ARCH 1121 - HISTORY OF WORLD ARCHITECTURE TO 1900

Ancient India & Southeast Asia

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Course Overview:

- What is architecture? What is history?
- Prehistoric, Mesopotamia, Egypt
- Early Aegean, Greece
- India & Southeast Asia, China & Japan
- Rome, Early Christian & Byzantine, Islamic
- Early Medieval, Romanesque, Gothic
- The Pre-Columbian Americas, Africa
- The Renaissance, Baroque, Rococo in Europe
- 18th Century & Neo-Classicism in Europe & America
Mohenjo Daro, Pakistan, c. 2400 - 2000 BCE

- Best preserved of the ancient Harappan cities of the Indus Valley
- Orderly, well planned cities constructed of uniformly sized fired brick
- 40,000 inhabitants
- Citadel with a large storehouse & a great bath
- No evidence of temples, tombs, or palaces
- Sophisticated plumbing system with fresh water and waste piping

Mohenjo Daro, Pakistan, c. 2400 - 2000 BCE

**DRAINAGE**

The people of Mohenjo-daro built the world’s first drainage system. Houses had bathrooms and toilets. Water and sewage ran out of them through pipes (right) into drains, which ran under the streets. Utility covers were placed over drains at intervals, allowing municipal cleaners to climb down and clear blockages. Waste finally went to disposal points outside the city.

Mohenjo Daro, Indus Valley
c. 2400 – 2000 BCE

Great bath

Statuette of “Priest King”
Architecture of Ancient India and Southeast Asia (beginning 3,000 BCE)

- The ancient Harappan civilization of the Indus Valley disappeared around 1700 BCE, displaced by Aryan tribes migrating from central Asia to occupy most of northern India c. 1500-500 BCE.

- Surviving architecture of ancient India & Southeast Asia is primarily temple and religious architecture.

Three main religions: Jainism, Buddhism, Hinduism

1. **Jainism** – followers attain spiritual achievement by performing acts of charity and kindness, avoiding all forms of violence and also taking religious retreats
Architecture of Ancient India and Southeast Asia (beginning 3,000 BCE)

Three main religions:

2. **Buddhism**
   - For Buddha, “the enlightened one”
   - Founded by Siddhartha Gautama (c. 563-483 BCE)
   - Dedicated to understanding the causes of suffering in everyday life
   - Traditional belief in cycles of reincarnation

>> Buddhist Architecture

* **Stupa**, a dome shaped monument for enshrining sacred relics.
* **Asoka Columns**, markers in the landscape inscribed with Buddhist teachings
Architecture of Ancient India and Southeast Asia (beginning 3,000 BCE)

Three main religions:

3. Hinduism

- Used popular images of gods and spirits in its rituals and for worship
- Rituals relate more to everyday life than to afterlife

>> Hindu architecture:

* **Nagara**: The tower of the Hindu temple is beehive shaped
* **Dravida**: The tower of the Hindu temple consists of progressively smaller stories of pavilions
EARLY EVOLUTION OF THE STUPA
(BUTKARA Great Stupa, 3rd century BCE- 2nd century CE)

1. MAURYAN
(3rd century BCE)
Coinage: Mauryan
Schist and plaster

2. INDO-GREEK
(2nd century BCE)
Coinage: Menander I
Schist and plaster
Nicho ... panels or relief-work
(Butkara I, p35)

3. INDO-GREEK
(2nd century BCE)
Coinage: Menander I
Schist and plaster

4. Late INDO-GREEK/
INDO-SCYTHIAN
(End of 1st century BCE)
Coinage: Azes II
Soapstone and plaster

5. KUSHAN
(2nd century CE)
Coinage: Kushan
Soapstone and plaster

SCALE
(meters)
5m 4m 3m 2m 1m 0m

Acanthus friezes:
Great Stupa, Sanchi, India: 250 BCE – 250 CE

- Stupas were originally markers of a Buddhist holy site, often housing relics said to be remains of the Buddha
- Simple stone corbel construction to allow for circumambulation around relic
Asoka Columns – markers on the roads to Buddhist Shrines, inscribed with Buddhist teachings
Drawing of the Stupa at Sanchi

- torana (gate)
- verdica (fence)
Great Stupa of Sanchi

• Early mounds of rubble or earth erected over relics, later faced with brick or stone.

• Massive stone fence (Verdica) 9 feet high

• 4 carved gates (Toranas) pointing to the Cardinal points

• Rituals included walking around (circumambulating) the Stupa while chanting or meditating
Great Stupa, Sanchi, India: 250 BCE – 250 CE

CHATRA (3-tier umbrella form, symbolizing the bodhi tree)

HARMICA (square railing)

TORANA (gate)

circumambulation path

VERDICA (fence)
Cave Temple at Karli, c. 100 BCE

Fazio Moffet & Wodehouse (2019)
Cave 26, Ajanta Caves, India: 5th century CE
Hindu Temples:

- Venerate multiple deities including Shiva, Vishnu, and Brahma.
- Are sites for worship, also a dwelling place for the deity.
- Symbolic of the cosmic order—axial organization, alignment with the cardinal points, east-facing entrance, pure geometries based on the square.
- Symbolic of the deities’ affinity for caves and mountains:
  - *garbhagriha* > square inner sanctuary
  - *shikhara* > mountain peak roof
- Early temples carved into stone mountainsides.
- No congregational worship, no need for large interior spaces—priests perform rituals on behalf of the community, individuals worship at any time.
- Rituals include circumambulation—clockwise movement around the shrine or multiple shrines of a temple complex.
Kandariya Mahadeva Temple, India: c. 1025 – 1050 CE
Kandariya Mahadeva Temple, India: c. 1025 – 1050 CE

The main spire or shikhara rises 102' to depict Mount Meru, the home of the gods.

Many of the side panels depict Shiva in the presence of apsaras (female spirits), consorts, and other divinities (erotic figures).

The temple form and surface patterning makes it appear as if it were carved out of a solid piece of stone.

Highly textured ornament gives the mass of the temple an appearance of lightness; horizontal bands balance the strong verticality.
Kandariya Mahadeva Temple, India: c. 1025 – 1050 CE
- Largest and tallest surviving temple in central India
- Axial organization vertically and horizontally; aligned with cardinal directions
Kandariya Mahadeva Temple, India: c. 1025 – 1050 CE

Main tower (shikhara) centered over the sanctuary (garbhagriha)

Progression of a mountain

Axial plan
Map of Temples of Angkor Wat and Angkor Thom, Cambodia
Angkor = Capital city of the Khmer Empire
Angkor Wat, Cambodia: begun ca. 1120

- Built as a Hindu royal shrine for Khmer Dynasty before being converted for Buddhist worship
- Rectangular perimeter wall 4275 x 4920 feet; one of the largest religious structures ever built
- Moat symbolizes “ocean out of which mountain rises” (A World History of Architecture)
- Stepped temple form represents “cosmic mountains” (A World History of Architecture)
Angkor Wat, Cambodia: begun ca. 1120
Angkor Wat

Second gallery measures 330’ X 380’
Angkor Wat, Cambodia: begun ca. 1120 CE
Angkor Wat, Cambodia: begun ca. 1120

- The stones, as smooth as polished marble, were laid without mortar with very tight joints
- The monument was made out of enormous amounts of sandstone, as much as Khafre's pyramid in Egypt (over 5 million tons)
Angkor Thom, Cambodia, Entrance gate ca 1200 CE
Angkor Thom, Cambodia ca 1200 CE
panoramio.com
Angkor Thom, Cambodia
Reading: Fazio, Moffet & Wodehouse
A World History of Architecture or Buildings Across Time
Chapter 3