

## Lecture #2 (9/4/2013)

- Dearphotograph.com....email to her (2 points extra credit) due December 4<sup>th</sup> by 5pm
- Archaeology is the study of the human past using their remains
- History of how we come to look at the human past through new methods and new ideas
- 3 key conceptual advances to understanding the past:
  - understanding the antiquity of the earth
  - Darwin's principals of evolution
  - Thompson's three age system

### Understanding the Antiquity of the Earth

- Many creation myths
- Yanomano Indians: hunt and farm in the jungles of South America
  - Studied by many people but Napoleon Chagnon studied them the most
  - In creation story: came up with way to explain gender roles
- Creation myths play an important part in and deeply affect the way in which we study our past and the kinds of questions that we ask about our past
- Several hundred years ago people believed our world was created 6,000 years ago (biblical references)
- Later more sophisticated calculations was done by Bishop James Ussher went through creation list in the bible and looked at the histories of the Mediterranean and Middle East
  - Came up with the date of the creation of the earth in 4004 BC appears in some English bibles after 1700
  - People had no concept that there was a period of human development before writing
  - No human development before the use of iron
- Because of this belief when confronted with physical evidence....stone tools, and fossilized animal evidence they had no way to explain the presence of these items
  - Said they were made by lightning strikes (referred to as thunder bolts or thunder stones)
  - Considered geological specimens (stone tools)
  - Work of mischievous elves and fairies
- William Dugdale: 17<sup>th</sup> century Recognized hand axes for what they actually were
- Michael Mercati: in last of the 16<sup>th</sup> century (1518)...guessed that the stone tools were actually made by humans. Came to this conclusion because he was the director of the Vatican's botanical gardens: he had to expand historical section, and had to expand the ethnohistory collections
  - He was being brought stone arrow heads from "New World" and compared the "geological specimens" with the arrow heads made by Indians in the real world and made the connection
- 18<sup>th</sup> and 19<sup>th</sup> century-some scholars begin to seek enlightenment from the natural world

## Catastrophism

- idea that cataclysmic events (earthquakes, fires, volcanic eruptions, massive flood) were responsible for creating the earth's appearance
- there is still a problem of scale
- Uniformitarianism
  - James Hutton (18<sup>th</sup> cent)
  - Charles Lyell (19<sup>th</sup> cent)
    - BOTH Argued that the processes responsible for the appearance of the earth were the same as what occurred in the past
    - Slowly uniformly occurring processes that explain the earth's appearance
    - Key element in this working is time
  - Geologically ancient conditions were geologically similar to our own
  - This means that the world would be significantly older than previously thought
  - Basis of modern archaeology (past is similar to the present in the conditions)
- John Frères (1797): published evidence of stone tools, layers in the ground under grass that contain archaeology evidence
- Jacques Boucher de Perthes: (1841)
  - Working along the stone river
  - Found stone hand tools used

## Darwin's Principles of Evolution

- Concept of evolution: best explanation for the origin/change of animals and plants and that **natural selection** is the means of that change
- Idea of change over a long period of time (time is the key element in this change)
- Evolution of change through time is used among various disciplines

## Third Key Concept

- Antiquarians: amateur collectors, collect objects merely for the sake of collecting
  - Curiosity cabinets: more objects = higher social class
  - No kind of order or classification of the objects
  - Once started to classifications they started asking why they are being classified in a certain way and who made them
- Christian Jurgensen Thomsen (1807)
  - Takes the artifacts in the Danish national museum and orders them in sections (stone, brass, and iron rooms)
- Jens Jacob Worsaae:
  - In the soil the stone artifacts are on the bottom, then bronze then iron objects (chronological statement starts being made) through stratigraphy
- Thomas Jefferson

- Pioneering excavation in 1784
- Believes that the mound on his property were built by the original inhabitants (Native Americans)
- Wanted to prove that by excavating a burial mound
- Carefully records everything that happens during this excavation
- His belief was correct
- Some of the big figures in professionalizing archaeology
  - General Augustus Lane Fox Pitt Rivers:
  - Sir William Flinders Petrie:
  - Alfred Kidder:
  - All did this:
    - Advocated the recovery of ALL objects
    - Total recording of the excavation
    - Sequence dating
    - Schools: training schools for archaeologist
    - Full publication: of results
      - Hard if you don't know the work previously done