

Archaic behavior

- What sorts of behaviors are first seen among the archaic humans, including the Neandertals?
- What sorts of tools were they making?
- How were they hunting?
- What was special about their behavior?
- What do these mean about the human adaptation at this time?

Modern Humans

- What are Anatomically Modern *Homo sapiens*?
- Why are they so hard to define?
- What features are used to define anatomic modernity?
- When and where do these features first appear?

Spread of Modern Humans

- When and where do modern humans first appear?
- When do they appear elsewhere in the world?
- Do all modern humans across the world show the same morphologies?
- Where is the last place that we find modern humans?

Modern features

- high, rounded cranium
(greatest breadth high on the parietals)
- less suprastructure development
- tall, nearly vertical frontal bone
- face larger under the cranium



Modern features

- mean cc 1350 (range 1000-2000)
- small teeth
- CHIN
- early ones show more primitive technologies, later share technologies with Neandertals



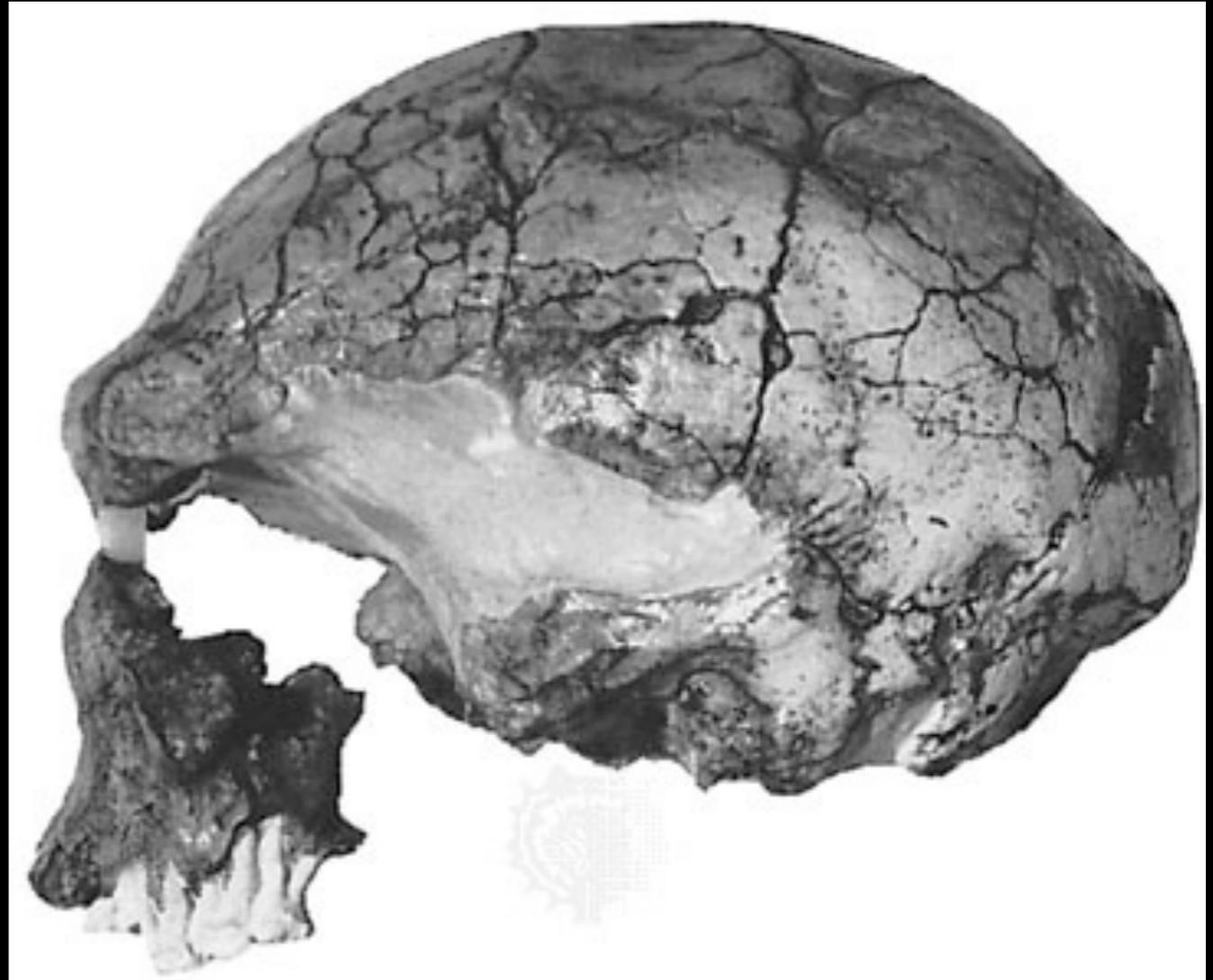


Modern variety



Herto Bouri
Ethiopia
160,000-154,000

Laetoli 18
129,000-108,000



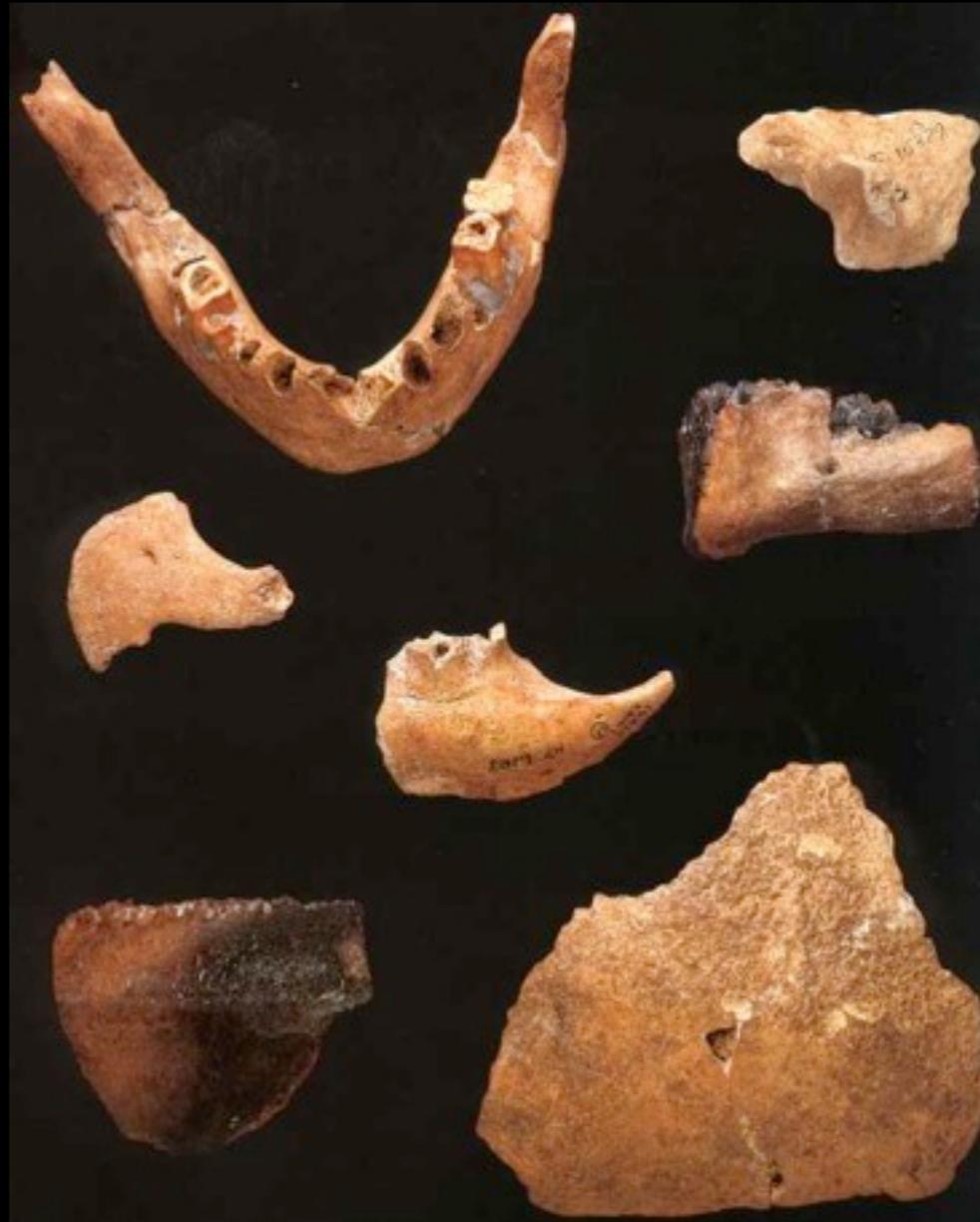


Omo
130,000 - 60,000

Omo 2



Klasies River Mouth 118,000-60,000



Jebel Irhoud
127,000 - 87,000





Florisbad
100,000

African Moderns

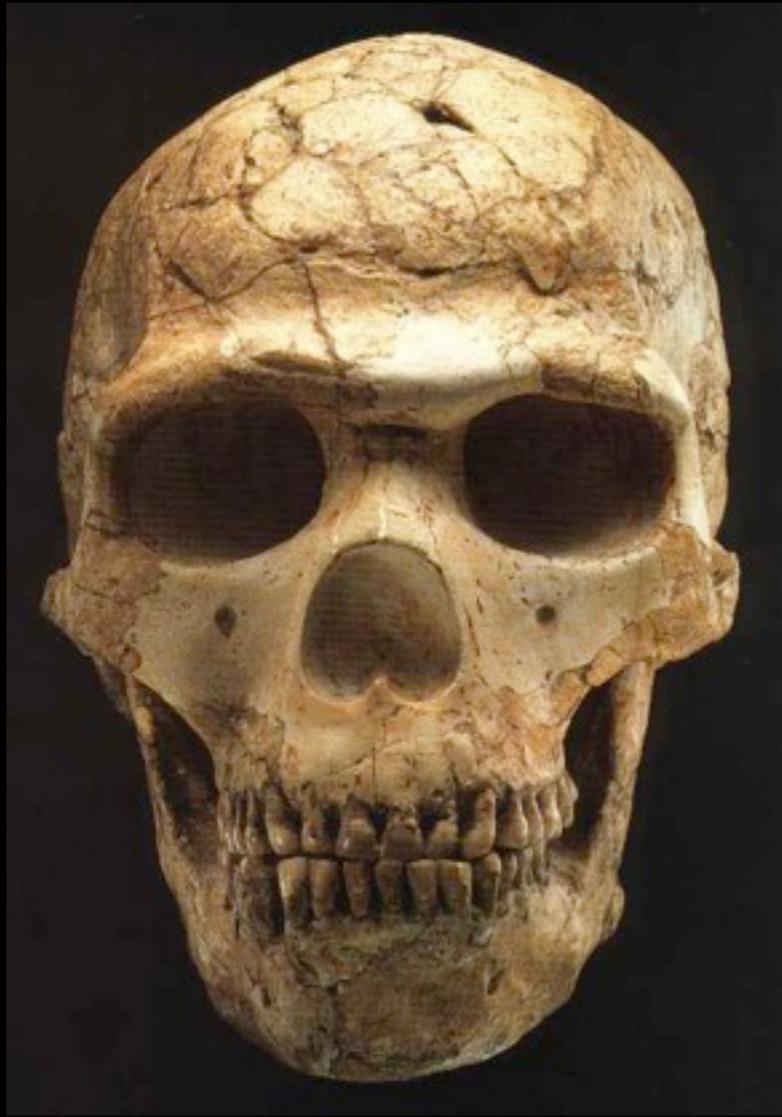
- Earlier than elsewhere in the World
- 100,000-160,000
- Mosaic of morphologies, leaning towards the modern

Western Asia

- Moderns either simultaneous with Neandertals or leapfrogging them
- Mosaic



Qafzeh



Skhul

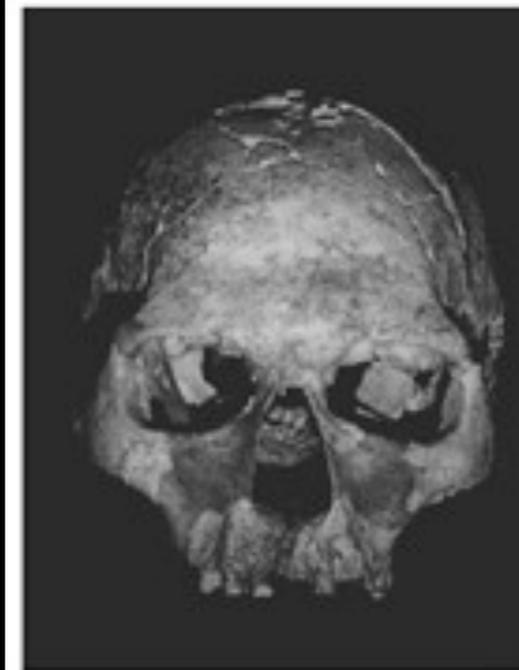
Chinese early
Anatomically Modern
date to about 70,000



Upper Cave 101



Liujiang



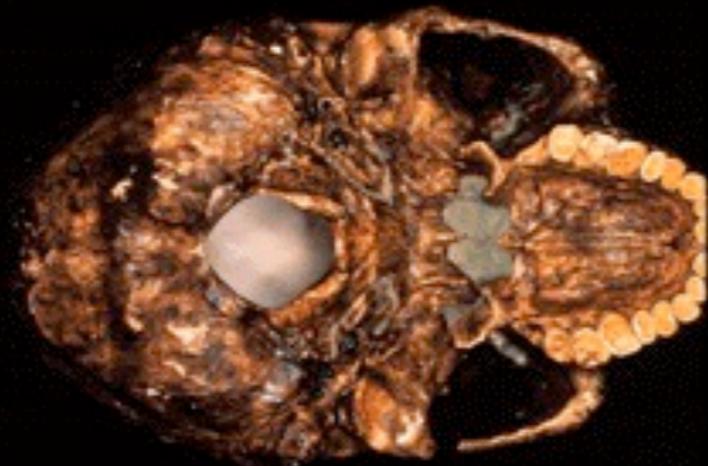
Minatogawa 1



Baoji M7

Fig. 2 Facial skeletons of Upper Cave 101, Liujiang, Minatogawa 1 and Baoji M7, all to the same scale. Note width of mid-face, orientation of malars, shape of nasal bones (not preserved in Minatogawa 1), height of face and height of nasal aperture.

Zhoukoudian
Upper Cave
30,000

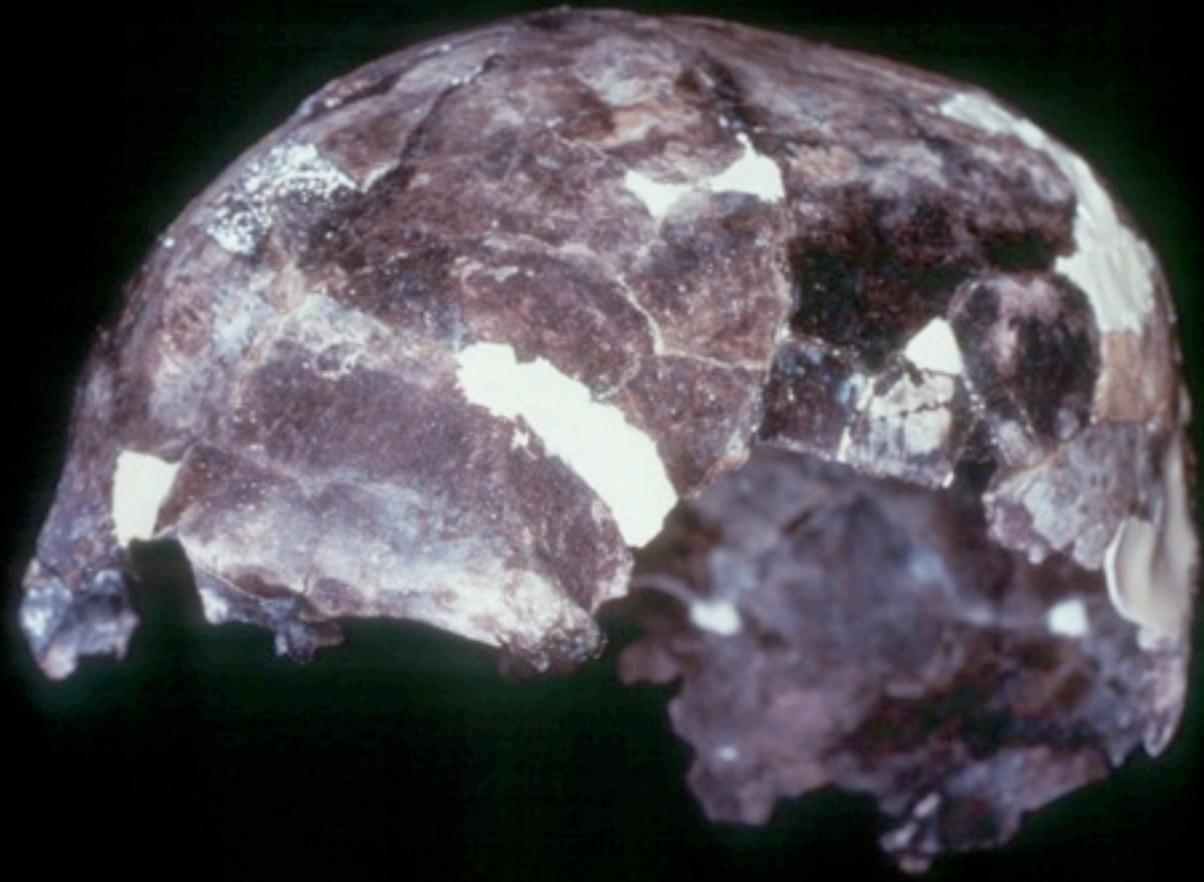


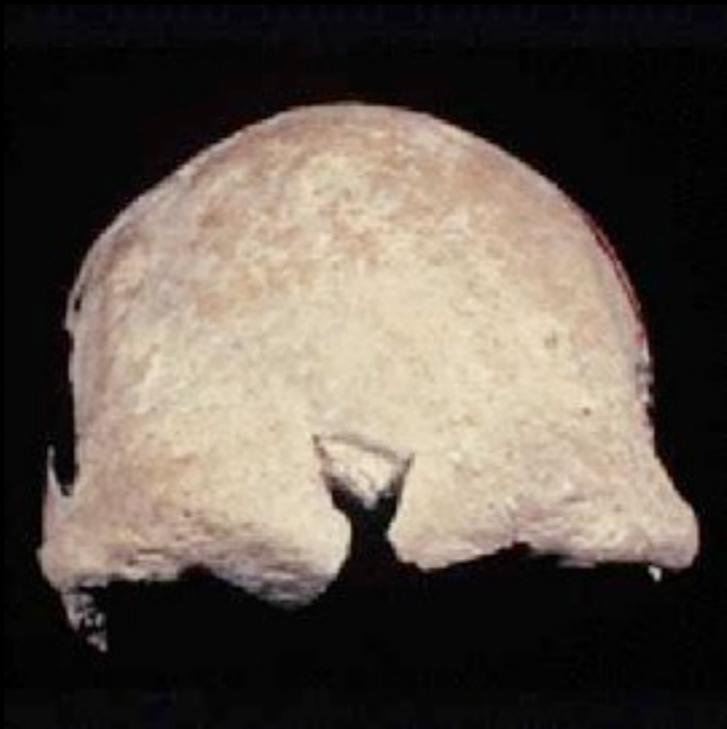


Wadjack



Mungo





Willandra Lakes



Coolbool Creek
14,000 ya

Asia summary

- Modern from at least 70,000
- With some very robust features
- On Australia from about 60,000



Predmost

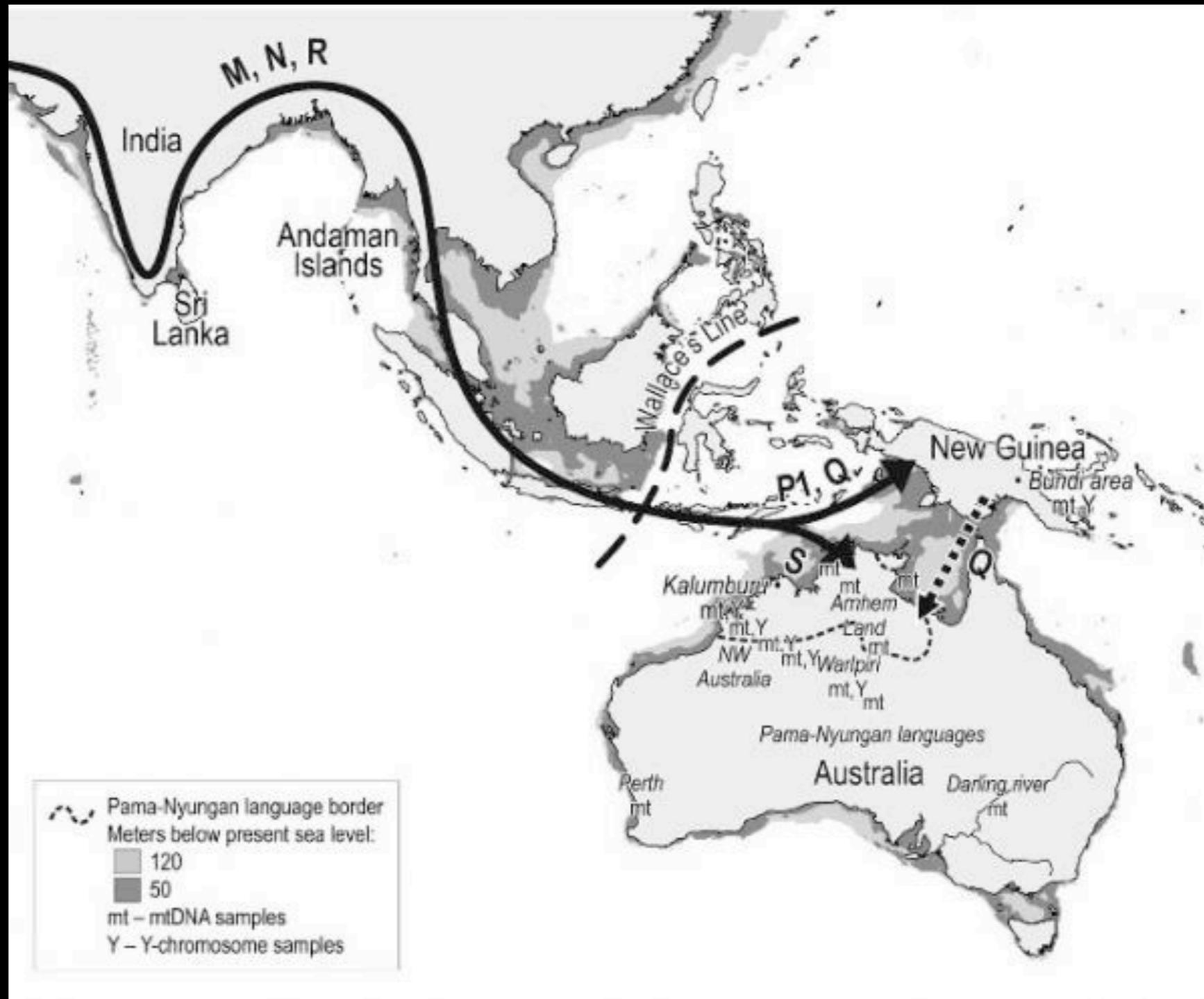


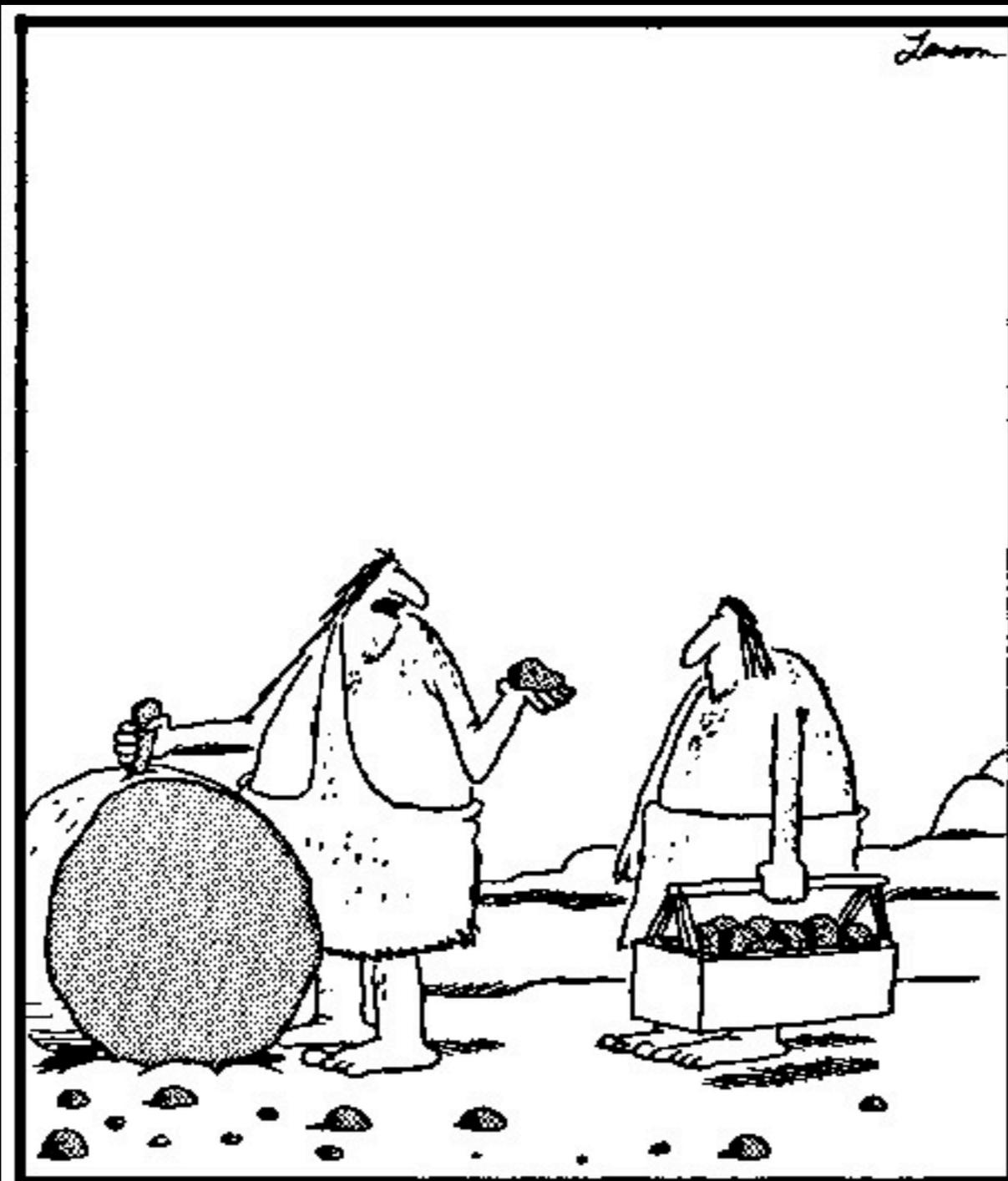
Cro Magnon

What is “Modern Behavior”?

- language?
- complex tools?
- art?
- boats?
- exploiting new resources?

Getting to Australia....



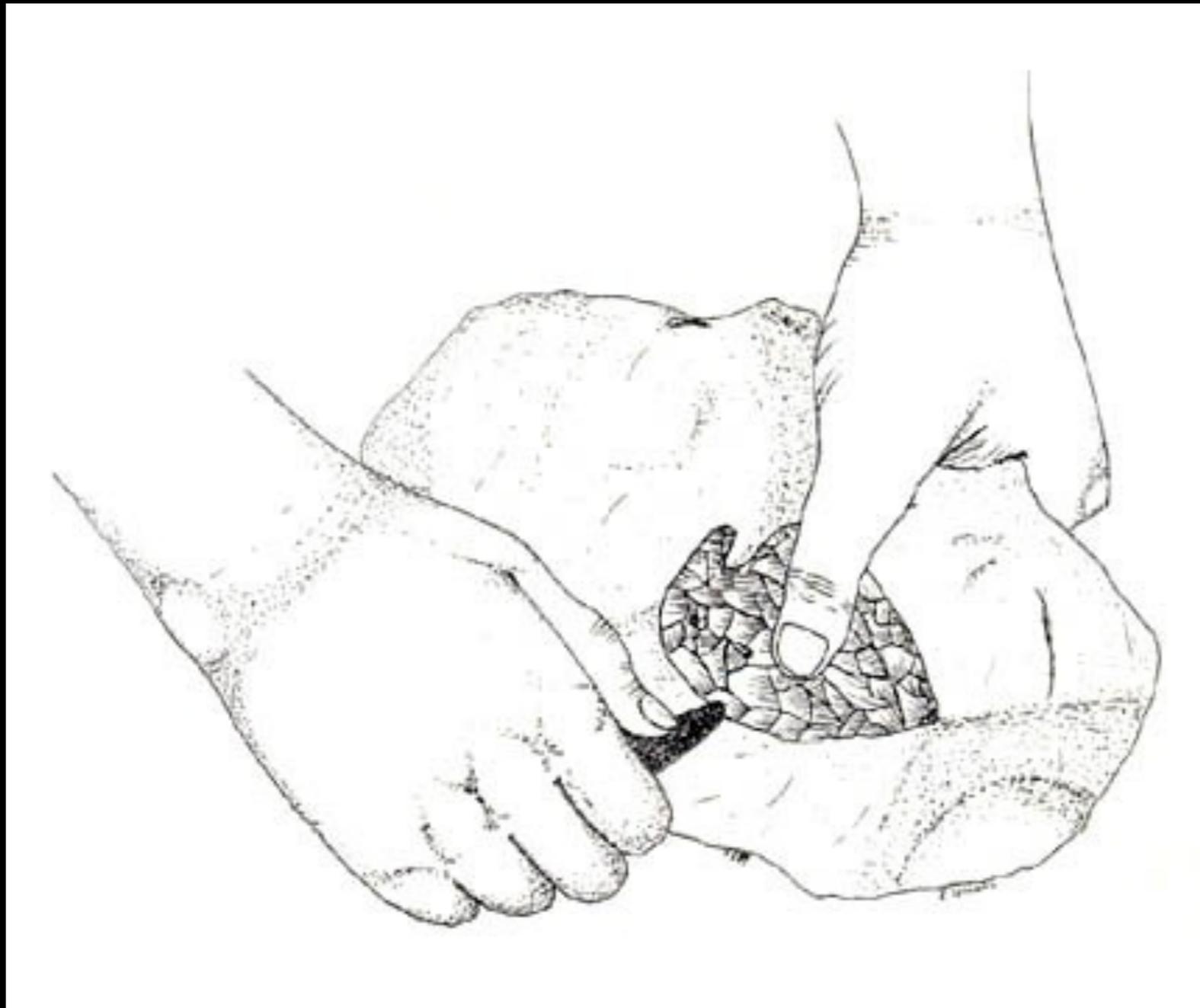


**"So what's this? I asked for a hammer!
A hammer! *This* is a crescent wrench! ...
Well, maybe it's a hammer. ... Damn these stone
tools."**

Tool industries

- Upper Paleolithic - modern humans
- Middle Paleolithic - Mousterian - Archaic humans
- Lower Paleolithic - Acheulean and Olduwan - early *Homo*

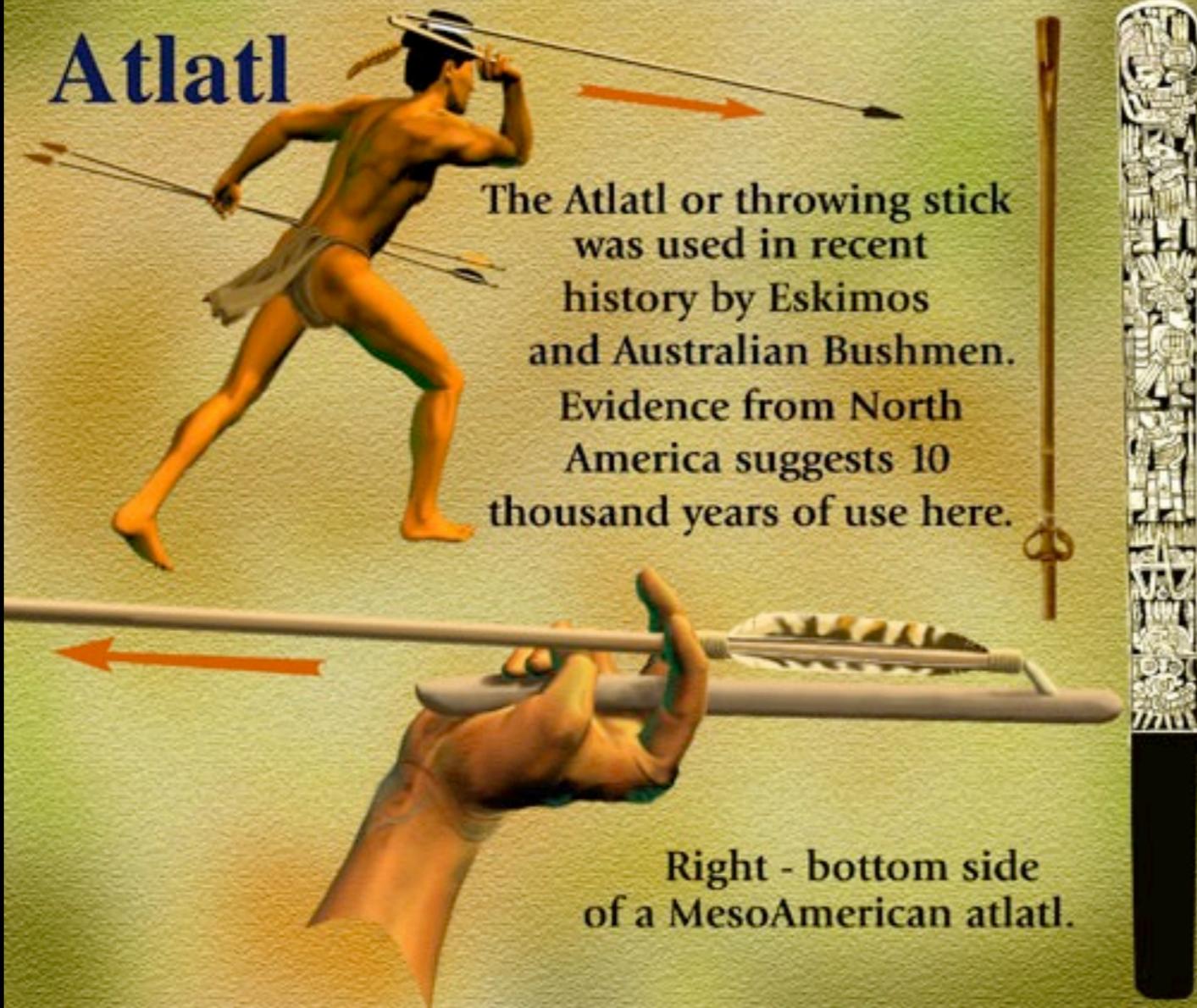
Pressure Flaking





Upper Paleolithic tools

Atlatl



The Atlatl or throwing stick was used in recent history by Eskimos and Australian Bushmen. Evidence from North America suggests 10 thousand years of use here.

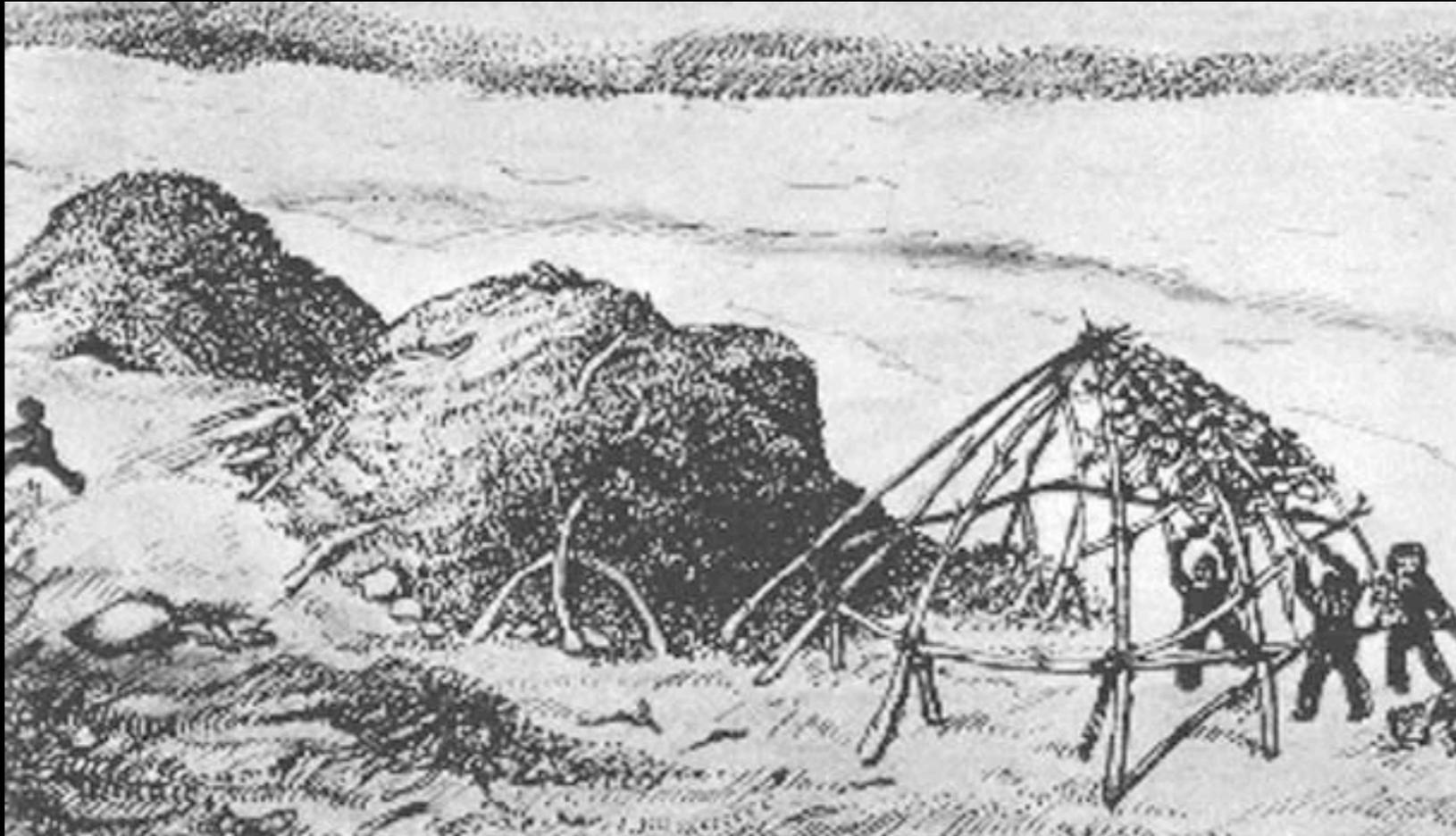
Right - bottom side of a MesoAmerican atlatl.





Atlatl

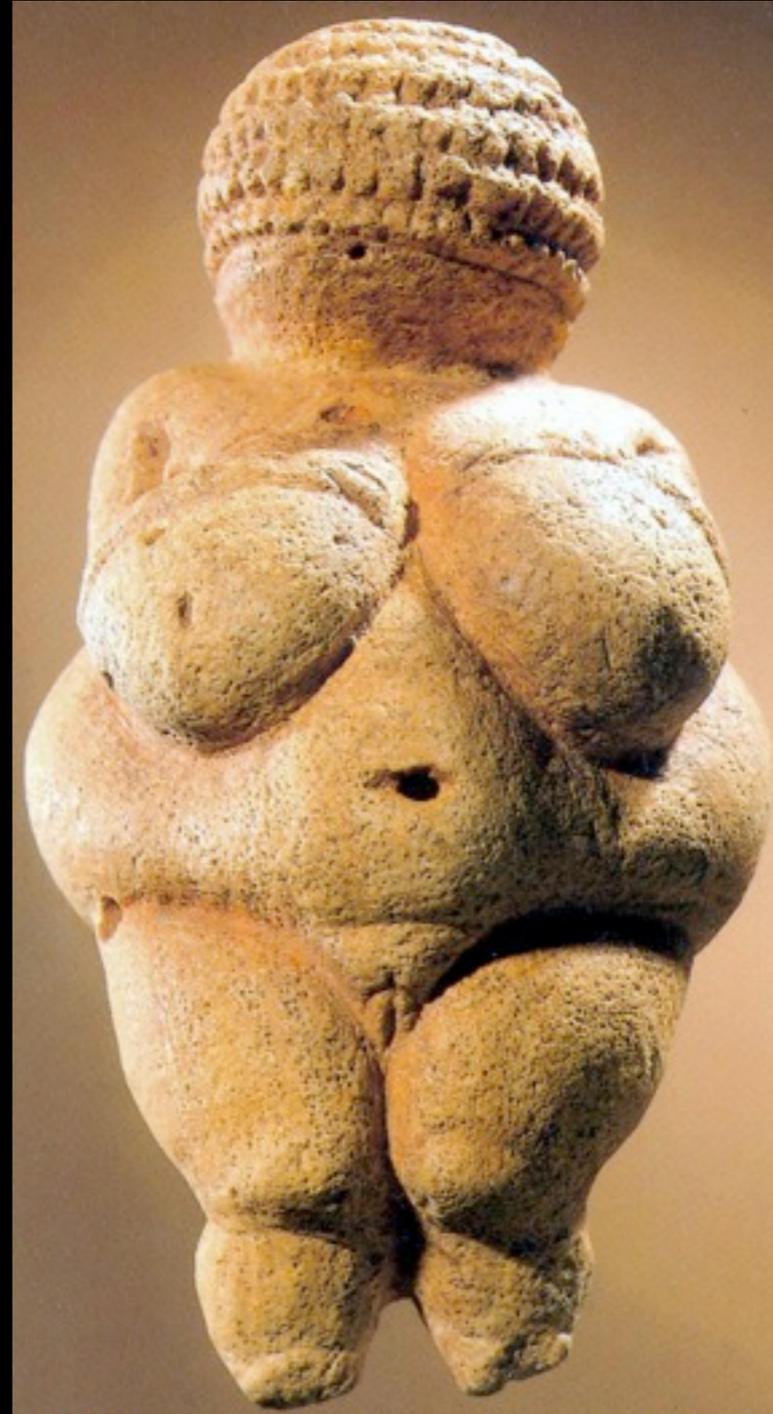




Upper Paleolithic Northeast Asia

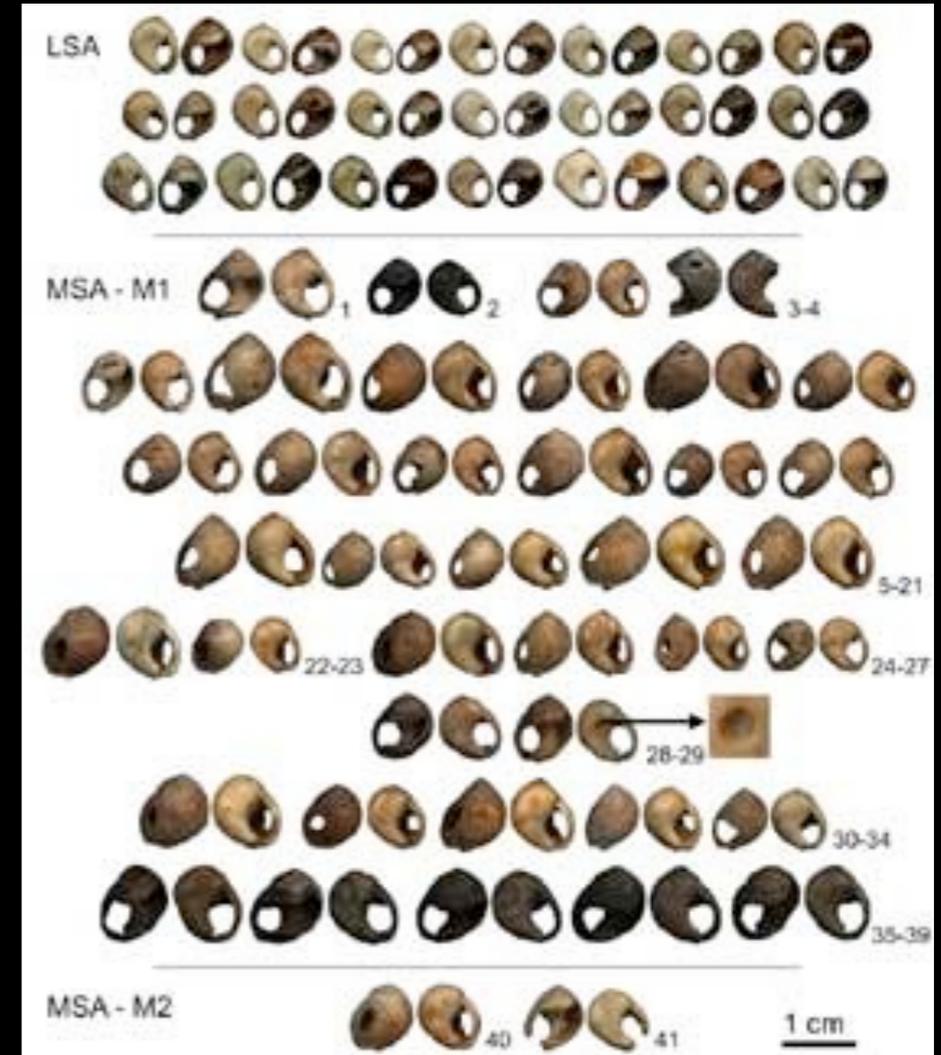


Venus of Willendorf
25,000 ya
Austria





Pendants and Figureine
from Dolni Vestonice
25,000



South Africa Shell Beads -
75,000!

Neandertal ornamentation?



Spain, 50,000

Upper Paleolithic Clothing?

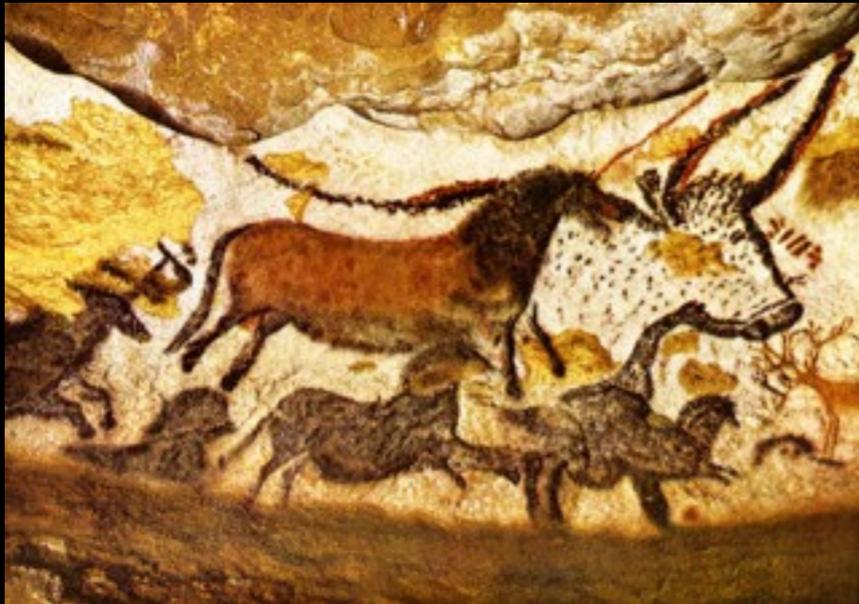


Bear tooth bead
18,000





Parietal art from Upper Paleolithic Europe



Lascaux





South African Rock art
27,000



Zambia 35,000-40,000



Engraved Ochre - 75,000





Rock art on cliff face in Huashan, Southwest China

Parietal Art, China



Aboriginal Rock art dates to as far back as 40,000 years



Wall Paintings from Queensland Australia

And then what?

- Significant anatomical and behavioral changes
- Modern humans spread around the world
- Population size greatly increases



A



B



C



D



E



F

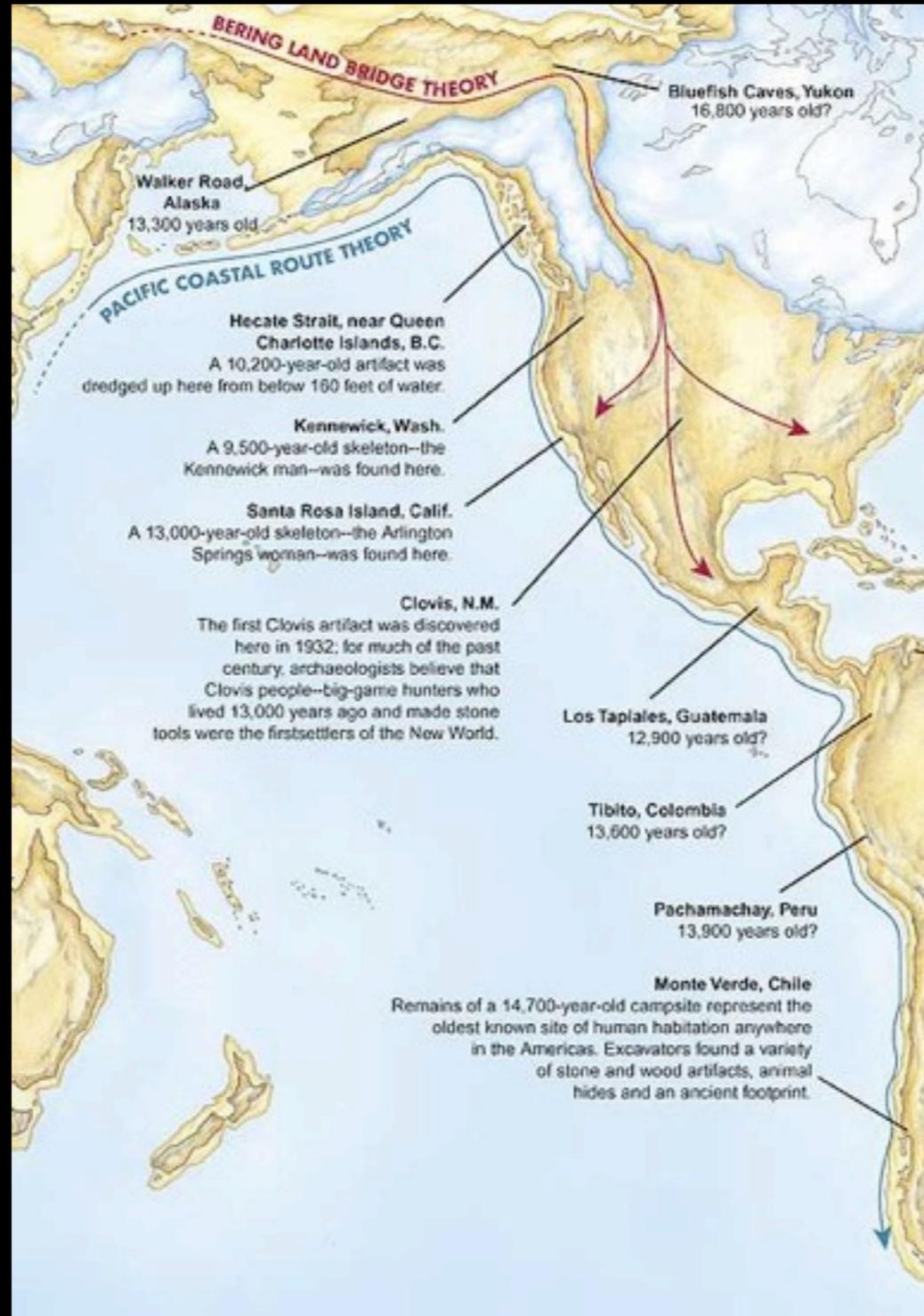


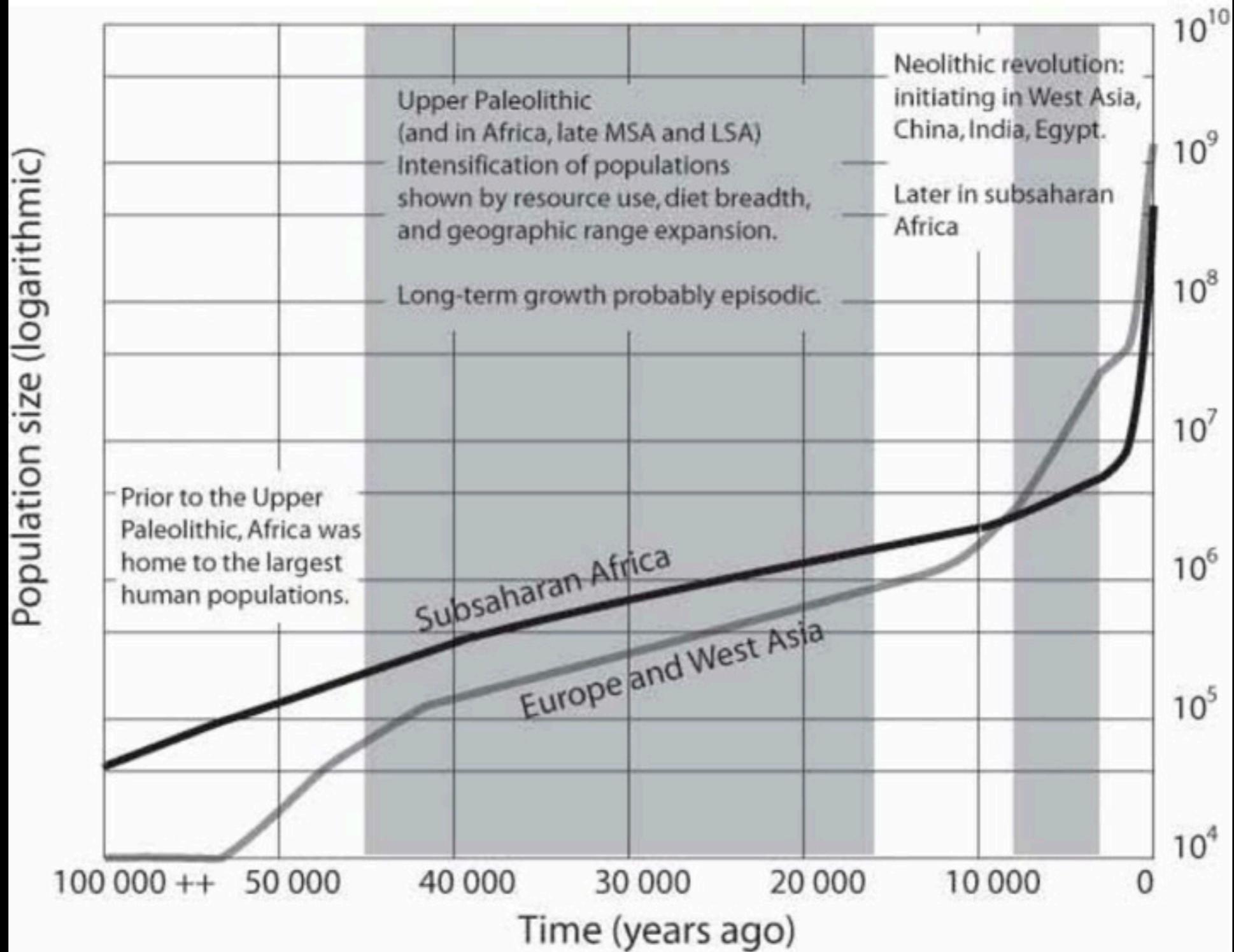
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Bering Land Bridge





New Tools





Mesolithic tools

Mesolithic Canoe

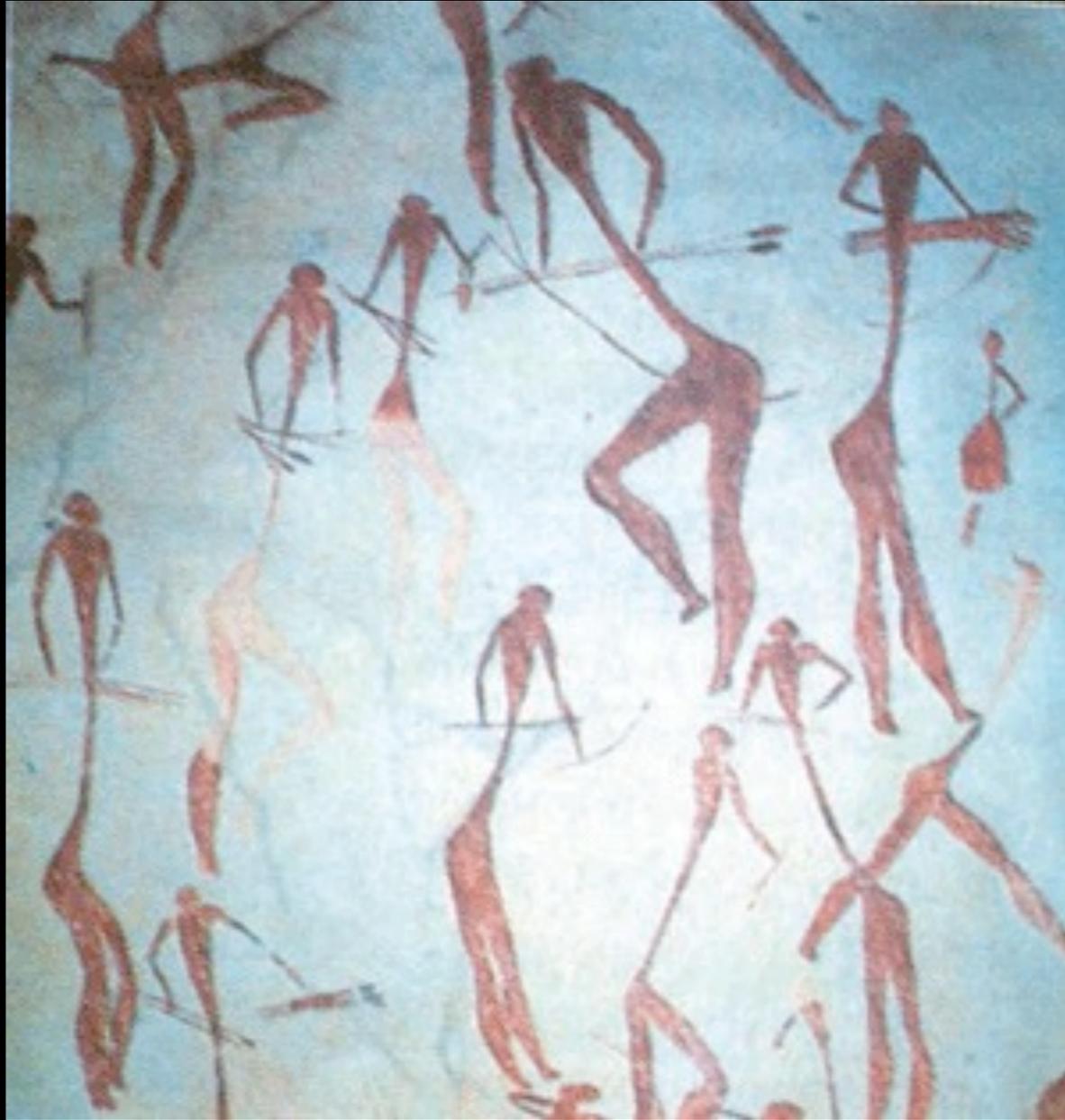


Replica of a Mesolithic Hut



Mesolithic fish trap, Ireland

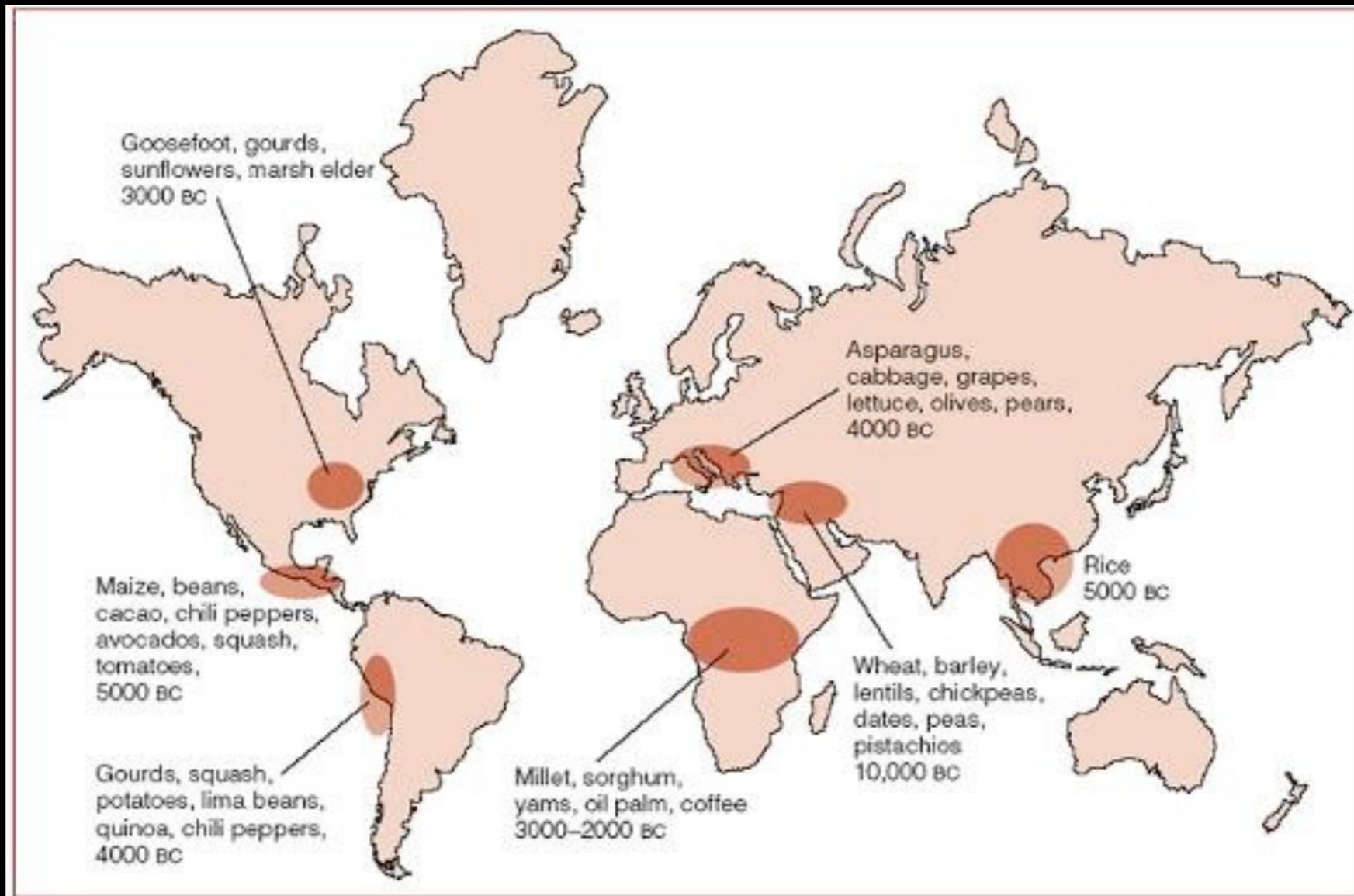


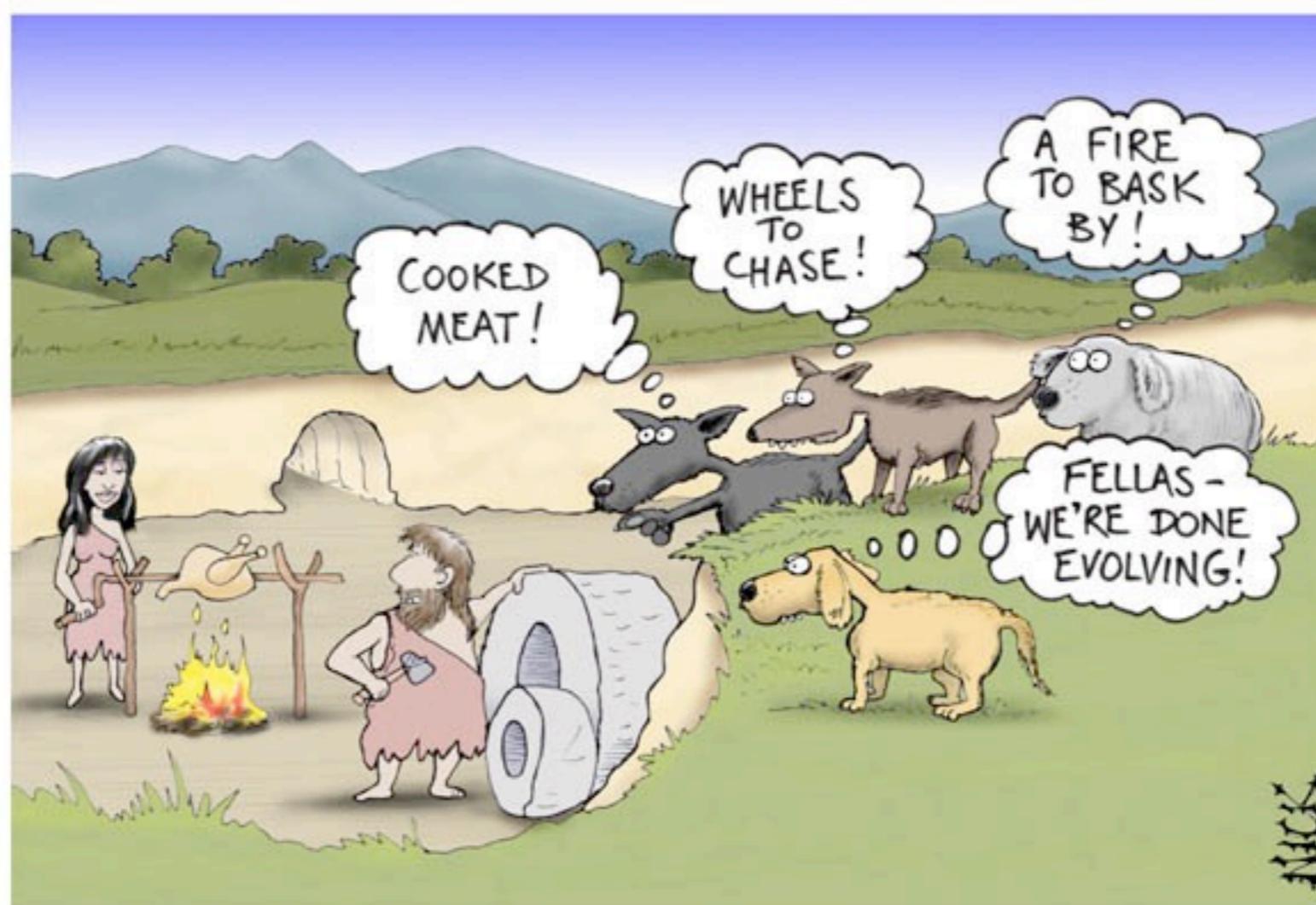


Mesolithic Painting depicting Bow and Arrow



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Forget the experts; domestication of the dog only took about 8 seconds.

Neolithic Pots -- About 6000 years old

