“Marvelous,” she said. “Tell me about this tapestry.”

Arachne’s lips curled over her mandibles. “Why do you care? You’re about to die.”

“Well, yes,” Annabeth said. “But the way you captured the light is amazing. Did you use real gold thread for the sunbeams?”

- Rick Riordan, The Mark of Athena
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Aurangabad is a symbol of deep culture and historic tradition. Even the stones here whisper to our ears of the ages of long ago and the air we breathe is full of the dust and fragrance of the past, as also of the fresh and piercing winds of the present. The tradition of millennia of our history surrounds us at every step and the process of innumerable generation passes by before our eyes.
Aurangabad was founded in 1610 A.D. by Malik Ambar, the Prime Minister of Murtaza Nizam Shah of Ahmadnagar, on the site of a village called Khadki. He made it his capital and the men of his army raised their dwellings around it. Within a decade, Khadki grew into a populous and imposing city. Malik Ambar cherished strong love and ability for architecture. Aurangabad was Ambar's architectural achievement and creation. Malik Ambar died in 1626. He was succeeded by his son Fateh Khan, who changed the name of Khadki to Fatehnagar. With the capture of Daulatabad previously known as Devagiri by the imperial troops in 1633, the Nizam Shahi dominions, including Fatehnagar, came under the possession of the Moghals. In 1653 when Prince Aurangzeb was not appointed the viceroy of the Deccan for the second time, he made Fatehnagar his capital and renamed it Aurangabad. Aurangabad is sometimes referred to as Khujista Bunyad by the Chroniclers of Aurangzeb's reign. Bibi Ka Maqbara was built in 1678 by Aurangzeb's son, Azam Shah, as a loving tribute to his mother, Rabia-ul-Daurani alias Dilras Bano Begam. In 1756, Nizam-ul-Mulk Asif Jah, a distinguished General of Aurangzeb with the intention of founding his own dynasty in the Deccan, arrived at Aurangabad and made it his capital. He paid a visit to Delhi in 1723, but returned in 1724, Nizam Ali Khan Asaf Jah II transferred his capital from Aurangabad to Hyderabad in 1763. It was ceded by Ali Khan Asaf Jah II, Nizam of Hyderabad to Maratha Empire with Daulatabad and Solapur after Battle of Kharda in 1795[6] with paying indemnity of 30 million rupees. However, Marathi rule was lasted only 8 years and Nizam regained lost territories except Solapur with help of Arthur Wellesley, British general during Second Anglo-Maratha War. Aurangabad was a part of Nizam's princely Hyderabad State until its annexation into Indian Union and thereafter a part of Hyderabad state of India until 1956. In 1956 it became a part of newly formed bilingual Bombay state and in 1960 it became a part of Maharashtra state.
The city of Paithan was formerly known as Pratishthana and today, lies in the district of Aurangabad in Maharashtra. Located 56 km south of Aurangabad, Paithan is today famous for its saris, the vibrant Paithanis. Other sites of interest include the Dyaneshwar Garden and Shrine of Sant Eknath.

Paithan, formerly Pratishthana, is a city and a municipal council in Aurangabad district in the Indian state of Maharashtra. Pratishthanapura was the capital of the first Satavahana king from where it grew into an empire covering almost half of present India. Pratishthanapura or present day Paithan is said to be the capital of Mulaka desh. Aurangabad, Nashik, Jalna, Vashim are parts of Mulaka. Mulukanadu follows the usual conjoint formulation of similar communities: the word Naadu means country in all the south Indian languages; this is suffixed to the country whence the community hails, being in this case “Muluka”. Thus, Muluka+Naadu=Mulukanadu, “people of the Muluka land.” Muluka or Mulaka is identified and it is also known as Moolaka or Moolaka desha.

There are some parts of the world that, once visited, get into your heart and won’t go. When I first visited, I was stunned by the richness of the land, by its lush beauty and exotic architecture, by its ability to overload the senses with the pure, concentrated intensity of its colors, smells, tastes, and sounds.
As per legends Pratishthana was built by King Ila. Ila, who was the king of Bahlika, strayed into Shiva's forest during his hunting trip and was cursed to become a woman by Shiva. By praying Shiva's consort Parvati, Ila managed to stay as man and woman alternatively every month. He would not remember events of one stage in the other. When he was a woman, he married Budha (Mercury, one of the nine planets the ‘Navagrahas’) through whom he had a son (Pururavas). Budha helped Ila to attain his former self by pleasing Shiva through ‘Ashwamedha Yagna’ (Horse sacrifice). After leaving Budha, Ila left Bahlika and established the city Pratishthana from where he ruled for long. After him, Pururavas became the king of Pratishthana.

Paithan was home of the great Maharashtrian saint Eknath, whose samadhi can be found there. The little town is famous for its Shrine of ‘Sant Eknath’, where people flock every year during the time of ‘Paithan Yatra’ also known as NathShashti. The town is famous for its champion textile- the Paithani silk.

It is also a famous Digambar Jain atishay kshetra. A beautiful black coloured Sand Idol of 20th Jain Tirthankar, Bhagwan Munisuvratnath is installed in temple here. Sant Dnyaneshwar Udyyan Dnyeneshwar Udyan is famous garden developed on the lines of Mysore Garden. The city is home to many noted personalities like Shankarrao Chavan, Yogiraj maharaj Gosavi, Balasaheb Patil.

A major dam named the “Jayakwadi Dam” is located near Paithan, and is known for attracting a wide variety of resident and migratory birds. This is the world’s first dam made from soil. It has 27 gates. On 9 August 2006, Paithan experienced its worst flood in known history when the dam floodgates were opened because of heavy rainfall in the region. Photography at this dam is banned and driving your vehicle up to the dam is not permitted.

Shri Santaji Jagnade (1624–1688) was one of fourteen cymbal players employed by Shri Tukaram Maharaja, a prominent Marathi Saint. Jagnade recorded several of Tukaram’s Abhangs. He belonged to the Teli caste of oil producers and is the only Saint from that caste. Jagadane was born and brought up in Sadumbare in the Maval tehsil in the Pune District.

He was a Varkari, a devotee of Lord Vittala (or Vithoba), an incarnation of Lord Krishna, who in turn, is considered in Hinduism to be an incarnation of Lord Vishnu. The address of his temple in Paithan is santaji chawk teli dharmshala Paithan. The founders of this temple are Mr. Kedarnath Dadaraa Sarje and Mr. Pralhadseth Sidlambe.

As of 2001 India census, Paithan had a population of 34,556. Males constitute 51% of the population and females 49%. Paithan has an average literacy rate of 67%, higher than the national average of 59.5%; male literacy is 75%, and female literacy is 60%. In Paithan, 14% of the population is under 6 years of age.

Bidkin is a large village in Paithan Taluka having a population of 14941 according to 2001 census.
“Please, please, Amba my goddess I fear I am caught in my Paithani sari  
Please Siva my God, let me play fearlessly with her.”  
- Commemorative verse to Goddess Amba
The sari is Draupadi’s unending fabric of time. It is the past with a possibility for the future. What was there? What is happening? What will be? Eternal questions play on the screen as the sari unwinds. The known rests upon the unknown, provoking us to look beyond the apparent.
In our ancestors’ times, they transferred what they saw onto their cloth. Lotus was abundant, they wove a lotus; royals kept peacocks, the queens demanded peacock designs on their pallu. Beauty is all around, so we drape ourselves in it.

A Paithani, like any other sari, has 3 distinct sections - the field, the border and the pallav. There are various combinations of the three in terms of colour, motifs and technique of construction.

Commonly used colours are Pophali - yellow, Anjiri - red, Neelgunji - sky blue, Gulbakshi - magenta, Baingani - purple, Motiya - peach pink, Pearl pink, Yellowish green, Pasila - red and green, Gujri - black and white, Mirani - black and red.

Bright, colourful and eye-catching combinations of field and pallav include magenta with yellow or green, green with yellow, yellow with red and turquoise with orange and the contemporary versions include red with white, pink with red and others.

The beauty and power of traditional motifs inspired by these historic works of art still hold captive, the interest, intrigue and heart of the weaver, and the ultimately the market. Contemporary motifs and variation in design are limited to special orders. However even these show some hint of tradition long held.
Ajanta Lotus Motif on the Border and the Pallu of Paithani
LOTUS, Carved on a ceiling of Ellora; Cave No.16
The Indian rock-cut architecture of 34 Caves of Ellora and The Buddhist Religious Art from the Ajanta Caves have a major influence on the traditional motifs of Paithani Sarees.

Paintings of Padmapani and Vajrapani (characters from Jatika Tales) holding lotus in their hand in Ajanta Caves as well as Carvings of Goddess Laxmi sitting on a full blown Lotus and Lotus rock carving in Ellora ceiling are highly influential in designing Paithani Motifs.

Motifs are inspired by everyday life of the weavers and local people. Also Flora and fauna feature majorly in the Paithani.

According to the local stories the peacock and parrot motifs are the depiction of the royal requirements.
Motifs are inspired by everyday life and the Ajanta- Ellora caves. Flora and fauna feature majorly in the Paithani. The traditional motifs which occur most frequently are:

- **The Kamal** - lotus flower on which Buddha sits or stands
- **The Asawalli** - flowering vines, became very popular during the Peshwa’s period
- **The Bangdi Mor** - peacock in bangle
- **The Tota** - parrots
- **The Amar Vell** - flowering shrub
- **The Narali motif** - coconut
- **The Kolma** - stylized coconut
• Muniya- a kind of parrot used in borders and always found in green with an occasional red touch at the mouth
• Panja- a geometrical flower-like motif, most often outlined in red
• Barwa- 12 strands of a ladder; 3 strands on each side

• Mor- peacock
• Mandir padh- temple motif
• Kalma buti- small paisleys

Small motifs like circles, stars, kuyri, rui phool, kalas pakhili, chandrakor, clusters of 3 leaves, were very common for the body of the sari.
Contemporary motifs include:
- The Ashraffi - also known as the Dollar or ‘sikka’ motif
- The Sada Bahar - flowering vines
- Stylized peacock
- Swapnaveil - a floral motif found a Rs. 500 note
- Shubh-chinn - a set of peacocks and parrots on a lotus in a kalash
Vell

Stylized Peacock bootis

Shubh-chinn
A Paithani is a true work of art that like any masterpiece, requires dedication, skill and time to create. An insight into the building blocks and techniques involved in the process of creating the sari is mentioned forthwith.

Raw material is procured from Bangalore, dubbed as the ‘Silk Depot’. 20/22 Mulberry warp silk with higher twist (known as grey silk) is sourced and chemical dying of the yarns is taken up at Yeola in Nasik district. Locally known as Resham, silk yarns are bought at Rs. 4000 per kg after processing.

Zari is sourced from Surat. It may be either impure zari (metal with 20% silver; bought at Rs. 70,000 per kg) or pure zari (gold, gold-plated silver; made only on custom orders).

Dyeing is done in Yeola and the colour shades are given by the manufacturers. The silk threads brought from Bangalore, known as kali/vakhar are divided into bundles known as thok.

The raw material is dipped in hot water and diluted in khar (unprocessed salt), for about 15 minutes. The material is then squeezed by putting a rod in between the kali to remove the excess impurities and then dipped repeatedly in cold water.

The dye bath is prepared in which the proportion varies according to the hues and shades. The kali is dipped in the dye bath, removed, and dried completely. This is repeated 2 to 3 times. It is then washed in cold water to make it smooth and lustrous.

Vat dyes and acid dyes are used because of its favorable properties. Shade cards of 400 samples act as a collection for the buyer to choose from.
Boxes 1 to 3 contain silk and cotton yarn samples from Yeola, dyed in different colours. Box 4 contains metallic zari, possibly Lurex.

After the dyeing process is completed, the silk threads are wounded upon the Asari, a stone and bamboo contraption with a smooth touch. In earlier times a Rahat was used for wounding, but machines made up of the cycle wheel have now replaced it, making the process less time consuming. From the Asari, silk threads are transferred onto a Kandi, a bobbin-like bamboo structure in a 5-ply set-up. The silk threads are finally set onto the loom.

Images seen on the facing page and on the right are taken at the dyeing centres in Yeola, a town in Nasik district. It is a hot-spot for yarn dyeing for the Paithani craft cluster.
Looms are our Gods. They give us livelihood. Our working day starts with a prayer of thanks to our looms; we put teeka or haldi-roli. On Rakshabandhan, we tie rakhis to our looms. They protect us.

The weaver’s relationship to his loom is a scared and intimate one. He worships and rever his loom, for it provides him an income and stabilty. A number stickers of a variety of Gods and Godesses can be found on the reed of a loom, a few common ones being Lord Ganesha and Laxmi Devi. As mentioned by the weavers, they annually tie rakhis, sacred yellow thread, as symbol of protection and love. This signifies the importance of the loom in their lives and the sacred relationship. Often, they draw a swastika in vermillion on the heddle of the loom.

Unable to leave their children at home, women to come to weaving centres with their infants and toddlers attached to their hip. The pitter-patter of little feet and cries of infancy can heard and a warm and jovial atmosphere percolates through the worspace. The toddlers form bonds with the loom as a playmate. The contraption with its multitude of wooden rolls and frames and swaying motion holds great intrigue for them. Infants can often be found in little hammocks strapped onto the Pata, the weaver’s seat in the loom.

To weave a Paithani sari, handlooms are used. Of late, a jacquard set-up has been introduced to ease the weaving of smalll bootis in the field. The jacquard set-up can also be used to weave the border of the sari, with or without a dobbey extention. The basic loom set-up is constructed in Hindpur, Andhra Pradesh. These looms are made using either Saanghvani or Neem wood. Initially looms made up of Saanghvani wood were very popular because of its strength and durability but because of the high costs, it was shifted to neem wood. The prices of basic loom construction varies from Rs. 15000 to Rs. 40000.
“Each part of these looms are made like pieces of a puzzle. They fit together to make a loom. Each piece is as important as the next. Without one, the entire system fails.”

The warp beam seen in Image (1) is called a Turai in local lingo. It is a metallic cylinder and feeds the warps yarns to the loom.

Image (2) shows a Wahi. This is the harness in the handloom through which the warp yarns pass. The wahi is made of a wooden frame with over 3000 nylon threads. However, the number of nylon threads employed in weaving is half the number of warp yarns of the fabric being woven.

Image (2) shows a Wahi. This is the harness in the handloom through which the warp yarns pass. The wahi is made of a wooden frame with over 3000 nylon threads. However, the number of nylon threads employed in weaving is half the number of warp yarns of the fabric being woven. This is because two warp yarns pass through a single eyelet in nylon thread. The wahi is held taut by means of needles attached to every nylon strand. These hang from the wooden frame and the weight is counter-balanced by an assortment of weights hung on the opposite side. These are heavy objects lying around the workspace, often boulders or concrete blocks.

Images seen in a sequence on the right are as follows: Needles holding taut nylon threads in the, Cement weight, Boulder weight.
A Wahi fani is placed closest to the weaver, ahead of the Wahi. It is a reed that is used to tighten the weft yarns fed by the shuttle and comprises a wooden frame with thousands of needles running breadthwise. The wahi fani can be manually moved back and forth. Physical strength has to be applied to move the wahi fani rigorously after very row of weaving.

A Paudi is a pair of wooden planks attached to the harness and it works as a the foot pedal used to shuffle the shed, according to the design to be constructed. The weaver places his foot onto the paudi and steps on it in tandem with the shedding and picking of the warp yarn.

The third image on the left is of a Dhota. This is the boat-shaped shuttle in which the bobbin is placed and its metal tips are made up of iron. The shuttle is made of Saggwan wood or buffalo horns.

A Pata as seen on the bottom-left is a wooden seat where the weaver sits and works. Padding may be used to ease the burden on the weaver and make him comfortable.

The Roll is a cylindrical rod that connects the paudi to the harness. When the weaver steps on the paudi the rod rotates clockwise which leads to the lifting up of the harness attached to it.

Levers used to facilitate taking-up and letting-off motion in weaving.
Cloth beam with finished woven fabric rolled on to it.
The collage of pictures above depicts the preparation of warp yarn for setting the loom.

A system of rustic equipment and technique, although laborious, produces finesse and consistency in the quality of warp yarn.

**Asrai** is a rod placed inside of a conical structure made of stone or cement on which the silk warp yarn is wound. 3 to 5 such stone-and-rod combinations are used and a hank of yarn is wound in a snake-like manner through the bamboo rods.

**Dhapa**, also known as **Kandi**, is a big wooden bobbin on which five ply yarn is wound. This five ply yarn is called ‘resham ki latti’ in the local lingo. The **kandi** is simplistic in structure and resembles a bird-cage.

5 ply yarn is made drawing yarn from 2 asrai’s, 2 kandi’s and an overhead bobbin, looped over a horizontal rod. The 5 yarns are twisted together nimbly and wound onto a new kandi.

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**Loom Set-Up**

The loom is readied for use by setting the yarns in the following steps:

- **Kandi** are hung on the loom according to the colour of yarn wound on them. Those with yarn to be used in the borders are hung at either end and the **kandi**s with yarn to be used in the field of the sari are hung in the middle.

- Silk yarns are drawn from all the **kandi** and wound onto the warp beam parallel-y. The yarns are wound around the cylinder and then fed into the loom. Often, small plastic bobbins are used to hold the yarns in place. Before they reach the next component of the loom, the yarns may be given direction with the help of a grooved wheel.

- The warp yarns travel to the harness, known as the **wahi**, and passed through the eyelets of the nylon wires. 2 yarns pass through one eyelet together.

- Once the yarns are drawn from the harness/heddle, they are passed through the reed known as the **wahi fani**. Here, only one warp yarns passes between 2 needles, made of iron, in the reed.

- The yarns are pulled through and wound onto the cloth beam.
Kandis hung on the loom, feeding yarn to the warp beam.

Warp yarns travelling to the cloth beam, border and field can be seen.

Warp yarns travelling through the eyelets in the harness.

Single yarns passing through the reed.
Once the warp yarns are set onto the loom, the weaver prepares bobbins for weaving in the weft. A shuttle called Dhoti is used and a bobbin is inserted into it. Known as Kakda, these bobbins are finger-sized rolled scraps of fabric on which silk and zari yarn is wound.

As seen in the image on the left, the kakda are made by spinning yarn drawn from a kandi. The yarn is set onto the grooved wheel and pulled out and around a spoke. With the rotatory motion of the wheel, yarn is drawn continuously from the kandi and spun onto the kakda.

Multiple kakda’s are used to weaving. Some have silk and some have zari. The kakda fitted into a dhota are used for weaving the base fabric. These are passed from selvage to the other. However, since tapestry weaving is employed, kakda’s are also used with a dhota to weave extra-weft patterns into the sari.

Occasionally, a jacquard set-up is included in the loom. This is done to either create buti’s in the field or weave geometrical designs in the borders. The set-up is similar to the one used in the production of Himroo (reference Page). A dobby may or may not be used to weave the borders. Use of a dobby hastens the process of weaving intricate but repeated motifs in the border. The use of a dobby clearly distinguishes the product from one that is created entirely by hand.
There are two types of motion to facilitate weaving of a Paithani sari.

Primary motions involved are:
1. Shedding — When the paudi is stepped on, the harness picks up a set of warp yarns. This divides the warp sheet into two visual layers, one above the other. The shed is the pathway for passage of the shuttle with the weft threads from one selvage to another.
2. Picking — A dhota is passed from one selvage of a cloth to another through the shed generated by the warp threads. This is the basic weaving of the cloth. The base of the pallav, border and field is created here.

For the field, silk yarns are used and the colour of the sari comes through. For the border, zari is used and this silk-zari mix of warp and weft is the base of the border. A change in colour from that of the field is introduced for the pallav. This is the same colour as that of the warp yarn in the border.
3. Beating — Making the fabric compact using the reed. The reed is pulled by the weaver towards himself to beat together, that is, to tighten the fabric woven by him. This ensures that the warp and weft in the fabric are woven tightly.

Secondary motions in the weaving process are:
1. Take up motion — taking up the cloth when being woven and winding it on the roller.
2. Let off motion — feeding the warp yarns wound on a warp beam to the loom, when the cloth is taken up on the cloth roller beam.

Taking up and letting off motions are carried out simultaneously with the help of levers [seen on Page (1)].

The distinguishing feature of a Paithani sari, apart from its colours and motifs, is the use of tapestry weaving in its construction. This is the technique of weaving extra-weft designs in the fabric by interlocking the end of a coloured yarn in the a weft-line with the beginning of a differently coloured yarn in the same weft line. In the case of difficulty in interlocking the yarns, as in the case of bootis in the field, they are knotted and clipped with a pair of clippers.

Extra weft designs in the field are either woven by hand, or with the help of a Jacquard set-up in the loom.

The use of tapestry weaving greatly enables freedom in design. A variety of colours and shapes can be introduced. Kakdas are used to weave them in. A paper with the design drawn on it, in scale, is placed under the area to be woven, usually the border. The artisan weaves over the paper and it guides him.

Passing the weft in a Dhota through the shed of warp yarns
Once the entire sari has been woven and all aspects of the weaving have been addressed, the loom isn’t freed of warp yarn completely. A fresh set of warp yarns are drawn from the kandi and wound onto the warp beam. These are then attached to the existing warp yarns, left from the previous fabric woven. An expert artisan attaches each new warp yarn to its corresponding predecessor in the loom by knotting the two yarns deftly. Once all the yarns are joined, the old yarns are pulled through and they, in turn, pull the new warp yarns through the wahi and wahi fani.

This process saves immeasurable time and energy as the loom is now set automatically. Thus a process that takes over a week is completed within the span of a day. The artisan in charge of knotting is well-respected for his contribution.
Contemporisation of Paithani

From its origin as a soda, the Paithani has grown leaps and bounds. Paithani no longer refers to just the sari, it encompasses the broad spectrum of all products that employ the use of the fabric. These include salwar-suits, kurtas, kurtis, dresses, jackets, dress material, footwear, handbags and even wall-hangings. Contemporisation has been innovated not only in the product range, but also in the motifs and colours used. These contemporarised products are manufactured in Yeola, which is also the dyeing hub. Contemporary motifs are being made on custom orders and often clients provide the designs themselves. Fashion designer of Maharashtra have taken it upon themselves to create awareness about the beautiful paithani sari.
Over recent years, the Paithani sari has grown in popularity because of its exquisiteness. Traditionally, a bridal sari, the original Paithani is now worn by women of high status. The selling cost is adjusted according to the combined cost of raw materials and labour charges. The cost of a Paithani sari ranges from Rs. 20,000 to 8 lakhs. The lower range is for Paithani’s woven with silk and impure zari. Saris woven with real gold cost upward of Rs. 3 lakhs. This price increases with increased use of pure gold zari in the sari. Saris with more handwork are also priced higher. The Paithani is sold the most in Maharashtra, Andhra Pradesh, Goa, Gujrat, Madhya Pradesh as well as countries like the United States, Canada, France, UAE, Japan. Paithani wall-pieces, handbags, scarves and stoles are in high demand in Japan, Nepal and the USA. Interestingly, the saris have recently become popular with the masses through television serials depicting Maharashtrian families.
We sleep, but the loom of life never stops, and the pattern which was weaving when the sun went down is weaving when it comes up in the morning.

- Henry Ward Beecher
Himroo

Himroo, an inexpensive brocade, is a blend of silk and cotton and locally produced in Aurangabad. Himroo was brought to Aurangabad in the reign of Mohammad Tughlaq, when he shifted his capital from Delhi to Daulatabad, Aurangabad.

The word Himroo originated from the word ‘Hum- Ruh’ which means ‘similar’. Himroo is a replication of Kim –Khwab, which was a kind of brocade woven from pure gold and silver threads for the royalty. Himroo uses Persian designs, and is very characteristic and distinctive in appearance. Himroo from Aurangabad is in demand for its unique style and design.

The Himroo weaving is done on a loom with cotton yarn forming the warp and silk yarn forming the weft. One Himroo shawl takes about 3 weeks to make and requires 2 people, one man pulls the string and the weaver weaves with 2-3 colour weft threads.

The process involves boiling 1kg ‘Resham’ to extract 750gm of silk yarn which goes through the gumming process to reduce weight. Himroo is mostly used in shawls and dress material and is equally bought by the Hindus and the Muslims.

Since, Paithani is the primary textile from Aurangabad, the Himroo fabric has lower sales. The prices of different Himroo fabric vary according to the quality of silk yarns and the different colours used per shawl.

The shopkeepers usually have no problems buying the Himroo fabric even during the ‘off-season’ from the weavers since the construction of the fabric takes a very long time and it thus leads to a happy buyer- weaver relationship.

Karigars’ coming in from the capital city Delhi get lower wages monthly in comparison to the local weavers. The Karigars from Delhi get around Rs600- Rs900 per month. The local weavers from Aurangabad basically belong to the ‘Khatri’ clan.

Today, Himroo is made with designs from Ajanta paintings in addition to original intricate floral inlay designs of ‘Taj Mahal’ and ‘Bibi ka Makabara’.

The image seen on the facing page on the right was taken at a weaver’s house in Aurangabad.
According to historians this art originated in Persia, though it has not been proved, Himroo is associated with the times of Mohammad Tughlaq who ruled in the 14th century. When Mohammad Tughlaq shifted his capital from Delhi to Daulatabad many weavers came and settled here. During the migration, the weavers instead of returning to Delhi chose to stay back here. They did not want to go back to Delhi. During the reign of Malik Ambar many people were attracted to the city and came and settled here from far and wide. Aurangabad during Aurangzeb's Governorship and the times of Mughal became the capital and the weavers had a gala time making money and becoming prosperous. The handicraft industry in Aurangabad attracted hundreds of craftsman and artisans. Members of the royal family and an elite few used the famous Aurangabad Himroo. Himroo weaving is very characteristic and different. Fabrics and shawls from Aurangabad are much in demand for their unique style and design.
Our looms are our religion. Each part is a God that we pray to.

The basic loom components of a handloom used to weave himroo fabric are similar to those of a handloom employed for Paithani weaving. Details of the same have been given on Page().
In addition to these components, a Jacquard set-up is incorporated seamlessly to facilitate weaving of intricate brocade designs.

Invented by Joseph Marie Jacquard in 1801, it simplifies the process of manufacturing textiles with complex patterns such as brocade, damask and matelasse. Hence, it is favoured for the production of Himroo, an inferior brocade.
(Image 1) represents the warp beam known as Turai in the local language. It is a wooden cylinder with warp yarns wound onto it. The Turai rotates about its axis to feed warp yarns to the loom.

(Image 2) is of a feeder box made of metal and wood. This box receives a punch card from the chain and feeds it into the weaving setup. The feeder box does so by holding the card in place.

(Image 3) is a chain of punched cards made of cardboard. Often they are made of metal, usually in the case of powerlooms. These cards are made by professional card makers requiring a mathematical and applied approach.

(Image 4) is of metallic needles with hook ends coming out of the feeder box. Multiple nylon threads are attached to a single needle hook and these are connected to the harness.

(Image 5) represents a set of foot pedals known as the paundi in local language. A Paundi is made of wood and is manually controlled by the weaver. It is attached to a specific sets of yarns in the heddle and these are lifted by each pedal’s use.
Image(1) is a powerloom jacquard having 2 jacquard setup simultaneously. It weaves the double width of the fabric. Hence increase the production.

Image(2) are the lever. One of the lever is connected to the cloth beam and perform the function of taking up the cloth while the other is attached to the warp beam and perform the letting off action of the yarns wound onto it.

Image(3) represents a shuttle made up of metal. It holds the quill of thread inside it and constitute the weft of the fabric.

There is also a cloth beam on which the fabric is wound as it is constructed. It consists of a large wooden cylinder which rotates about its axis.
Jacquard Powerloom at Aurangabad silk weaving centre
Jacquard handloom at a weaver's house in Aurangabad
Preparation of Yarn

Raw Materials:
Grey Cotton [Image (2)] is procured from Mumbai and the silk yarns [Image (1)] are brought in from Bangalore. Depending on the product, yarn of different count is ordered. Heavy cotton and silk is required to weave bed sheets and lighter yarn for products like stoles and fine scarves. The un-dyed yarns are further processed to make them ready for the loom.

Preparation of cotton warp yarn:

Winding:
The yarn spools procured are re-wound into hanks to ready them for dyeing. The 3-step mechanism involves a set-up [Image (5)] for holding the yarn spool, a metallic drum and a large wooden bobbin. The set-up is run by an electric motor that powers the winding. Yarn is drawn from the spool in the holder and wound around the metallic drum [Image (3)] twice and then is wound onto the wooden bobbins manually [Image (4)]. Once the motor is switched on, the line of yarn follows and is let off by the spool and taken up by the bobbin.
Dyeing:
Although earlier natural dyes were exclusively used, with the advancement in textile production, chemical dyes are used equally. In-house set-ups rely solely on chemical dyes. Cotton dyeing is done in-house whereas silk dyeing is outsourced to Yeola, the dyeing centre in Nashik district. For in-house cotton dyeing, the following process is followed:
• The dye bath is a concrete pit that is filled with dyestuff. A channel is used to direct hot water into the pit to dissolve the dye and prepare the colour solution.
• Regular dyestuff is used for cotton. Salt is added for colourfastness.
• A wooden or metallic rod is used to stir the hanks, to ensure even absorption of dye and after a few hours the hanks are lifted out of the pit and lowers into the water baths.
• Concrete water baths are connected to cold water channels. The hanks are repeatedly dipped and washed in cold water to wash away excess dye.
• Once the hanks are cleaned, they are lifted out of the bath and lowered onto metallic rods that are twisted to wring away water.
• They damp hanks are now hung on wires similar to clotheslines to drip dry.
Preparation of Loom

Preparation of warp beams:

The dried cotton hanks are opened and wound onto mid-sized bobbins. This is done using a mechanism similar to the preparation of the hanks. It is, in fact, the reverse of the said procedure (refer Page).

The large wooden bobbins with the hanks fitted onto them are hung on a contraption. The hanks are simultaneously unwound and wound onto mid-sized bobbins either mechanically with the help or electrical motors, or manually with a rotator.

These bobbins are placed in a large shelf-like structure with multiple compartments with each compartment holding one bobbin. A yarn is drawn from each bobbin and the total number yarns drawn is equal to the yarns in the entire warp of the finished fabric.
The drawn yarns are passed through a heddle and then wound onto a large iron cylinder that rotates about its own axis. This packs the yarns compactly. The compact collection of straightened yarns is let off from the cylinder and taken up by another heavy, solid cylinder simultaneously. This cylinder with the dyed, straightened and readied yarns is known as the Warp Beam.

**Preparation of quills (weft yarn):**

The dyed silk yarns, sourced from Yeola are brought in spool-form. These spools are fixed onto a machine with a base that has 16 spokes. Thus, up to 16 weft bobbins, known as quills, can be wound at a time.

For example, if 5 quills are to be prepared, 5 spools of dyed yarn will be affixed onto the machine and the quills will be fitted onto the base.

Yarn from the spools will be drawn and twisted to form a thick ply and this will be passed through grooves in the motor and then through a hook.

Once the ply passes through the hook, it isuntwisted, pulled taut and each yarn is wound onto one corresponding quill. Once the motor is switched on, the corresponding quill draws yarn from its parent spool and thus up to 16 quills can be readied for use in the loom within a matter of minutes.

*The image on the right is of a quill-winding machine. Here, preparation of 12 quills simultaneously can be seen.*
A Weaver’s Dream
The Shedding, picking, beating take-up and let off motion is similar to that of any standard process of weaving (refer Page). The use of a jacquard is justified by the ease in creation of intricate designs. Details of the Jacquard card system are given below.

The loom is controlled by a “chain of cards”, a number of punched cards, laced together into a continuous sequence. Multiple rows of holes are punched on each card and each row of punched holes correspond to one row of the design. Chains, like the much later paper tape, allow sequences of any length to be constructed, not limited by the size of a card. Each position in the card corresponds to a “Bolus” hook, which can either be raised or stopped dependent on whether the hole is punched out of the card or the card is solid. The hook raises or lowers the harness, which carries and guides the warp thread so that the weft will either lie above or below it. The sequence of raised and lowered threads is what creates the pattern. Each hook can be connected to a number of threads, allowing more than one repeat of a pattern. A loom with a 400 hook head might have four threads connected to each hook, resulting in a fabric that is 1600 warp ends wide with four repeats of the weave going across.

Jacquard looms, whilst relatively common in the textile industry, are not as ubiquitous as dobby looms which are usually faster and much cheaper to operate. However, unlike jacquard looms, they are not capable of producing so many different weaves from one warp. Modern jacquard looms are controlled by computers in place of the original punched cards, and can have thousands of hooks.

The threading of a Jacquard loom is so labor-intensive that many looms are threaded only once. Subsequent warps are then tied in to the existing warp with the help of a knotting robot which ties each new thread on individually. Even for a small loom with only a few thousand warp ends the process of re-threading can take days.

Congested surroundings, unspooled threads and the reality of their insignificant dwelling places, all seem to melt away as the fabric helps them transcend these concerns and catch a glimpse of the creator.