

- 1 **The Genus *Homo*, Part II: Early and Late Archaic Groups**
 Anth 1013 Lecture
 17 November 2004

- 2 **How Many *Homo* Species After *H. erectus*?**
 - n Time period from 400 kya (possibly earlier) to about 100 kya
 - q Hominin fossils show great amount of variability (morphologically, geographically, and temporally)
 - n Transitional forms in b/t *H. erectus* and modern *H. sapiens*
 - q Commonly referred to as **archaic *H. sapiens***
 - n Divided into early and late archaic groups
 - q Late archaic includes specifically the Neanderthals

- 3 ***H. heidelbergensis***
 - n Transitional species b/t *H. erectus* and *H. sapiens*
 - n Geographic distribution
 - q Africa, Asia, and Europe (including western Europe)
 - n Time frame
 - q Oldest: ~ 780 kya (Spain)
 - q Middle: ~ 4/300 kya
 - q Youngest: ~ 200 kya

- 4 **“Muddle in the Middle”**
 - n *H. heidelbergensis* as an intermediate species
 - q Morphologically
 - n Cranial capacity: 12/1300 cc
 - n Large brow ridges, but arched
 - n Cranium widest on parietals
 - n Lack of mentum (prominent chin)
 - n Smaller teeth (within upper range of modern humans)
 - q Temporally
 - n Overlaps with *H. erectus*, other archaic *H. sapiens*, and possibly modern *H. sapiens*

- 5 **Life of *H. heidelbergensis* (Early Archaic)**
 - n Acheulian technology carried over from *H. erectus* into Middle Pleistocene
 - q Relatively unchanged until end of the period
 - q Levallois technique in Africa and Europe
 - n New technique to produce more precise flakes
 - q <http://www.hf.uio.no/iakk/roger/lithic/LEV/Lev.html>
 - n Temporary shelters
 - q Concentrations of bones, stones, and artifacts
 - n Fire
 - q Hearths found at sites in Europe and China (?)
 - n Expansion of diet
 - q Fruits, nuts, seeds, meat, fish, etc.

- 6 **Intra and Interspecific Variation and the Problem of archaic *H. sapiens***
 - n Conservative taxonomic approach
 - q Archaic *H. sapiens*
 - n Used to broadly encompass specimens that aren't *H. erectus*, but not quite modern
 - n Alternative classification

- q Some argue that these should be placed into another species within genus *Homo* (i.e., *heidelbergensis*)

7 ***H. sapiens neanderthalensis***

- n Late archaic *H. sapiens*
 - q ~ 120/110-25 kya
 - q Only in Europe and western Asia (the Near East)
- n Discovered 1856
 - q Neander Valley

8 ***H. sapiens neanderthalensis***

- n Morphology
 - q Cranial
 - n Wide nasal openings
 - n Long, low cranial vault
 - n Retromolar space
 - n Prominent brow ridges
 - n Occipital bun (or chignon)
 - q Postcranially
 - n Short, stocky frame
 - n Distal parts of upper and lower limbs were longer
 - n Robust muscle markings

9 **Cultural Manifestations**

- n Mousterian culture
 - q Even more complex tool kit than seen with the Acheulian
 - n Larger proportion of "flake tools"
- n Fire and shelter
- n Hunting
- n Burial of dead
 - q What does it mean?
- n Speech?

10 **Origins of Anatomically Modern *H. sapiens***

- n New genetic evidence suggests:
 - q Neanderthals split from human line around the time we see *H. heidelbergensis* appear
- n Next time...
 - q Anatomically modern *H. sapiens*, multiregional (continuity) or replacement?, and human variation