

Early Humans and Neanderthals - Questions

- A. Neanderthals
oldest remains in Europe
evidence of planning, consciousness and symbolic behavior(burial)
most similar to us
brains slightly larger
short, stocky bodies
hunters of big game
After 1970s, viewed in more human way
- B. Neanderthal intelligence
digital 3D image of skulls - low dome and elongated, **possibly different brain shape**;
can we conclude anything? Speculate about capacity for thinking
food we eat leaves chemical signature in protein of our bones - **exclusively meat eaters**;;
Neanderthals **show few signs of change**; no matter where they live, they do the same thing - hunt big game for hundreds of thousands of years;
Is this evidence of limited intelligence?
No real technological development; only thrusting spears;
Most Neanderthal skeletons have multiple fractures, few lived past thirty
Around for 400,000 years and then vanish; 200,000BC - 30,000BC
- C. Homo sapiens sapiens - modern humans
Appear 200,000 - 150,000 years ago;
Out of Africa theory - migration 100-150,000 years ago;
Cognitive explosion about 30-40,000 years ago;
versatile, adaptive, intelligent, creative, expressive - **cave paintings!**
arrows, spears, perforating tools, chisels, decorative art;
encountered Neanderthals
- D. Max Planck Institute in Leipzig germany sequenced the Neanderthal genome
Comparison - **fox2 gene related to speech and language development in humans** -
in Neanderthals identical to us;
shared capacity for language
Conclusions??
Exactly what makes us different remains a mystery!

E. Inter-breeding?

Neanderthals die out roughly around the same time as homo sapiens' cognitive change or creative explosion;

Might there be a connection? What do you think?

According to these scientists, interbreeding occurred either sporadically over a long period of time or intensely for a short period of time. What do you think?

What do you think the findings about interbreeding might suggest about how each group viewed the other? In what scenarios might such inter-breeding have occurred?