

KP GATE CLASSES, NEW DELHI – INDIA’S No. 1 GATE AR COACHING

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**CHAPTER 1. WESTERN HISTORY OF
ARCHITECTURE**

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1.1 PRE-HISTORIC ARCHITECTURE

Prehistoric architecture includes monumental structures such as Stonehenge, cliff dwellings in the Americas, and thatch and mud structures lost to time. The dawn of architecture is found in these structures. Prehistoric builders moved earth and stone into geometric forms, creating our earliest human-made formations.

The Stone Age consists of three periods.

- Palaeolithic Era or old stone age (2.5 Million years ago)
- Mesolithic Era or Middle Stone Age (15000 years ago)
- Neolithic Era or New stone age (11000 years ago)

Palaeolithic Era

The Paleolithic Era is distinguished by the development of stone tools. It extends from 2.5 Million Years ago to 15000 years ago.

Mesolithic Era

The Mesolithic Era comes after the end of the Paleolithic Era. Forests began to develop. Therefore, timber and other forest materials gave rise to new developments, unlike the use of bone and skins in the Paleolithic era.

Neolithic Era

The Neolithic Era exists between 15000 – 11000 years ago. Further developments took place, where people utilized mudbrick to construct houses.

Some important pre-historic structures are discussed below:

STONEHENGE, ENGLAND



The stone age is famous for the use of huge rocks – Megaliths. These Megaliths are predominantly found in Stone Henges. Henges was of wood or stone circles. Henges, simply circles of stone or wood usually in a circular ditch, are quite common in the Stone Age and seem to have had some kind of religious or astronomical significance.

These mark sacred spaces, but the exact purpose is still unknown.

Three different types of these massive stone structures: **Menhir, dolmen, and cromlech.**

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It consists of a series of concentric circles and U-shapes. Sandstone blocks were erected in a layout that aligned with midsummer sunrise and midwinter sunset and the positions of the moon. The outer circle is post and lintel construction with stone blocks thirteen feet high. The lintels were slightly in curve form creating a circle and are attached end to end. The inner circles are single upright bluestones.



DOLMEN

A **dolmen** or **portal tomb** is a type of single-chamber megalithic tomb, usually consisting of two or more upright megaliths supporting a large flat horizontal capstone or "table". Most date from the early Neolithic period (4000–3000 BCE) and were sometimes covered with earth or smaller stones to form a tumulus (burial mound). Small pad-stones may be wedged between the cap and supporting stones to achieve a level appearance. In many instances, the covering has eroded away, leaving only the stone "skeleton".



Chûn Quoit in Cornwall, UK, about 2400 BCE



Zennor Quoit in Cornwall, UK, 2500–1500 BCE



A dolmen erected by Neolithic people, Marayur, Kerala, India.



The dolmen Er-Roc'h-Feutet in Carnac, Brittany, France



Lancken Granitz dolmen, Germany



Tinkinswood, Vale Glamorgan, Wales, around 3000 BCE

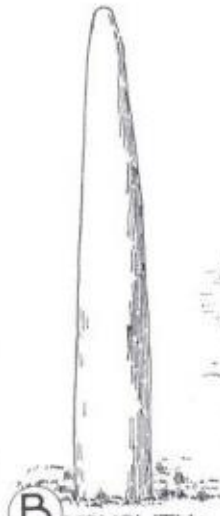
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2

PREHISTORIC ARCHITECTURE



A THE HUT



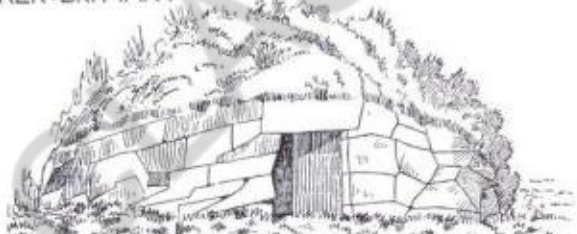
B MONOLITH:
LOCMARIAKER: BRITTANY



C SHIELINGS:
JURA: SCOTLAND



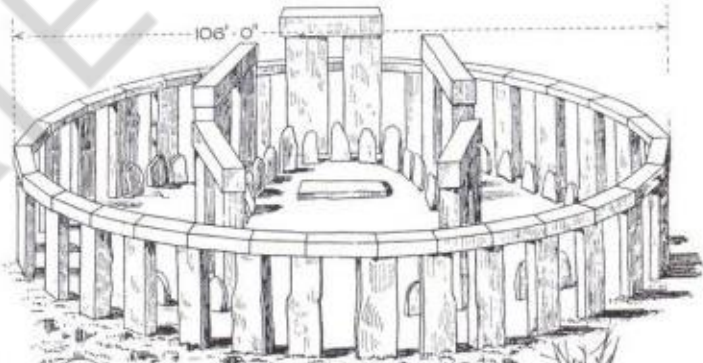
D BEEHIVE HUTS: LEWIS: SCOTLAND



E BEEHIVE HUT: IRELAND



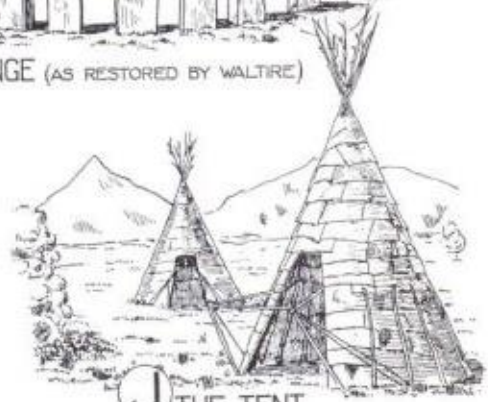
F DOLMEN: N^r. REGNIER: SAVOY



G STONEHENGE (AS RESTORED BY WALTIRE)



H THE CAVE



J THE TENT

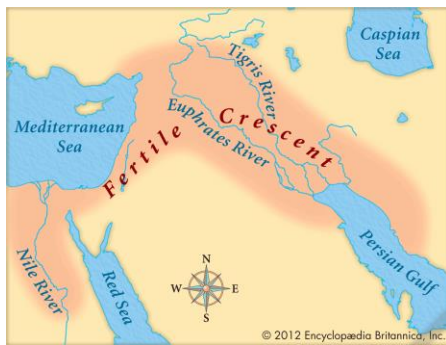
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1.2 MESOPOTAMIAN ARCHITECTURE

1.2.1 INTRODUCTION TO MESOPOTAMIAN ARCHITECTURE

Mesopotamia is a historical region of Western Asia situated within the Tigris–Euphrates River system, in the northern part of the Fertile Crescent. Today, Mesopotamia occupies modern Iraq. In the broader sense, the historical region included present-day Iraq and parts of present-day Iran, Kuwait, Syria, and Turkey.

- **Meaning:** The word Mesopotamia comes from the ancient Greek root words μέσος (mesos, 'middle') and ποταμός (potamos, 'river') and translates to '(land) between rivers'.
- **Timeline:** The architecture of Mesopotamia is ancient spanning a period from the 10th millennium BC (when the first permanent structures were built) to the 6th century BC.
- **Fertile Crescent:** The Fertile Crescent, often referred to as “the cradle of civilization,” is the crescent-shaped region in Western Asia and North Africa that spans the modern-day countries of Iraq, Turkey, Syria, Lebanon, Israel, Palestine and, for some scholars, Egypt.



Fertile Crescent was home to many ancient civilizations including Sumer, Akkad, Assyria, and Babylonia.

Its position between ancient Egypt and the Indus River Valley region—an area encompassing modern-day Afghanistan and Pakistan—also made this area a major crossroads for the exchange of goods and ideas.

- **Accomplishments:** Among the Mesopotamian architectural accomplishments are the development of urban planning, the courtyard house, and ziggurats.
- **Building Materials:** Sumerian masonry was usually mortarless although bitumen was sometimes used. Brick styles varied greatly over time. Early bricks were sun baked to harden them. These types of bricks are much less durable than the later used oven-baked ones.

The banks of the Tigris and Euphrates presented only alluvial plains, where wood suitable for building was rare. The country, however, possessed an abundance of clay, which, being compressed in flat square moulds and dried in the sun, was the material of which were formed the huge platforms upon which temples and palaces were built.

These immense platforms were at first faced with sun-dried bricks, and subsequently in later periods with kiln-burnt brick.

- **Plano-convex brick:** It is a sun-dried or kiln-fired rectangular brick with a flat under surface and a domed upper surface, used in the Early Dynastic period of southern Mesopotamia. They often had thumb-impressed holes on the domed surface.



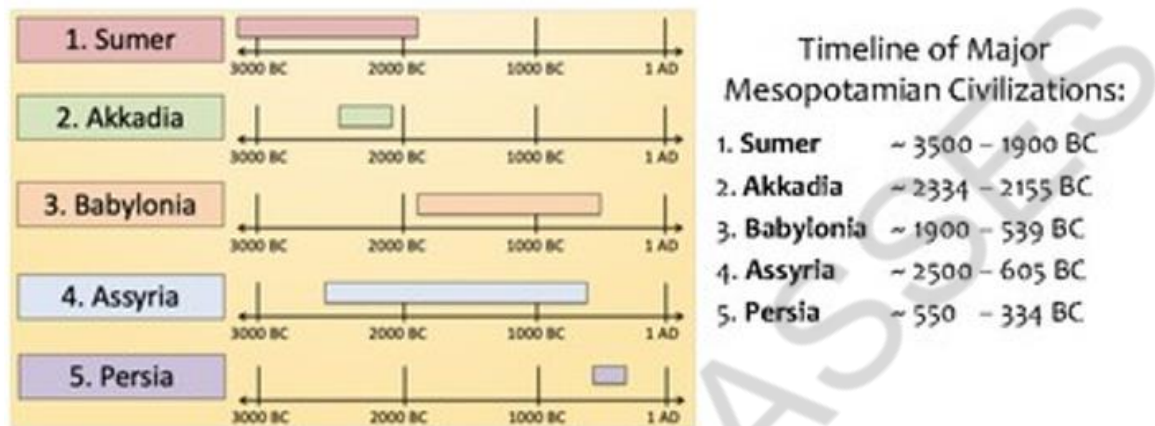
- **Masonry construction:** The favoured design was rounded bricks, which are somewhat unstable, so Mesopotamian bricklayers would lay a row of bricks perpendicular to the rest every few rows.

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The advantages of plano-convex bricks were the speed of manufacture as well as the irregular surface which held the finishing plaster coat better than a smooth surface from other brick types.

- **Civilizations:** Some of the major Mesopotamian civilizations include the Sumerian, Assyrian, Akkadian, and Babylonian civilizations. Over the course of 5,000 years there were three remarkable Bronze Age civilizations: the Sumerians, the Babylonians, and the Assyrians.

This region was later a part of Persian Empire, also known as the Achaemenid Empire, which lasted from approximately 559 B.C.E. to 331 B.C.E.



1.2.2 SUMERIAN CIVILIZATION

Sumerian civilization developed in ancient Mesopotamia (present-day Iraq) around 3500 BC. The Sumerians were among the first civilizations to develop a system of writing, and their art and architecture reflect their complex religious beliefs and social hierarchies.

Sumerian architecture is characterized by its use of mud brick. Some important structures of Sumerian Architecture and their features are given below:

1. TEMPLE OF EANNA, URUK, ANCIENT SUMERIA:



Part of the front of Inanna's temple from Uruk (in Vorderasiatisches Museum Berlin)



Photograph of modern reconstruction from the Pergamon Museum in Berlin, Germany, of columns with decorative clay pins resembling mosaics from the Eanna temple

- **E-anna**, also referred to as the **Temple of Inanna**, was an ancient Sumerian temple in Uruk.