



Università
degli Studi
di Ferrara

Marco Peresani

Cronologie e culture del Paleolitico

Lezione 17 – The Gravettian



La migration Dessin de Benoit Clarys

The Gravettian: Populations and lifestyles



Pointes de la Gravette



Contents lists available at ScienceDirect

Journal of Archaeological Science: Reports

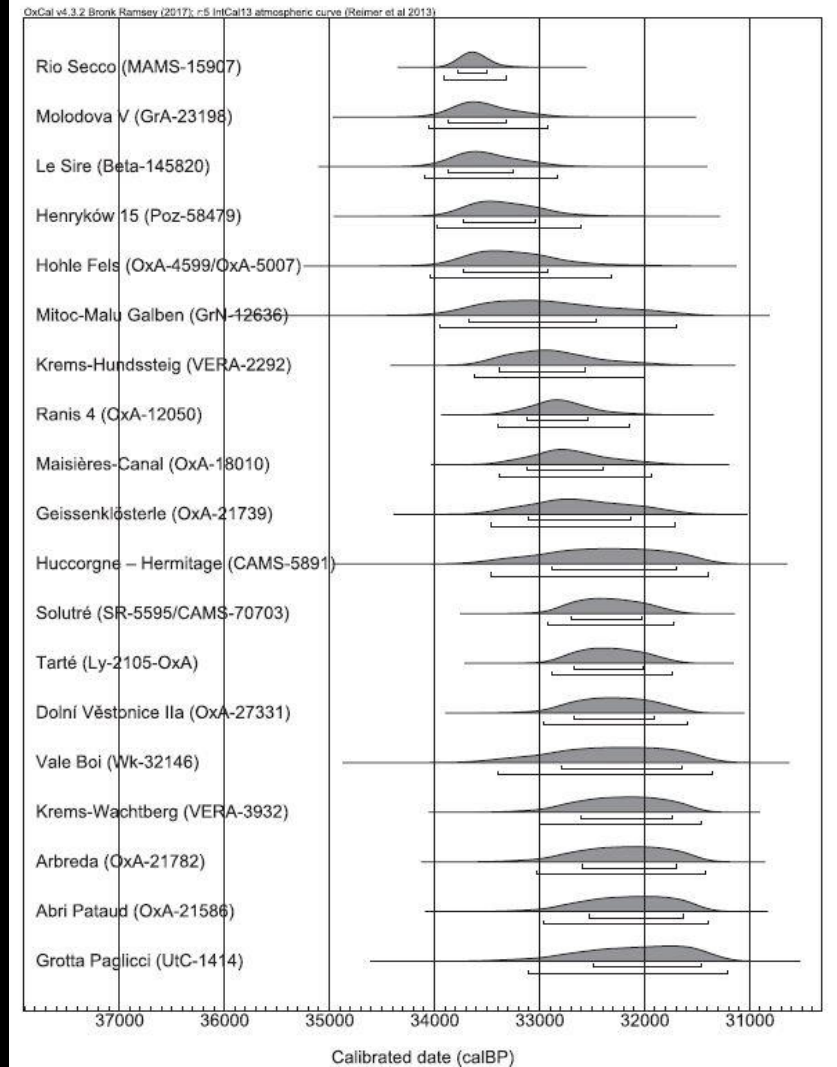
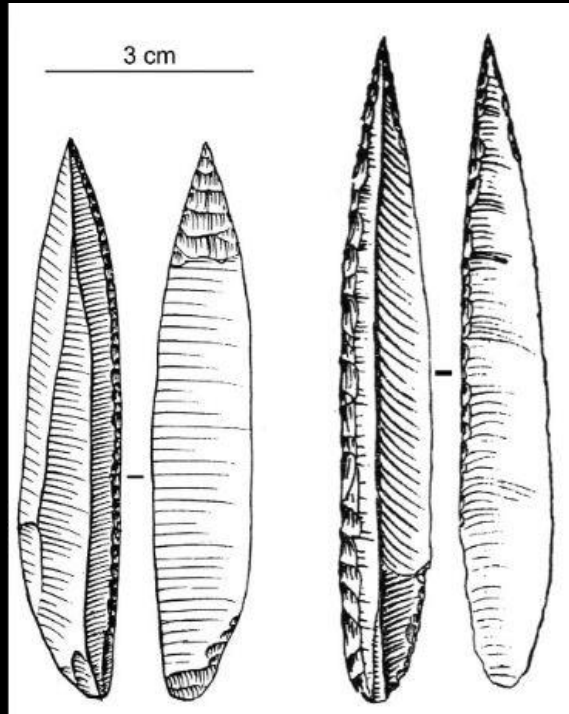
journal homepage: www.elsevier.com/locate/jasrep



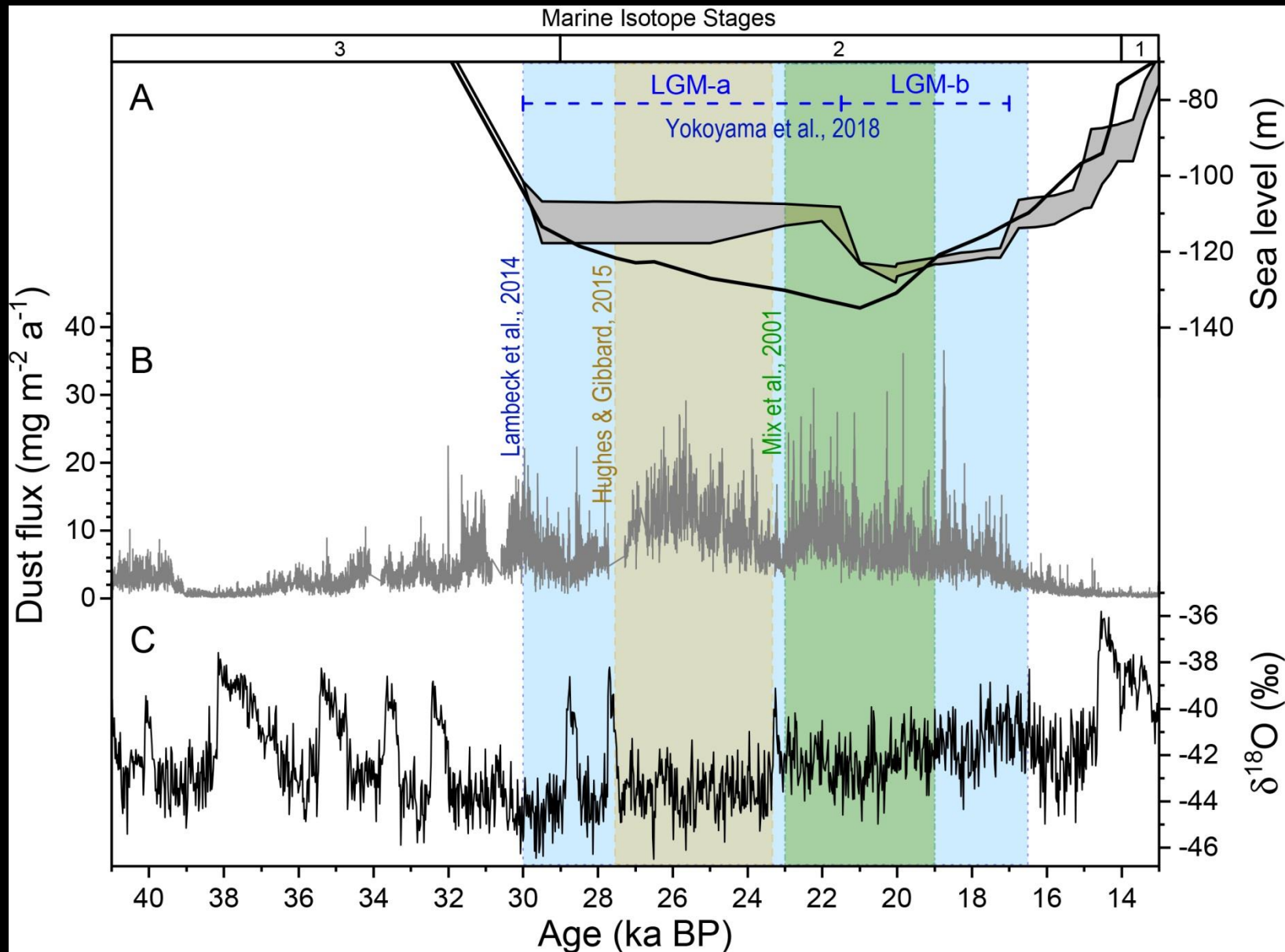
Spatiotemporal modelling of radiocarbon dates using linear regression does not indicate a vector of demic dispersal associated with the earliest Gravettian assemblages in Europe



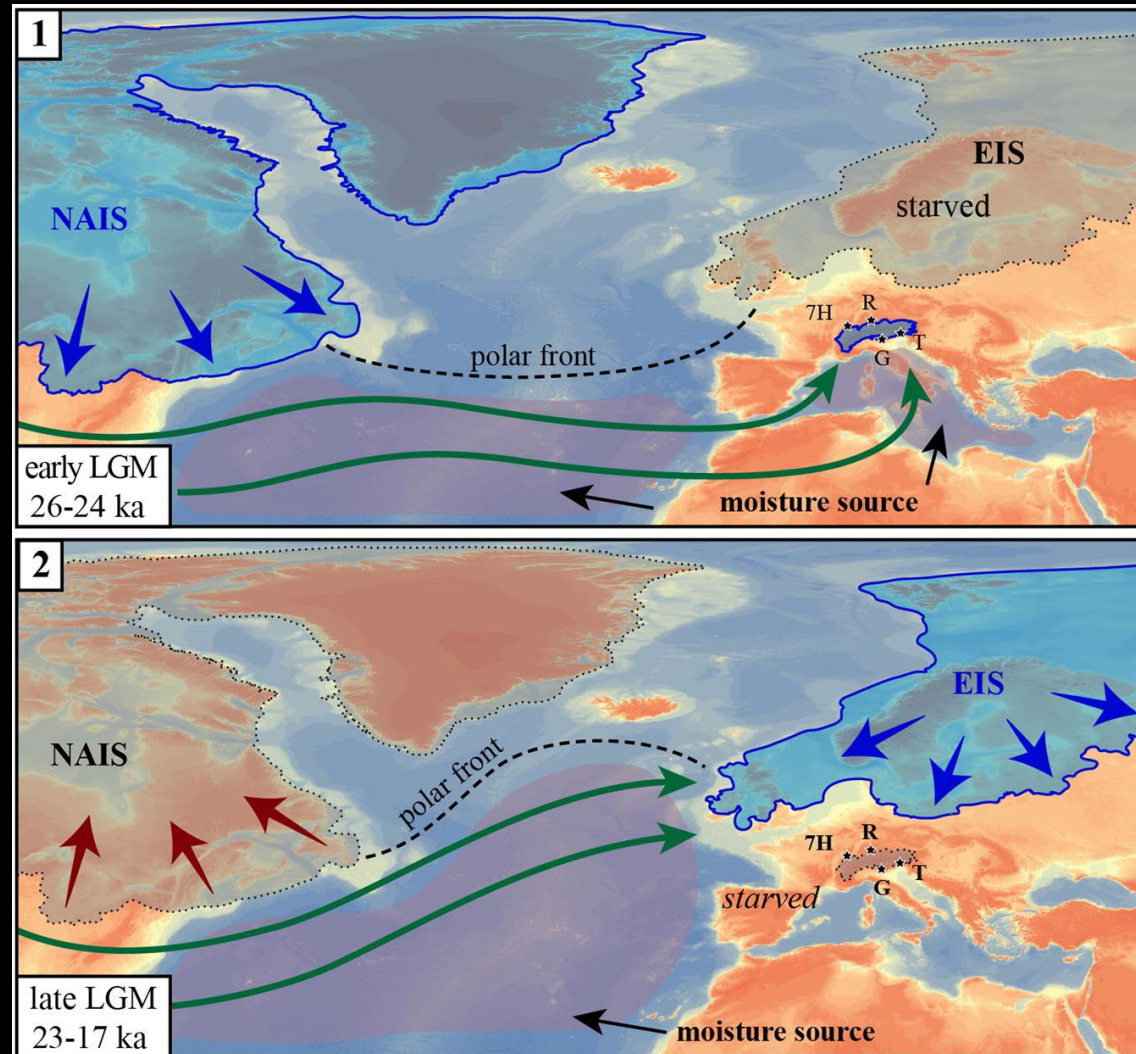
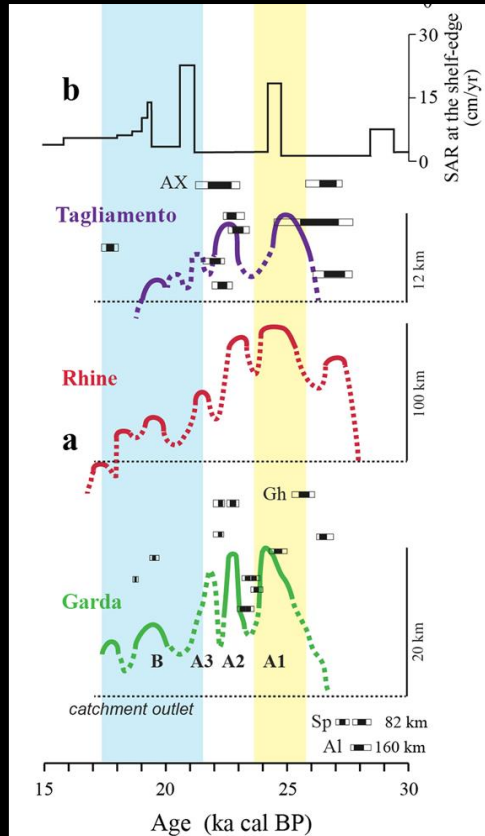
N. Reynolds^{a,*}, C. Green^b



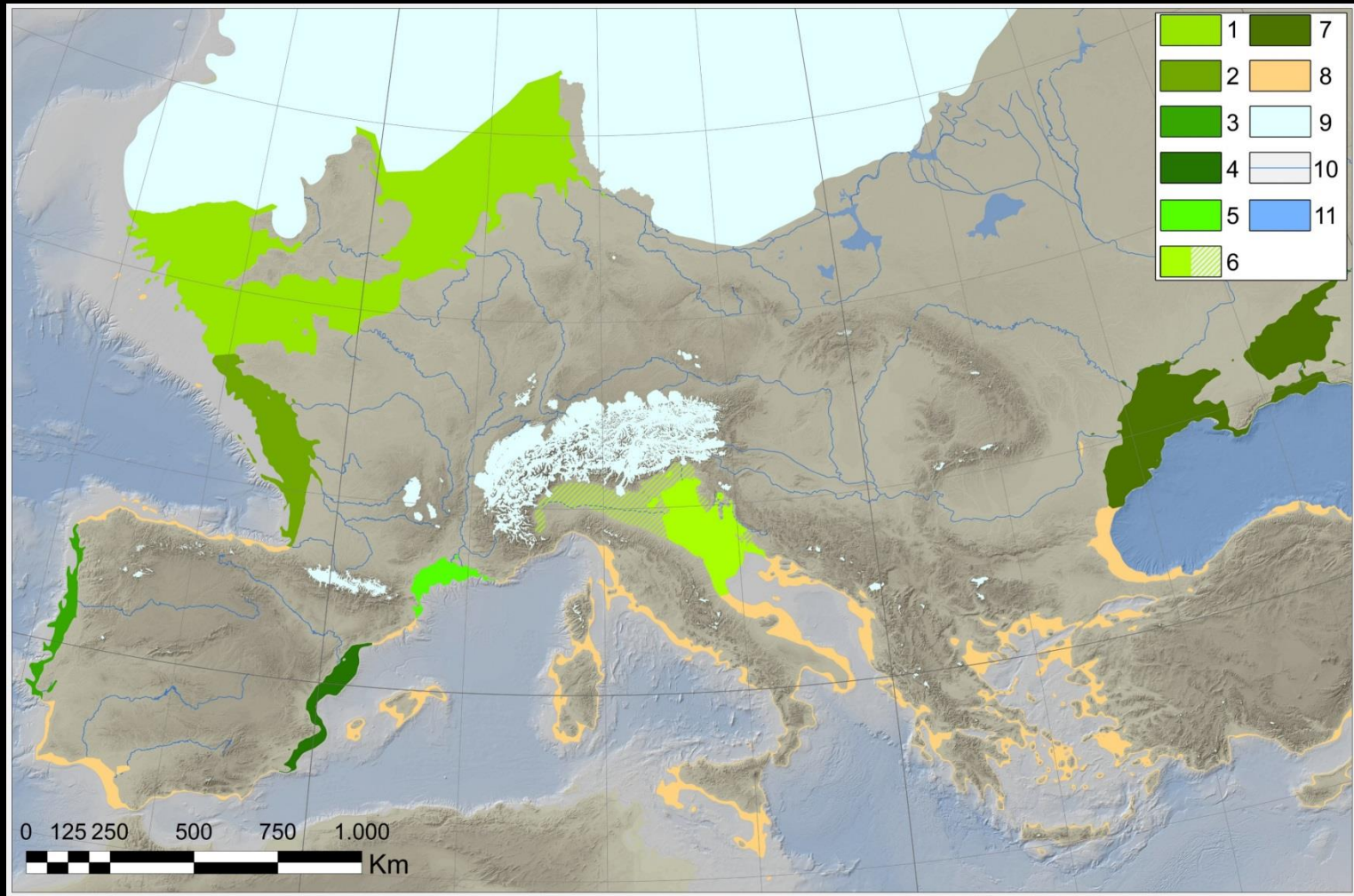
Chronological boundaries of the Last Glacial Maximum



The Last Glacial Maximum

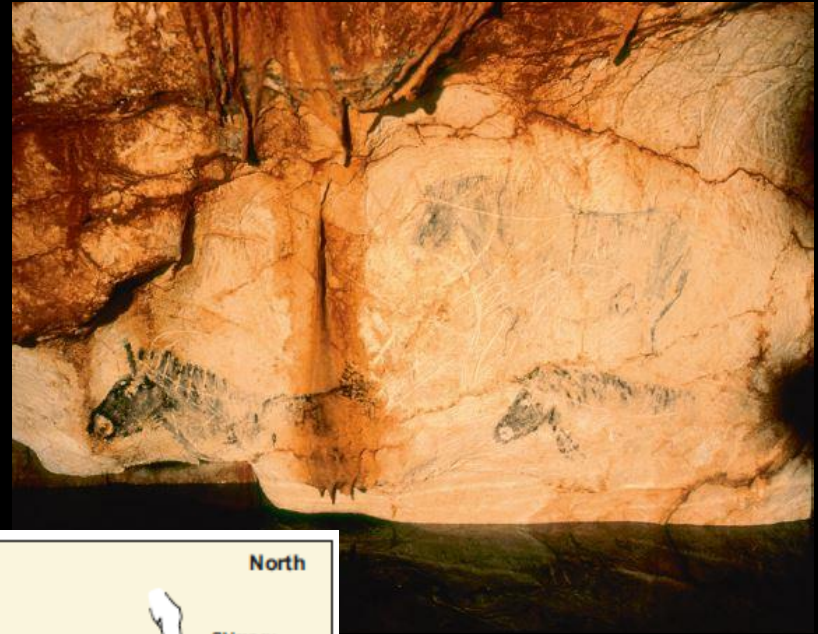


Europe during the LGM

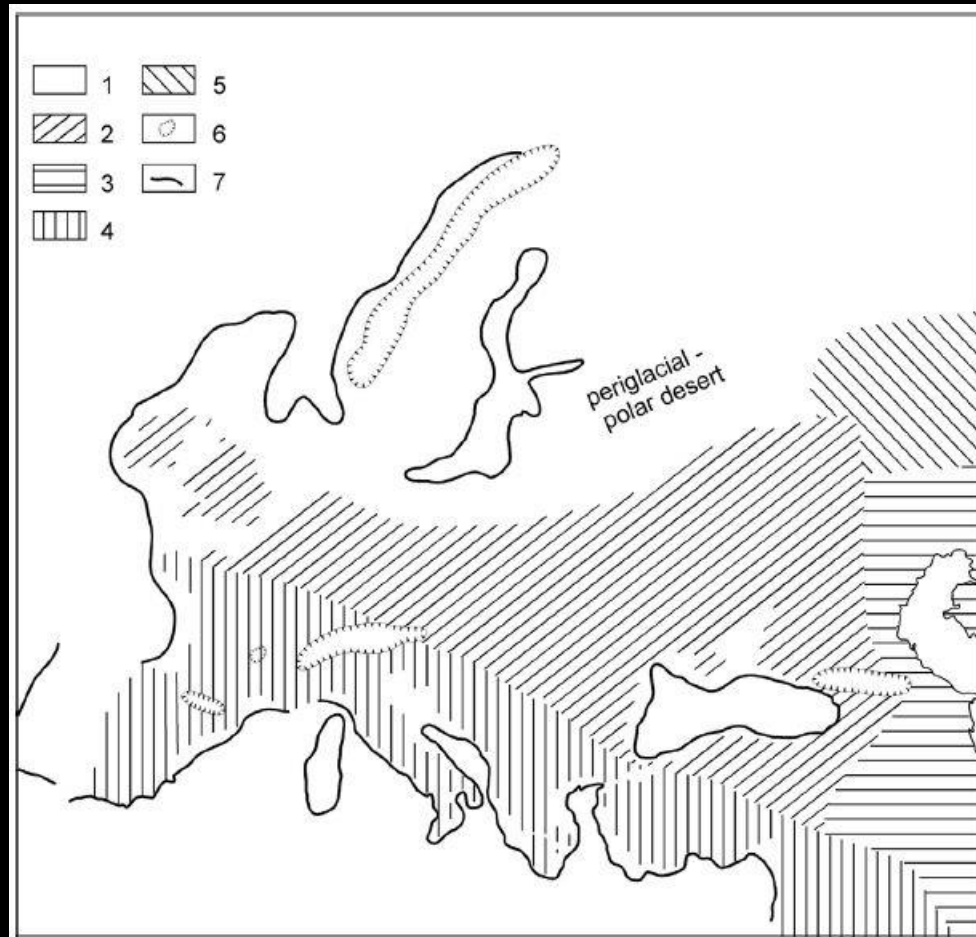


Map of Europe with the largest continental shelves emerged during the Last Glacial Maximum. 1. Doggerland/North Sea, English Channel and Bristol Channel; 2. Bay of Biscay and France Atlantic Coast; 3. North-central Portugal Atlantic Coast; 4. Catalunya and Valencia Coasts; 5. Gulf of Lion; 6. Great Po Plain; 7. Northern Black Sea Coast (Sea of Azov and Chorne Sea); 8. Other LGM emerged areas; 9. Scandinavian and British Islands ice sheets; 10. Mountain Glaciers; 11. Major rivers and lakes.

The Cosquer Cave



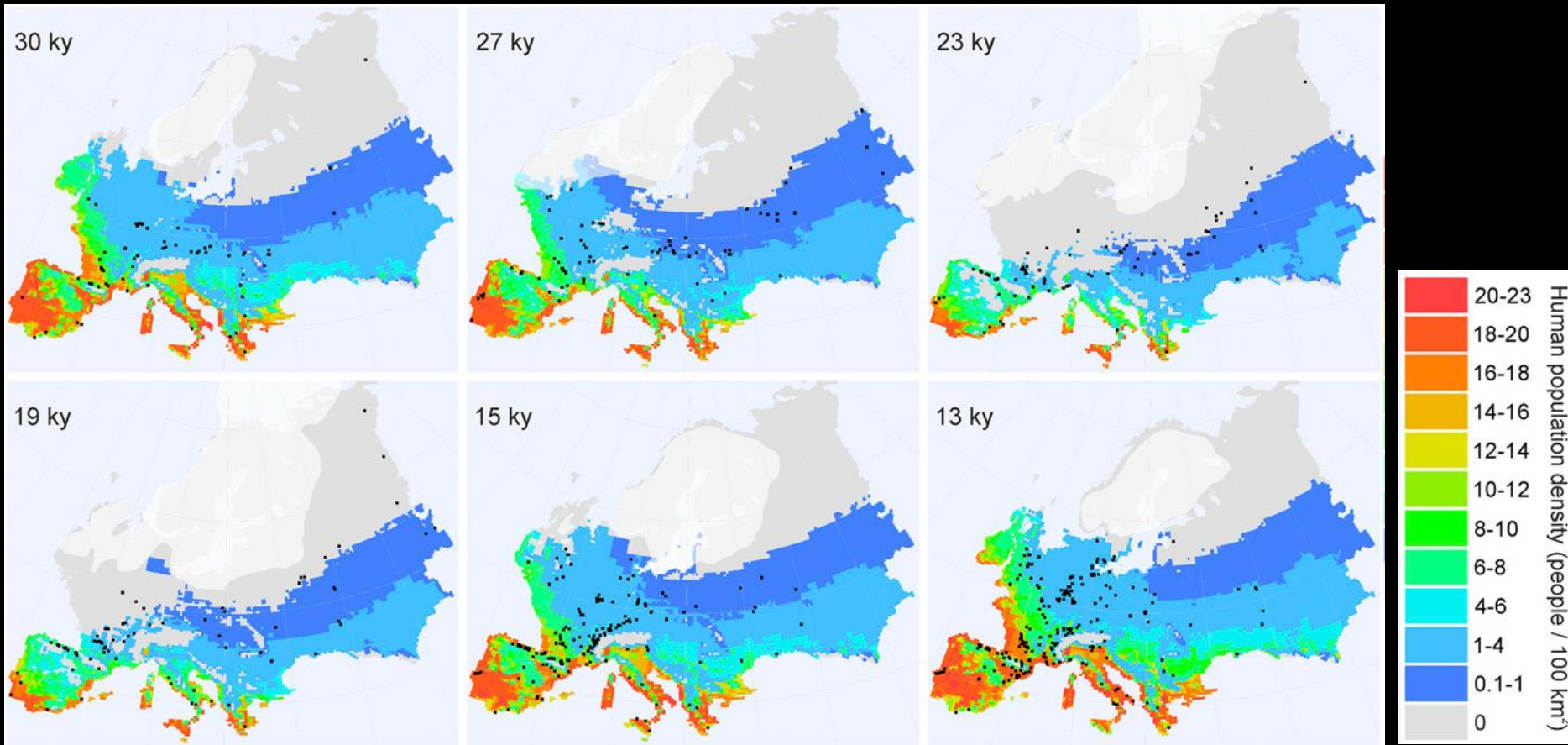
Ecology of Europe during the LGM



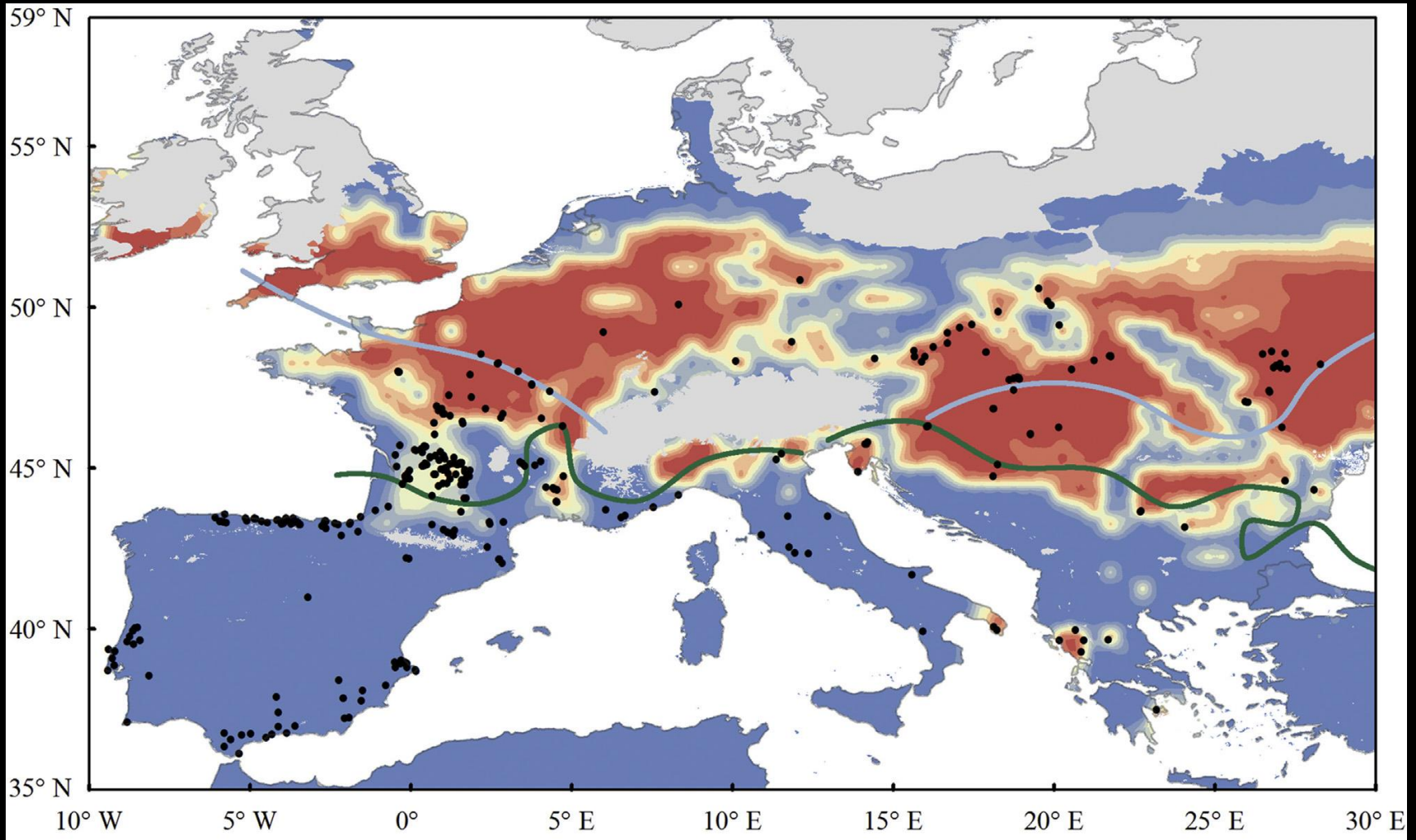
Ecological zones during LGM: 1 - polar desert, 2 - steppe-tundra, 3 - cold steppe, 4 - temperate grassland, 5 - evergreen taiga, 6 - glaciers, 7 - coastline.

Human population dynamics in Europe over the Last Glacial Maximum

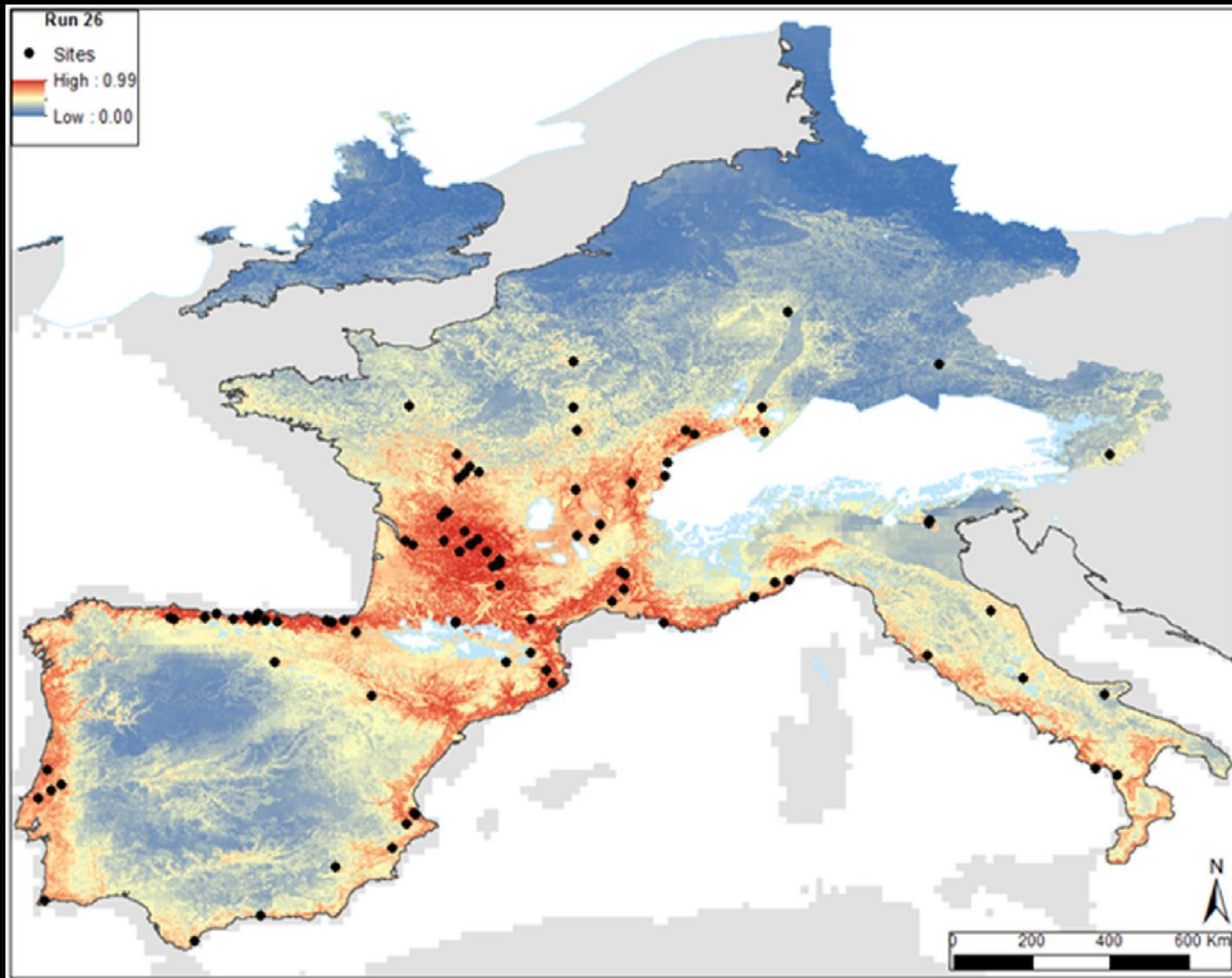
Miikka Tallavaara^{a,1}, Miska Luoto^b, Natalia Korhonen^{c,d}, Heikki Järvinen^d, and Heikki Seppä^b



Simulated human population range and density compared with the spatial distribution of archaeological sites during six time intervals from 30 to 13 ky ago. Archaeological sites are indicated with black dots.

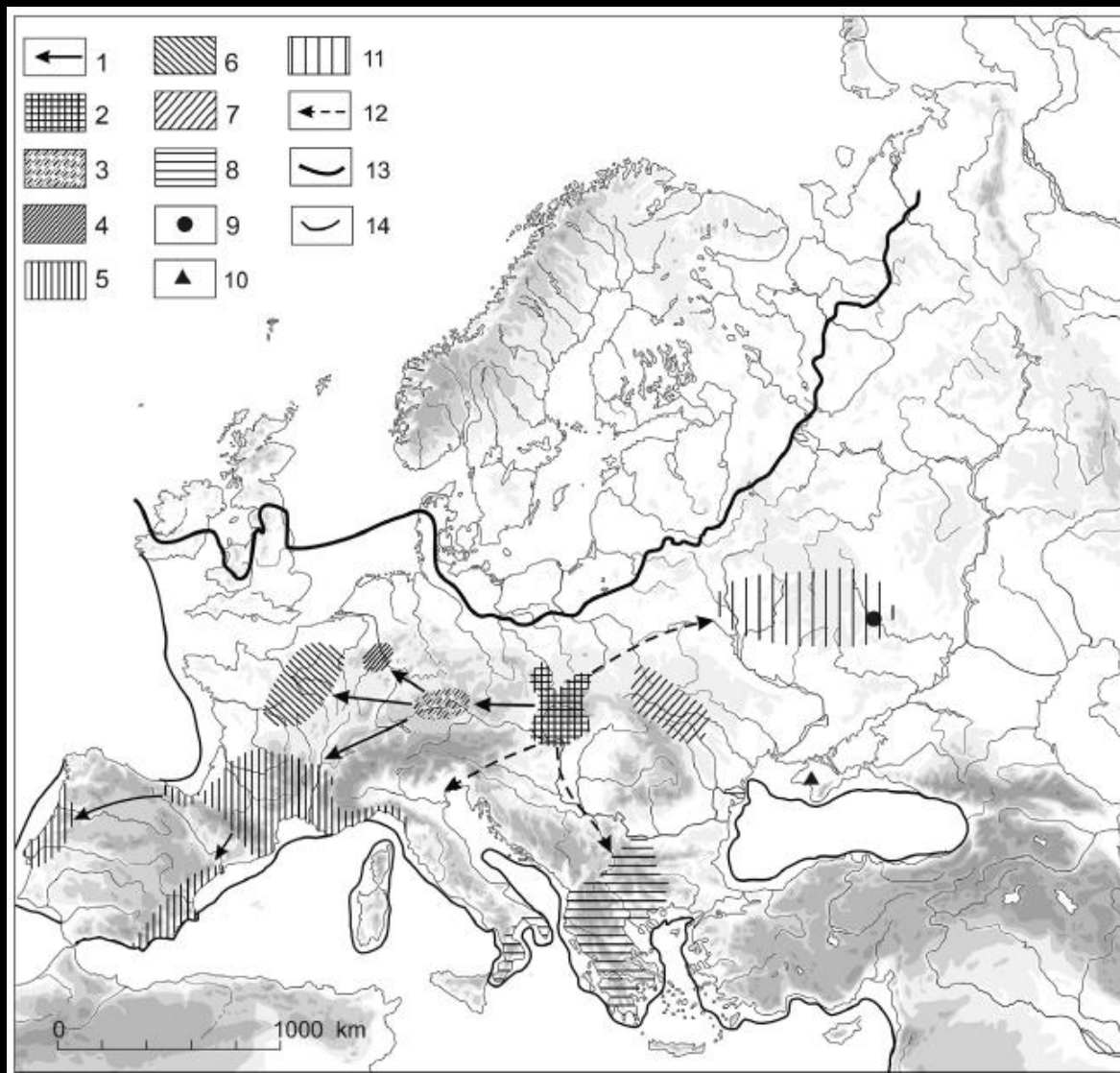


The blue line indicates the southern border of continuous permafrost, green line indicates the northern timberline. The grey areas mark the extent of glaciers.



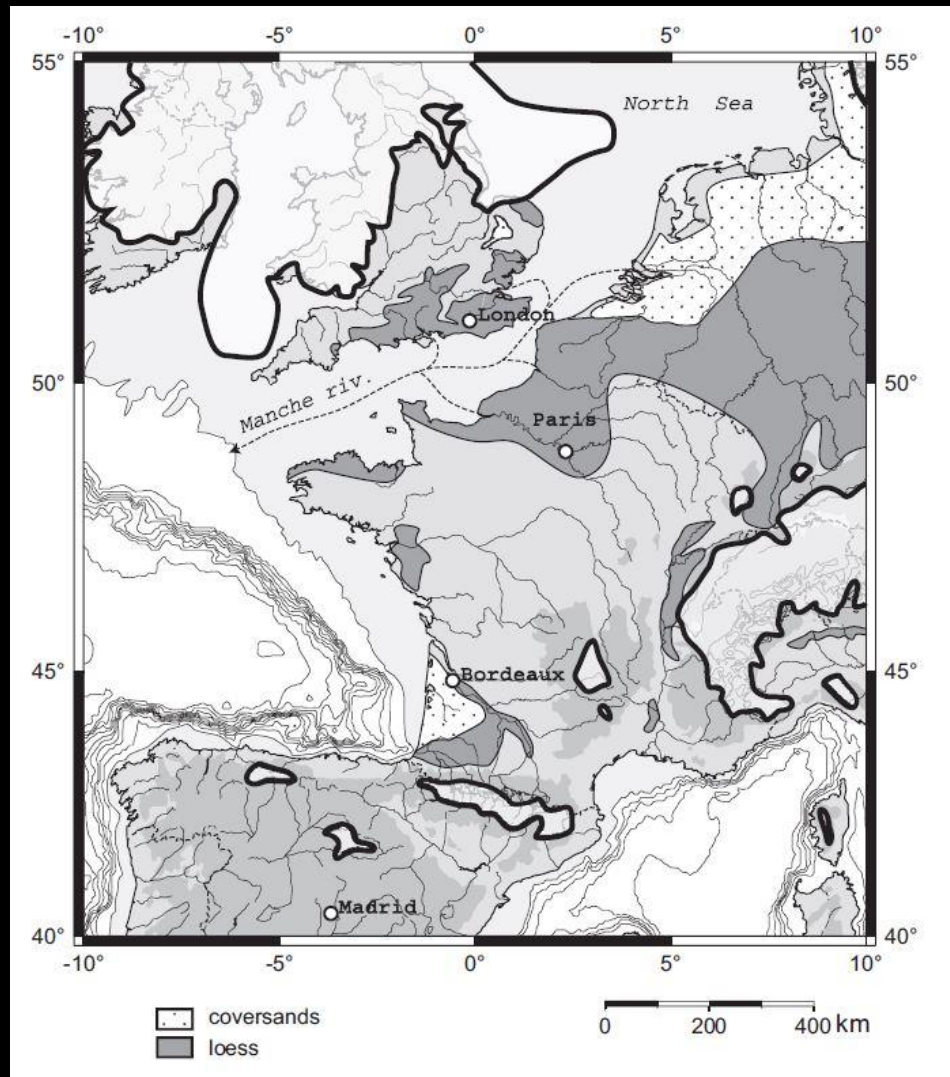
The final habitat suitability model. Archaeological sites used as presences in the analysis are represented by black dots against a background of habitat suitability.

Ariane Burke ^{a,*}, Masa Kageyama ^b, Guillaume Latombe ^c, Marc Fasel ^d, Mathieu Vrac ^b, Gilles Ramstein ^b, Patrick M.A. James ^e

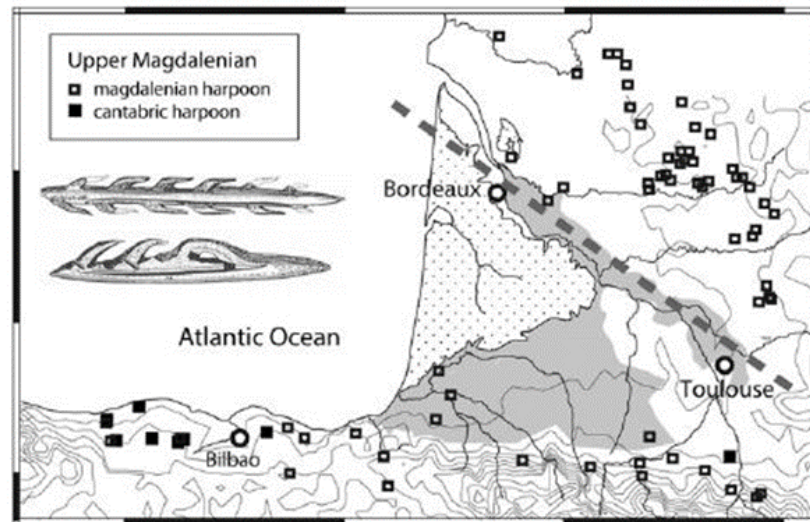
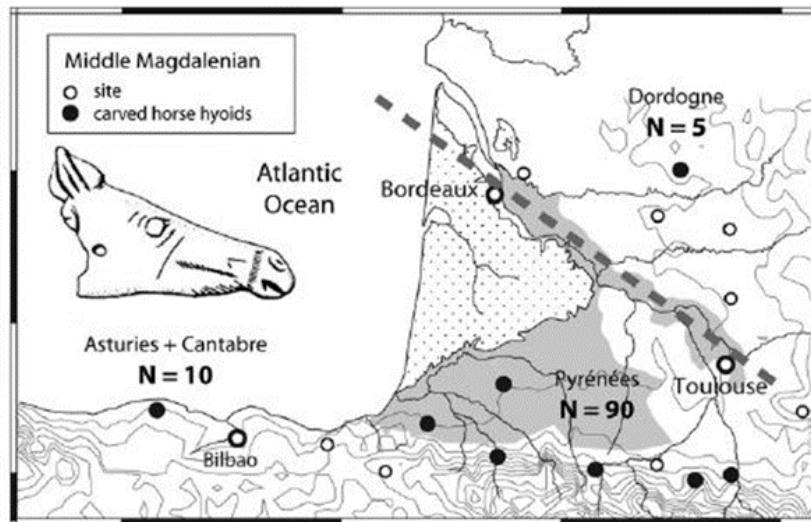
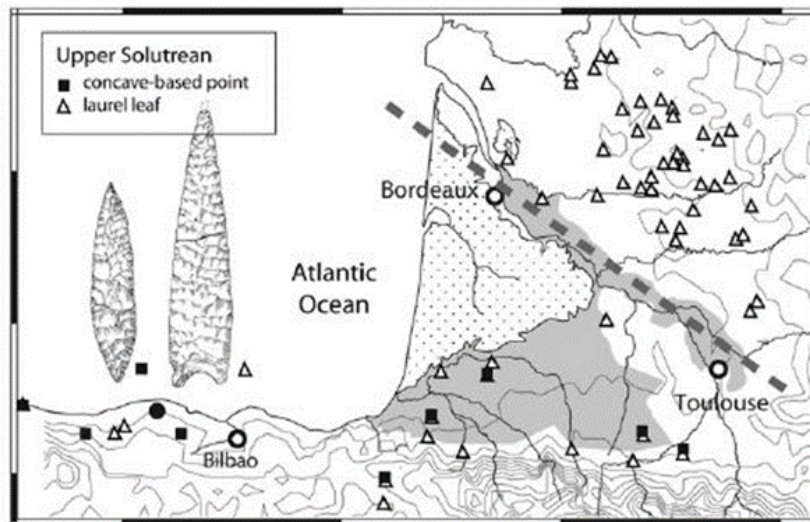
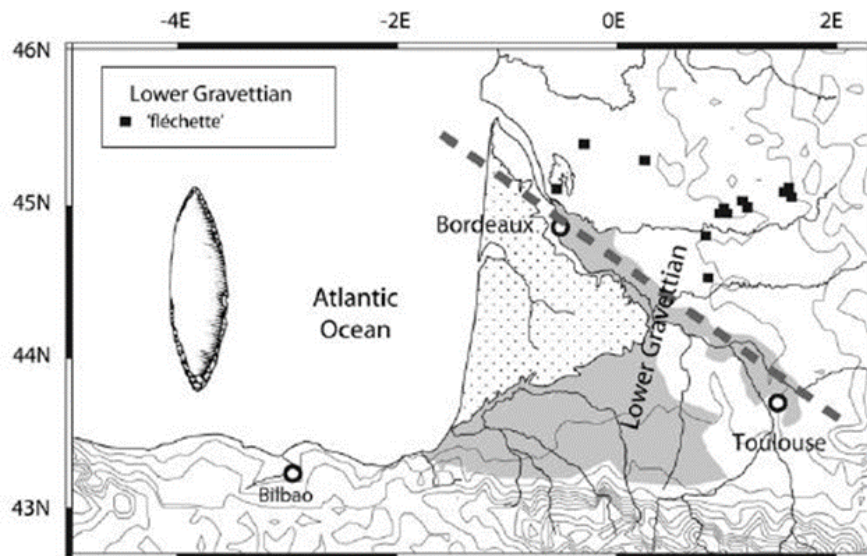


Map of the different regional centers of the Gravettian: 1 - Diffusion of the Gravettian to the west, 2 - Pavlovian, 3 - Upper Danube group, 4 - Middle Rhine group, 5 - western Gravettian (Perigordian), 6 - Maisierian/Perigordian, 7 - Dnester/Prut group (Molodovian), 8 - Mediterranean Gravettian, 9 - Kostienki, 10 - Buran-Kaya, 11 - Kostienkian (KostienkieAvdeevo group), 12 - Diffusion of the Gravettian to the East and South in the beginning of LGM, 13 - LGM ice-sheet, 14 - coastline.

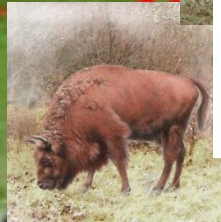
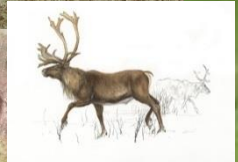
The Landes de Gascogne (southwest France): periglacial desert and cultural frontier during the Palaeolithic

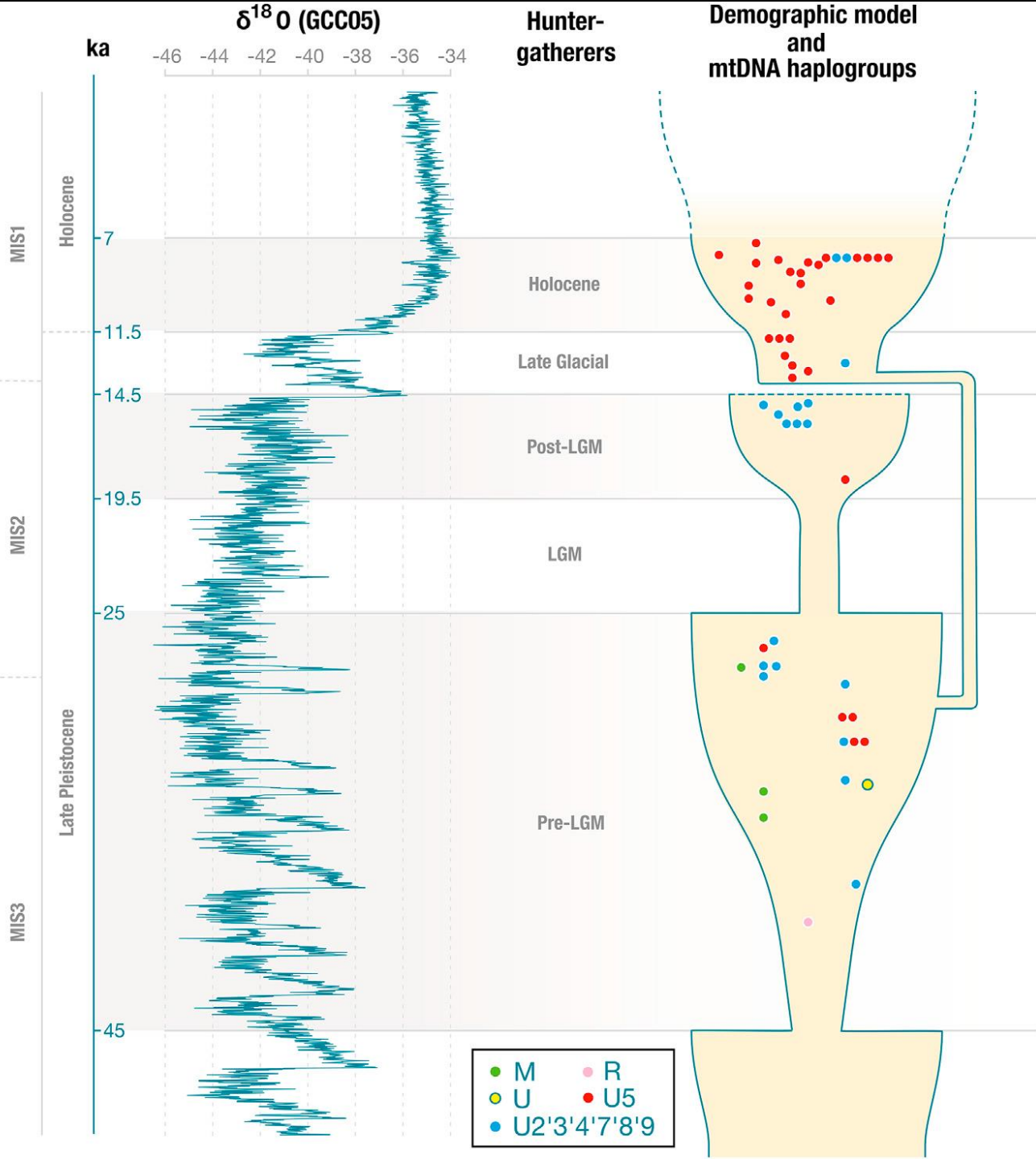


General view of the major sand and loess deposits in western Europe.



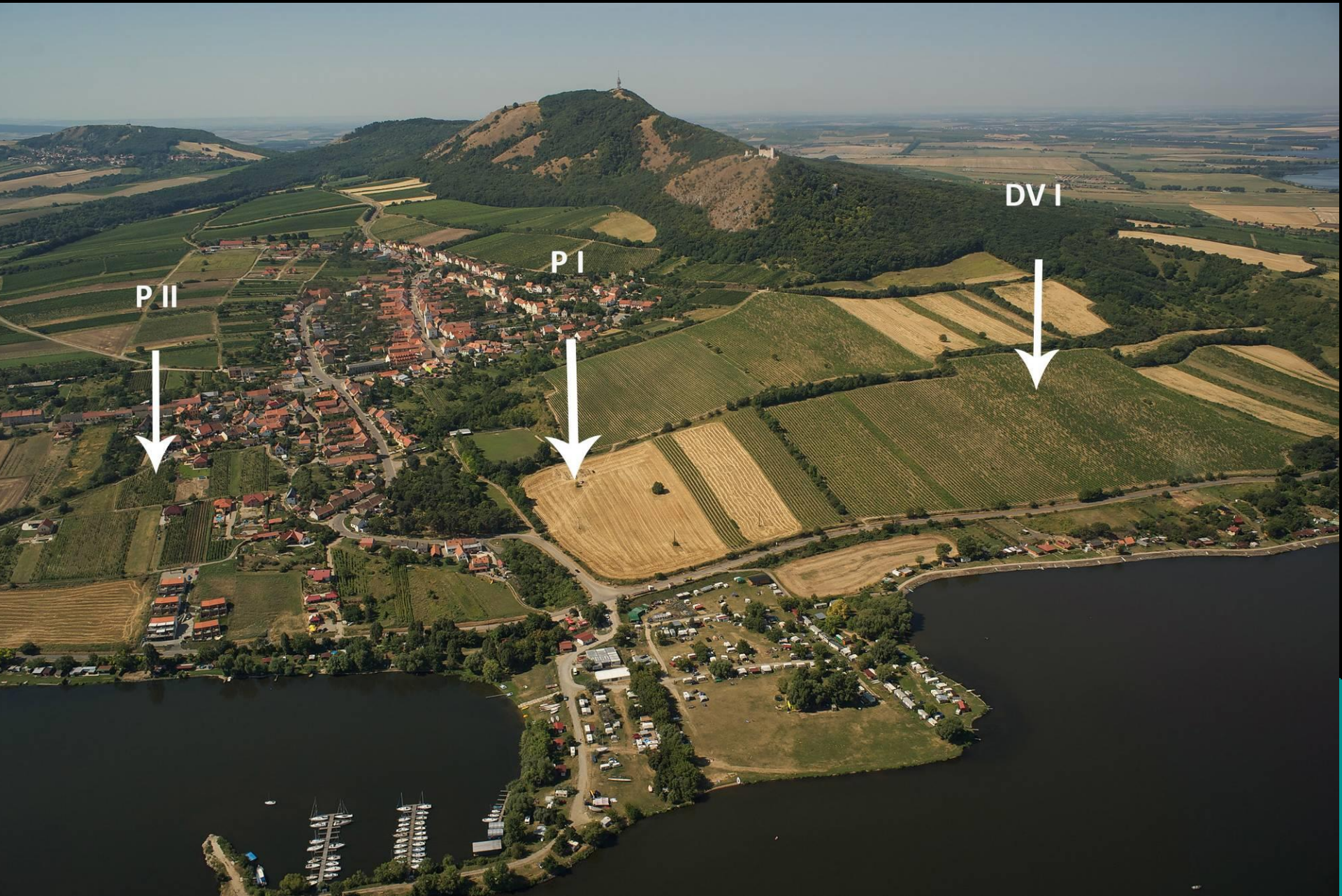
Distribution of selected Upper Palaeolithic tool types and art pieces. Lower Gravettian Fléchettes, Solutrean points, Middle Magdalenian ornaments (carved horse hyoids), and Upper Magdalenian harpoons.

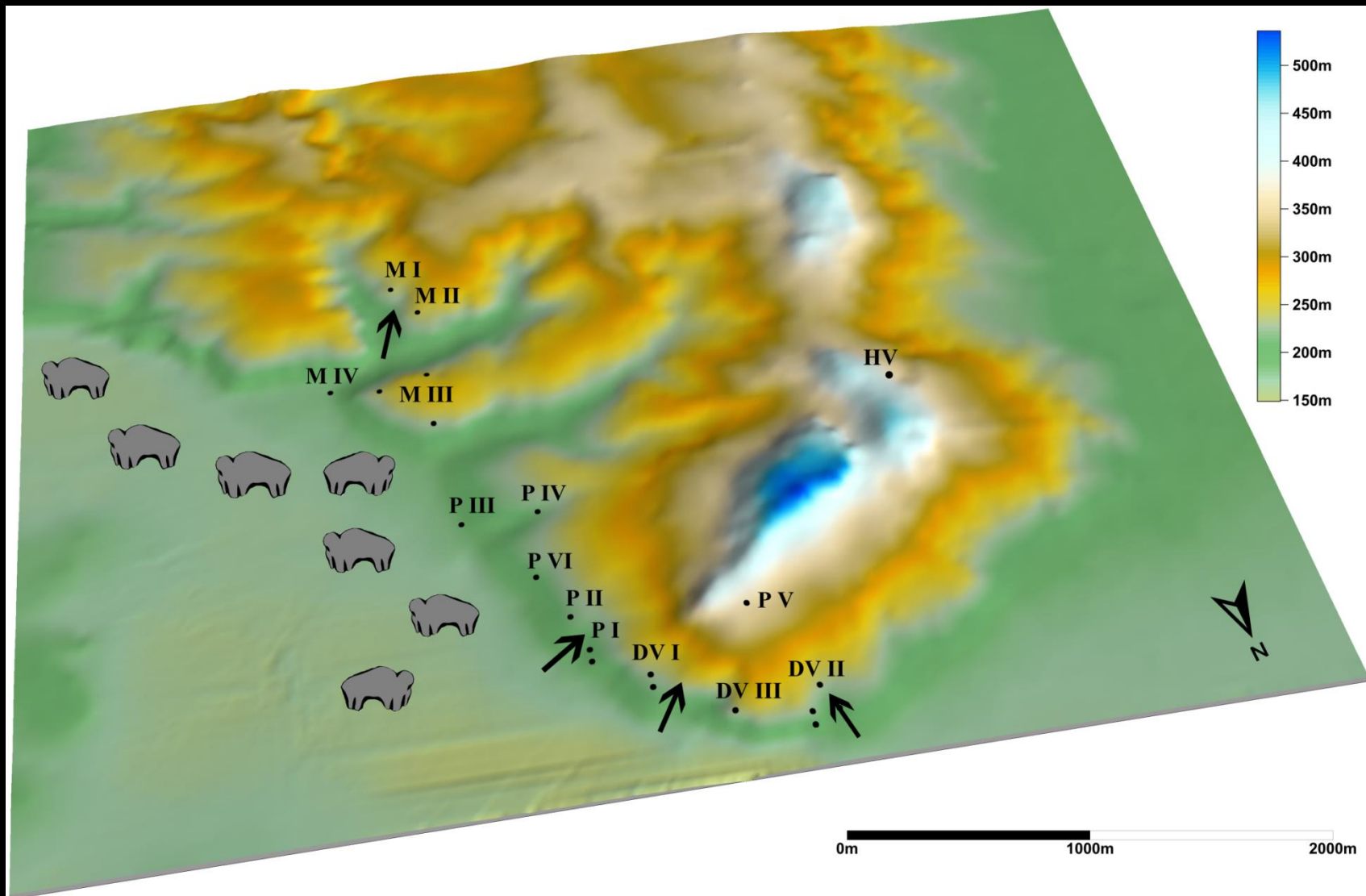




Posth et al. Curr. Biol. 26, 2016, 827-833
 (with co-author's agreement)

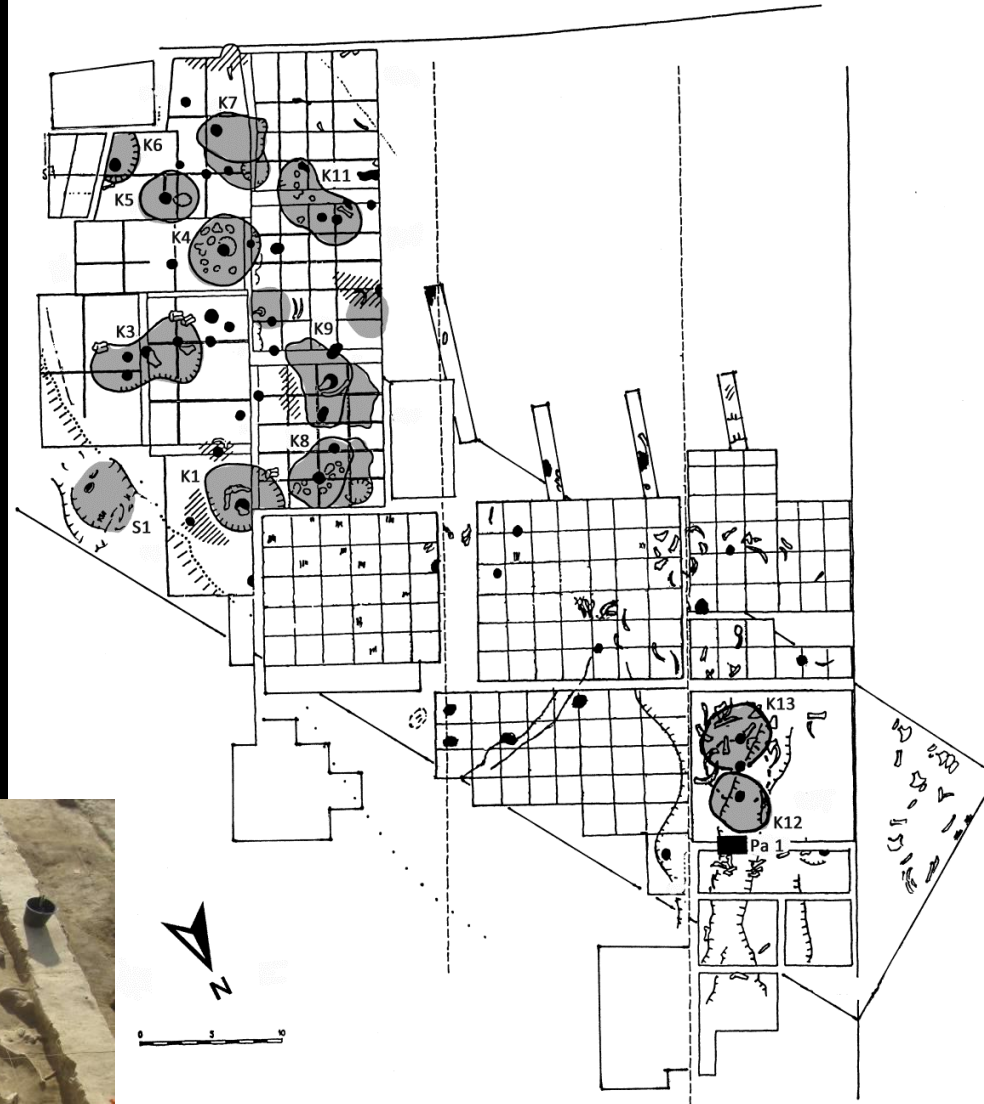
Dolni Vestonice and Pavlov





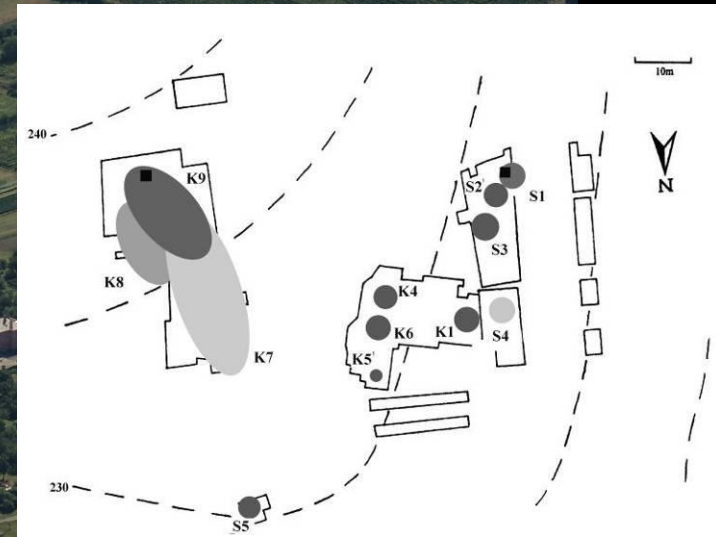
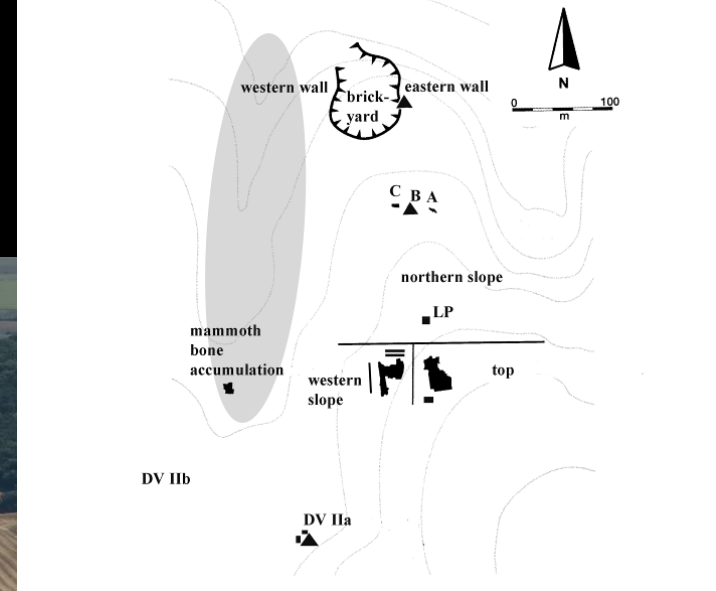
Pavlov I: an aggregation site

excavation 1952-1972
and 2013-2014



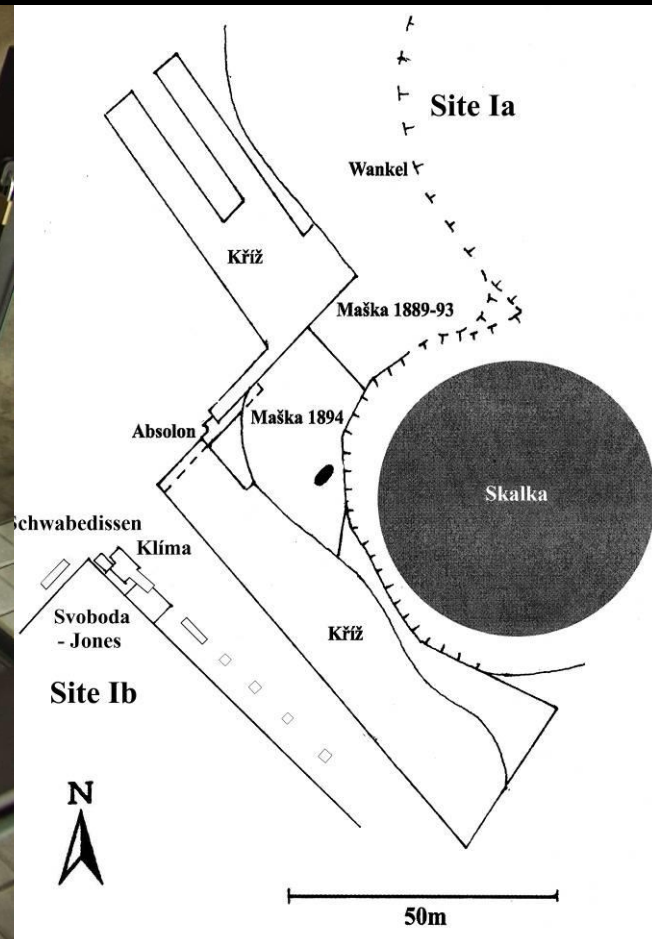
Dolní Věstonice II: a complex site

excavation 1985-1991, 2005, 2012



Předmostí 2006:

a settlement zone, a mammoth bone deposit, and burial



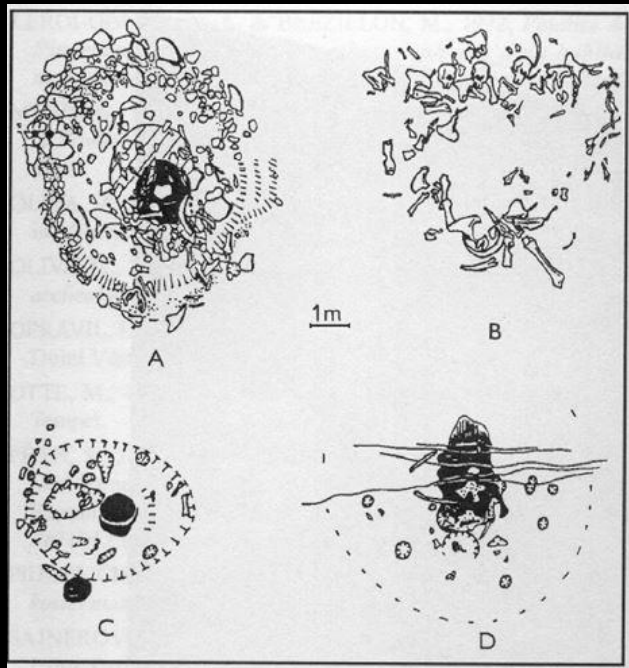
The architecture of mammoth bone circular dwellings of the Upper Palaeolithic settlements in Central and Eastern Europe and their socio-symbolic meanings



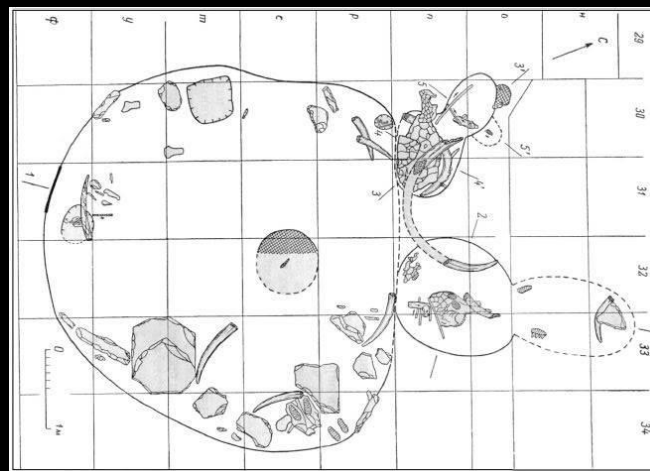
Lioudmila Iakovleva



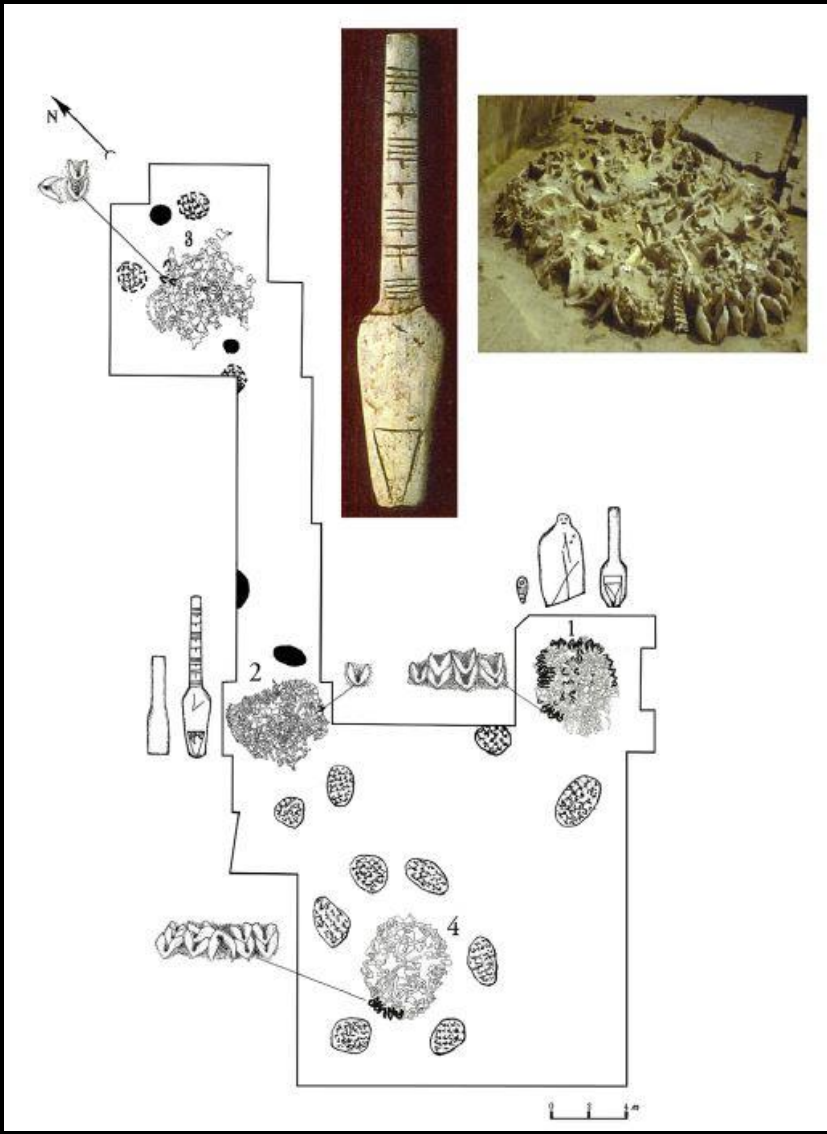
Dwelling of Kostienki 11/1a



Types of spatial structures in the Pavlovian.



Dwelling of Gagarino



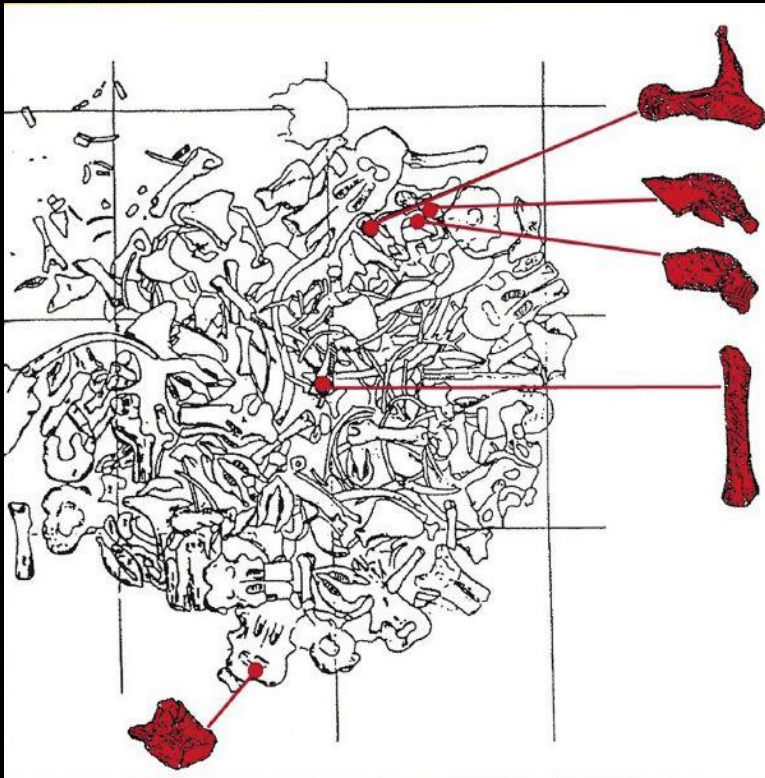
Map of the dwellings of Mejršicho



Dwelling of Gontsy



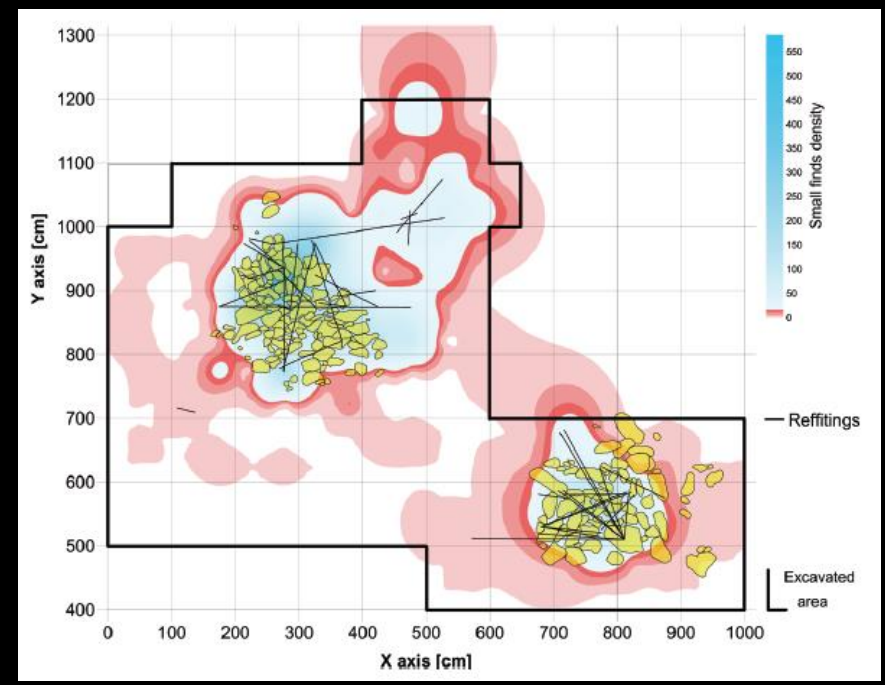
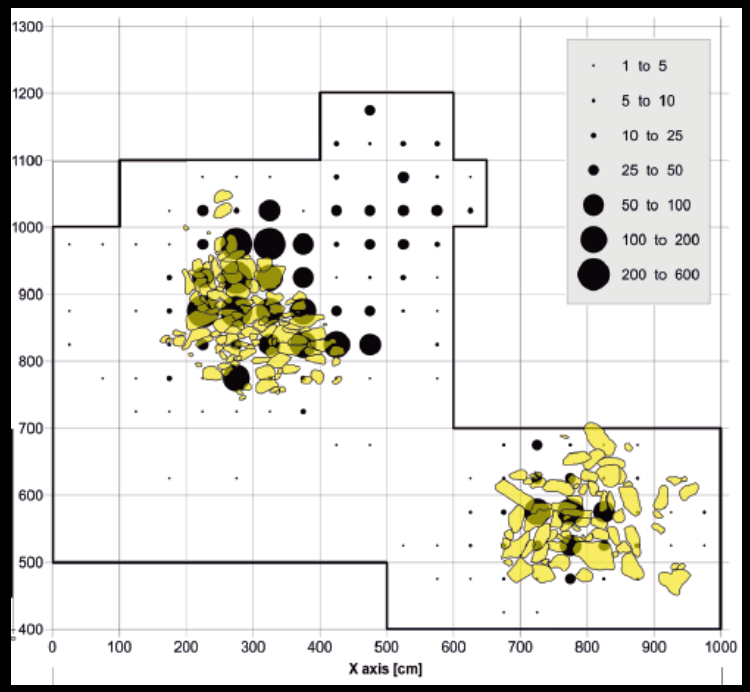
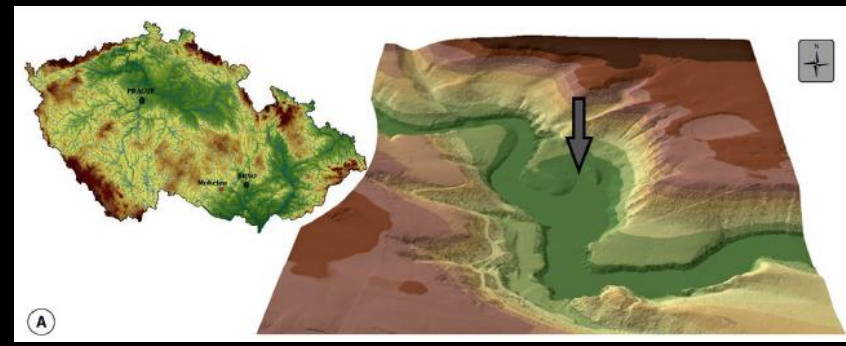
Distribution of the mammoth jaws in the external wall of dwelling n. 5 in Gontsy



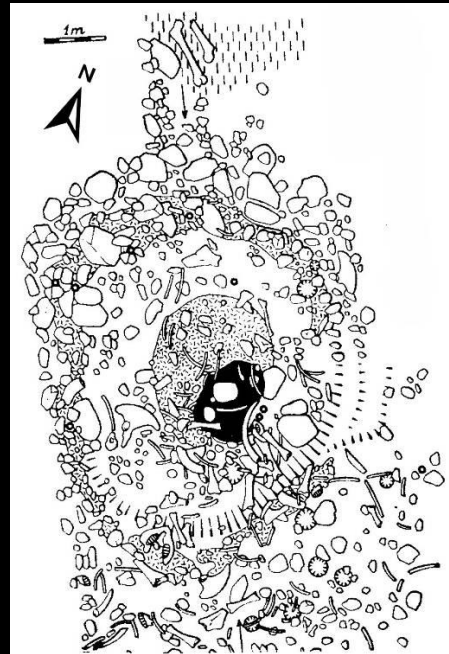
Reconstitution of the dwelling n. 1 of Mezine by the team of Ivan Chovkopllass.

Map of the dwelling n.1 of Mezine with the spatial distribution of painted bones

Last Glacial Maximum paved stone structures from Mohelno-Plevovce, Moravia

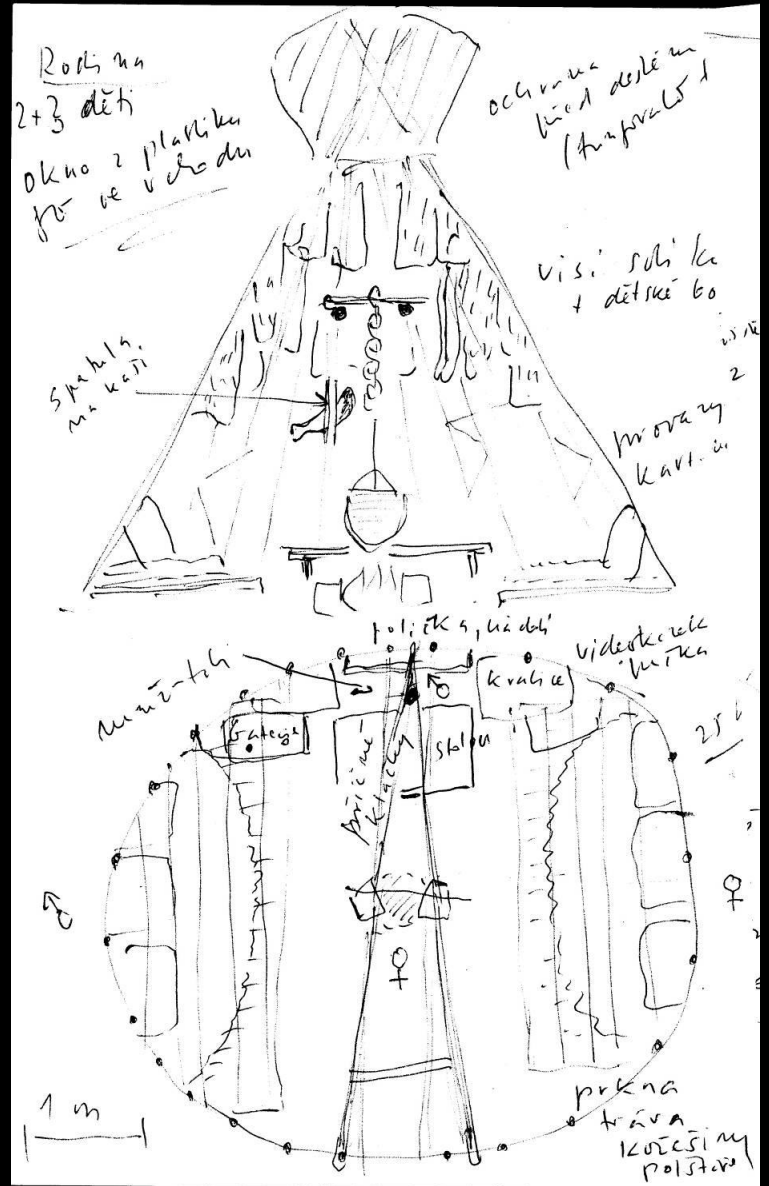


Ethnoarchaeology Stone circles



Ethnoarchaeology

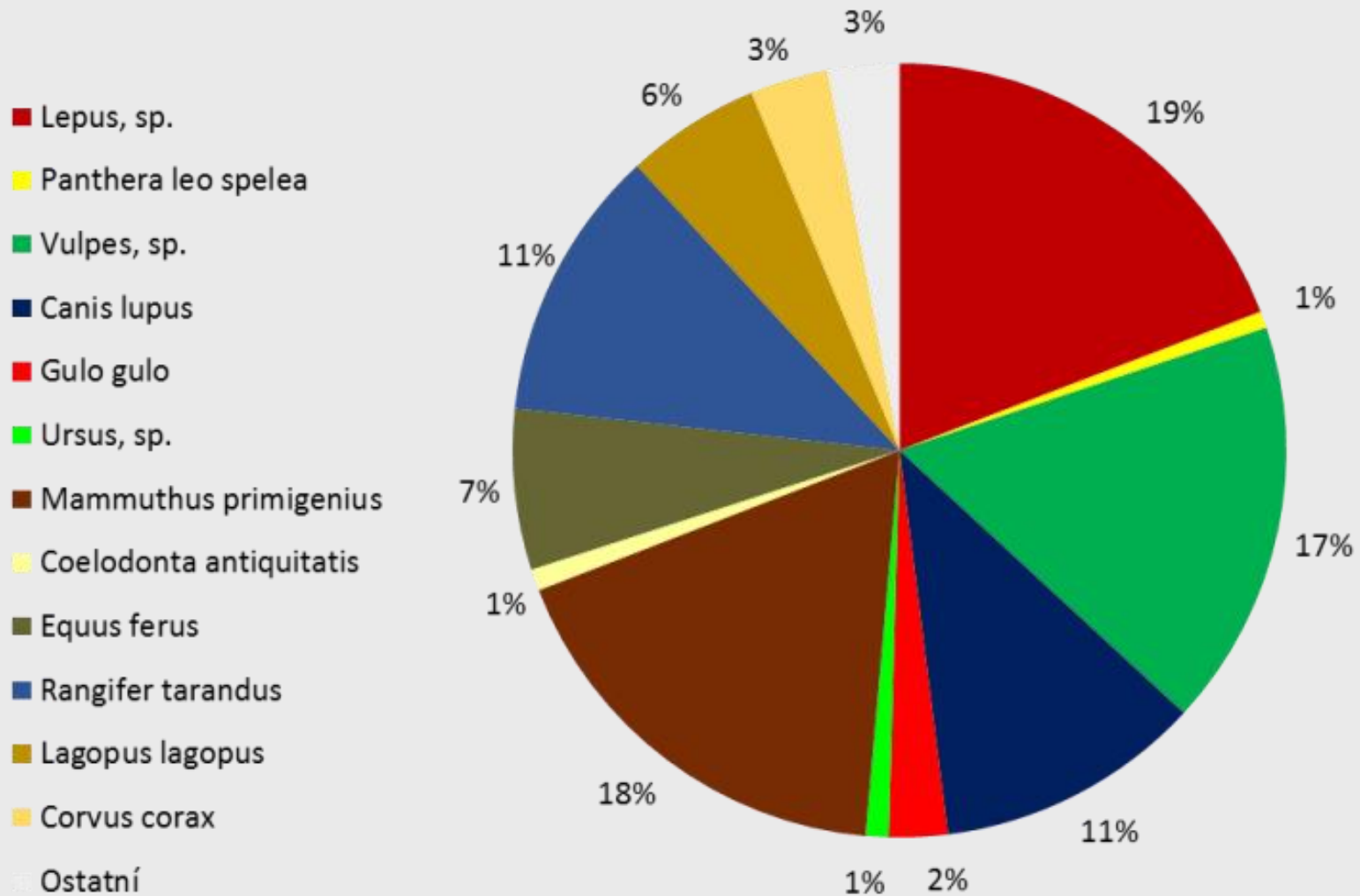
Single dwelling – „chum“



Gravettian faunal composition

Dolní Věstonice – Pavlov – Milovice (mammoth deposits not included)

data by Musil, Wojtal, Brugere, compiled by Sázellová

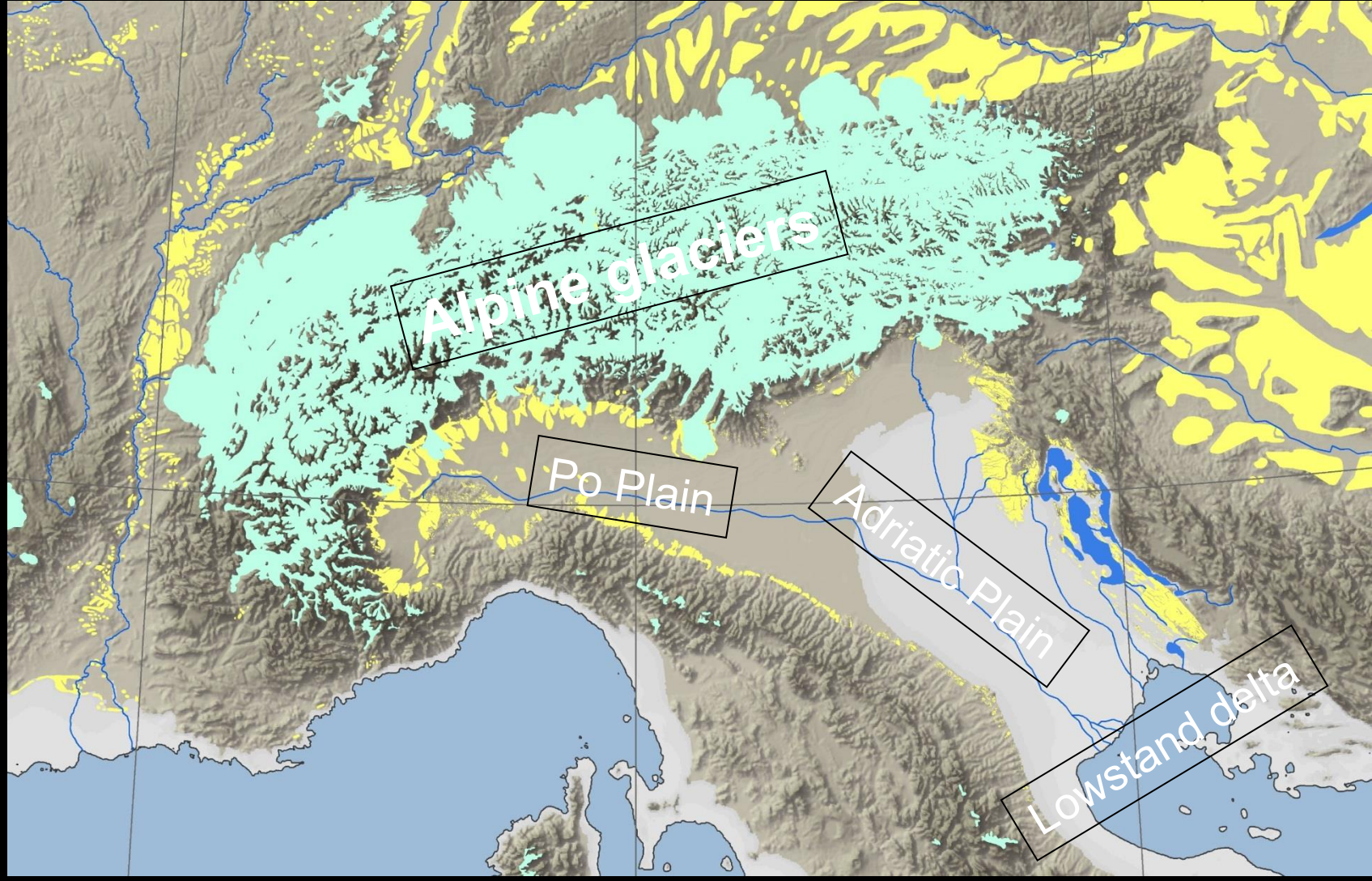


Poster Presentation Number 52, Fr 19:00-19:45

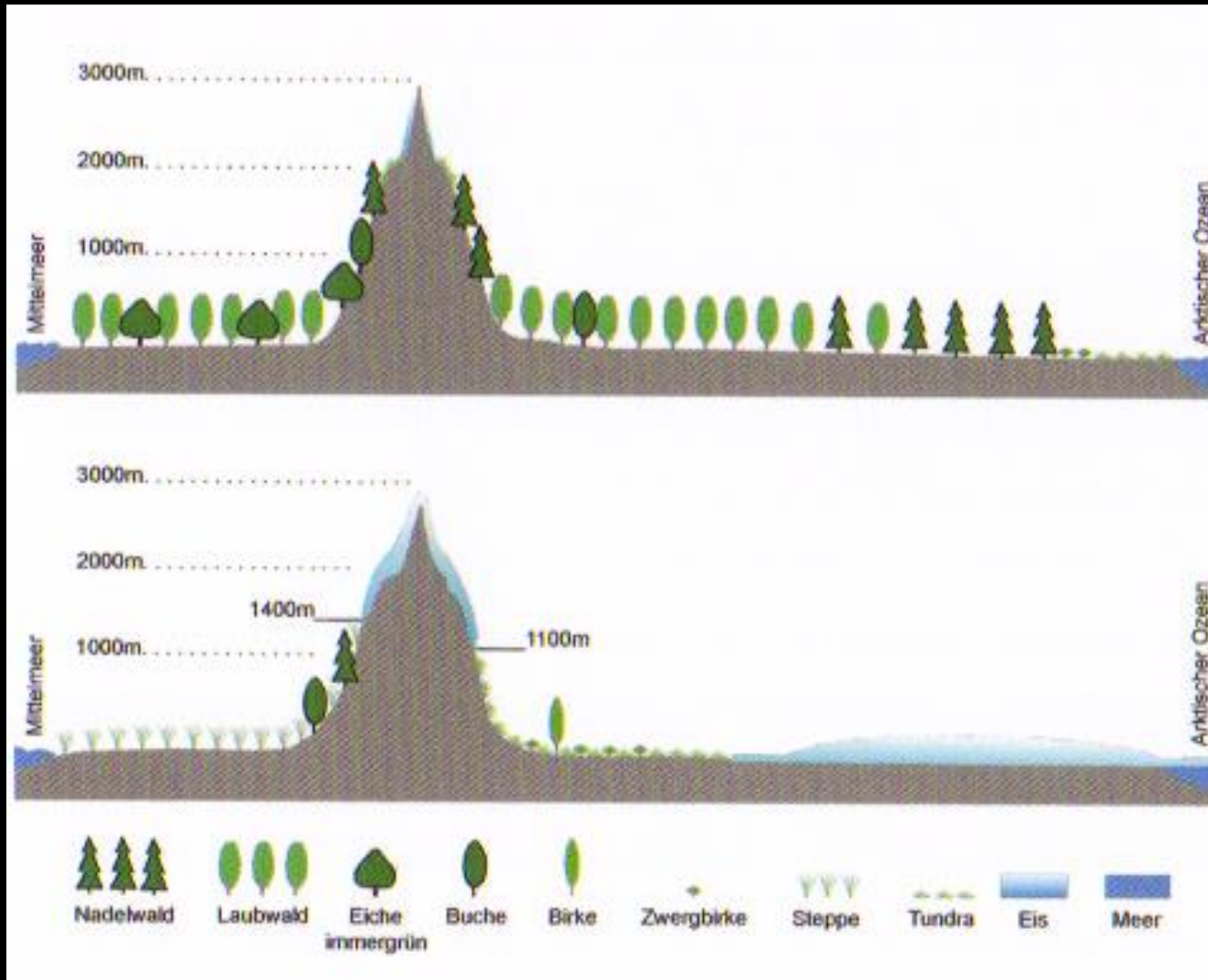
What lies beneath? **New insights on the Předmostí (-) canid skull specimen and associated materials** using μ CT scan data

Catherine Claudia Bauer¹, Mietje Germonpré², Martina Lázničková-Galetová³, Hervé Bocherens¹

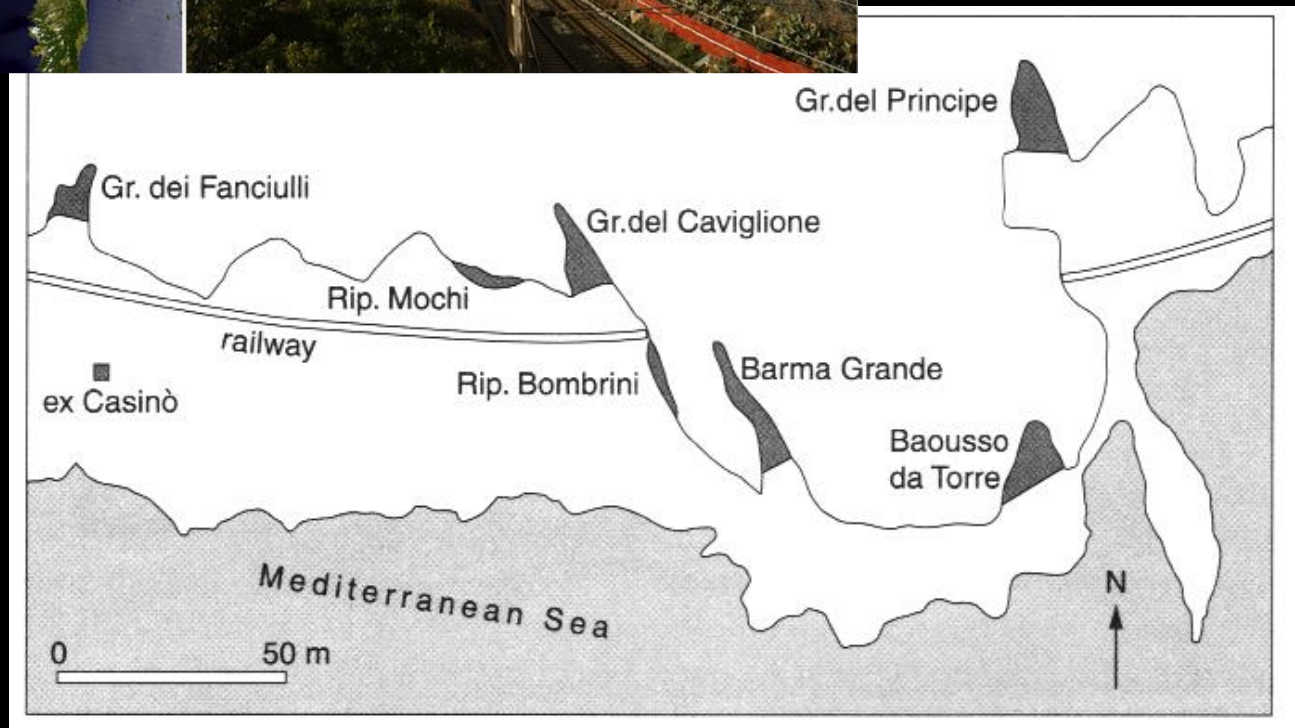




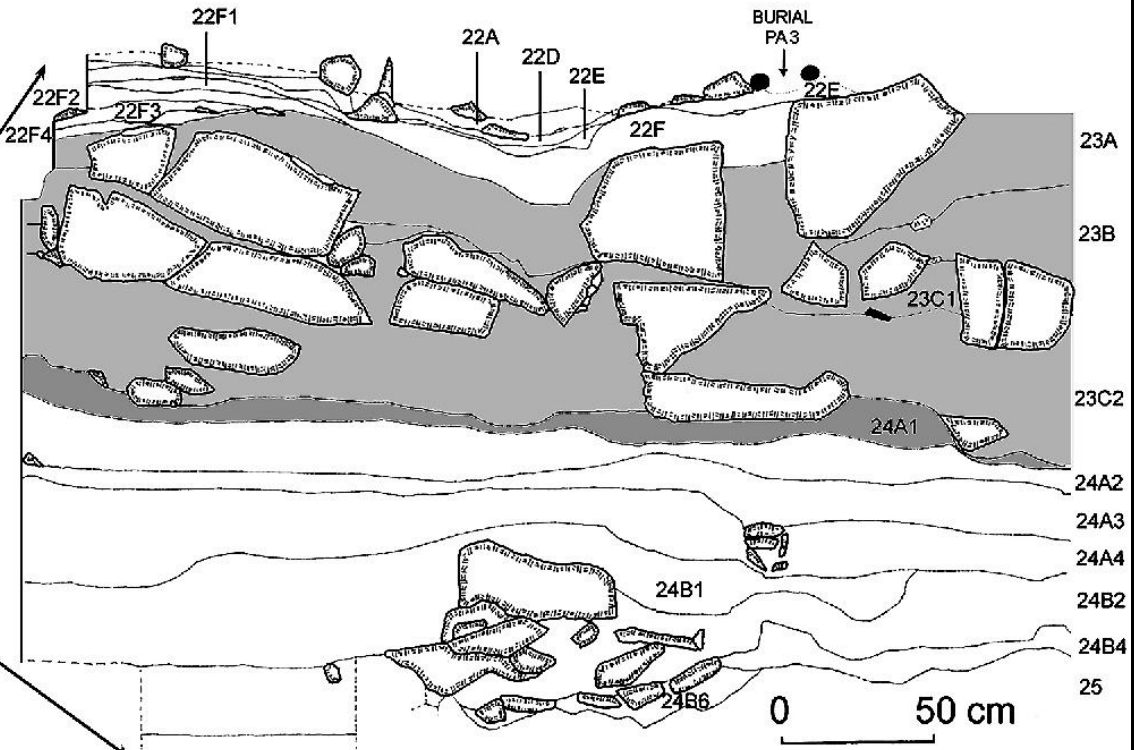
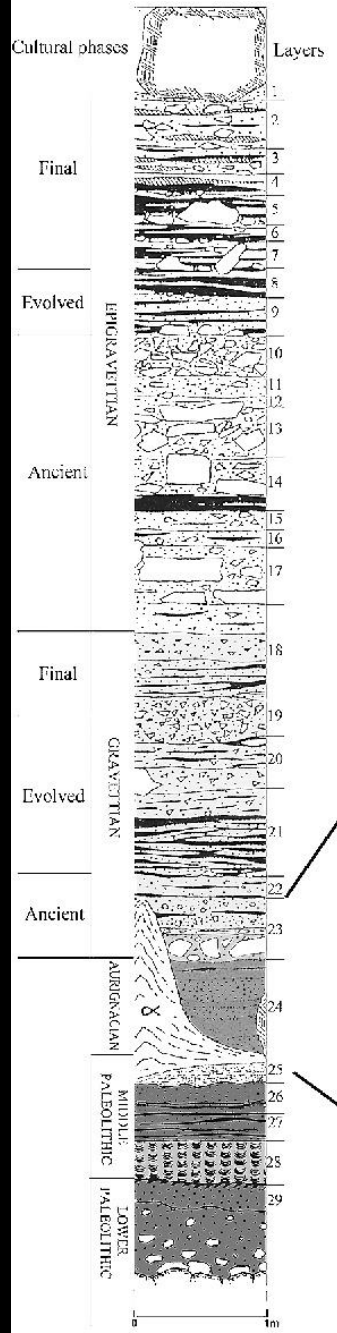
Southern and northern slopes of the Alps



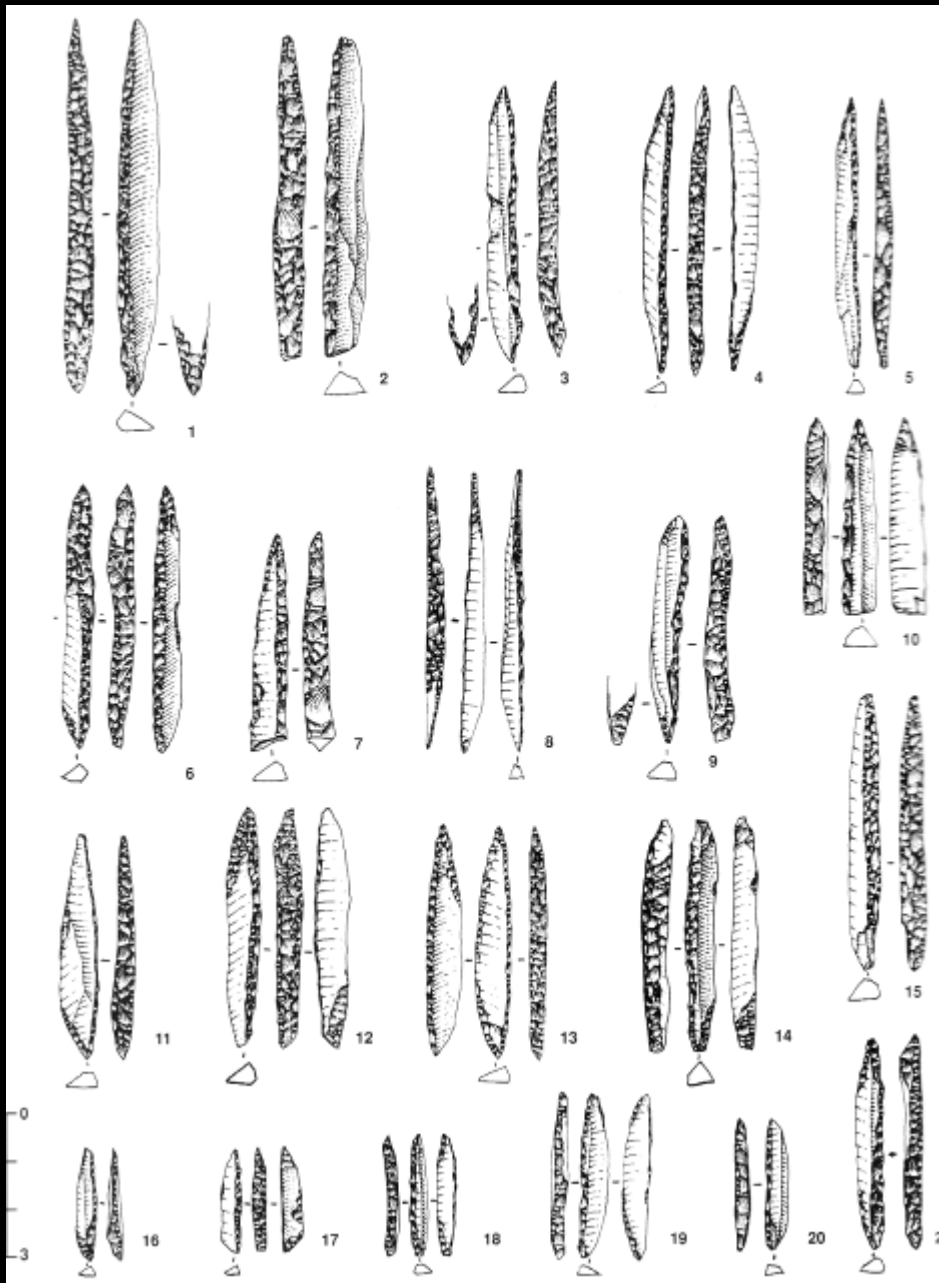
The Balzi Rossi, Liguria, Italy



Grotta Paglicci, South Italy

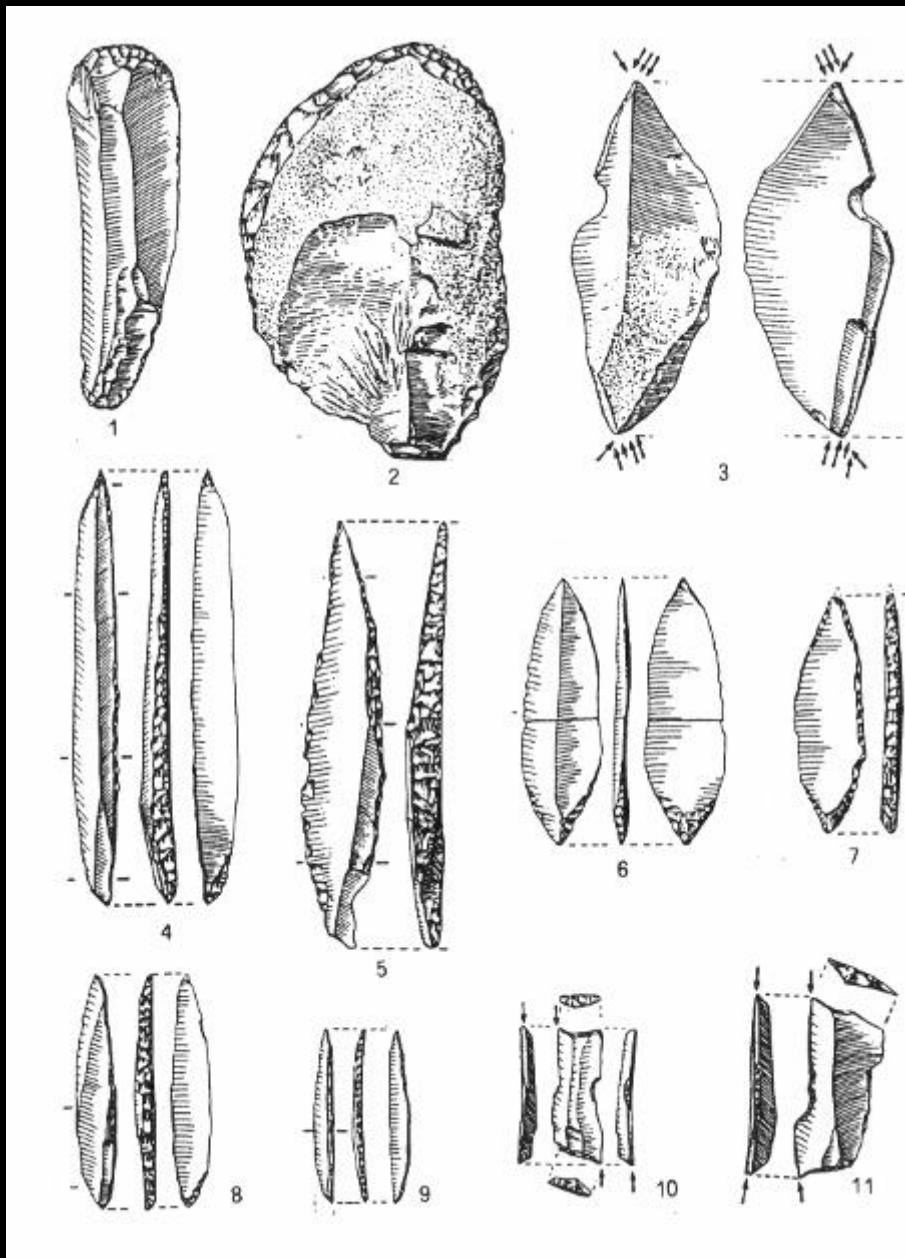


Gravettes e microgravettes



Subdivision of western Gravettian

- Earliest phase : 31-28 cal ka BP (flechettes)
- Evolved phase : 28-25 cal ka BP (p. Font Robert, Noailles burin)
- Recent phase: 25-22 cal ka BP



Gravettiano dell'Abri Pataud
(Francia)

6,7 flechettes

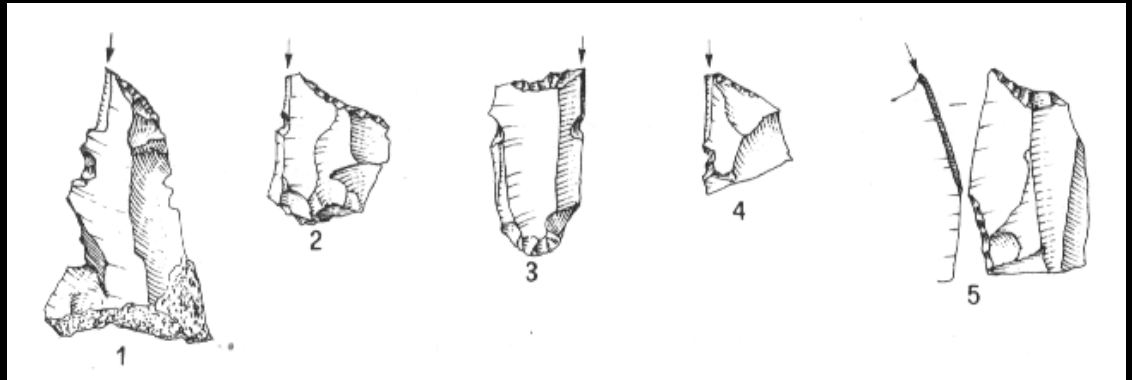
4,5 gravette

8,9 microgravettes

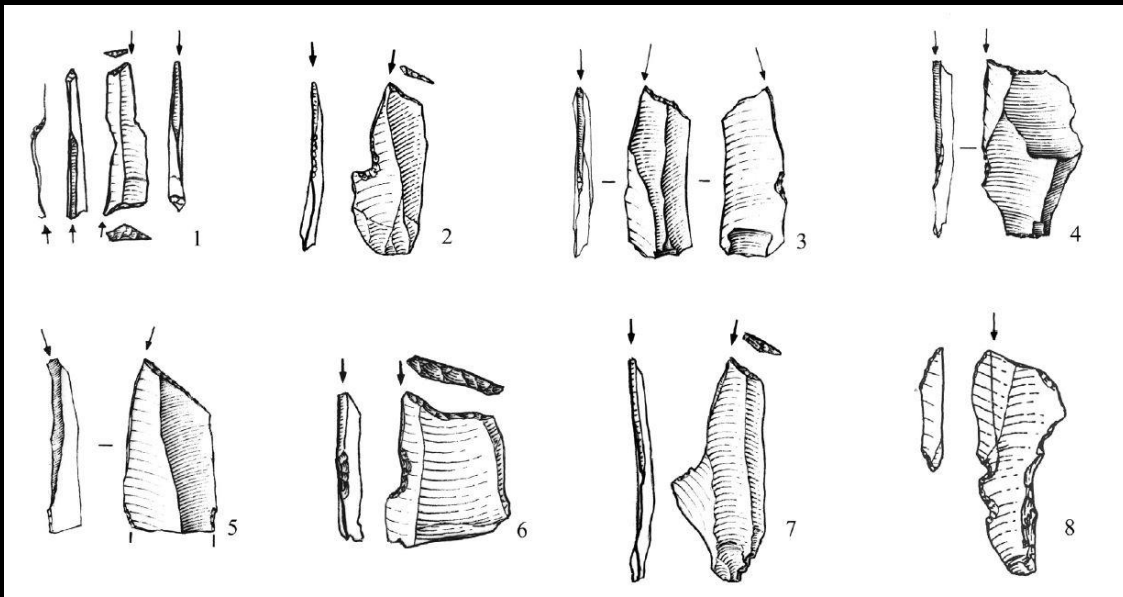
10, 11 bulini di Noailles

Gravettiano a Noailles





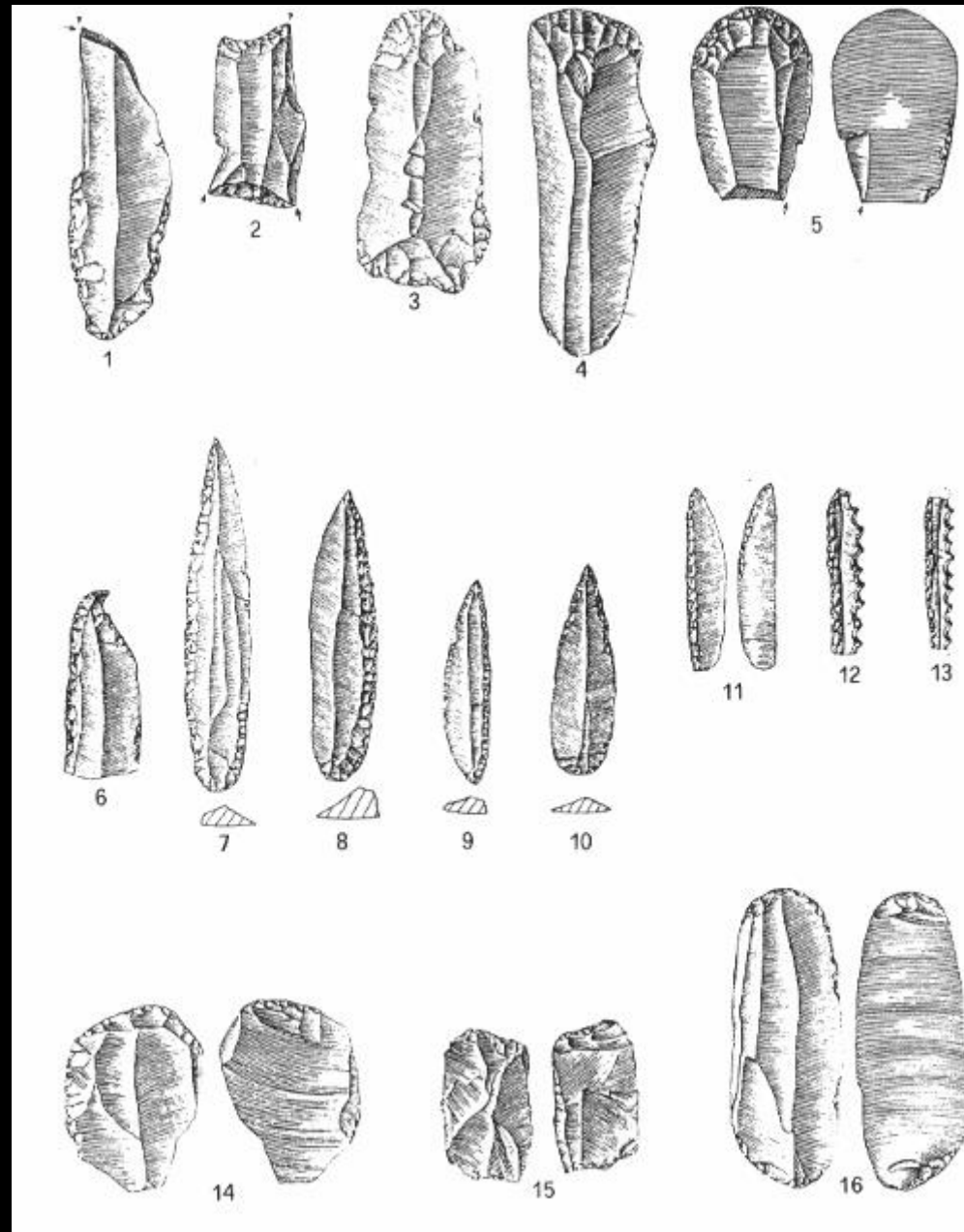
Noailles burins from Riparo Mochi (Liguria, Italy).



Noailles burins from Bilancino (Toscana, Italy).

Subdivision of Eastern Gravettian

- Early phase: 30-26 Cal ka (gravettes, microgravettes)
- Evolved/recent phase: 25-22 Cal ka (shouldered points - punte a cran)



Dolni Vestonice

14-16 coltelli di Kostienki

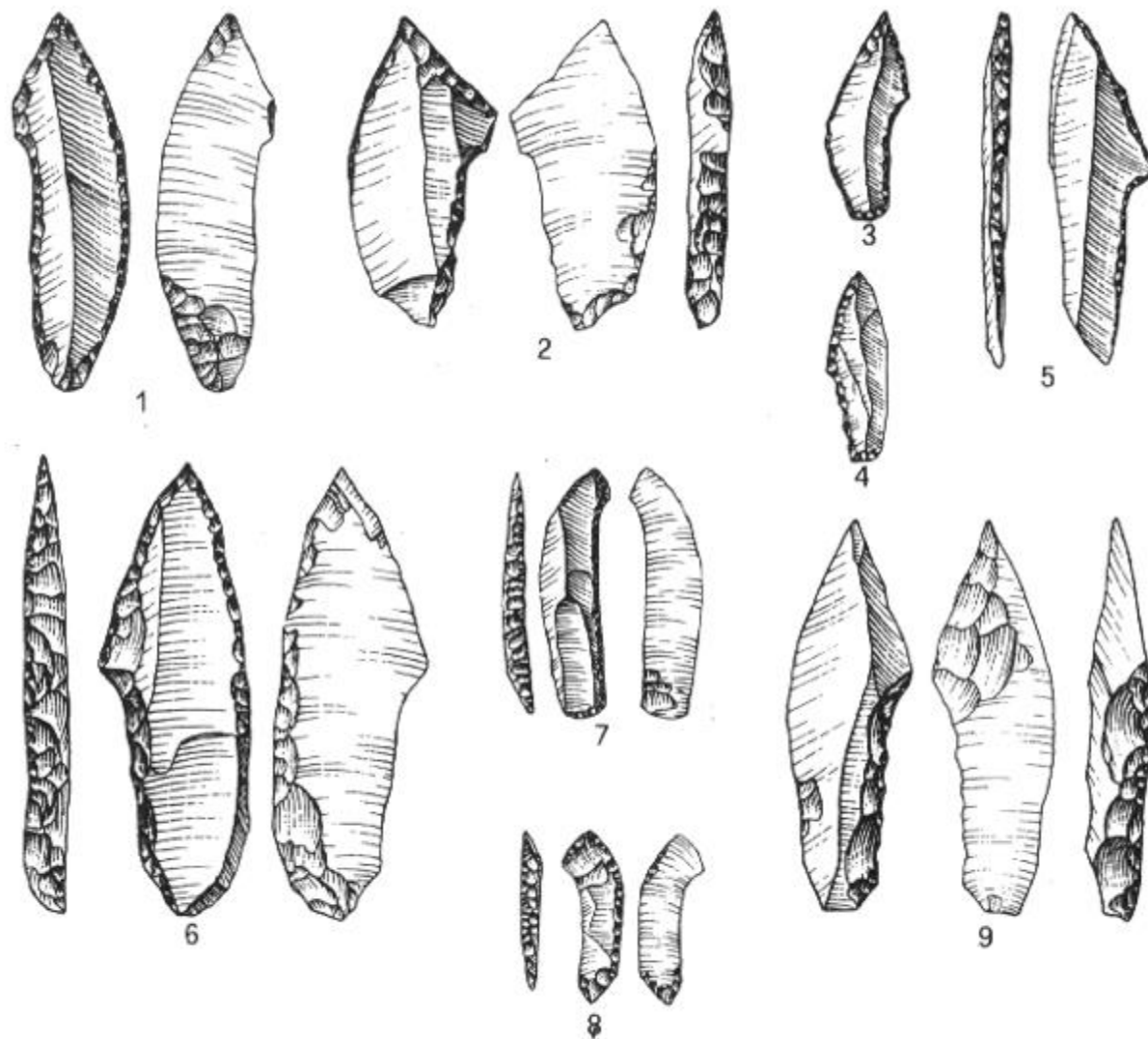
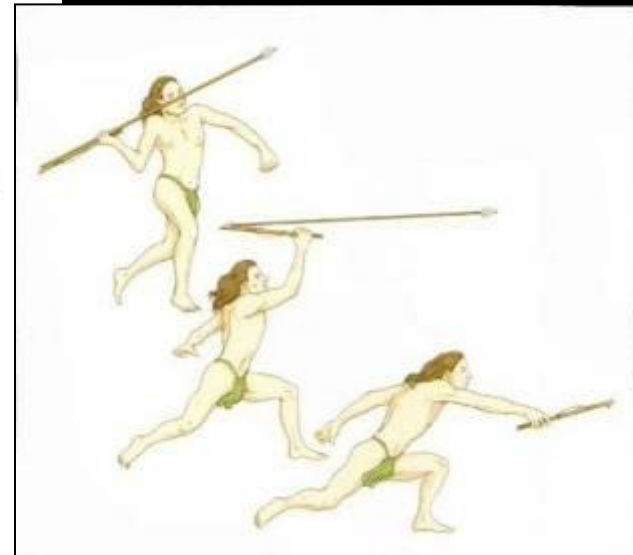


Fig. 76 Punte a *cran* nelle industrie gravettiane evolute di Willendorf (Bassa Austria). 2/3 della grandezza naturale (da A. Broglio e G. Laplace).

IL SISTEMA D'ARMA : PROPULSORE - GIAVELLOTTO

- Propulsore come prolungamento del braccio del cacciatore:
principio fisico della leva

VANTAGGI: minor sforzo fisico, maggiore gittata, maggiore forza impressa, efficace in ambienti aperti



- Propulsori più antichi datati 20.000 anni fa:

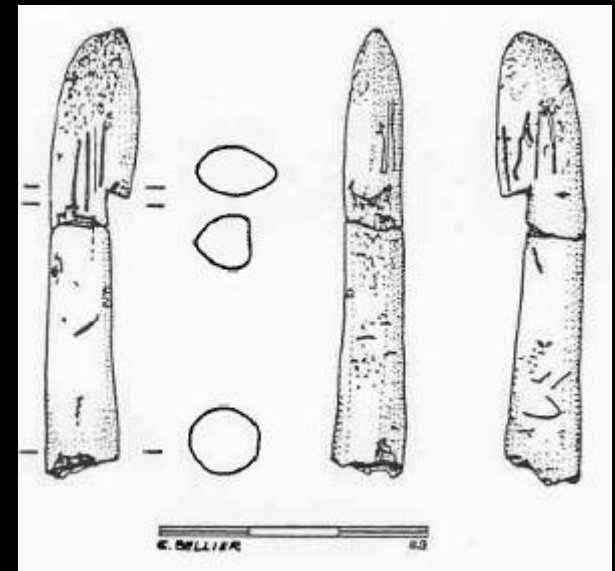
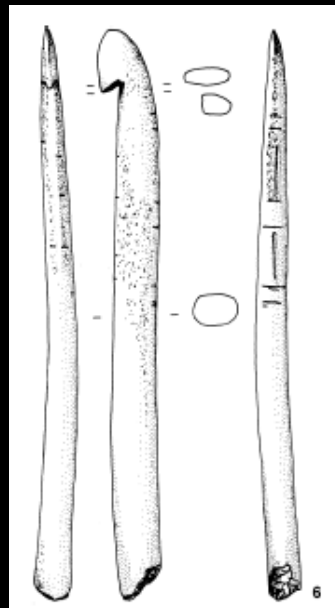
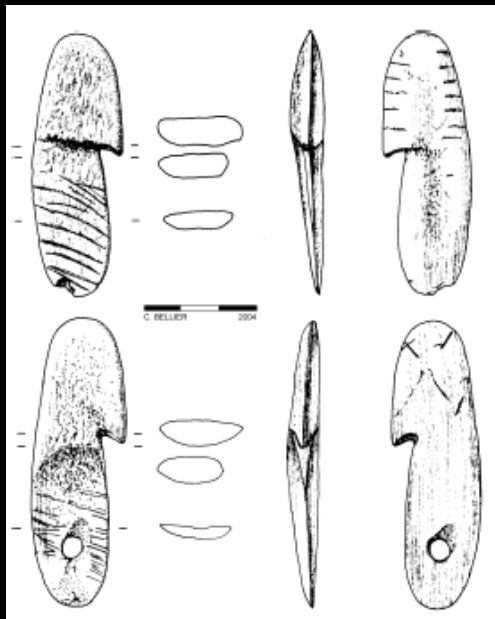
1) Combe Saunière in Dordogna

2) Grotte du Planchard in Charente



Termine cronologico di riferimento ma non si esclude un utilizzo in fasi antecedenti

punte gravettiane datate a 25.000 anni fa



Propulsori, Grotte du Planchard 20.000 anni B.P.

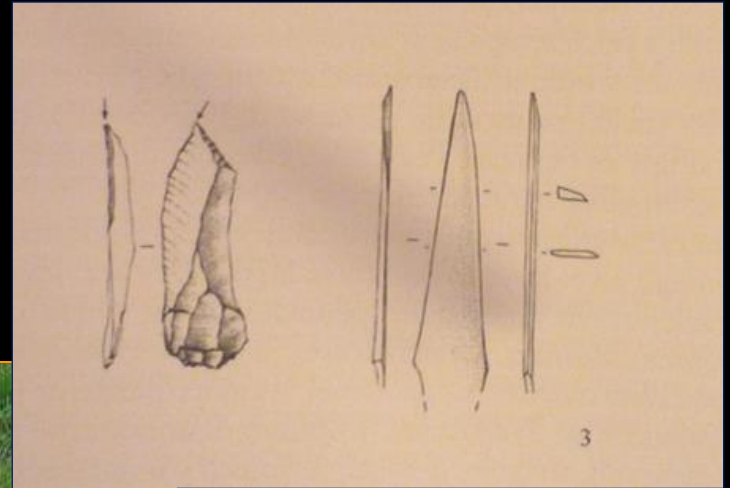
Cattelain 2004

Propulsore, Comb Saunière 20.000 anni B.P.

Cattelain 1989

This hunting implement disappeared from Europe around 14.000 BP as a consequence of changes in hunting strategies and in the life-style of hunter-gatherers

Prehistoric flours



Bilancino (Toscana): evidenze di utilizzo dei rizomi di tifa per l'estrazione della farina (ricca di amido)

Thirty thousand-year-old evidence of plant food processing

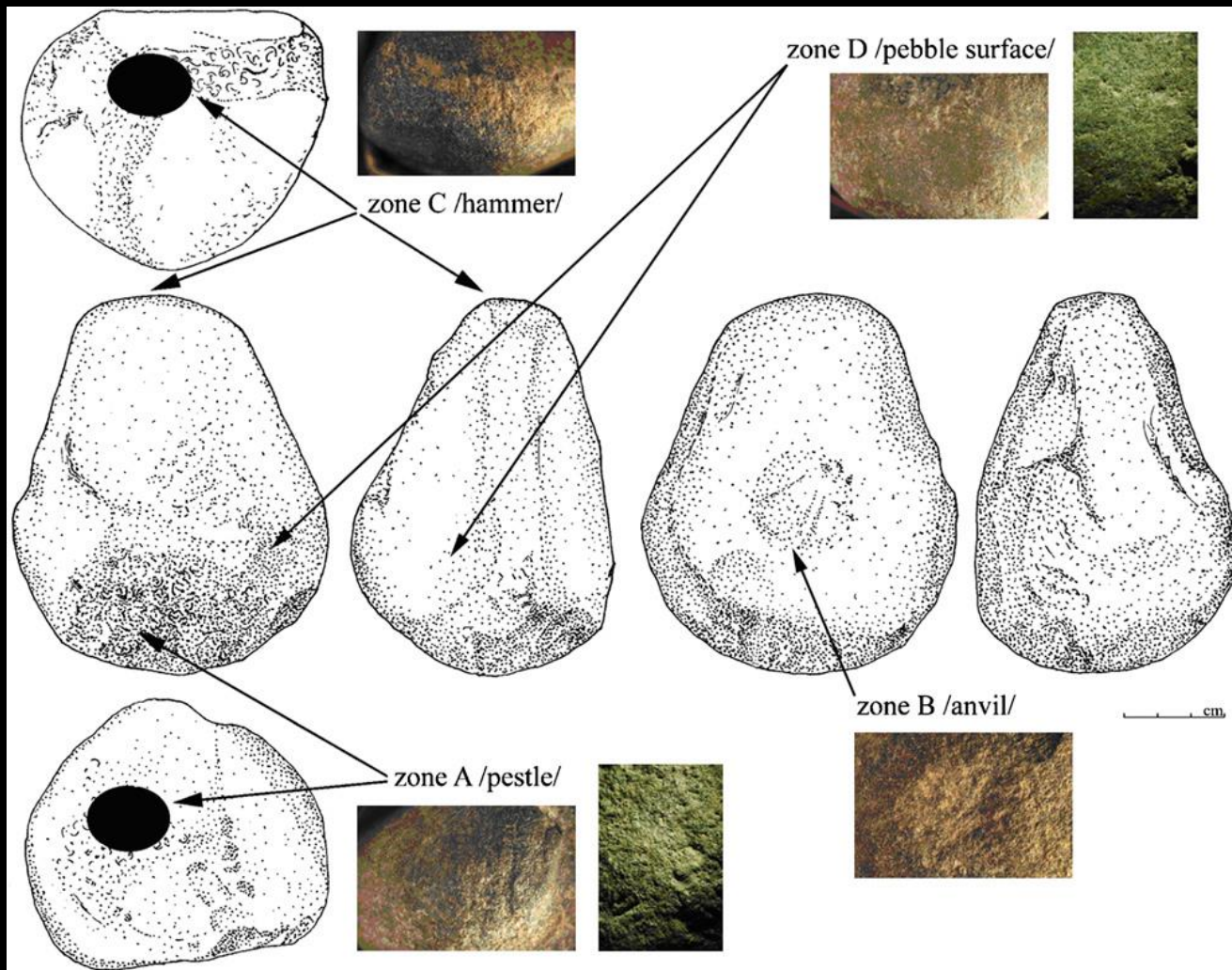
Anna Revedin^{a,1}, Biancamaria Aranguren^b, Roberto Becattini^a, Laura Longo^c, Emanuele Marconi^d, Marta Mariotti Lippi^e, Natalia Skakun^f, Andrey Sinitsyn^f, Elena Spiridonova^g, and Jiří Svoboda^{h,i}

www.pnas.org/cgi/doi/10.1073/pnas.1006993107

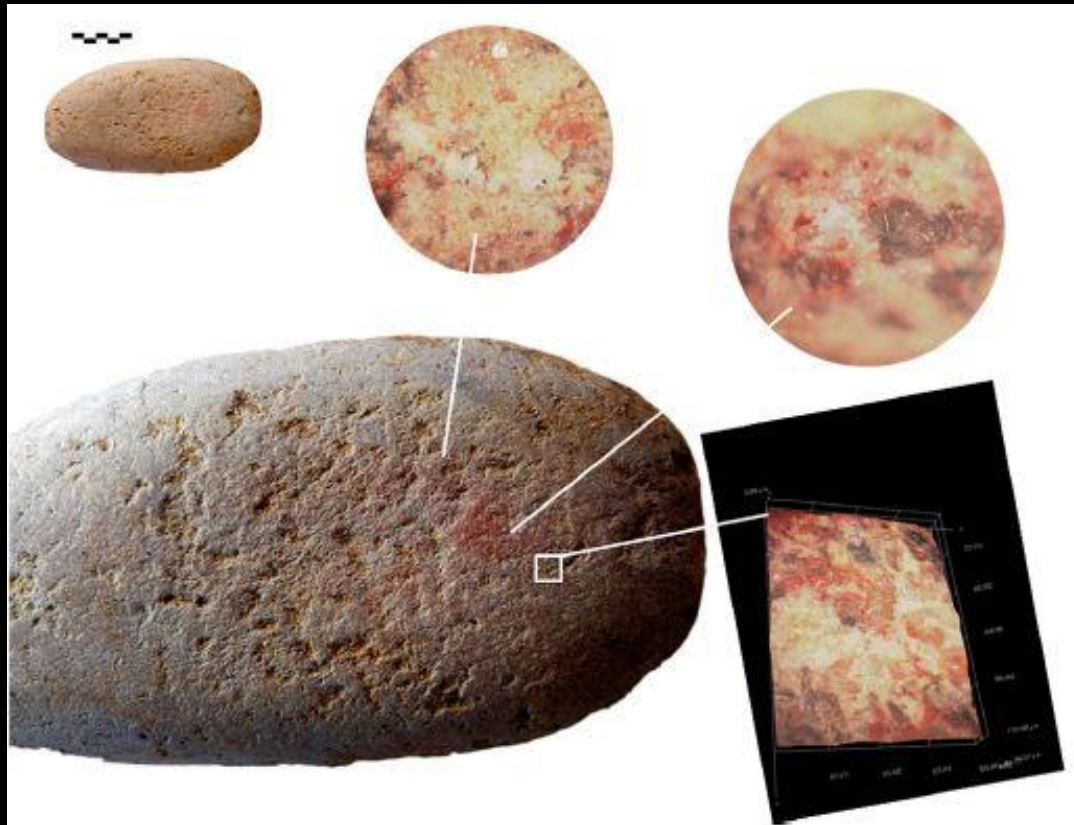
European Paleolithic subsistence is assumed to have been largely based on animal protein and fat, whereas evidence for plant consumption is rare. We present evidence of starch grains from various wild plants on the surfaces of grinding tools at the sites of Bilancino II (Italy), Kostenki 16–Uglyanka (Russia), and Pavlov VI (Czech Republic). The samples originate from a variety of geographical and environmental contexts, ranging from northeastern Europe to the central Mediterranean, and dated to the Mid-Upper Paleolithic (Gravettian and Gorodtsovian). The three sites suggest that vegetal food processing, and possibly the production of flour, was a common practice, widespread across Europe from at least ~30,000 y ago. It is likely that high energy content plant foods were available and were used as components of the food economy of these mobile hunter–gatherers.



Location of the three Upper Paleolithic sites in Europe: 1, Bilancino II; 2, Pavlov VI; and 3, Kostenki 16–Uglyanka.



Kostenki 16 (Uglyanka). The pestle grinder wear traces.



Bilancino. Macro and microwear traces and hematite residues on the grinding stone.

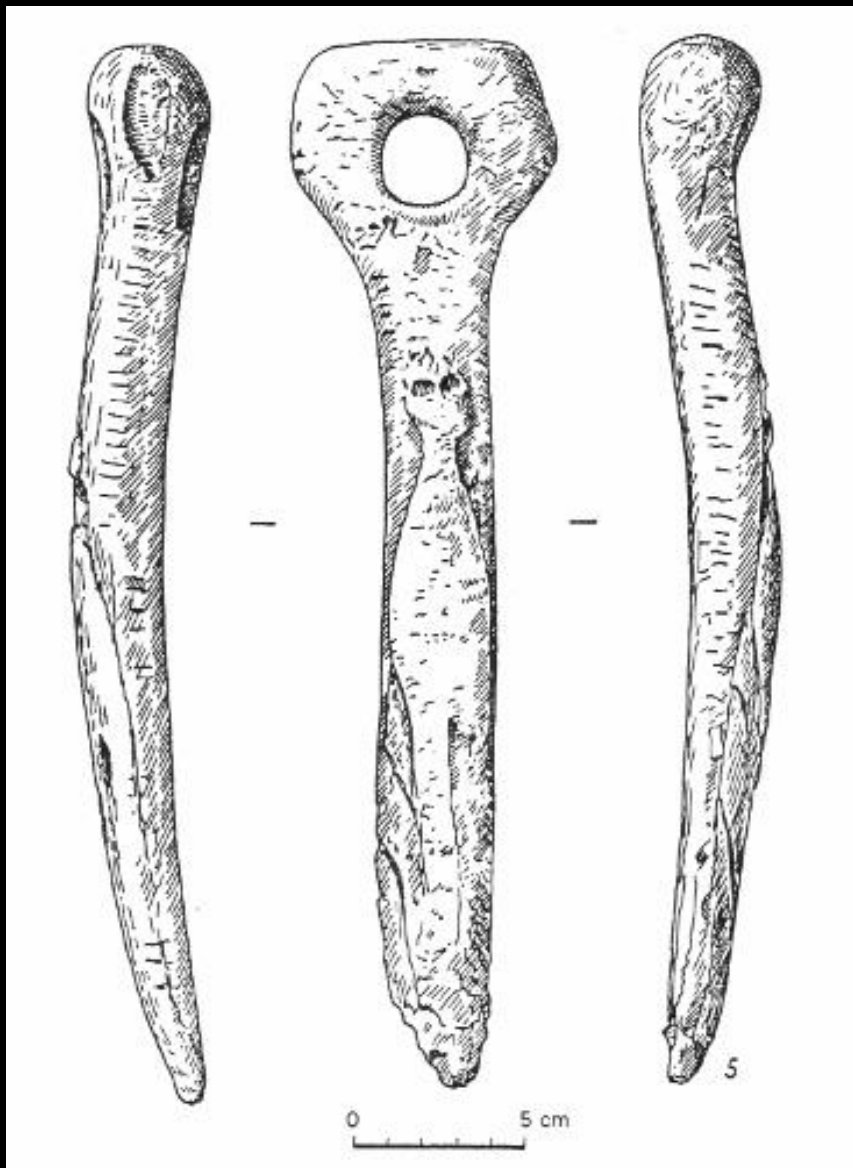
Gravettian burials



Krems-Wachtberg, Austria

The earliest reported case of monozygotic twins. Male, buried 31 ky ago



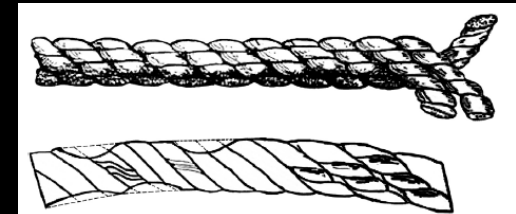
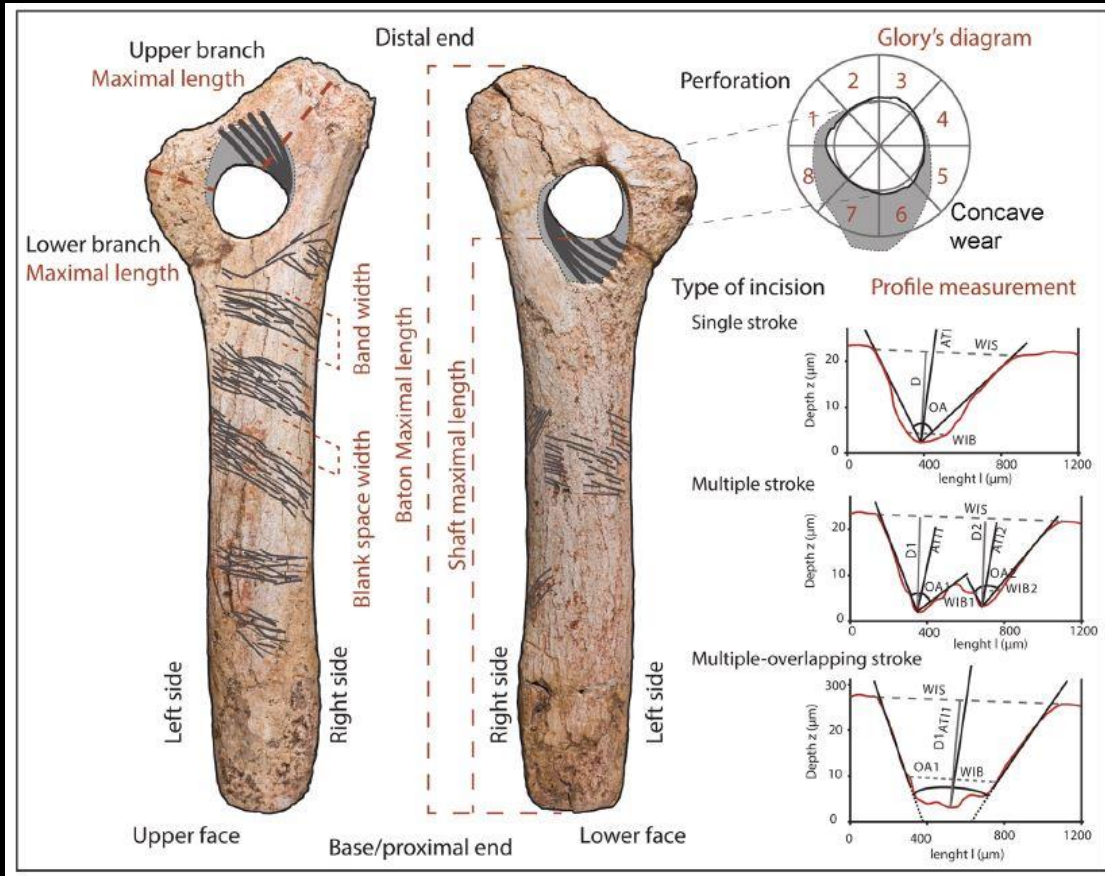


Arene Candide cave, the young Prince



Investigating the use of Paleolithic perforated batons: new evidence from Gough's Cave (Somerset, UK)

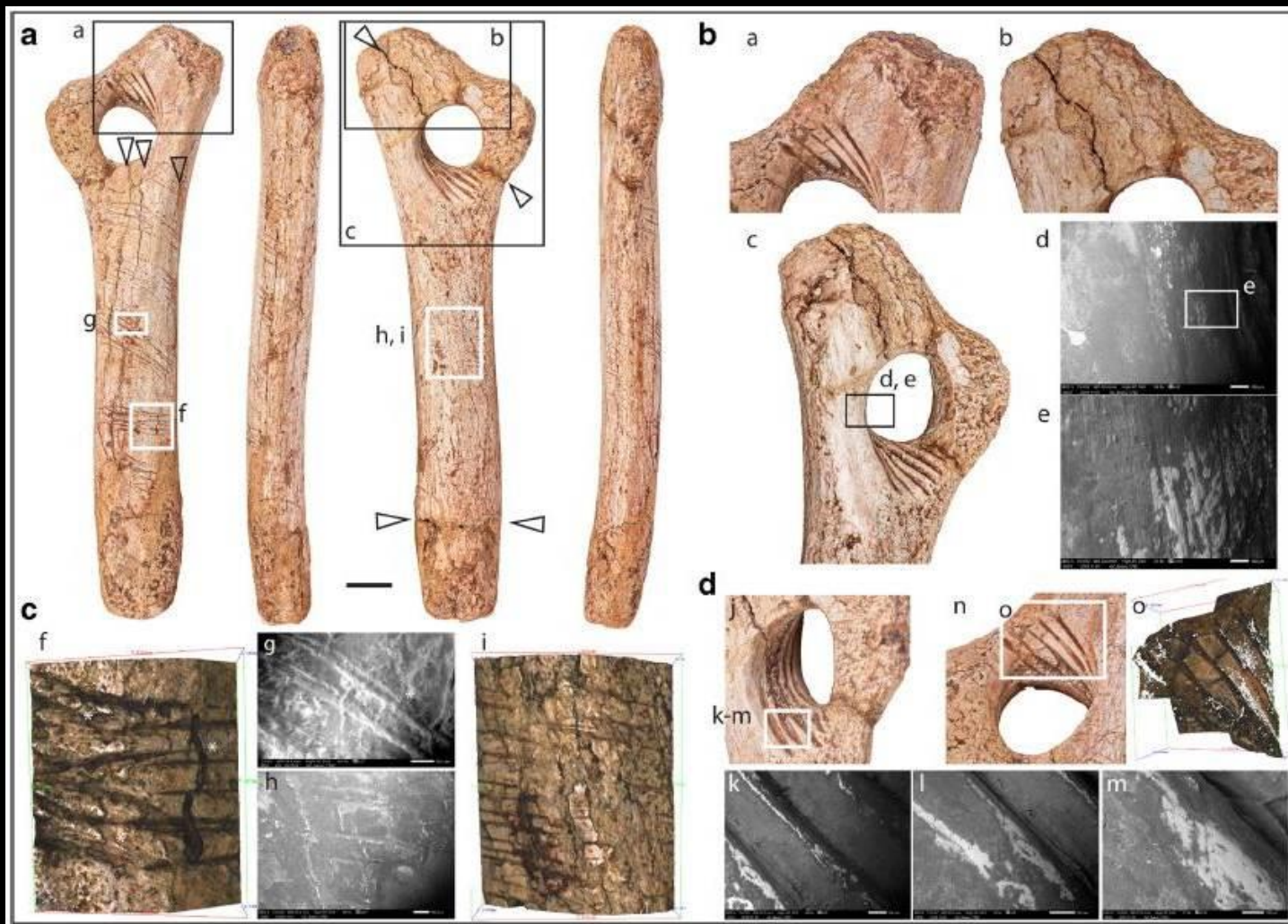
C. Lucas^{1*}, J. Galway-Witham¹, C. B. Stringer¹, S. M. Bello¹



Modifications of the perforations and shafts support the hypothesis that the batons were used in a task associated with ropes and subjected to considerable forces.

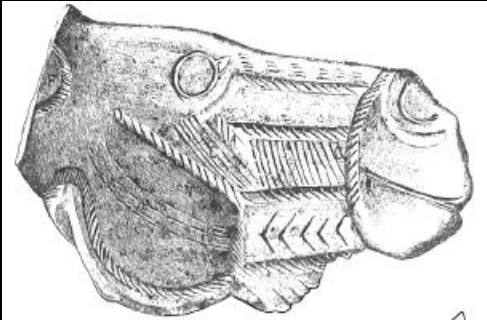
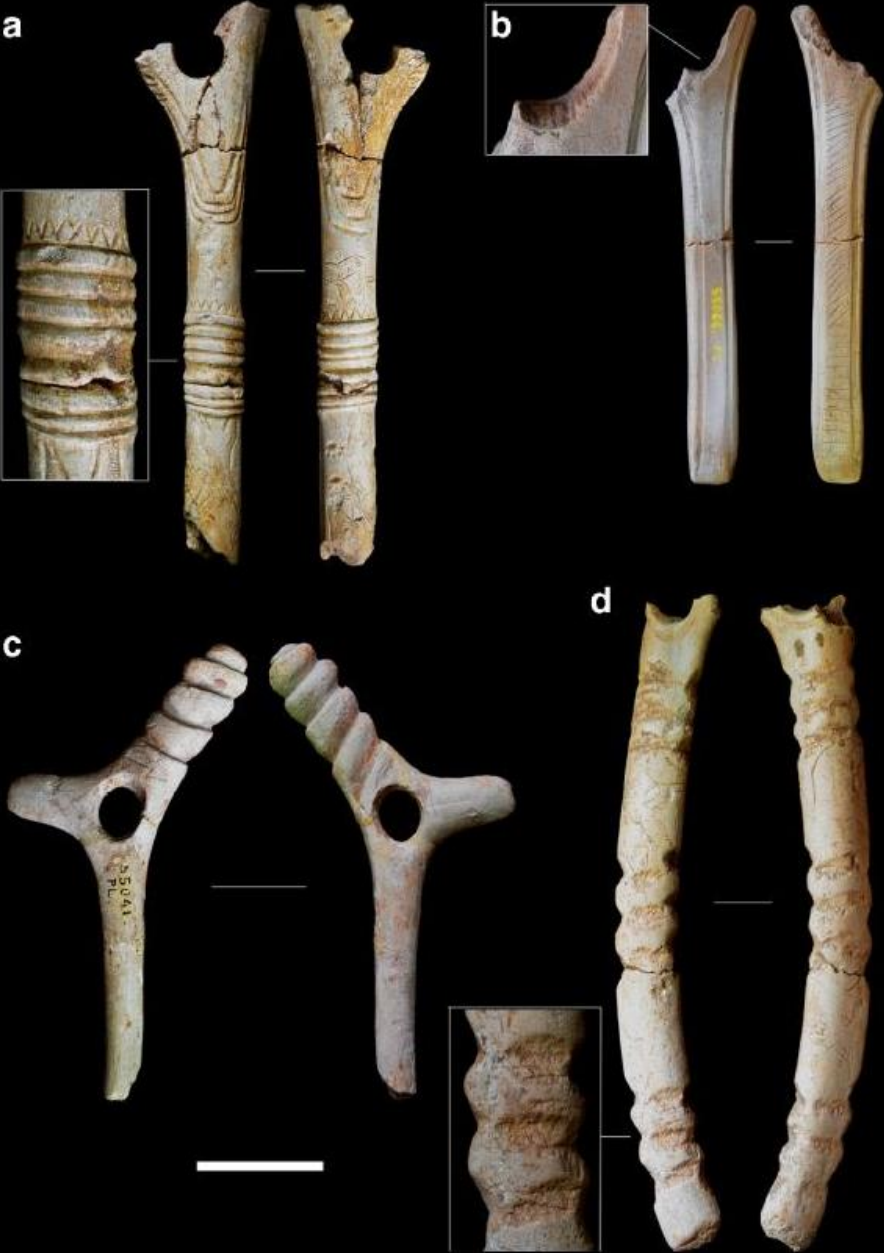
Reconstruction of the Lascaux rope based on the clay mold recovered from the cave. The diameter is estimated at 7–8 mm.





Perforated baton NHMUK PA E 7782 from Gough's Cave. The white triangles indicate the location of the main cracks. Scale = 10 mm. B Detailed photos of the (a) upper and (b) lower face of the upper branch showing numerous, small invasive removal scars, which indicate sectioning by peripheral sharp percussion. (c) Photo of polished area on the left of the perforation on the lower face of the baton and (d and e) SEM images of the polish area with series of micro-striations closer to the edge of the perforation.

Other examples of Magdalenian perforated batons housed at the Musée d'Archéologie Nationale (Saint-Germain-en-Laye, France). A Baton from La Madeleine rock-shelter (Dordogne, France); B Baton from Mas d'Azil (Pyrenees, France); C Baton from Lortet Cave (Pyrenees, France). Scale = 50 mm.



Grotte d'Espalungue

Messages of the Gravettian art





urgeschichtliches
museum



La fertilità femminile

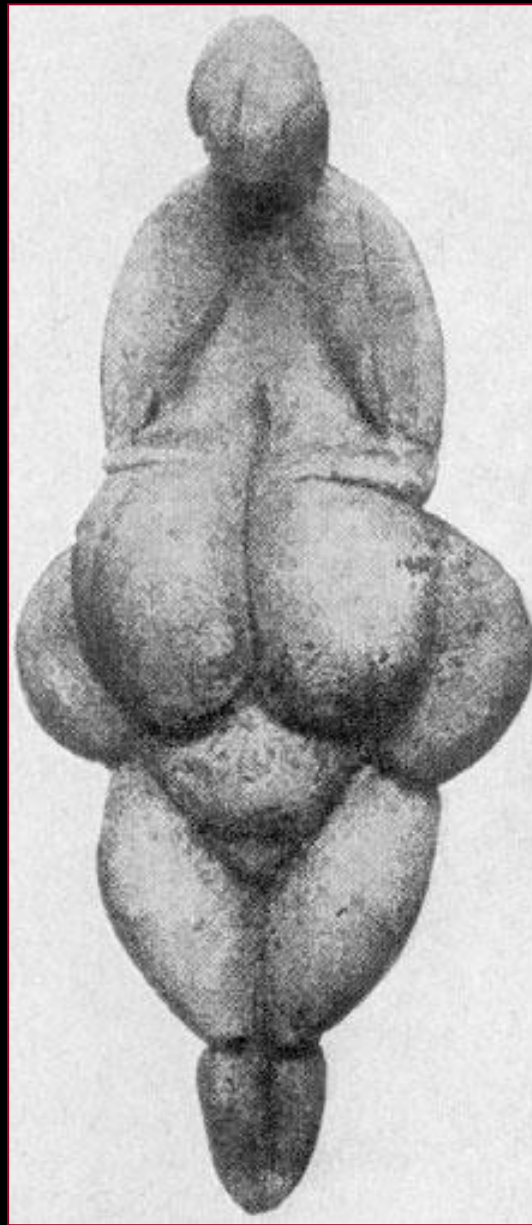
Le “Veneri”

Al Gravettiano viene attribuita una produzione Standardizzata di figure antropomorfe a tutto tondo riproducenti il corpo femminile.

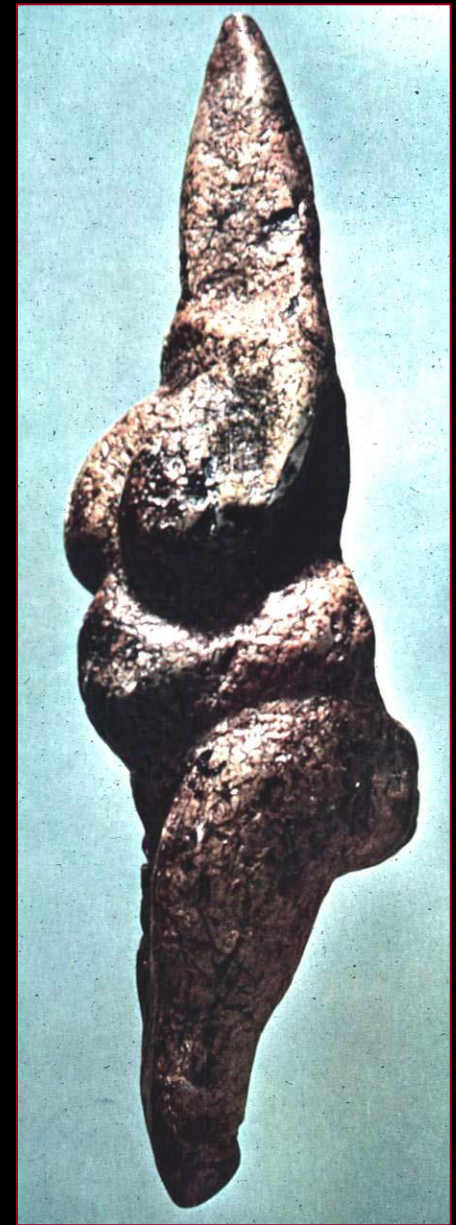




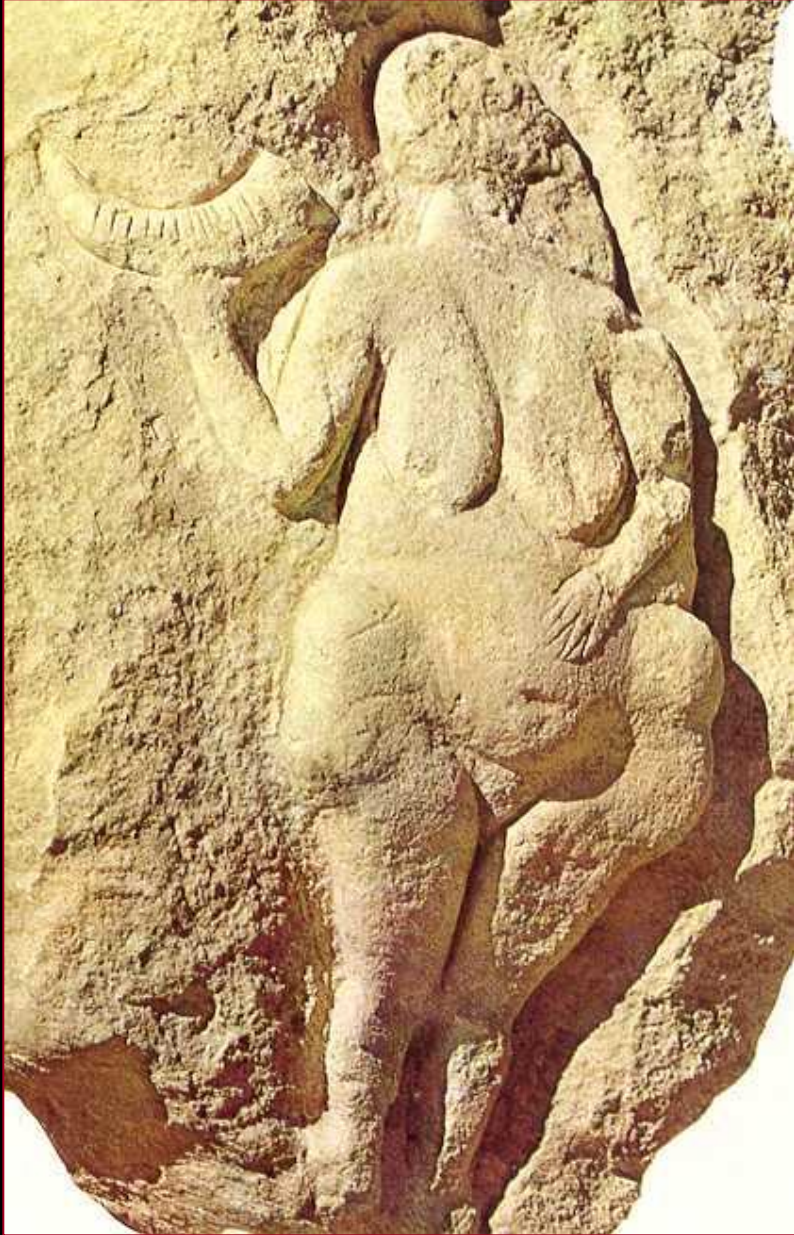
Balzi Rossi



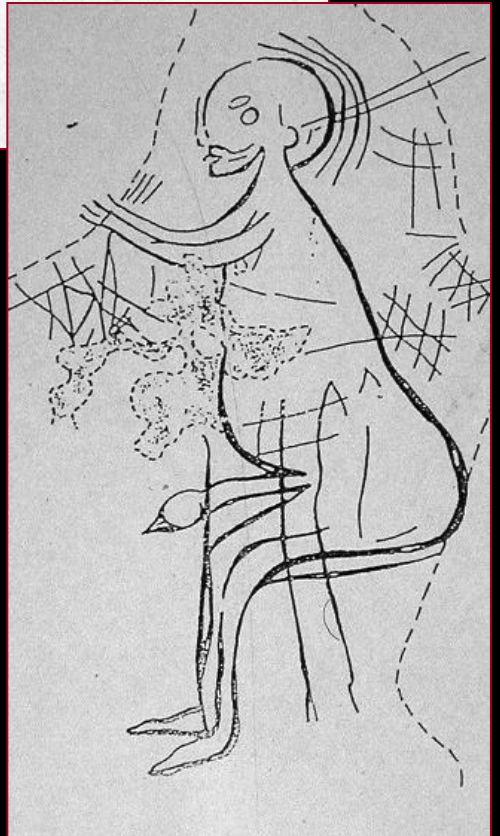
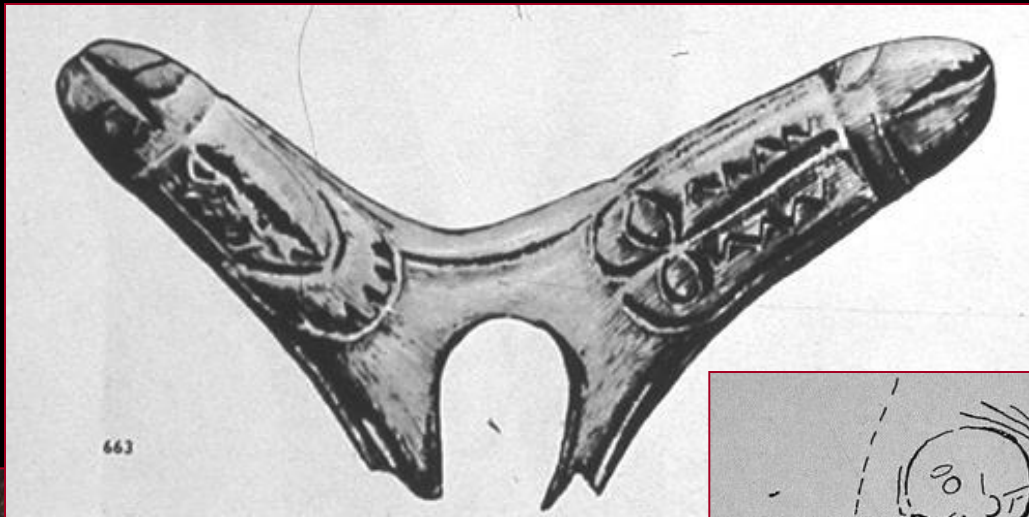
Lespugue



Savignano



Laussel



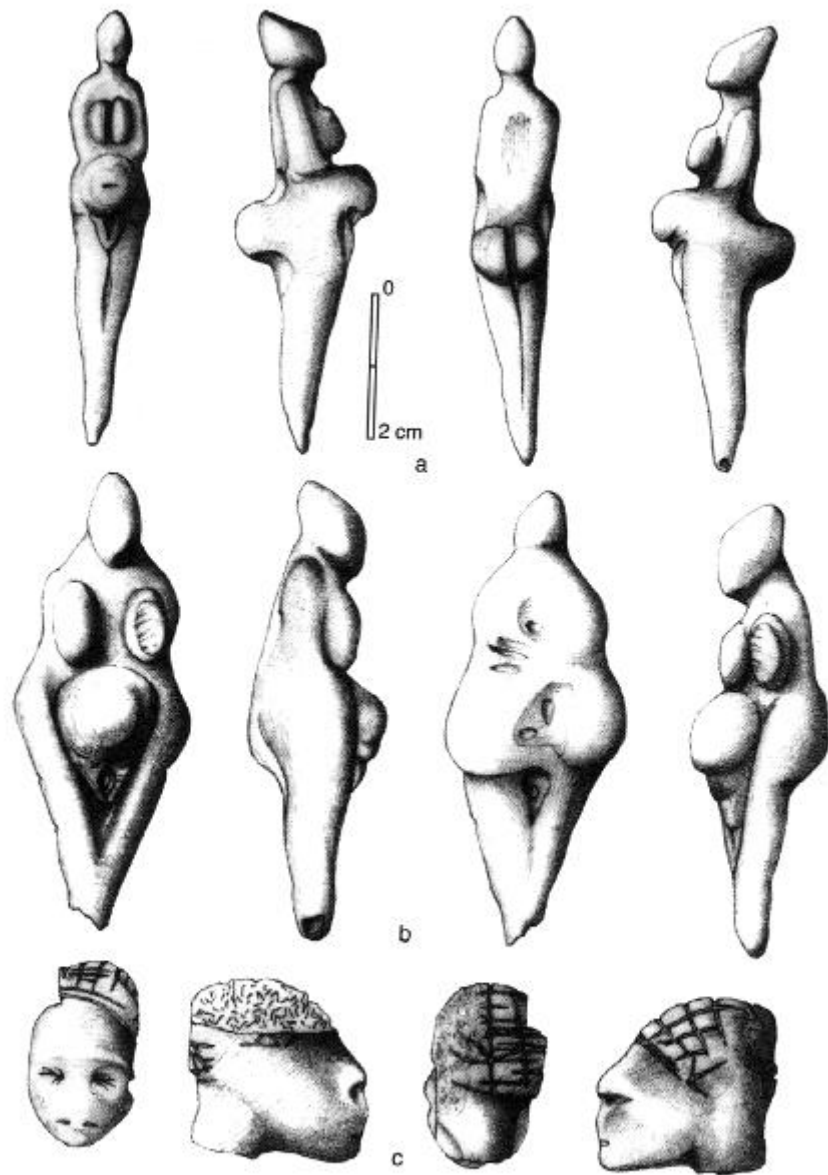
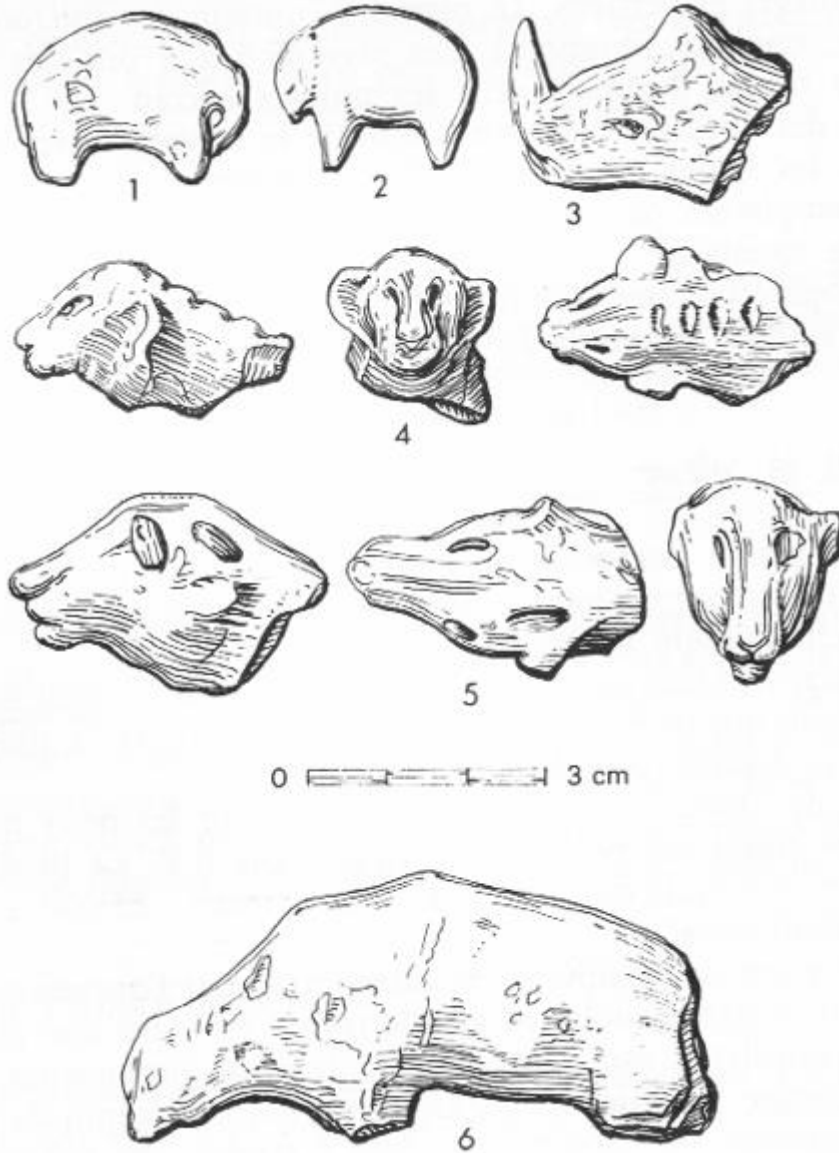


Figure 6.20. Balzi Rossi. Steatite figurines: (a) *Polichinelle*, (b) *Lozenge*, (c) *Tête négroïde* (original drawings by M. Mussi).

Dolni Vestonice

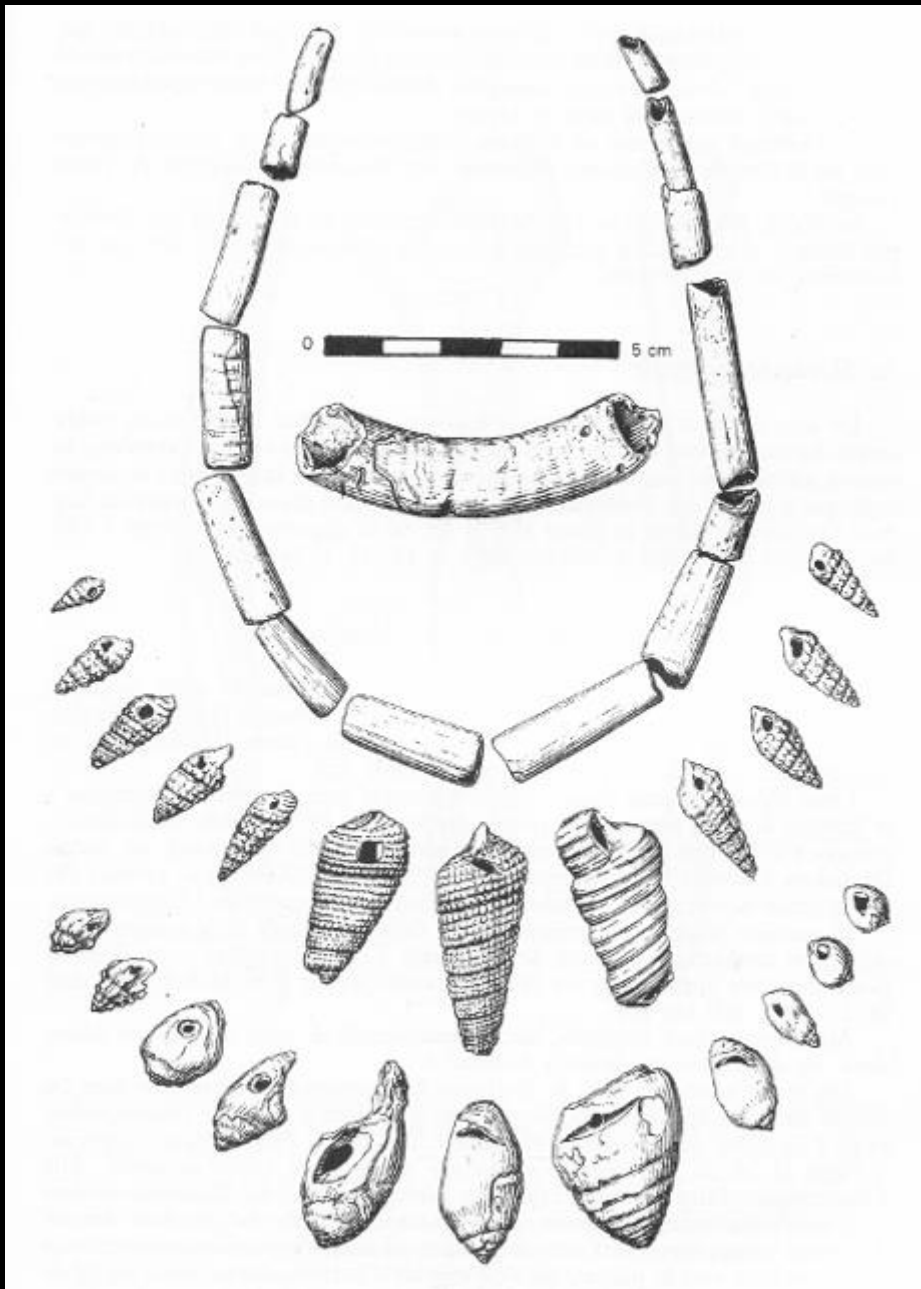
Fired clay figurines



Sciaman figures



Beads and ornaments



Pendant in human bone



Engraved bone points

