

# EARLY HOMINIDS AND PREHISTORIC MAN

## Theory of Evolution

- □ Hominid separation from pongids ~ 6-7 million years ago
  - Not a single culture or religion's beliefs prepared them for the idea humans are related to apes (all had their own creation stories)
- □ Theory of Evolution science's creation "story"
  - Charles Darwin all life evolved over long periods of time
  - Dating methods for archaeology
    - Radiocarbon dating
    - Attempt to explain the origins of man with facts instead of faith



 African apes divided into gorillas, chimpanzees and hominids







- Distinguishing traits evolved
  - $\blacksquare$  Bipedalism, controlling fire, fashioning tools, enlarged brain & language, and a consciousness of self  $\sim$  150,000 years ago

#### Precursors to Modern Humans

The Scientific Theory of origins of Pre-Historic Man (the time before <u>writing</u>)

- Australopithecines earliest bipeds (walks on 2 feet)
  - Could deal with dynamic environmental shifts
  - Were intelligent
- □ Australopithecus afarensis ~ 3.4 million years ago
  - 1974: Awash River, Ethiopia Donald Johanson and team (ASU) find a female skeleton that shows evidence of walking on 2 feet
    - Oldest complete hominid skeleton



# Ape to Man clip

# Taung

Australopithecus africanus ~ 3.0 million years ago 1924: Taung, South Africa — Raymond Dart discovered the Taung Child



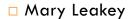
- Hominids had to adapt and evolve to survive
  - □ All other hominids did die out
  - No straight-line descent from first hominids to modern humans
  - □ Bipedalism best advantage <u>— hands free for other tasks</u>
  - Able to migrate out of hostile environments
  - Acquired cognitive skills first tools
  - Opposable thumbs allowed for usage of tools
- Hominids sought secure and abundant ecological regions
  - □ Diverse grains and fruits, abundant wildlife
  - Many struggled in hostile environments with predators
- Larger groups of hominids created communities

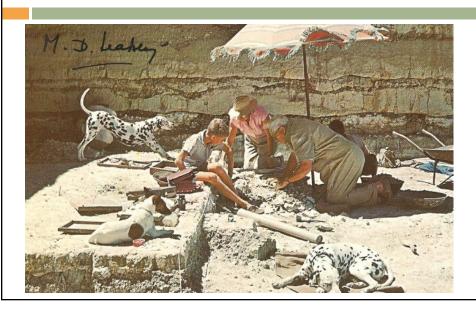
#### The Genus Homo

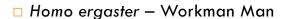
- □ Homo habilis <u>— Handy Man</u>
  - 2.3 1.4 million years ago
  - Discovered by Mary & Louis Leakey in Tanzania between 1962 and 1964
  - Reconstruction of H. habilis











 $\square$  2.5 – 1.7 million years ago

Discovered near Lake Turkana, Kenya in 1975

- □ Homo erectus Upright Man
  - $\blacksquare$  1.8 1.3 million years ago
  - Walked on <u>2 feet, lived in family groups</u>, and used tools
  - Originated in Africa, and spread to India,
     China, Vietnam, Indonesia, and Spain





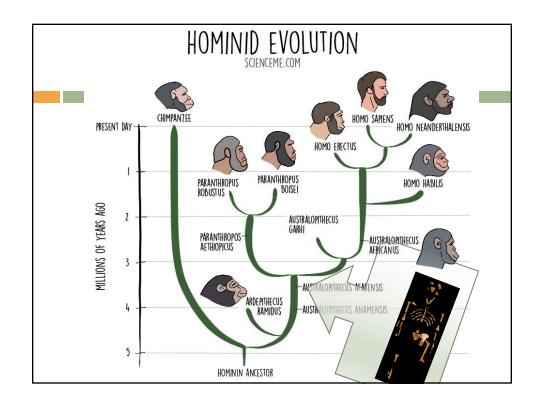
#### □ Homo neanderthalensis <u>– Neanderthal Man</u>

- □ 350,000 to 24,000 years ago
  - They mixed with early Homo sapiens from 35,000 to 24,000 years ago
- □ Mostly carnivorous (some cooked veggies),
  - made advanced
    tools, had a formal
    spoken language,
    and lived in
    complex social
    groups



■ Found in Eurasia,

Germany to the Zagros Mountains in Iraq



### The Genus Homo

- □ Homo sapien sapien Wise or Knowing Man
  - □ 200,000 years ago to the present
- □ Out of Africa Theory
  - □ All humans are descendant from a group of *H. sapiens* that left Africa, and migrated across the globe
  - Evidence that those who added <u>fish</u> to their diet were able to evolve faster.







# Mankind Clip

## Hominid Maps

★112°E : 8°S Modjokerto

★43°E:8°N Hadar

Answer

questions:

▲ 27°E: 14°S Broken Hill

 $\triangle$  68°E : 41°N Teshik-Tash

▲ 7°E: 52°N Neandertal

1-4

■ 120°W : 44°N Marmes

■88°W:32°N Natchez

Cross off

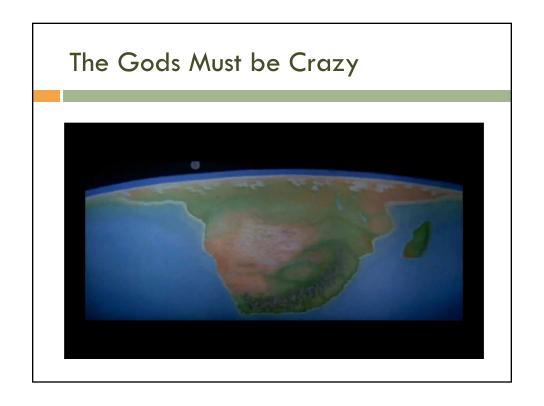
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#### Homo Sapiens: The First Modern Humans

- □ Hunters and gatherers until about 12,000 years ago
  - Some hunter-gatherer societies still exist
    - San in Kalahari Desert, Botswana
  - As late as 1500 BCE, 15% of world still hunter-gatherers
  - Relatively egalitarian
    - Women made a larger contribution and had higher status
    - Men specialized in hunting
    - Women specialized in gathering and child rearing
    - Cereals and fruits were dietary staples
  - Enough food could be found in about three hours each day





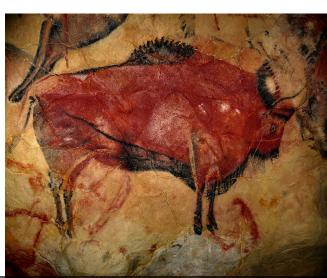


## Development of Art and Language

- □ Homo sapiens developed cultural forms that reflected:
  - □ Consciousness of self
  - □ Drive to survive
  - □ Appreciation of beauty
  - □ Ability to engage with environment
- □ Cave art accumulated over 25,000 years
  - □ Most often of large game mastodon, buffalo, etc
- □ Small sculptures  **<u>from bone and stone</u>** 
  - ☐ Most common very voluptuous and/or pregnant women
  - Also animals

## Venus of Willendorf & Altamira Bison





### Cave Art Web Lesson

- $\hfill\Box$  Check out a computer
- $\hfill \square$  Finish by the end of class

- □ **Language** sets humans apart from other animals
  - □ <u>Use of sounds to make words that convey meaning to</u> others
  - Requires ability to think abstractly and communicate that thought
  - Humans can make and process more phonemes than any other species
- □ Complex languages occurred about 100,000 years ago
  - Expanded into nineteen language families
  - □ All modern (natural) languages evolved from those 19

How did art and language increase early humans' chances of survival?

#### **Neolithic Revolution**

- □ Initial discovery of how to grow food.
- When people changed from being food gatherers to food producers is the mark of when civilization begins.
- □ Having a surplus, or extra food, is the reason that the growth of civilizations occurred.



- Humans established greater control through <u>domestication of</u> <u>plants and animals</u>
  - Population pressure and natural food supply may have triggered domestication
  - □ Settled agriculture requires staying in one place and settling
- Domestication of plants
  - □ Gathered larger harvests by **pulling grain directly from plant**
  - □ Most seeds and grains used for food
  - □ Some saved for planting in the next growing cycle (BIG Deal!)
- Domestication of animals
  - □ Dogs were the first ~12,000 years ago
  - □ Wild sheep and goats next
  - □ Animals accepted dependence because humans fed them

## Canaan and Afghan Dogs





#### □ Pastoralism

- □ Around 5500 BCE herding sheep, goats, and cattle
- □ Produced meat, dairy, and wool
- Nomadic pastoralism (Ukraine to Siberia/Mongolia)
  - Horse-riding herders of livestock domestication of horses
  - No fixed home, moved in response to needs of herd
  - □ <u>Transmitted ideas, products, and people across large</u> <u>distances</u>
- Agriculturalism
  - □ Grew grains, cereals, and fruits
  - □ Required large parcels of land
  - □ Caused a worldwide revolution between 9000 & 2000 BCE

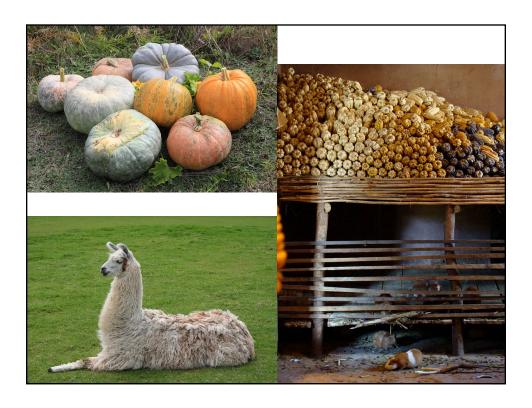
#### Southwest Asia

- Earliest agricultural revolution Fertile Crescent
- □ Domestication of wild grasses and five large mammals
  - Barley and wheat
  - Sheep, pigs, camels, goats, and cattle
- □ East Asia
  - □ Pottery used to store food
  - Two river basins on mainland allowed for growth of rice and millet Yellow and Yangtze Rivers!
    - <u>Used plow cultivation</u> ox plows and water buffalo plowshares



#### Europe

- □ Agriculture spread to Europe from Southwest Asia
- Necessary to find plants and animals that could <u>thrive in colder</u> <u>and more forested land</u>
  - Wheat, barley, olives, grapes
  - Sheep, goats, cattle
- Designed settlements built with mud huts or long houses
- Most remained hunters, gatherers, and fishers
- The Americas
  - □ Climate change forced different types of food in North America
    - Smaller animals, roots, berries, fish, shellfish
  - □ Mesoamericans grew corn, squash, beans, and potatoes
    - Domesticated animals not used as food (mostly) llamas' wool for clothing



#### □ Africa

- □ Sorghum, a cereal principal crop
- □ Stone dwellings, underground wells, grain storage areas
- □ Forced to move as Sahara expanded



#### Paleo Trail Mix

- Buckwheat
- □ Rye
- □ Hard Red Wheat
- Barley
- □ Oats
- □ Brown Rice
- □ Sesame
- □ Sunflower Seed
- □ Pumpkin Seed
- □ Grapes



#### Effects of the Neolithic Revolution

- $lue{}$  Agricultural settlements became  $\underline{\text{villages}}$ 
  - □ Specialization and surpluses led to early social stratification
  - $\hfill\Box$  Evolution from clan groups in circular homes to towns in
    - rectangular homes walls divided and separated
- Villages hadburial sites
  - □ <u>Higher status by</u> <u>birth for first time</u>



Fewer people needed to farm so they found other things to do.

 People began <u>making</u> <u>and trading goods</u> <u>instead.</u> society more complex.

the need for governments
divisions of labor, writing,

calendars and technology (on a very basic level)

- □ Gender relations
  - More pronounced gender roles in agricultural societies



- □ Men took over agriculture yoking animals
- Women took on repetitive and painful tasks <u>- weeding and grinding grains</u>
- Men became the <u>dominant gender in leadership roles</u>
  - Created inequalities
  - Began spread of <u>patriarchy</u> male-led and male-dominant societies