Tuesday, Dec 11, 2007, 3-6pm.
Fowler A103B (our classroom)

What to bring to the exam…
- A green scantron sheet Form No. 882-E
- A #2 pencil
- Your student ID

You DO NOT need a “blue book”

Office Hours
- Monday, December 10: All DAY
- PLEASE SEE YOUR TAs too…

A Brief History of Archaeology
- Archaeology = Explanation of past human behavior using physical remains
- Foundations:
  - James Usher: “Young Earth”
  - Charles Lyell: Uniformitarianism=
  - John Ray: “fixity of life”
  - Carl Linnaeus: Intermediate forms
  - Boucher de Perthes: people in the “Old Earth”
  - Thomsen and Worsaae: regular stages

Archaeological Explanation: Culture, Adaptation, and Evolution
- Empirical foundations:
  - How and Why does life change?
  - Charles Darwin and Theory of Natural Selection
- What about behavior?
  - Culture =
  - Cultural variation =
  - Innovation =
  - Adaptation =
- Biological and Cultural
### What is the archaeological record?

- **Contexts**
  - Systemic context =
  - Archaeological context =
- **Transformational processes**
  - Primary context =
  - Secondary context =
- **Archaeological Data**
  - Artifact =
  - Feature =
  - Ecofact =
  - Site =
  - Region =
- **Archaeological research:** discovery, recovery, reconstruction, explanation

### Dating the Archaeological Record

- **Chronometry =**
- **Relative versus absolute dating**
  - resolution, accuracy, precision and dating range
- **Stratigraphy**
- **Radiocarbon ($^{14}$C)**
- **Potassium-Argon (K-Ar)**
- **Dating gap =**

### Early Hominins and Their Behavior

- **Hominin =** bipedal locomotion: benefits?
  - Basal Hominins
  - Primitive Australopithecines
  - Derived Australopithecines
  - Early Homo
- **Oldowan Industry**
  - Elements of stone technology: raw material =,
    hammer =, core =, flake =, tool =
  - Interpretations of stone-bone associations

### Homo erectus and Dispersal

- **Expensive tissue hypothesis =**
- **H. erectus, H. ergaster, H. heidelbergensis (H. antecessor)**
- **migration vs. dispersal**
  - climatological explanations
  - biological explanations
  - behavioral explanations
### Neanderthals: Geography, Biology & Culture
- Archaic *H. Sapiens*
  - Regional populations in Africa, Europe, and Asia
- Neanderthals
  - Material Culture (Middle Paleolithic)
  - “Survival of the Unfit”
  - Burial evidence
  - Ritual cannibalism
- Classification: *H. neanderthalensis* or *H. sapiens neanderthalensis*?

### Origins of Modern Humans
- Anatomically modern human =
- Multiregional model=
- Replacement model=
- Weak replacement model=
- archaeological predictions…
- Key process that ties it all together?

### The Symbolic Revolution
- Upper Paleolithic adaptive advantage?
- Klein’s “Great leap forward”
- Language=
- Symbolic behavior
  - symbol =
  - ocher, ornaments, mobiliary and parietal art
- Functions of symbolic behavior?

### Human Dispersals
- Australia and the Pacific
  - Sunda versus Sahul shelves
  - Dispersal prerequisites: Watercraft?
  - AMH in Sunda (40-35ka)
  - AMH in Sahul (<50ka)
- The Americas
  - Bering Land Bridge
  - Dispersal prerequisites: Arctic adaptations?
  - Ice Free Corridor v. Coastal Route
  - early sites v. Clovis
Post-Midterm Material

Climate, Population & Intensification
- Late Glacial Climatic Sequence
- Holocene: sea levels rise, changes in vegetation
- Population growth, carrying capacity, restricted mobility/territory size
- Population growth, intensification, social complexity
  - Simple hunter-gatherers =
  - Complex hunter-gatherers =
  - How can people intensify their subsistence strategies?

Origins of Agriculture
- Synchronous origins
- Domestication=
- Theories
  - “Solitary genius” & Childe’s “Oasis hypothesis”
  - Population pressure
  - Climate change
  - Social theories
  - “Readiness” v. accident
- Transformation of human life: health consequences, population growth

Domestication in the Old World
- Identifying domesticates
  - Large seed size; Semi-tough rachis; Seed quantity
  - Small body size; Excess males
- Founder domesticates in SW Asia =
  - SW Asian sequence
    - Kebaran to late aceramic (PPNB)…
- Founder domesticates in East Asia
  - South China & Yangzi =
  - North China & Yellow River =
- Ceramics v. pottery
Domestication in the New World

- Mesoamerica
  - Mesoamerican trinity =
  - cucurbits, 8000 BC
  - maize, 3500 BC
- American Southwest
  - Trinity: 2000 BC at earliest
- Eastern North America
  - Goosefoot, marsh elder, gourds (oily seeds)
  - Trinity: 1000 AD

Emergence of Social Inequality

- Urbanism =
- State =
  - large groups of non-food producing specialists; power held by institutions rather than kin groups
- Traits of cities & states (pay attention to overlap)
- City/state formation
  - “Urban revolution” vs. Systems theory
  - Single mechanisms: irrigation, trade, warfare
  - Social theories: why give up autonomy?
- Marx and economic, ideological, and political power of the state =

Mesopotamia

- Northern Mesopotamia
  - precipitation agriculture & the Halafian
- Southern Mesopotamia = Sumeria
  - irrigation agriculture mandatory
  - Ubaid period =
  - Uruk period =
  - Rapid urbanization
- Sumerian world system & City-states
  - City-states: Uruk, Eridu, Ur
  - Formal trade networks; formal competition; ethnic co-residence

Writing Technologies

- Speech & Social Memory
  - limited sounds → infinite ideas
- Symbols ↔ ideas
  - Pictographs, figurines, physical mnemonics
- Symbols ↔ sound
  - Explosion of combinatorial complexity
- Literacy and the state
  - Sumeria: Economic power =
  - China: Ideological power =
  - Maya: Political power =
- Power and the impact of literacy
  - Traditions/customs → laws/regulations
  - Social memory → institutional memory
### The Archaeology of War
- Hobbes v Rousseau
- Warfare =
- Archaeology of war
  - Defensive and aggressive markers =
  - Settlement systems =
  - Burials =
  - Sites (destruction) =
  - Technology =
  - Iconography/history =
- Equifinality =
- Purpose/causes of war
  - Competition; elimination of people
  - Acquisition of resources/territory
  - Acquisition of prestige

### Mesoamerican Civilization
- Preclassic; Classic; and Postclassic Periods
- Highland
  - Massive urbanization
  - Valley of Mexico, Teotihuacan
  - Valley of Oaxaca, Monte Alban
- Lowland
  - Moderate urbanization
  - Maya
  - Idyllic view versus brash reality

### Chinese Civilization
- late Neolithic
  - Longshan & Liangzhu → millet agri, chiefdoms
- Xia Dynasty
  - mythical vs. Erlitou
- Shang Dynasty
  - shifting capitals
  - incredible wealth & ritual power
  - Anyang
- Zhou Dynasty
  - violent territorial expansion

### Collapse of Civilization
- defining collapse
  - population dispersal…
  - population dislocation and urban abandonment…
  - state collapse…
  - cultural collapse…
- internal vs. external
- social vs. ecological
Archaeology & the Public

- multiple ways that the archaeological record can be destroyed
- the archaeology of identity
  - political uses of archaeology (nationalism)
- what is our responsibility as both archaeologist and member of the public?

THANK YOU!