NOTES OF ARTS OF INDIA

Traditional Indian Art History

Archaeologists uncovered prehistoric rock artworks which can be traced back at least 290,000 years in this location. The Bhimbetka petroglyphs in central India are the earliest specimens. This was the dominant kind of **cave painting** from the Paleolithic to Neolithic eras, frequently showing human and animal figures.

The Indus Valley Civilization produced the first known Indian sculptures between 2,500 and 1,800 BC. They made miniature terracotta and bronze figurines of animals and humans such as cattle and primates.

The development of Buddhism in the sixth century BC cleared the door for religious artwork, generally in the shape of bronze and stone statues. During this period, religious painters also experimented with constructing massive stone temples adorned with Greek-style columns. Traditional Indian Sculpture was popular among Hindus and Buddhists. Hinduism remained a major emphasis of Indian art for generations, with statues of deities such as Shiva being popular near Varanasi.

By the 16th century, Islam had grown in prominence under the Mughal Empire, and Indian artwork creation had increased under Islamic monarchs. The arts flourished during this period, and the building of the Taj Mahal began in 1631. British engagement in India started in the 18th century when art schools were founded to promote European forms.

As a result, indigenous art styles mixed with external cultures, and ancient art forms were sometimes glorified or exaggerated in order to attract European customers.

India won sovereignty from the British empire in 1947, prompting indigenous painters to seek a new style. Traditional components and inspirations from the country's rich past are incorporated into modern Indian artwork.

Traditional Indian Art Styles

Each area of India had its particular art style. Religious motifs are among the most popular, with legendary animal and human figures as well as rich decoration. Sculpture and paintings by Indian artists have been the most prominent art forms throughout India's history, as well as their magnificent architecture.

Indian Paintings

Each painting style that arose in India symbolized traditions, practices, and ideas that had been passed down from past generations. Though early Indian paintings were created on walls, the art form was later adapted to more contemporary materials such as paper, fabric, canvas, and other materials.



Krishna playing flute (ca. 1790 - 1800), from the Guler/Kangra region. Opaque watercolor and gold on paper; Freer Gallery of Art, CC0, via Wikimedia Commons

Madhubani Paintings

Madhubani paintings are among the most well-known in India. This style started as a kind of wall painting in the Mithila area of Bihar, but it wasn't generally recognized in the Western world until British government servant and art historian W.G. Archer discovered it in 1934 while surveying damage from an earthquake on the border between Nepal and India.



A Madhubani Painting.

Miniature Paintings

First found on palm leaves, created for merchants who transported them throughout the country in the 10th and 12th centuries, these little works were mainly crafted as images for manuscripts. Throughout the Mughal and Rajput courts, the art form grew in importance.

Miniature paintings were elaborate and detailed, relying on Persian methods. The themes varied from historical and religious situations to ordinary ones.

Pattachitra Paintings

This style, which goes back to the 12th century BC in Orissa, is another early type of painting. This kind of painting is still produced in the area's tiny settlements today. Pattachitra literally means "cloth picture," which accurately describes this classic, cloth-based kind of scroll painting.

The paintings, known for their detailed intricacies and legendary themes, use angular, aggressive lines and are heavily influenced by Mughal-era influences.

Warli Paintings

Warli folk paintings, a kind of traditional Indian artwork, have been around for 2,500 years. The style developed in Maharashtra, a state in western-Central India, and is still commonly performed today. Warli paintings, which are often painted on the walls of huts, use linear and monochrome colors and a basic manner of execution that mimics cave painting.

In contrast to other styles of tribal art, which use a plethora of colors, this style uses <u>earth tones</u> and neutral shades to show the everyday routines of indigenous people like hunting, farming, and dancing.



A Warli Painting

Though Pattachitra, Warli, Madhubani, and miniature paintings are some of the most well-known forms, numerous additional varieties of Indian folk art come from various times and places of the subcontinent, including:

Thanjavur paintings: Between the 16th and 18th centuries, this South Indian painting style thrived. These paintings are brightly colored panel artworks created on a wooden plank, with a god as the predominant subject matter.

Kalamkari paintings: These paintings are block-printed cotton cloth made in the Indian regions of Telangana and Andhra Pradesh. It has a strong relationship to Persian themes and was originally employed for crafting narrative scrolls and panels.

Gond paintings: This style of art glorifies nature, representing anything from lush foliage to animals. The artworks are made up of finely organized dots and dashes.

FRESCO Paintings

The origins of fresco painting are unknown, but it was used as early as the Minoan civilization (at Knossos on Crete) and by the ancient (at Pompeii). The Italian Renaissance was the great period of fresco painting, as seen in the works of Cimabue, Giotto, Masaccio, Fra Angelico, Correggio—who favoured the *sotto in su* ("from below to above")_technique—and many other painters from the late 13th to the mid-16th century. Michelangelo's paintings in the Sistine Chapel and Raphal's Stanza murals in the Vatican are the most famous of all frescoes. By the mid-16th century, however, the use of fresco had largely been supplanted by oil painting. The technique was briefly revived in the 20th century by Diego Rivera and other Mexican muralists as well as Francesco Clemente.

Fresco painting, method of painting water-based pigments on freshly applied <u>plaster</u>, usually on wall surfaces. The colours, which are made by grinding dry-powder pigments in pure <u>water</u>, dry and set with the plaster to become a permanent part of the wall. Fresco painting is ideal for making <u>murals</u> because it lends itself to a monumental style, is durable, and has a <u>matte</u> surface.



A DEPICTION OF FRESCO PAINTINGS

MAURYAN ERA ARCHITECT

Introduction

The Great Mauryan ruler **Ashoka** embraced **Buddhism** (as a part of shraman tradition) and the immense Buddhist missionary activities that followed during his rule paved the way for the development of **Mauryan sculptural** and **architectural styles.**

King Ashoka patronized the shraman tradition in the third century BCE.

The shraman tradition refers to several Indian religious movements parallel to but separate from the historical vedic religion.

It includes Jainism, Buddhism, and others such as Ajivikas, and Carvakas.

Background

In 321 BC, **Chandragupta Maurya**, with the help of **Chanakya** (author of Arthashasthra) founded the **Mauryan dynasty** after overthrowing **Nanda Dynasty**.

The Mauryan Empire was the first most powerful Indian empire to bring the entire Indian subcontinent under a single rule.

The Mauryan empire under Chandragupta Maurya spread its boundaries into Central Asia and Persia.

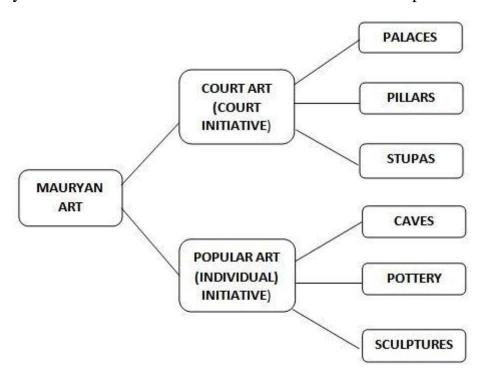
Expansion of Mauryan Empire: Chandragupta Maurya was succeeded by his son **Bindusara** in 298 BC who expanded the kingdom over most of present-day India, except Kalinga.

Mauryan Dynasty under Ashoka: Bindusara's kingdom was inherited by his son Ashoka the Great in 274 B.C.

Kalinga Invasion: During the invasion of Kalinga, Ashoka renounced bloodshed and adopted the policy of Ahimsa and adopted Buddhism.

Mauryan Art and Architecture

Mauryan architecture can be divided into Court Art and Popular Art.



Mauryan Court Art: Implies architectural works (in the form of pillars, stupas and palaces) commissioned by Mauryan rulers for political as well as religious reasons.

Palaces: Greek historian, **Megasthenes**, described the palaces of the Mauryan empire as one of the greatest creations of mankind and Chinese traveler **Fa Hien** called Mauryan palaces as god gifted monuments.

Persian Influence: The palace of Chandragupta Maurya was inspired by the **Achaemenid palaces** at Persepolis in Iran.

Material Used: Wood was the principal building material used during the Mauryan Empire.

Examples: The Mauryan capital at Pataliputra, Ashoka's palace at Kumrahar, Chandragupta Maurya's palace.

Pillars: Ashoka pillars, (usually made of **chunar sandstone**), as a symbol of the state, assumed a great significance in the entire Mauryan Empire.

Objective: The main objective was to disseminate the **Buddhist ideology** and **court orders** in the entire Mauryan empire.

Language: While most Ashoka pillar edicts were in Pali and Prakrit language, few were written in Greek or Aramaic language also.

Architecture: Mauryan pillars mainly comprise of four parts:

Shaft: A long shaft formed the base and was made up of a single piece of stone or monolith.

Capital: On top of shaft lay the capital, which was either lotus-shaped or bell-shaped.

Abacus: Above the capital, there was a circular or rectangular base known as the abacus.

Capital Figure: All the capital figures (usually animals like a bull, lion, elephant, etc) are vigorous and carved standing on a square or circular abacus.

Similarities with Persian (Achamenian) Pillars

Polished Stones and Motifs: Both Maurya and Achaemenian pillars, used polished stones and have certain common sculpture motifs such as the lotus.

Proclamations: Maurya's idea of inscribing proclamations (related to Buddhist teachings and court orders) on pillars has its origin in Persian pillars.

Third Person: Inscriptions of both empires begin in the third person and then move to the first person.

Differences with Persian (Achamenian)

The Mauryan Architect seemed to be highly influenced by Persian Architect but the two differs from each others in following ways

Pillars

The Capital Figure: It was absent in Mauryan pillars of the Kumhrar hall whereas pillars at Persepolis have the elaborate capital figures.

The Shape and Ornamentation: The shape of Mauryan lotus is different from the Persian pillar.

Pillar Surface: Most of the Persian pillars have a fluted/ ridged surface while the Mauryan pillars have a smooth surface.

Architectural Scheme: The Achaemenid pillars were generally part of some larger architectural scheme, and bit complex and complicated, while the Ashokan pillars were simple and independent freestanding monuments.

Shaft: Unlike Mauryan shafts which are built of monolith (single piece of stone), Persian/Achaemenian shafts were built of separate segments of stones (aggregated one above the other).

Pillar Edicts and Inscriptions

Ashoka's 7 pillar edicts: These were found at Topra (Delhi), Meerut, Kausambhi, Rampurva, Champaran, Mehrauli:

Pillar Edict I: Asoka's principle of protection to people.

Pillar Edict II: Defines Dhamma as the minimum of sins, many virtues, compassion, liberality, truthfulness, and purity.

Pillar Edict III: Abolishes sins of harshness, cruelty, anger, pride, etc.

Pillar Edict IV: Deals with duties of Rajukas.

Pillar Edict V: List of animals and birds which should not be killed on some days and another list of animals which have not to be killed at all.

Pillar Edict VI: Dhamma policy

Pillar Edict VII: Works done by Asoka for Dhamma policy.

Minor Pillar Inscriptions

Rummindei Pillar Inscription: Asokha's visit to Lumbini & exemption of Lumbini from tax.

Nigalisagar Pillar Inscription, Nepal: It mentions that Asoka increased the height of stupa of Buddha Konakamana to its double size.

Major Pillar Inscriptions:

Sarnath Lion Capital: Near Varanasi was built by Ashoka in commemoration of Dhammachakrapravartana or the first sermon of Buddha.

Vaishali Pillar, Bihar, single lion, with no inscription.

Sankissa Pillar, Uttar Pradesh

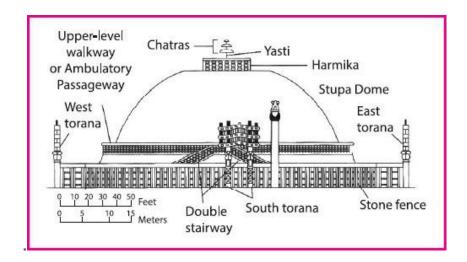
Lauriya-Nandangarth, Champaran, Bihar.

Lauriya-Araraj, Champaran, Bihar

Allahabad pillar, Uttar Pradesh.

STUPAS

Stupa: Stupas were burial mounds prevalent in India from the vedic period



Architecture of STUPAS: Stupas consist of a cylindrical drum with a circular **anda** and a **harmika** and a **chhatra** on the top.

Anda: Hemispherical mound symbolic of the mound of dirt used to cover Buddha's remains (in many stupas actual relics were used).

Harmika: Square railing on top of the mound.

Chhatra: Central pillar supporting a triple umbrella form.

Material Used: The core of the stupa was made of **unburnt brick** while the outer surface was made by using **burnt bricks**, which were then covered with a thick layer of plaster and medhi and the toran were decorated with wooden sculptures.

Examples:

Sanchi Stupa in Madhya Pradesh is the most famous of the Ashokan stupas.

Piprahwa Stupa in Uttar Pradesh is the oldest one.

Stupas built after the death of Buddha: Rajagriha, Vaishali, Kapilavastu, Allakappa, Ramagrama, Vethapida, Pava, Kushinagar and Pippalivana.

Stupa at Bairat, Rajasthan: Grand stupa with a circular mound and a circumambulatory path.

Depiction of Buddha at Stupas

Symbols: In the early stages, Buddha was represented through symbols that represented the different events of Buddha's life like **footprints**, **lotus thrones**, **chakras**, **stupas**, **etc**.

Jataka Stories: Later on, Jataka stories (stories associated with the previous birth of Buddha) were portrayed on the railings and torans of the stupas.

The Jataka stories that find frequent depiction are Chhadanta Jataka, Sibi Jataka, Ruru Jataka, Vessantara Jataka, Vidur Jataka and Shama Jataka.

The chief events from Buddha's life which are narrated in the arts are birth, renunciation, enlightenment, the first sermon (dharmachakrapravartana) and mahaparinirvana (death).

Rock cut structures in Mauryan period

A style of Rock Art in which a structure is carved out of solid natural rock is known as rock-cut architecture. Many cave temples and monasteries may be found across India.

Mauryan Rock-Cut Architecture (4th and 2nd Century BC)

During their reign, the Mauryans were also patrons of several rock-cut architectures. The majority of these were Buddhist in nature. The rock-cut cave in the **Barabar Hills is** an excellent example of Mauryan rock-cut construction.

The two important features of the caves of the Mauryan period were:

• Polishing inside the cave

• Creation of artistic gateway.

Lomus Rishi Cave, Barabar Hills

- It is a rock-cut cave in the Barabar Hills near Gaya, Bihar.
- The semicircular Chaitya (worship place) arch, which serves as the cave's entrance, is carved into the cave's face.
- On the chaitya, there is an elephant frieze carved in great relief. The cave's inner hall is rectangular in shape, with a circular chamber at the back. The entrance is positioned on the hall's sidewall.

Lion Capital, Ashokan Pillar at Sarnath



Lion Capital, Ashokan Pillar at Sarnath, c. 250 B.C.E., polished sandstone, 210 x 283 cm (Archaeological Museum Sarnath.

To depict of Buddha's First Sermon

The most celebrated of the <u>Ashokan pillars</u> is the one erected at Sarnath, the site of <u>Buddha's</u> First Sermon where he shared the Four Noble Truths (the dharma or the law). Currently, the pillar remains where it was originally sunk into the ground, but the capital is now on display at the Sarnath Museum. It is this pillar that was adopted as the national emblem of India. It is depicted on the one rupee note and the two rupee coin.

The pillar

The pillar is a symbol of the axis mundi and of the column that rises every day at noon from the legendary Lake Anavatapta to touch the sun.

The capital

The top of the column—the capital—has three parts. First, a base of a lotus flower, the most ubiquitous symbol of <u>Buddhism</u>.

Then, a drum on which four animals are carved represents the four cardinal directions: a horse (west), an ox (east), an elephant (south), and a lion (north). They also represent the four rivers that leave Lake Anavatapta and enter the world as the four major rivers. Each of the animals can also be identified by each of the four perils of

samsara

. The moving animals follow one another, endlessly turning the wheel of existence.

Four lions stand atop the drum, each facing in the four cardinal directions. Their mouths are open, roaring or spreading the dharma, the Four Noble Truths, across the land. The lion references the Buddha, formerly

Shakyamuni, a member of the Shakya (lion) clan. The lion is also a symbol of royalty and leadership and may also represent the Buddhist king

Ashokawho ordered these columns. A cakra (wheel) was originally mounted above the lions. Some of the lion capitals that survive have a row of geese carved below the lions. The goose is an ancient Vedic symbol. The flight of the goose is thought of as a link between the earthly and heavenly spheres.

The pillar reads from bottom to top. The lotus represents the murky water of the mundane world, and the four animals remind the practitioner of the unending cycle of samsara as we remain, through our ignorance and fear, stuck in the material world. But the cakras between them offer the promise of the Eightfold Path that guides one to the unmoving center at the hub of the wheel. Note that in these particular cakras, the number of spokes in the wheel (eight for the Eightfold Path), had not yet been standardized.

The lions are the Buddha himself from whom the knowledge of release from samsara is possible. And the cakra that once stood at the apex represents moksa, the release from samsara. The symbolism of moving up the column toward Enlightenment parallels the way in which the practitioner meditates on the <u>stupa</u> in order to attain the same goal.

The term 'chaitya' is derived from the Sanskrit word 'Chita', the mound of ashes formed by the cremation of a dead body. Eventually, it came to mean the earth mound heaped over the ashes or relics of a saint, and chaitya became 'that which is worthy to be gazed upon,' thus 'worshipful'.

Evolution of Chaityas:

The earliest 'rock-cut' sanctuaries date back to 200 B.C. These chambers were carved as retreats for ascet ics and monks of various sects. The architecture resembled the wooden structures of the time, with barrel vaulted interiors and vertical grooves on the walls to imitate wooden beams and members.

As Buddhism developed from isolated asceticism to a monastic organization, the single cell chamber developed into a monumental chaitya hall that could accommodate a much larger assembly. One of the earliest chaitya hall and vihara (monastery) complexes is the one at Bhaja in western India. But this similarity to wooden buildings gradually disappeared and with it the Hinayana period of chaitya architecture. The Mahayana period not only detached rock- cut architectural style from its wooden predecessor but also introduced an anthropomorphic representation of the Buddha on the stupa. The chaitya halls at Ajanta represent the apex of Buddhist rock- cut architecture and bear the theistic imprint of Mahayana Buddhism.

Difference between Vihara: the Chaitya and Chaitya were the places of worship and assembly of the monks and it consists of stupa within the structure at one end. The Vihara are the monastery where the monks used to live and it acts as their accommodation during the rainy days. They are usually carved out of rocks as cave structures. There are also places which contains the Chaitya and the Vihara in a single complex. Number of Chaitya and Vihara can be found Ajanta Bagh in and caves.

These chaitya and vihara was the main aspects of maintaining the monastic nature of Buddhism and Jainism. Many Kings came forward to build these structures to the monks as their contribution to the religion. It led to the development of the art of rock **cut structures and mural paintings in India.**

ARCHITECT OF SOME FAMOUS ANCIENT TEMPLES OF INDIA

1. The Lord Brihadeswara Temple of Thanjavur

This temple is of the largest temples of the South Indian culture and is a prime example of Dravidian architecture, which is a form of Hindu temple architecture that emerged in India across the South. There are over 15 different structures that show this type of architecture between temples, castles, and entire kingdoms.

History

The temple we are speaking of today was built by a Tamil King by the name of Raja Raja Chola during the years of 1003 and 1010 AD. The temple is part of a World Heritage Site of UNESCO, the temple being known as "The Great Living Chola Temples". These 11th-century temples were built around a moat. The temple included a gopura, the main temple, a massive tower, inscriptions, and sculptures.

One tower is built completely of granite and is one of the tallest in South India. The tower's name is Vimana and consists of a large corridor or prakara as it's known in India. The tower is structured with granite and framed with brass. The tower holds the shrines of Indian ambassadors, gods, and kings of Nandi, Parvati, Kartikeya, Ganesha, Sabhapati, Dakshinamurti, Chandeshvara, Varahi, and others. This temple is the most visited by tourists wanting to experience the culture.

Location of this Granite Temple

The Brihadeswara Temple is in the city of Thanjavur, India about 220 miles away from Chennai the closest city. The city is close to local railways, bus services, and highways. The temple is at the start of the Cauveri River with access to the Bay through the Indian Ocean. Along with the temples that were completed in the 11th century, the Tamil people also introduced agriculture to their environment allowing for the movement of goods and to control the water flowing in from the bay into the urban areas.

Architecture

The temple was built following the development of axial and symmetrical geometry rules. The temple sits on a higher platform than a traditional man-made mound which is how traditional temples are normally built. The shrines,

sculptures, inscriptions, and exterior are all made from granite stone, and brass framing throughout the entire temple.

Over the next few years, there are several renovations in the works for this temple and what it houses. Each monumental piece of the temple is protected and kept up to reduce the deterioration of the structure and the history it holds.

The old murals that are fading away with time will be replaced with new ones or repainted to bring back the original coloration.

Meenakshi Temple

Meenakshi Amman Temple, also known as Minakshi-Sundareshwara Temple, is one of the oldest and most important temples in India renowned for its astonishing Dravidian style of architecture. Located in the city of Madurai, Tamil Nadu, the temple has a great mythological and historical significance.

Mythological and historical significance

According to tradition, more than 3500 years ago the god Indra installed a small tower over a naturally formed stone lingam as a sign of devotion to Shiva, one of the primary deities in the Hindu pantheon. Other gods followed Indra's lead and began to worship there. Soon a human devotee witnessed the miraculous scene of gods worshipping at the lingam and notified the local king, Kulashekhara Pandya, who built a temple at the site.

According to legend it is believed that Lord Shiva assumed the form of Sundareswarar (the handsome one) and married Parvati (Meenakshi) at the site where the temple is currently located. Since Parvati herself had assumed the form of Meenakshi, Lord Vishnu, Parvati's brother, presided over the wedding of Shiva and Meenakshi and handed her over to Lord Shiva. The divine couple made their home in Madurai, where they ruled (and continue to symbolically rule) as queen

and king. Even today, the wedding ceremony is celebrated every year as 'Chithirai Thiruvizha' which is also known as 'Tirukalyanam' (the grand wedding).



Vishnu presiding over the marriage of Shiva and Meenakshi, Meenakshi Temple, Madurai

History of Meenakshi Temple

The history of Meenakshi Temple dates back to the 1st century C.E. It is said that Kulashekarar Pandyan, a king who ruled over the Pandyan dynasty, built the temple as per the instructions given in his dream by Lord Shiva. The temple was rebuilt throughout the 16th century as it was destroyed by the Muslim invaders. During the 14th century C.E, Malik Kafur, a commander of Delhi Sultanate, looted the temple.

The temple was rebuilt and reopened after the Vijaynagar Empire defeated the Muslim Sultanate. The temple was further expanded during the late 16th century and early 17th century by Vishwanatha Nayakar, a king of the Nayaka dynasty. According to researchers, while rebuilding the temple, the rulers of Nayaka

dynasty followed the architectural style of 'Silpa Shastras' (a set of architectural laws found in the ancient texts).

The temple was once again expanded by Thirumalai Nayak, during his reign from 1623 to 1655, many 'Mandapams' (pillared halls) were built. They also enlarged the complex and redesigned the surrounding streets in accordance with the sacred tradition of the Vastu Shastra.

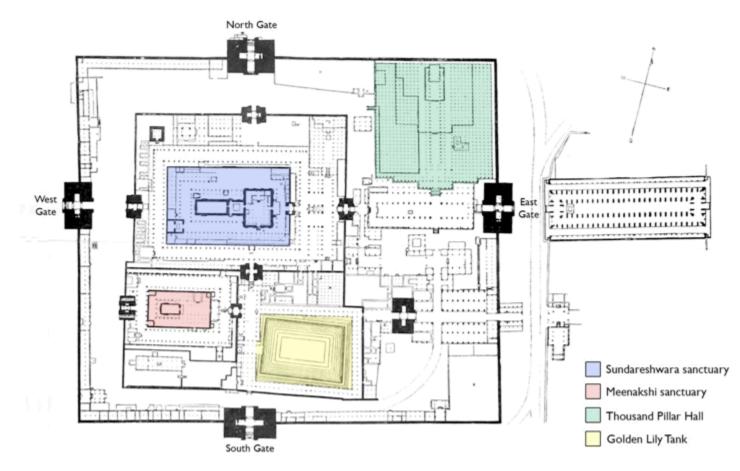


Mandapams (pillared halls)

But once again during the British rule the temple was once again degraded and parts of it were destroyed. In 1959, Tamil Hindus started the restoration work which ended in 1995.

Dravidian Architecure

The Meenakshi Temple is a prime example of Dravidian architecture—common in the southern states of India. Characteristics of Dravidian architecture often include covered porches on temples, tall entry gate towers on two or more sides, many-pillared halls, and a water tank or reservoir for ritual bathing.



Plan of Meenakshi Temple, A Handbook for Travellers in India, Burma, and Ceylon

Temple Structure

The temple is spread over 14 acres. The temple is enclosed with huge walls, which were built in response to the invasions.

The entire structure, when viewed from above, represents a mandala. A mandala is a structure built according to the laws of symmetry and loci. There are various shrines built within the temple complex. The two main shrines at the centre of the

temple are dedicated to Sundareswarar or "Beautiful Lord" (a form of the god Shiva) and Meenakshi (who is considered a manifestation of the goddess Parvati), the temple also has shrines dedicated to various other deities like Ganesha and Murugan. The temple also houses goddesses Lakshmi, Rukmini, and Saraswati.

The temple's shrines, pillars, sculptures, and paintings are populated with a dazzling quantity of divine beings who engage in various activities, can manifest in multiple guises and places simultaneously, and are subject to dissolution and rebirth. In total the temple contains around 30,000 sculptures.

TOWN PLANNING OF INDUS VALLEY CIVILZATION

The Harappan civilization's town layout supports the idea that the city's municipal establishments were well developed. The Indus Valley civilization is distinguished by its town layout. Their town layout demonstrates that they had a civilised and evolved life. In nature, town planning was fantastic. A few towns feature citadels to the west built on higher platforms, with residential areas to the east. They are both enclosed by a large masonry wall. Cities without a fortress are built on towering mounds.

Town Planning & Structures

The Harappan civilization was characterized by its grid-based town planning system, in which streets and alleys cut across one another virtually at right angles, separating the city into many rectangular blocks.

Harappa, Mohenjodaro, and Kalibangan each had their own castle erected on a high mud-brick pedestal.

Each city has a lower town with brick buildings occupied by the ordinary people beneath the castle.

The Harappan civilisation is distinguished by the widespread use of burned bricks in practically all types of architecture and the lack of stone structures.

Another notable feature was the underground drainage system that connected all dwellings to street drains that were covered by stone slabs or bricks.

The Great Bath, which is 39 feet long, 23 feet wide, and 8 feet deep, is Mohenjodaro's most significant public space.

- A flight of steps leads to the surface at each end. There are separate dressing rooms. The Bath's floor was constructed of charred bricks.
- The biggest structure at Mohenjodaro is a granary 150 feet long and 50 feet wide
- However, there are as many as six granaries in Harappa's fortress

Town Planning & Structures - Features Streets and Roads

- Indus Valley's streets and roadways were all straight and intersected at a right angle.
- All of the roadways were constructed with **burned bricks**, with the length of each brick being four times its height and the breadth being two times its height.
- They ranged in width from 13 to 34 feet and were fully lined.
- The city was split into **rectangular blocks** by the streets and **roadways.**
- Archaeologists unearthed the lamp posts at regular intervals. This implies the presence of street lighting.
- On the streets, there were also trash cans. These demonstrate the presence of competent municipal management.



Streets of Indus Valley Civilization

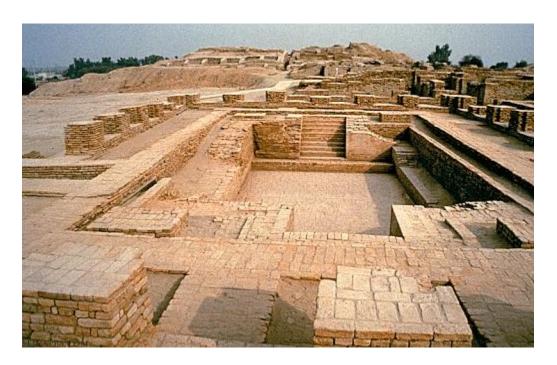
Drainage system

- One of the most notable elements of the **Indus Valley civilization** was the city's efficient closed drainage system.
- Cities of the **Indus Valley Civilization** possessed sophisticated water and sewage systems.

- Many **Indus Valley** sites have houses with single, double, and more rooms coupled to a very effective drainage system.
- Each residence had its own **drainage** and soak pit that was linked to the public drainage system.
- Every roadway was lined by brick-paved canals.
- They were covered and had manholes at regular intervals for cleaning and clearing.
- To convey **extra water**, **large brick** culverts with corbelled roofs were built on the city's outskirts.
- As a result, the Indus people developed a flawless subsurface drainage system.
- No other modern culture paid such close attention to hygiene.
- Corbelled drains were the primary method of collecting waste and rainfall; they may also have been used to empty enormouspools used for ceremonial washing

Great bath

- The **Great Bath** is the most notable feature of **Mohenjodaro**. It is made up of a big quadrangle.
- The discovery reveals that the **Great Bath**, which was located within the city, was a huge **rectangular tank** used for special rites or ceremonial bathing and resembled a modern-day swimming pool.
- There is a **large swimming pool** in the centre (about 39 feet long, 23 feet wide, and 8 feet deep) with the ruins of galleries and chambers on all four sides.
- It features a flight of stairs at either end and is supplied by a well in one of the neighbouring apartments.
- The water was **released through** a massive drain with a corbelled ceiling that was more than 6 feet deep.
- The **Great Bath's** outside walls were 8 feet thick.
- To prevent water leakage, the tank was covered with gypsum.
- For 5000 years, this sturdy structure has resisted the assaults of nature.
- Some rooms were equipped with hot water baths.



The great bath

Granaries

- **The granary,** which is 45.71 metres long and 15.23 metres broad, is the biggest structure at **Mohenjodaro**.
- **Harappa** has a set of **brick platforms** that served as the foundation for two rows of six granaries each.
- Brick platforms have also been discovered in the southern section of **Kalibangan.**
- These granaries protected the grains, which were most likely gathered as income or as storehouses to be used in crises.
- During disasters, most staple foods like rice, wheat, and barley were stockpiled in these warehouses for public distribution.
- The cervical granaries were a massive building.
- Archeological evidence suggests that the lowest half of the stockroom was formed of blocks, while the upper part was most likely made of wood

Buildings

• People from the **Indus Valley civilisation** erected dwellings and other structures beside highways.

• They constructed terraced dwellings out of charred bricks. Every dwelling

