

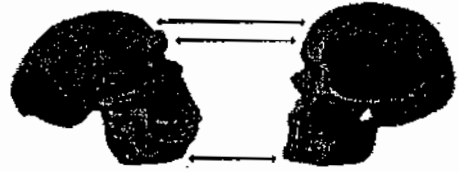
Early Modern *Homo sapiens* (*Homo sapiens sapiens*)

Les Eyzies, France (28,000 ya) = "Cro-Magnon" people

* see list at end for more specimens and sites throughout Old World

Anatomy

distinctly high rounded skull
cranial capacity around 1350 cc (may exceed 1590 cc.)
no occipital bun
rounded delicate occiput
high vertical forehead
smaller or no brow ridges
non-protruding smaller faces (slightly broad)
maximum width located relatively high up on the skull
face and nasal cavity smaller
distance between eye orbits reduced
strong chin
5'4" and 6' (skin color and body hair difficult to surmise)
skeletons are generally less robust and musculature lighter



Origins of modern *H. sapiens*

Africa and/or sw Asia

Qafzeh, Israel 115,000 - 96,000 ya

Klaies River Mouth and Border Cave, S. Africa 120,000 - 100,000 ya

Europe and E. Asia: 50,000 - 40,000

1. Replacement Model (Out of Africa or Noah's Ark Model)

Christopher Stringer, Peter Andrews

200,000 - 100,000 ya

2. Regional Continuity Model (Milford Wolpoff)

Fossil and Genetic (DNA) Evidence

Predictions

3. Partial Replacement Model (Assimilation) Model (G. Brauer, Fred Smith)

mtDNA

"mitochondria Eve"

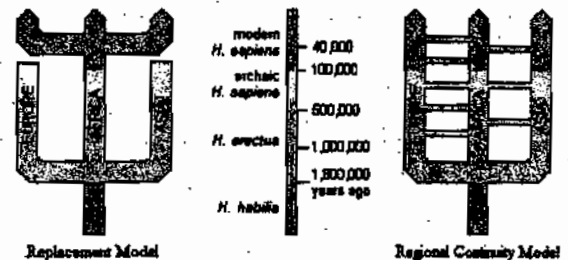
mitochondria

Rebecca Cann, Alan Wilson, and Mark Stoneking (UC Berkeley)

John Relethford

DNA, Y Chromosome, chromosome 12, betaglobin gene

Regional Continuity and fossil evidence



Alan Thorne

Expansion out of Old World

- Australia
- Sundaland/Sahuland
- 40,000 - 50,000 ya..
- Lake Mungo (25,000 - 30,000 ya)
- Keilor (15,000 ya)
- Kow Swamp (10,000 ya)
- Willandria Lakes (50,000 ya??)

- New World
- 12.5 ya (30,000 ya??)
- Beringia
- Folsom & Colvis projectile points

Pacific
Austronesian expansion



Other specimens of anatomically modern humans:

- Africa
- Klaises River Mouth, South Africa 120,000? ya
- Border Cave, southeast South Africa 75,000? ya
- Omo Kibish, southern Ethiopia (130,000 ya)
- Langebaan Lagoon footprints (117,000 ya)
- Laetoli (120,000 ya)

- Near East
- Jebel Qafzeh 100,000 ya
- Skhul 115,000

- Europe
- Cro-Magnon (23,000 - 27,000 ya) Les Eyzies, Dorgone, s.w. France
- Combe Capelle, France 30,000- 35,000
- Five Knolls (England)
- Chancelade (France)
- Grimaldi (Italy)

- Asia
- Upper Cave Zhoukoudian 18,000- 10,000 ya
- Ordos (50,000)

- Southeast Asia
- Niah Cave, North Borneo (41,500 ya)
- Wadjak, Indonesia (10,000- 2,000 ya)