



ARCHY 483

Analysis of Stone Artefacts

Spring 2019

Lecture 9

Upper Palaeolithic: blades, microliths,  
Châtelperronian, Aurignacian, Gravettian,  
Solutrean, Magdalenian

Q1. Why is Nick Toth's classification system for the Olduwan better than Mary Leakey's?

Q2. What are the three main types of stone artefact that are found in Achuelean assemblages?

Q3. What two differences between handaxes found in East Africa and East Asia?

Q1. How is Richard Klein's view of the Middle Palaeolithic wrong?



Q2. Name two of the key contributors to the Mousterian debate, and summarise their positions.





# Q3. What do Middle Palaeolithic stone artefacts from India tell us about Stanley Ambrose's hypothesis?





Spring 2019

Home

Announcements

Assignments

Discussions

Grades

People

Pages

Files

Syllabus

Outcomes

Quizzes

Modules

Conferences

Collaborations

Chat

Attendance

UW Libraries

Add 4.0 Grade Scale

Panopto Recordings

Settings

## Experimental assemblage report: step 2

Published Edit

Related Items

SpeedGrader™

The purpose of this assignment is to guide you in collecting the data in a timely fashion, so you have time for the analysis and writing. This will help to make the Experimental Assemblage Report easier for you.

Here are the specific steps:

- Enter data into your spreadsheet from **at least 20 artefacts from two of the five experimental assemblages**. By 'artefacts' we mean complete flakes, retouched pieces, cores, flake fragments and debris. For big assemblages with way more than 20 artefacts, start with retouched pieces, complete flakes and cores and stop when you have 20. Eventually you will need data on at least 20 artefacts from all five assemblages to complete this assignment. But for now, two assemblages is a good milestone. If an assemblage doesn't have 20 artefacts, don't worry, record all that are present.
- Upload your spreadsheet file** (in xlsx format) with the data you have collected so far to Canvas as your submission to this assignment.
- Each member of your group must **individually upload** to Canvas a copy of your group's data. This helps us ensure that everyone can access the data they need for the final report.
- Note that in the final report you will need to write a brief self-evaluation and a group evaluation, describing your contribution to your group's work. Please review [our expectations about how to work well in a group work](#) to ensure that you will be an effective contributor for this assignment.

Points 4

Submitting a file upload

Due	For	Available from	Until
May 31	Everyone	-	-

+ Rubric

# **Upper Palaeolithic**

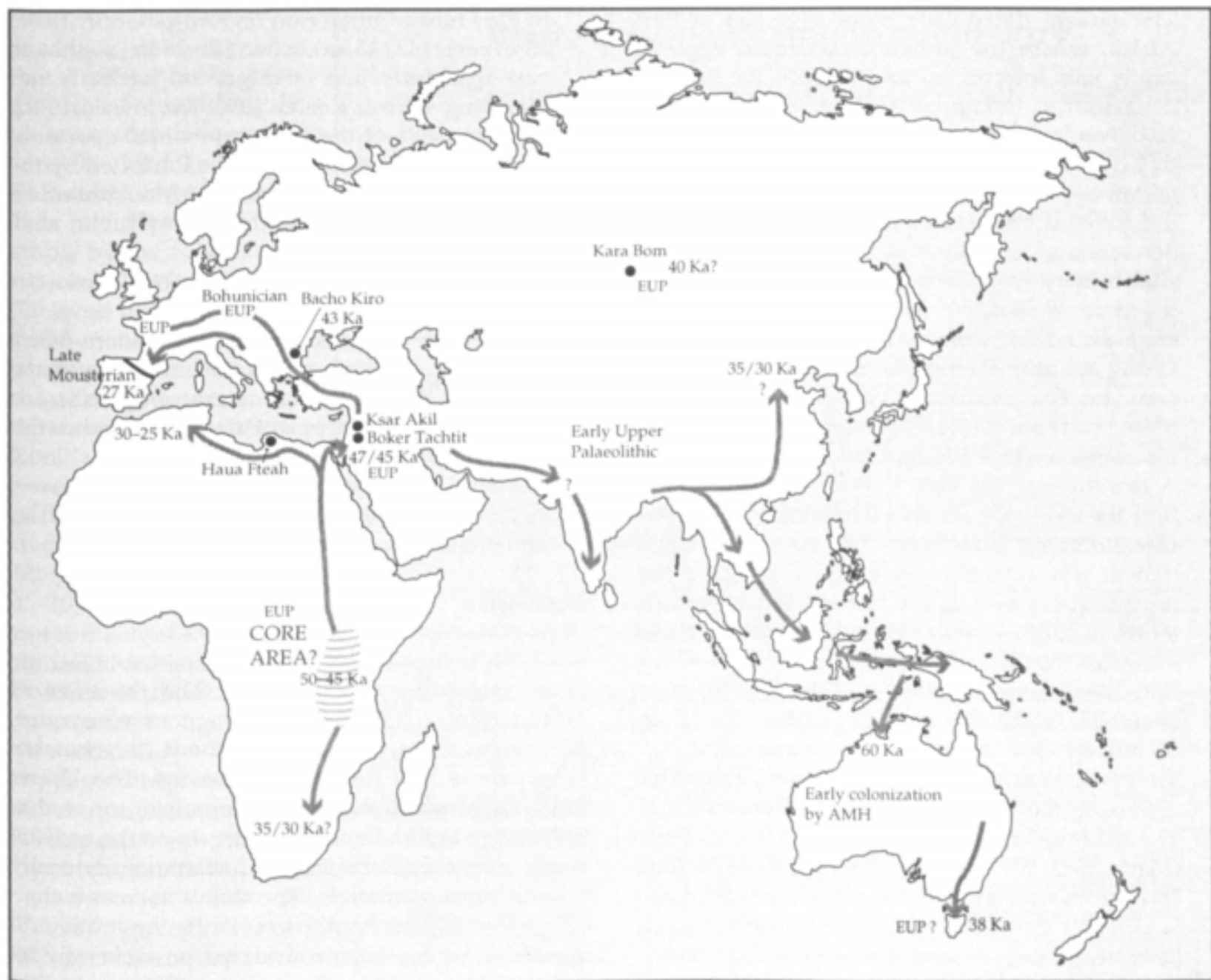
Levallois replaced by prismatic  
blade core reduction

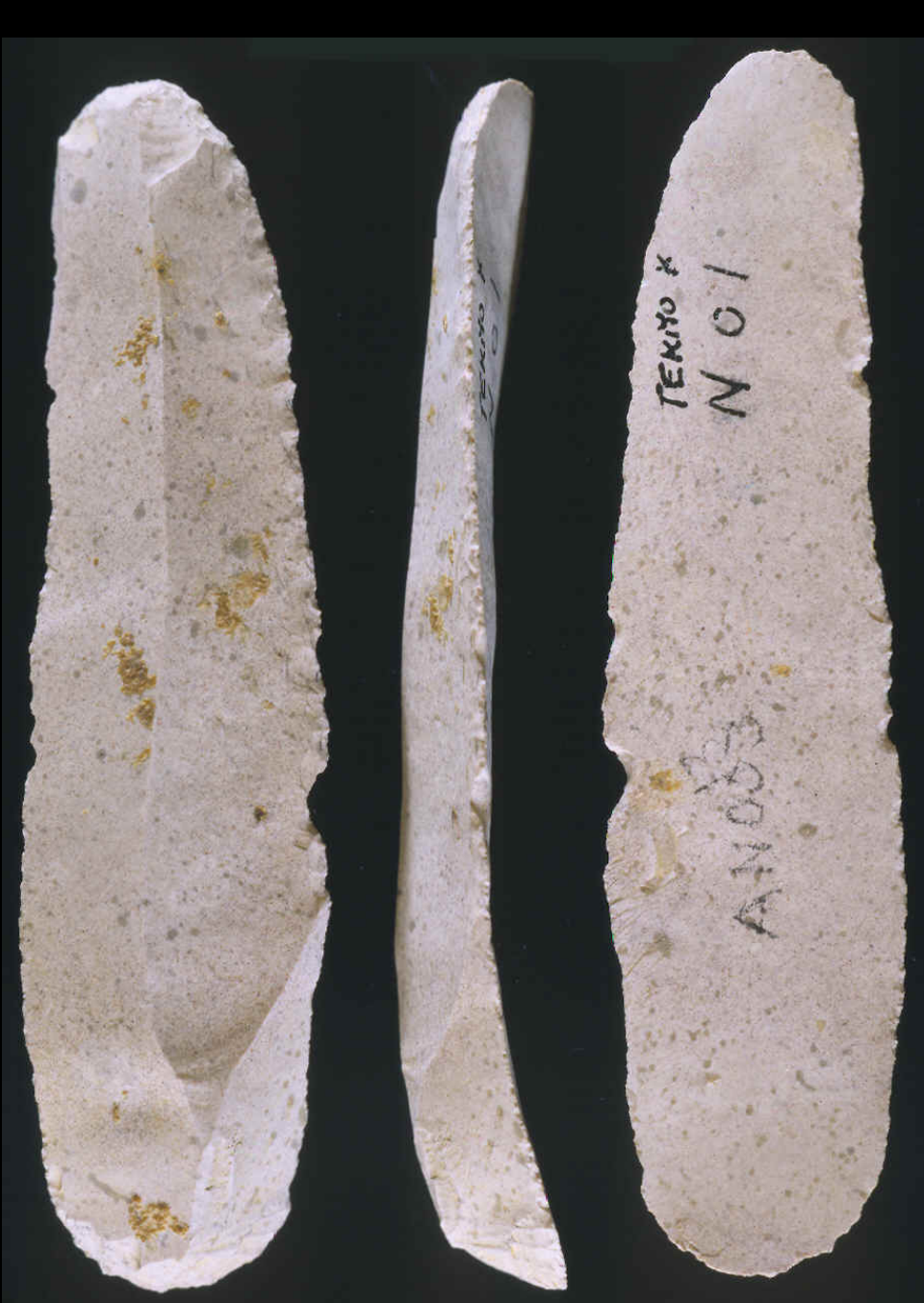
Handaxes and LCTs disappear  
completely

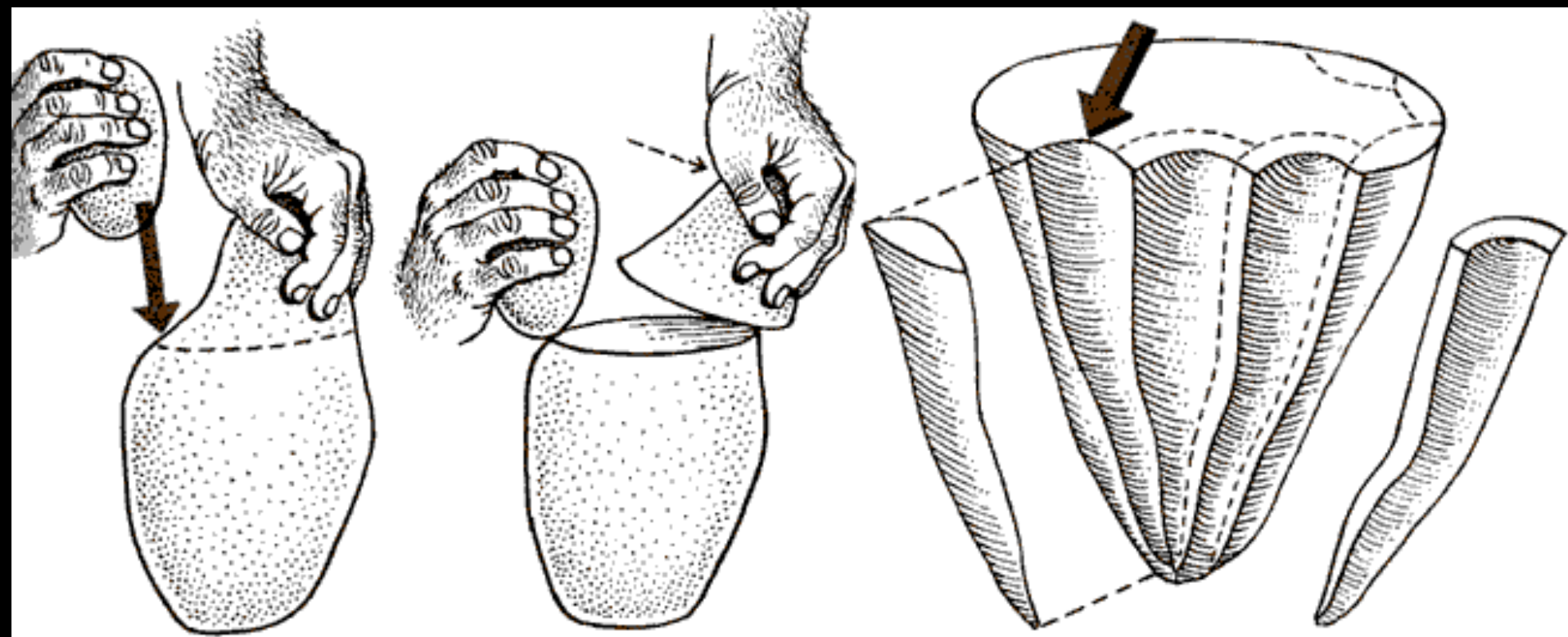
Greater numbers of burins &  
endscrapers made on blades

Some grinding stones

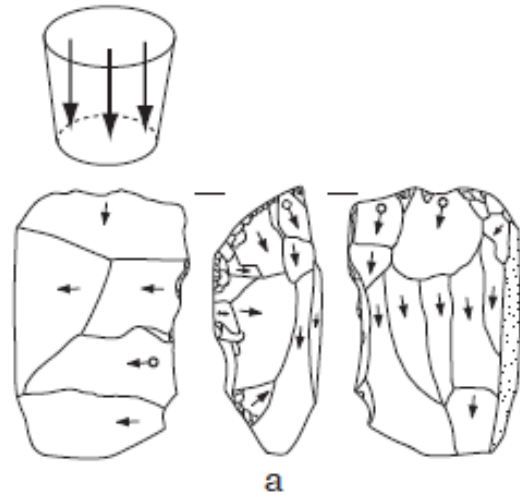




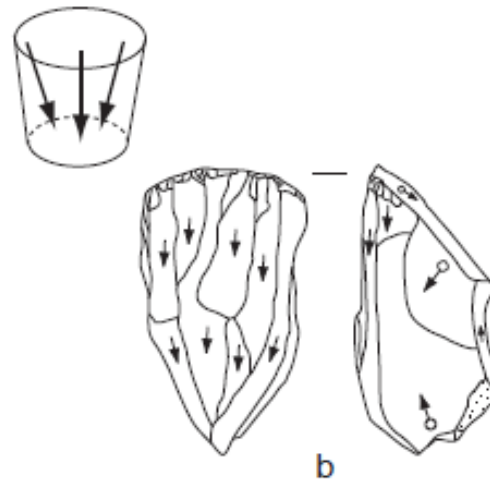




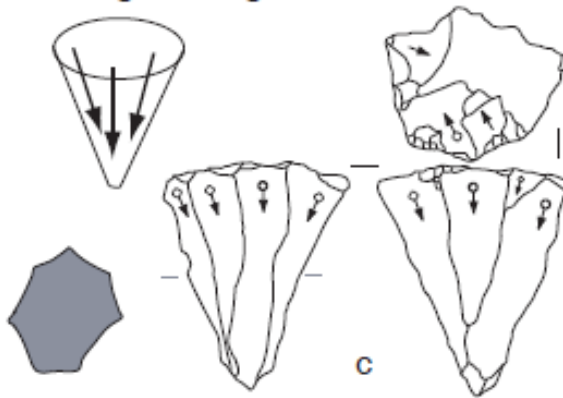
Parallel Single-Platform



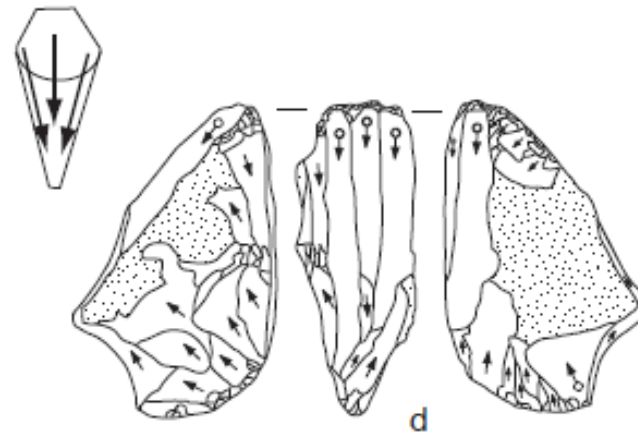
Convergent Single-Platform



Pyramidal/Cone-Shaped  
Convergent Single-Platform



Narrow-Fronted Single-Platform



Prismatic blades: cores have series of elongated rectangular or triangular flakes detached from them. "Prismatic" refers to the long, flat flake scars that occur on blades and cores. Core shapes are approximately conical or cylindrical. Flakes have ridges from previous removals that serve as guiding line for next removal.



- Systematic production of prismatic blades, with only rare cases where flake production continued to be the dominant mode (East Asia and Australia)
- The routine exploitation of animal bones, antlers and ivory as raw materials for the production of mundane or ritual tools as well as for art objects
- Systematic usage of body decorations, including beads and pendants made from marine shells, teeth, ivory and ostrich eggshells
- Long-distance exchange networks providing lithic raw materials and marine shells from distances of up to several hundred kilometers
- Development of grinding tools is noticeable in the subtropical belt including the region with the Mediterranean-type vegetation



Châtelperronian: interchangeably called Castelperronian and characterized by backed curved knives or points and bone tools

Aurignacian: with carinated (keeled, ridged) and nosed scrapers, and rich in bone, antler and ivory items, beads and pendants and mobiliary art objects

Gravettian: with straight-backed points on blades, and with many bone, antler and ivory objects

Solutrean: typified by numerous delicate bifacial tool types, most probably projectile points

Magdalenian: rich in antler and bone work, among which the harpoon types are most famous

Châtelperronian (45–40 ka)

Aurignacian (32–26 ka)

Gravettian (28–22 ka)

Solutrean (21–17 ka)

Magdalenian (18–10 ka)

Various other less interesting things

Mesolithic

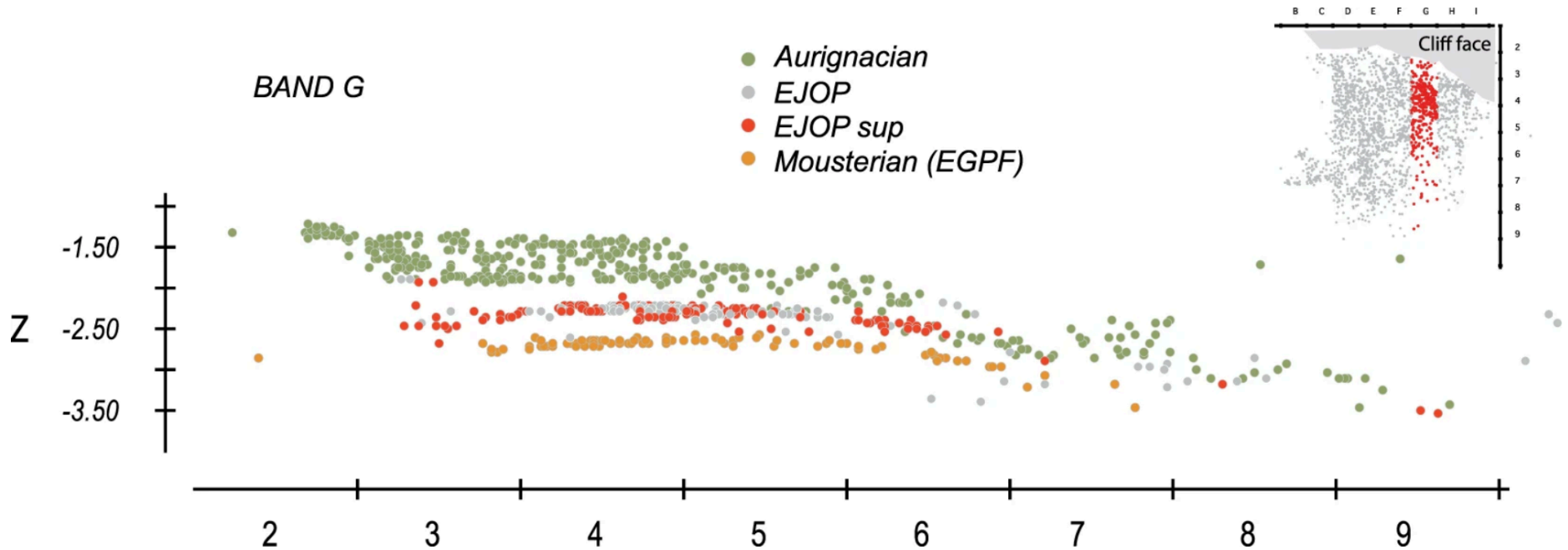
Neolithic

Modern human dispersal  
routes in Europe  
(45,000–35,000 BP)

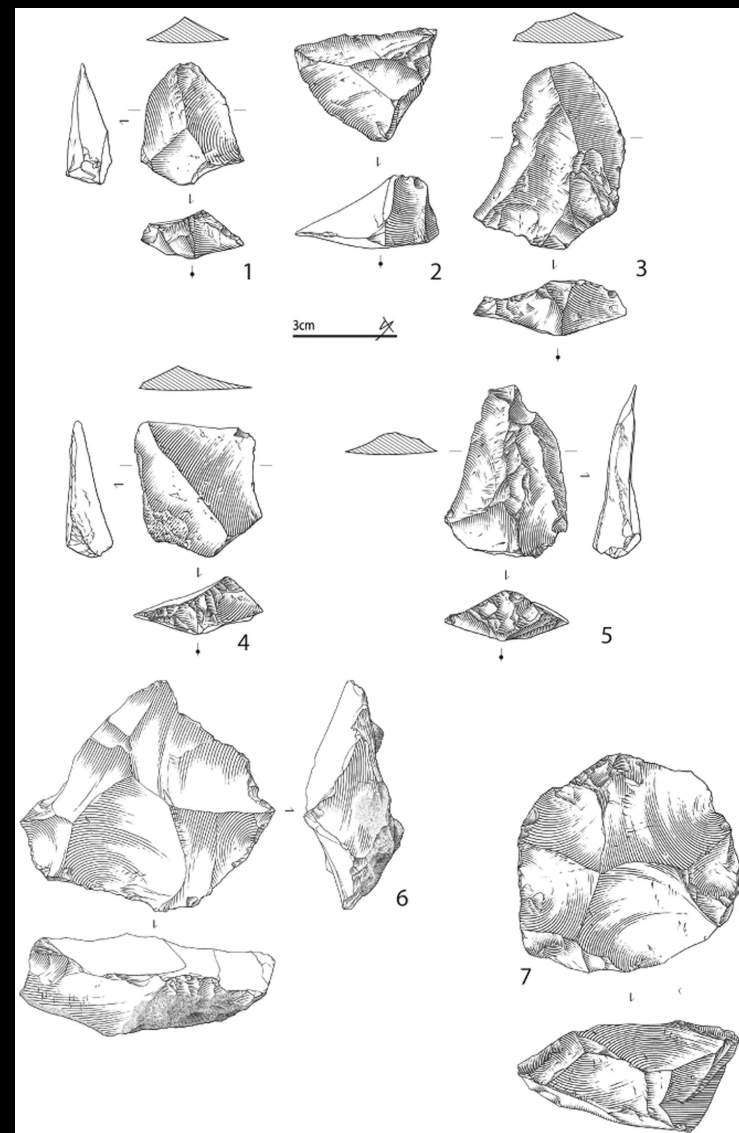
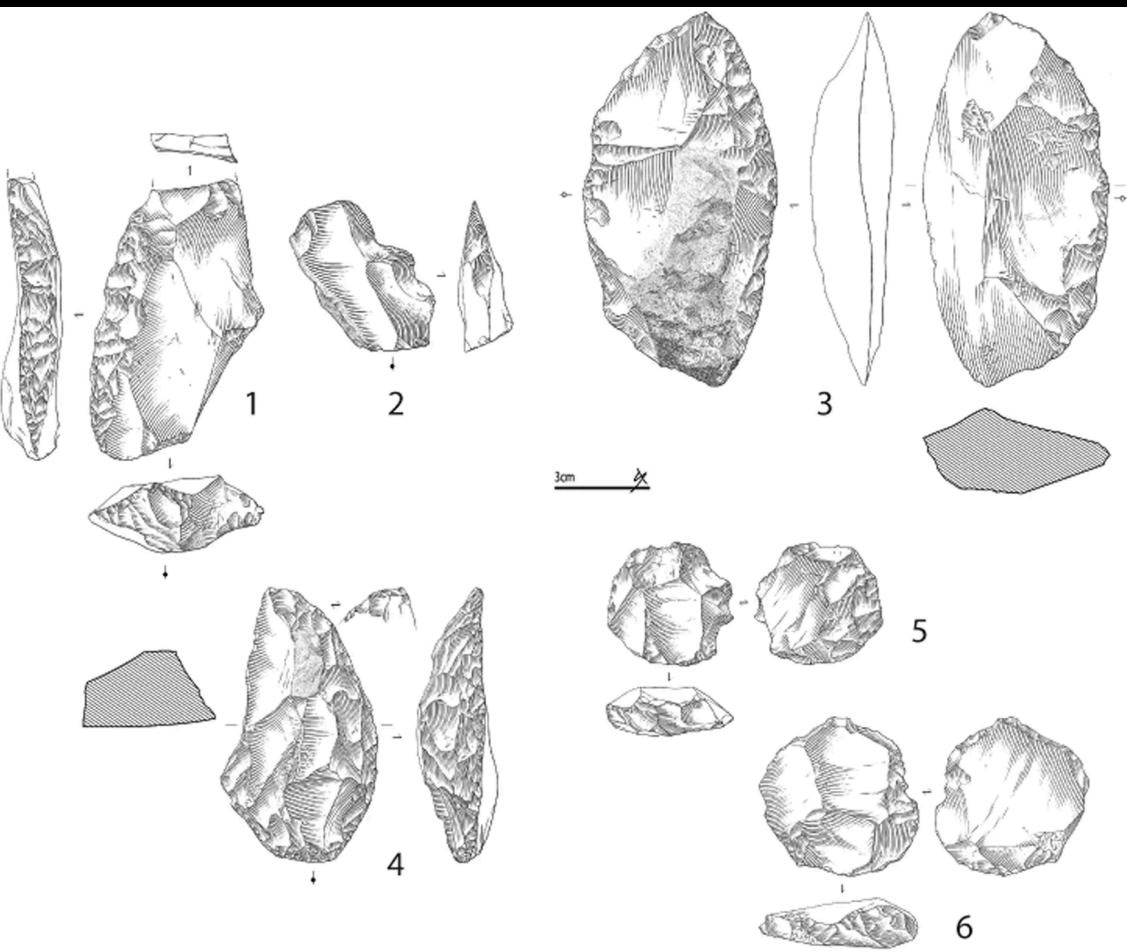


# Figure 1

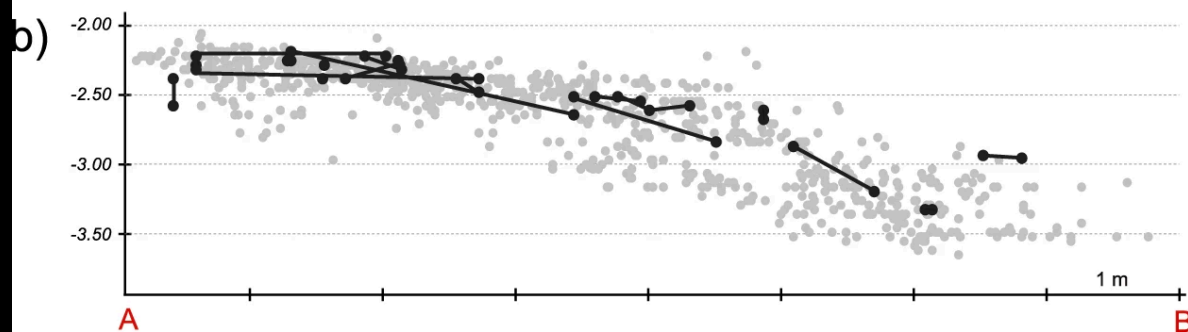
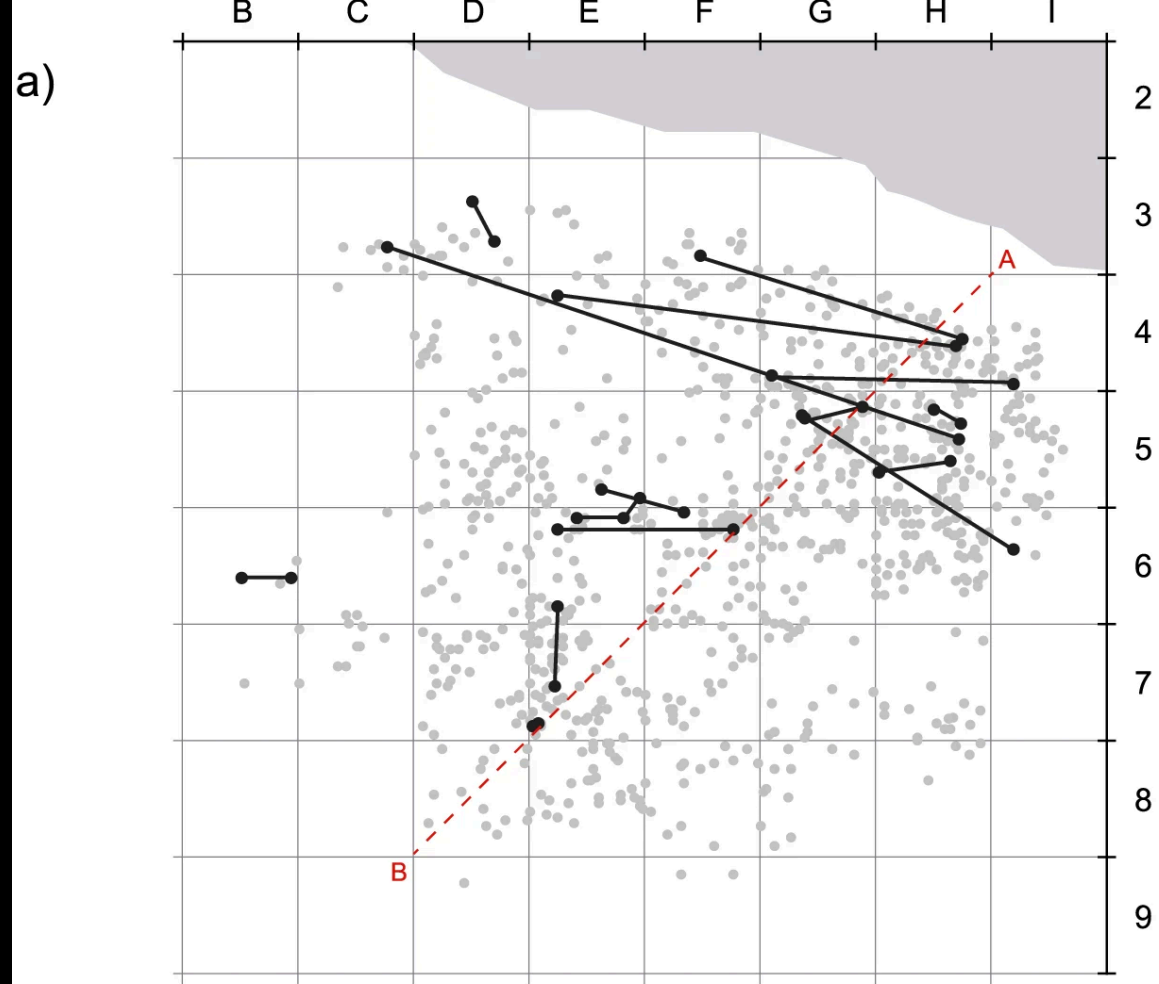
From: [No Reliable Evidence for a Neanderthal-Châtelperronian Association at La Roche-à-Pierrot, Saint-Césaire](#)



Projection of all lithic material recovered from band G during Lévêque's excavations. Note that from line 6 onwards the heavily sloped deposits mix material assigned by Lévêque to the Mousterian, Châtelperronian and Aurignacian.



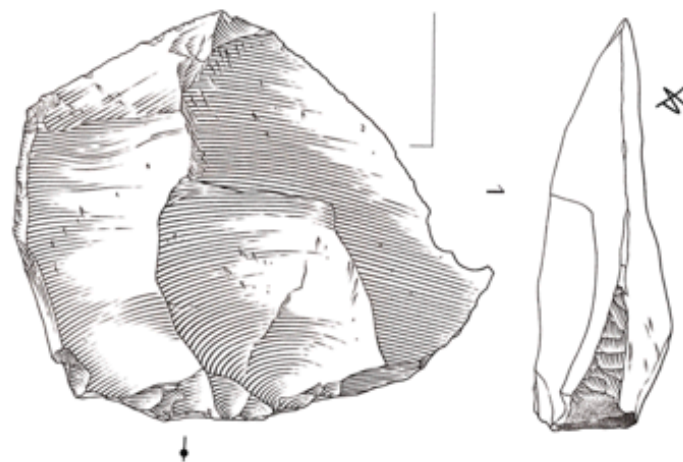




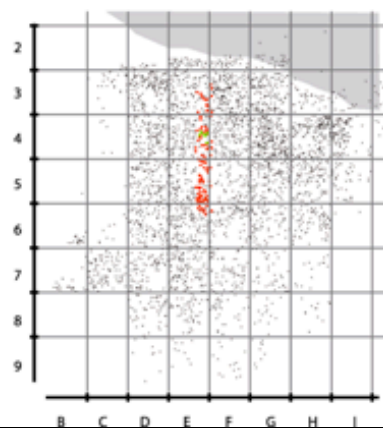
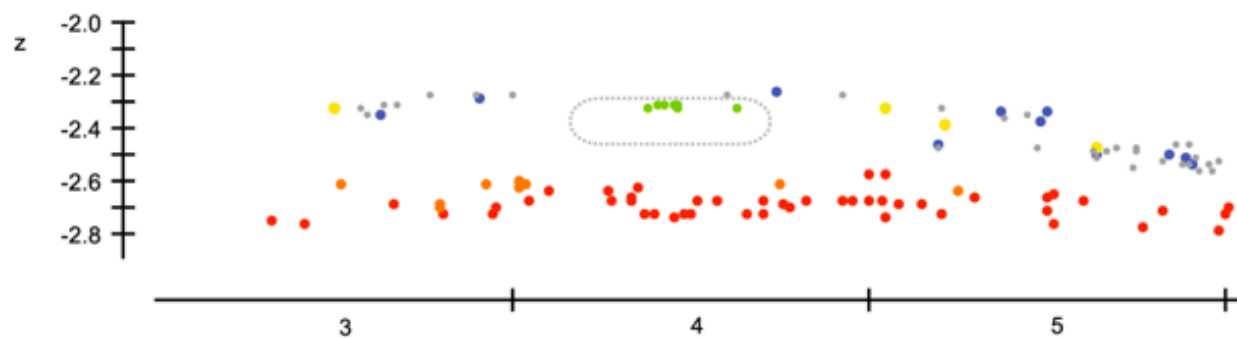
a)



b)



c)



Estimated extension of plastered block

EJOP sup

- Human remains
- Châtelperronian
- Middle Palaeolithic
- Indeterminate

EJOP inf

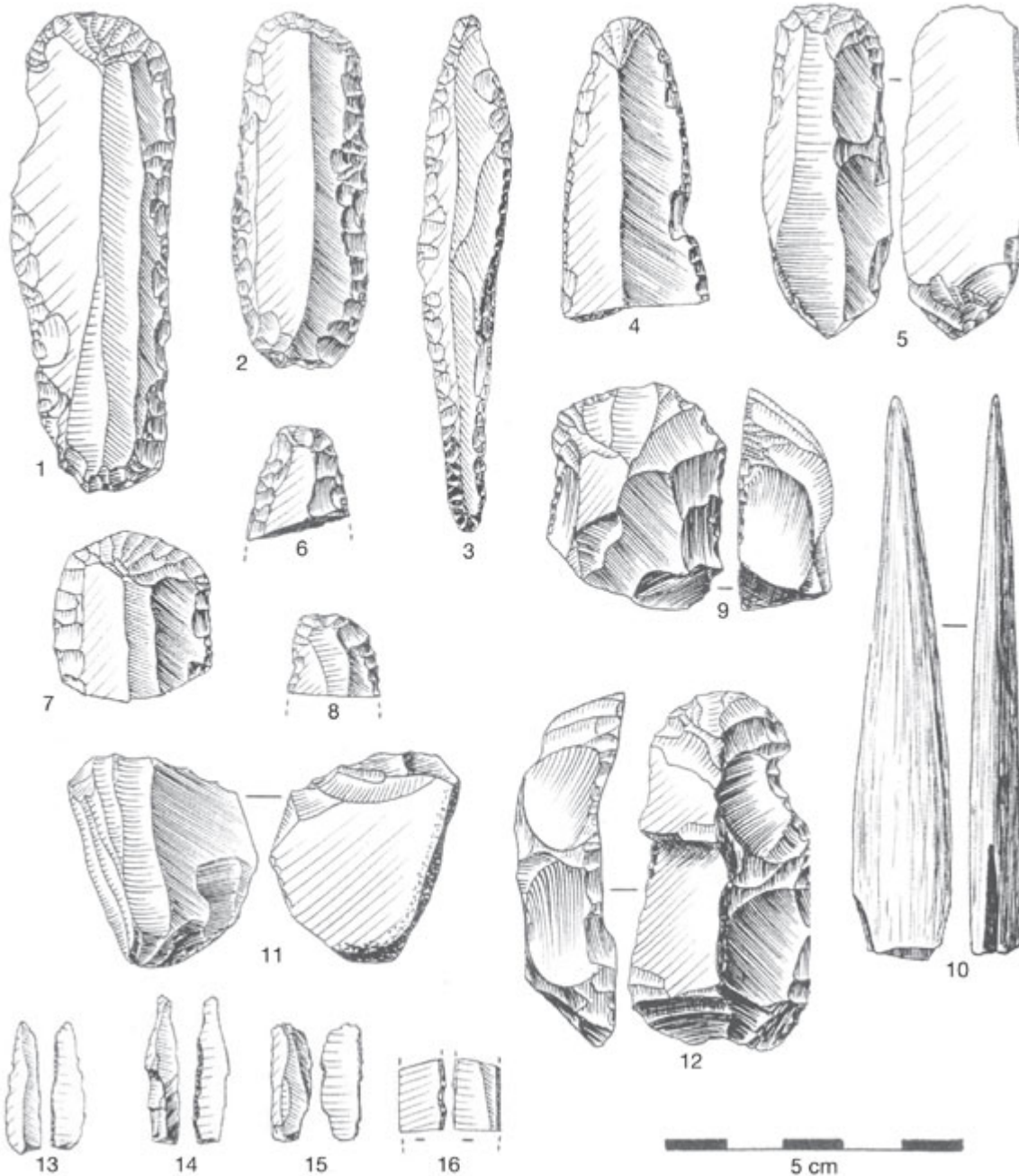
- Middle Palaeolithic

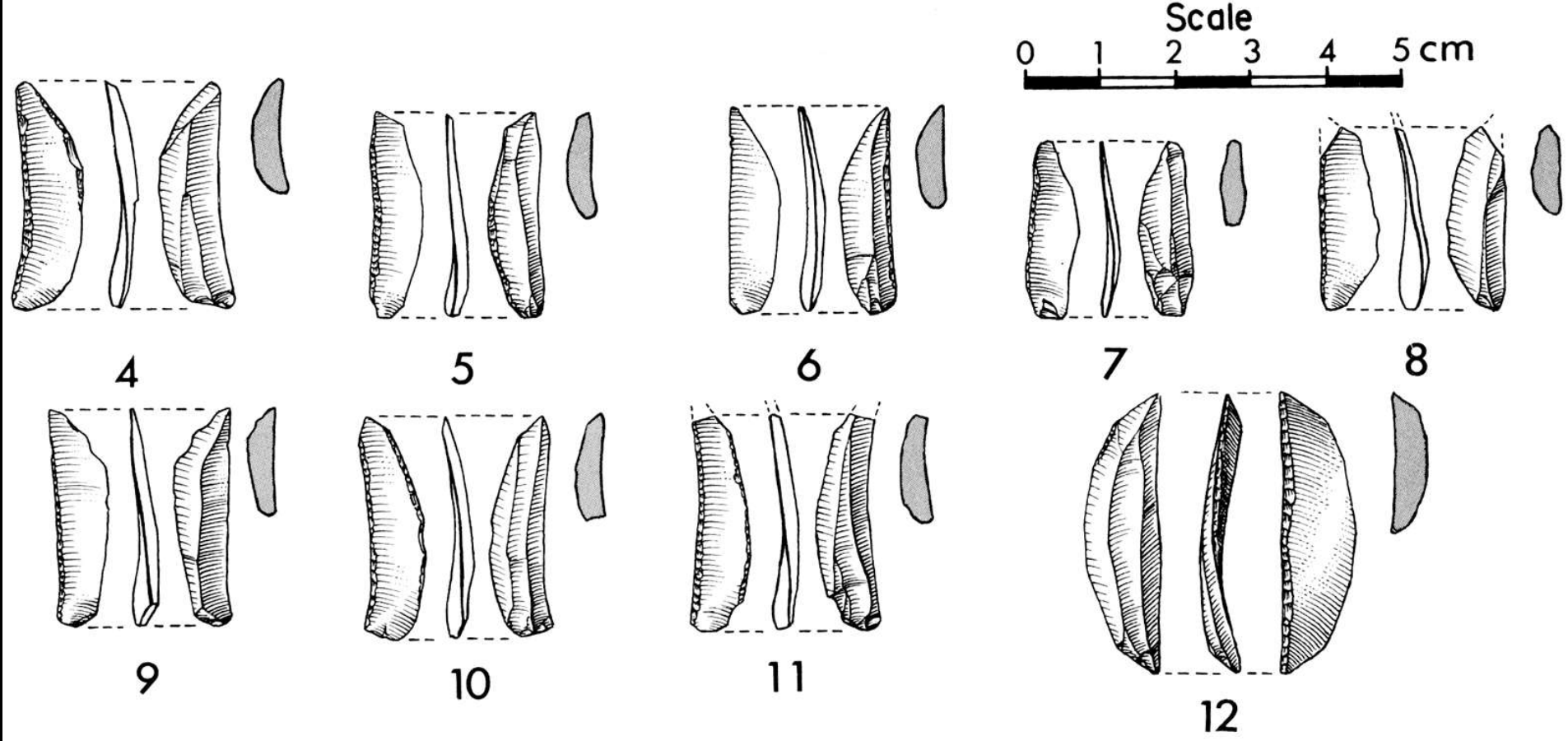
EGPF

- Middle Palaeolithic

# Grotte des Fées

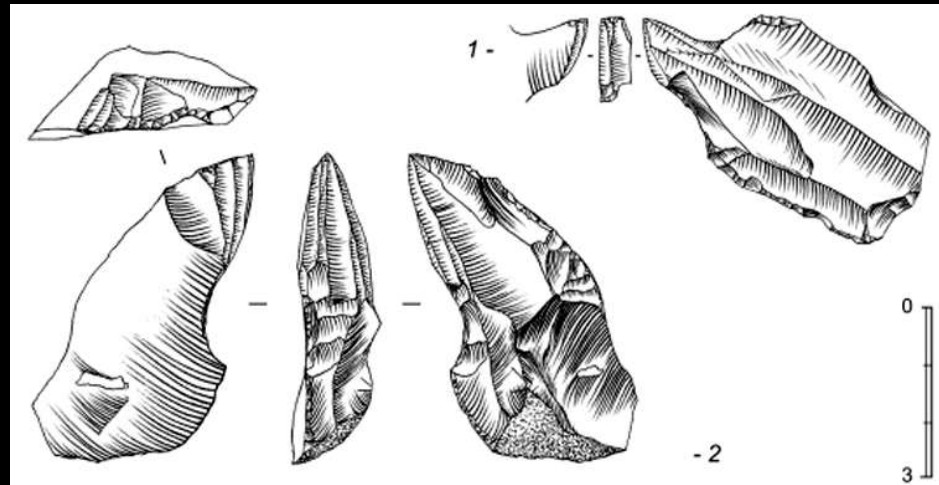
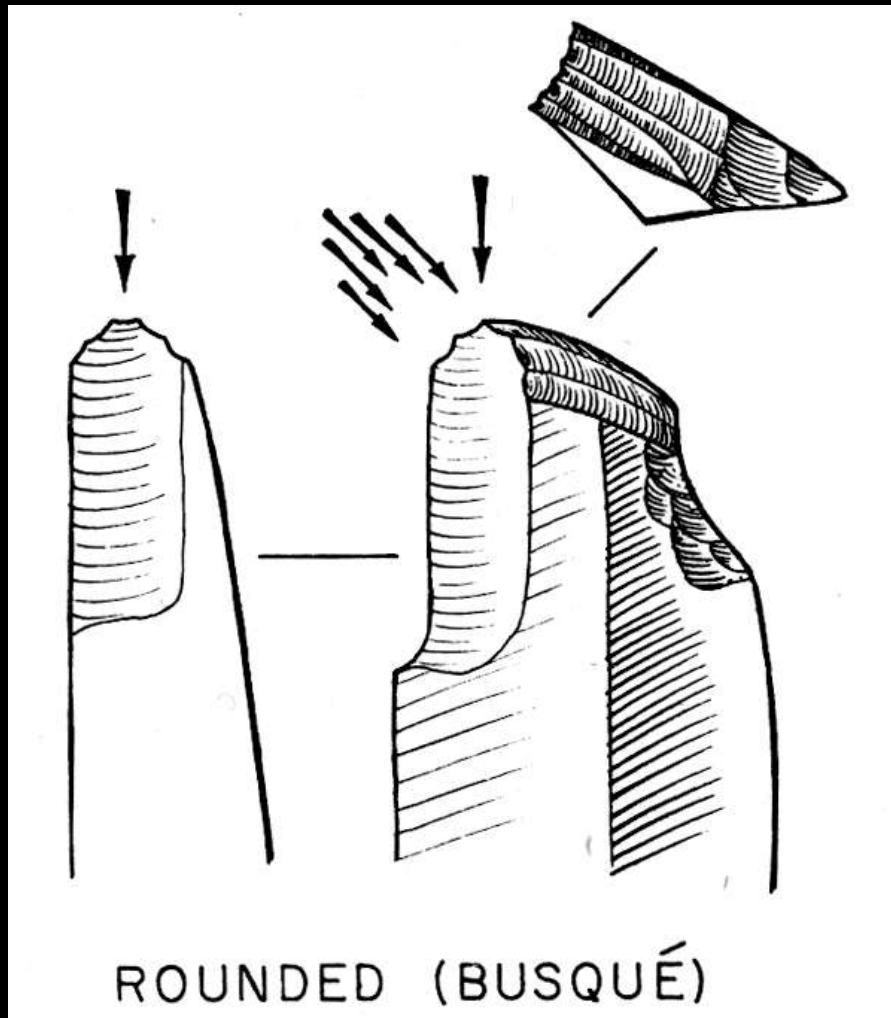
1–8, edge-retouched Aurignacian blades; 9 and 12, thick, carinate end scrapers; 11, bladelet core on large flake; 13–16, inversely retouched Lamelles Dufour bladelets; 10, split-base bone or antler point.





Dufour bladelets, (Lamelles Dufour) from Abri Pataud Level 8:  
Intermediate Aurignacian-a. (Movius 1977)





Beaked Burin





**VENUS OF HOHLE FELS**  
Germany, 35,000 BCE



**VENUS OF GALGENBERG**  
Austria, 30,000 BCE



**VENUS OF DOLNI VESTONICE**  
Czech Republic, 28,000 BCE



**VENUS OF LESPUGUE**  
France, 26,000 BCE



**VENUS OF WILLENDORF**  
Austria, 24,000 BCE



**VENUS OF MORAVANY**  
Slovakia, 23,000 BCE



**VENUS OF BRASSEMPOUY**  
France, 22,000 BCE



**VENUS OF YULIYEVICH**  
Russia 16,000 BCE

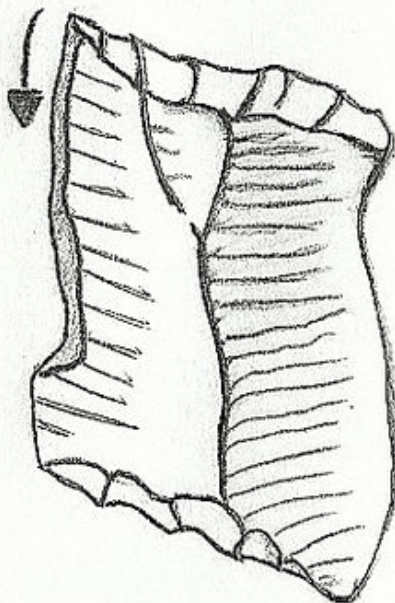
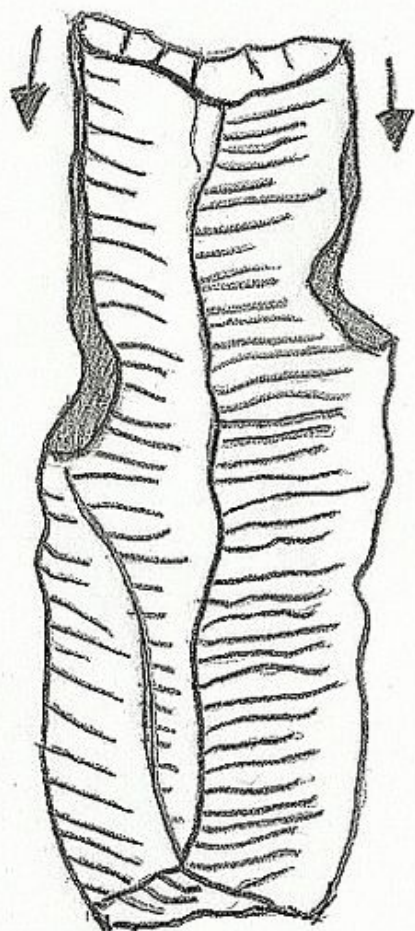


**VENUS OF MONRUZ**  
Switzerland 11,000 BCE





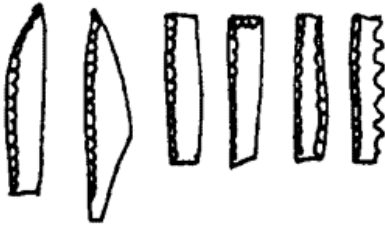


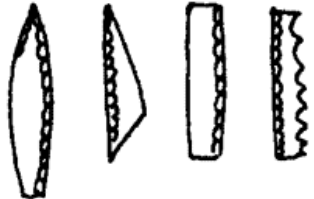


Gravettian point and shouldered point



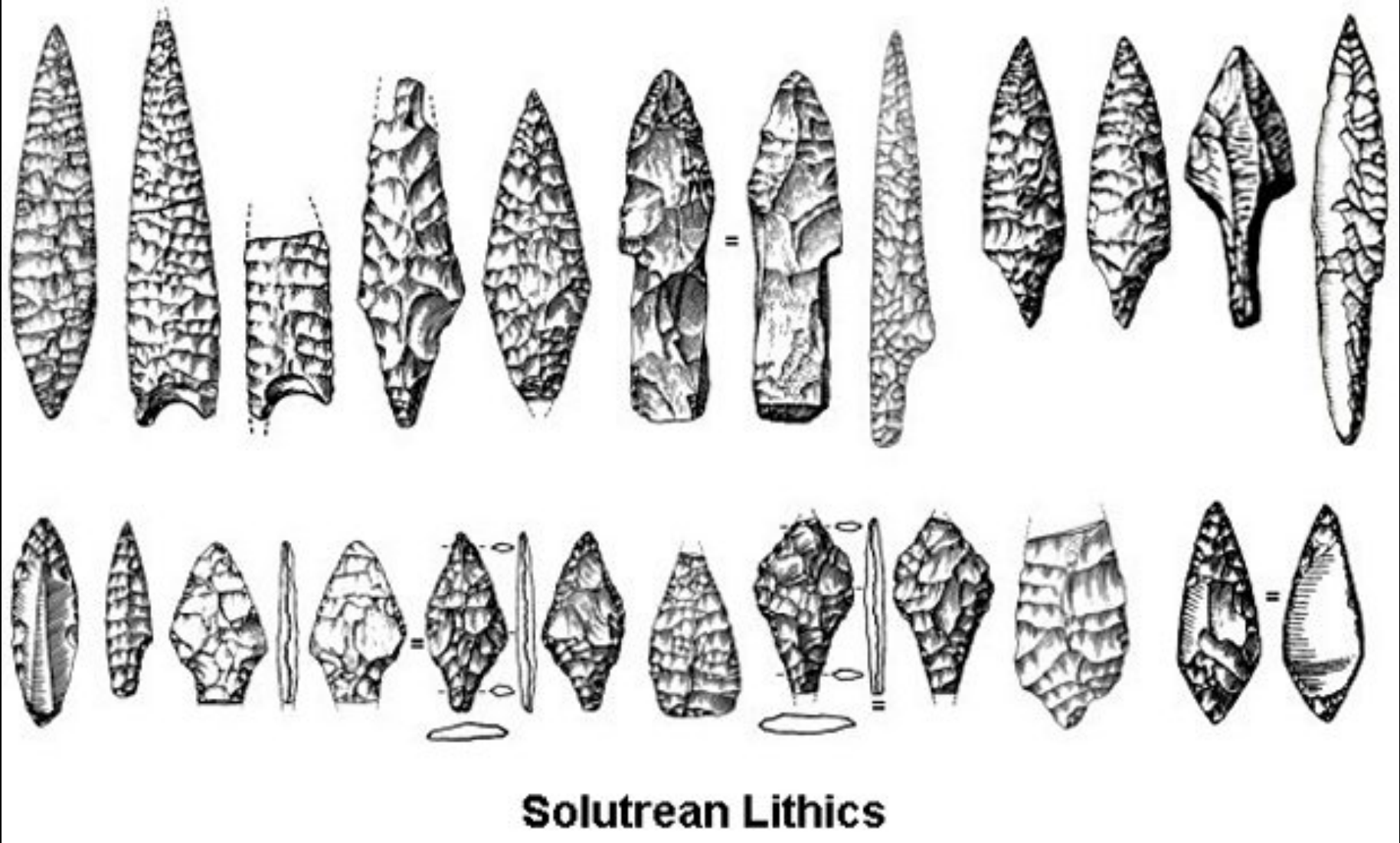


Noaillian Burins



	Backed microliths	Non-backed microliths	Typical points
<b>Willendorf-Kostenkian:</b> <b>Petřkovice I,</b> <b>24-21 ky BP</b>			
<b>Evolved Pavlovian:</b> <b>Pavlov I,</b> <b>27-25 ky BP</b>			
<b>Early Pavlovian:</b> <b>Dolní Věstonice II,</b> <b>around 27 ky BP</b>			

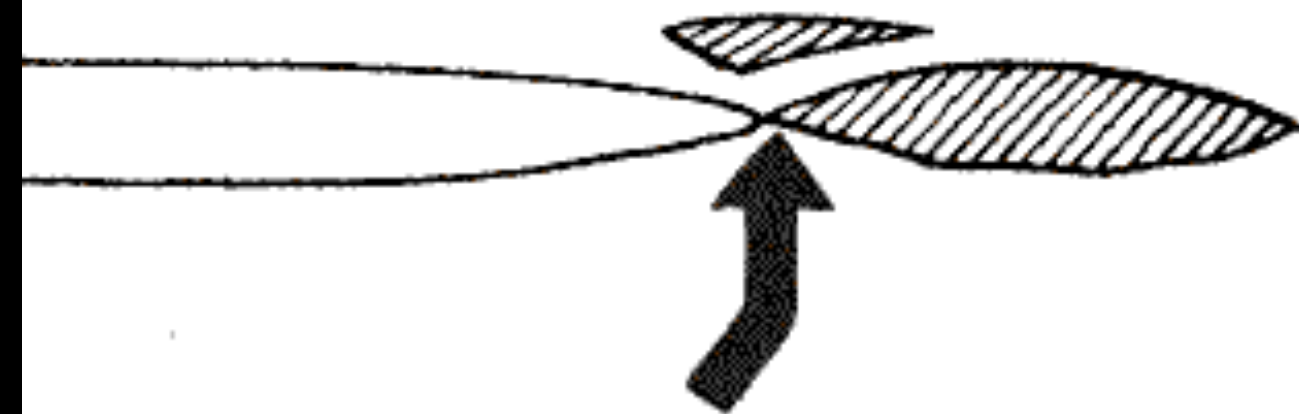
Central European Gravettian microliths

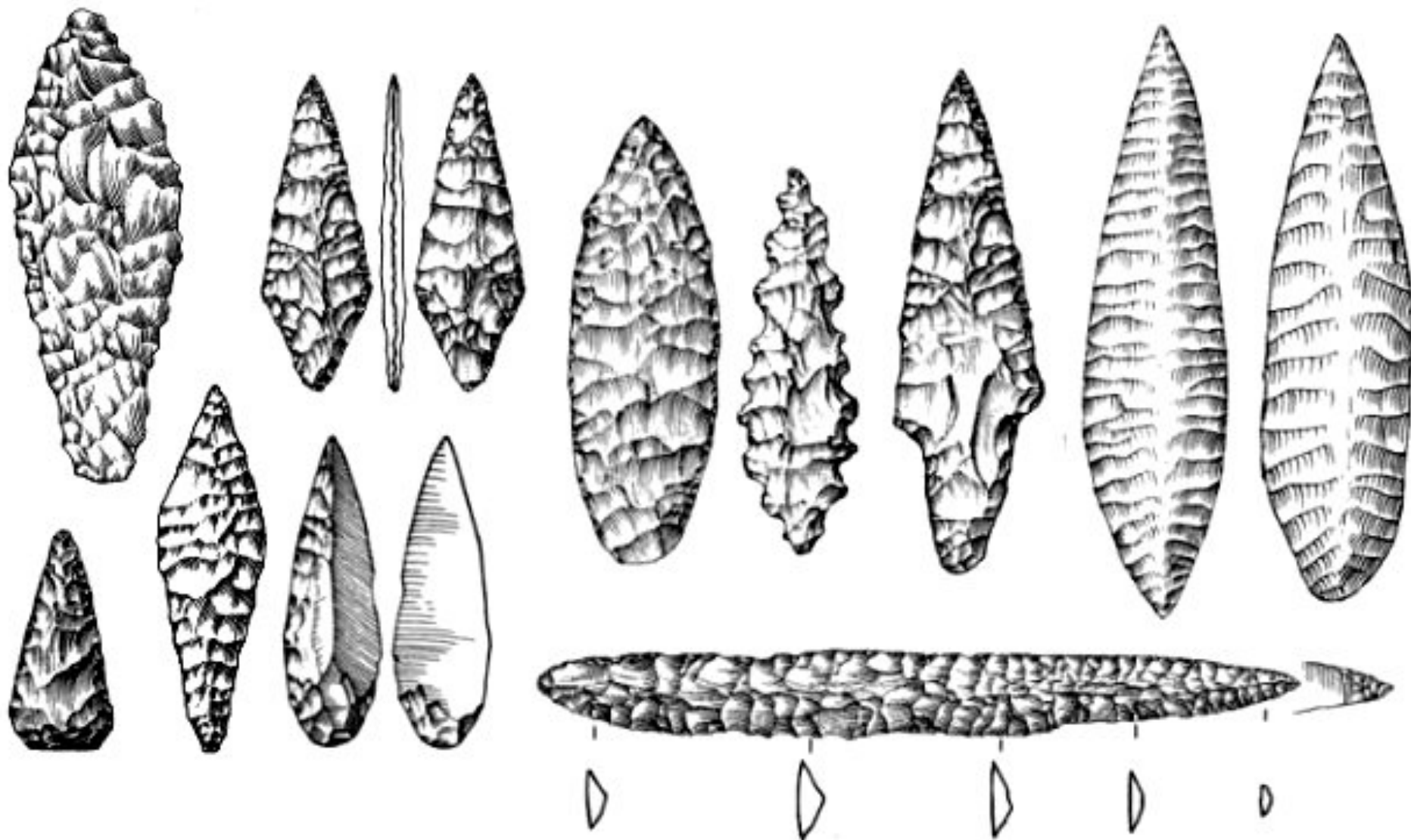


Philip E. L. Smith 1966 "Le Solutr  en en France" Publications de l'Institut de Pr  histoire de l'Universit   de Bordeaux, No. 5.

**Solutrean: pressure flaking**







**Solutrean Lithics**

Solutrean: pressure flaking



Solutrean Laurel-Leaf points from the Volgu cache, Le Volgu in the Department of Saonet-et Loire in eastern France (max 35 cm long)

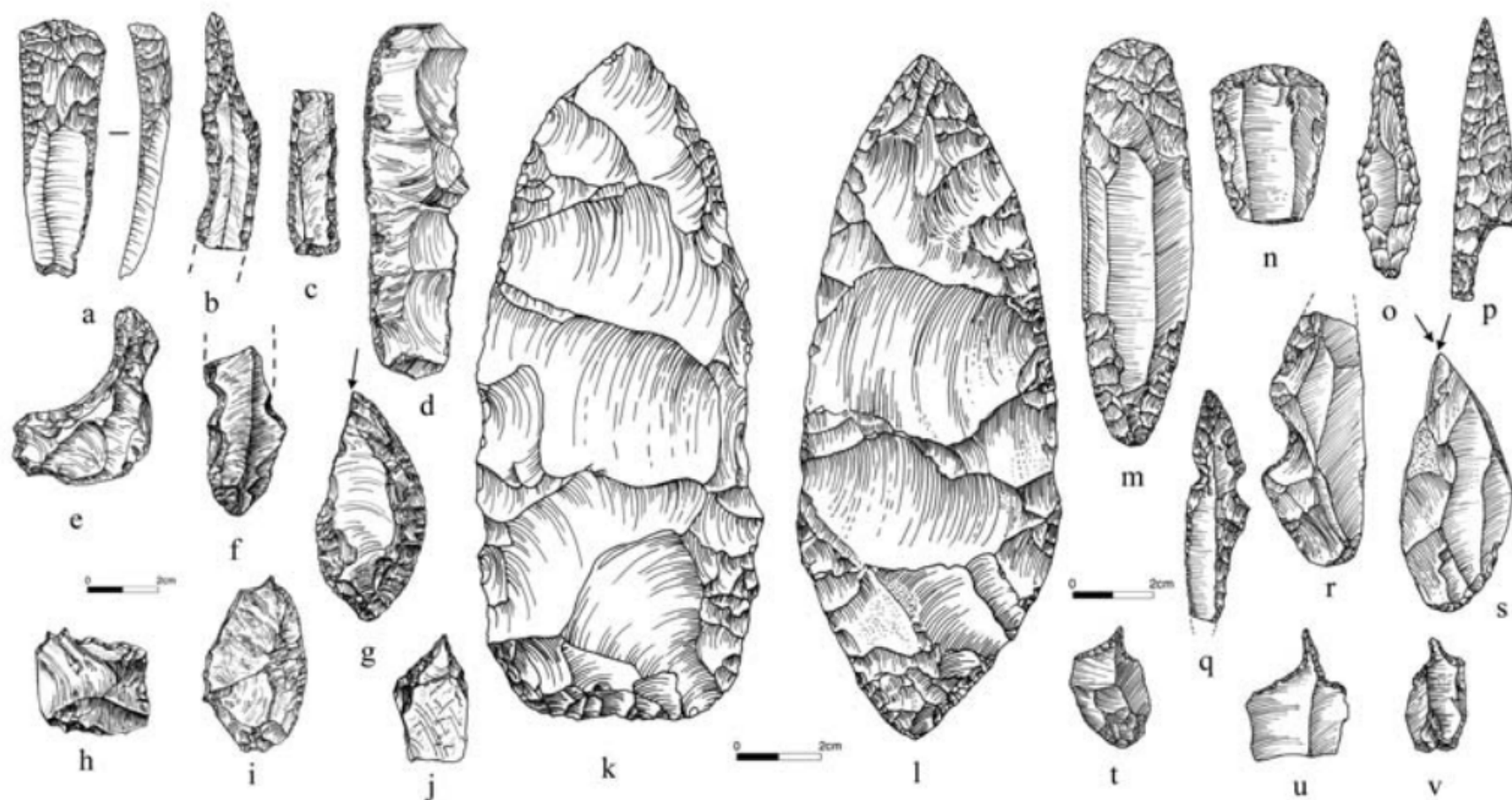
# The Solutrean hypothesis



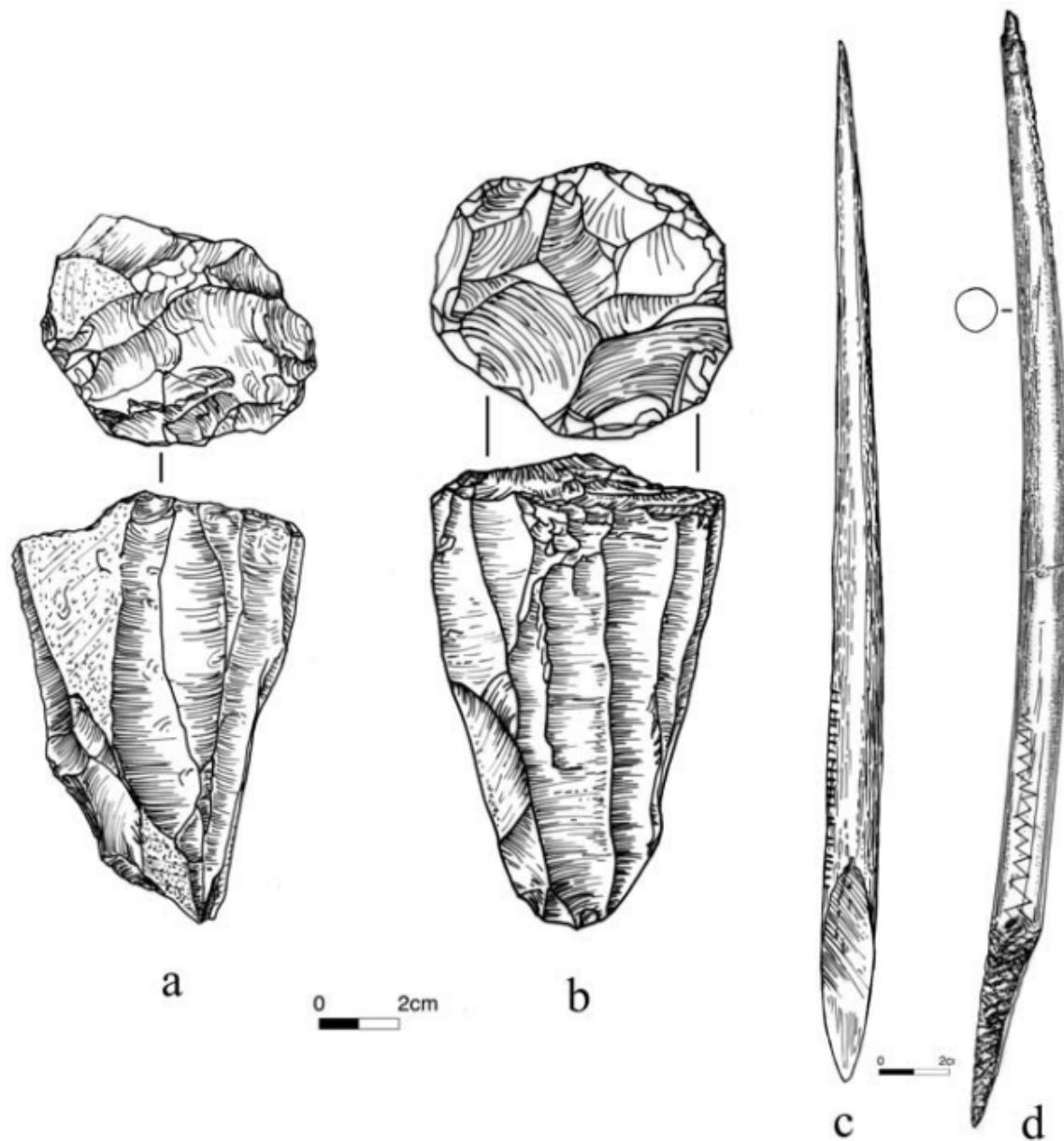


Dennis Stanford (Smithsonian) and Bruce Bradley (Exeter)





*Figure 1* Clovis and Solutrean tools. a–k: Clovis; l–v: Solutrean; a, m–n: end scrapers on blades; b, o: borers; c: retouched bladelet; d: retouched blade; p: shouldered point; e, f, r: notches; g, s: burins; h–j, t–v: graters. (a: Gault Site; b, c, j: Bostrum site; d, e: Simon Cache; f, g, i: Murray Springs; h: Blackwater Draw Locality 1; k: Fenn Cache; l: Solutré; m, q: Fourneau-du-Diable; n, r, s, t, u: Laugerie-Haute Ouest; o: Oulén; p: La Placard; v: La Riera.)

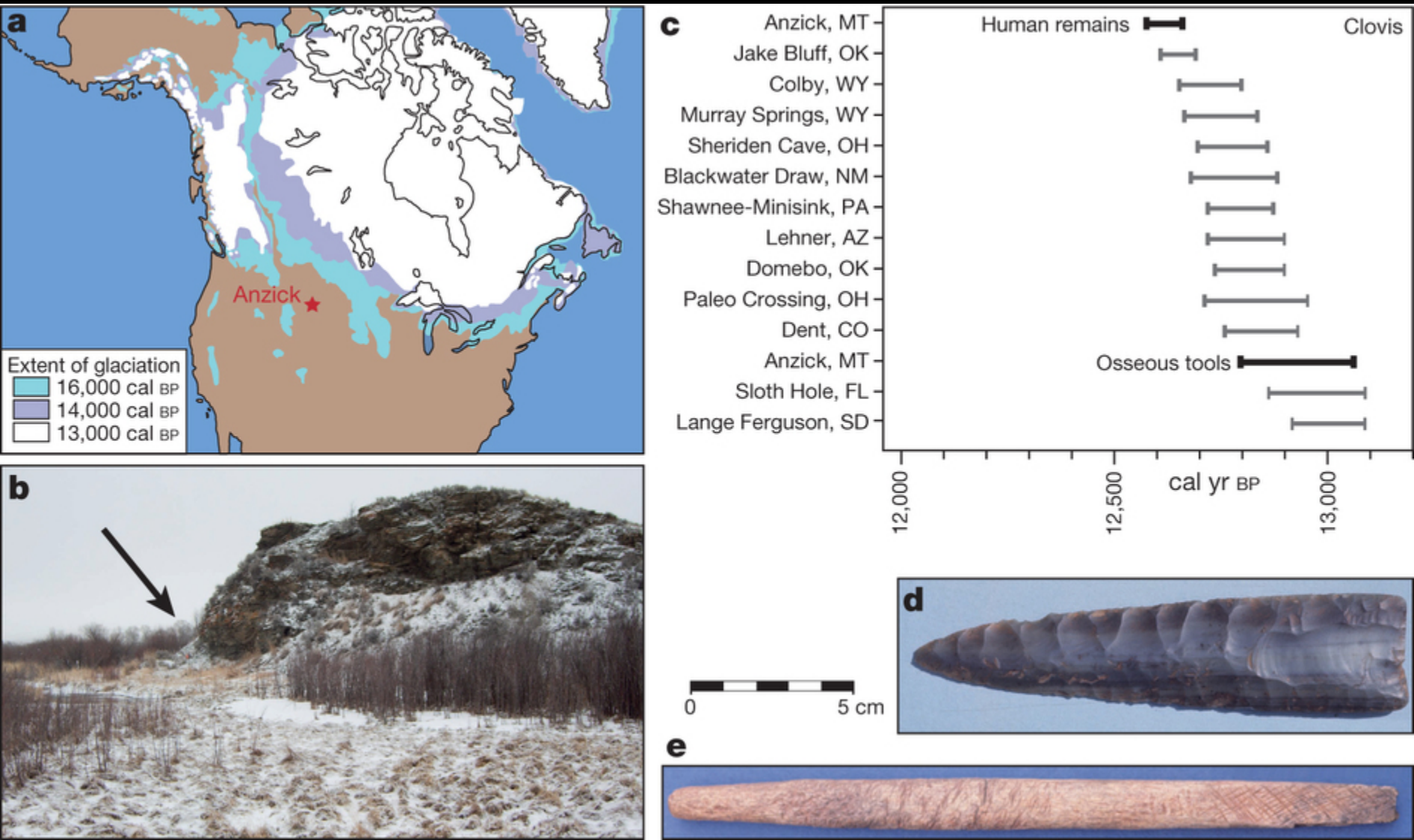


*Figure 2* Solutrean and Clovis artefacts. a: Solutrean blade core from Les Maitreaux; b: Clovis blade core from Gault; c: Solutrean sagai from Grotte des Harpons; d: Clovis sagai from Aucilla River.

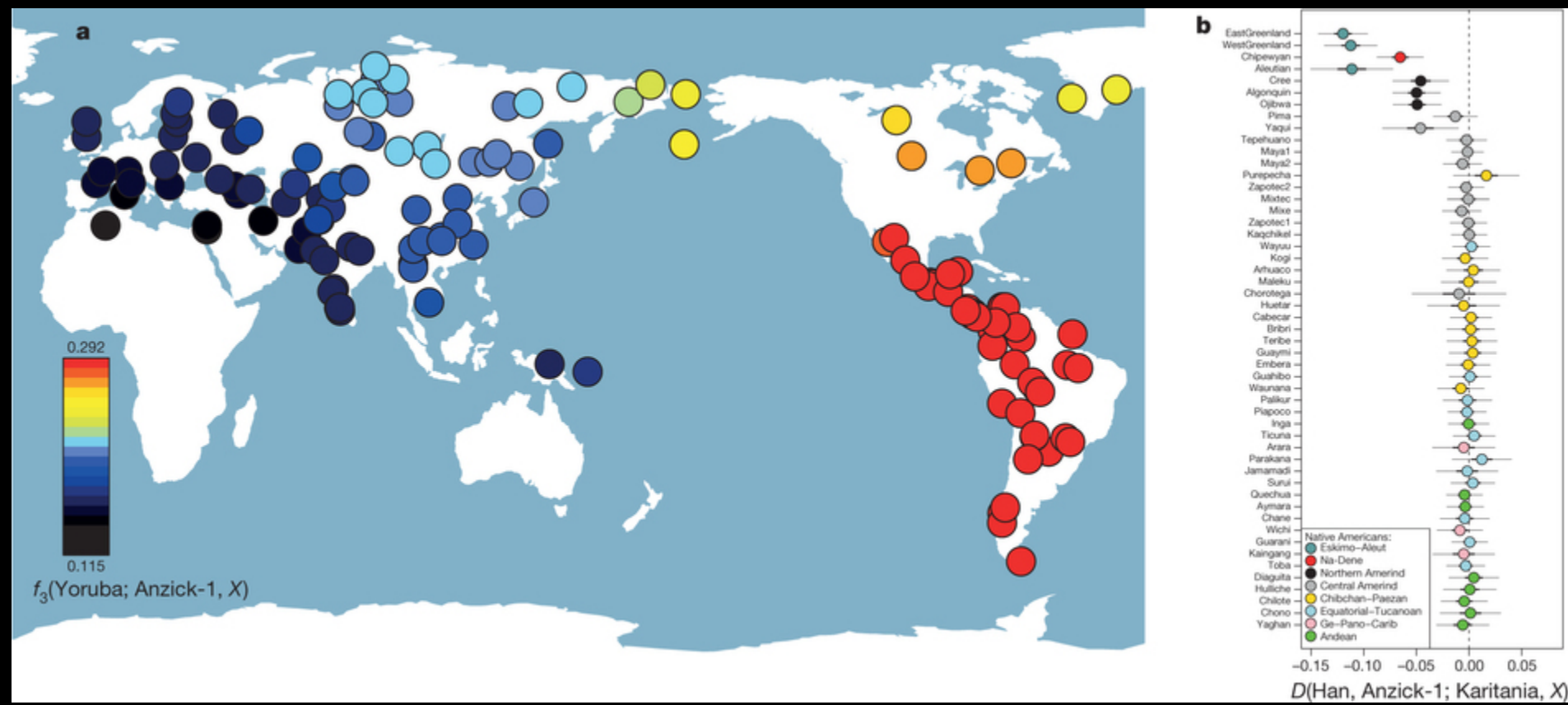
# STONE AGE COLONISTS HOW EUROPEANS FIRST REACHED AMERICA







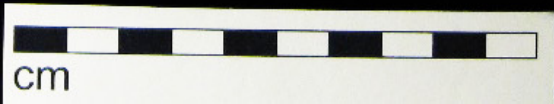
DNA from a male infant, buried approximately 12,600 years ago with ochre-covered Clovis artefacts at the Anzick site



“[The infant] belonged to a meta-population from which many contemporary Native Americans are descended and is closely related to all indigenous American populations. As such, contemporary Native Americans are effectively direct descendants of the people who made and used Clovis tools and buried this child. In agreement with previous archaeological and genetic studies, our genome analysis refutes the possibility that Clovis originated via a European (Solutrean) migration to the Americas.”



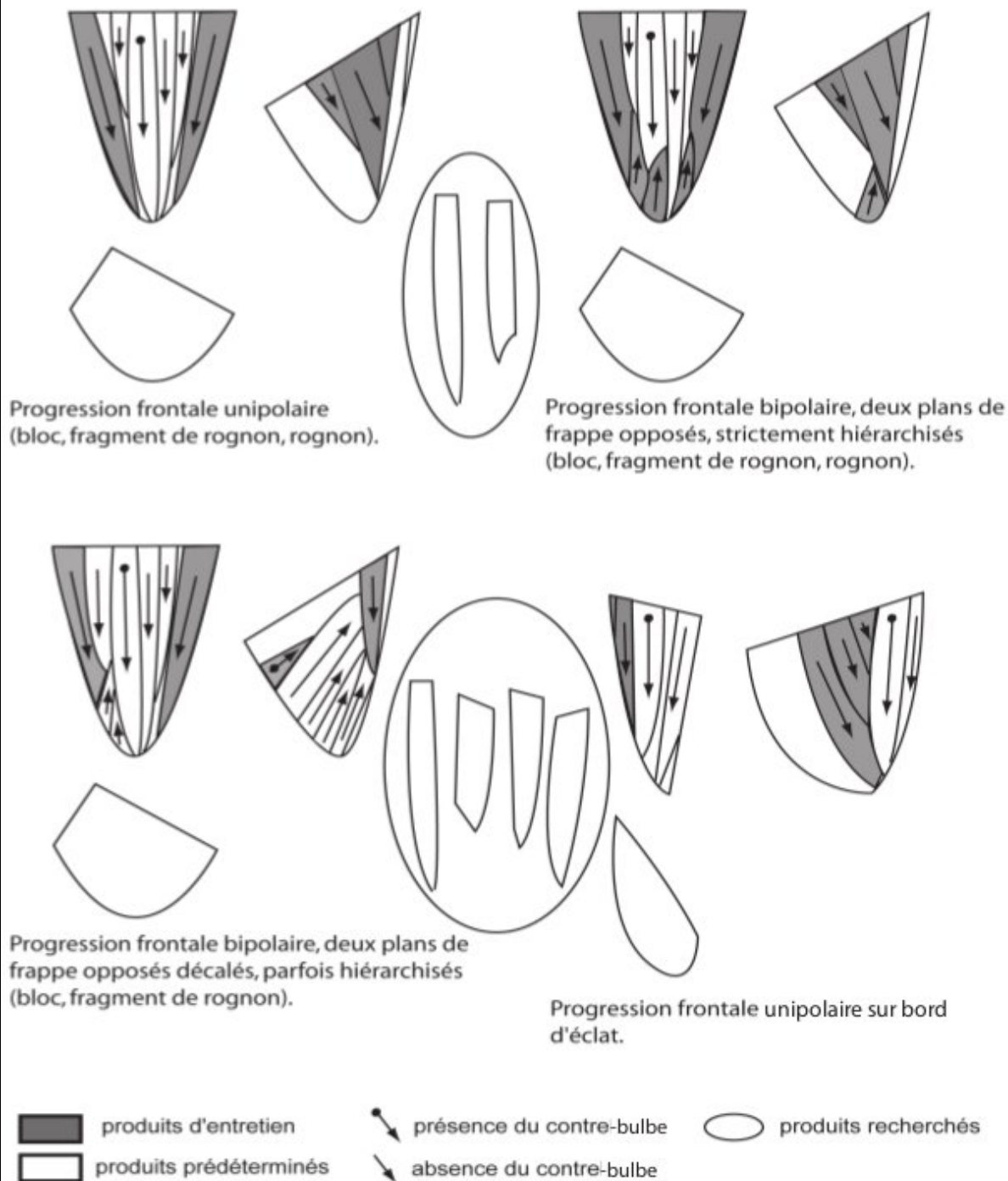
1. The Solutrean is too early.
2. Artefact size is wrong.
3. Lack of evidence of Solutrean seafaring
4. There's no fluted base in the Solutrean material.





## Magdalenien:

- Bone, antler, and ivory artefacts
- blade & scraper industries, carinated cores
- Lamelle à dos (backed bladelets)
- Lamelle denticulée (denticulate blades)

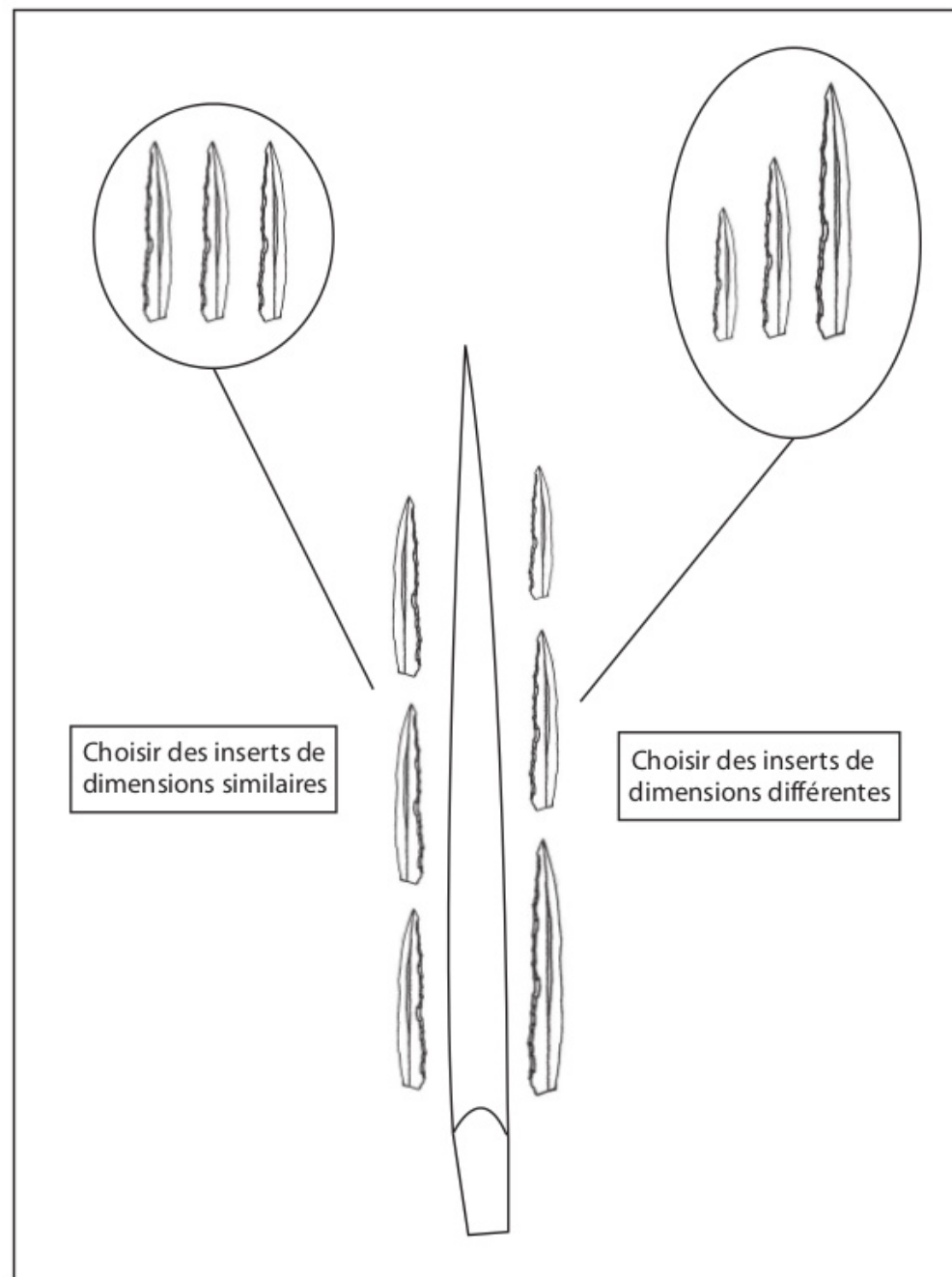






La Madeleine (Dordogne) Musée d'Archeologie Nationale et  
Domaine, St-Germain-en-Laye





# Summary

Upper Palaeolithic in Europe