

Chapter 11: Art, Architecture, and Craft

Summary

South Asian art is everywhere: carved into hillside monasteries, built into temple towers and marble tombs, painted on palace walls and paper, and drawn in rice flour on a doorstep every morning. This chapter starts with the art people make at home, kolam and rangoli, and the dots and symmetry behind them. It then tours the region's great buildings, from Buddhist stupas and Hindu temples to Mughal tombs and gardens, and its traditions of painting, from Mughal miniatures and Sri Lanka's Sigiriya to Himalayan thangkas and Mithila painting. It ends on the street, with mehndi, terracotta, block printing, and the painted trucks and rickshaws of Pakistan and Bangladesh.

Concepts Covered

1. Stupa
2. Hindu Temple Architecture
3. Jali
4. Mughal Architecture
5. Calligraphy
6. Mughal Miniature Painting
7. Sigiriya

8. Thangka
9. Madhubani Painting
10. Rangoli
11. Kolam
12. Mehndi
13. Terracotta
14. Block Printing
15. Truck Art
16. Rickshaw Art

Prerequisites

- **Chapter 3: Empires and Encounters** for the Mauryas, the Cholas and the Mughals, who built many of the monuments here.
- **Chapter 5: Faiths of South Asia** for the basic ideas behind Buddhist, Hindu, Jain and Islamic sacred buildings.
- **Chapter 7: Festivals Through the Year** for the festivals when rangoli, alpona and mehndi appear.

Art is something you do



Hi, I'm Mora, and yes, I have opinions about color! Some of the most skilled art in South Asia isn't in a museum. It's on a doorstep, a pair of hands, or the back of a truck, and you might already have some of it at home. This chapter helps you see it, name it and maybe make some yourself. Every tradition has a story. Let's find it!

11.1 Rice Flour on the Doorstep

It's the morning of Pohela Boishakh, the Bengali New Year, and Zara Hossain comes downstairs to find her Nanu kneeling at the front door with a bowl of white rice paste. Nanu dips her fingertips in the paste and draws a flower, then vines curling out from it, then a border of tiny leaves, all without lifting her eyes from the floor. "This is *alpona*," she tells Zara in Bangla. "We did it at home in Chattogram every new year."

That afternoon at the South Asian Student Association meeting, Zara shows the club a photo. Arjun Reddy leans over. "My grandmother does something like that in Hyderabad, but every single morning, before sunrise. She calls it *muggu*. In Tamil it's called kolam. First she puts down a grid of dots, then she draws lines around them." Ben Lindqvist zooms in on the photo, then on Arjun's. "Wait. How do they get them so perfect? It's not like they use a ruler." Arjun shrugs. "She just knows." But how do you "just know" a design that perfect, and what else across South Asia is made with that same kind of knowledge?

11.2 Art at the Threshold: Rangoli, Kolam and Their Cousins

Start with something you've probably done: drawing on graph paper. The little squares tell you where to put each line, so even a complicated pattern comes out even. Or think of cutting a paper snowflake: fold once, cut once, and the shape repeats around the center by itself. South Asian floor art uses both tricks: a hidden grid and symmetry.

All across the region, families decorate the floor at the doorway, especially for festivals, weddings and new years. The threshold matters because it's

where the outside world meets the home. Each region has its own name and style.

Rangoli (रंगोली, *rung-GOH-lee*) is a design made on the floor or ground using dry materials such as colored powders, rice flour, colored sand, crushed limestone or flower petals. Rangoli is made most often for Diwali (and for Tihar in Nepal), and also for Onam, Pongal and other festivals. Rangolis can be geometric, floral, or pictures of deities, peacocks and lamps, and modern ones often use bright synthetic colors.

Kolam (கோலம், *KOH-lum*), a Tamil word meaning "form" or "beauty," is a line drawing made with white rice flour on the swept and dampened ground outside a home, traditionally drawn each morning before dawn by women in Tamil Nadu. In Telangana and Andhra Pradesh the same practice is called *muggu* (ముగ్గు, *MOOG-goo*), and Tamil families in Sri Lanka and around the world draw kolams too. The artist holds a pinch of flour between thumb and first finger and lets it fall in a steady line as her hand moves.

The most traditional style is the *pulli kolam*, "dot kolam." The artist first sets down a grid of dots (*pulli*). Then she draws lines that loop around the dots, usually without touching them. In the hardest designs, a single line winds around every dot and joins back to where it started, with no loose ends. That answers Ben's question. The dots work like graph paper, and the rules (go around, don't touch, keep the line moving) work like a recipe. Learning those rules takes years of watching relatives draw, and many women keep a notebook of designs and swap the hardest ones.

Kolams are meant to disappear. During the day, feet, wind and rain wear them away, and ants and birds eat the rice flour. Many families see that as part of the point: a kolam is thought to welcome prosperity into the home, the flour feeds small creatures, and the next morning it's drawn again.

Kolam meets computer science



In 1974, the Indian mathematicians and computer scientists Gift Siromoney, Rani Siromoney and Kamala Krithivasan published a paper describing kolam patterns with "array grammars," a way of writing drawing rules a computer can follow. Why do you think a pattern drawn by hand on a doorstep turned out to be a good puzzle for computer scientists?

The region has many more cousins. In Bangladesh and West Bengal, **alpona** (আলপনা, *AL-po-na*) is painted, not sprinkled: a wet paste of rice flour and water is applied with the fingertips or a twig or cloth, for Pohela Boishakh, Durga Puja and weddings. In Bangladesh, alpona is also painted for national days such as International Mother Language Day on 21 February. In Kerala, the Onam flower carpet is called *pookalam*. Gujarat has *sathiya*, Rajasthan *mandana* and Odisha *chita*.

Tradition	Where	Material	How it's made	Typical occasions
Rangoli	Across India and Nepal	Dry colored powder, rice flour, sand, petals	Sprinkled by hand, often freehand or from outlines	Diwali, Tihar, festivals, weddings
Kolam / muggu	Tamil Nadu, Telangana, Andhra Pradesh; Tamil	Dry white rice flour	Lines drawn around a grid of dots, often in one	Every morning; bigger designs in the month

Tradition	Where	Material	How it's made	Typical occasions
	communities in Sri Lanka		continuous line	of Margazhi and at Pongal
Alpona	Bangladesh and West Bengal	Wet rice-flour paste	Painted with fingertips, twig or cloth	Pohela Boishakh, Durga Puja, weddings, national days
Pookalam	Kerala	Flower petals	Petals arranged in circular designs	Onam

11.3 Sacred Buildings: Stupas and Temples

The stupa

A **Stupa** (स्तूप, *STOO-puh*) is a Buddhist monument shaped like a dome or mound, built over relics, such as the remains of the Buddha or of revered teachers, or sacred objects. Buddhists honor a stupa by walking around it clockwise, a practice called *pradakshina*, and by meditating near it. A classic stupa has a round, solid dome, a small square railing on top, and a pole with umbrella-like discs, a sign of honor.

The Great Stupa at Sanchi, in central India, was first commissioned by the Mauryan emperor Ashoka in the 3rd century BCE as a simple brick dome over relics of the Buddha. In the 1st century BCE, four richly carved stone gateways (*toranas*) were added, covered with scenes from the Buddha's life and earlier lives. UNESCO, which made Sanchi a World Heritage Site in 1989, calls it the oldest Buddhist sanctuary still in existence.

As Buddhism spread, the stupa took new shapes and names.

- In **Sri Lanka**, a stupa is called a *dagoba*. The huge white Ruwanwelisaya in Anuradhapura, a city UNESCO lists as the Sacred City of Anuradhapura (1982), was built by King Dutugemunu more than 2,000 years ago.
- In **Nepal**, the Kathmandu Valley (a World Heritage Site since 1979) includes the great stupas of Swayambhu and Boudhanath. Boudhanath is one of the largest spherical stupas in the world.
- In **Bhutan**, stupas are called *chortens*. Chorten Kora in eastern Bhutan, built in 1740, was modeled on Boudhanath.
- In **Pakistan**, the hilltop Buddhist monastery of Takht-i-Bahi, founded in the 1st century CE in the old region of Gandhara, is so well preserved that UNESCO listed it in 1980.
- In **Afghanistan**, the Bamiyan Valley held two giant Buddha figures carved into a cliff, possibly in the 6th century, surrounded by painted caves. They were destroyed by the Taliban in March 2001, an act UNESCO describes as a tragedy that "shook the world." The valley became a World Heritage Site in 2003.
- In **Bangladesh**, the great Buddhist monastery at Paharpur (Somapura Mahavihara), built under the Pala kings from the late 8th century, was a center of learning until the 12th century and is a World Heritage Site (1985).

The Hindu temple

Hindu Temple Architecture is the set of shared design traditions used to build Hindu temples as homes for a deity. At the heart of a temple is the *garbhagriha* ("womb chamber"), a small, dark sanctum holding the image of the deity. Above it rises a tower: a *shikhara* (शिखर, *SHIK-huh-ruh*, "mountain peak") in the north, or a *vimana* in the south. In front there is usually a *mandapa*, a hall where worshippers gather, and a path for walking around the sanctum. The tower is often shaped like a mountain, and the walls are covered with sculpture.

Historians describe two main regional styles.

	Nagara (northern) style	Dravida (southern) style
Tower over the sanctum	Curved <i>shikhara</i> , often with smaller towers clustered around it	Stepped, pyramid-like <i>vimana</i>
Gateways	Usually modest	Huge, sculpture-covered gate towers called <i>gopuram</i> (கோபுரம், <i>GO-pu-rum</i>), often taller than the main tower in later temples
Famous examples	Khajuraho, Madhya Pradesh, India (built mostly 950 to 1050 under the Chandella kings; about 20 Hindu and Jain temples survive)	Brihadisvara Temple, Thanjavur, Tamil Nadu, India (built by the Chola emperor Rajaraja I, 1003 to 1010)

The Brihadisvara Temple is part of the Great Living Chola Temples, a World Heritage Site since 1987, and its granite *vimana* is one of the tallest in South

India. Nepal developed its own style of tiered, pagoda-roofed temples, like Pashupati in the Kathmandu Valley, and Bangladesh and West Bengal developed temples made of brick and terracotta (Section 11.6).

11.4 Mughal Architecture: Domes, Gardens and Stone Lace

Mughal Architecture is the building style that developed under the Mughal emperors, who ruled much of the subcontinent from the 1500s to the 1700s (you met them in [Chapter 3](#)). It blended Persian and Central Asian ideas, such as tall domes, arched gateways and walled gardens, with Indian building skills, materials and decoration. Its signatures are red sandstone and white marble, perfect symmetry, and the *charbagh*, a garden divided into four parts by water channels, which in Islamic tradition recalls the four rivers of Paradise.

Three sites show how the style grew.

1. **Humayun's Tomb, Delhi.** Commissioned in 1558 by Bega Begum, Emperor Humayun's widow, and designed by Persian architects Mirak Mirza Ghiyas and his son, it was finished around 1570. It was the first garden-tomb in the subcontinent and the first building to use red sandstone on such a scale. UNESCO calls it the model that inspired the Taj Mahal.
2. **The Taj Mahal, Agra.** Shah Jahan ordered it in 1631 as a tomb for his wife Mumtaz Mahal, who died that year. The white marble mausoleum was built between 1631 and 1648, and the whole complex, with its gardens and red sandstone buildings, was finished around 1653. More than 20,000 workers and artisans worked on it under a board of architects led by Ustad Ahmad Lahori. It is a World Heritage Site (1983).

3. **The Lahore Fort and Shalimar Gardens, Pakistan.** The fort holds marble palaces, a hall of mirrors (Sheesh Mahal) and the enormous Picture Wall, covered in glazed tile mosaics of court life, begun under Jahangir and finished under Shah Jahan around 1632. Shah Jahan's Shalimar Gardens (1641 to 1642) step down three terraces with pools, cascades and fountains. Both became a World Heritage Site in 1981. Across from the fort stands the Badshahi Mosque, built by Emperor Aurangzeb from 1671 to 1673, which was the largest Mughal mosque.

Islamic architecture in the region didn't start with the Mughals. In southern Bangladesh, the Historic Mosque City of Bagerhat (a World Heritage Site since 1985) was founded in the 15th century by Khan Jahan Ali. Despite its name, its great brick Sixty Dome Mosque has 81 domes held up by 60 columns. And in the Maldives, builders cut mosques from coral stone: the Malé Friday Mosque (Hukuru Miskiy), completed in 1658, is built from blocks of coral that fit together without mortar. It is on UNESCO's tentative list, and on 21 January 2026 the Maldives submitted a full World Heritage nomination for it and four other coral stone mosques, which was still being evaluated in 2026.

Jali

A **Jali** (जाली, *JAA-lee*, "net") is a stone screen carved with holes in a geometric, floral or calligraphic pattern. Jalis let in air and soft, filtered light while blocking harsh sun and rain and giving privacy, which is a clever answer to South Asia's hot climate. Geometric jalis appear by 1311 in the Alai Darwaza gateway in Delhi. The Mughals carved finer, plant-like designs, as in the marble screens of the Taj Mahal. Some of the most famous jalis are in the Sidi Saiyyed Mosque in Ahmedabad, built in 1572 to 1573, whose stone windows are carved with intertwining trees and leaves.

Calligraphy

Calligraphy is the art of beautiful writing. In Islamic art it holds a special place, because many Muslims believe the words of the Qur'an deserve the most beautiful form possible, and because Islamic religious art usually avoids pictures of people in mosques and tombs. So instead of statues, Mughal buildings carry words. The Taj Mahal's gateways and walls are framed with Qur'anic verses in a flowing script called *thuluth*, made of jasper or black marble set into white marble. The calligrapher was Abdul Haq, whom Shah Jahan honored with the title Amanat Khan.

Calligraphy runs through the region in many scripts. Urdu is usually written in the elegant, slanting Nastaliq style (see [Chapter 6](#)). Sikh scripture is written in the Gurmukhi script, and Buddhist monasteries in Bhutan and Nepal treasure texts written in Tibetan script. You'll even find calligraphy on the back of a Pakistani truck (Section 11.6).

Whose Story?

Who gets the credit for a masterpiece? Tour guides say Shah Jahan "built" the Taj Mahal, but historians point to a board of architects led by Ustad Ahmad Lahori, a calligrapher, inlay workers, stone carvers and more than 20,000 laborers whose names were mostly never recorded. Some historians call Mughal buildings "Islamic architecture," others "Indian architecture," and many prefer "Indo-Islamic," because the style mixed Persian designs with local craftsmanship. The same question comes up for art made at home: kolam, alpona and Mithila wall paintings were made for centuries by women who were rarely called "artists" at all. Museums and scholars now debate whether labels like "folk art" honor these traditions or rank them below "fine art."

11.5 Painting on Paper, Rock and Cloth

Mughal Miniature Painting

Mughal Miniature Painting is the style of small, detailed paintings made in the workshops of the Mughal emperors, either to illustrate books or to be collected in albums. It grew out of Persian miniature painting, made a tentative start under Emperor Humayun, and soon mixed with the styles of Indian painters. Under Akbar, a large workshop of artists often worked in teams: senior artists might draw the outlines, and junior artists fill in the colors, especially the backgrounds. Akbar's most ambitious project was the *Hamzanama*, a giant illustrated adventure story begun around 1562. According to his court historian, it had illustrations for 1,400 passages of the story.

Mughal painters were known for realistic portraits, court scenes and nature studies. Under Emperor Jahangir, the artist Ustad Mansur became famous for his studies of birds, animals and flowers. He was the first to illustrate the Siberian crane. Pages were made with fine brushes and rich colors, sometimes on paper flecked with gold. Hindu Rajput and Pahari kings in the hills also kept painters at court, so related miniature styles flourished in Rajasthan and the Himalayan foothills.

Sigiriya

Sigiriya (*SEE-gi-ri-ya*, from Sinhagiri, "Lion Rock") is a royal fortress and palace built on top of a granite rock about 180 m (590 ft) high in central Sri Lanka by King Kashyapa I, who ruled from 477 to 495 CE. Visitors once entered through a gateway shaped like a giant lion. Today only its huge brick paws remain on either side of the stairs.

Partway up, the king had the rock face painted with colorful frescoes, and some still survive. Next to them runs the polished Mirror Wall, where visitors scratched well over a thousand poems and comments, most of them between the 8th and 10th centuries. Below the rock lie water gardens with

pools and channels. After Kashyapa's reign, the site became a Buddhist monastery until the 13th or 14th century. UNESCO listed the Ancient City of Sigiriya in 1982.

Thangka

Thangka (Tibetan ཐང་ཀླ, *TAHNG-kah*) is a Buddhist painting on cotton or silk that can be rolled up like a scroll, showing a deity, a scene from the Buddha's life, or a *mandala* (a circular diagram of the universe used in meditation). Thangkas are made in Nepal, Bhutan, Tibet and the Himalayan parts of India, and they are used as teaching tools and as aids for personal meditation. Painters follow precise, traditional rules about the proportions, postures and measurements of each figure, a little like the kolam artist's rules for her dot grid. Thangka painting grew in part from the Newar painting tradition of Nepal's Kathmandu Valley, called *paubha*.

Bhutan makes the biggest thangkas of all. A *thongdrel* is a giant appliqué religious image, sewn from colored cloth, that covers the side of a building. It is unveiled only once a year, usually on the last day of a district's *tsechu*, Bhutan's main religious festivals. Nima Sherpa tells the club that her family's monastery in Solukhumbu keeps its thangkas rolled up and brings them out for special days.

Madhubani Painting

Madhubani Painting, also called Mithila painting, is a style of bold, colorful painting from the Mithila region, which spans northern Bihar in India and the Terai lowlands of southern Nepal around Janakpur. For centuries, women of the region painted gods, goddesses, lotus ponds, fish, birds and wedding scenes on the freshly plastered mud walls and floors of their homes, especially for marriages. Every space is filled with pattern, and figures are

outlined in double lines. Artists use fingers, twigs, brushes, nib pens and even matchsticks, with natural pigments such as ochre and lampblack.

In the late 1960s, during a severe drought, a few women began painting these designs on paper to sell for family income. Over the following decades, hundreds of women from many different castes and communities took it up, and Madhubani painting became known worldwide. It's named after Madhubani district in Bihar, still its busiest center.

11.6 Craft at Home and on the Road

Mehndi

Mehndi (Urdu مہندی, *MEH-hn-dee*), also called henna, is the art of decorating the skin, usually hands and feet, with a paste made from the dried, powdered leaves of the henna plant (*Lawsonia inermis*). The paste leaves a reddish-brown stain that lasts about one to three weeks. Across South Asia, mehndi is part of weddings (many families hold a separate "mehndi night" before the wedding), Eid, Karva Chauth, Teej and other festivals. Zara's cousins line up on Chand Raat, the night before Eid, to have fine, detailed vines and paisleys piped onto their palms from a cone.

Real henna isn't black



Natural henna stains orange-brown to reddish-brown. "Black henna" often contains a hair-dye chemical called PPD, which the US Food and Drug Administration warns can cause dangerous skin reactions and scarring in some people. This is safety information, not medical advice: if you react to any skin product, talk to a doctor.

Terracotta

Terracotta (Italian for "baked earth") is clay that is shaped and then fired, usually to an orange-red color. In the delta of Bengal, where there is plenty of river clay but little building stone, builders turned brick and terracotta into an art form. Temple walls were covered with fired-clay panels showing gods, epics, hunting scenes and daily life.

- The Kantajew Temple in Dinajpur, **Bangladesh**, built between 1704 and 1752, is a celebrated example of terracotta architecture, with walls covered in clay panels.
- The Malla kings of Bishnupur, in West Bengal, **India**, built a group of terracotta temples in the 17th and 18th centuries.
- Earlier still, the walls of the great Buddhist monastery at Paharpur in Bangladesh were covered with carved decoration.

Terracotta is also a living village craft. The long-necked Bankura horse, made in Panchmura village in West Bengal, was first made for village rituals and is now a symbol of Indian folk art around the world.

Block Printing

Block Printing is a way of printing patterns on cloth by carving a design into a wooden block, dipping it in dye, and stamping it by hand, over and over, to build up the pattern. A single cloth may need several blocks, one for each color, lined up by eye.

In Sindh, **Pakistan**, the block-printed cloth called *ajrak* is a symbol of Sindhi identity. It uses deep indigo blue and crimson red, with white and black outlining geometric patterns, and it is made with carved wooden blocks and resist-dyeing, where parts of the cloth are covered so dye can't reach them. Ajrak is also made by Sindhi communities in Kutch, Gujarat, in **India**, in the village of Ajrakhpur. In Rajasthan, the town of Bagru is known for hand block

printing with natural dyes by the Chhipa community of printers. You'll see more of South Asia's textiles in [Chapter 12](#).

Truck Art

Truck Art is the tradition of decorating trucks (and buses) with paintings, calligraphy, carved wood, mirrors and reflective strips, best known in Pakistan and also common in India and Afghanistan. A decorated Pakistani truck can carry mountain landscapes, birds, film stars, the winged horse Buraq, poetry and religious verses in calligraphy, and painted eyes meant to ward off bad luck. A tall carved wooden "crown" rises above the cab. The art grew up in the colonial era, when trucks first came into the region and drivers began decorating them with local folk designs.

Karachi is one of the biggest centers of the trade. In 2002, the Karachi truck painter Haider Ali and bodywork expert Jamil Uddin decorated a 1976 Bedford truck on the National Mall in Washington, D.C., at the Smithsonian Folklife Festival, and the finished truck joined the Smithsonian's permanent collection. Ayesha Qureshi tells the club her uncle in Lahore insists the most beautiful trucks are the ones that carry poetry. In India, painted trucks often carry the phrase "Horn OK Please."

Rickshaw Art

Rickshaw Art is the painting and decoration of cycle rickshaws, best known in Dhaka, Bangladesh. Almost every part of a rickshaw, from the back panel to the hood and seat, is painted with flowers, birds, animals, scenes from history and fables, national heroes, movie stars and text, then decorated with tassels, plastic flowers and tinsel. Because rickshaws move slowly through the streets, they work like a moving art gallery. Traditionally, the craft is passed down in workshops by hands-on training, and both men and women paint. In 2023, UNESCO added "Rickshaws and rickshaw painting in Dhaka" to

its list of the Intangible Cultural Heritage of Humanity, partly because the craft is under pressure as motorized rickshaws spread.

You're surrounded by art



Look around your own home: a block-printed tablecloth, a brass lamp, a framed calligraphy panel, a henna cone in the kitchen drawer. Every one of them came from a craft with a long history. Pick one and find out who made it and where.

11.7 Countries and Crafts at a Glance

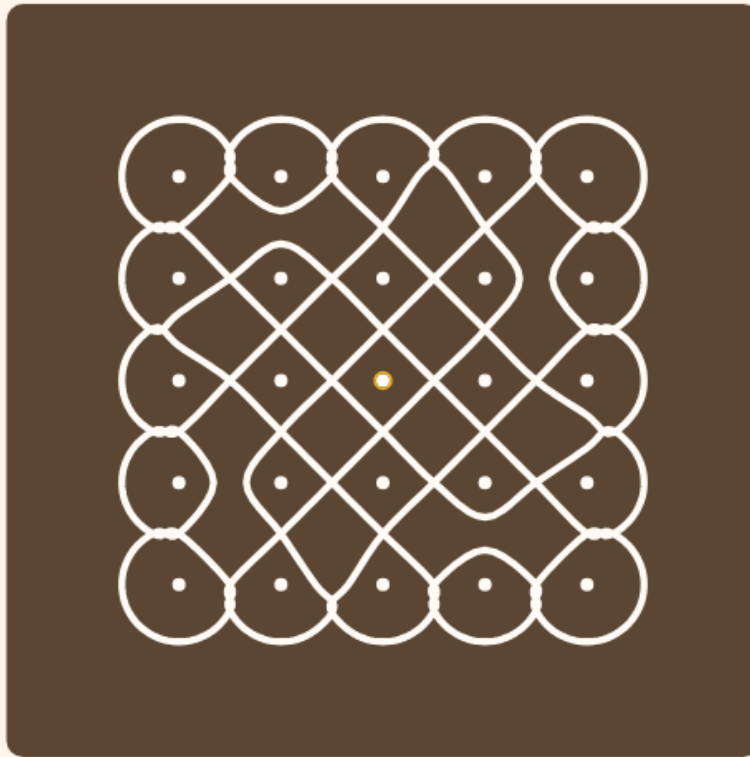
Country	Examples from this chapter
Afghanistan	Bamiyan Valley Buddhist art (Buddhas destroyed 2001); decorated trucks
Bangladesh	Alpona; rickshaw art (UNESCO 2023); Sixty Dome Mosque, Bagerhat; Kantajew terracotta temple; Paharpur monastery
Bhutan	Chortens such as Chorten Kora; thangkas and giant thongdrels
India	Sanchi stupa; Khajuraho and Thanjavur temples; Humayun's Tomb and the Taj Mahal; jalis; kolam, rangoli and muggu; Madhubani painting; block printing
Maldives	Coral stone mosques such as the Malé Friday Mosque

Country	Examples from this chapter
Nepal	Swayambhu and Boudhanath stupas; Newar paubha and thangkas; Mithila painting around Janakpur
Pakistan	Takht-i-Bahi; Lahore Fort, Shalimar Gardens and Badshahi Mosque; ajrak block printing; truck art
Sri Lanka	Sigiriya; Ruwanwelisaya dagoba in Anuradhapura; kolam in Tamil homes

Diagram: Kolam Maker

Kolam Maker: Dots and Symmetry

Draw on the ground with your mouse or finger. Loop around the dots; try not to touch them.



Demo: one unbroken line circles all 25 dots.

5 x 5 dots▼

Rice flour white▼

☒ 4-fold symmetry (copy each stroke 4 ways)

Trace demo

Clear

Save

[Back to Kolam Maker Lesson Plan](#)

Interactive simulation: <https://aaryavvatts-lab.github.io/south-asian-culture-textbook/sims/ch11-kolam-maker/main.html>

Open the Kolam Maker fullscreen

MicroSim specification: Kolam Maker

sim-id: ch11-kolam-maker

Library: p5.js

Status: Implemented

Bloom Level: Create

Bloom Verb: design

Learning Objective: The learner will create a symmetric dot-grid design and explain how the dots (pulli) and rotational symmetry guide the drawing of a kolam.

Canvas: responsive width; 565 px drawing area plus 115 px control area.

Controls: grid size menu (3 x 3 to 7 x 7 dots), ink color menu, "4-fold symmetry" checkbox, Trace demo / Pause button, Clear button, Save button; draw with mouse or finger.

Behavior: A dark "ground" square with a grid of white dots. The sim starts with a demo pulli kolam already drawn: on odd grids it is one continuous line around every dot; on even grids, several closed loops. Trace demo animates the drawing. Learner strokes are copied four times around the center when symmetry is on. Save downloads the design as a PNG. The demo is computed as a mirror curve (diagonal lines through the gaps between dots, bouncing off the edge and off a few symmetric inner walls).

Start by tracing the demo with your eyes, or press **Trace demo** and watch. On the 5 x 5 grid, the line is a single unbroken loop that passes around all 25 dots and never touches one. Notice the two rules that make it work: the line always travels diagonally through the gaps between dots, and when it reaches the edge, it swings around the outside of the edge dot and heads back in.

Then press **Clear** and make your own. With **4-fold symmetry** on, draw one small curve near a corner and watch it appear in all four corners at once. Try

to make a design that loops around the dots the way the demo does. Then turn symmetry off and try to draw the same design by hand. You'll quickly see why kolam artists rely on the dot grid, and how much skill it takes to make a balanced design on a doorstep at dawn without any help from a computer. Finally, switch to the 4 x 4 grid and notice that the demo needs four separate loops instead of one.

Ask Your Elders

Your interview for this chapter

Talk with a parent, grandparent, aunt, uncle, family friend or community elder about the art and craft in their home and life: floor designs, mehndi, embroidery, pottery, painted objects, or buildings they love. If you don't have a South Asian elder to ask, interview a club advisor, a local temple, mosque, gurdwara or cultural center volunteer, or a classmate's family (with permission). Ten minutes is enough.

Before you start: Ask them to show you one handmade object in the house (a cloth, a dish, a painting, a piece of jewelry) and hold it while you talk. Ask if you can take a photo of it for your notes.

Questions to ask

1. When you were young, who in your family made art or did crafts at home? What did they make?
2. Did anyone draw alpona, kolam, rangoli or other designs at the door? When, and how did they learn?
3. Who put mehndi on your hands for weddings or Eid or festivals? What designs do you remember?

4. What is the most beautiful building you have ever seen, in South Asia or anywhere? What made it beautiful to you?
5. Have the crafts you grew up with changed, or are fewer people making them now? Why do you think that is?
6. Is there a handmade object or a skill in our family that you hope I keep?

Listen for: mentions of Kolam, Rangoli or alpona at the doorway, Mehndi at celebrations, and buildings that show Mughal Architecture, Hindu Temple Architecture or a Stupa.

Save it: Write down one quote or story in their words, with their permission. If they agree, you can share it with the [Roots & Rivers Story Archive](#).

Your turn: compare two answers

Compare the object or craft your elder described with one from this chapter. Was it made for a ritual, for beauty, for sale, or all three? If a friend interviewed someone from a different country, compare: did both elders learn their craft by watching relatives, or in another way?

"Every family does it a little differently, and there is no wrong answer here."

Common Misconceptions

Myth: Rangoli and kolam are the same thing.

Reality: They are related doorstep arts, but kolam is traditionally drawn in white rice flour, often as lines looping around a grid of dots, and is made daily in many Tamil homes. Rangoli usually uses colored powders or petals and is made most often for festivals like Diwali. Alpona in Bengal is different again: it's painted with wet rice paste.

Myth: The Taj Mahal is the only Mughal building worth knowing.

Reality: Humayun's Tomb in Delhi was the model the Taj Mahal grew from, and the Lahore Fort, Shalimar Gardens and Badshahi Mosque in Pakistan are among the greatest Mughal works. Earlier Islamic buildings like Bagerhat's Sixty Dome Mosque in Bangladesh are worth knowing too.

Myth: Folk art is less skilled than fine art.

Reality: A pulli kolam that circles every dot in one unbroken line takes years to master and follows rules complex enough to interest mathematicians and computer scientists. Madhubani and rickshaw painting are recognized worldwide, and rickshaw painting is on UNESCO's heritage list.

Myth: Truck art is just graffiti.

Reality: Pakistani truck art is a skilled, commissioned trade with specialist painters, woodcarvers and metalworkers who follow established styles. One Karachi-decorated truck is in the Smithsonian's permanent collection.

Check Yourself

? 1. What is a pulli kolam, and what are the dots for? ✓

A pulli kolam is a kolam drawn on a grid of dots (pulli). The dots guide the drawing: lines loop around them without touching, which keeps the design even and symmetric.

? 2. Name the two main styles of Hindu temple architecture and one difference between them. ✓

The northern Nagara style has a curved shikhara tower over the sanctum. The southern Dravida style has a stepped, pyramid-like vimana and often huge gateway towers called gopurams.

? 3. Why are Mughal tombs and mosques decorated with calligraphy rather than statues? ✓

Islamic religious art usually avoids images of people in sacred buildings, and many Muslims believe the words of the Qur'an deserve the most beautiful form. So builders decorated with calligraphy, geometric patterns and plant designs.

? 4. What is a thongdrel, and when is it shown? ✓

A thongdrel is a giant appliqué thangka made in Bhutan. It is displayed only once a year, usually at dawn on the last day of a district's tsechu festival.

? 5. What did UNESCO add to its heritage list in 2023 from Bangladesh? ✓

"Rickshaws and rickshaw painting in Dhaka," the colorful painting and decoration of cycle rickshaws.

Exercises

Remember

1. Match each place to its country: Sigiriya, Takht-i-Bahi, Bagerhat, Boudhanath, Sanchi.

✎ Answer ✓

Sigiriya: Sri Lanka. Takht-i-Bahi: Pakistan. Bagerhat: Bangladesh.
Boudhanath: Nepal. Sanchi: India.

2. What material is a kolam traditionally made from, and at what time of day is it usually drawn?

 Answer

White rice flour, drawn in the early morning before or around dawn.

Understand

1. Explain why a jali is both beautiful and practical in South Asia's climate.

 Answer

Its carved holes create patterns of light and shadow, while letting in air and soft light and blocking harsh sun, rain and outside views, which keeps rooms cooler and private.

2. Explain how Madhubani painting changed from a wall art to a famous art on paper.

 Answer

Women of the Mithila region painted it on the mud walls of their homes for centuries. During a drought in the late 1960s, some began painting on paper to sell for income, and over the following decades hundreds of women took it up and it became known around the world.

Apply

1. Use the Kolam Maker to design a kolam on a 5 x 5 grid with 4-fold symmetry. Describe in two sentences where the center of rotation is and how many times each of your strokes appears. *Hint: look for the small gold circle.*
2. Your club wants to decorate the entrance for a Pohela Boishakh event and a Diwali event. For each, choose a floor art tradition from this chapter and list the materials you'd need. *Hint: compare alpona and rangoli in the table in Section 11.2.*

Analyze

1. Compare the stupa at Sanchi with a Hindu temple like the Brihadisvara at Thanjavur. How does each building guide what visitors do with their bodies? *Hint: think about walking around, entering, and where the most sacred spot is.*
2. Truck art and rickshaw art are both "moving art." Analyze two ways they are similar and two ways they differ. *Hint: think about vehicle, country, materials and recognition.*

Evaluate

1. Should everyday crafts like kolam or mehndi be displayed in museums next to Mughal paintings? Evaluate the pros and cons. *Hint: the Whose Story? box raises the question of labels like "folk art."*
2. UNESCO says rickshaw painting is under pressure as motorized rickshaws spread. Evaluate one way a community could keep a craft like this alive. *Hint: think about who learns it, who pays for it, and where people see it.*

Create

1. Design a club poster or slide that teaches one South Asian craft in five steps, with a simple drawing for each step. *Hint: kolam, alpona, block printing or mehndi all work well.*
2. Create a short "museum label" (80 to 120 words) for a handmade object from your own home or an elder's home, including what it is, where it comes from, who made it and why it matters. *Hint: use your Ask Your Elders interview.*

Key Takeaways

- Doorstep arts differ by region: kolam (rice flour lines around dots, Tamil Nadu and Sri Lankan Tamil homes), muggu, rangoli (colored powder, festivals) and alpona (wet rice paste, Bengal).
- Dots and symmetry are the hidden structure of a pulli kolam, and the best designs use one unbroken line around every dot.
- Stupas (Sanchi, Anuradhapura, Boudhanath, Takht-i-Bahi) and Hindu temples (Nagara and Dravida styles) are designed for walking around and approaching a sacred center.
- Mughal Architecture blended Persian and Indian traditions, from Humayun's Tomb and the Taj Mahal to the Lahore Fort and Shalimar Gardens, with jalis and calligraphy as signature details.
- South Asian painting ranges from Mughal miniatures and Sigiriya's frescoes to Himalayan thangkas and Mithila (Madhubani) painting.
- Living crafts like mehndi, terracotta, block printing (ajrak), truck art and rickshaw art (UNESCO 2023) connect art to everyday life across all eight countries.

What a gallery!



From rice flour to marble, you've toured South Asia's art in every size. Next, in Chapter 12, we look at what people wear: cotton, silk, jamdani, ikat and the stories woven into saris, kurtas and shalwar kameez.

Quiz: Art, Architecture, and Craft

Test your understanding of Chapter 11. Choose the best answer, then click **Show Answer** to check.

Question 1

In which country is the rock fortress of Sigiriya, built by King Kashyapa I in the 5th century CE?

- A. Nepal
- B. Bangladesh
- C. Sri Lanka
- D. Pakistan

? Show Answer



The correct answer is **C**. Sigiriya, the "Lion Rock," is in central Sri Lanka, and Kashyapa I ruled from 477 to 495 CE. The Buddhist monastery of Takht-i-Bahi is the major ancient site in Pakistan from this chapter, and Bagerhat is in Bangladesh.

Concept Tested: Sigiriya **Bloom's Level:** Remember

Question 2

What is a jali?

- A. A carved stone screen with holes that lets in air and filtered light
- B. A dome built over the relics of the Buddha
- C. A gateway tower on a South Indian temple
- D. A garden divided into four parts by water channels

 Show Answer

The correct answer is **A**. A jali is a perforated stone screen carved in geometric, floral or calligraphic patterns. A dome over relics is a stupa, a temple gateway tower is a gopuram, and a four-part garden is a charbagh.

Concept Tested: Jali **Bloom's Level:** Remember

Question 3

In 2023, UNESCO added which Bangladeshi tradition to its list of the Intangible Cultural Heritage of Humanity?

- A. Truck art in Karachi
- B. Terracotta temples in Dinajpur
- C. Alpona painting for Pohela Boishakh
- D. Rickshaws and rickshaw painting in Dhaka

 Show Answer

The correct answer is **D**. UNESCO inscribed "Rickshaws and rickshaw painting in Dhaka" in 2023. Truck art is best known in Pakistan, not Bangladesh, and the terracotta temples and alpona are Bangladeshi traditions but were not the 2023 listing.

Concept Tested: Rickshaw Art **Bloom's Level:** Remember

Question 4

Why do pulli kolam artists start by placing a grid of dots?

- A. The dots are where the colored powder will be piled highest
- B. The dots guide the lines, which loop around them, keeping the design even and symmetric
- C. The dots mark where guests should step
- D. Each dot stands for one member of the family

? Show Answer



The correct answer is **B**. In a pulli kolam, lines loop around the dots, usually without touching them, so the dots work like graph paper for an even, symmetric design. Kolam is traditionally drawn in white rice flour lines, not piles of colored powder, which is closer to rangoli.

Concept Tested: Kolam **Bloom's Level:** Understand

Question 5

Why is Mughal Architecture described as a blend of traditions?

- A. It combined Persian and Central Asian ideas like domes and walled gardens with Indian materials, skills and decoration
- B. It copied Greek temples exactly
- C. It was designed entirely by European architects
- D. It used only wood and bamboo from the Himalaya

? Show Answer



The correct answer is **A**. Mughal buildings such as Humayun's Tomb, designed by Persian architects and built with Indian red sandstone and craftsmanship, mixed Persian and Central Asian forms with local building traditions. They were not copies of Greek or European buildings.

Concept Tested: Mughal Architecture **Bloom's Level:** Understand

Question 6

Why is calligraphy, rather than statues of people, the main decoration on the Taj Mahal?

- A. Statues were too heavy for marble walls
- B. Shah Jahan did not like sculpture of any kind
- C. Islamic religious art usually avoids images of people in sacred buildings, and the words of the Qur'an are honored in beautiful script
- D. Calligraphy was cheaper than carving

? Show Answer



The correct answer is **C**. Islamic religious buildings are usually decorated with calligraphy, geometric patterns and plant designs instead of human figures, and Qur'anic verses are given the most beautiful form possible. Cost and weight had nothing to do with it. The Taj's inlaid calligraphy was itself expensive, skilled work.

Concept Tested: Calligraphy **Bloom's Level:** Understand

Question 7

A friend offers to give you a "black henna" design before a wedding, saying it's darker than regular mehndi. Based on the chapter, what's the best response?

- A. Accept, because all henna is made from the same plant
- B. Be cautious, because "black henna" often contains PPD, a hair-dye chemical the FDA warns can cause dangerous skin reactions
- C. Accept, as long as it's washed off within an hour
- D. Refuse, because mehndi is only for Eid

? Show Answer



The correct answer is **B**. Natural henna stains reddish-brown, but "black henna" often contains PPD, which can cause dangerous reactions and scarring. Mehndi is used for weddings, Eid, Diwali, Karva Chauth and many other occasions, so it isn't "only for Eid." This is safety information, not medical advice.

Concept Tested: Mehndi **Bloom's Level:** Apply

Question 8

Your club is decorating for a Pohela Boishakh celebration and wants to use the floor art Zara's Nanu made. Which materials and method should you use?

- A. Dry colored powders sprinkled in a freehand design
- B. Flower petals arranged in circles
- C. White rice flour dropped in lines around a grid of dots

D. A wet rice-flour paste painted on with fingertips

? Show Answer



The correct answer is **D**. Alpona, the Bengali floor art made for Pohela Boishakh, is painted with a wet paste of rice flour and water using the fingertips, a twig or cloth. Dry colored powder describes rangoli, petals describe pookalam, and rice flour lines around dots describe kolam.

Concept Tested: Rangoli **Bloom's Level:** Apply

Question 9

Compare a stupa with a Hindu temple. Which statement is most accurate?

- A. Both are built only in India
- B. A stupa is a solid mound walked around by worshippers, while a temple has an inner sanctum (garbhagriha) that worshippers approach
- C. Both always have gopuram gateway towers
- D. A stupa holds an image of a Hindu deity, while a temple holds relics of the Buddha

? Show Answer



The correct answer is **B**. A stupa is a solid dome over relics, honored by walking around it clockwise, while a Hindu temple is built around a sanctum holding the deity's image, with a tower above it. Stupas are found in Sri Lanka, Nepal, Bhutan, Pakistan and Bangladesh as well as India, and gopurams belong to South Indian temples, not stupas.

Concept Tested: Stupa **Bloom's Level:** Analyze

Question 10

Madhubani painting moved from mud walls to paper in the late 1960s. What does this change best show about the tradition?

- A. It stopped being made by women
- B. It was invented in the 1960s
- C. Women adapted a long-standing wall art to a new material during hard times, which helped it reach audiences worldwide
- D. It became a form of truck art

? Show Answer



The correct answer is **C**. Women of Mithila had painted walls for centuries. During a severe drought in the late 1960s, some began painting on paper to earn income, and hundreds of women from many communities later took it up. The art was not invented in the 1960s, and women remained its main artists.

Concept Tested: Madhubani Painting **Bloom's Level:** Analyze