

**2<sup>nd</sup> Year Architecture -2<sup>nd</sup> semester  
2018/2019**

# History of Architecture

*Lecture (1)*

## **Prehistoric Architecture**

***by* : SEEMA K. ALFARIS**

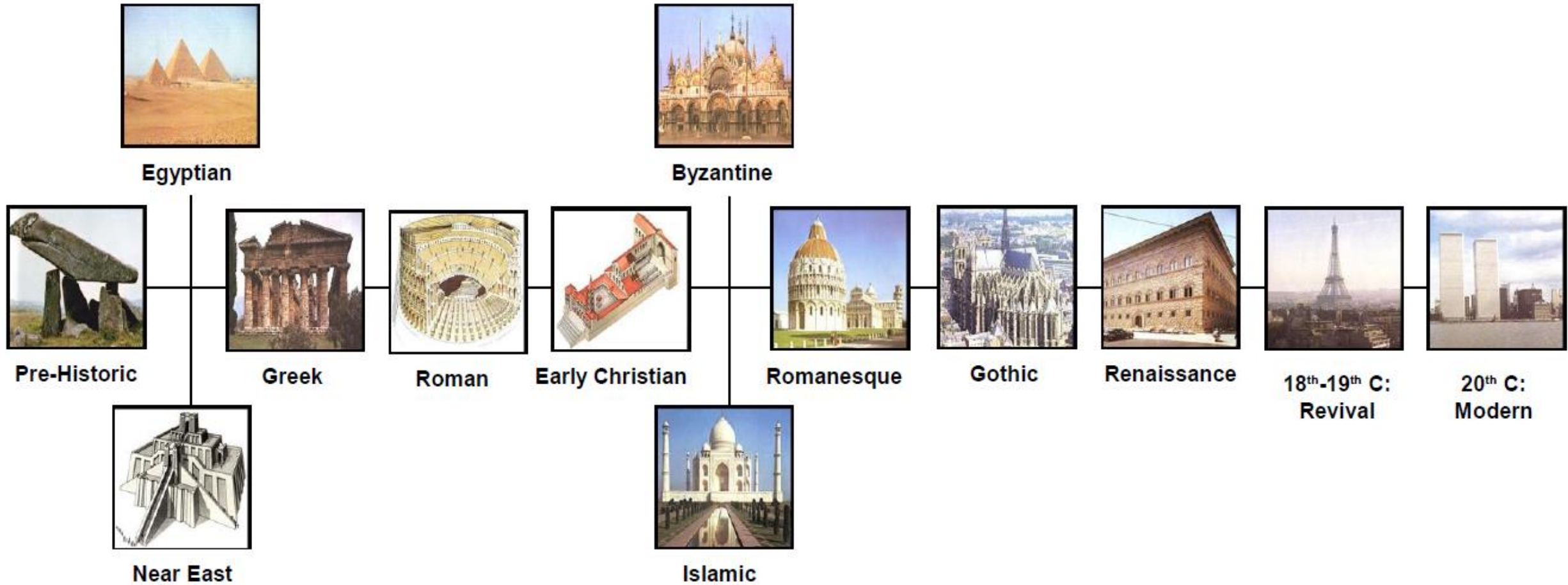
# Course 's information

<b>Course name</b>	History of Architecture I
<b>Lecturer</b>	Seema k. Alfaris
<b>Course 's information</b>	This course traces the history of Architecture from the early developments in the Paleolithic Age (Early Stone Age) to the Rome (16th century)..
<b>The objective</b>	<ol style="list-style-type: none"><li>1. Treating the history of architecture as a history not only buildings ,but of cultural beliefs and ideas, values and aesthetic ideals actualized through architectural forms and experiences,</li><li>2. this course seeks to foster the students' ability to analyze and understand the unique formal vocabulary of architecture and its expressive potential, as well as the complex and instrumental dialogue between architecture and culture.</li></ol>

# Course mark's division

Attendance	12	5%
Quiz	1	10%
Midterm exam	1	20%
Seminar	1	10%
Participation	1	5%
Homework	2	10%
Final	1	40%

# The Historical Timeline of Architecture



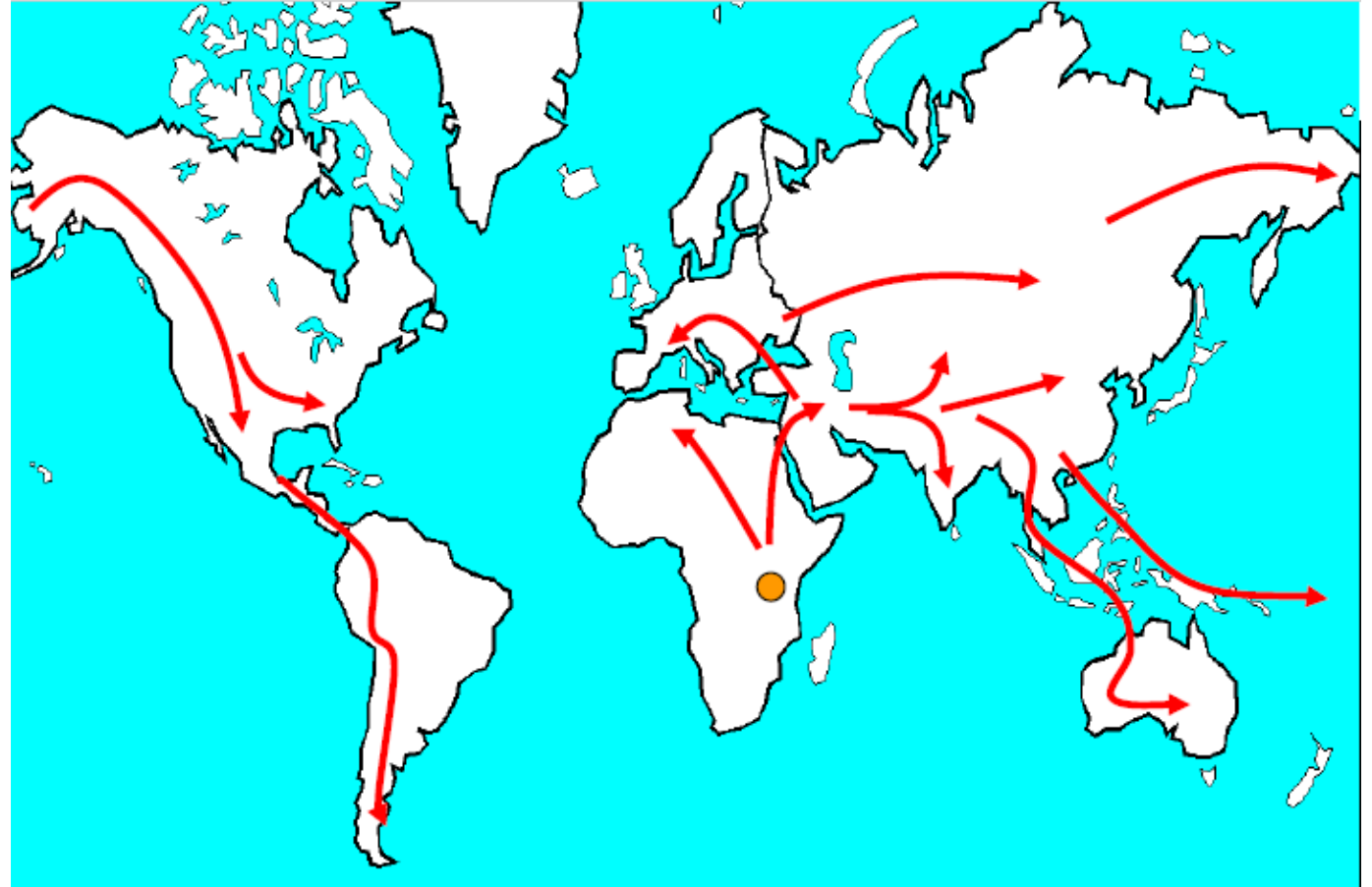
# Pre-historic and Early Civilization

## What is Pre-History?

- Cultures who lived before the time of writing and so of recorded history.
- only evidences were founded about the earliest dwellings of ancient people.

## Introduction

- Direct human ancestors evolved in Africa from 2.3 million years ago
- Humans spread from Africa into Southern Europe, Asia .
- Could not settle far north due to the cold climate .
- From Siberia by foot into North America
- From Southeast Asia by boat into Australia
- No organized religion
- The dead are treated with respect - burial rituals and monuments .

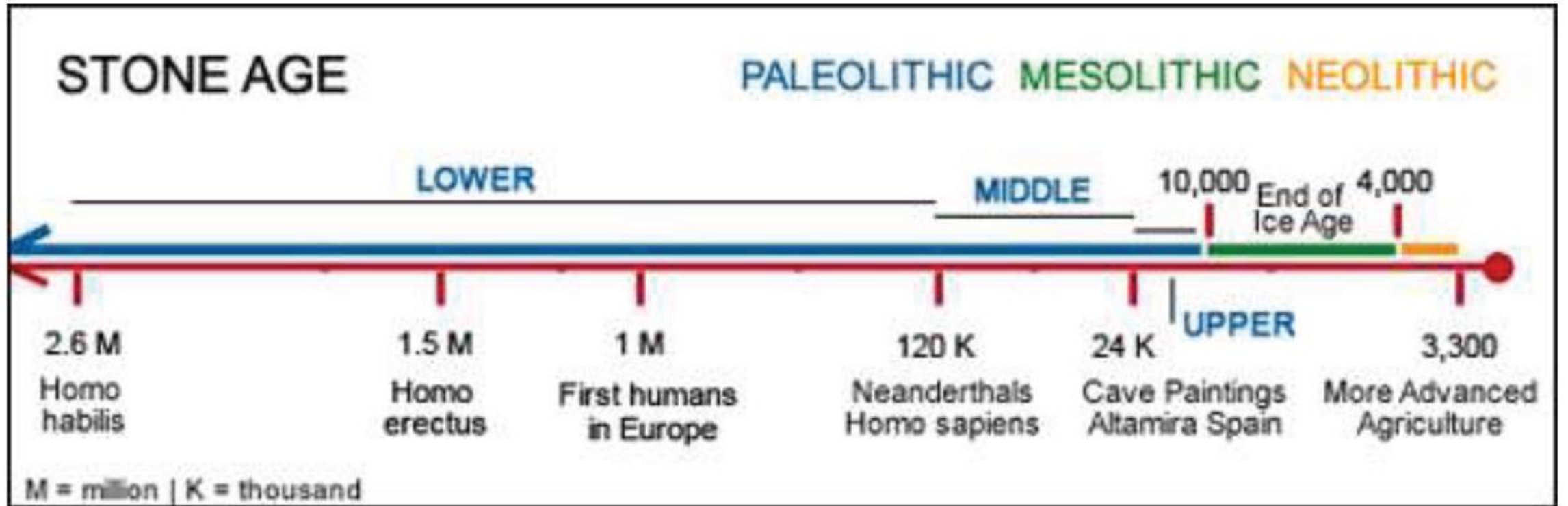


# Pre-historic and Early Civilization

Primitive Architecture:

1. Old stone age (Paleolithic 500000) B. C).
2. Middle stone age (Mesolithic 15000B.C).
3. Modern stone age(Neolithic 8000 B.C).

NOTE : It can be said that the stone formations which carried out in these Ages are only the beginning of the art and mystery of Architecture .



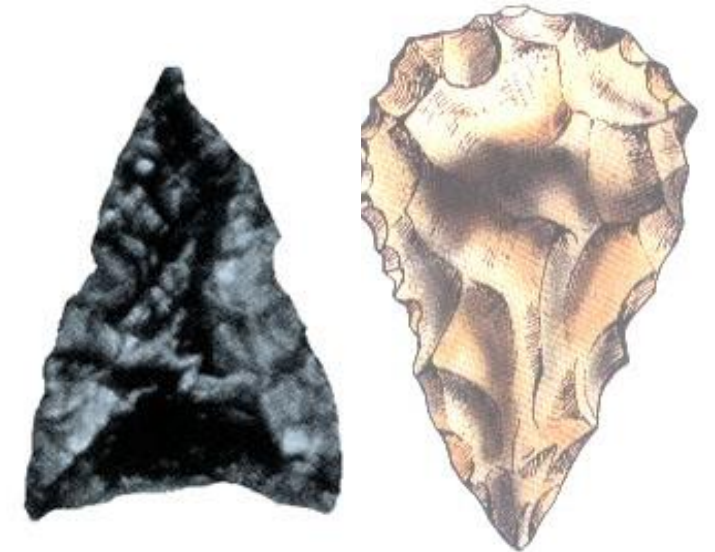
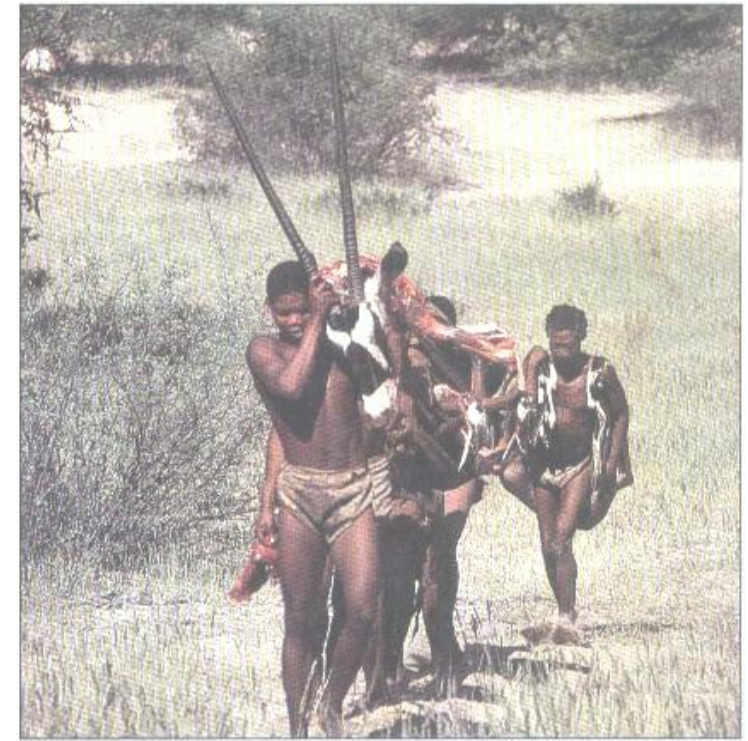
# Pre-historic and Early Civilization

## 1. Old stone age (Paleolithic) :

- The Stone Age is the longest age between the other ages .

### Human Environment:

- Man was a hunter and a food gatherer , that's why he was **unsettled(Nomadic)** , moving from place to other in search of food , water and good weather , Usually move about in small bands of less than 15 persons , their life style made them barely able to survive.
- The use animal skins for implantation.
- **Making primitive hunting tools** as a weapon to protect against life conditions – made of stones , wood and bones .
- **The discover of Fire** , it been used for protection, Hunting and cooking .



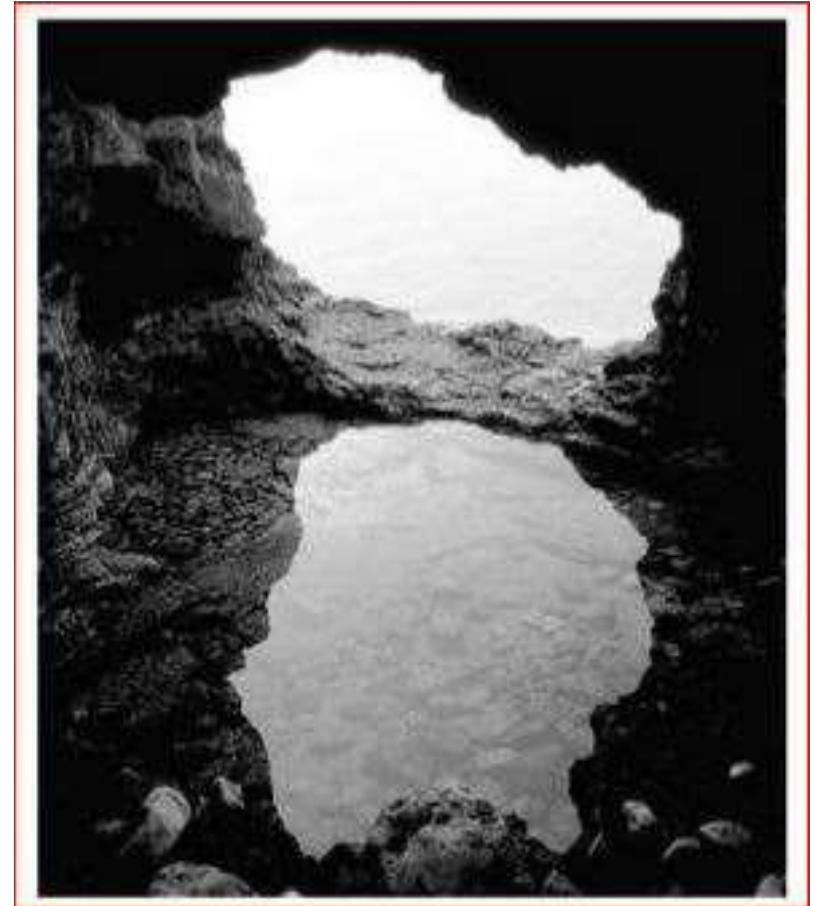
weapons

# Pre-historic and Early Civilization

## 1. Old stone age (Paleolithic) :

### Architecture Character :

- There is no trace of human intervention in any kind of **civilization** , because , Don't need to a permanent shelter or settlements .
- Cave dwellings : Caves were early human living spaces ,Man made use of natural and man-made caves both below and above ground as a shelter.
- This shelter for protection , and there was an architectural treatment such as smoke exit vents .



Water cave , Found traces  
Of human life within it

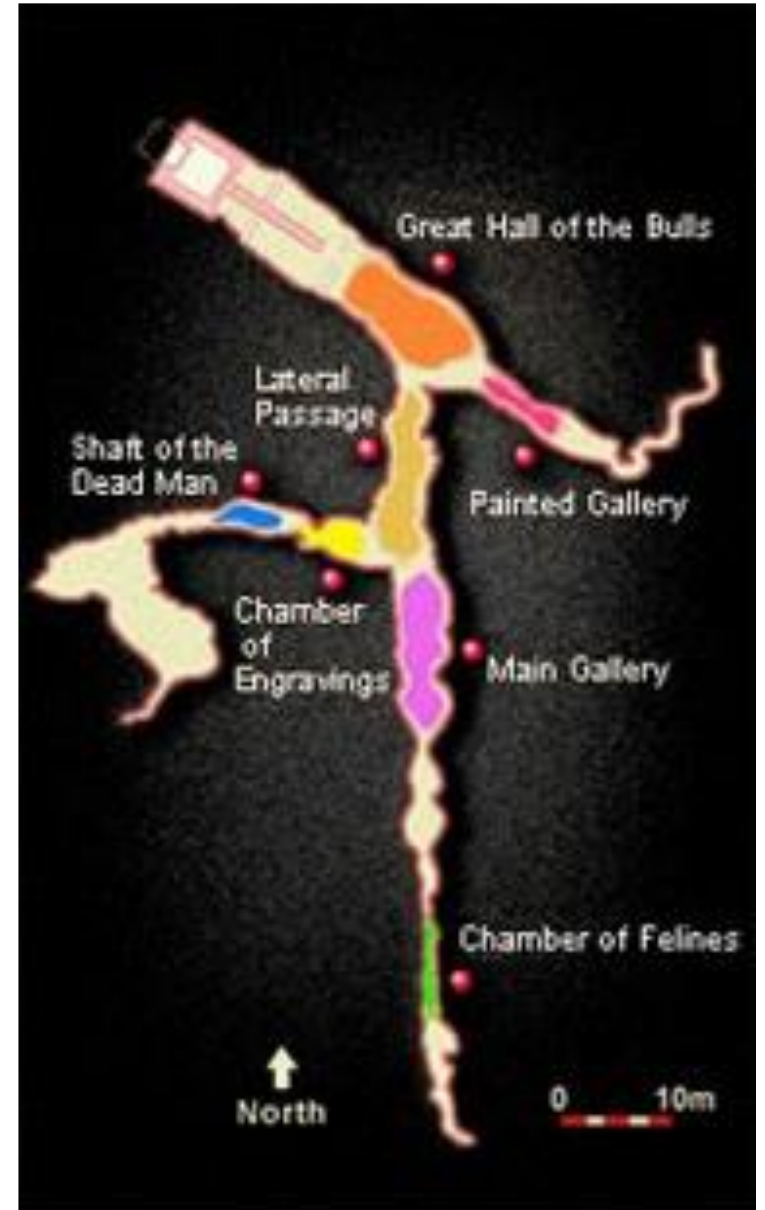


# Pre-historic and Early Civilization



Cave entrance shows the Human influence in Design.

- 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 .
- Discovered in 1940



Cave at Lascaux, France- layout

Source: [www.culture.gouv.fr](http://www.culture.gouv.fr)

# Pre-historic and Early Civilization

- Evidence of human occupancy of caves comes from the **painting** that were made with only fire-light as illumination. The intention of the paintings were **not for decoration** but rather to provide images that might grant **mystical power over haunted animals**.



Cave at Lascaux, France  
Source: [www.culture.gouv.fr](http://www.culture.gouv.fr)



Lion Panel, Chauvet Cave, Ardeche, France.  
15,000 – 10,000 BC



Cave at Lascaux, France - Drawings  
Source: [www.culture.gouv.fr](http://www.culture.gouv.fr)

# Pre-historic and Early Civilization

## 2. The middle stone age (Mesolithic) :

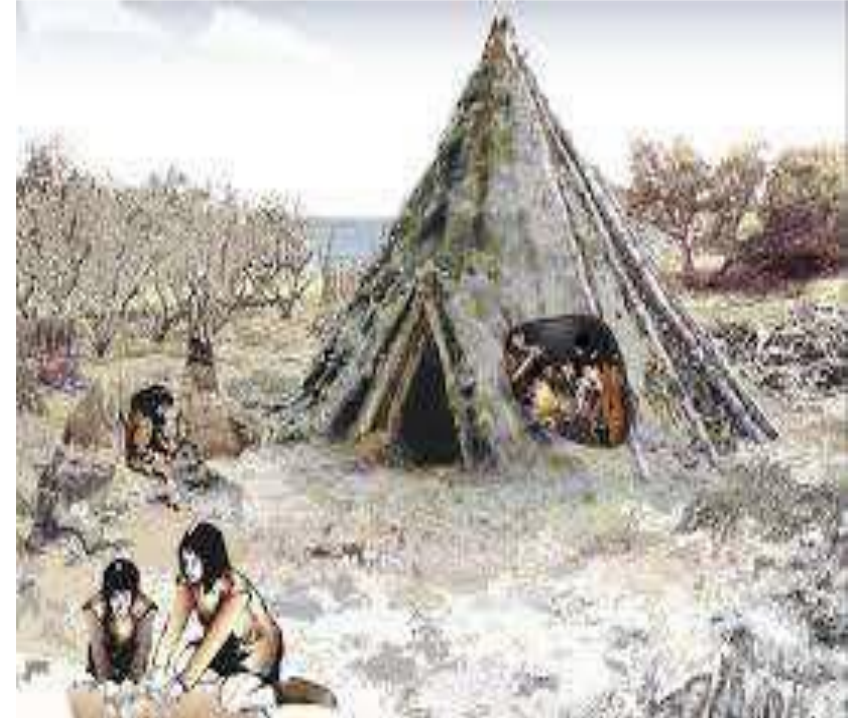
- This age is shorter than the first one .

### Human Environment:

- In this age the first attempts to Settlement was near the sources of fresh water , also he began to raise animals, and tried to produce the food , Still also gathering food.

### Architecture Character :

- This age also recode the beginning of architecture , by Construct a temporary shelters from perishable materials such as tree trunks and leaves.
- Used simple, easily available materials , Usually of plants and animal materials such as wooden poles, grasses , and animal skins.
- Construction system was also simple , Usually involves digging holes, putting wooden poles in holes and burying them . The poles are tied together to create the shell of the building .The shell is covered with grasses, leaves or animal skins .



# Pre-historic and Early Civilization

## 2. The Tongues Hut

### Temporary Structures( First shelter ):

#### 1. The HUTS :

- Bambuti Hut : huts show evidence of use of leaves to cover hut.
- The Tongues Hut : show evidence of use of grass to make huts.
- **The huts protected the old man from:**
  - Inclement elements of weather such as sun, wind and rain.
  - The huts gave him security from wild animals.

#### 1. The Bambuti Hut



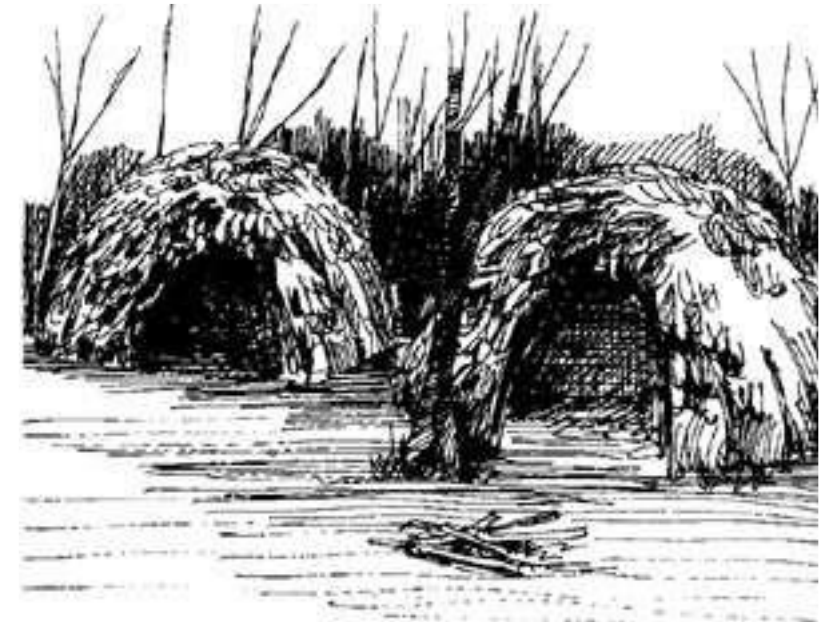
elevation



plan

Primitive thatch hut

Source: S. Norbert, 6000 years of Housing



Bambutu Huts

Primitive hut

Source: S. Norbert, 6000 years of Housing



# Pre-historic and Early Civilization

## Temporary Structures( First shelter ):

### 2. The Lapp tent :

- The Lapp tent shows the use of animal skins .



Lapp tent

Source: S. Norbert, 6000 years of Housing



Lapp tent

Source: S. Norbert, 6000 years of Housing



# Pre-historic and Early Civilization

Temporary Structures( First shelter ):

## 2. The Lapp tent :

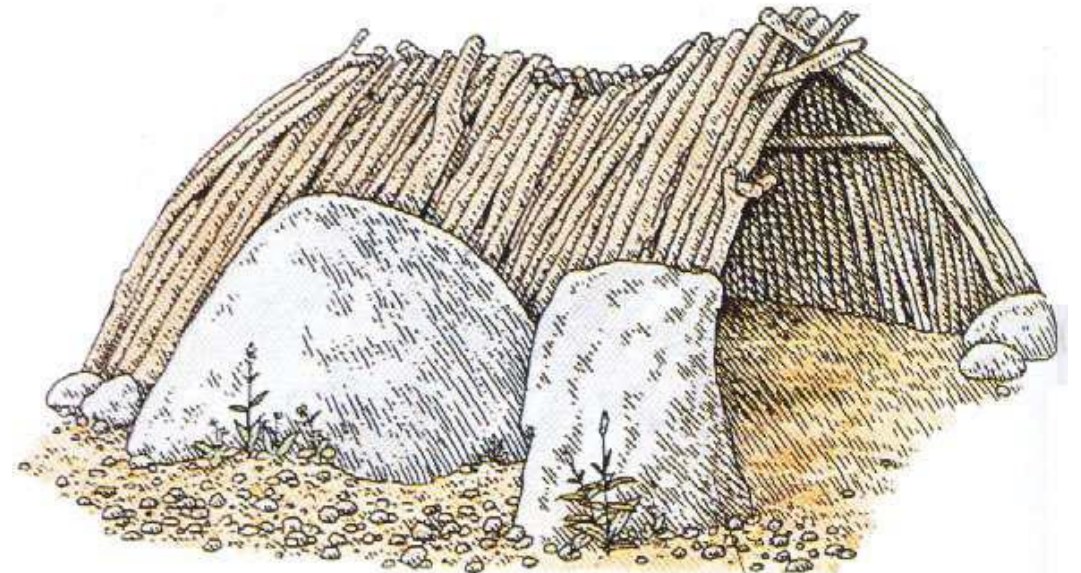
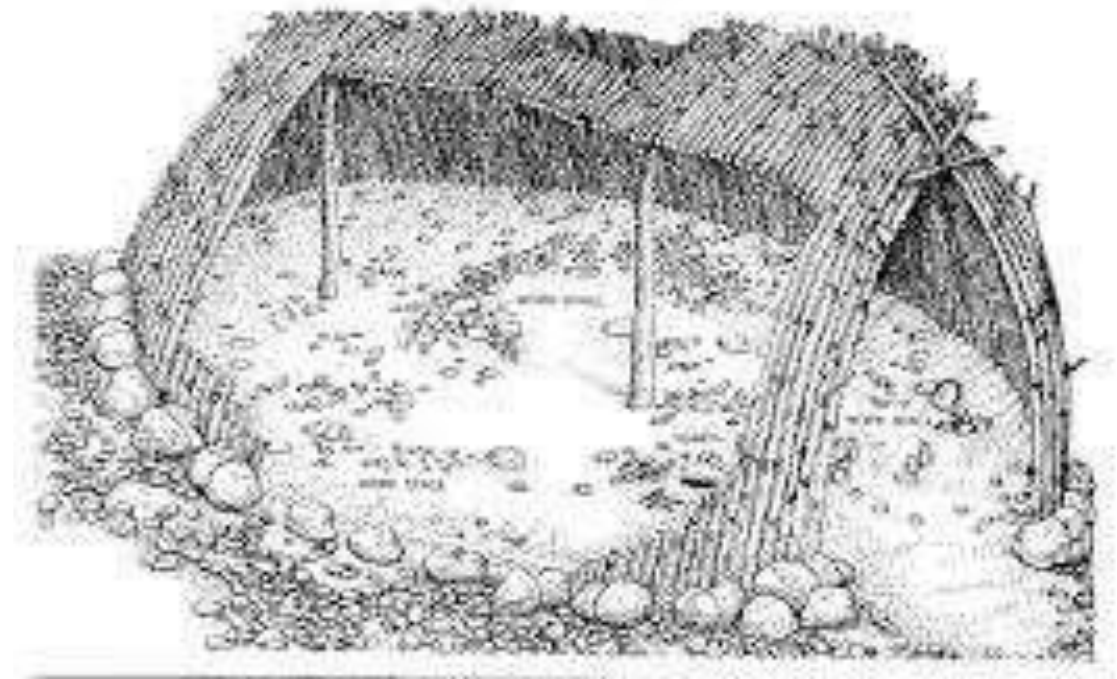


# Pre-historic and Early Civilization

## Temporary Structures( First shelter ):

### 2. Brushwood Hut:

- 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 .



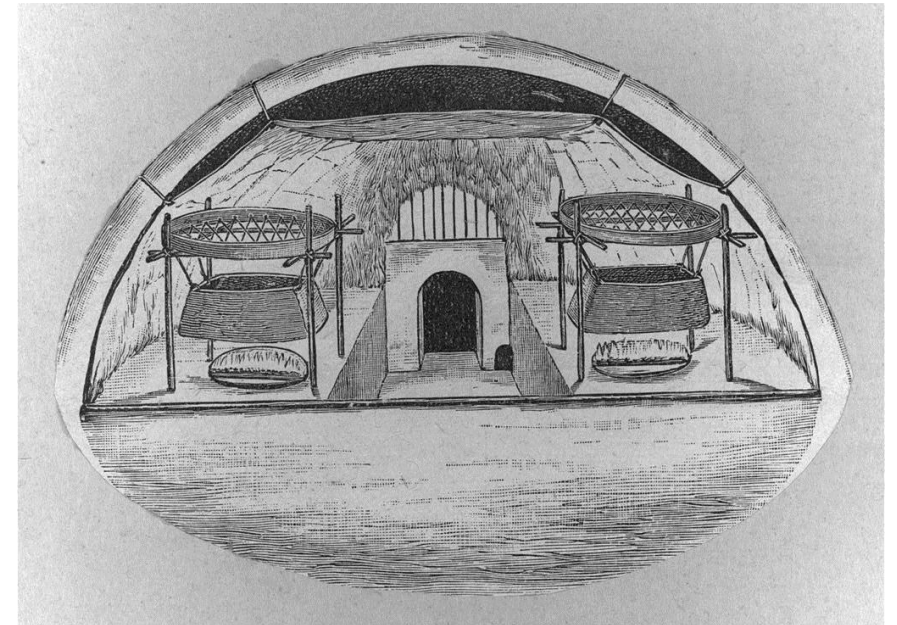
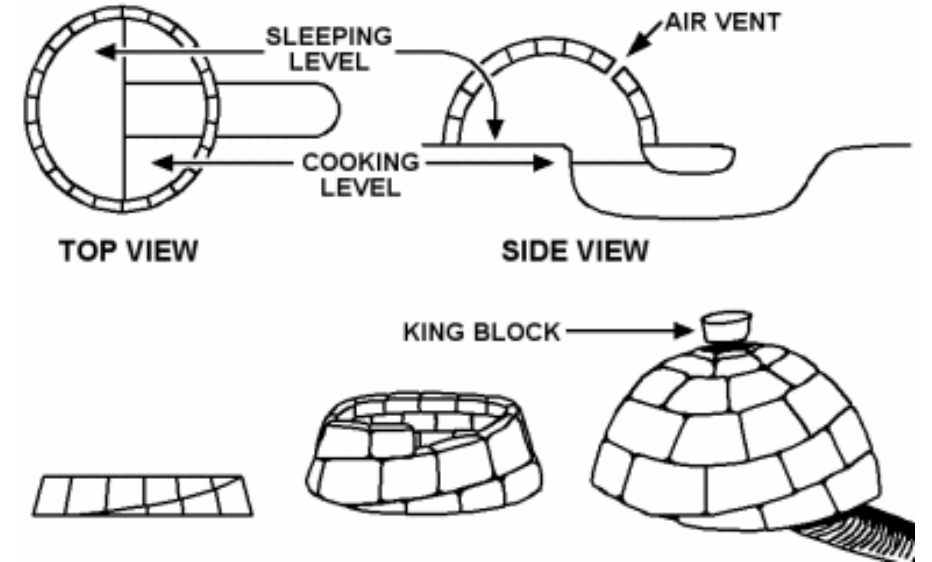
Rocks held the structure in place.

# Pre-historic and Early Civilization

## Temporary Structures( First shelter ):

### 3. Inuit- Igloo (Eskimo ):

- The snow house or the Igloo of the Inuit people is a circular construction built from blocks of snow.
- The blocks are laid up in **concentric circle of diminishing size to form a dome.**
- **An entrance tunnel of snow blocks is angled to prevent penetration by prevailing winds, and it includes a space to accommodate dogs.**

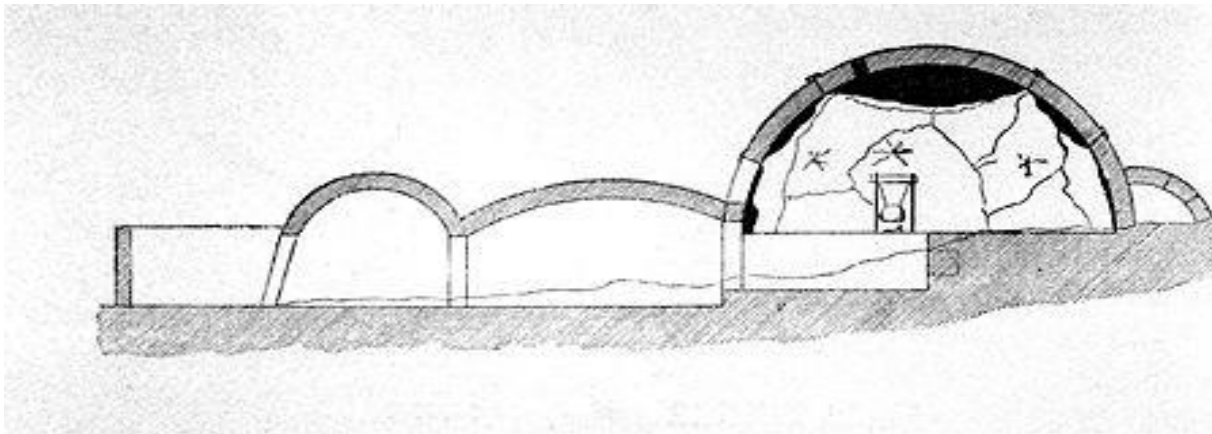
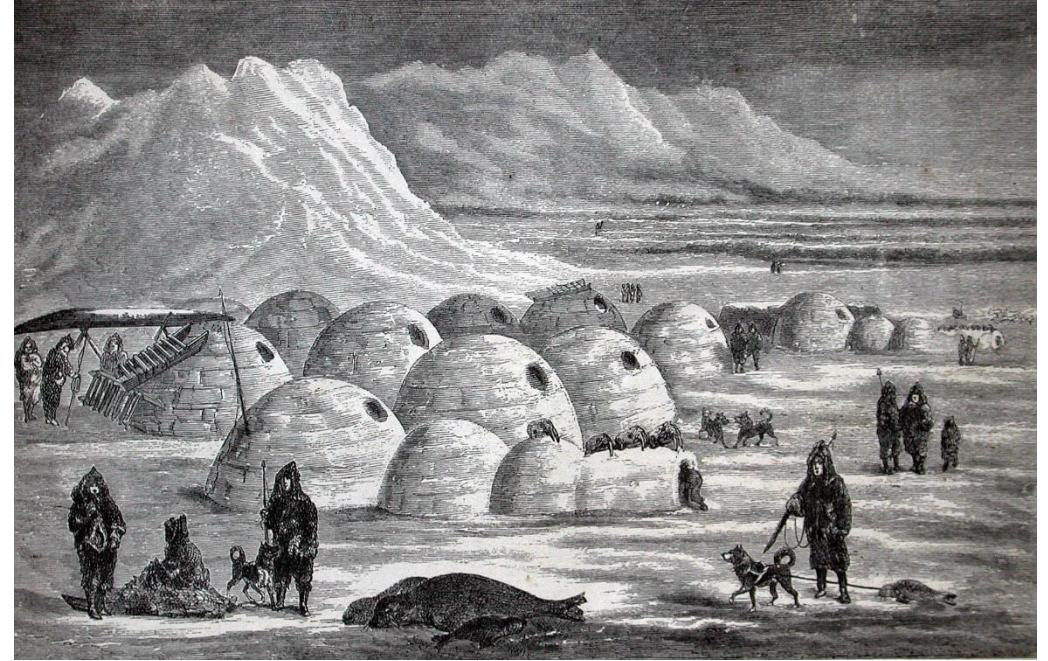




# Pre-historic and Early Civilization

## Temporary Structures( First shelter ):

- Within the house skins are used to line the house, leaving an air space that helps to insulate the interior while preventing the heat from melting the snow dome.
- **Raised platforms** lift the interior floor level and also act as a **substitute form of furniture**
- The **domed exterior form** is strongly resistant to **high winds in winter**.

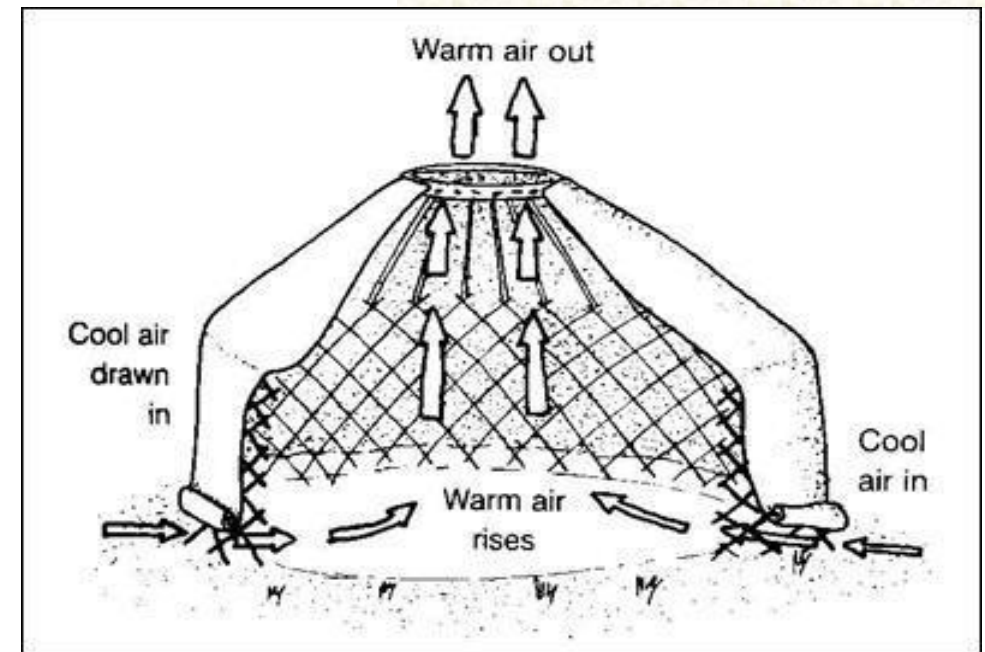
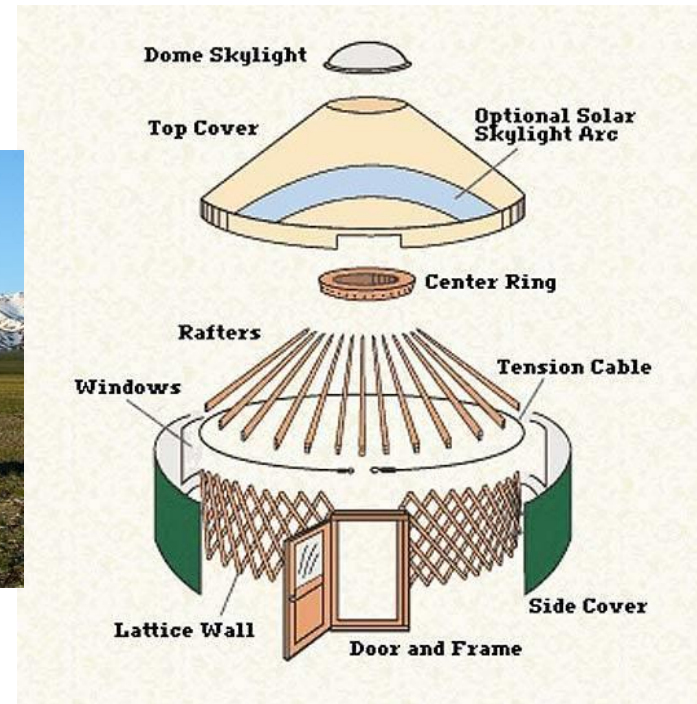


# Pre-historic and Early Civilization

## Temporary Structures( First shelter ):

### 4. Mongolian yurt :

- The yurt is a structure with an enclosing wall of lattice strips (grid) supporting a roof structure of poles. The exteriors are covered with skins or mats. Inside, boxes to hold possessions rugs and stools create spaces with considerable aesthetic character.



# Pre-historic and Early Civilization

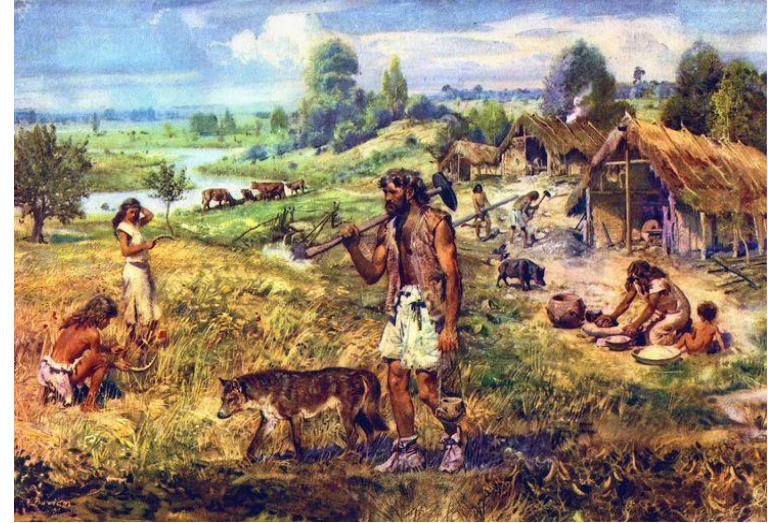
## 3. The New stone age (Neolithic) :

### Human Environment:

- Discovery of agriculture and food production.
- Multiple professions like (hunter, farmer and craftsman , ... etc.) ,and that's Is the basis for the city emergence .
- **Stability concept more developed** next to the sources of fresh water , and the formation of primitive society and tribes . Mobility was in groups controlled by the head of the tribe .

### Architecture Character :

- Established **permanent dwellings** , Constriction techniques developed to use **Mud , Brick and stone** .
- This age also recode **the emergence of urban communities and housing units and the emergence of the concept of residential communities(Villages)** protected by high walls .
- Monumental construction .



Agriculture in Prehistoric times

# Pre-historic and Early Civilization

## Megalithic Monuments

- Monumental construction by Neolithic man particularly in Europe.
- Megalithic construction involves setting up large stones.
- Blocks alone or leaning against each other.
- The construction method were unknown , Very similar to the Egyptian pyramids, Stones dragged from far away to this site .
- Megalithic Monuments , are consist of two types of arrangements :
  1. Tombs – also called **Dolmen**
  2. Non funereal structures:
    - Single stones – **Menhirs**
    - Stones composed in groups – **Stonehenge** Monuments

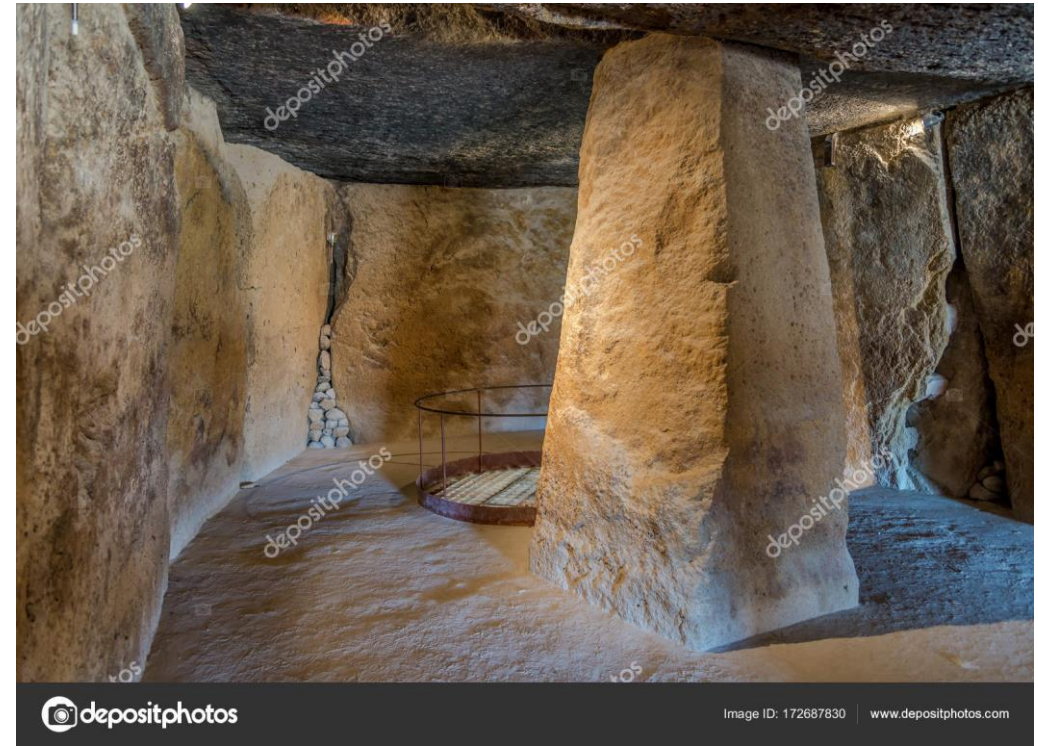
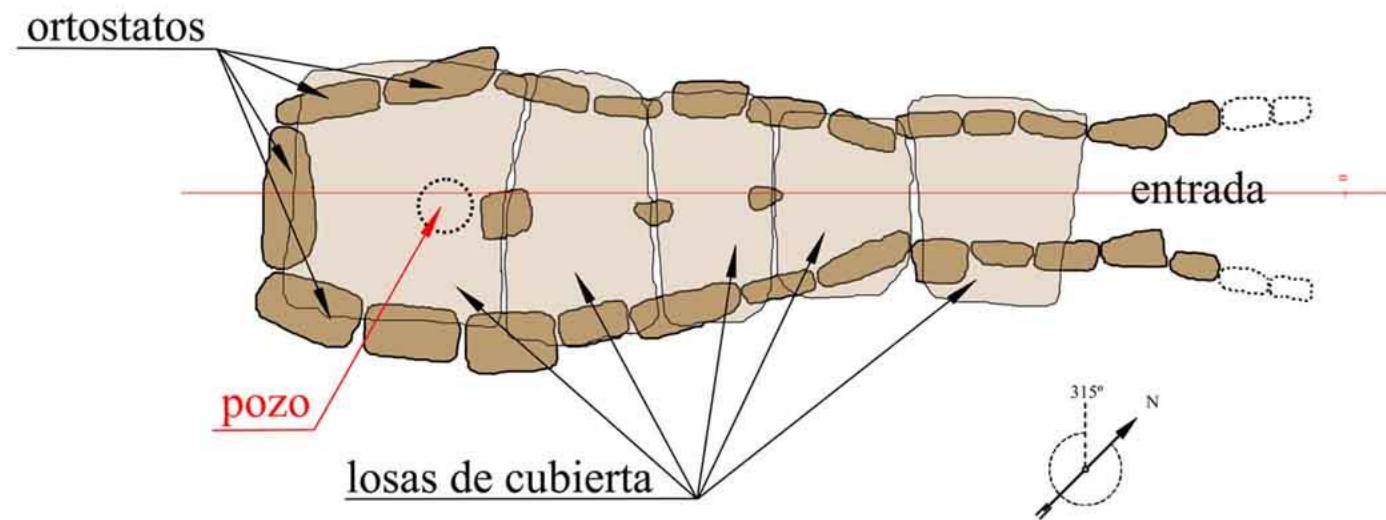
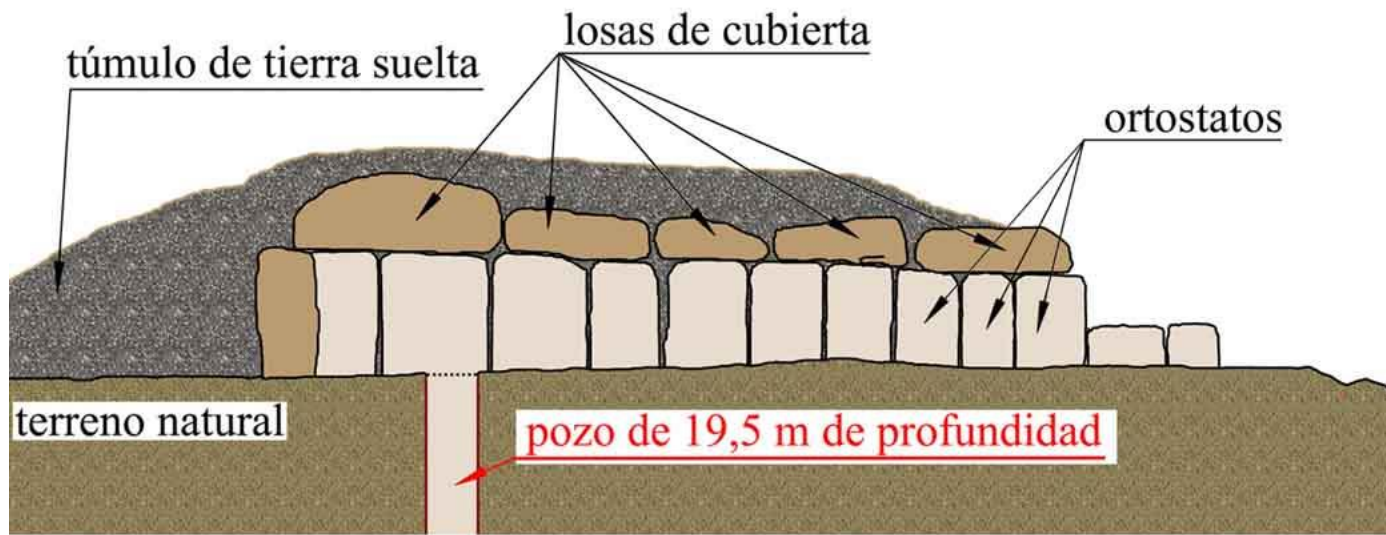
# Pre-historic and Early Civilization

## Megalithic Monuments

### 1. (Dolmens )Tombs:

- The arrangement of a large stone placed **on top of two or three upright stones** ,so many dolmens created the inner chamber of a tomb
- After the burial chamber was completed ,the whole structure was buried under an artificial hill ,  
**Dolmens are more often liked to burial rites.**
- Cueva de Menga in Spain is the largest dolmen in Europe, built using 32 megaliths, the largest of which weighs 180 tons, it was discovered and opened in the 19th century, the skeletons of several hundred people were found inside.





# Pre-historic and Early Civilization

## Megalithic Monuments

### 2. Non funereal structures:

- **Menhirs** : A single, large upright monolith ,Serves a religious purpose , its shape like irregular obelisk , with a semi-circular section of more than 20 m 2. Arranged for thousand of miles .

**Menhirs means tall stone**



# Pre-historic and Early Civilization

## 3. The New stone age (Neolithic) :

### Architecture Monuments:

#### 2. Stonehenge :

- This arrangements of stones called **Alignments** , Huge stones where carefully placed to create interior spaces with strong aesthetic impact, whether they were originally open to the sky (as it is now) or roofed with materials that have since disappeared. The purpose seems to have been connected with rituals relating to the movements of the sun, moon and stars. The circular form is characteristic of many ancient human constructions.

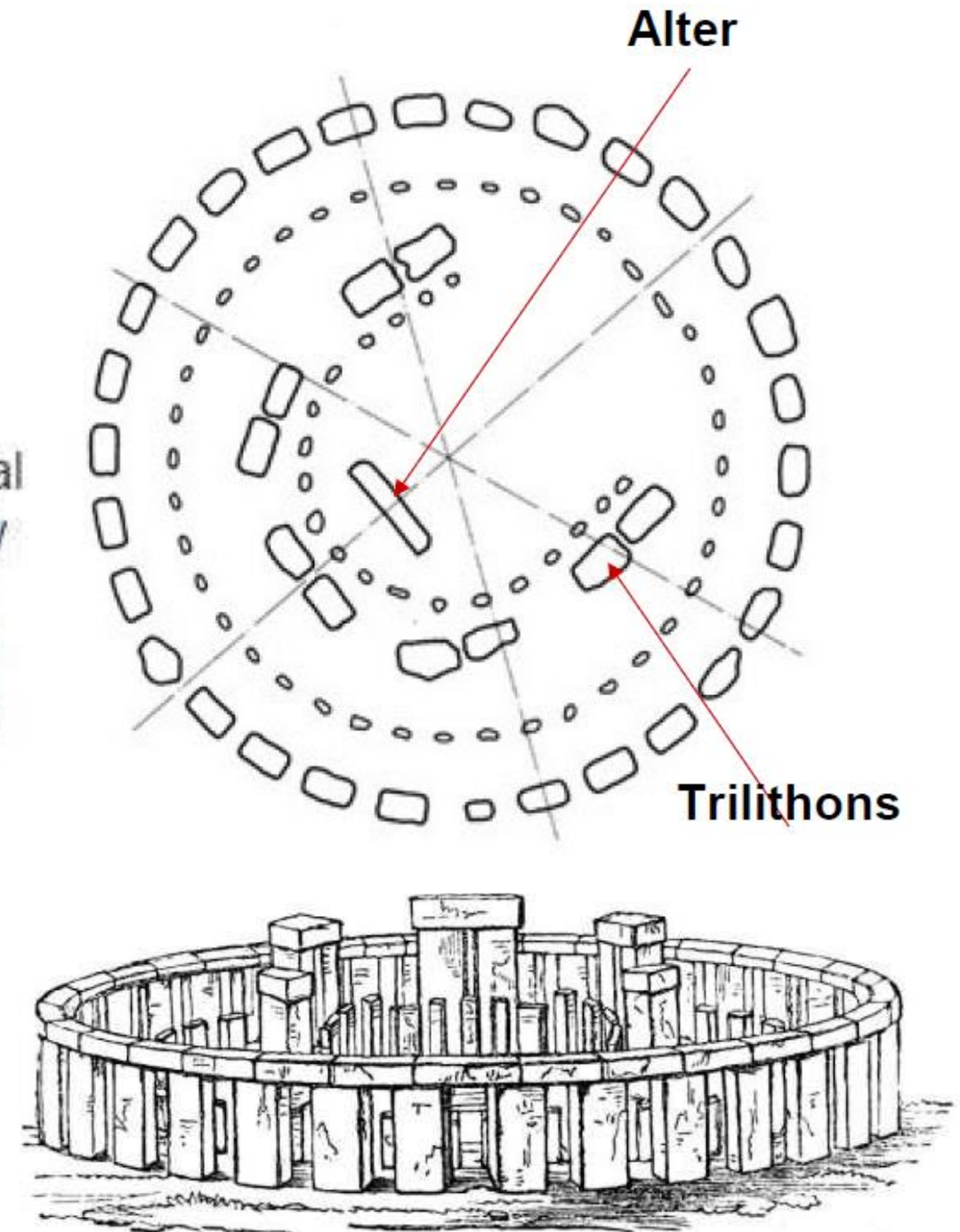


**Most important prehistoric structure in Europe , Stonehenge in Wiltshire, England  
2750-1500 BC**

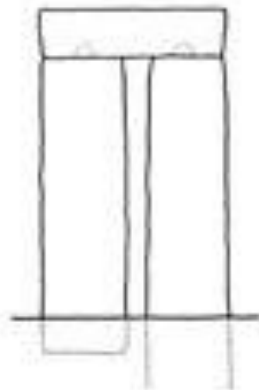


# Pre-historic and Early Civilization

- The plan of Stonehenge is arranged in the form of **concentric circles** , At the center is an **Alter** , Around it five **trilithons**.
- **Trilithon:** is a structure consisting of two large vertical stones (posts) supporting a third stone set horizontally across the top (lintel). Commonly used in the context of megalithic monuments. the most famous **trilithons** are those seen at Stonehenge, Malta, and the Osirion in Egypt.



Stonehenge - trabeation detail  
Source: Trachtenberg & Hyman



# Pre-historic and Early Civilization

- The actual function of the structure is still not clear but **it suggests that its functions are :**
- Cremation / burial site.
- Astrological observatory.
- Solar calendar.
- Sacred site.

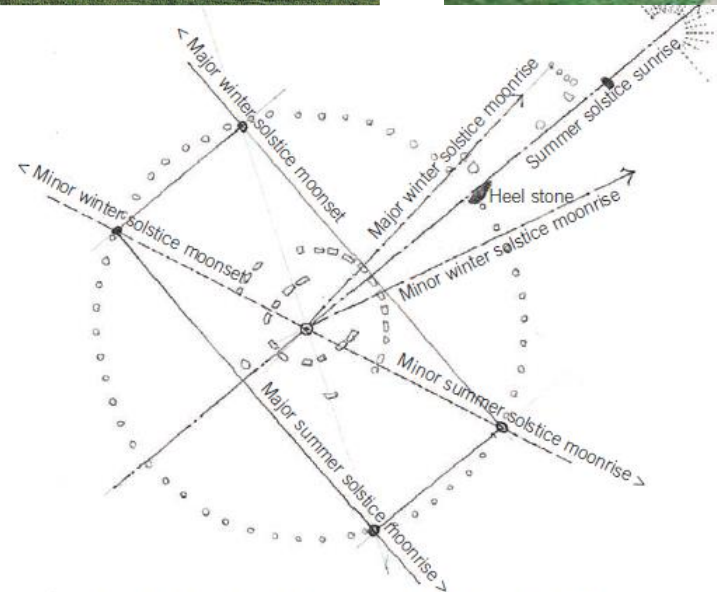
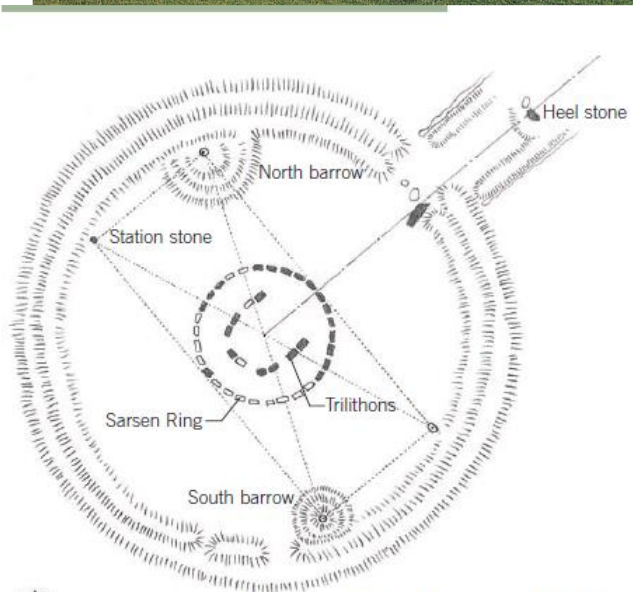


Stonehenge, Salisbury England - view

Source: Unknown



# Pre-historic and Early Civilization



# Pre-historic and Early Civilization

## 3. The New stone age (Neolithic) :

### Neolithic Dwelling & Settlement:

Village of Catal Hüyük near Konya, Turkey 6900–5400 BC

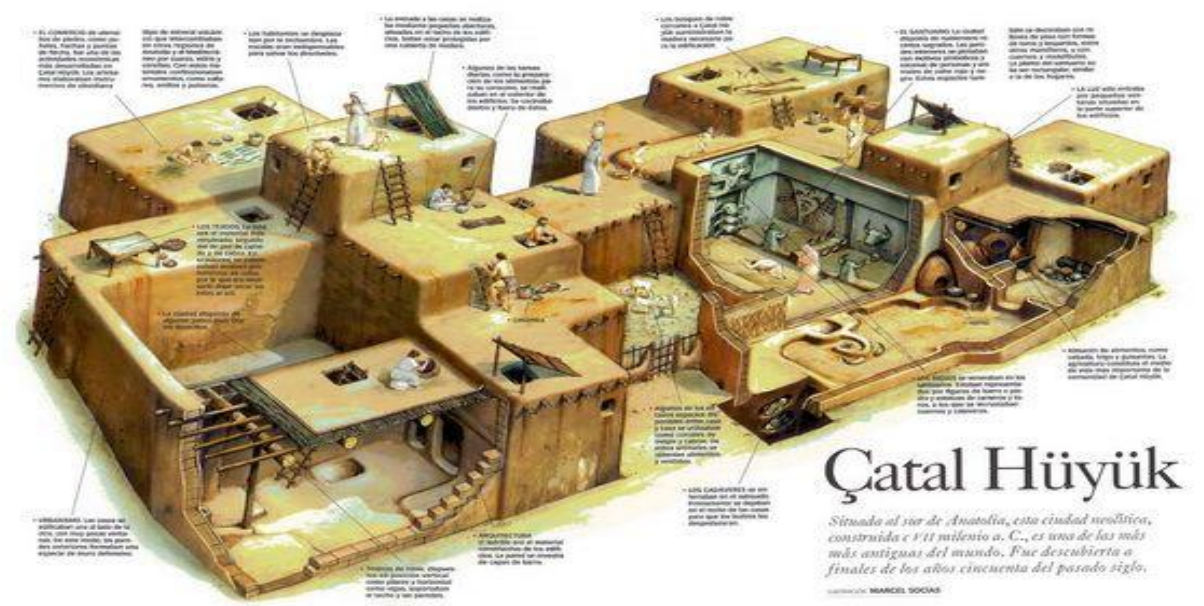
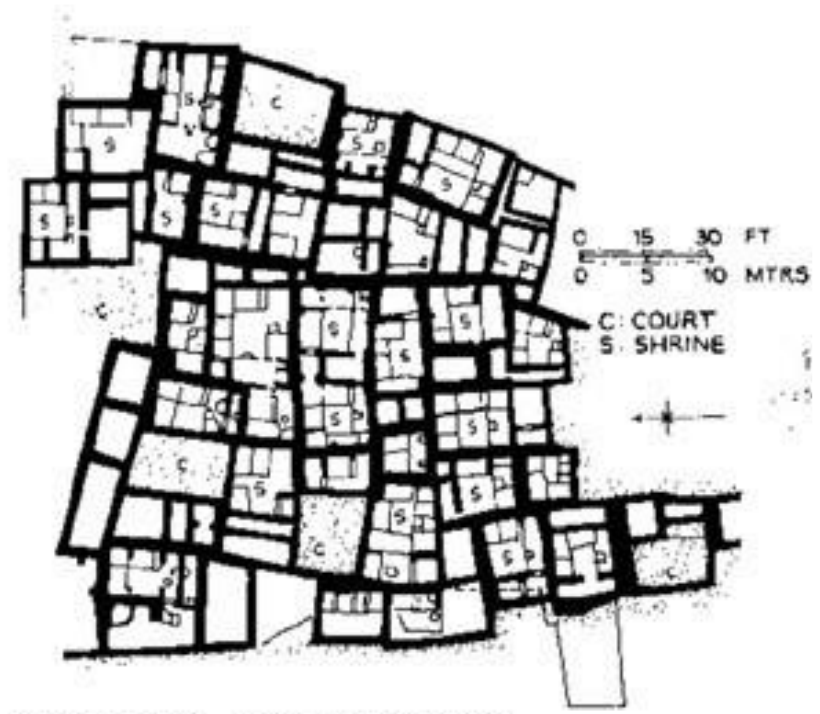
- Jericho and Catal Hüyük were famous Neolithic cities .
- **Catal Hüyük** was the largest and most cosmopolitan city of its time , with a population up to (6000) person.
- It had an extensive economy based on specialized craft and commerce
- The city was a trading center.
- The size of the city and its wealth are a product of its status as a trading center.
- Physically Catal Huyuk was highly organized with elaborate architectural features .



# Pre-historic and Early Civilization

## 3. The New stone age (Neolithic) :

- All the buildings at Catal Huyuk were accessed from the roof-tops.
- The buildings comprised dwellings, workshop, and shrine rooms.
- As the town had no formal fortification, it is thought that the door-less and the window-less exterior walls of the connected structures formed the defensive perimeter for the community.

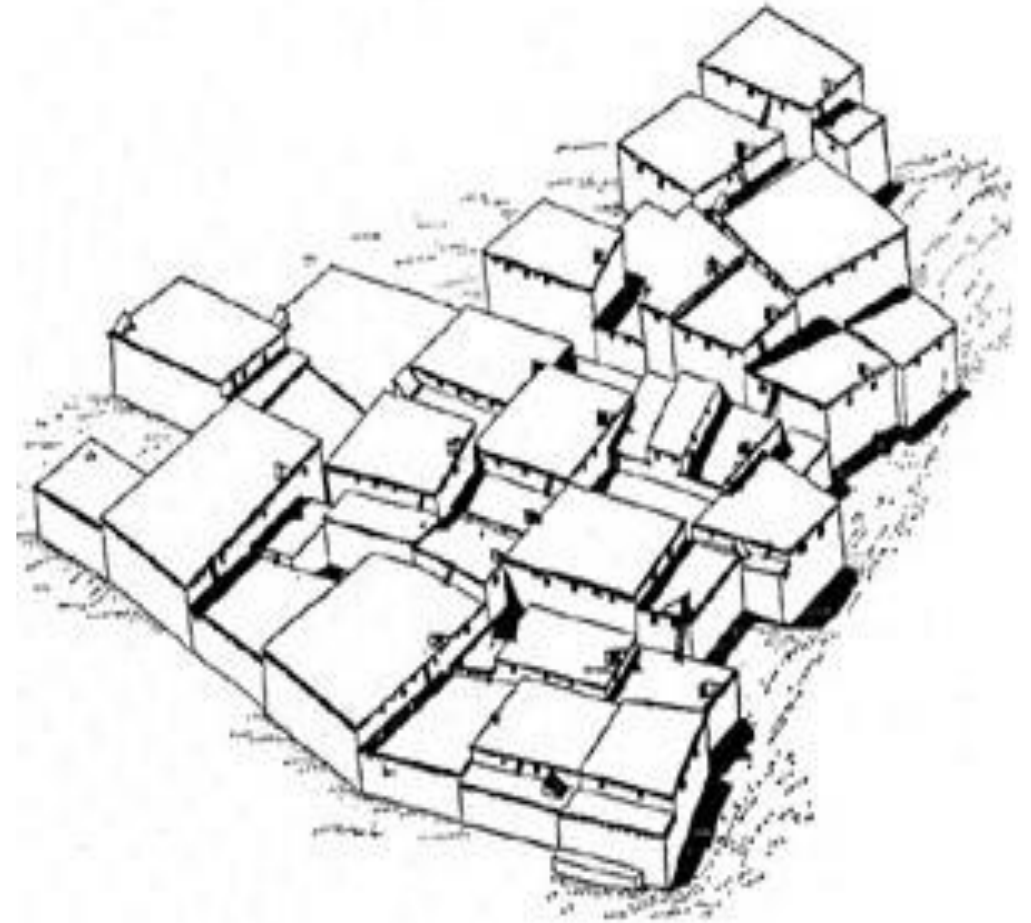
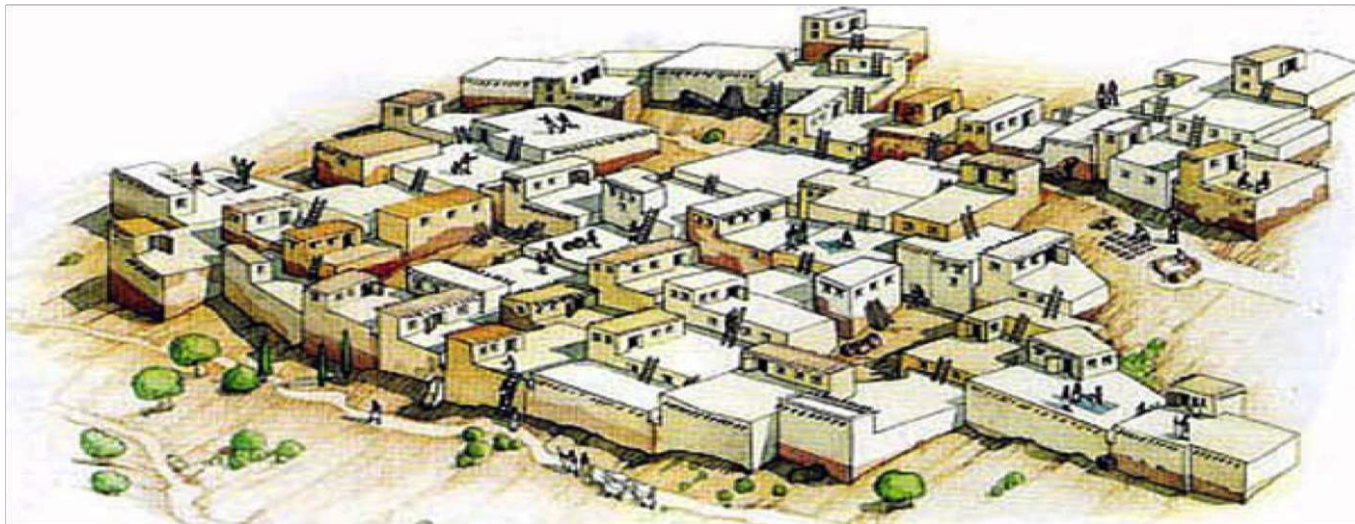


# Pre-historic and Early Civilization

## 3. The New stone age (Neolithic) :

### Permanent Structures :

- Houses were packed in one continuous block punctuated by courtyards.
- Houses were of one floor **mud construction**.
- No streets in settlement and access to houses was through the roof
- Movement from house to house through the roof .



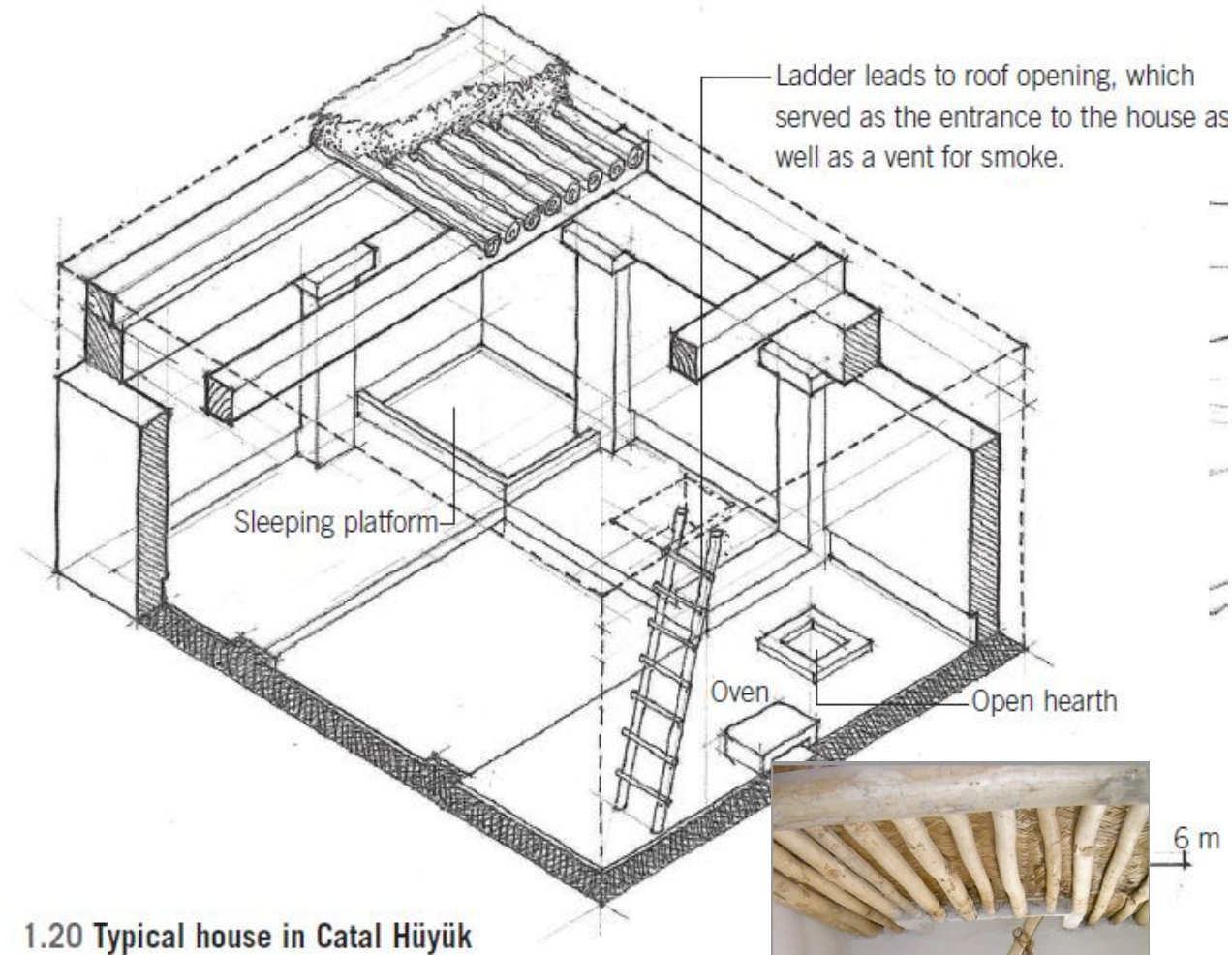
Catal Huyuk - view of settlement  
Source: Trachtenberg & Hyman (1986)

# Pre-historic and Early Civilization

## 3. The New stone age (Neolithic) :

### Permanent Structures :

- **Two types of houses were discovered there :**
  1. Houses had main rooms with in-built clay furniture, fire places and ladder to the roof.
- The chamber of each house had a **raised sleeping platform** and a hearth for cooking and heat. Access to the outside was provided by a ladder to the roof hatch that also served as a smoke vent. A few wooden beams supported smaller poles that in turn supported the roof surface of clay or mud.

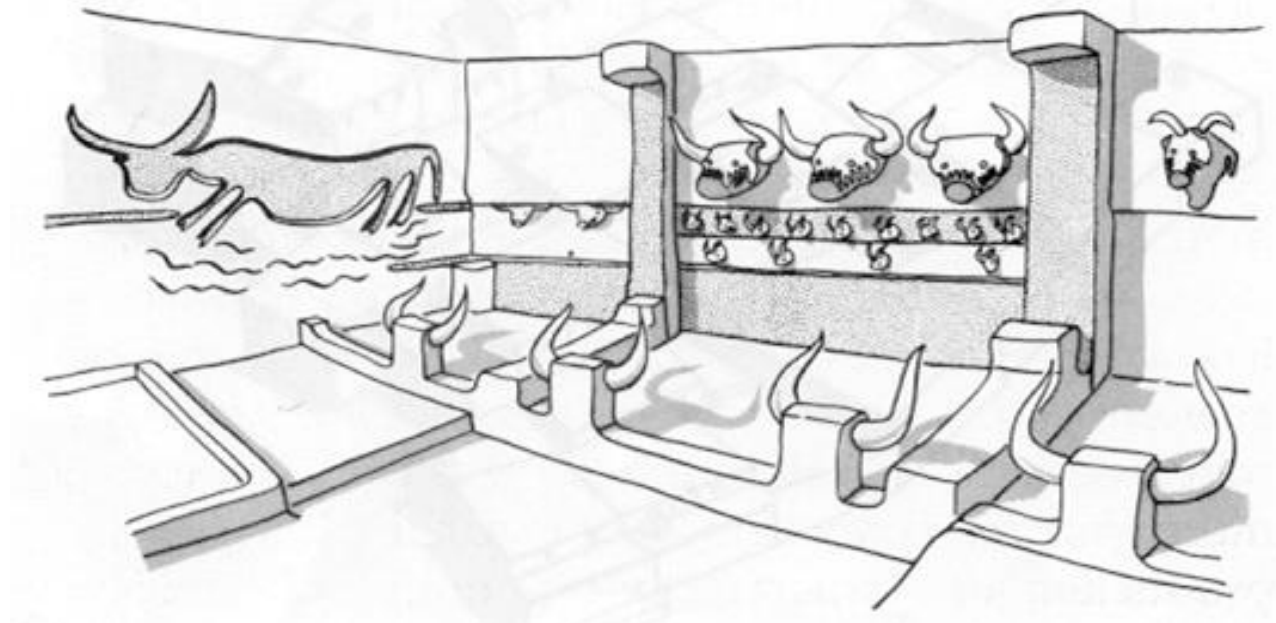


# Pre-historic and Early Civilization

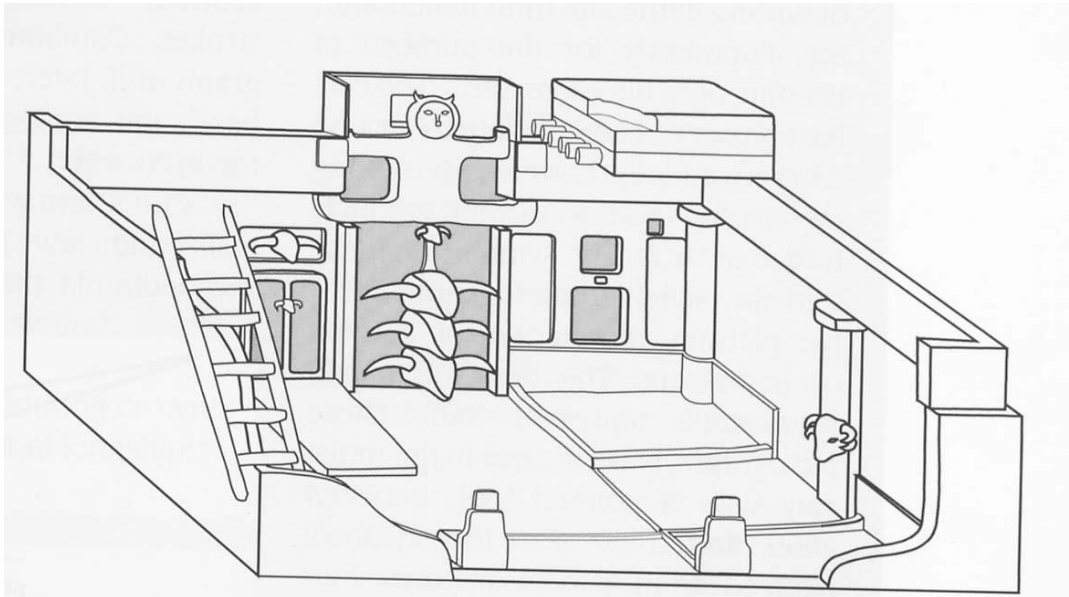
## 3. The New stone age (Neolithic) :

### Permanent Structures :

2. Houses have cult rooms decorated with bull heads Some houses appear to be shrines for worship.



1.21 Reconstructed shrine at Catal Hüyük





# Conclusion :

Old stone  
age  
(Paleolithic)

Middle  
stone age  
(Mesolithic)

New stone  
age  
(Neolithic)

Cave Dwellings

Handmade  
shelters

History of  
Architecture  
began

# Conclusion :

- In organic materials such as mud or (in cold climates ) snow have **limited lasting qualities** , while stone , although very durable ,is so difficult to work as to have had very limited possibilities for shelter building.
- **These realities mean** that the materials surviving from prehistoric times are largely **small objects** of stone such as arrow head sands pear points ,or large arrangements of stones setup in patterns or assembled into structures .

**THANK YOU ...**