



1. mojari making

The *mojari* was introduced during the Mughal conquest of India in the early 16th century. Since that time a wide range of *mojari* styles have evolved across the Indian subcontinent. The traditional aristocracy wore velvet *mojaris* with extremely long, flattened upturned toes. The shoes were embroidered with gold *zari* embroidery or *zardosi* and *salma sitara* consisting of gold wire, sequins, beads, pearls, iridescent beetle wings and precious stones. Less costly varieties of this courtly shoe are now in great demand for weddings and ceremonial wear.

Mojaris are made with buffalo, camel or cow leather soles, and with leather or textile uppers. They appear in many variations according to regional tradition, period and shoemaker. They have no right-left distinction, mostly flat soled or with a heel of varying heights. Uppers, usually embroidered with gold, silver or lurex, are of one piece joined at the back, folded in and stitched with heavy thread to the leather sole. The toes are always extended, either in a flattened point or upturned and curled. Bells, beads, precious stones and pendants are frequently suspended from the toes. Traditional *mojaris* with heavily embroidered uppers are made by specialised craft men. *Mojaris* are worn in Rajasthan, Gujarat, Punjab, Bihar and Uttar Pradesh.





Rows of mojari shops with shoes on display in Madhavpura.

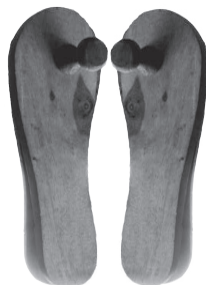
Their little shop displays their products which are mostly bought from different *mojri* producing centers in India and sold in the local market. Although some of the traditional local variety and some fancy ones are made in house, the father son duo prefer working on special made to order pieces since they generate more income.

Besides design development, production is also carried out in the shop itself.

Jaipuri, Jodhpuri, Pali, Patiala mojris, Pakhija, Nagra and Bantu mojris, half awl and full awl, sandals, chappals and shoes, a variety of footwear is available in this market. They also make the Taiwanese *mojri* which is very popular as it goes well with the wedding trousseau. The *mojris* have acquired their names from their characteristic shape, size, make and the places from where they are produced. The *gol mojris* are round in the front while the *bharat mojris* like the *Jaipuri* ones are embroidered.

They also make *kapadni mojris* for saints and for people who don't wear leather.

"This is an art that was left to us by our forefathers. You just need to give us the design and leave the rest to us", boasts Gajjar. They also keep wooden foot wear called *chowkadi* which is used by the saints.



LOCATION : Gajjar mojari house, 1430/1, Madhavpura, Mochi bazaar, Phool purs ni same, Shahi baag, Ahmedabad. 380004
Ph: 9426137354.

CRAFTSMEN : Surajbal Gajjar and his son Ashok Gajjar. Originally from Rajasthan, their family has been in this trade from over 125 years. It takes them less than two hours to make a pair of *mojris*.

MATERIALS: Leather both factory finished and hand finished is obtained locally from the ghi kanta area of Ahmedabad. The metal tools as well as the dye stuff used for staining leather is bought locally from established traders.



Varieties of mojaris on display at the shop front. Mojaris with trifoil from Rajasthan, embroidered ones from Deesa, patterned ones with finer embroidery from Jodhpur.



Wooden foot wear made specially for the jain saints.

Students from design and fashion institutes like NID and NIFT learn the craft from them and also develop new designs with them. Some people get the top of the *mojri* made with the *khoshiya ka dora* and the Gajjars then add the appropriate sole.

They have also developed bags and accessories on made to order basis.

Besides footwear they are also open to developing new innovative products.



Traditional Indian chowkadi made in stone has been reproduced in leather by referring to the ancient designs recorded in the books.



The price of an ordinary *mojri* ranges between Rs 100 to Rs 250. Custom made *mojri* range from Rs 500 upwards depending on the work and material used. Most of the material is brought down from Chennai.



A special fabric with intricate gold embroidery is provided by a client to be custom made into a pair of Jodhpuri mojdis to be worn at a wedding.



A pair of slip-ons made without using leather. Woolen fabric developed for the NGO Avani in Kumaon is used for the top of the shoe.

An ancient pattern of foot wear redeveloped by referring to books. Leather dyes are available to stain the leather in different colours.





A flat wooden tool called khurpaa is used to make the mojaris.



The khurpaa is the most important tool. It is used to etch out the required shape onto the leather. Also to stretch and pull the leather into shape.



The awl is a pointed tool with various purposes- to pierce holes through which threads can be drawn and to join the shoe upper and sole together.



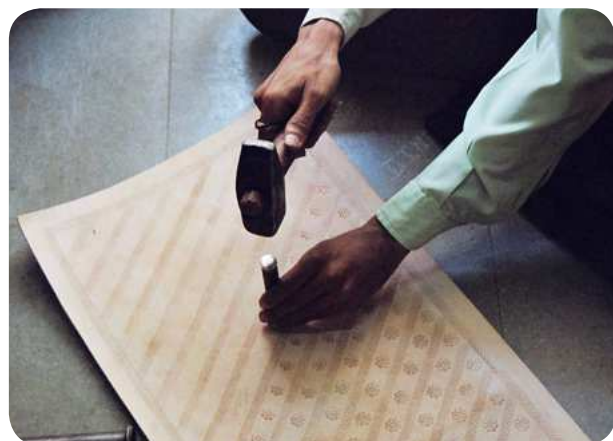
A flat sharp chisel is used to scrape away the fibrous excess from the underside of the leather piece making it smooth.



The last (left) is the form used to shape the upper and lasting pincers (right) are used to pull the upper leather right around the last before it is secured with tacks.



Metal dies with various patterning are available. They are used to imprint the leather with decorative designs by hammering them onto the leather surface.





2. khata making

LOCATION: N.G Kagadi, 68 Kagdi bazaar, below Fernandez bridge, Teen darwaza, Ahmedabad-1.

Shop: 25357065

Factory: 22135963

CONTACT PERSON: shop owner;
Iliaz bhai, craftsman cum manager;
Akbar bhai.

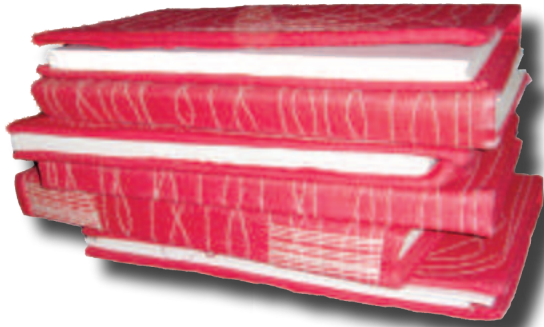
During the following months their workshop is busy in production of *khatas*.

May – July

September - November.

(Right) Akbar bhai opening a very long khata called vahi chopada used for keeping account by accountants. (Facing page) The khatawala shop in Teen darwaza.





(Left) Murar book is its typical red cover used by the traders in Gujarat to keep accounts. (Below) The traditional Murar book now diversified in shiny colourful satin covers for the new clients like students, tourists and urban customers.



BINDING PROCESS:



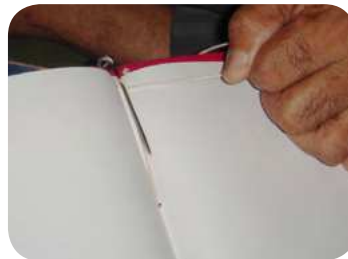
1) Signatures of paper are held together and two slits made.



4) A knot is made to bind the paper to the cover firmly. Therefore each signature leads to one knot.



2) A single signature is taken and placed on the cover. Two needles are passed through the two slits made in the signature.



5) Once the paper is stitched to the cover another set of knots is made for each signature.



3) The needle is pulled through the signature and the spine of the cover binding the two.



6) When the binding is complete the book is shut and the spine beaten down.

Books in different shapes and sizes bound in different techniques are available. (Below) rexine bound books imitating the leather khata of Jaipur. However leather is not preferred in Gujarat so it has been replaced by imitation rexine, little diaries bound in fabrics like velvet, embroidered fabric, note pads and bank slip books that are hung on the wall, books with special binding that open completely flat at the centre.



3. kite making

HISTORY OF KITE MAKING IN GUJARAT:

Kites were most probably brought to India either by Muslim traders or Buddhist religious pilgrims coming from China to obtain sacred texts. The Muslim community with its high standard of craftsmanship and manufacturing dominates the kite making trade. It is their historical spirit of maintaining quality while opening up to new markets that allows the kite makers of Gujarat to be relevant in the 21st century.

Ahmedabad is the centre for kite flying in India. During Uttarayan, the traditional kite flying festival, kite flying starts at dawn and continues without a pause throughout the day, way into the night when strong white anchor kites with lighted lanterns attached to their strings are anchored into the sky. The people of Gujarat engage in friendly fights with their kites, trying to cut each other's kite from the sky. Rivalries about who is the best kite flyer go through generations, keeping the business of kite making and buying alive. The festival elevates the human spirit nearer to God. When a person is happy they are nearer to God. The kite is a vehicle for happiness.

Kites are over a thousand years old in India. In 1300 AD the word "Gurdhi" meaning 'kite' was first used by Santnambe in his Hindustani song. The poet Manzan used the word 'patang', the more common Hindu word for kite, in his poem of 1542 AD. Miniature paintings of the markets and pastimes of Gujaratis frequently depict people flying kites, especially from rooftops. Kites are a highly integrated part of India's cultural heritage.

Kites are a very special form of social expression for the Gujaratis. For hundreds of years they have celebrated the day when according to the Hindu calendar the sun passes through the winter solstice from the tropic of cancer to the tropic of Capricorn (Makara) on the 14th of January. On this day the city of Ahmedabad as well as many other centres of Gujarat like Surat, Vadodra, Nadiad and Rajkot celebrate the festival of "Uttarayan". "Uttar" meaning north is the day when the sun commences its northward journey signifying the end of the winter season. The sun comes out to relieve the days of chilly winters and the wind picks up to encourage the flight of kites, marking the beginning of spring. The gods who are believed to have slumbered for six long months are now awake and the portals of heaven are thrown open. From morning to evening the serene blue sky remains dotted with vivid splashes of colourful kites.



Applique kites in a rich variety of designs developed by Rasul bhai at his workshop.

LOCATION: Kalupur tower chakla, Kalupur, Ahmedabad.
Ph: 9825735615
9376144929

CRAFTSPERSON: Rasool bhai Rahim bhai took over the kite manufacturing business from his father and had been working in this profession for over 60 years. He has won several awards for his skill and innovations in kite making including a National award. Besides this he has also been invited to other countries to hold workshops and participate in kite festivals.

Pappu bhai his son has now taken over his father's kite business as he is the eldest son. All his younger siblings are involved in the kite making business. Pappu bhai is interested in teaching kite making and holding workshops. He has already taught in vocational schools in Ahmedabad. The family has a year round business catering to kite festivals throughout India. Since Gujarat was their largest market the family moved from Mathura in Uttar Pradesh in order to improve their income opportunities. Therefore by providing kites to each part of the country in their particular season, it is possible to be in business throughout the year.

To manufacture kites all years round the family has 35 families of workers, including over 300 people who are involved in the



Rasul bhai with his large kite made of cloth.

production of kites. The family operates a retail store in Ahmedabad and wholesales kites to distributors in Bhavnagar, Jamnagar, Rajkot and Vadodra. These wholesalers distribute to smaller cities, towns and villages across Gujarat.

In Rasulbhai's business there is a 'kite calendar' for exporting his products throughout India:

Gujarat	December/ January
Karnataka	February/ March
Maharashtra	March/April
Delhi	June/ July/ August
Saurashtra	September till Diwali

Since 1989 Gujarat has entered the international world of kites by hosting the Gujarat International Kite Festival (GIKF) in the days preceding and following "Uttarayan". Kite enthusiasts from all over the world come to display the remarkable variety and skill in many types of kites. Kite trains, brought to the festival by the Japan kite association, have been taken up by Indian kite flyers. For the Gujarat International kite festival Rasul bhai had made his longest train of over 500 small kites tied together on one string.



The manja thread is prepared on the foot-paths around the city. The production starts only after diwali and continues for the next 3 months.

FIRKIS:

The spools used to hold the flying line used to be made of bamboo and wood in the local markets. Now, manufacturing has switched to plastic and gone out of state because of cost and availability. The firakis are now ordered from Andhra Pradesh, Agra and Delhi.

Tukkals are little lamps that hold candles and are borne aloft by large white kites at night time during Uttarayan. The lanterns are still manufactured locally using recycled paper. New designs of transparent plastics are obtained from Bangalore.

Manja:

Manja is a rice paste coloured with direct textile dyes and mixed with fine ground glass powder. The application of the substance to cotton threads (used as flying line) is dangerous because the maker must press the substance onto the string with his hands. This is the least organised sector in the kite making business and is only relevant in the context of Uttarayan, because the kite festival is the battle in the sky in which cutting a rival kite. However, outside India, especially in Europe and North America, manja line is banned from kite festivals and from recreational kite flying areas. International kite flyers celebrate kite flying as an artistic performance with huge sculptures or paintings in the sky and manja cutting or kite fighting is not practised. Also every year many birds are killed or wounded by the kite strings. Bystanders and kite flyers are injured because of this sharp thread. This activity is generally carried out on the footpaths or along public thoroughfares. The process of manja making is adversely affects the health of the manja makers as well as the coating enters their bloodstream in spite of using gloves. However, colourfully dyed manja threads without the glass coating are also available for children.



The brightly coloured manja thread is available in the markets as small hanks, balls or wound on plastic manja.



MATERIALS:

Kite bamboo is shipped from across India from Assam to Calcutta (to be processed and cut for cheaper shipping) and then sent to Gujarat.

Paper is obtained from Pune. There are several varieties of paper. Kachha paper is white in colour, coloured paper, Triveni paper which is of a very good quality.

Waste plastic sheets that are used for packaging in the food packaging industry are obtained from Delhi.

PROCESS: Several crafts people specializing in a specific skill are involved in the process of kite making. The kite passes through at least 10 people before it is finally completed.

Stage 1: The colourful sheets are first sent to for cutting. There are two types of cutting; fancy which is in different patterns or simple. Simple consists of three main shapes, the square called patang, a horizontal rhombus called cheer and a vertical rhombus called rocket.



Stage 2: attaching the dora.

A fine thread called dora is attached along the edge of the kite before it is folded over. This increases the longevity of the kite as it makes the edges sturdier and prevents them from ripping due to the force of the wind. Throughout Gujarat this activity is carried out by female workers who work from home itself.



Stage 3: Thadda lagana

The central bamboo stick on the kite is called the thadda. Glue is applied on the stick by tapping it on a mixture of and then the stick is pasted on the kite.

Stage 4: Kaamp lagaana

This is the horizontal bent stick on the kite.

Stage 4: Channi lagana

These are pieces of paper that are pasted onto the corners of the kite for additional support and strength. Also available in gold and silver they add to the decoration of the kite.



Kites displayed on the roof of Pappu bhai's workshop.





4. gamthiwala

The Gamthiwala shop is owned and run by Noor Mohammed Haji Abdul Rahim and his sons Mohammed Husain, Gulam Ahmed, Mehmood Miya and Mohammed Yunus. It is one of the most innovative center for block prints, *mashru* and other hand worked fabrics in Ahmedabad. Known for the fine quality, excellent designs, brilliant colours of their fabrics and a commitment to keeping the arts of printing dyeing and weaving alive. The family has been involved in the cloth trade for over four generations.

History:

The Gamthiwala shop at the entrance of Rani no Hajiro was established in 1955. At that time the Manik chowk was the sole market for cloth in Ahmedabad where traditional block printed saris and *odhanis* were sold to urban customers besides the farmers, herders and tribals from the surrounding rural areas.

The cloth market was largely seasonal and during the three months following *Holi* (mid-march), people from the surrounding villages would pour into the market to make their cloth purchase for the year.

However once the monsoons started the farmers would return to their fields and the business would slack off again except for a sporadic demand for fabrics for *Janmashtami* (August), *Diwali* (october-november), and some other festivals.

Each community of the traditional user of the block printed fabric would buy *odhanis* and saris in the same design and colour combination year after year without any changes as these fabrics were of religious as well as social significance.

However the seasonal trade too started falling dramatically in the 1960's and 1970's as the traditional rural buyers of the block printed fabrics started replacing them with cheaper, lighter and more durable synthetic fabrics. At the same time however, a new type of consumer began to emerge: elite, urban Indians and foreigners. To cater to these new customer, Noor Mohammed, began to experiment with new designs and to sell cloth by the yard, rather than by the piece. When tourists came to the Manek chowk area to see the Jama Masjid, Badshah's tomb, Rani's tomb, they would often stop to see the cloth in the market as well. Western tourists instead of saris would require smaller pieces to be stitched into garments or cushion covers. Therefore Noor Mohammed would provide one section of the sari or half an

odhani. Some of the Indians who accompanied them went one step further and began to request new colour combinations. Noor Mohammed worked hard to adjust to the new ideas and new demands and started experimenting with block prints as yardage. He listened carefully to his customers and began to work closely with his artisans to prepare samples which he would then try out in the market.

The transition from a traditional, rural market to an elite urban one, was not easy. However thanks to his active intervention in design and production and constant attention to changing demands in the market place Noor Mohammed revived an interest in block prints.

Noor Mohammed's sons have built on his success. Mohammed Husain, Ahmed bhai with a B Com degree, Mehmood Miya with Bsc. chemistry, and Mohammed Yunus and cousins and nephews have joined the business. The family has worked hard to adapt traditional block printing technology and designs to new styles and demands. They have benefited from close association with artists, designers, architects and interior designers from NID, NIFT, CEPT and fine arts Faculty of M.S. University in Baroda as well as from abroad.



Block printed fabrics.

LOCATION: Noor Mohammed Haji Abdul
Rahim

Shop 1: Rani's Hajira, Manekchowk,
Ahmedabad - 1

Shop 2 - Nr. Badshah's Hajira gate,
Manekchowk, Ahmedabad - 1

PRODUCTS: Block printed fabrics in natural
dye, Pigment prints, Dhabu resist, Ajrakh
print, Batik, Hand woven cotton fabrics,
Mashru, Khan etc.





5. rogan printing

Gold printing is not an indigenous technique in India. The craft was one of the many which entered via Persia in the course of the Mughal domination of India, during the 16th or the 17th century. The quick and simple method of gold printing was an ideal substitute for the expensive brocades of silk and gold. Also, it has the advantage that it can be applied to any serviceable material like velvet.

Roghan, a thick bright paste used to decorate inexpensive textile is obtained when oil of safflower, castor or linseed is boiled for about twelve hours before being poured into cold water to form a thick residue. This is then mixed with chalk, coloured pigment and a binding agent. The sticky *roghan* mixture is then applied to the cloth with a short stick or a metal rod, which is twisted in the hand to get the *roghan* to get off the stick and onto the cloth. *Roghan* is also block printed using metal-faced blocks.

Roghan work is now only done in the Nakhatrana Taluka of Kutch, where cloth decorated using this method is used as skirt lengths and for wall hangings. Formerly it was produced at Chowbari in eastern Kutch and Ahmedabad, Baroda and Patan. In Ahmedabad where skirt and sari borders were a speciality, *roghan* was painted on one strip then another plain strip was pressed on top. These were then left to dry in the sun and then peeled apart, leaving a coloured pattern on both the strips.

Sometimes gold or silver powder is sprinkled on the *roghan* and printing in this manner is called tinsel printing. This is done in Jaipur, Sanganer, Udaipur, Mandasor, Nasik, Ahmedabad, Baroda and Mumbai as well as several centres in Madhya Pradesh and Andhra Pradesh.



LOCATION: Nr Astodia darwaza
Ph: 9898336338

CRAFTSMEN: Hanif bhai Rangrez Nathubahi was a trader by profession dealing in materials like chalk, dye stuff, glitter powder, etc that are used in printing. However he learnt the art of roghan printing from the printers in Dani Limda and Salem and soon began his printing workshop along with his father Nathu bhai. His wife Khatum banu joined him in the craft when she married him. This family run business has been established since the past 25 years. These days their young son Firoz Hanif Rangrez carries out the printing along with his mother. They often hire one or two more craftsmen when they get large orders for printing. Printing is carried out on paper as well as cloth of any material.

CRAFT:

Roghan printing
Gold leaf printing or
Warkh kaam
Flocking
Screen printing



(above) silver leaf printing or warkh kaam, (far left) flocking, (left) screen printed paper for Xylem.

MATERIALS: wooden , brass blocks, *roghan* paste, coarse brush.

PROCESS:

To make the *roghan* paste initially chalk powder, *roghan* which is a gum like resin is mixed with water. The mixture is kneaded till the excess water starts separating out. The excess water is removed and kerosene is added to the paste to make it soft, supple and smooth. Titanium powder is added to make the paste white. Colourful dyes can also be added to the paste. This mixture is then poured into the metal block. Care has to be taken to make sure that the *roghan* paste is of the right consistency in order to facilitate good quality printing.



Few of the metal blocks from the large collection of blocks available at the workshop.

Printing commences from left to right. This requires practice and skill as care needs to be taken that equal and even pressure is applied to the block at all times so that the *roghan* paste is printed on the given surface clearly. Different kinds of powder can be sprinkled over for different effects like gold, silver or foam. The freshly printed surface is then left to dry off in the sun for one or two days. Once dry the excess powder is brushed off. In the case of a printed fabric it is sent for washing whereas for printed paper a wet cloth is used to wipe clean the surface in order to remove the excess powder.



The roghan paste is poured into the metal block.



Gold dust is gently dusted onto the moist roghan print.





6. tie and dye

Dyeing is done by the *Rangrez* community of workers. The word comes from the words *rang* meaning colour and *rez* to pour.

Beyond the world of the *rangrez* is the more elevated realm of the men and women who apply pattern to the cloth. The technique of tie and dye in India takes an essentially simple process of colour patterning on cloth to the highest form of textile expression. Such textile are known as *bandhani* from the Sanskrit word meaning to tie,

Simple patterned *bandhani* textile are inexpensive and allow the women of poorer communities to dress colourfully. When tie and dyed with many dots the price of *bandhani* fabric increases. Silk fabric with finer *bandhani* work is worn as bridal attire by women of richer merchant communities.

The main centre of *bandhani* in Gujarat are Jamnagar, Porbandar, Morvi, Rajkot, Bhuj and Mandvi.

LOCATION: Near FD High school, Sindhi vaad, Jamalpur, Ahmedabad - 380001.
Ph: 079 25390396

CRAFTS PERSON: Nissar bhai.

Nissar bhai's great grandfather migrated to Ahmedabad from Jaipur. In Jaipur they were *dhobis* or washer men by profession. The dyeing business in Ahmedabad was set up by his father, Abdul Latif bhai who apprenticed himself to a dyer and learnt the profession of dyeing. After working in *Karkhanas* on a daily wage with dyes like naphthol, rapid and hydro caustic bases by 1975 he reached a point when he introduced tie and dye or *bandhani*.

Nissar bhai along with his four brothers run the workshop and do the dyeing in vat. Naphthol, acid and direct dyes. All the work is distributed among the family members itself with one or two hired workers. For tying however women from the surrounding locality are employed. For finer dots the fabric is sent to be tied to Rajasthan. *Bandhani dupattas* produced in the shop are sold on Ashram road and in the Satellite area of Ahmedabad. They also carry out dyeing work for individual parties. They also help out in the dyeing department of NID.

The dyeing workshop is open throughout the years except a two day holiday for Id and during heavy continuous rains in the monsoon season.



Stitch resist technique.



Patterning through leahriya type resist technique.



Various shapes of blocks used in clamp dyeing.





PROCESS:

The cloth is first block printed with a washable blue. Then the marked cloth is taken to another part of town where women do the tying sitting at home. Once the fabric returns after being tied it is dyed. One of the limitations of *bandhani* in Ahmedabad is that it is only the medium and the large size tying that is done here, since the women are paid per sari where as in Kutch they are paid by the number and the fineness of the points they tie.

(Above) sari with the popular aankhda design being printed. (Right) A bandhani worker pinches up the coloured part of the cloth and ties it with wrapping thread which resists the penetration of the dye in that area. (Below) after dyeing when the cloth is stretched out and the threads removed, the areas resisted by tying appear as different coloured pinpricks.



Bhandhani done in Ahmedabad is simpler with big dots.



Bandhani done in Rajasthan shows more complex patterning with finer quality of dots.





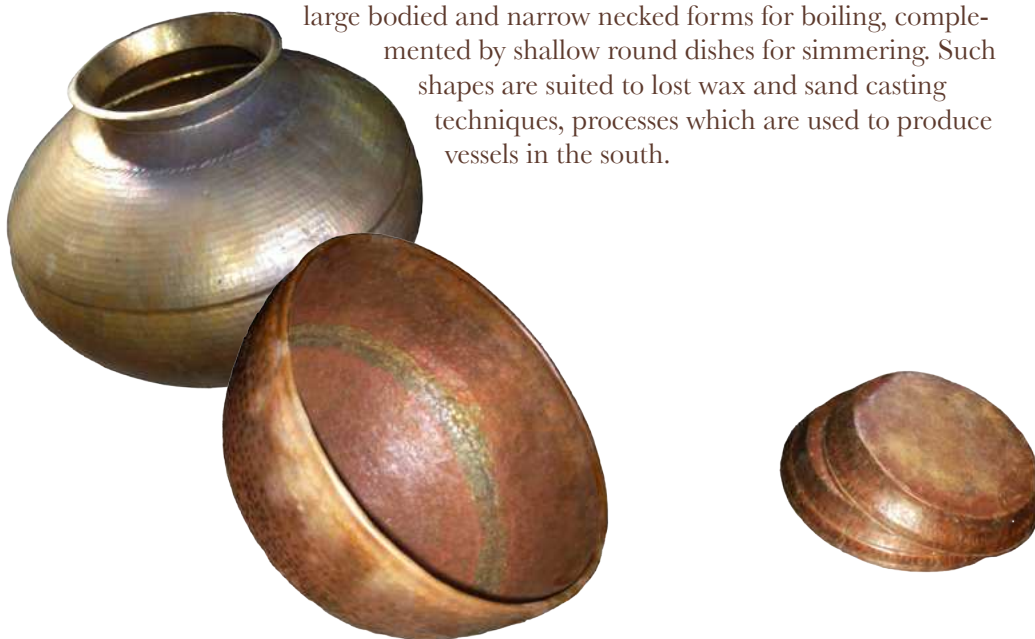
7. copper utensils

Each region of India has its own range of cooking utensils that is intrinsically linked to diet. Metal workshops can be traced by the din they create. Here the craftsman forges, beats, cuts, rivets and burnishes the myriad of metal vessels and implements of ancient and traditional form that have changed but little over the centuries. These undecorated metal wares are very elegant however plastics and mass produced stainless steel goods are replacing these traditional hand wrought metal wares.

The metal used is brass or copper. These metals improve in strength from repeating hammering during the shaping of the sheet metal into the desired form. Water vessels, buckets and bowls are composed of a number of components cut from sheet metal. For a curvaceous water pot or *ghara*, the sheet metal will be heated and hammered into the concave base. Depending upon the form of the final object, malleable sheet metal can be hand shaped with a hammer or a mallet. Low, shallow forms are obtained from hollowing or sinking. Deeper forms can be raised. Such vessels are worked externally, starting at the base and continuing towards the rim using a ball shaped or domed stake. The overlapping or folded joints are soldered together by brazing over an open fan driven furnace and are made inconspicuous by the process of hand grinding and burnishing.



In the south as the diet is mainly founded on rice and vegetables, rather than meat and wheat, cooking vessels have evolved into large bodied and narrow necked forms for boiling, complemented by shallow round dishes for simmering. Such shapes are suited to lost wax and sand casting techniques, processes which are used to produce vessels in the south.



LOCATION: Mandvini pol, Teen darwaza.
Ph: 079 22145350

CRAFTS PERSON: Mahendra bhai Kansara. He has been making and repairing metal utensils for the past 60 years.

At present he makes copper utensils only on order basis and most of his lively hood is earned repairing old broken vessels in copper or brass. He lights his *bhatti* or 4-5 times a month when enough utensils that need to be worked on have been collected. In the rainy season the work is stopped as the pieces of copper do not get joined easily on the fire. Any particular design can be drawn and given to him and he would be able to get it developed.

PROCESS:



Circular cut sheets of metal in different sizes are stacked up in the shop.



Sheets of copper are heated on the coal fire till they turn red hot. This makes the copper sheet malleable so that it doesn't split or break while it is being beaten into shape. The copper sheets are available in different thicknesses generally between 8 gauge - 16 gauge. Also they are not pure copper but a 80/20, 50/50, 40/60 mixture. Pure copper is heavy, expensive and more malleable. Traditionally pure copper was used however now utensils from pure copper are only made when they are made by braking down old utensils.



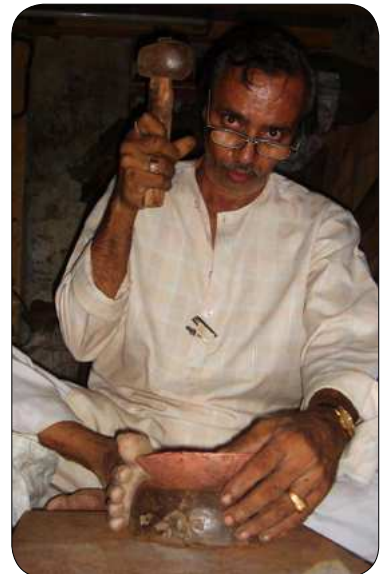
Thick copper katori used by the silver smiths to store corrosive acids.



A circle is etched onto the sheet using a metal compass.



The sheet is cut into a circular shape. It is easier to cut when it has been recently taken of the fire.



The circular sheet is then placed onto a stone and beaten with a hammer. The sheet is held firmly between the foot and the hand and rotated regularly so as to have an evenly concave form. The metal has to be heated again before further beating can commence.



A stone block with a depression carved in it is used to shape the vessels into a concave form.

LOCATION: Shrinath ji metal corporation,
913 Kansara pol, Mandvini pol, Ahmed-
abad -1.

Ph: 079 22146127

079 55256137

CRAFTS PERSON: Jeetu bhai Kansara and
nephew Kirish bhai Kansara. The family
has been involved in this craft since seven
generations. Until 40-50 years ago nearly
all the inhabitants of the Kansara pol used
to make metal utensils, however now the
number has dwindled to a few families.

CRAFT: manufacturing of copper utensils.

PRODUCT RANGE: *bedha* a combination
of two pots i.e.; the *mathli* and the *ghada*,
parat which is a flat dish like vessel used to
knead dough.

Traditionally they used to make vessels in a
wide range of shapes and sizes for different
uses often specific to certain communities.

Visnagari goli, *Jalavadi goli*, *boghana*,
dhanghadi and *bamba* to heat water, *charu*
a vessel to collect water from a pump pond
or a well, *lota* or a small cup like vessel for
drinking water, *gala* which is a big vessel
used for preparing the marriage feast.

There are certain vessels used specifically
by the Muslim community like the *deghcha*,
deghchi, *degh*, *tapela*, *tabgir* which is a
long spoon used for stirring while cooking
biryani, *katordaan*, *khal*, *chilamchi*.

There are also antiques like the *kawadani*,
afhildaani, *surmadaani*.



*Tippan work is done on the traditional
"bheda". The bheda is made of 6 pieces
joined together by hand on a coal fire. At
present the most popular utensil as it is an
essential part of the dowry which is given by
the father to the daughter in marriage, in
the communities of the surrounding villages.
A heavy wooden hammer is used to beat
decorative dots onto the base of a ghada or
a pot. The hammer is regularly rubbed with
a white polish paste spread onto a wooden
block.*



*Tools with a
special polished
head are used for
tippan work.*





8. chick making

For more than a thousand years the simplest crafts of India have been considered lowly occupations. The ancient and elegant craft of working vegetable fibres into useful and decorative baskets and mats is one such calling, along with those of making pots and weaving cloth. Served by an abundant source of materials, needing almost no tools, and without technical secrets, basketry and mat weaving share with pottery the distinction of being the earliest human crafts. The earliest archaeological evidence for this fact found in north-west India, links the two crafts with the finding of an ancient pot bearing the imprint of a fibre mat.

Across India baskets are woven from local raw materials to shape and dimensions that admirably match the lifestyles of their owners.

Bamboo is a principal material for the everyday carrying baskets. The basket weavers supply durable, cheap and environmentally sound containers for essential goods throughout India. Whether they bear produce of the farmer, or fish from the ocean these baskets are objects of essential use and simple beauty.

LOCATION: Footpath along Satyagraha Ashram, Paldi char rasta, Ahmedabad.
Ph: 9925553066

CRAFTS PERSON : Babu ben husband Ishwarbhai and sons Manu and Suresh.

Ishwarbhai migrated from Mumbai to Ahmedabad 50-60 years ago. He belongs to a community of basket makers and worked in this craft for his lively hood. Once he came to Ahmedabad his family soon learnt this craft and is now taking it forward.

The raw materials which is mainly bamboo comes from Assam. The finished chicks are sold to either individuals or parties in Surat, Baroda and Ahmedabad. He also makes chicks for NID.

Chattai in various designs, sizes and qualities, Bamboo shacks,
Rate for a simple chick is generally Rs. 18 per square feet. A 5 ft. by 4 ft chick would take about 2 hours to construct with three people working on it simultaneously.



A more complex chick with a trellis like patterning takes 2 days to construct.



The bamboo is first cut into necessary lengths and then slit into thin strips with a machete.



The strips of bamboo are then attached together by crossing the blue nylon threads across each other over the strip. Spools of thread are made by winding them over pieces of rubber tyres.



Once the bamboo mat is completed it is laid down flat on the ground and beaten into an even surface.



9. basket making

LOCATION: Pavement opposite Jaisanka Sundari hall, Raikhad, Ahmedabad.

CRAFTS PERSON: Ram Singh Mahadev and family.

Ram Singh bhai is locally known as the Khursiwala as he repairs cane and bamboo furniture. Besides this he also make racks, baskets, wig stands. If one gives him a sketch he would be able to construct the corresponding object.





10. mata ni pachedi

INTRODUCTION :

The *pachedi* of *mata*, the cloth of the mother Goddess of a hundred names and attributes is a prevailing deity since time immemorial, worshipped by the poor of the lower caste. Her cloth is dyed and hand printed by a guild of her devotees on the banks of the Sabarmati. No foot of man or animal is allowed to be placed on this sacred cloth. Sabarmati water contains special properties for the setting of dyes and the flat sandy shores are ideal for drying and bleaching the cloth.

DESIGN VOCABULARY :

The colours of the *pachedi* are blood red, black and white. Blood sacrifice is still a sacred feature of the worship of the mother goddess. For birth, death and blood are closely bound with the everyday lives of the people and they accept its presence and its meaning with directness and simplicity. Red is also an auspicious colour, the very essence of energy, of joy, of life itself. It is the colour of festive occasions. The Gods are worshipped with red marks made with *kumkum* and red powder is thrown on each other during the festival of Holi.

The patterned form is always the same; the commanding figure of the goddess is centered, austere, stern, many armed and powerful. Under her is her mount or vehicle and around her in procession are her attendant gods and worshippers. Every thing about this *pachedi* cloth evokes awe and even fear. In Gujarat seven of these *Matas* are worshipped.

The seven Goddesses are accounted for in the Puranic myth by the following story. Shiva fought a great battle with the evil asuras. With each blow of his sword that he dealt, blood dripped to the ground and formed new *asuras* to join the enemy host. Shiva therefore created from the fire issuing from his mouth in battle a sakti, or Goddess, who caught the drops of blood as they fell in a bowl. The other seven Brahmical gods did likewise and so successful were the saktis that the *asuras* were vanquished. The Goddesses were then given the names and mounts of their respective God counterparts and carried their symbols.



LOCATION: Vasna, Ahmedabad.

TECHNIQUES:

Kalamkari, vegetable dyeing,
Block printing with natural dyes on fabric
and on paper, resist printing on natural
dyed fabrics,
Screen printing with natural dyes.

PRODUCT RANGE : *Mata ni pachedi*, wall
hangings in various sizes, bed sheets, saris,
dupatta, yardages.

CRAFTSMEN:

Jayanti bhai Chitara along with his brothers
Vikram bhai, Ashok bhai, Kiran bhai and
Chandrakant bhai are involved in the craft.
Originally from Viramgam, Ashoknagar,
the family migrated to Ahemdabad 7-8
generations ago and picked up the craft of
Mata ni pachedi.

pachedi is maximum during the months
preceeding Navrati. The completed
pachedis are sold in a shop at the dholka
bazaar every year during the months of
Chaitra and navratri to the local buyers.
Work stops completely during the rainy
season as the damp wet weather is not
feasable for printing.

One person can make 25-30 *pachedis* in
one month. Production of the *Mata ni*

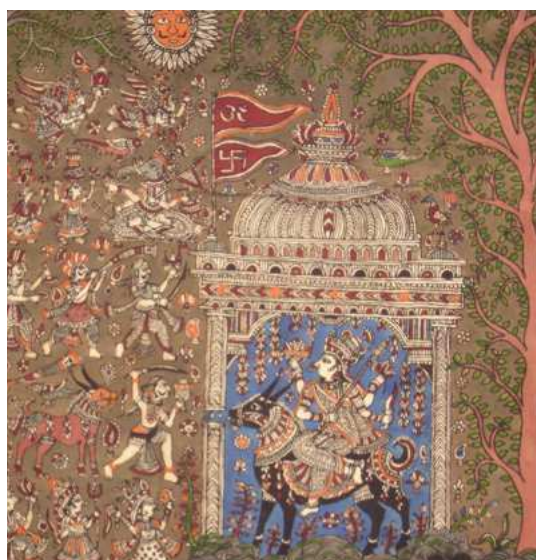


Screen printing with natural dyes.

BLOCKS: The *pachedi* blocks are supposed to be sacred. Earlier none but the *Pachedi* printers were allowed to buy them and the used ones could not be purchased. Used weathered blocks were thrown into the river where they returned to the mother Goddess.

Earlier Jayanti bhai's grandfather used to make his own blocks with mud and clay. However, over the past 50 years the mud blocks have been replaced by wooden blocks which are made in Pethapur by a community of Gajjars. The old intricate blocks have been given to the Calico museum where they are on display.





((Above) a mata ni pachedi in natural dyes. (far left) Pachedi printed with natural colours but not yet treated with alizarin that fixes the dye. (Left) Pachedi in a combination of natural and pigment colours. (right) Fabric being dyed in natural dyes.

PROCESS:

Preparing the fabric: Initially hand spun *khadi* fabric used to be used, however now mill spun grey fabric is used as it is cheaper. Since the finish in mill fabric is unsuited for dyeing or printing processes it is first washed thoroughly to remove the sizing. It is soaked in water for 24 hours. Once the cloth becomes white, soft and fully absorbent, it is used for printing.

Treating with *harda*: A paste of *harda* powder in water is prepared and the fabric is soaked in it for about 10 min. after which it is dried under the hot sun for 15 min.

Printing: natural materials for preparing the print paste are obtained from the Madhavpura market. For black colour ferrous sulphate is printed on the *harda* base, a yellow paste is filled around the printed figures. This paste is a mixture of liquid alum and *kachuka* flour and turns the cloth red. Different shades and tones of red like maroon, *kesari* etc are obtained using alum. *Haldi* and *amdi* give shades of yellow while *mehendi* gives a green colour. Indigo is used to prepare the blue colour. Onion skin gives a pinkish shade and saffron flowers give an orangish yellow tone.



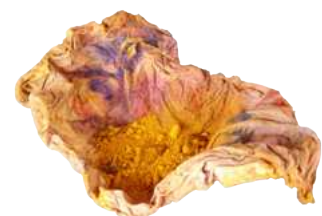
Fixing the dye:

The *pachedis* are later boiled in a alizarin liquid. Alizarin is a yellow powder made from the root of the madder plant traditionally used as a mordant dye. It produces jet black when applied to iron and a brilliant turkey red where an alum mordant has been used. Only those areas which have been printed with the iron and alum mordant are affected by the alizarin bath. *Dhawda* flowers are added to this alizarin bath once it reaches boiling point. This helps to maintain the white areas of the cloth which is not printed.

The *pachedis* are then washed thoroughly in flowing water, Each *pachedi* after being rinsed by hand is thrown upstream into the shallow waters of the Sabarmati river. It drifts down into the string which has been stretched taut between two poles. The printed fabric is spread out in the water securing one end over the line.

The *pachedi* is then bleached and dipped in a blueing agent so that the white areas are fully re-established as brilliant contrast to the red and black printed design.

Alizarin powder is wrapped in a piece of cloth and left in the dye bath.



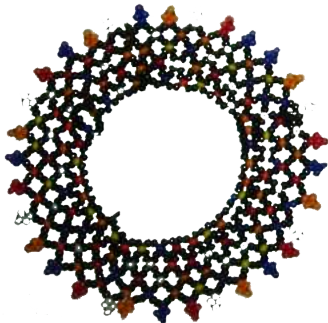
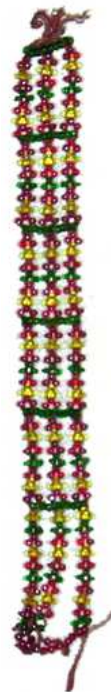
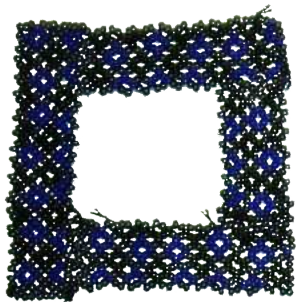


11. bead work

Bead work or *moti bharat* is a needlework craft that was introduced into western India comparatively recently. In the 19th century, Bhattia and Bania traders from Kutch and Saurashtra were based in Zanzibar and were engaged in the trade with East Africa. One of the main items of trade with East Africa was the Venetian Murano bead.

Around 1850, these traders began to bring these beads into India. Bead work was taken up by professional mochi craftsmen followed by the Kathi women who used bead work to replace embroidery. The Mahajans, then also adopted the Kathi style of beadwork. The Kathi bead work motifs portrayed divine and human figures, combined with flowers, cradles, racing camels, other animals and birds and were worked with translucent and semi-translucent beads set in a background of white opaque beads. The colours used were mostly orange, yellow, green, purple and red.

Bead-work is a speciality of Rajkot, Bhavnagar, Jamnagar and Junagadh. Decorative pieces like torans, chopat, carpets, caps, and belts are some of the fine articles of bead-work.



LOCATION: Morvadani pol, Dilli darwaza, Ahmedabad.
Ph: 9909259550

TECHNIQUES: Bead work.

PRODUCT RANGE : Traditional products like wall hangings, torans. Traditional ornaments from different folk communities of Gujarat, buttons, hair pins, keychains, bags, necklaces, bracelets, anklets, earrings, patches to be stiched onto garments, 3D toys worked out in beads.

CRAFTS PERSON: Sita ben.

Sita ben has been practicing this craft as a little girl.. For about 15 years she had been supplying products to Khadi bhandar and Gurbari. She has held training workshops for Nalsarovar adivasis for 2 months, and for the women from SEWA. She has also been invited to teach bead work in design institutes like NID and NIFT. She has attended seminars like the African Indian seminar where she got to interact with craftsmen from other countries and learn their techniques.



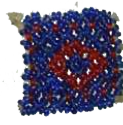
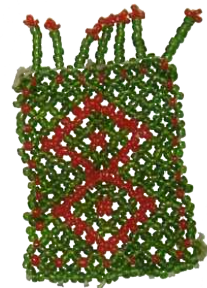
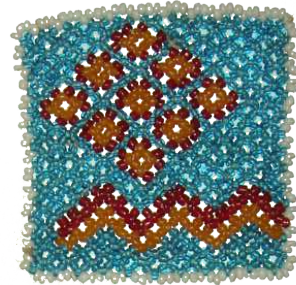
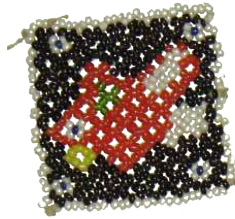
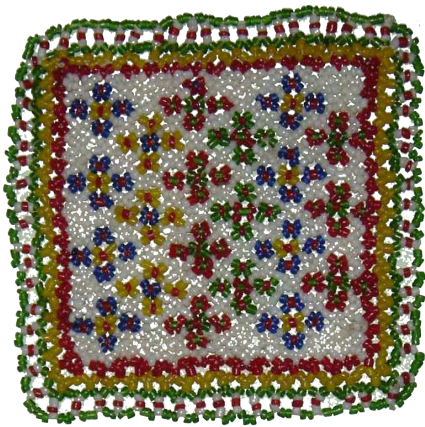
Sita ben displaying a toran from her bead work collection.

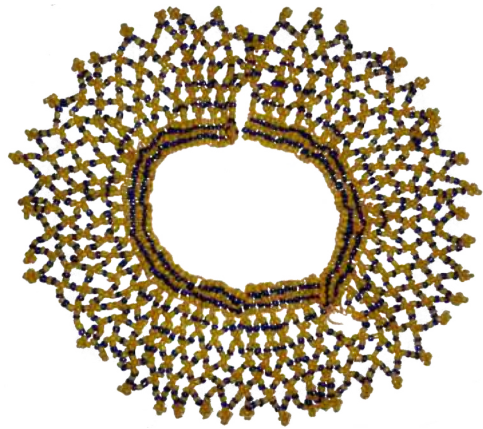
Sita ben is very keen to teach her craft to others and also to work with others to develop new designs.

(Facing page top) Various designs in different shapes and techniques worked out in beads. These patches can then be stiched on to edges of fabrics in garments and furnishings. (Facing page bottom) Toy bead elephant and a bead work bag. (Left) Wall hanging with animal figures.



(Right) Densely packed surface constructed in the single bead technique. (Below) A bead work patch in traditional African design. (Far bottom) Patches of surfaces in three bead technique with different angular designs. (Facing page) fancy buttons, hair pins, earrings, bangles, necklaces constructed using various techniques in bead work.





LOCATION: Juna Vadaj, Ahmedabad.
Ph: 9925366743

TECHNIQUES: Hand embroidery, applique, tassel making, fringing, hand hemming..

CRAFTS PERSON: Gita ben

Gita ben takes job work for the students of NID. She would be interested to work with designers.



*Quilt, Sindh,
Pakistan, 20th
century.*

11. applique

Applique is generally carried out on red cotton cloth against a white background. The appliqué work of Gujarat is primarily used on festive occasions, when rituals are performed, or to trap animals. Locally referred to as the '*katab*', the word is probably a distorted form of the English words 'cut-up'. The decorative appliques vary from a range of stylized birds and elephants, to several geometric patterns

In the 19th century, the Kathis, an agro-pastoral community of the Kathiawar region of Gujarat and their Muslim associates, the Molesalaam, or the land owning community are known to have produced intricate appliqué work. Some of the surviving specimens show a wide representation of stylized human and animal figures in cotton and silk cloths, *bandhani* (tie and dye), or *patola* cloth.

In the neighboring state of Rajasthan, the *Oswal Baniyas* have a similar tradition of stitching large appliqué canopies with a range of panels or squares in different colour combinations, for marriages. The *Rajputs*, *Satwaras* and various other cattle-breeding communities also produce similar appliqué art to enhance the beauty of their *chandarvo* (canopies), *dharaniyo* (quit covers), amongst other things.



Wall hanging,
Bhatia. Saurashtra,
Gujarat, 20th
century.



12. bird cage making

LOCATION: Pavement opposite R C High school, Dilli darwaza.

CRAFTS PERSON: Ranjit Bala and family.



Cages in various shapes and sizes for display on the pavement where the little community construct these cages.

PROCESS:

Stainless steel dishes that are available in different sizes and designs in the local market form the base of the cage. Holes are drilled at regular intervals along the circular edge of the plate.

Galvanized aluminium wire forms the structure of the cage. According to the size of the cage to be constructed specific lengths of wire are cut. Each straight piece is bent and curved on a circular metal piece fixed onto a wooden board. The two ends of the wire are twisted into hooks using pliers.

This bunch of wires is then strung onto a circular ring. The other end of these wires is hooked into the holes drilled into the stainless steel dish. A continuous length of a thinner galvanized wire is then wound around the basic frame of the cage.

The intersection of the thinner horizontal wire and the thicker vertical wire is held in place by a third finer wire that twists around them.

Finally the cage is topped with a stainless steel saucer and a glass which has a hook drilled into it to hang the bird cage.





13. garland making

LOCATION: Near FD High school, Sindhi vaad, Jamalpur, Ahmedabad - 380001.

CRAFTS PERSON: Taina banu



Rayon or "resham" yarn is white in colour. It is cut into bunched of a particular length which are then dyed in bright colours like pink, red, yellow, green and orange. The dyed yarn is then treated with a solution of starch or glue to make it stiff. Also at this stage the yarn that is entangled is separated.



The dyed "resham" is packed into rolls of plastic sheets according to their colour. These are then sent to be cut into smaller cylinders. Initially the cutting was done by hand, however now it is done by a cutting machine. The cost of cutting 1 kg of yarn is about Rs 10.



A wooden slab with two nails driven into it at a particular interval. A cotton thread is stretched between the two nails with the other half of the thread left loose beyond the second nail. Bunches of coloured resham are placed vertically on the cotton thread base in a specific order to create the desired pattern. Talcom powder is regularly rubbed onto the



figures to ensure easy grip on the resham yarn. The neatly placed bunches of resham are then flattened down evenly. The extended free half of the cotton thread is folded over such that the two ends come together. The two ends of the cotton thread are then held together and twisted in the palm of the hand. As the cotton twists around itself the resham yarn gets locked in between.



Initially the process of twisting was carried out by hand, however now a small hand held machine is available in the market. This makes the process faster and less tedious.



14. bobby painter

Luminous pink cheeked gods, perpetually delighted children, Muslim shrines twinkling against calligraphic backdrops, heroes of the Indian independence movement glowing with nationalistic fervor, coy and enticing women, swans and monkeys, radios and keys - intense, graphic, suffused with lush colours, boldly centered within the frame. India printed images like these are available to almost everyone, either as small framing pictures that can be bought for a couple of rupees, as larger posters, as packaging labels for inexpensive commodities like matches, incense and fireworks or as calenders that are given away by businesses as advertisements. These commercially sold prints are now referred to as “bazar art”.



This art cuts across city and the village, the street and the home, worker and peasant. It also blurs the boundaries between the realms of politics, commerce, religion and the aesthetic. Its sacred and secular iconography appears in public spaces of work and political spectacle as much as it inhabits the domestic sphere of kitchens, bedrooms and prayer rooms. It bobs on the dashboards of buses, taxis and autos; watch over government offices, schools and factories; hang from trees in outdoor markets; animate political propaganda and advertising.





(Above) auto rickshaw flaps painted with images of a bollywood film heroin.(Facing page) Bobby Painter replicating a picture of the Mata from a calender onto a metal sheet.

LOCATION: Pavement oppoait Dilli darwaza.

TECHNIQUE: Oil painting, Radium strip fancy decorations and lettering.

CRAFTS PERSON: Bobby Painter and brother Bobby Painter.

The brothers have been paiting from more than 30 years. Tir father too was a painter. They generally paint film heroes, Mataji, paint large scale imitations of small calender art as well as personal portraits. Also if one tells him a story or describes a place he can paint it in his own style drawing images from his own imagination. He also paints wall pieces.

He can be found painting away, sitting under a people tree on the pavement from 9 a.m. to 8 p.m.



15. paper making



(Above) cotton pulp being converted into sheets of paper. (Left) sheets of paper hung to dry.

PROCESS:

Discarded cotton fabric waste is torn into chindhis or scraps. These scraps are then further crushed into a pulp by passing them in water through a pulp making machine for about four hours. Alum is added so that the ink does not run when the paper is used for writing. The required colour is added at this pulp stage. The pulp is then transferred to tanks where men work in pairs to make paper. A rectangular mesh is dipped into the pulp. A thin layer of pulp is evenly spread on the mesh and the excess water drained out. Different textures of the mesh will produce paper with the corresponding texture. Therefore a sheet of pulp is formed which is pressed to further squeeze out water and transform the pulp into a compact surface. Finally hung to dry. The dry paper is then calendared by a machine after which the edges are trimmed to give neat rectangular sheets of paper.

LOCATION: Kalamkhush hand made paper centre. Gandhi Ashram, Ahmedabad - 380027.

Ph: 079 27559831, 079 27559832

CONTACT PERSON: Manager Mohanbhai j. Desai.

PRODUCT RANGE: Wedding cards, Invitation cards, Greeting cards, Certi paper, filter paper, bond paper, blotting paper, drawing paper, files and folders, box file, paper bag, covers, photo album, photo frame, lamp shade, diaries and paper stationary.



Paper products displayed for sale at the Kalamkhush outlet at Gandhi Ashram.



Paper decorations from Calcutta. However they can also be made by the crafts women in Ahmedabad.



Paper parrot made by a crafts person from Calcutta who has been living in Ahmedabad.



Paper decorations from Delhi.



Paper flower decorations and streamers made in Ahmedabad.

16. paper flowers



LOCATION: Honest decoration, Rani na Hajirano davi baju, Manik chowk, Teen darwaza, Ahmedabad-1.

Ph: 9879813617.

CRAFTS PERSON: Majid bhai Amir bhai and family.

Majid bhai owns a little shop where he stocks and sells a variety of bright, colourful and glittering paper decorations. This is a family business where the women of the house construct these paper decorations sitting at home while the men manage the business i.e. procuring the raw materials and selling the finished goods.

The paper decorations are used during the festivals, especially those of the Mata which occur twice a year. Once in October when it is celebrated as Navratri and once in the months of Chaitra which is in April. There are 12 distinct kinds of paper decorations that form an essential part of the Mata ji festival decorations.

Besides this these decorations are also used abundantly during weddings and other special occasions.



17. bangle makers

The *Maniars* used to carve bangles out of ivory. However when ivory was banned, their lively hood was threatened. It was then that they chance upon acrylic.

According to Anil bhai Parajapti, an acrylic bangle wholesaler a company had imported acrylic sheets to make buttons. The *Maniars* got hold of some sheets and made bangles out of them. Now there are close to 50 manufacturers of these bangles around the city.

Acrylic scrap is bought from Mumbai. It is then melted down in Ahmedabad and caste into cylindrical dies. After this it is cut into the shape of a bangle. Carving and other decorative work follows.

The selling of these bangles is done by wholesalers in Manik chowk and Kalupur areas and bangles are supplied to almost all parts of the country.

Traders say that the acrylic bangles have many advantages over the glass ones. Acrylic is sturdier, the sheen stays for a longer time and is seen by the younger generation as a more contemporary option.



LOCATION: Gahdhi rd, Bala Hanuman, Teen darwaza, Ahmendabad - 1.

TECHNIQUE:

Acrylic bangles with diamonds.
Acrylic bangles with metal patti.

CRAFTS PERSON: Raju bhai Maniar and his Nephew. Raju bhai owns a little shop on Gandhi rd where besides selling his bangles he also makes them along with his nephew. According to him production of acrylic bangles continues for 8 months in a year. It is suspended during the months of June to September. His clientele is mostly the local people who buy these bangles during the wedding season of December-January and March-April as the bangles form an essential part of their traditional costume.



LOCATION: "Hira Prapbu", 96 Gandhi rd, Nr. Bala Hanuman, Ahemdabad - 1
Ph: 079 22146844, 079 221 46888

TECHNIQUE: Can shape Acrylic into bangles, earrings, necklaces. Acrylic objects with metal patti and gold decorations.

CRAFTS PERSONS: Nigam Maniar. His family owns a comparatively large and well stocked shop with a large variety of acrylic bangles. They have their own workshop in Teen darwaza where hired workers carry out the production of these bangles.



Necklaces, earrings, fingure rings, bangles in traditional designs made in acrylic by Nigam bhai Maniar. Unlike cream coloured ivory that was used initially, acrylic acrylic that has replaced it is available in a wide range of colours.



LOCATION: Cynderella beauty parlour,
Swastik char rasta, C.G. rd

CRAFTS PERSON: most beauty parlours



18. henna

The art of *mehendi* is referred to as henna or *mehendi*. In various eastern parts, henna is thought to hold special medicinal or even magical properties. It is used to help heal skin diseases, prevent thinning hair, and cool the skin to reduce swelling in hot climates. It is made into a beverage to heal headaches and stomach pain. Newly purchased homes in Morocco often have their doors painted with henna to wish for prosperity and chase away evil. Henna is used as a protection against the “evil eye”. The foreheads of bulls, milk cows, and horses are sometimes decorated with henna for their protection. Tombstones in graveyards are sometimes washed with henna to please the spirits.

Mehendi staining on the skin is of temporary nature. *Mehendi* designs have traditionally fallen into four different styles. The Middle Eastern style is mostly made up of floral patterns similar to the Arabic textiles, paintings and carvings and do not usually follow a distinctive pattern. The North African style generally follows the shape of the hands and feet using geometrical floral patterns. The Indian and Pakistani designs encompass more than just the feet and hands and generally extend further up the appendages to give the illusion of gloves and stockings which are made up of lines, paisley patterns and teardrops. Lastly, the Indonesian and Southern Asian styles were a mix of Middle Eastern and Indian designs using blocks of color on the very tips of their toes and fingers. All of these styles remain popular today but have also been joined in popularity by celtic designs and chinese symbols.

In India, it is used at celebrations like weddings and other special occasions which are traditionally associated with transcendence and transformation. It is traditional for the bride to get together with her friends and have them spend hours applying the henna to her skin and give her marriage advice in tandem. The patterns used for weddings are much more intricate and time consuming. The bride’s henna must be more beautiful and intricate than anyone else’s of course since it is, after all, her special day. Another interesting fact is that the bride has good reason to look after her henna for she is not expected to partake in housework until the henna is gone.



Silver anklets sold in the silver shops in Manik chowk. All the little pieces of silver come from Surat and are welded together to create different designs in Ahmedabad.



18. silver jewelery



Individual patterned loops of an anklet are placed in rows on an asbestos sheet for welding.



Different patterned silver pieces are arranged on an asbestos sheet to be welded together into a neck ornament.



A white solution is applied to the different pieces of an anklet at their point of attachment.



A little silver flower is made using pliers.





The arrangement of silver pieces is then welded together.



The ready pieces of silver ornaments are then treated to a flame for about 2-3 minutes. They are then washed in sulphuric acid solution. This is done to polish the silver and give it lustre.



(Left) Silver anklets before being polished.



(Below) Traditional Bharwad anklets shine brilliantly after being polished.



Traditional folk ornaments of Gujarat. The pieces of silver are yet to be welded.





20. slotted angle racks



The metal sheet cut into the required sizes is punched on a punching machine.



The edges of the sheet are folded over at right angles.





Another metal sheet is riveted to the larger metal sheets for support so that the rack can carry more weight.



Finally the individual pieces are painted before being joined together.