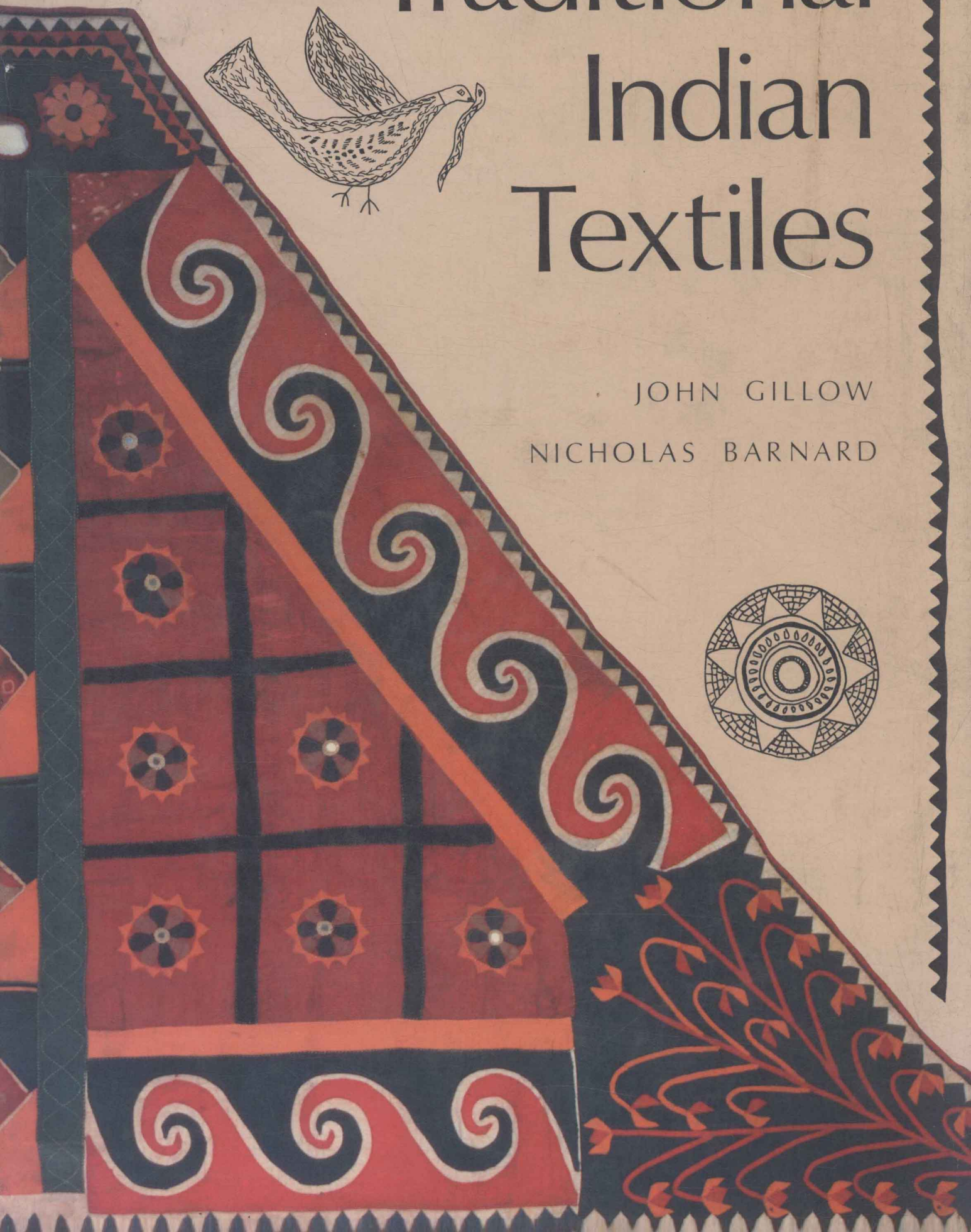
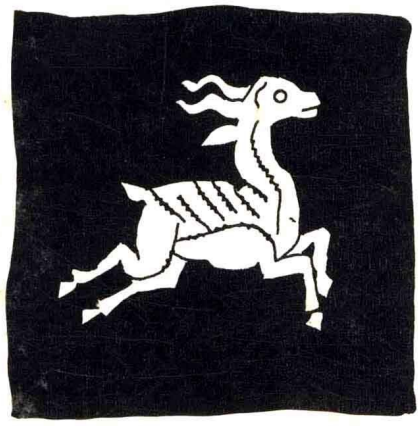
Traditional Indian Textiles

JOHN GILLOW

NICHOLAS BARNARD





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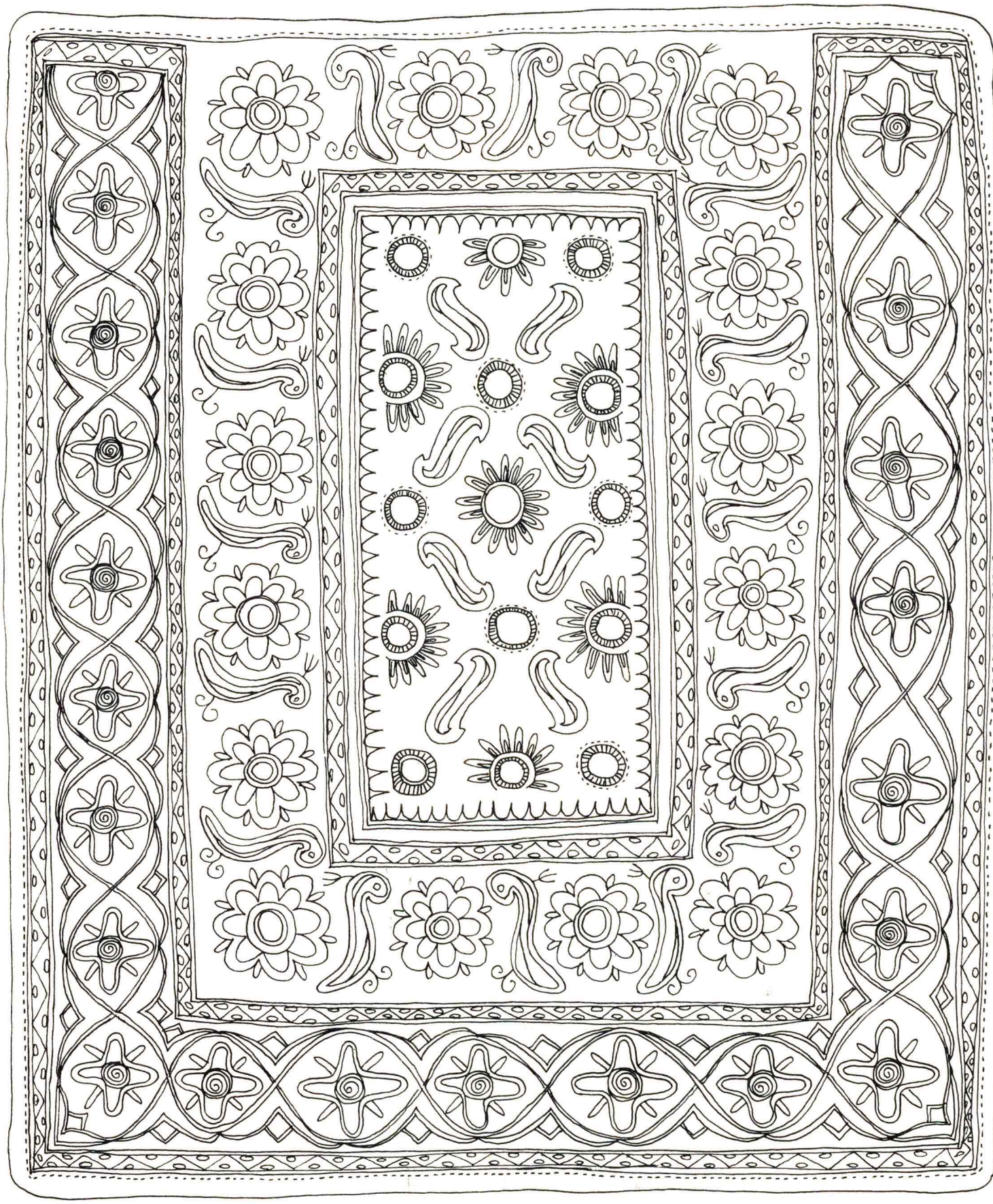

JOHN GILLOW AND NICHOLAS BARNARD

Traditional Indian Textiles

With 195 illustrations, 169 in colour, and 4 maps

THAMES AND HUDSON

To the memory of my late father, J.G. Gillow

Our thanks to: Peter Ackroyd, Janet Anderson, Elizabeth Andrews, Tim Ashfield, Karen and Alan Beagle, Ishwar Singh Bhatti, Kay Brooks, Peter Collingwood, Ilay Cooper, Dennis Cope, Rosemary Crill, S.N. Das, Rosie Ford, Gilubhai, Janet Harvey, Celia Herrick, Jennie Parry, the late Manubhai, Radakishan Maheshweri and family, Abdul Sattar Meghani and family, James Merrell, Anne Morell, M-L. Nabholtz-Kartaschoff, Aithur Muni Krishnan, Julia Nicholson, Sheila Paine, D. Paparao, Khodidas Parmar, Rose and Nelson Rands, Khatri S. Salehmohmad Parvani, Bharat Patadia, Karen Scadeng, Khatri Mohammed Siddiq, John Smith, Rabu and Munji Sharma, Meira Stockl, Marianne Straub, Judy Turner, Badal Uttam, Motabhai Vadya, Piers Vitebski, and Goodie and Amrit Vohra.

Frontispiece: Child's cap piece, Kutch

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Introduction

Fifteen years ago, after one of those long, dusty, apparently endless train journeys so typical of India, I alighted at last at Bhuj railway station in the far north-west of the country.

There I looked on to a walled, gated town, whose incongruous centrepiece is a Victorian Gothic tower – part of the Maharao's palace, but better fitted to a public school in the English countryside. I walked through the main bazaar of Bhuj, past silver merchants and shops full to bursting with fine mashru satins and shawls. Jostling past me came Sidis of African descent, as well as Ahir and Rabari, Hindu herders in their mirrorwork costumes and ivory bangles, and Kanbi farming women with chain-stitch blouses and skirts. Stalking through them all came tall and lean Jat Muslim herders, henna-bearded men in ajarakh block-printed turbans and lungis, and women wearing profusely embroidered tunics, heavy gold nose-rings and madder-dyed bandhani shawls and skirts. Here were communities and castes living side by side, at peace – and expressing their differences through colour and textiles.

In the workshops, I saw block printers and bandhani workers, weavers at pitlooms producing mashru satins and dablo blankets for the herders and farmers. Later, in the villages, I saw interiors decorated with bead-work panels and hung with embroidered, pennanted bunting setting off highly polished brass pots and silverware, with furniture carved with the recurring patterns of flowers, birds and animals, all against walls decorated with a relief of mud sculpture, whitewashed and inset with mirrors.

No other land enjoys such a profusion of creative energies for the production of textiles as the subcontinent of India. The interaction of peoples – invaders, indigenous tribes, traders and explorers – has built a complex culture legendary for its vitality and colour; today, over ten million weavers, dyers, embroiderers and spinners contribute their handmade textiles to this melting pot.

From earliest trading records, it is clear that European, Asian and Levantine civilizations looked to India for her textiles. Greeks, Romans, Arabs, Persians and Chinese traded precious metals and silks for the fine and colourful cottons of the Subcontinent. The special quality of the light cotton cloth, the embroidery techniques, the ability to respond with alacrity and sensitivity to the demands for new designs and patterns, as well as the fast nature of the colourful dyes, ensured that, until the European Industrial Revolution, India was the world's foremost centre of textile production.

Today, India has more than recovered from the disasters wrought by the flood of foreign powerloom imports. From the Rann of Kutch to the Coromandel Coast and from city to village the handloom weavers, block printers, textile painters, dyers and embroiderers work to continue the developing traditions of Indian textiles crafts. *Traditional Indian Textiles* focuses on the twentieth-century development of this home and small workshop industry. The histories of textile traditions are examined, the techniques of dyeing, weaving and embroidering are analysed and the country is traversed from region to region to explore and highlight the centres of traditional textile production. For the designer, traveller, student and collector, *Traditional Indian Textiles* is the essential guide to the most famous of all crafts of the Subcontinent.

John Gillow

1 The History of Textile Production

The production of sophisticated textiles within the Indian subcontinent has prehistoric origins. Yet though we are spoilt with riches from other cultures with a less fecund weaving history – from the ancient Central Asian and pre-Columbian weavers and embroiderers, for instance, whose work has been stored in the cryogenically sealed tombs of the Siberian Altai, or the desiccated burial troves of the Peruvian coastal desert, tragically none of the wealth of ancient Indian textile manufacture has survived. In fact, the unpredictable patterns of the extremes of the alternately wet and dry climate have ensured that only a few fragments of bio-degradable woven plant and animal fibre remain to help us chart with any degree of accuracy the history of Indian textiles. This lack of tangible evidence is counterbalanced in part by an abundance of archaeological finds and literary references that have, at times, transported the quest for analytical and accurate data into a world of delightful myths and legends that are very much more in keeping with the mystical and religious qualities still associated with traditional Indian textiles.

The earliest textile finds were made at Mohenjo-daro, an archaeological site of the third millennium BC on the Indus River. There, woven and madder-dyed cotton fragments wrapped round a silver pot had been preserved by the metallic salts that impregnated the cloth. The use of madder dye made fast with a mordant and the presence of dye vats at the site testify to an advanced understanding of the processes of colour fixing on cloth, and a relief-carved stone sculpture from the dig clearly depicts figures draped with patterned cloth. Spindles were found at Mohenjo-daro and used, most probably, to wind weft threads when working at a wooden loom; the presence of bronze needles at the site suggests that this Bronze-Age civilization embellished its woven cloth with embroidery or supplementary threadwork on the loom. From this evidence we may surmise that some peoples of the Subcontinent were at least two, perhaps three, millennia in advance of the European world in the preparation and use of cotton and mordanted dyestuffs.

Aside from the tapestry-cloth discoveries in Central Asia at the tombs in the Altai mountains (6th–4th centuries BC) and in Turkestan (2nd century BC–10th century AD), some of which may be of Indian origin, no examples of cloth from the Subcontinent were known until the copious nineteenth-century finds of trade cloth unearthed at Fostat, near Cairo in Egypt, some of which date back to the fifteenth century. We have both Asian and European literary references to cloth production to shed light on the many centuries bridging these archaeological finds. Assyrian and Babylonian tablets from the seventh century BC allude to the cotton cloth trade between Mesopotamia and the Subcontinent. From within India itself the Hindu epics such as the *Ramayana* and the *Mahabharata*, as well as Buddhist sources, chart in detail the processes and uses of textiles made of cotton, linen and silk between the fifteenth and the second centuries BC. The silk yarn is thought to be Chinese, suggesting the existence of a long-established overland trading route with the lands north of the Himalayas. By the sixth century BC the expansion of the Persian Empire linked the Indus basin with the Mediterranean by overland and coastal trade routes. Indian cloth became much coveted by both the Persians and the Greeks because of its brilliant colours.

The empire of Alexander the Great and his colonizing Greek successors extended to the foothills of the Hindu Kush. Alexander's invasion of India in 327 BC and his two years of campaigning encouraged cultural and trading links that reached from Asia Minor and the Mediterranean sea ports to India by way of land routes through Persia and Afghanistan. Such links were strengthened by a regular exchange of envoys continuing through three generations of Seleucid and Mauryan kings. Such was the consistency and continuity of commerce through this early

l other trading networks
e ports of western and eastern India. Goods flowed to and from the peninsula of India both overland and by coastal sea routes, and from India to Ceylon and Burma by way of the ports of Orissa and Bengal. Trade with China was established through the eastern route traversing Assam and Burma. To the west, the lands of Arabia, Persia, Mesopotamia, Asia Minor and the Mediterranean were linked by coastal trading stations on the Arabian and Red Seas to the Gulf of Cambay. The Arabian Sea was crossed by pioneering Arab sailors, who used accurate stellar navigation throughout the monsoon-blown summer voyage from west to east. They would then remain in India until the opposite winter winds allowed them to return to the ports of Aden and Socotra. These sea routes carried the main bulk of trade between the Mediterranean world and the Subcontinent.

By 250 BC, the marauding activities of the nomadic tribes north of the Himalayas set the scene for the establishment of a trade route that was to assume a title more of romantic than economic importance – the Silk Route. Thwarted to the east by the Great Wall, pasture-seeking tribes ventured west and south, displacing the

'Moti' (beadwork) 'chakla' (square hanging)

Scythians from the Aral Sea hinterland. The Scythians, in turn, moved into Bactria and Parthia, bringing Central Asia into the Indian trading world and laying the foundations for the Silk Route. Indian traders carried commerce to the remote towns of Kashgar, Khotan, Turfan and Yarkand, establishing merchant colonies and a new era of communication with China. In the West, the wealthy Roman Empire sought out the luxury goods of the East, and Indian merchants became both middlemen and suppliers to this trade. The Roman demand for spice encouraged Indians to travel and trade further afield in South-East Asia, to Java and Sumatra, which eventually led to the establishment of sea-trading routes with China. By way of Indian traders spices, jewels, exotic animals, cotton and silk goods and silk yarn from China found an eager and rich Mediterranean consumer. Consequently, Rome developed a trade deficit with the East which, Pliny complained, caused a drain of over 550 million sesterces of gold bullion each year. By the first century AD, Gangetic Indian muslins were well known in Europe, lyrically described as 'venti' (fine as the wind) and 'nebula' (misty in nature).

Roman traders were to be found in south and west India and at one settlement, Arikamedu, on the south-east coast, it is known that muslins were woven to the requirements of the consumer some three thousand miles to the west. The *Periplus Maris Erythreae* of the first century AD, a maritime analysis of the regional trade, describes in detail the weaving centres of the Subcontinent, revealing the existence of a network of specialized trades little changed some two thousand years later. From the east coast came cotton, silk and indigo, with the finest muslins from the Gangetic delta; from the west coast, cotton, silk textiles and yarn.

This direct trade with a Mediterranean empire was to be halted by the notorious Huns of Central Asia. Thwarted in their advances to the east and south by the empires of China and India, the Huns turned westwards to destroy the Roman Empire. By the end of the fifth century they had penetrated north-central India and in their wake arrived other Central Asian tribes who were to assume cultural and military significance in the centuries to follow. By the end of the sixth century the Hunnish attacks ceased and the Persians and Turks took Bactria; Indian trade was now directed towards South-East Asia and amongst the large regional markets of India itself. Silk was imported from China in quantity, and Indian traders settled in Canton and throughout Thailand, Cambodia and the Indonesian archipelago, irrevocably influencing the religious and cultural development of each land.

Sinarth Brahmins wearing 'dhotis' (loin cloths). One holds a 'gaumukhi' – an embroidered glove, which contains the sacred prayer beads.

The famous Ajanta wall paintings of the fifth to the eighth centuries AD provide an invaluable record of the refined nature of the Indian textile industries of the time. The cave frescoes clearly depict dancers, nobles, servants and musicians clothed in loin cloths and blouses, most probably patterned by the resist techniques of printing, tie and dye and ikat as well as brocade weaving. By contrast to this picture of a world of the courtly rich in ceremonial attire, the two seventh-century Chinese pilgrims Yuang Chwang and I Tsing noted on their travels through India that the everyday costume of the people was not tailored and was mostly white. Reference is also made to the variation in garb between the wealthy and the poor, and to the clothing of the priestly classes.

Known for their adventurous seafaring spirit, the Arabs who came to western India at the beginning of the eighth century were fired by religious and territorial ambitions, and by a desire to control the lucrative spice trade with South-East Asia, until now in the hands of Indian middlemen. For more than two centuries, after the forcible conversion of the Zoroastrian Persians, the extension of the Muslim Empire into India was restricted to the occupation of Sind; however, the Arab traders succeeded, by settling permanently on the Malabar coast, in gaining control of the flow of sea trade between South-East Asia, India, the Mediterranean and beyond, which they then maintained for over seven hundred years.

The peace of this inward-looking interlude was irrevocably shattered from AD 998 onwards, when Mahmud of Ghanzi and his Afghan army conducted near-annual incursions into northern and central India to loot and break up the idols of the Hindu temples, returning laden with bullion, jewels and statues of precious metals. The eventual settling of north and central India by Turkish and Afghan sultans by the late twelfth century created the Delhi Sultanate, a regime that sponsored the arts with lavish displays of court patronage. The skills of weaving, textile production and decoration must by this time have reached a certain zenith, for a sultan would bestow robes of honour, numbering some hundreds of thousands of garments each year, upon his acolytes. A Delhi royal silk 'karkhanah' (workshop) is recorded as having employed over four thousand weavers to supply part of this ostentatious display of wealth, and the silk trade with Central Asia and China certainly flourished during this time, both overland and by Arab-

North Indian portrait of a man and boy proudly wearing Kashmir shawls with resist-dyed turbans

controlled sea routes that linked the prosperous Indian and South-East Asian ports. Influences from western Asia and further afield are evident in the architecture of this period, when Afghans, Mongols, Turks, Persians, Arabs and Abyssinians were all drawn to the magnificent city and court of Delhi as craftsmen, soldiers and adventurers.

The two-hundred-year reign of the sultans ended in 1398 when Tamerlane sacked Delhi, and after a fifty-year period of recovery under the Sayyids the north of India returned to Afghan rule under the Lodis. The weakening of this regime by inter-tribal jealousies prompted the governors of the Punjab and Sind, in the second decade of the fifteenth century, to invite an adventurer from Central Asia to help assert their independence and re-establish their status within the Sultanate. An appeal for assistance to Babur, a direct descendant of Tamerlane and Genghis Khan, proved to be an unwise move, for at the battle of Panipat in 1526 the Afghans were defeated and Babur then founded a dynasty that was to rule India as the magnificent Mughal Empire.

The dying years of the fifteenth century and the early decades of the sixteenth were to be most significant for the Subcontinent. Culturally and commercially, the peoples of India were to be influenced by two totally different expansionist empires. After Vasco da Gama's discovery of the Cape of Good Hope route in 1498, the Portuguese were to found the first European coastal colonies in India at about the time the Mughals were establishing their northern kingdom. Whereas the Mughals confined their activities to mainland India, however, the Portuguese and other European nations not only formed new local powers within the region, but also set out to take over the lucrative Arab-controlled sea trade routes.

The primary driving force for European expansionism was the value of spice, an essential flavouring and preservative for meat. High profits could be made from this commodity, and other factors, such as a popular anti-Muslim sentiment, the disruption of overland trade links by the marauding Central Asian tribes and the desire to overturn the Venetian and Egyptian trade stranglehold, sent Columbus in one direction in 1492 and Vasco da Gama in the other, both seeking 'Christians and spices'. For a century, Portugal reaped the rewards of its commercial acumen; under Portuguese control, Malabar became the re-export centre for spices from the East Indies, and the maritime routes from the Arabian Sea to the Malaccan straits became a Portuguese domain. Toll was exacted from other sea trade by a system of licences.

Babur, the first leader of the Mughals, established a legendary empire, an interlude of independence between the foreign rule of the Central Asian Turks and the British. There have been few more opulent consumers of exotic weavings and embroideries than the Mughal nobility and their acolytes. Their copious patronage of the arts was in part a result of laws of inheritance, for assignments of land to the nobility lasted for life only and the next generation would have to scrabble upwards from the bottom once more; taxes remained in arrears until death, when a great man's property would be sealed and the remainder released after the deduction of exacting dues. It is no surprise, therefore, that the Mughal lords were profligate.

The glory and ostentation of this time are still evident throughout northern India. Public works projects were popular, mosques were built, wells excavated, retainers clothed, rest houses

established and summer palaces and gardens lovingly created. Textiles of woven and brocaded precious metal threads were fastidiously worked in the royal workshops, palaces were caparisoned with colourful hangings and whole tented cities travelled with the royal court when the emperor was campaigning, hunting or surveying his dominion. Royal workshops and local village outworkers satisfied the needs of the nobility – François Tavernier, a traveller who in 1665 visited the karkhanahs of the court, noted that artisans such as weavers, embroiderers and wood turners, as well as painters and lacquering specialists, were each given the use of a large hall, within which they practised their craft.

External trade flourished during the seventeenth century – the golden years of the Mughal Empire – and, as the Romans had previously discovered, the drain of bullion to the Subcontinent from Europe was a cause for serious Western concern. Textiles, indigo, saltpetre and spices were sent westwards, and exchanged for wine, novelties, horses and precious metals. The fine colouring, patterning, weaving and dye-fast properties of Indian cloth delighted the Western consumer and from the early days of the Portuguese incursions the printed, painted and embroidered cloths were in great demand. The textile production was further stimulated by the almost simultaneous arrival of the Dutch and the English in Southern Asia, their goal being to break the Portuguese stranglehold on the spice trade. The first Dutch fleet of 1595 sailed directly to the source of the precious commodity, establishing a new colony in Batavia (now Jakarta), in Java. The Dutch established a cunning network of trade in which India became a key link as a source of inexpensive fine textiles. With cheap cloth bought in India, the Dutch were able to barter for valuable spices in the East Indies without having to draw on their scarce reserves of silver. Their merchants prospered greatly by this triangular trade and found south India valuable not only for textiles but for its own supply of pepper, cardamom and cinnamon.

The English were too late to grasp direct control of the East Indies, and so they looked to India as a possible alternative. Established on 31 December 1600, the East India Company initiated a steady rather than heady pattern of trade between the East and Europe. From west India, and particularly from Gujarat, came embroideries, printed cloth and indigo, and from the Malabar

Rajasthani women, dressed in richly decorated traditional garb: a brocade 'odhni' (shawl) with 'mashru' border; and (right) a 'bandhani' (tie-and-dye) odhni.

coast, the spices of the East Indies and Ceylon; Madras and the south-east was a source of cottons, Kashmir produced a now legendary supply of shawls, and Bengal sugar, silks, embroideries and fine muslins. In return India purchased metals, novelties and ivory. The broadcloth of the English was of no interest to the Indians, and so the imbalance of trade had again to be redressed with silver bullion.

Some idea of the scale, range and wealth of Indian textile exports from the fifteenth century onwards has been confirmed by the Fostat finds in Egypt and from well-preserved collections of furnishing cloth within the stately homes of Europe. In Egypt, the Arab city of Fostat was built near Cairo after the defeat of the Byzantines in AD 641, and was to become one of the great entrepôts of the Arab world. The remnants of the throughflow of trade textiles were discovered first of all in the nineteenth century, and great quantities of Coptic tapestry weavings as well as printed cloth from Gujarat have since been unearthed by archaeological excavations. The

oldest of these fragments have been dated as fifteenth century or earlier and, although none may be classed as luxury cloth, the sophistication of the resist printing and dyeing techniques is still evident despite the ravages of time. Influences in design range from Muslim and Hindu to styles drawn from the European tradition. The cloth was probably destined for use as garment material, household furnishings and religious covers or hangings.

The flexibility and creativity of the Indian weavers and embroiderers in their commercial response to both export and domestic trends is well documented, therefore, from ancient times. And from the seventeenth century to the present day there are many surviving examples of cloth that clearly emphasize the tremendous range of Indian cloth production and the Subcontinent's ability to cater for the export market: for the Europeans were produced prints, embroideries and quilts decorated with flower and animal designs; for the Muslims of East Africa and the Arabian peninsula more simple printed cloth as well as striped cotton and silk textiles; and for the Indonesian archipelago the extraordinary double-ikat cloth so cherished by the nobility. Certainly for many centuries India had been trading via the Levant to the Mediterranean, to supply the demands for fine furnishing cloth, and to the East by sea, for the Indonesian market; but it was the trading companies of the French, Dutch, Portuguese and English who kindled the fires of greater export production. At first the printed calicoes were treated as bartering cloth for spice, but by the seventeenth century their value in the European market was realized, and by the early 1700s, surveys were commissioned to determine the types, designs, colours and quantity of cloth suitable for the consumer. Chinese and South-East Asian designs were introduced, mingling with Mughal, Persian and Hindu traditions. Embroideries from Gujarat and Bengal and painted cloths from the east coast depicted idyllic scenes of arboreal, floral and bird life, intertwined to charming effect. 'Pintathoe', from the Portuguese 'pintado' meaning 'painted', was the descriptive term for much of east Indian decorated calico. Later the painted cloths were known as 'chintes', from the Hindi 'chint' meaning 'variegated'. By the late seventeenth century, this term was applied to both painted and printed cloth, eventually spawning the English word 'chintz'.

To the east, the trade production included the Bengali embroideries and quilts, which were produced with a dramatic visual intermingling of cultures, featuring European heraldry and direct pictorial representation of local and foreign peoples and wildlife, as well as a mêlée of Hindu and Christian religious themes. By the early years of the nineteenth century the great demand for clothing and furnishing fabrics favoured the block-printing production methods, at the expense of the embroiderers and painters of textiles. The weaving communities that had, by the end of the nineteenth century, entered a longterm and irreversible decline include the producers of specialist textile trading commodities such as the intricately dyed and finely woven patola and mashru cloths of Gujarat. Each was destined for a particular market, the patola to Indonesia for court attire and the mashru to the Muslim communities of East and West Africa, as well as of the Arabian peninsula and the Levant.

Of greater fame than the printed, painted and embroidered cloth, and especially in more recent decades, is the Kashmir shawl. Always a luxury commodity, the tapestry-woven fine wool shawl had become a fashion wrap for the ladies of the English and French élite by the late eighteenth century. As early as 1803 Kashmiri needlework production was established to hasten output, and even earlier, in 1784, the English had begun to weave imitation Kashmir shawls. Other Europeans, notably the French, soon followed the English example. But by 1870, the widespread use of the semi-mechanized Jacquard loom in Europe destroyed the exclusivity of the Kashmir shawl, causing a catastrophic collapse of indigenous manufacture.

Having arrived to trade, the English increasingly took a hold on the reins of government, a process that was set in motion by Robert Clive's conquest of Bengal in 1757. This was consolidated in the next hundred years with the spread of British rule over most of the Subcontinent, and then brought to fruition as the all-powerful British Raj of the late nineteenth century. Certainly the policy towards trade remained constant, with the Subcontinent seen as a developing market for the goods run off from the newly mechanized workshops of industrialized Britain. The English continued to import specialist embroideries and painted and printed cloth for an ever-changing and prospering society, and had taken up their new scientific tools to perfect the techniques of

Contemporary 'kantha' (quilted and embroidered) panel

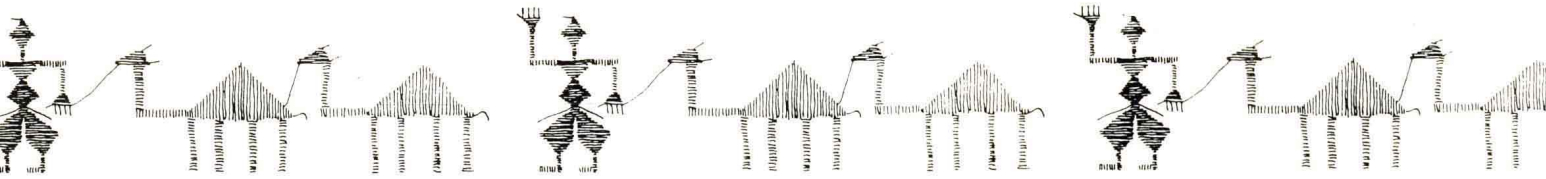
spinning cotton as well as those of dyeing and printing, later to apply such ideas to the development of the cloth-printing machine. By the early nineteenth century the sheds of Lancashire, resounding with the din of textile mass production, had machines reeling off finely printed and fast-coloured cotton yardage with designs specifically created for the Indian market.

For the Indian textile handicrafts industry, the first seventy years of the nineteenth century were dismal, as it suffered from the influx of cheap English cloth. In response to this trend, and against a powerful English protectionist lobby, the first mechanized cotton mill was established in India in 1854. By the turn of the century, having capitalized on the disruption of North American cotton supplies during their Civil War, the Indian cotton mills flourished, dominating the economies of the cities of Bombay and Ahmedabad. The crippling protectionist legislation in favour of the English mills was abandoned in 1925 and the development of the industry since Independence has confirmed India's position as a major exporter of machine-loomed cloth.

In the struggle to achieve independence from the British, Mahatma Gandhi seized upon the idea of using the domestic weaving industry as a symbol to bring home to the people the reality and implications of commercial domination by foreign rulers. 'Khadi' (cloth handwoven from indigenous handspun cotton) was the symbol of a homespun independence and self-sufficiency within the village unit. This khadi program has reinvigorated the handloom industry of India, directly inspiring highly successful commercial developments such as co-operatives of production and marketing throughout the traditional weaving, printing and painted textile centres and states of India.

In addition to this village, town and city power- and hand-produced textile manufacture, there is the domestic decoration of cloth by women of such groups as the shepherds, gypsies and farmers of the more remote regions of the Subcontinent. Amongst these peoples, the embellishment of traditional fabrics by fine embroidery and the imaginative use of appliqué techniques is a part of everyday life. The richest source for this type of production is undoubtedly the north-west of India.

The traditions of cloth manufacture within India continue to develop, and the production of handmade textiles is flourishing, perhaps as never before. Very little has changed over the centuries of international trade. As ever, there are so many levels and types of production, some on the one hand developing and copying from all sources to match the vagaries of taste of the domestic and export market, while yet others continue to produce textiles for traditional family purposes. Truly, India remains the most original, creative and prolific source of textile production in the world.



2 The Materials

As we have seen, one of the fundamental reasons for the continuing success of Indian textile manufacture over the centuries has been its ability to cope with a broad range of market demands. Indian weavers, dyers and embroiderers have been guided by merchants, other middlemen and more recently by government craft societies to produce textiles that might be best described as 'tailored for market preference'. This flexibility of production, combined with the energy of a largely traditional Indian craft society, has resulted in the outpouring of textiles with an enormous variety of colours, patterns and textures.

Of all the textile crafts, it is for the art of dyeing that the Indian peoples have been world-famous for many centuries, and especially for their processing of natural dyestuffs and application of fast dyes with which to decorate cloth.

Dyes

The dyers of the Subcontinent have been creating fast colours for textile decoration for a very long time, at least since the second millennium BC. The secrets of the technical skills that form the core of the dyers' art were not discovered by the West until the seventeenth century; and thus it was that for over three thousand years, the natives of Europe had to be content for the most part with dun-coloured woollen cloth, textiles of animal hair, furs and flax which, when decorated, would be no more than painted or daubed with fugitive colours of vegetable, animal and mineral origin. The fast dyeing or bright colour dyeing that did occur in the West was in the preparation of cloth for the aristocracy and the very wealthy; indeed, certain brilliant and rare colours were restricted to that use only. No wonder the ancient Greeks, their fellow Mediterraneans and the later European visitors to the Subcontinent were enraptured by the colourful cloth they found in common use: washable as well as colourful and colourfully patterned, it certainly seemed to display miraculous qualities for garment and furnishing cloth.

Primary evidence for the very early mordanting of cotton cloth for decoration is provided by the printed textile fragments found at the Mohenjo-daro excavations. The cotton plant is endemic to this area of the Indus Valley, which is thought to be one of the first regions to develop techniques for processing the fruit of the perennial wild cotton plant, *Gossypium arboreum*, from a boll of vegetable fibres to yarn ready to weave. Although such useful fibrous material was available in abundance, it was less adaptable than animal fibres such as sheep's wool, silk, horse, goat and camel hair, for it will not accept natural dyes for permanent colouring. From early on, therefore, it was necessary to find ways to develop and improve on dyestuffs which could be made to coat insolubly, or 'bind' on to, the surface of the cotton fibres.

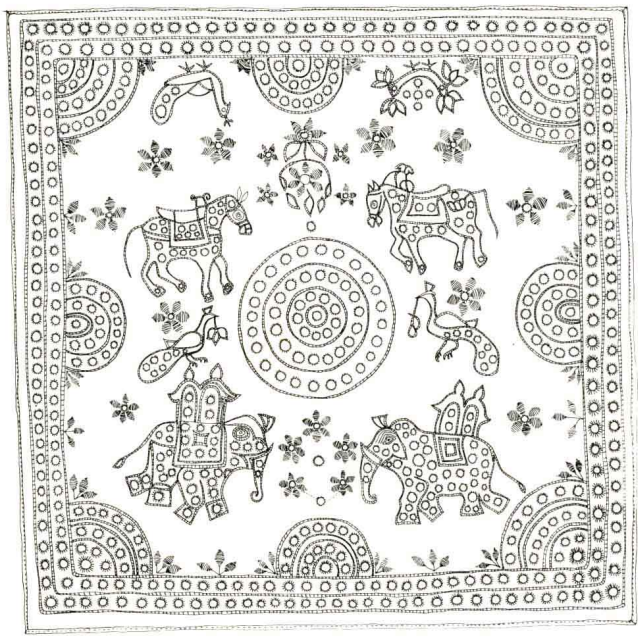
The secret of this fast colouring of vegetable fibres lay in sensitive and intelligent use of metal oxides as an intermediary substance. Such a substance is known as 'mordant', a word derived from the Latin 'mordere', meaning 'to bite'. The mordant 'bites' the fibre in combination with the dyestuff to fix the colour. There are over three hundred dye-yielding plants endemic to the Indian subcontinent which, after careful preparation, can be used with the various types, densities and qualities of mordants.

The application and significance of colour is central to the Hindu culture, as the textile scholar Pupul Jayakar made clear in an article published in the magazine *Marg* (XV,4,1962): 'In India the sensitivity to colour has expressed itself in painting, poetry, music, and in the costumes worn both by peasant and emperor. Raga was the word used both for mood and dye. Colours were surcharged with nuances of mood and poetic

Bengali women arrayed in jamdani and brocade saris

association. Red was the colour evoked between lovers: a local Hindi couplet enumerates three tones of red, to evoke the three states of love; of these, manjitha, madder, was the fastest, for like the dye, it could never be washed away. Yellow was the colour of Vasant, of spring, of young mango blossoms, of swarms of bees, of southern winds and the passionate cry of mating birds. Nila, indigo, was the colour of Krishna, who is likened to a rain-filled cloud. But there is another blue, Hari nila, the colour of water in which the sky is reflected. Gerua, saffron, was the colour of the earth and of the yogi, the wandering minstrel, the seer and the poet who renounces the earth. These colours when worn by peasant or emperor were but a projection of the moods evoked by the changing seasons. The expression of mood through colour and dress was considered of such consequence that special colours were prescribed to be worn by a love-sick person and a person observing a vow.'

The craftworkers who have been responsible for creating and reproducing this panoply of dye colours have never enjoyed the lofty status of their patrons. Despite their specialist and often highly prized skills, remuneration has ever been modest. Working as extended family groups, dyers remain locked within the caste system at the lower levels of the social and economic scale. National and local government bodies have in recent years, however, endeavoured with some success to give greater appreciation, respect and financial rewards to select members of so venerable a craft industry by instituting awards and titles of rank for the dyers. For the most part, however, their lot is to remain in as limited a sphere of social opportunity as their predecessors. Seventeenth-century descriptions of the activities



'Chakla' (square hanging)

of dyeing communities tally with the practices of today, whereby specific trade cloth and dyestuffs are allocated to families with an order, on a piecework or outworker basis. Communities of the same caste within a village or town will practise similar tasks or contribute various elements of production, eventually creating the type of textile for which that area is famous. Other castes may well practise yet more specialized or different traditional dyeing and textile-decorating work within the same district. In every instance, however, both young and old participate in the textile dyeing as a matter of course, allocated specific tasks according to status or experience.

Whatever their standards of living, the dyers of India are ensured pride of place in the world history of the textile arts. Until the late nineteenth century, they worked exclusively with natural dyes. An aura of reverence and respect for the properties of these dyes permeated their lives and, even after the discovery of the chief chemical dyes by the Western producers, the Indian dyers claimed that their indigenous and naturally occurring dye substances not only lasted longer but strengthened, rather than harmed or weakened, the cloth. Yet, the introduction of these new chemical dyes in the 1890s dealt a body-blow to the traditional practices of the dyers and the final death knell to much of the farming of dye crops; it was said that it also 'injured the artistic feelings of the people and demoralized the indigenous crafts'.

Chemical dyes are a marketing dream: they can be used on all types of yarn, are relatively easy to handle and transport and above all, are cheap. Colour ranges may be selected from a chart and mixed, if desired; and neither supply nor price is subject to the vagaries of the monsoon climate which so bedevils the lives of the Indian farmers. Chemical dyes, therefore, are the primary source of colour for the textile industry of India in the twentieth century. Hampered at first by an inadequate understanding of the early aniline chemical dyes and their uses, bewildered by the range of bitingly bright colours available, the dyers of India laid themselves open to charges of declining aesthetic standards. Certainly the families and corporations involved in semi-mechanized and the more recent automated mass production of cloth have adopted chemical dyes to achieve an efficient and profitable output at the expense of the traditional aesthetic qualities of natural colours. In recent times the development and expert use of high quality and fine colour chrome dyes has contributed in part to the renaissance of interest in the textiles of India for the fashion and furnishing market of the West.

In another area of textile production, this century has seen a re-invigoration of India's handloom textile industry. Government organizations have been formed to spread an awareness of new raw materials, production skills and marketing possibilities. The All India Handlooms Board was established in 1952, the Institutes of Handloom Technology and the Weavers Service Centres in 1955. These organizations, in league with National Marketing Societies and their associated state co-operatives, have championed the cause of the weavers in both the home and the export market, awarding medals each year for excellence of production. By supporting the senior craftworkers in this way, a respect for the traditions of the past can be engendered within the young apprentices.

There still exist pockets of production that have always retained traditional methods, through specific local demand, a lack of choice, an abundance of dyestuffs or a dearth of finance. Communities of dyers and printers in Gujarat and Rajasthan produce distinctive printed 'ajarakh' cloth using both natural and chemical dyes. On the east coast the 'kalamkari' (pen-work) cloth printers and painters use both types of dyestuff sources: indigo is in prolific supply in the area, but their red shades come from chemical alizarin.