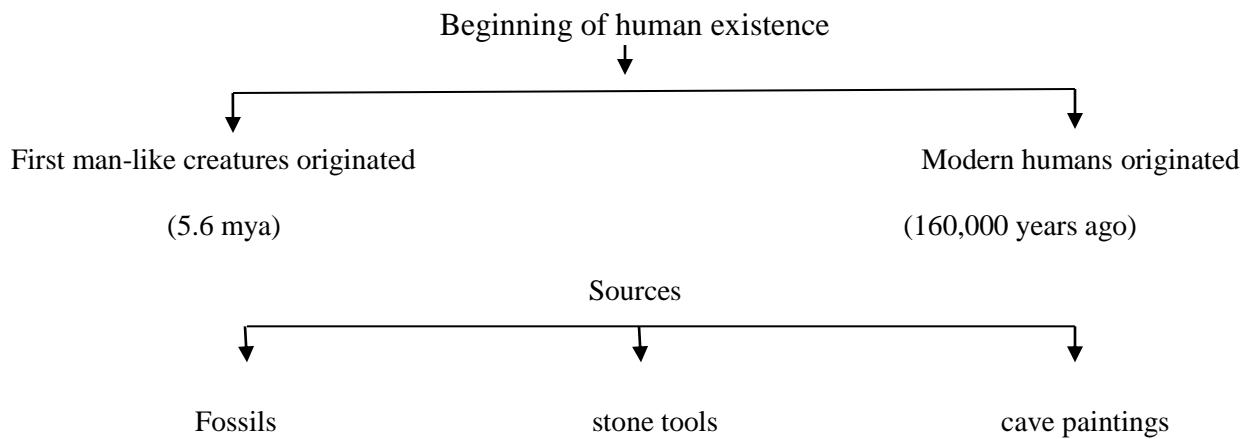


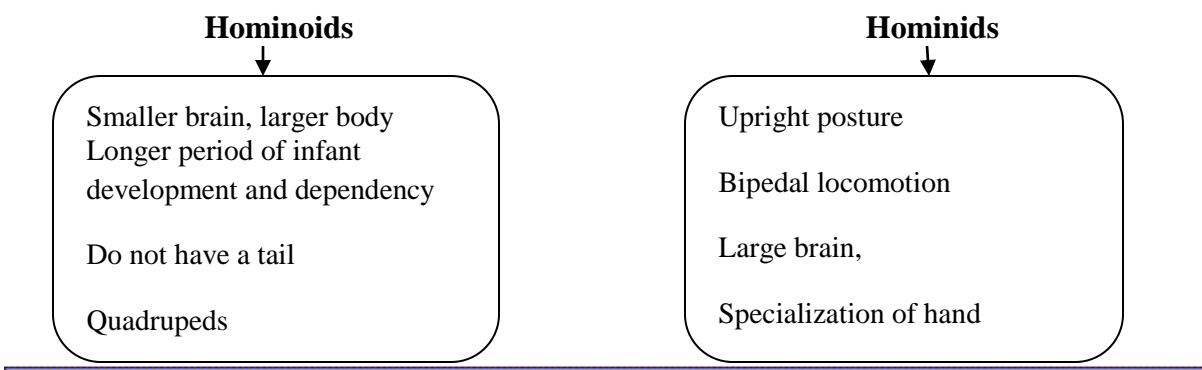
Theme1 From the Beginning of Time



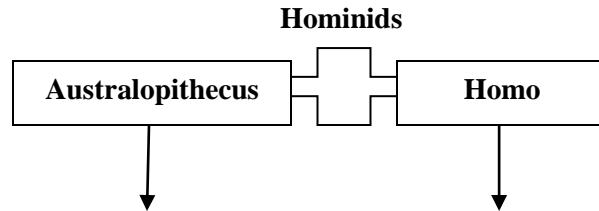
- Fossils, stone tools and cave paintings help us to understand early human history.
- About 200 years ago, many scholars refused to accept these remains.
- This was due to their belief in the Old Testament of the Bible.
- According to this, human origin was regarded as an act of Creation by God.
- In 1856, workmen who were quarrying for limestone in the Neander valley (Germany) found a skull and some skeletal fragments.
- They handed over their find over to Carl Fuhlrott, a local naturalist.
- He took the material to anatomist Herman Schaaffhausen at Bonn University.
- They jointly published a paper claiming that this skull represented a form of human that was extinct.
- On 24 November 1859, Charles Darwin published On the Origin of Species.
- He argued that humans had evolved from animals

The Story of Human Evolution

- The story of human evolution is enormously long and complicated
- By about 24 mya, there emerged a sub group amongst primates called hominoids. (In Asia and Africa)
- This included apes and humans.
- Hominids were evolved from hominoids and share certain common features. There are major differences between the two also.



Hominids belong to a family known as Homindae. Hominids are further divided in to branches (genus) of which **Australopithecus** and **Homo** are important



<ul style="list-style-type: none"> Latin word ‘austral’ meaning ‘Southern’ Greek word ‘pithekos’ Meaning ‘ape’. They retained many features of apes. They have a small brain size, heavier jaws and larger teeth. Fossils discovered from Olduvai Gorge in East Africa 5.6 mya 	<ul style="list-style-type: none"> Latin word Homo Meaning ‘man’ They have larger brain, jaws with a reduced outward protrusion and smaller teeth. 2.5 mya.
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Types of Homo

Types of Homo	Meaning	Fossils found
Homo habilis 2.2mya	Tool maker	Omo,Ethiopia,Olduvai Gorge in East Africa
Homo erectus 1.8 mya	Upright man	Africa and Asia
Homo Sapiens 0.8 mya	Wise man	Africa ,Asia and Europe

Fossils of Homo sapiens.

- The earliest fossils of Homo sapiens from Europe have been found in Heidelberg, Germany and were called **Homo heidelbergensis**.
- Fossils found in Neander valley were categorized as **Homo neanderthalensis**

Benefits of Bipedalism (Erect position)

- Carrying objects- upright posture freed the arms to carry various objects(including offspring)
- Visual surveillance -standing up provided better view of surroundings
- Long distance walking was more efficient for biped than for a quadruped. (during hunting and foraging)
- Less energy is consumed while walking when compared to the movement of the quadruped

Glaciation (Ice age)

The onset of glaciations, around 2.5 mya, brought major changes in climate vegetation. Reduction in temperatures rainfall and expansion of grassland led to the extinction of Australopithecus. The species that were better adapted to drier conditions were the representatives of Homo.

Modern Human Beings

There are 2 main theories for the origin of modern humans- Replacement model and Regional continuity model

Regional continuity model

(Multi regional origin)



Humans evolved simultaneously in different parts of the World from local archaic humans.

There is regional difference in the features of modern humans.

Dissimilarities are due to differences between Homo heidelbergensis and Homo neanderthalensis

Replacement model

(Single region origin)



Humans originated in Africa.

Archaic humans were replaced by modern humans

Genetic and anatomical homogeneity support this view

Similarity is due to origin from a single region

The earliest fossils of modern humans (from Omo in Ethiopia) support this view

Early Humans: Ways of obtaining food

Early humans would have obtained food through gathering, hunting, scavenging and fishing.

- **Gathering**-Early humans collected plant foods such as seeds, nuts, berries, fruits and tubers.
- **Scavenging**- Early humans scavenged or foraged for meat of animals that had died or had killed by other predators. Small mammals such as rodents, birds, reptiles and even insects were eaten by early humans.
- **Hunting**-Hunting probably began by about 500,000 years ago.

The evidence for the planned hunting comes from some sites:

1. Box grove in southern England
2. Schoningen in Germany
3. Dolni Vestonice in Czech Republic

❖ Sites near rivers have been chosen by them for planned hunting. Herds of migratory animals crossed the river during their spring and autumn migrations. People knew the movement of these animals and killed them.

Fishing -Fishing was also important, as is evident from the discovery of fish bones at different sites.

Early Humans: From Trees, to Caves and Open-air Sites

- By plotting the distribution of artefacts, we can find out the place of residence of the hominids.
- Thousands of flake tools and hand axes have been excavated at Kilombe and Olorgesailie(Kenya)
- In some areas, food resources were abundant and people visited repeatedly.
- People would leave traces of their activities and presence, including artefacts.
- The deposited artefacts would accumulate in one place.
- The places where less visited would have fewer artefacts. The artefacts may have been scattered over the surface.
- Between 400,000 and 125,000 years ago, caves and open-air sites began to be used.
- In the Lazaret cave in southern France, a 12x4 metre shelter was built. Inside it were two hearths and evidence of different food sources.
- At Terra Amata in southern France, flimsy shelters with roofs of wood and grass were built for short term, seasonal visits.
- Pieces of baked clay and burnt bone along with stone tools have been found at some sites in South Africa.
- We do not know these were the result of a natural bushfire or volcanic eruption or controlled use of fire.

The uses of fire

- To provide warmth and light inside caves
- To harden wood
- To scare away dangerous animals
- For cooking
- For flaking tools

Early Humans: Making Tools

- The ways in which humans make tools require greater memory and complex organizational skills.
- The earliest evidence for the making and use of stone tools comes from sites in Ethiopia and Kenya.
- The earliest tool makers were the Australopithecus.
- We do not know whether tool making was done by men or women or both.
- About 35,000 years ago, there were changes in human tool making.
- New kinds of tools such as spear-throwers and the bow and arrow were used for killing animals.
- The meat thus obtained was processed by removing the bones, followed by drying, smoking and storage
- Thus, food could be stored for later consumption.
- Trapping of fur-bearing animals and the invention of sewing needles were other changes.
- The earliest evidence of sewn clothing comes from about 21,000 years ago.
- The punch blade technique was introduced to make small chisel-like tools.
It was now possible to make engravings on bone, antler, ivory or Wood

Modes of Communication: Language and Art

Language:

- Among living beings, it is humans alone that have a language.
- There are several views on language development. They are,
- 1.hominid language involved gestures or hand movements
- 2.spoken language was preceded by vocal but non verbal communication
- 3.human speech probably began with calls among primates

When did spoken language emerge? It has been suggested that

- 1. The brain of Homo habilis had certain features which would have made it possible for them to speak. Thus language may have developed as early as 2mya.
- 2. The evolution of vocal tract was equally important. This occurred around 200,000 years ago
- 3 Language developed around the same time as art, that is, around 40,000-35,000 years ago.

Art:

- Hundreds of paintings have been discovered in the caves of Lascaux (/la-sko/) and Chauvet(/show-vay/in France and Altamira in Spain).(These include depictions of bison,horses,ibex,deer,mammoths,rhinos, lions bears, panthers, hyenas and owls.
- We have no idea why they made these paintings.
- One of the explanations for these paintings is ritual.
- The act of painting was a ritual to ensure a successful hunt
- Another explanation is that these caves were meeting places for small groups of people or locations for group activities. They shared hunting techniques and knowledge.
- Thus, Paintings served as the media for passing information from one generation to the next.

Hunter -Gatherer Societies: From the Present to the Past

- There are two points of view on the following issue -
- Whether the lives of present day hunter gatherers could be used to understand the past?
- 1. The scholars who directly applied specific data from present day hunter-gatherer societies to interpret the archaeological remains of the past.
- Some archaeologists suggests that the Hominid sites-dated to 2 mya along the margins of Lake Turkana could have been the dry season camps of early humans. Such practice has been observed among the Hadza and the Kung San.
- 2. The scholars who feel that ethnographic data cannot be used for understanding past societies.

They have the ideas:

- Present day hunter-gatherer societies pursue several other economic activities along with hunting and gathering.
- These include engaging in exchange and trade in minor forest produce or working as paid labourers in the fields of neighboring farmers.
- More over, these societies are totally marginalized in all senses-geographically, politically and socially.
- The conditions in which they live are very different from those of early humans.
- There are tremendous variation amongst living hunter -gatherer societies
- There are conflicting data on many issues such as the relative importance of hunting and gathering, group sizes or the movement from place to place.

Both men and women are contributing to the food supply

Key Words and their Meanings

Fossils

Fossils are the remains or impressions of a very old plant, animal or human which have turned in to stone. They are often embedded in rock, and are thus preserved for million years.

Species

Species is a group of organisms that can breed to produce fertile offspring. Members of one species cannot mate with those of other species to produce fertile offspring.

Anthropology

Anthropology is a discipline that studies human culture and evolutionary aspects of human biology.

Artefacts

Artefacts are objects that are made by human beings. The term can refer to a wide range of things- tools, paintings, sculpture, and engravings.

Primates

Primates are a sub group of a larger group of mammals they include monkeys, apes and humans. They have body hair, a relatively long gestation period following birth, mammary glands, different types of teeth, and the ability to maintain a constant body temperature.

Ethnography

Ethnography is the study of contemporary ethnic groups It includes an examination of their modes of livelihood, technology gender roles, rituals, political institutions and social customs

Passage based references

1. **Olduvai Gorge** is located in the Rift Valley, East Africa. Mary and Louis Leaky identified this site and worked there for 40 years. It was Mary who discovered the remains of the Australopithecus there in 1959.
2. **The Hadza:** A small group of hunters and gatherers living around Lake Eyasi in the Rift Valley, East Africa. The Hadza depended on the wild foods. There were never shortages of food even in times of drought because of the availability of vegetables. Their camps are sited among trees or rocks and within a kilometre of a water source.
3. **Altamira:** A cave site in Spain. The importance of Altamira is its cave painting

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