

STS 007 class notes class 4

General prehistory

Continuing importance of science in understanding history (and vice versa)

Paabo's feat – first 1856 skeleton

Paabo's comments on interbreeding – dominance matters

Svante Paabo Stockholm Nov. 08

Only one gene so far clearly linked to language (Fox P2), Neandertals have it

Analysis of one million base pairs of N. DNA by 2600

DNA sequencing in second generation: 3 billion bases by end of year

How different the self-conception of humans would be if Neandertals had survived

Forbidden experiment

See: http://www.edge.org/3rd_culture/paabo09/paabo09_index.htm

Strands of evidence – sustaining and constraining

The riddle of consciousness

Discovery of cro-Magnono

Male, 50 years old, 5 bodies deliberately buried

See: http://www.abc.net.au/beasts/evidence/prog6/images/evi_cromagnon_large.jpg

From museum of prehistory (handouts)

Neandertal or Mousterian culture – “middle Paleolithic” (50-250,000 BP)

Fire

Tools (from 2.5 M BP)

(Carbon dating, radio carbon 14 decay – also uranium/thorium or potassium/argon ratios)

Used wood, pelts, rocks

Burials: ochre nearby, grave goods, from 100K BP

Sometimes fished, hunted

Marks on bones, not necessarily cannibalism

As far east as Kurdistan and Palestine, north to Sweden, south to Spain

Flint tools, biface (symmetrical) “Swiss army knife” utensil

See: <http://www.astrosurf.com/luxorion/Bio/cro-magnon-caverne.jpg>

What makes us human? Not bipedalism (chickens) but “refusal/defiance of his condition”

Le grand refus – challenge against the universe

Gesture more than function: both practical and artistic

Cro-Magnons – Upper Paleolithic ca. 40-50000 BP

Use hand lamps (juniper fuse, animal fat), also torches

Social systems implied by hunt – chasing animals over cliffs

Cave bears until 15000 BP (300-800 kg, 2-3 m long, 1.3 m high)

Materials: animal, mineral (paintings), vegetable’

Supplies for hunting and for art

Feathers – arrows

Ivory

Shells

Flints found in specific sites

Shells and bones used for apparel

See:

http://www.megalithic.co.uk/a558/a312/gallery/France/Aquitaine/aP5190370_Cro_Magnon.JPG

<http://www.mos.org/evolution/fossils/photos/cro-magnon.jpg>

Cave painting as needing many technologies – plural

What are they? Tools: Minerals, binder, brush, light, ventilation, state of mind/psychotropic mechanisms

Also network of connections – emphasized by Christian – also true of art today

Also riddle of consciousness –

Mystery of motivation

symbolic capacity: what does this mean?

Paabo on questions for which we will never know the answer

Discovery of imagination?

Font de Gaume

15-17000 BP – warmer then

The most extended frescoes are at the back, difficult to see

See: <http://www.donsmaps.com/fontdegaume.html>

Sophistication of the images

Perspective: twisted, to show movement

“3-D”

Cinematic effects

Curves of stone make belly of horses

One leg serves for both bison and deer

Mastery of observation of habits, shapes

Two colors/ polychromatic, only one still open

Iron oxide is red, manganese dioxide powder is black

Four types of images: animals, stick people, geometry (tectiforms), hand

Ways of making images: hand/fingers, brush, blowpipe

100% humidity, necessary to keep paint on walls, mixed with water

See: <http://williamcalvin.com/BHM/img/AbbeBureulCopy.jpg>

Les combarelles

Very narrow

600 engravings mainly horses 52 of the anthropomorphic

15000 BP

Discovered 1901 authenticated by Abbe Breuil

Flint used to engrave

Calcite over engraving

Lascaux – “Sistine chapel of prehistory” – shaped like a sanctuary

Discovered 1940, closed since 1963

Lascaux II

“light show” of guide

¾ view, overlaps of herd

Forelegs of cow are stone

Stylized animals: horses have small head, deers have big antlers

The shaman? Sorcerer?

Cougnac

Pillar in middle

Music, on stalagmites and tites – flute found

Inner sanctum

Broken stalagmites/tites en route

Great drawing showing how stone shapes are used for legs of ibex

Wounded human figures on animals

Many “blazes” on animals

Drawn 25000-27000

Finger marks 14000

Pech-Merle

Very hard to get to, sealed up 12000 with return of cold weather

16000 BP black frieze’

Black frieze: horse, bison, mammoth

Also mammoth and auroch (black frieze)

One artist, knew order, sketched first

Elongated head of bear so you see it as if from an angle

Horse done 24000 BP – hands – red dots, ochre, spitted dots

Also aviform and tectiorms and

One line does a mammoth

Sketched with finger first

Claw marks of cave bear - teeth

Footprint of children, teenage boy

Get dates of Chauvet

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