

HISTORY OF ARCHITECTURE

LECTURE 2

Introduction: Prehistoric Architecture

Unit-I

- Definition and scope of Architecture. Interdependence of various components of the built environment. Need for a holistic approach.
- Man's early/prehistoric attempts to colonize and personalize space.
Examples of early shelters, Stonehenge, tumuli, etc. as expression of man's physical and spiritual needs.

WHAT IS THE MEANING OF 'COLONIZE' ?

"to inhabit"

According to man's need -- how he moulds and how he starts to inhabit space



WHAT IS THE MEANING OF 'PERSONALIZE' ?

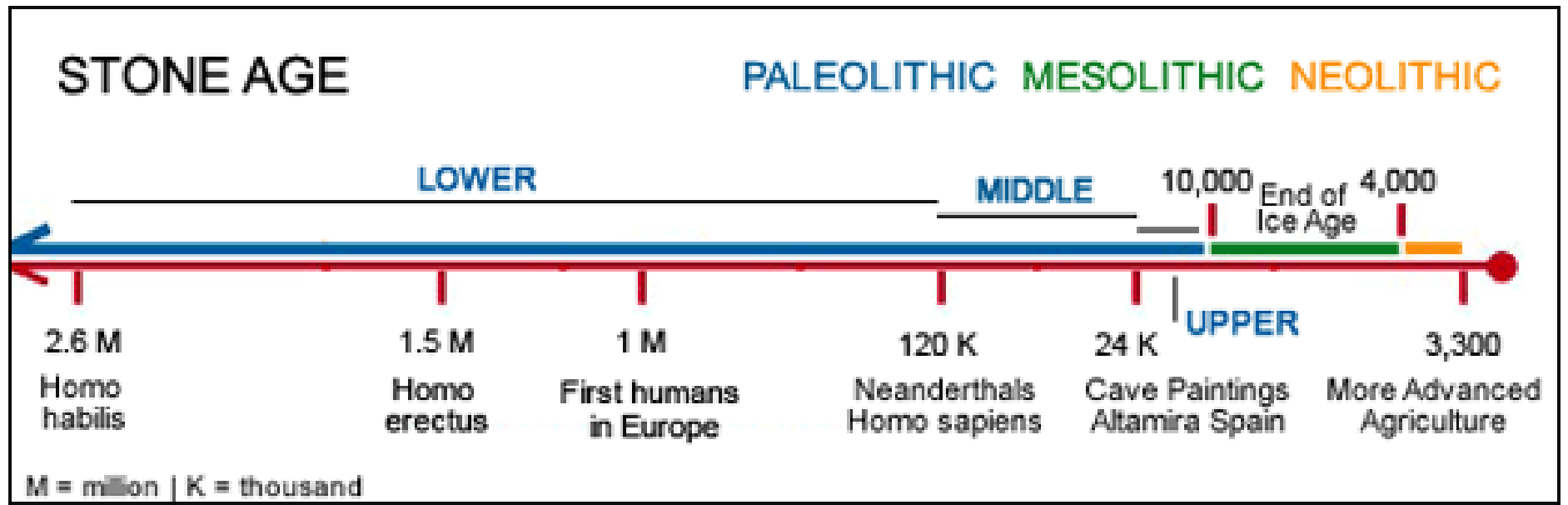
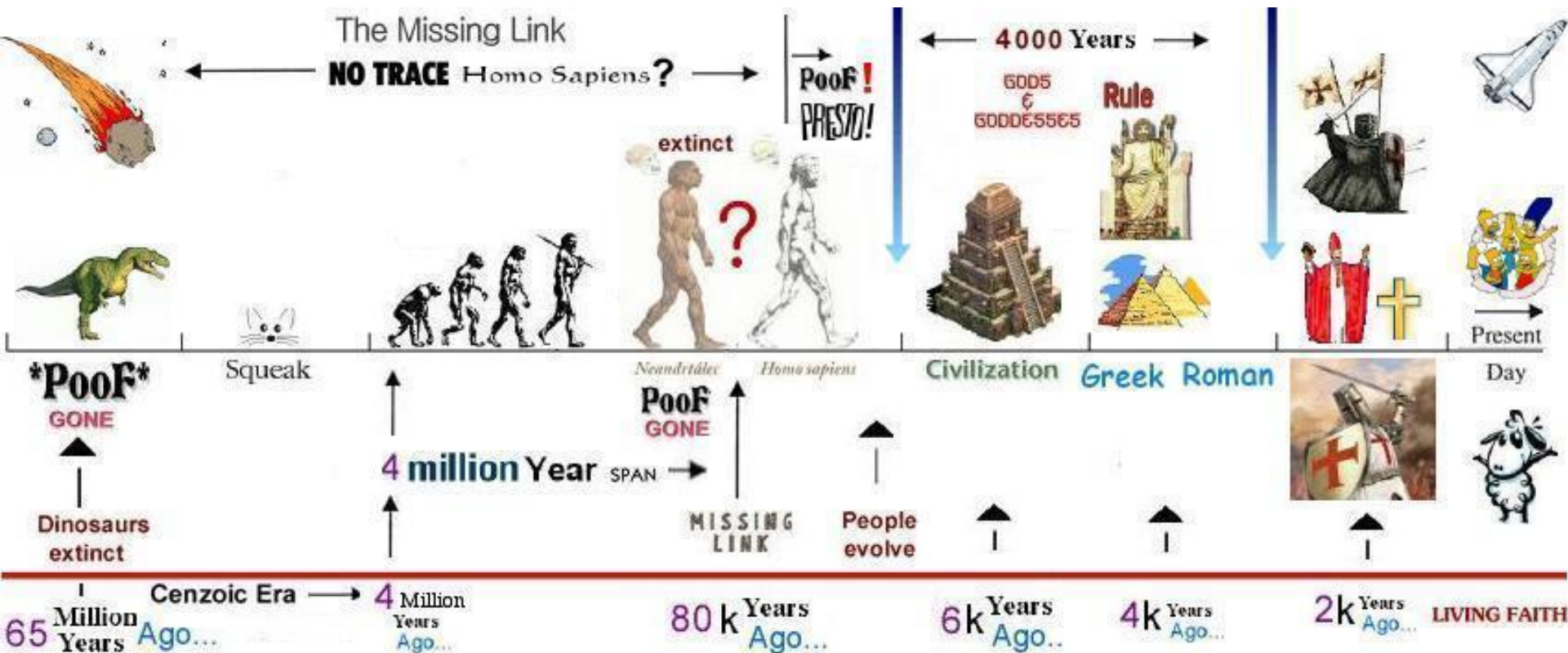
Personal needs , Someone's individual requirements

Modify spaces as per personal requirements



Learning Outcome

- Learning outcome from the civilization:
 - Ways of life and dwellings in the earliest period of human civilization.
 - The evolution of early buildings and settlements.
 - The evolution of monumental construction in relation to religion and ritual activities.



Prehistory

3 millions years
to 3000 BC

PALEOLITHIC

3 millions
10000 AC

Use of fire
1 million years
BC



First human species
2.5 millions years BC



NEOLITHIC

10000 BC

Agriculture
begins
10000 BC



ANCIENT
AGE

3000 BC to
476 AC

Invention of
Writing
3.000BC



MEDIEVAL
AGE

476 AC to
1492 AC

Fall of Western
Roman Empire
476 AC



MODERN
AGE

1492 to
1789 AC

Columbus
discovered
America
1492 AC



CONTEMPORARY
AGE

1789 AC
2011AC

French Revolution
1789 AC



– Lecture 1-A (EARLY PREHISTORIC ARCHITECTURE)

- **Historical Background**

- Location and period
- Social characteristics and beliefs

- **Architecture of the Civilization**

- Early Stone Age architecture

– Lecture 1-B (NEW PREHISTORIC ARCHITECTURE)

- New Stone Age architecture

- **Architectural Characteristics**

- Buildings and other architectural elements
- Building materials, construction and technologies
- Principles of Architectural Organization

EARLY PREHISTORIC ARCHITECTURE

Outline of Lecture

- Historical Background
 - Location and period
 - Social characteristics and beliefs
- Architecture of the Civilization
 - Early Stone Age architecture

PREHISTORIC AGES

PERIOD

- Occurred before invention of written records.
- Also called **Stone Age** period because of the absence of metal implements.



- Early Stone Age
- 2 million years ago



- Middle Stone Age
- 20000 BC to 9500 BC



- New Stone Age
- 9000 BC – 4500 BC

LOCATION

- Not restricted to any particular geographical region.
- Occurred in different localities.
- Usually close to sources of food, near rivers.

SOCIAL CHARACTERISTICS & BELIEFS

- Ways of life differed between the Early Stone Age period and the New Stone Age Period.
- We will examine each of the periods independently to understand the **people and their society**.

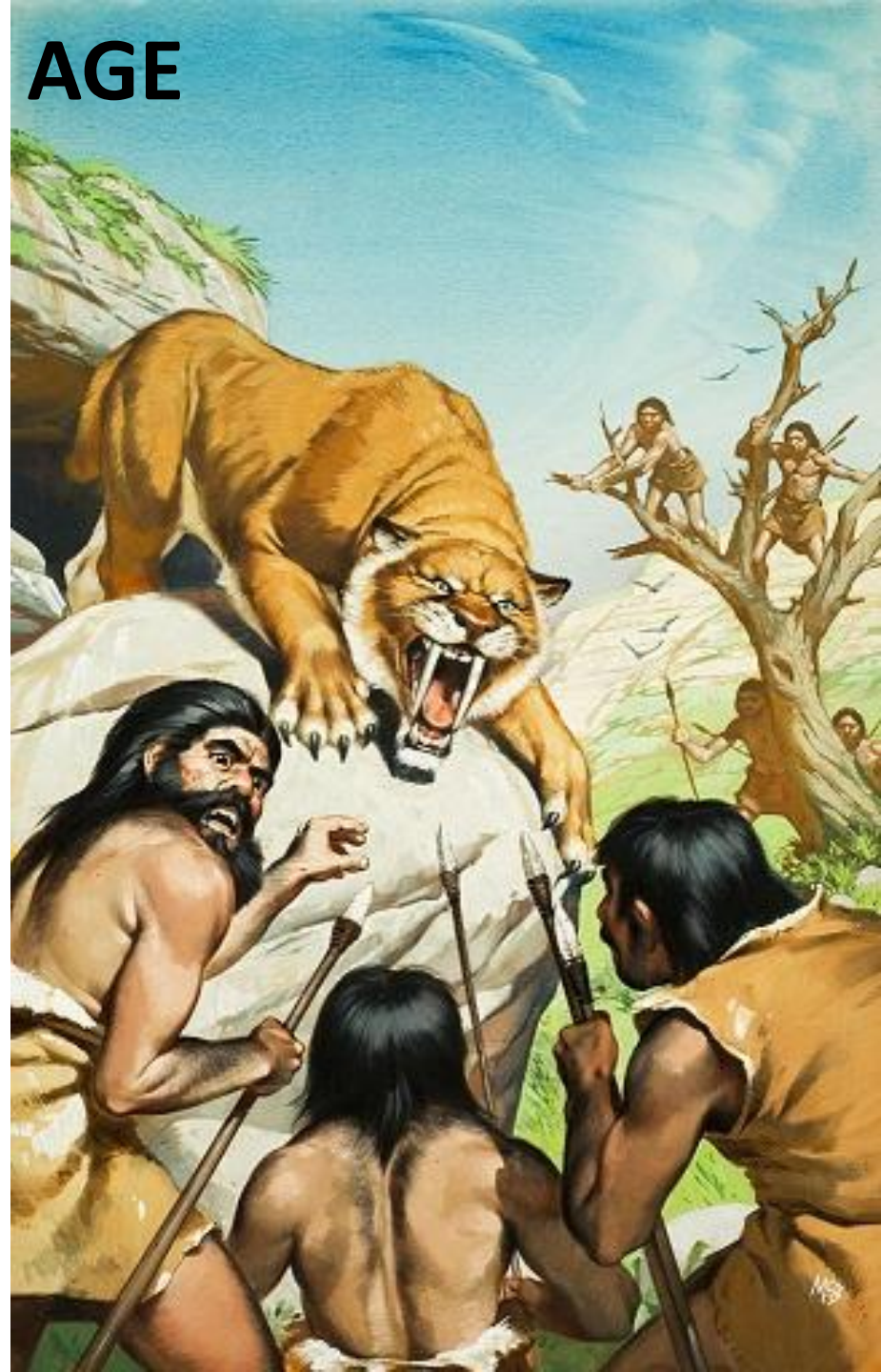
Historical Background

PALEOLITHIC AGE



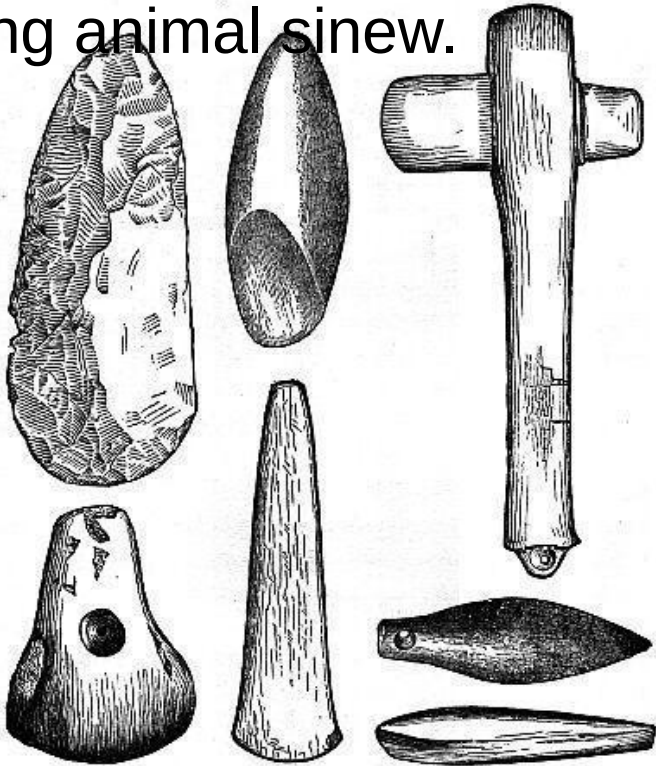
PALEOLITHIC AGE

- **Paleolithic or Old Stone Age** (Mesolithic or Middle Stone Age)
The time between the end of most recent period of glaciation (c. 10000 BC) and the beginnings of agriculture.
- Paleolithic art appears to have taken three principal forms:
- Portable sculptures of women and animals,
- Paintings on the walls and ceiling of caves and
- The decoration of artifacts with geometric designs.



PALEOLITHIC AGE TOOLS

- To hunt for food, early humans formed spears,
- first by sharpening the ends of sticks, but later by attaching a sharp stone spear-tip to wood using animal sinew.



Weapons of Stone from Tennessee. (Smith. Inst.)

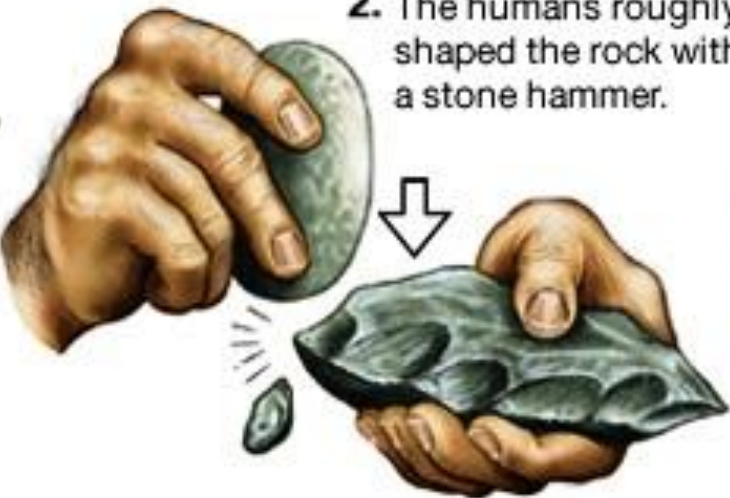


How Stone Age Humans Made Hand Axes

1. The process started with a large piece of rock.



2. The humans roughly shaped the rock with a stone hammer.



3. Using a hammer made of wood, stone, or antler, they sharpened the edge.



4. They trimmed the edge by prying off tiny flakes with a pointed stick.



finished hand ax



front view



side view

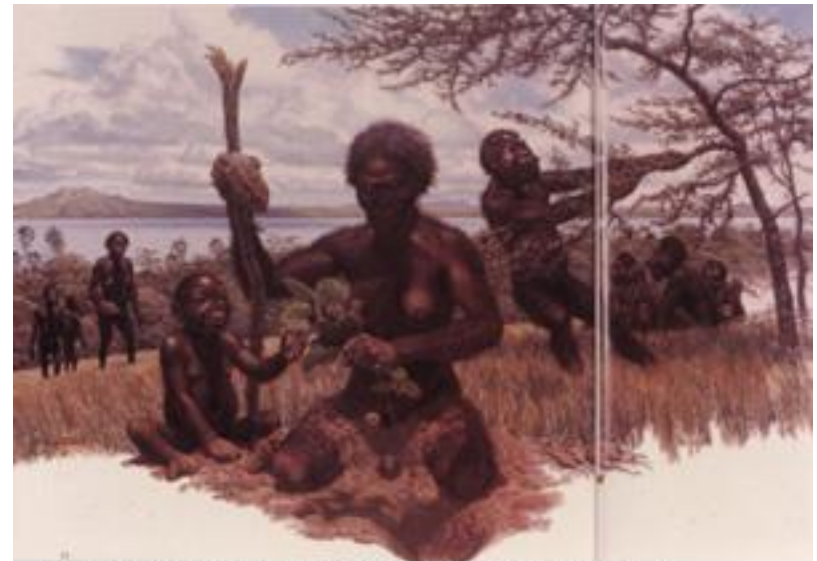
Sources of Information

- No written record from the prehistoric period
- Information is gathered from scientific studies of prehistoric objects
- Many academic disciplines are interested in studying human civilization- archeology, paleontology, anthropology etc
- The disciplines study prehistoric objects
- They provide information about civilizations based on studies

Early Stone Age

(Before 9000BC)

- Nomadic, always on the move.
- Move about in search of **food, water, and good climate.**
- Got their food through food **gathering, hunting and fishing.**
- Usually move about in small bands of less than **15 persons.**
- Their lifestyle made them barely able to survive.
- Not much is known about their beliefs.



Prehistoric lifestyle - Reconstruction image

Source: Unknown

Architecture of the Civilization

Architecture of the Civilization

- Varied by periods
- Will be examined according to the periods:
 - Architecture of the Early Stone Age
 - Architecture of the New Stone Age

Early Stone Age Architecture

- Introduction

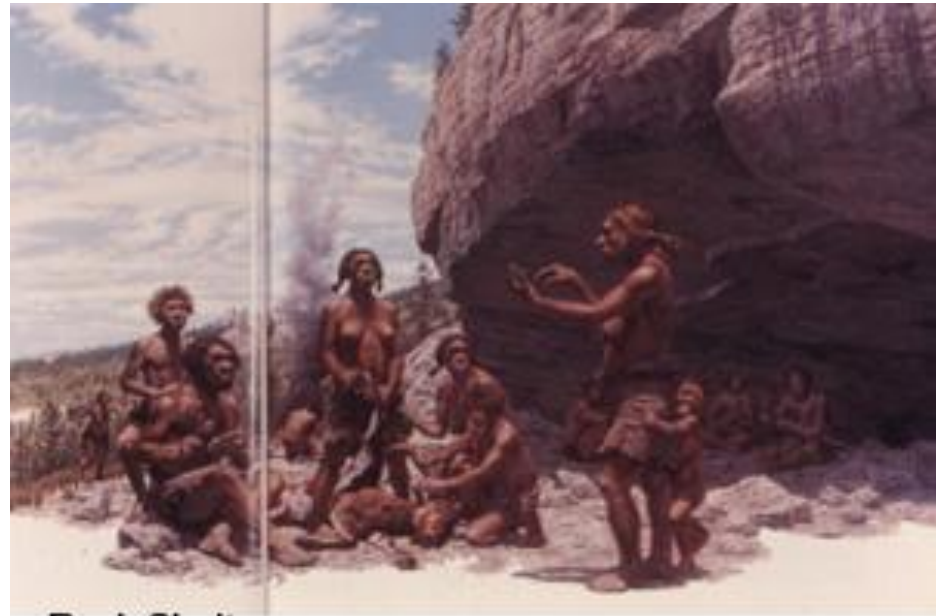
- Nomadic people constantly on the move
- Did not require permanent shelter or settlements
- Dwellings consist of simple shelters

- Examples

- Rock Shelter
- Cave Dwelling
- Temporary structures of plant and animal materials

ROCK SHELTER

- Rock shelters and caves provided natural protection.
- Reconstructed image to the right shows the use of rock formation as shelter

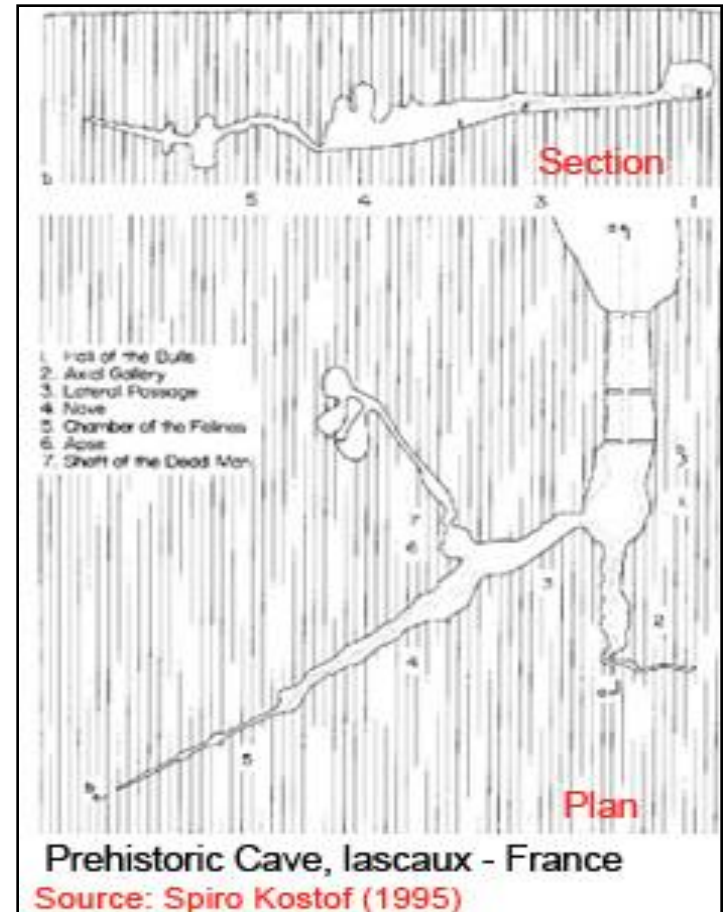


Rock Shelter

Source: Unknown

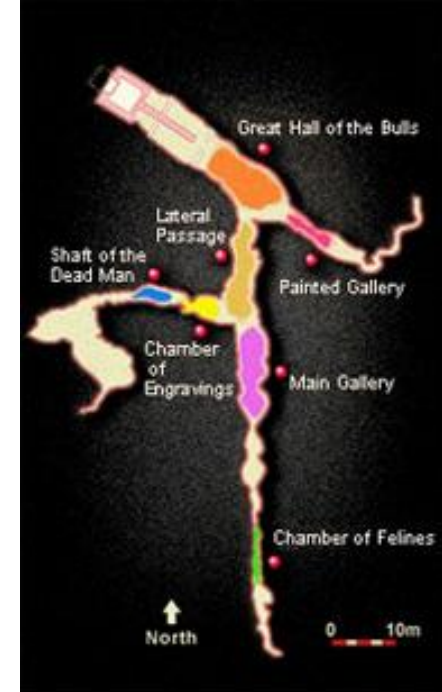
Cave Dwelling

- Caves were, however, more popular as dwelling.
- **Caves used by Stone Age** people have been found in many **regions of the world**.
- A good example is the cave at **Lascaux in France**.



Cave at Lascaux, France

- Discovered in 1940
- Used about ten to twenty thousand years ago.
- Used by several generation of people.
- Entered through one entry to a large hall.
- From the hall, cave braches out into other spaces.



Cave at Lascaux, France- layout

Source: www.culture.gouv.fr



The cave at Lascaux, France - Drawings

Source: Spiro Kostof (1995)

Cave at Lascaux, France

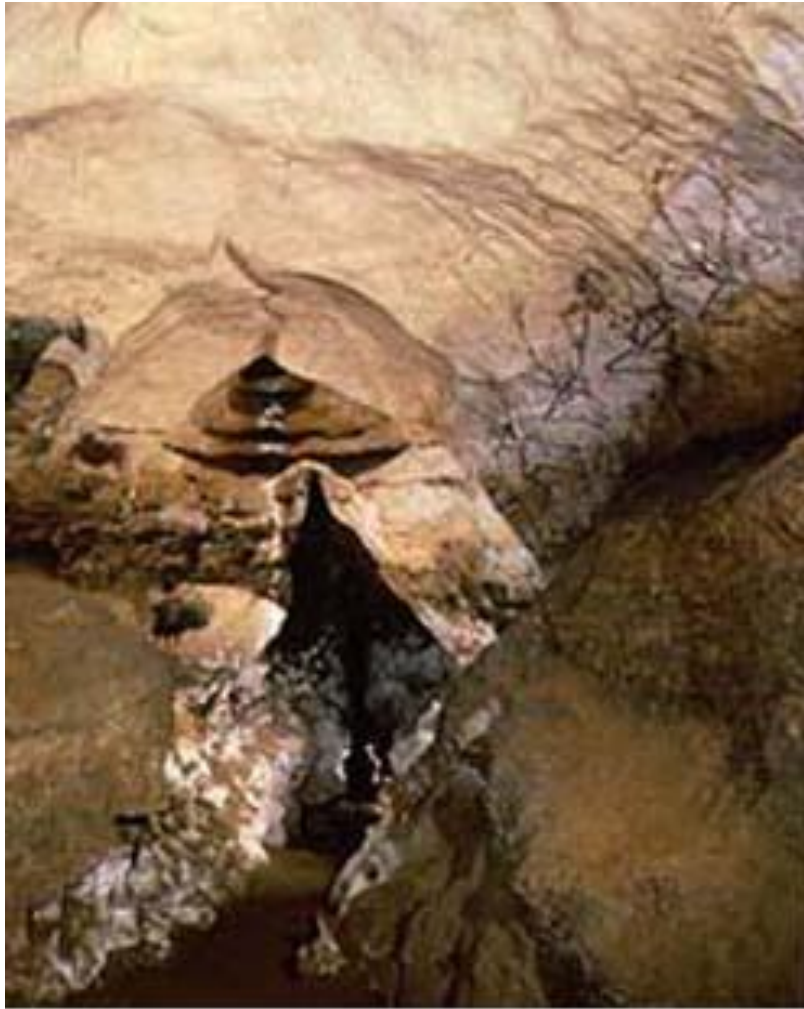
- Interior has elaborate paintings of animals and hunting scenes
- The artwork celebrates the hunting life of the early stone age people



Cave at Lascaux, - Drawings

Source: Spiro Kostof (1995)

Cave at Lacaux France



Cave at Lascaux, France - Interior
Source: www.culture.gouv.fr



Cave at Lacaux, France - Interior picture
Source: www.culture.gouv.fr



Cave at Lascaux, France - Drawings
Source: www.culture.gouv.fr

Cave at Lascaux France



Cave at Lascaux, France

Source: www.culture.gouv.fr



Cave at Lascaux, France - Drawings

Source: www.culture.gouv.fr



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Cave at Lascaux, France - Drawings

Source: www.culture.gouv.fr

Cave at Lascaux France

- Question
 - Why did early stone age people adopt art as a tool of expression?
- Explanation can be found in constant struggle between life and death for survival
- Art provides a means to explore the struggle



Cave at Lascaux, France - Drawings

Source: www.culture.gouv.fr

Temporary Structures

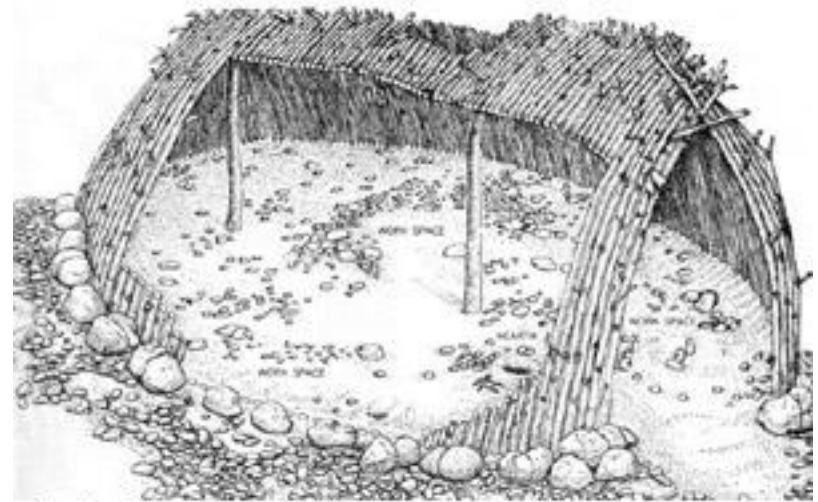
Hut at Terra Amata, France

- Early stone people constructed temporary shelters using available materials
- One of earliest known example discovered in 1966 at Terra Amata in France
- Dates back to 400,000 years
- Oval in shape and constructed of tree branches

Temporary Structures

Hut at Terra Amata, France

- Space inside is organized for different uses
- The hut was used by a band of people for limited hunting days
- It is left to collapse after use and new huts built over by the next years hunting season



Early Stone Age hut, Terra Amata

Source: Spiro Kostof (1995)

Temporary Structures

Example from the Modern World

- Degradable materials means buildings cannot last long
- Few have survived for us to study them
- We can learn by looking at primitive societies of the modern age
- Evidence show improvement in technology led to covering of buildings

Temporary Structures

Example from the Modern World

- Bambuti Hut
 - The bambutti huts show evidence of use of leaves to cover hut



Bambuti Huts

Primitive hut

Source: S. Norbert, 6000 years of Housing

Temporary Structures

Example from the Modern World

- The Tongus Hut
 - The Tongus huts show evidence of use of grass to make huts



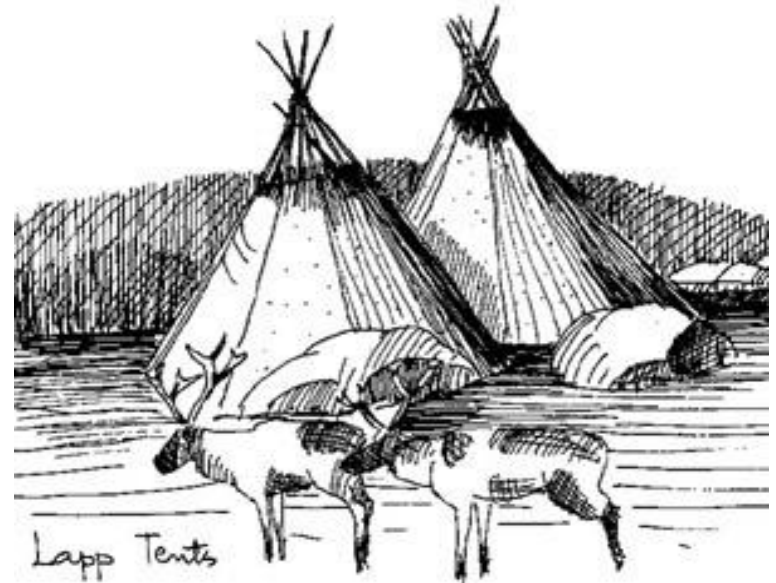
Primitive thatch hut

Source: S. Norbert, 6000 years of Housing

Temporary Structures

Example from the Modern World

- The Lapp Tent
 - The Lapp tenth shows the use of animal skins



Lapp tent

Source: S. Norbert, 6000 years of Housing



Lapp tent

Source: S. Norbert, 6000 years of Housing

Architecture of the Civilization

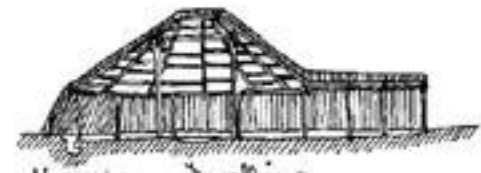
- Mud Construction
 - Gradual improvement in technology led to mud construction and architecture.



Round Pan-pio Dwelling
after Jonathan N. Leonard



square Pan-pio Dwelling
after Jonathan N. Leonard



Mandan Dwelling
after Albert F. Davis

Primitive mud construction

Source: S. Norbert, 6000 years of Housing

CLASS ASSIGNMENT (on the basis of today's class lecture)

Topic: Prehistoric Architecture- UNIT-1

1. a) Flow Chart showing the following parameters:
 - Name three phases of Pre- Historic Architecture.
 - **Historical background**- Location, Time
 - Social Beliefs & characteristicsb) Architecture of civilization
2. Sketch the various types of early shelters.
(With the help of hand outs & Class lecture)

Note :

Reference Book- Sir Banister Fletcher's a History of Architecture

Submission on- A3 Sketch file

For **sketches** use soft pencil.