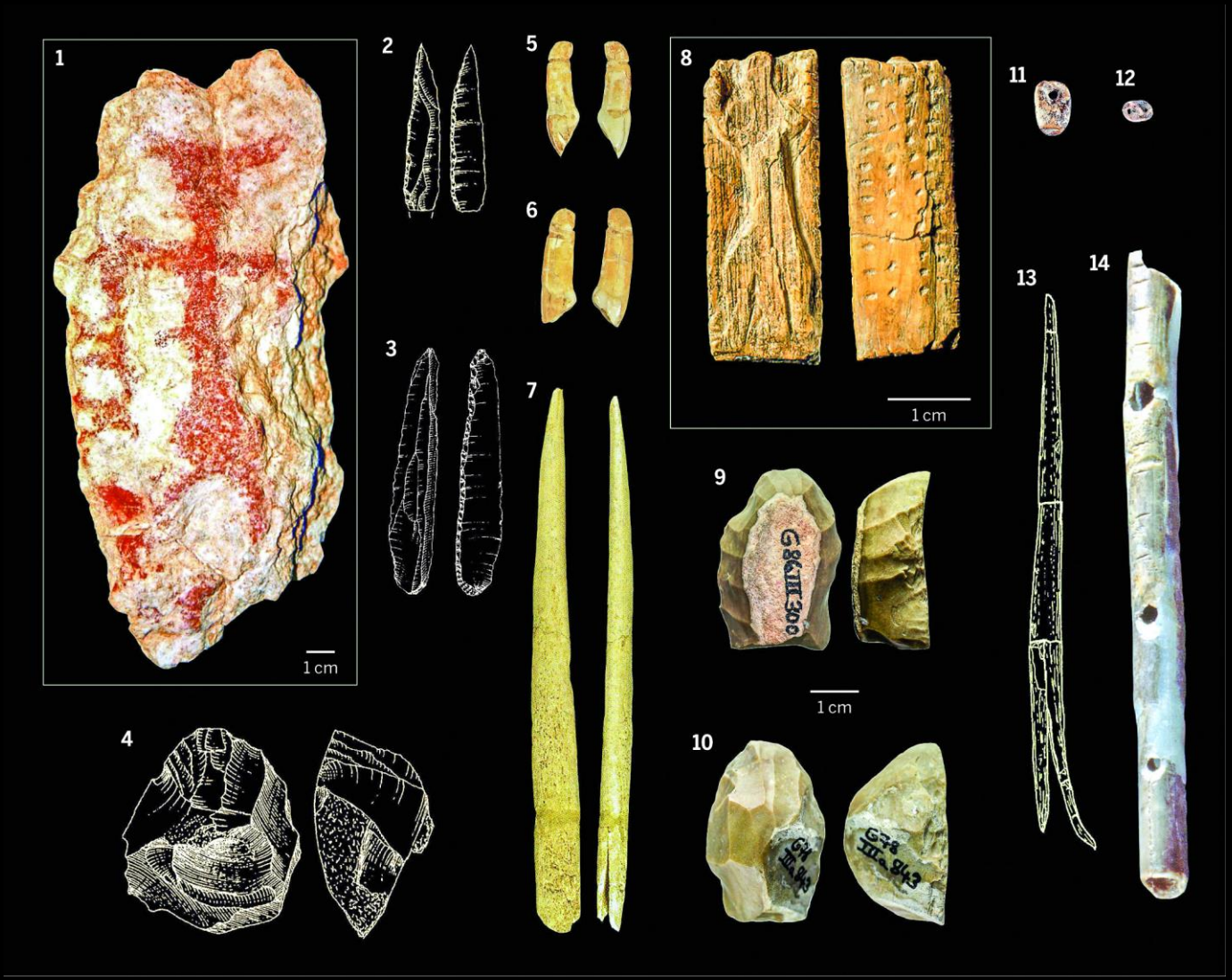
Università degli Studi di Ferrara

Marco Peresani

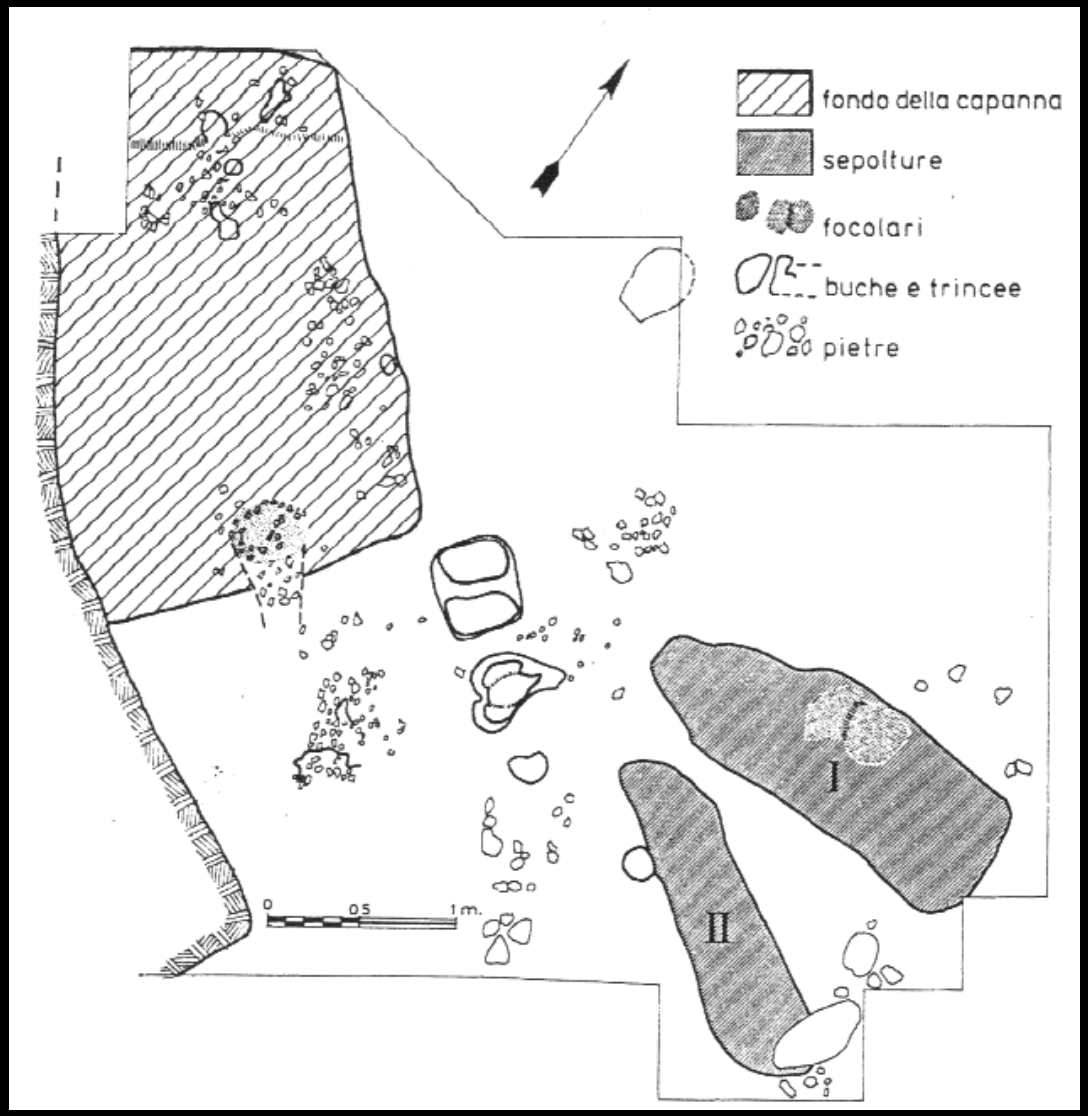
Cronologie e culture del Paleolitico
Lezione 15 – the Aurignacian



Protoaurignacian finds from Grotta di Fumane (1 to 7) compared to early Aurignacian finds from Geißenklösterle (8-14). (1) Therianthropic painting on limestone block; (2, 3) points with abrupt retouch; (4, 9, 10) carinated scrapers; (5, 6) grooved cervid teeth; (7, 13) split-based bone points; (8) therianthropic relief carved from ivory; (11, 12) personal ornaments made from ivory; (14) bone flute made from a swan radius.

The makers of the Aurignacian

Presumed burials at Cueva Morin, Spain
No bones, due to post-depositional alteration



Aurignacian human remains in Europe?

YEARBOOK OF PHYSICAL ANTHROPOLOGY 43:61–115 (2000)

Makers of the Early Aurignacian of Europe

STEVEN E. CHURCHILL[1]* AND FRED H. SMITH[2]
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[2]*Department of Anthropology, Northern Illinois University, DeKalb, Illinois 60115*

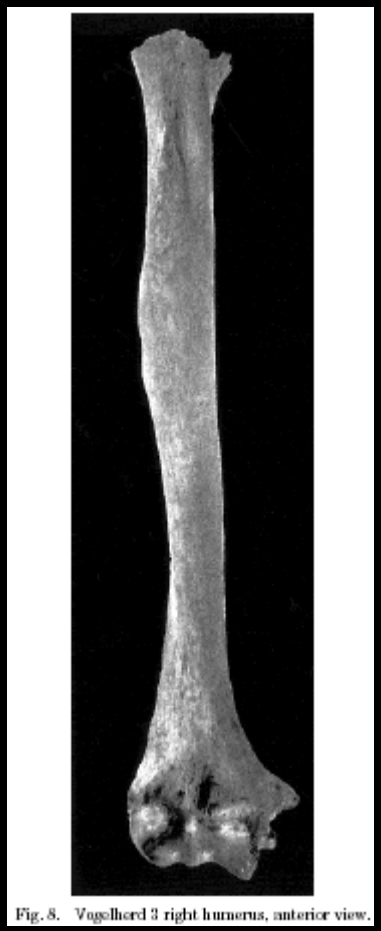

Fig. 8. Vogelherd 3 right humerus, anterior view.

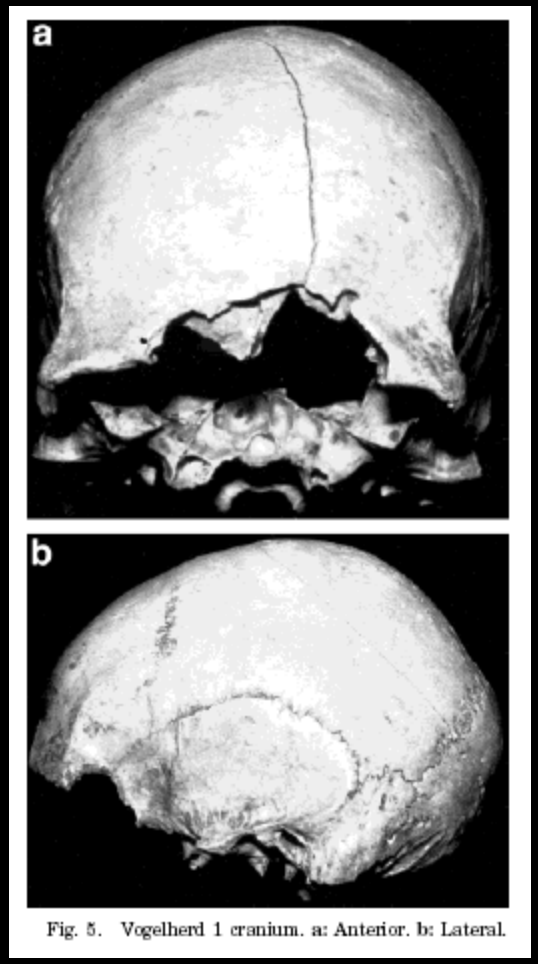

Fig. 5. Vogelherd 1 cranium. a: Anterior. b: Lateral.

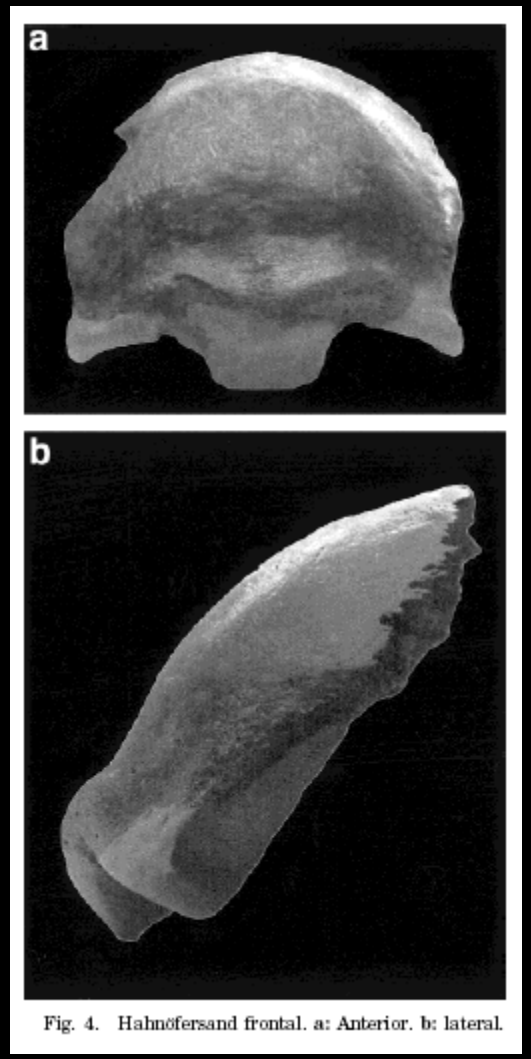

Fig. 4. Hahnöfersand frontal. a: Anterior. b: lateral.

Neolithic (ex Aurignacian) human remains

NATURE | VOL 430 | 8 JULY 2004 | www.nature.com/nature

letters to nature

Unexpectedly recent dates for human remains from Vogelherd

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[2]*Leibniz Labor für Altersbestimmung und Isotopenforschung Universität Kiel, Max-Eyth-Strasse 11-13 24118 Kiel, Germany*
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Table 1 **Radiocarbon ages of human skeletal remains from Vogelherd cave**

Laboratory number	Specimen	Reported stratigraphic context	Collagen yield[1] (mg)	Material	Date[3] (BP)
KIA 20967	Stetten 1 cranium	AH V base	2.9	Collagen	4,910 ± 25
			1.7	Insoluble residue	4,970 ± 35
KIA 20969	Stetten 1 mandible[2]	AH V base	4.2	Collagen	4,985 ± 30
			0.7	Insoluble residue	5,070 ± 45
KIA 19538	Stetten 1 mandible	AH V base	3.8	Collagen	4,715 ± 35
			1.4	Insoluble residue	4,695 ± 35
KIA 19537	Stetten 2 cranium	AH IV top	3.5	Collagen	3,980 ± 35
			1.4	Insoluble residue	3,560 ± 30
KIA 19539	Stetten 4 vertebra	AH V base	1.3	Collagen	4,735 ± 30
			4.5	Insoluble residue	4,245 ± 25
			9.0	Organic preservative	135.1 ± 0.4 pMC[4] (AD 1962 or 1977)
KIA 19540	Stetten 3 humerus	AH V base	4.1	Collagen	4,995 ± 35
			2.2	Insoluble residue	5,175 ± 30

ARCHAEOLOGY

The makers of the Protoaurignacian and implications for Neandertal extinction

S. Benazzi,[1,2]* V. Slon,[3] S. Talamo,[2] F. Negrino,[4] M. Peresani,[5] S. E. Bailey,[2,6] S. Sawyer,[3] D. Panetta,[7] G. Vicino,[8] E. Starnini,[9,10] M. A. Mannino,[2] P. A. Salvadori,[7] M. Meyer,[3] S. Pääbo,[3] J.-J. Hublin[2]

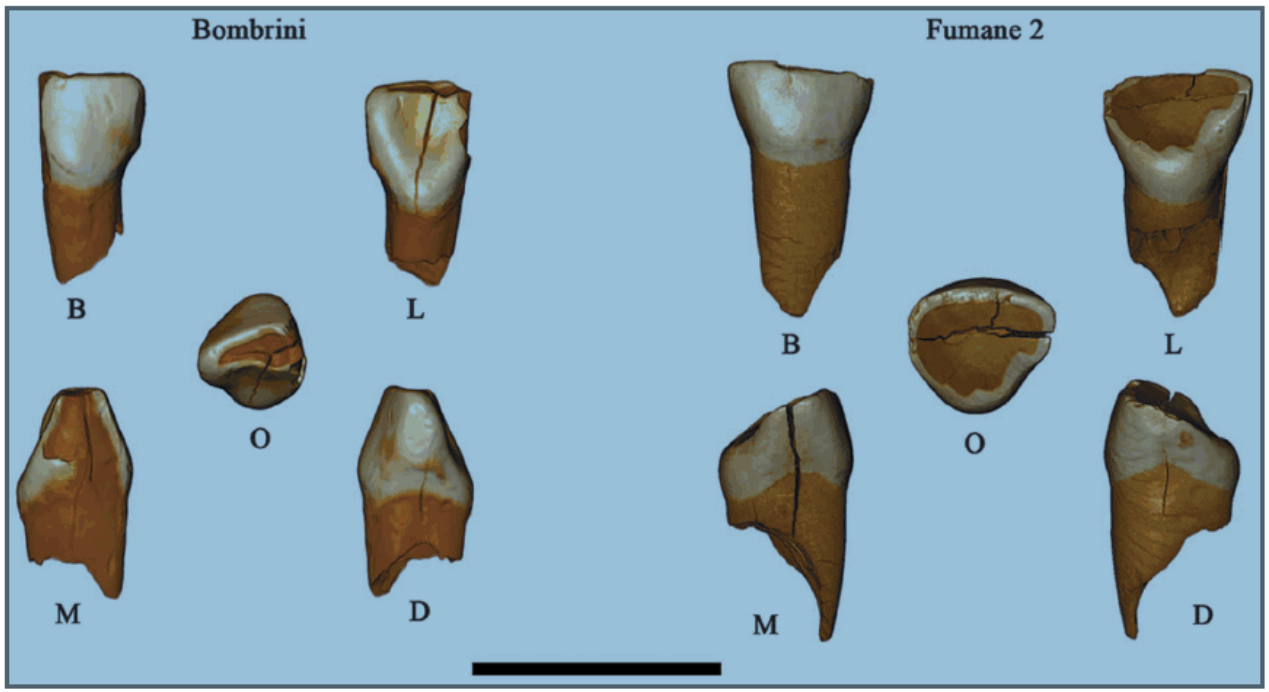


Fig. 1. Three-dimensional digital models of the Protoaurignacian human remains. The Bombrin ooth is a lower left lateral deciduous incisor (Ldi_2), whereas Fumane 2 is an upper right lateral deciduous ncisor (Rdi^2). B, buccal; D, distal; L, lingual; M, mesial; O, occlusal. Scale bar, 1 cm.

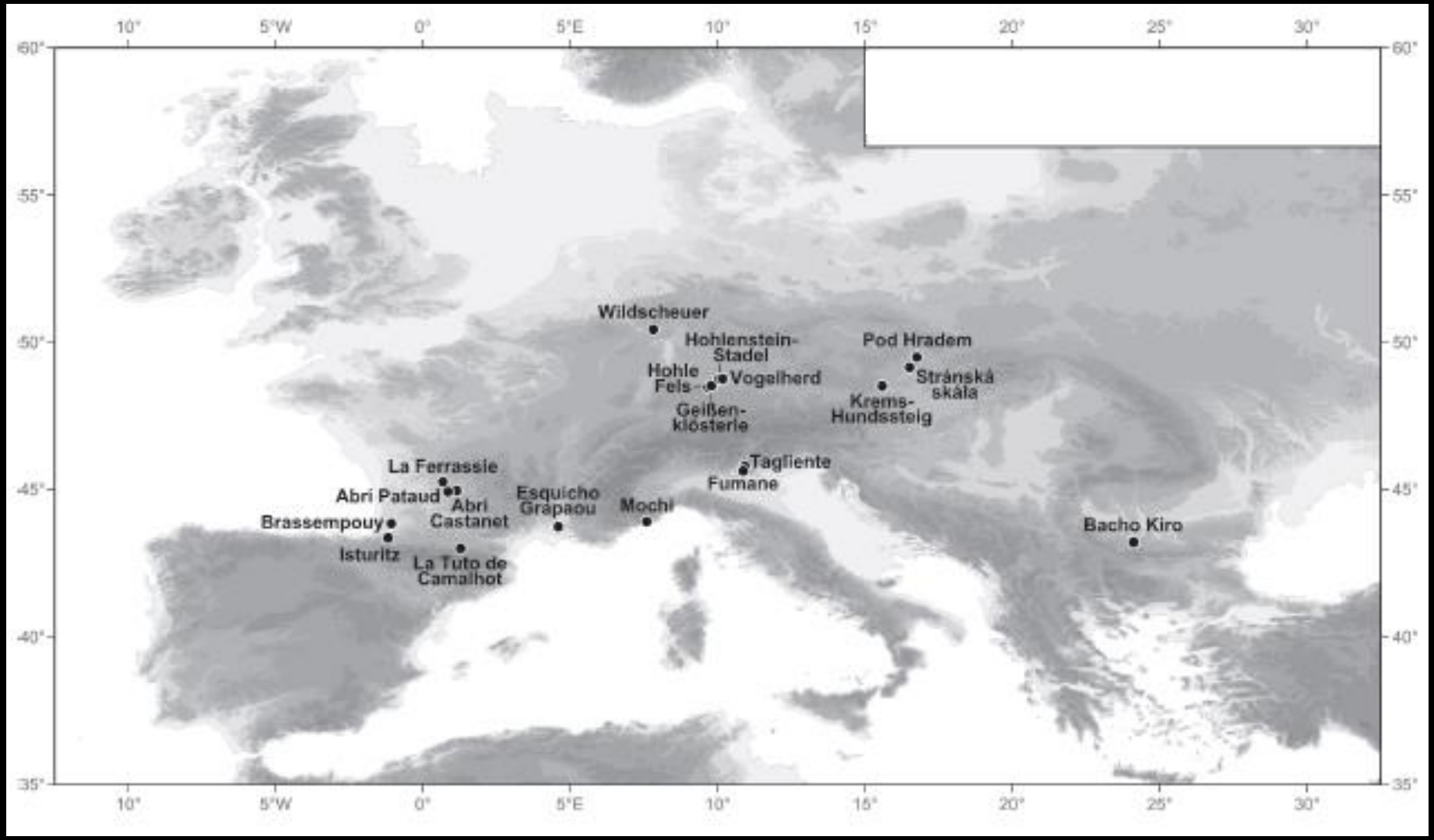
Early modern humans from the Peştera Muierii, Baia de Fier, Romania

PNAS | November 14, 2006 | vol. 103 | no. 46 | 17199

Andrei Soficaru*, Adrian Doboş†, and Erik Trinkaus‡§

An early modern human from the Peştera cu Oase, Romania

Sites in the Jura Swabe

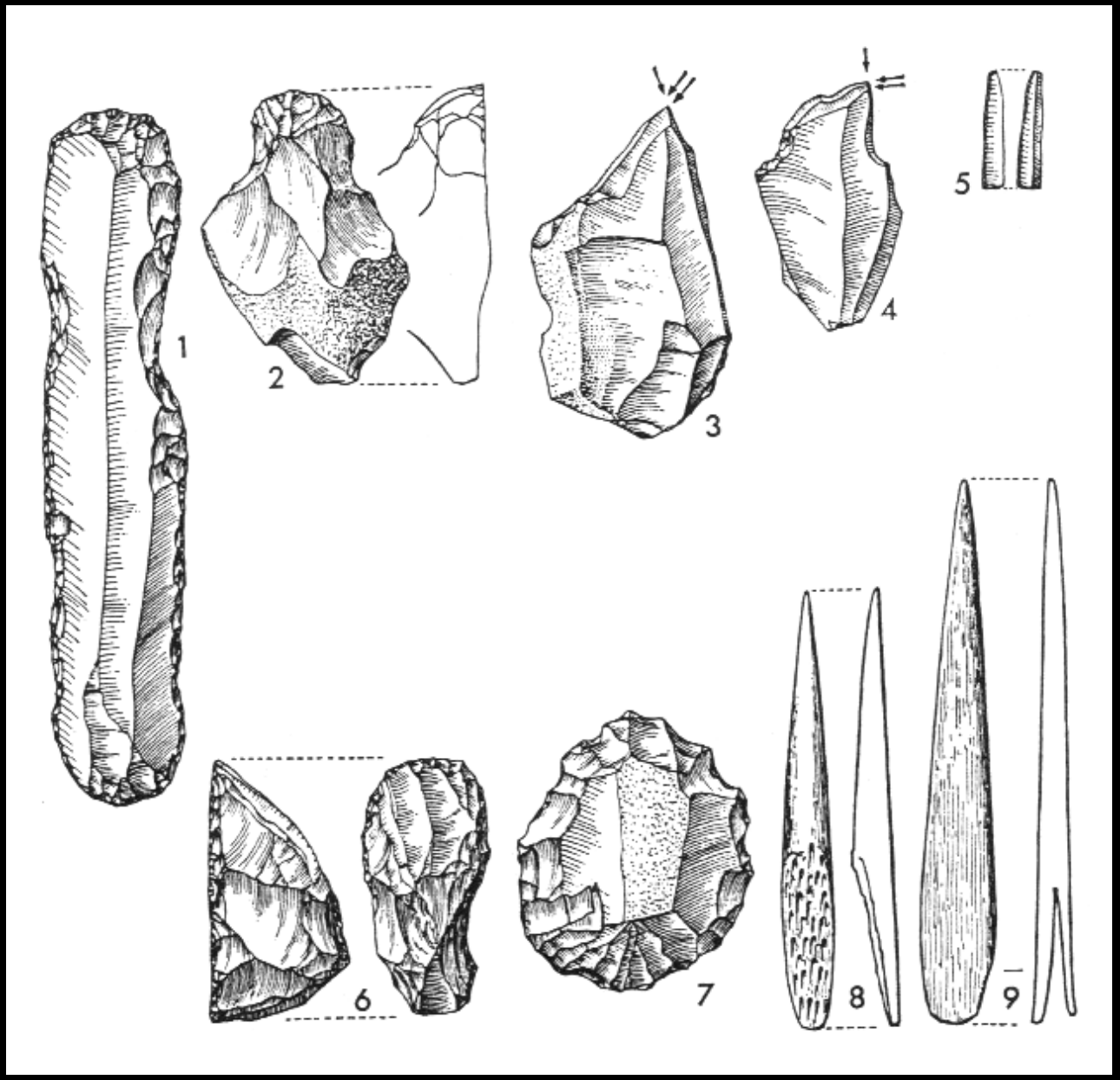


SUBDIVISION AND EVOLUTION OF THE AURIGNACIAN

- Late Aur.

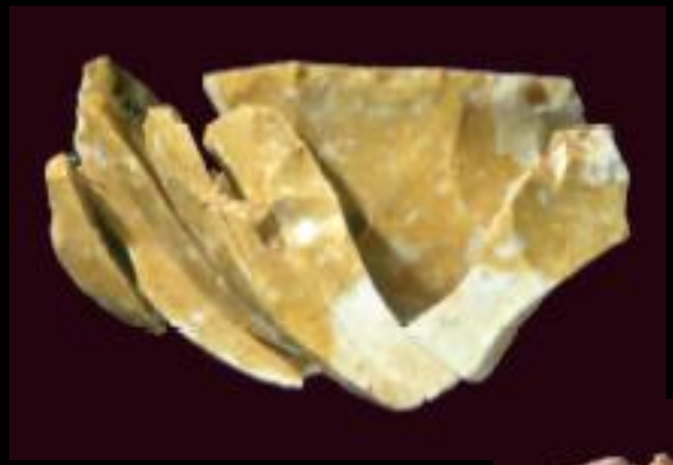
- Classic Aur.

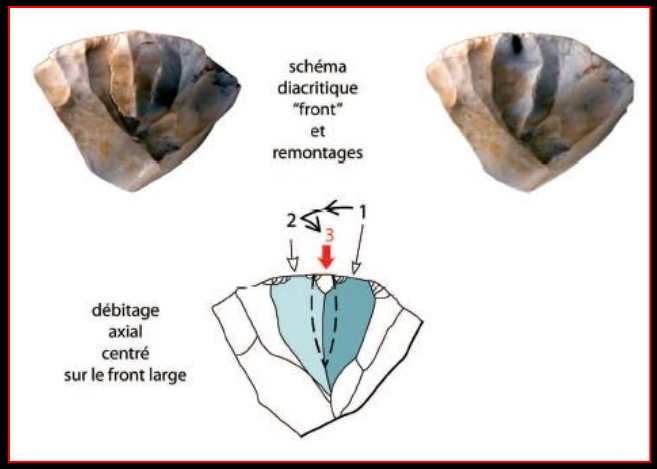
- Protoaurignacian (med.Eu)/Early Au. (central Eu)



1-grattatoio su lama aurignaziana, 2-grattatoio a muso, 3-bulino diedro, 4-bulino busquè, 5-lamella dufour, 6-grattatoio carenato, 7-grattatoio circolare, 8-zagaglia a base sbiecata, 9-zagaglia a base fenduta

Productions lamellaires à l'Aurignacien





Pointed bladelet
(punta su lamella)

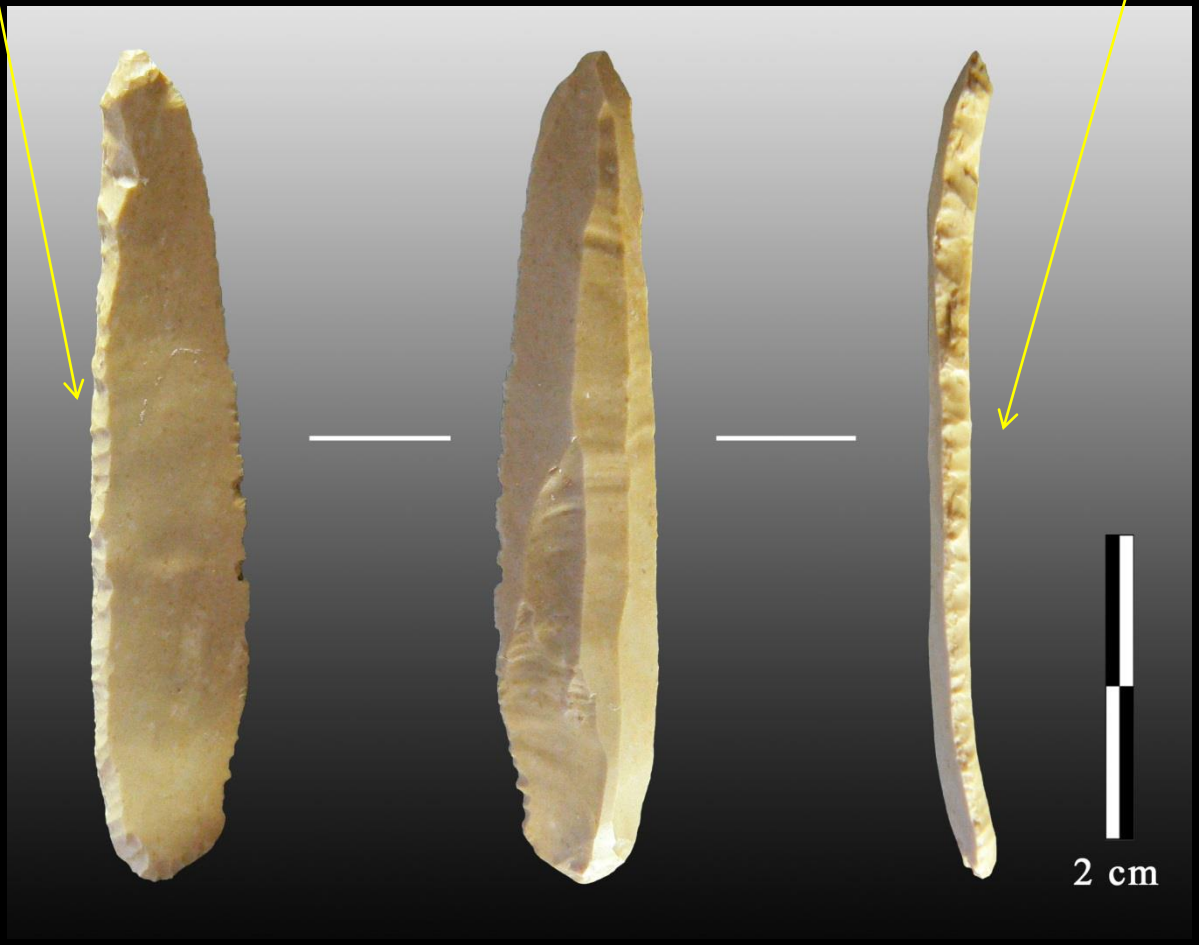
Lato ritoccato

Lato ritoccato

Dufour bladelet
(lamella Dufour)

Lato ritoccato

Lato ritoccato



Protoaurignacian

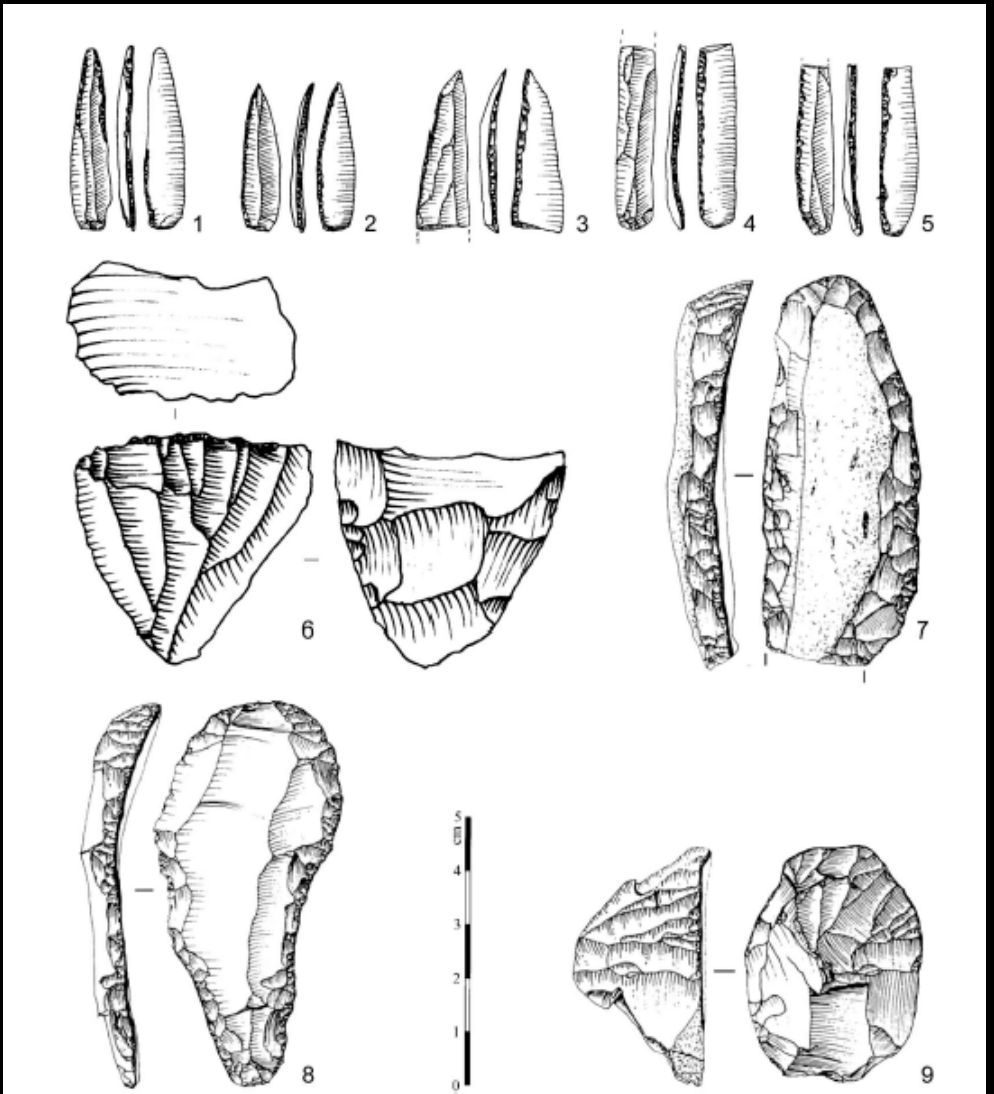
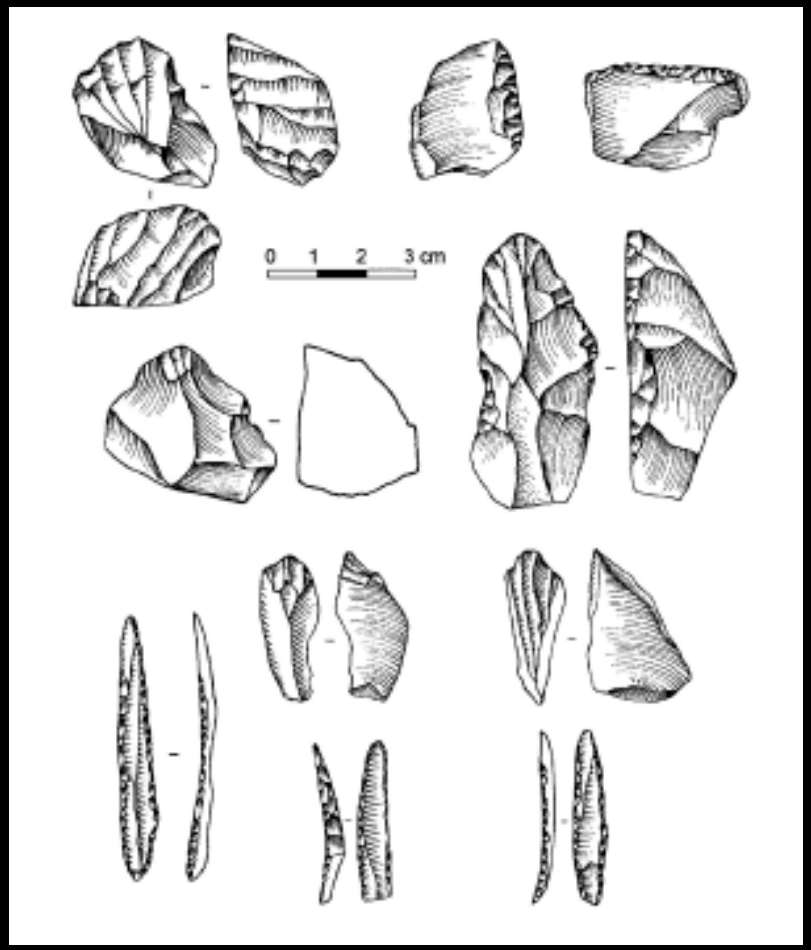


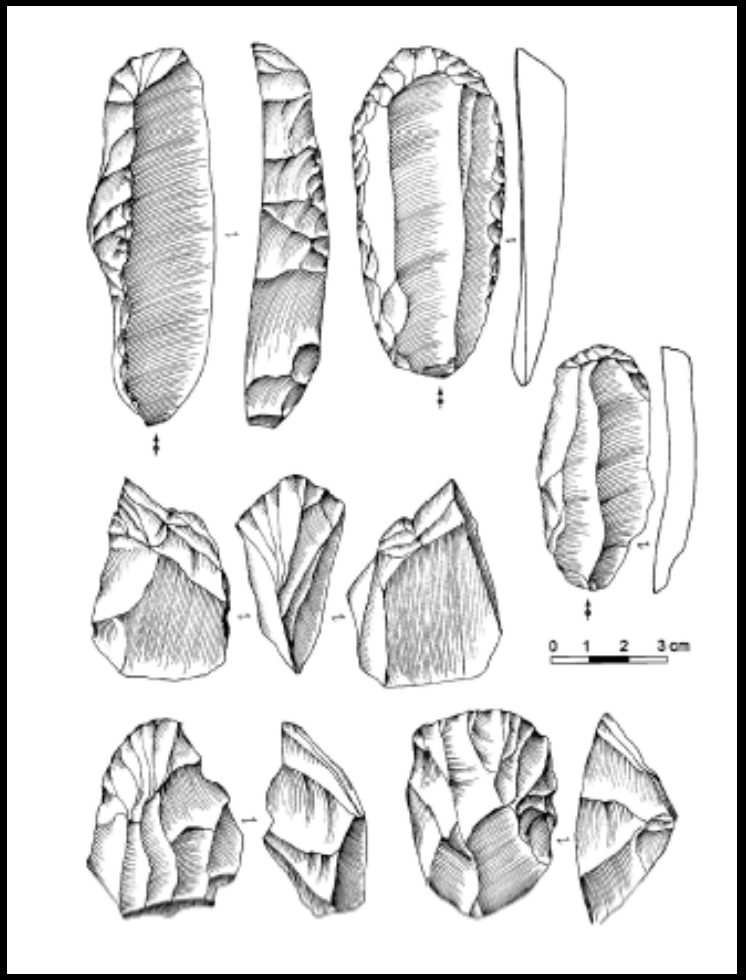
Figure 1 Lithic industry from Krems-Hundssteig, Austria (1–5 and 7–9, after Hahn 1977; 6, after Teyssandier 2003). 1–5: retouched bladelets, Dufour type; 6: pyramidal bladelet core; 7–8: end-scrapers on retouched blades; 9: carinated core ('scraper') with a wide front. Note that pieces nos 1 to 6 can be fully integrated into the Protoaurignacian tradition, while nos 7 to 9 correspond more closely to the classic characteristics of the Early Aurignacian.

Krems-Hundssteig (Austria)

Protoaurignacian correlates

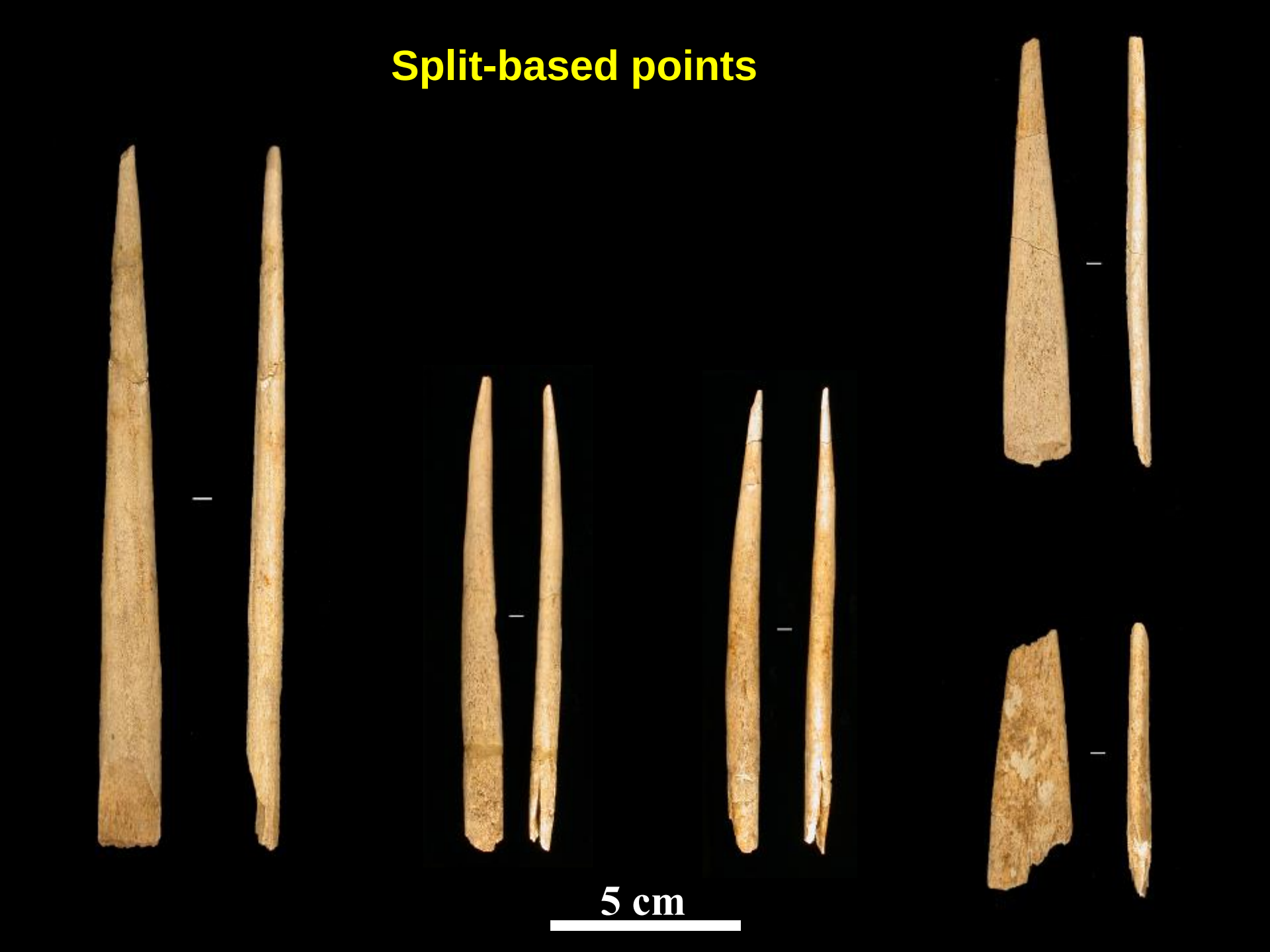


Warwasi, Iran. Lithic assemblages from layer Z.

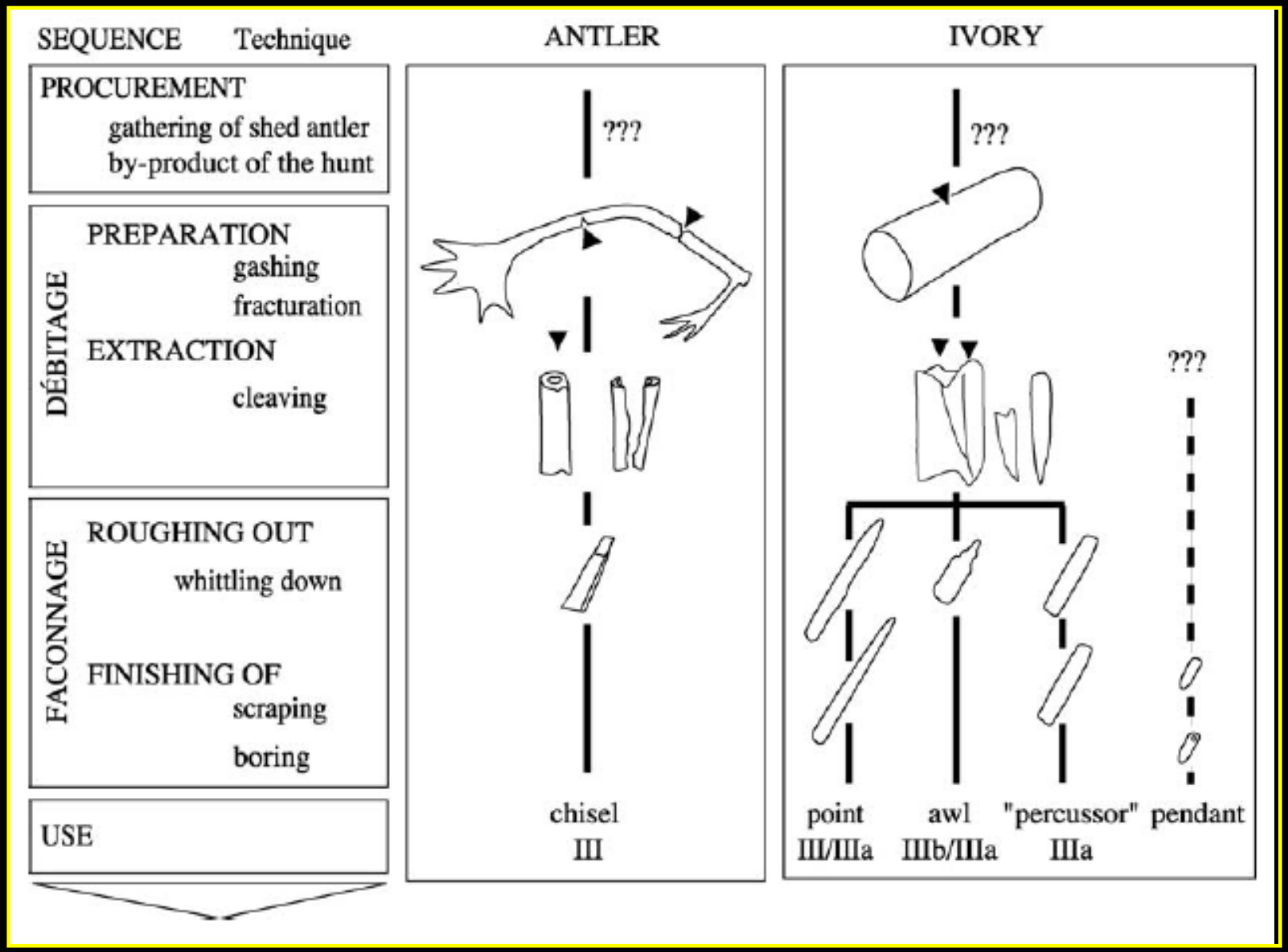


Ust-Karakol, Siberia (Russia). Lithic assemblages from layers 9A to 11B.

Split-based points



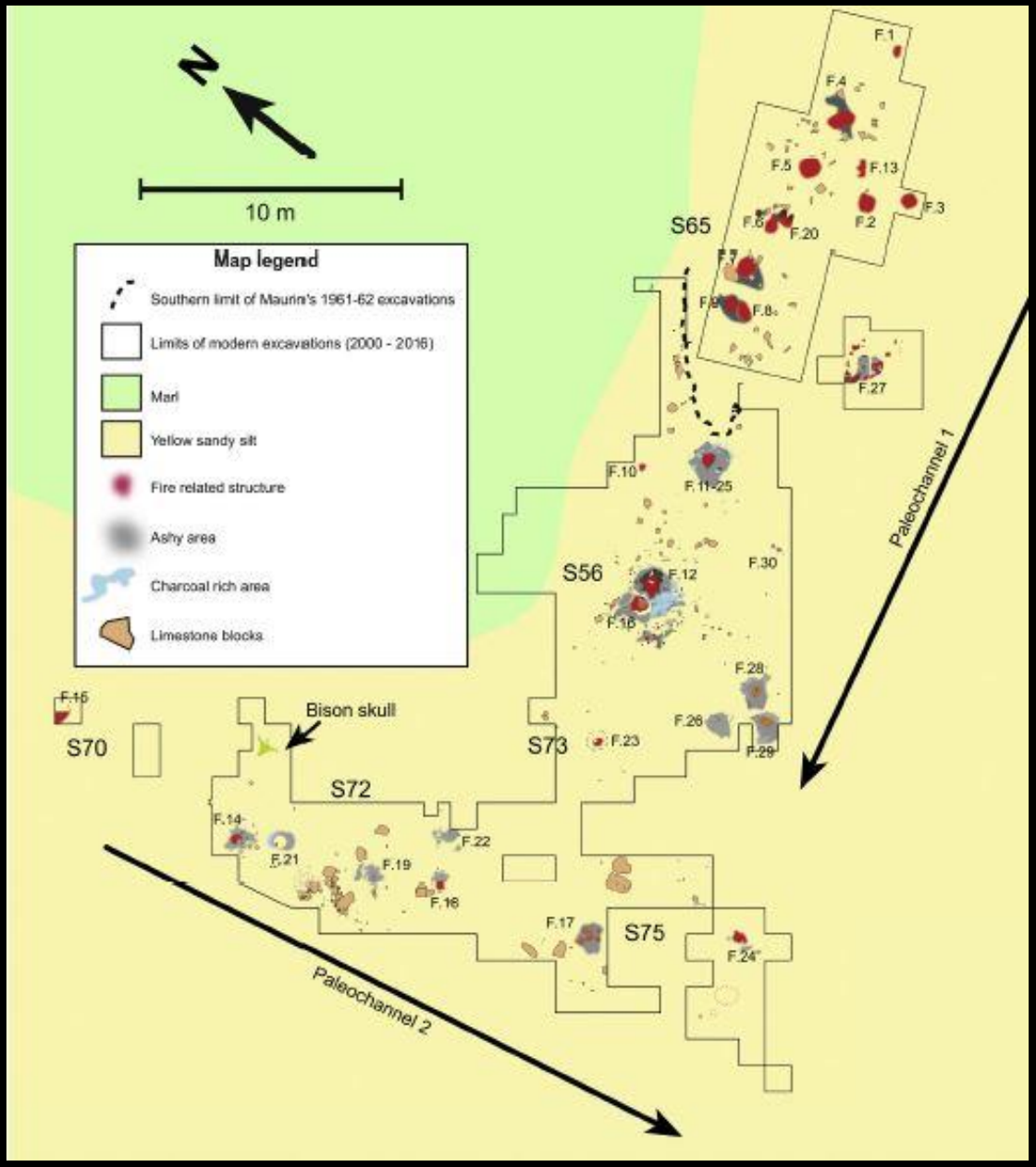
Geissenklosterle cave. Antler and ivory-working production sequences level III

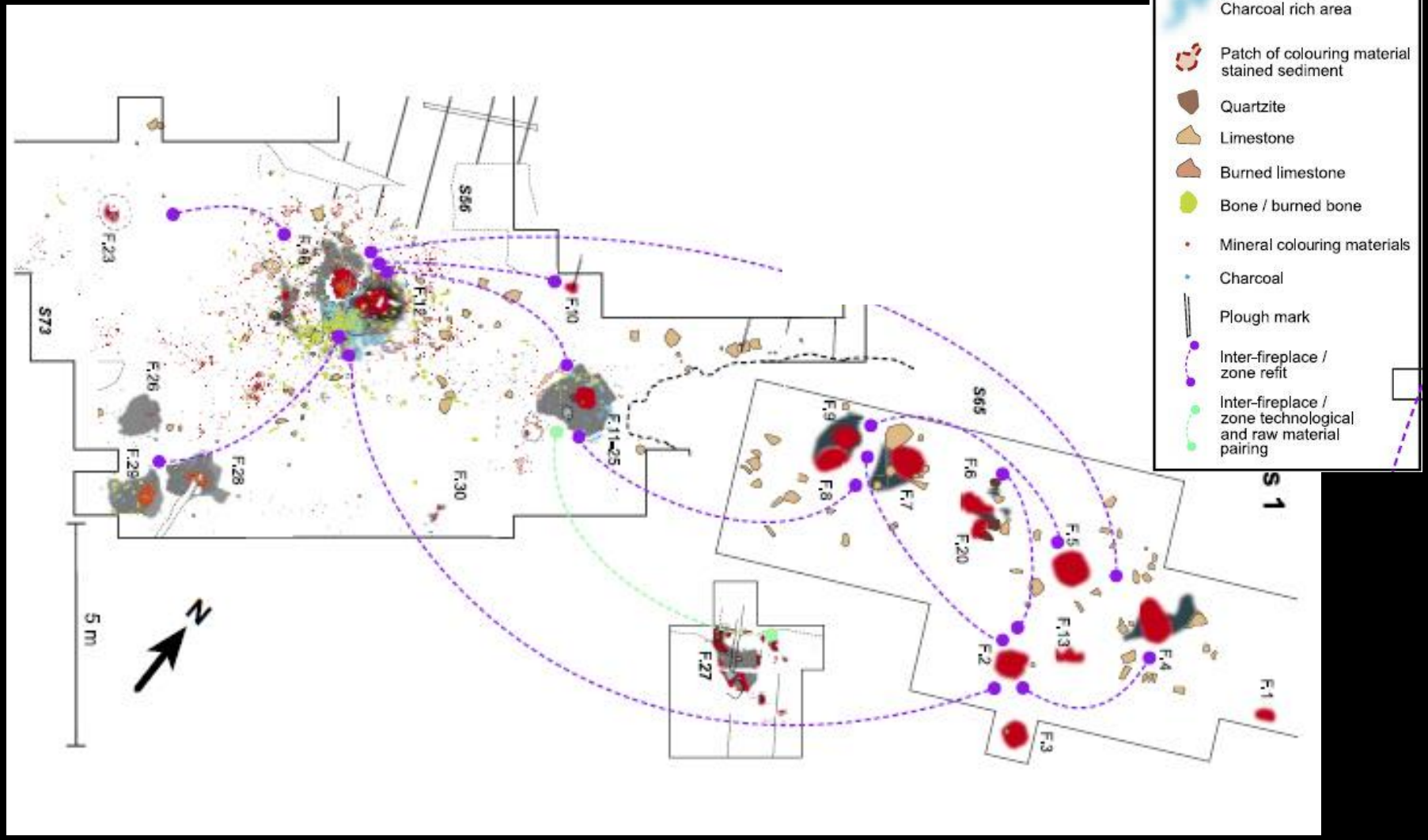


Fumane cave – Protoaurignacian hearths

Fumane cave – Protoaurignacian toss-zone

Régismont-le-Haut (South France)




Map Legend
Southern limit to Maurin's 1961-62 excavations
Fire related structure
Ashy area
Charcoal rich area
Patch of colouring material stained sediment
Quartzite
Limestone
Burned limestone
Bone / burned bone
Mineral colouring materials
Charcoal
Plough mark
Inter-fireplace / zone refit
Inter-fireplace / zone technological and raw material pairing
S56
S73
S65
S1
F.23
F.26
F.29
F.28
F.30
F.12
F.10
F.11-25
F.9
F.8
F.7
F.6
F.20
F.5
F.13
F.2
F.4
F.1
F.3
F.27
5 m
N

Aurignacian art and ornaments

Portable aurignacian art

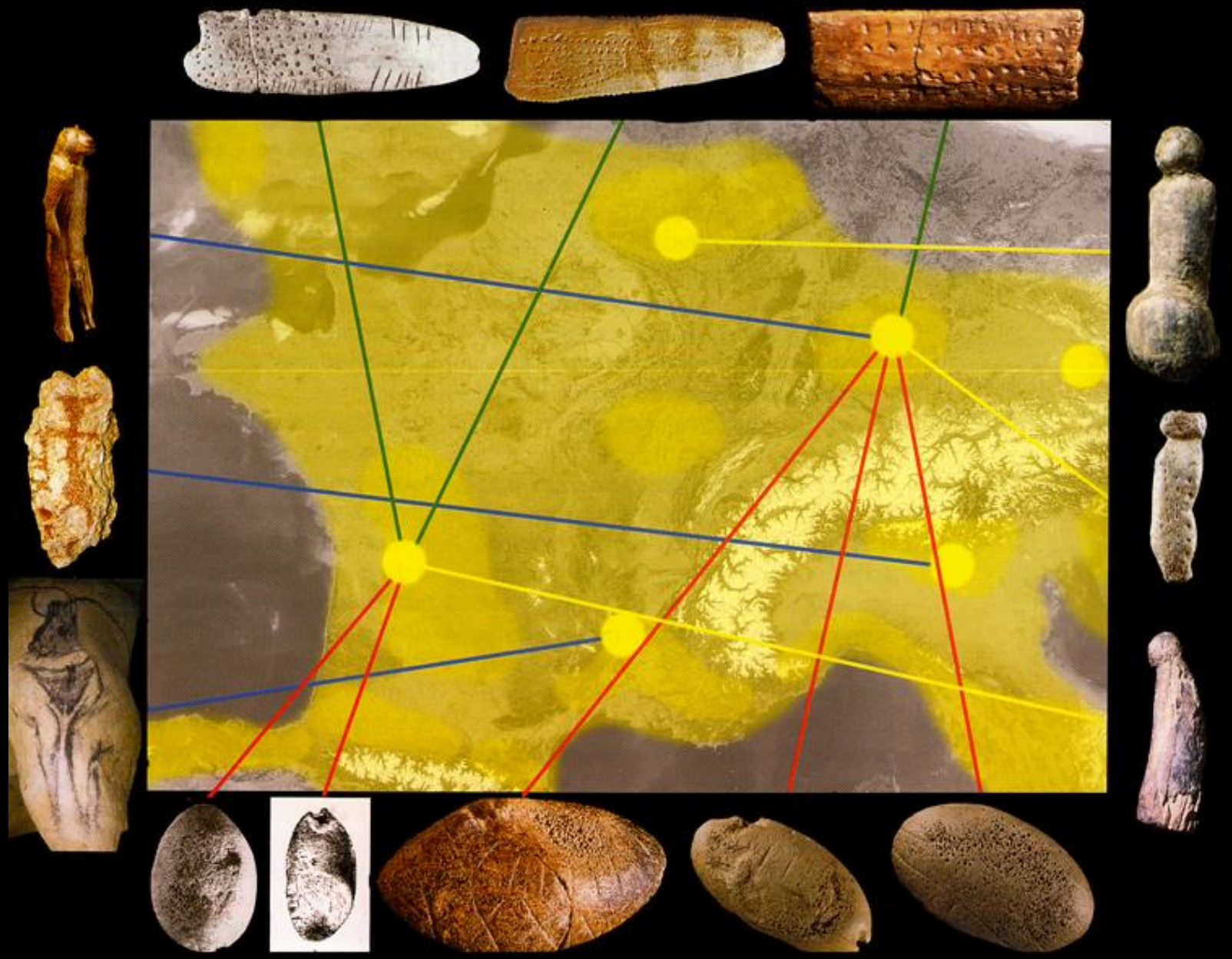


Fig. 1. Four classes of symbolic artifacts that are first documented outside Africa. Examples from the Swabian Jura dating to ~35,000 years ago. (*A*) Mythical images; "Lionman", Hohlenstein-Stadel, height 29.6 cm. (Photo by Thomas Stephan, © Ulmer Museum). (*B*) Musical instruments; bone flute, Geißenklösterle, length 11.7 cm. (*C*) Ornaments formed in three dimensions; carved beads, Hohle Fels, maximum dimensions 7–11 mm. (*D*) Figurative art; mammoth, Vogelherd, length 3.7 cm. (*B–D*, Copyright University of Tübingen.)

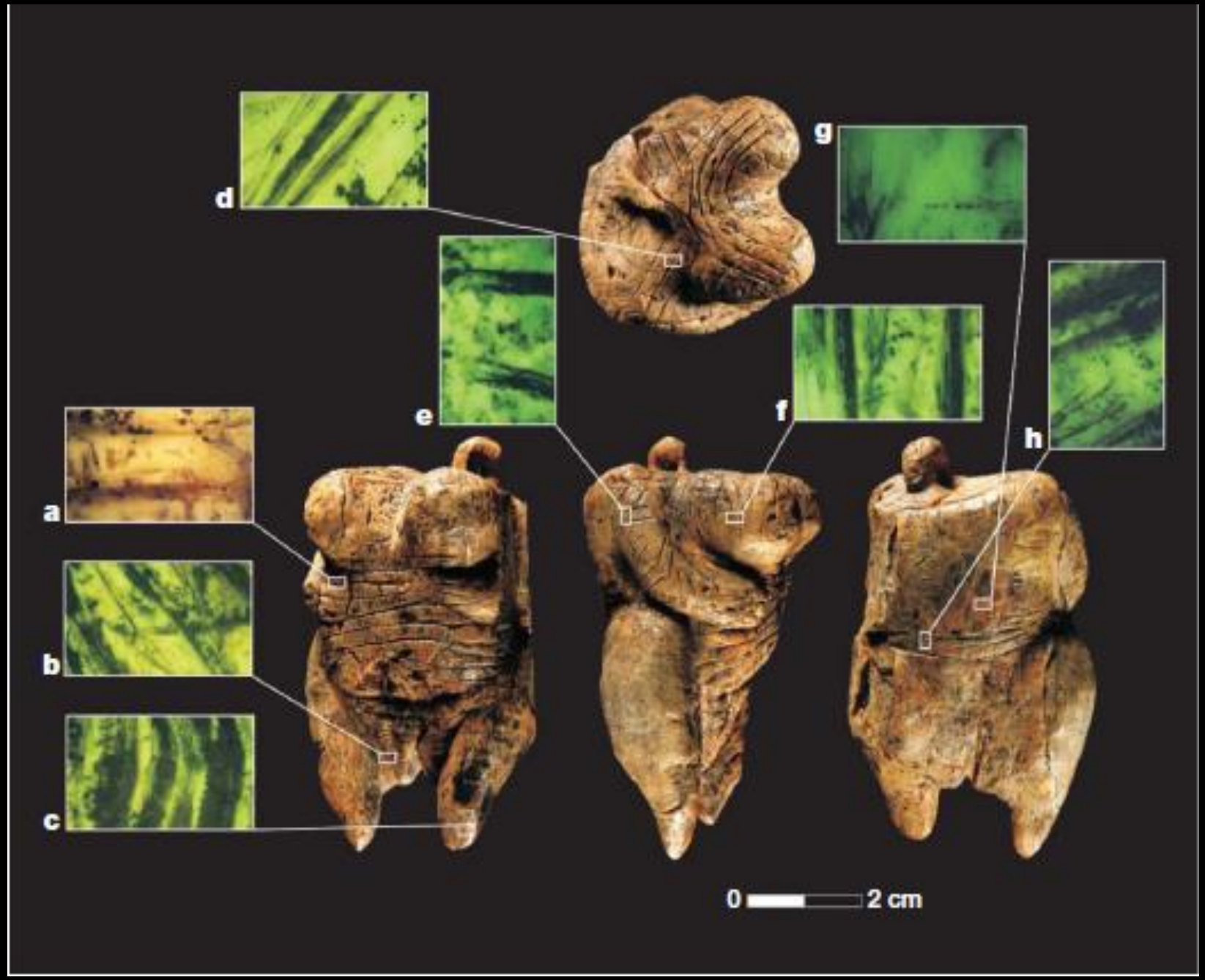
Fumane cave

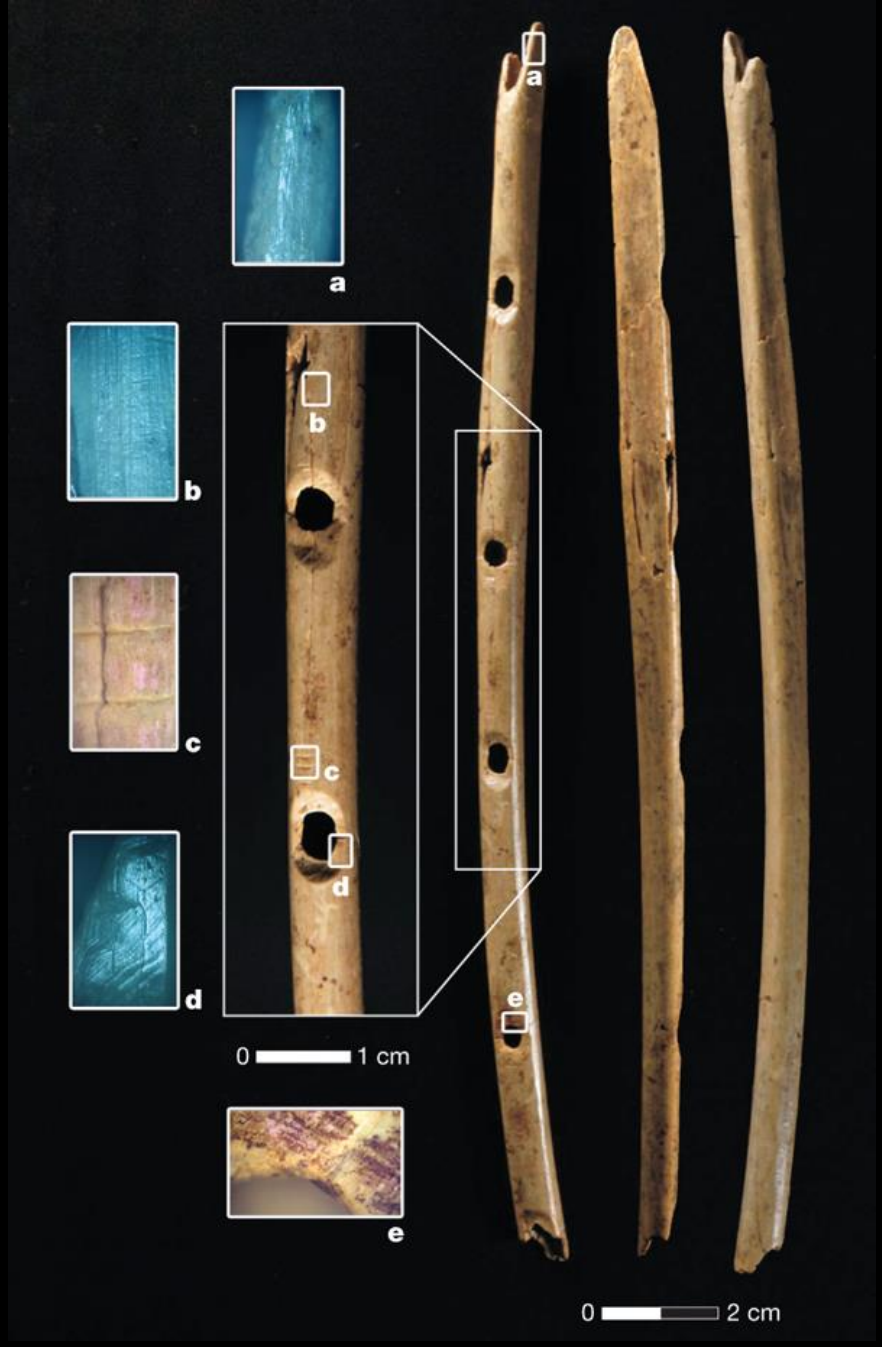
The sciaman

41-36 ky BP

A female figurine from the basal Aurignacian of Hohle Fels Cave in southwestern Germany

Nicholas J. Conard[1]

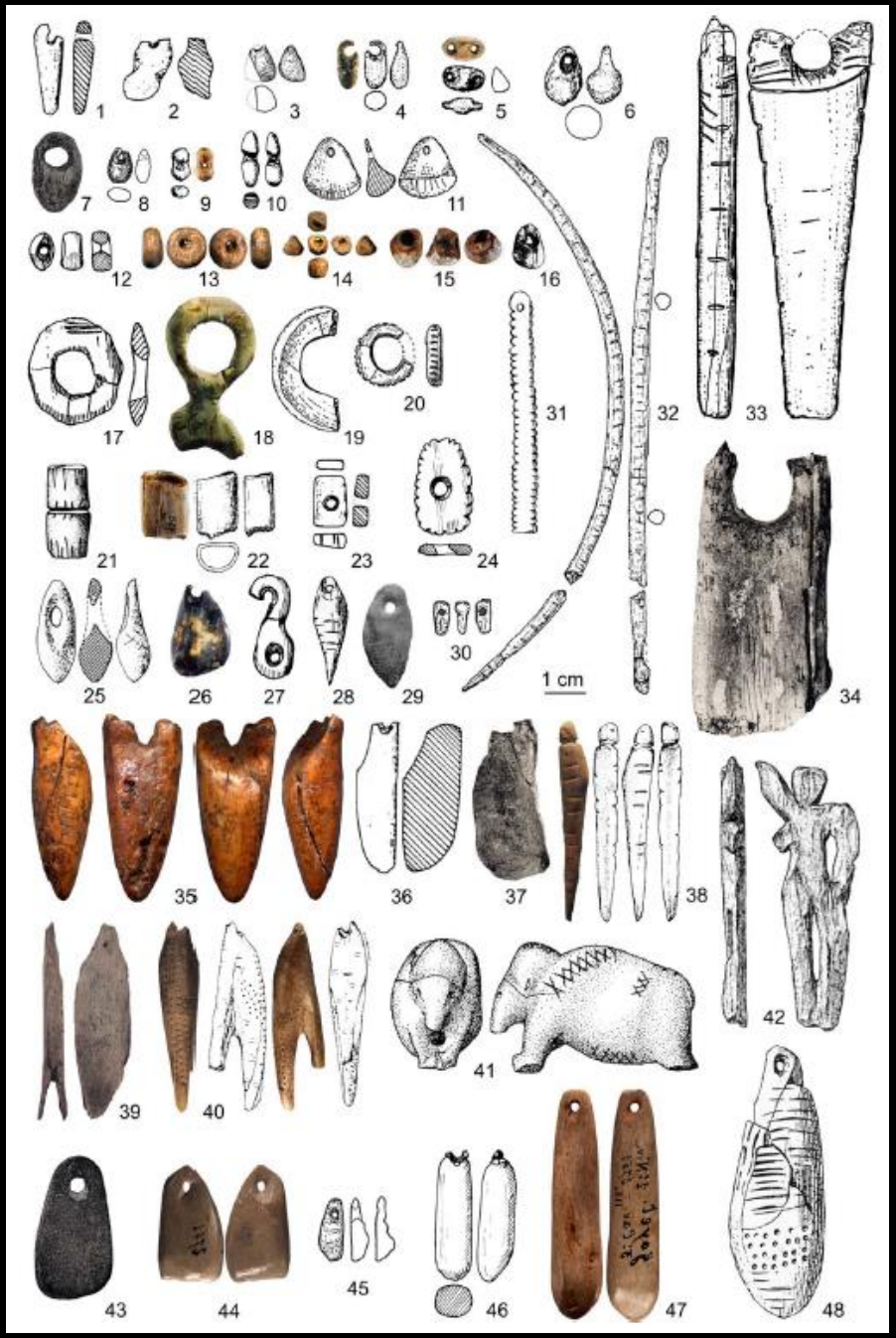

a
b
c
d
e
f
g
h
0
2 cm



Bone flute from Hohle Fels archaeological horizon Vb.

NJ Conard *et al. Nature* 000, 1-4 (2009) doi:10.1038/nature08169

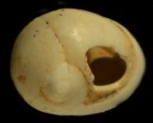
nature



Major shaped ornament types. 1, elongated steatite bead (Pendo); 2, asymmetric elongated stone bead (Pendo); 3, conical ivory pendant (Lommersum); 4, elongated ivory bead (Geissenklo¨sterle); 5, bulged elliptical double-perforated ivory bead (Hohle Fels); 6, drop-shaped ivory pendant (Hohle Fels); 7, elliptical ivory pendant (Isturitz); 8, ovoid stone pendant (Wildscheuer); 9, bilobate ivory bead (Hohle Fels); 10, ivory lip-plug (Spy); 11, trianguloid ivory pendant (Gatzarria); 12, disk-shaped black stone bead (Spy); 13, disk-shaped ivory bead (Solutre´); 14, ivory basket bead (Solutre´); 15, stone basket bead (Garma); 16, bone basket bead (Mochi); 17, ivory ring (Spy); 18, ivory ring with protrusion (Renne); 19, stone ring (Gatzarria); 20, notched stone ring (Bockstein Torle); 21, tubular ivory bead (Spy); 22, tubular bone bead (Geissenklo¨sterle); 23, rectangular flat ivory bead (Pendo); 24, elliptical flat notched ivory bead (Spy); 25, ogival ivory pendant (Prince); 26, pyramidal ivory pendant (Geissenklo¨sterle); 27, figure-eight-shaped ivory bead (Spy); 28, pointed ivory pendant (Tuto de Camalot); 29, decorated pointed ivory pendant (Souquette); 30, wedge-shaped ivory bead (Kostienki 1); 31, ivory diadem (Ferrassie); 32, antler diadem (Geissenklo¨sterle); 33, notched trapezoidal flat ivory pendant (Vogelherd); 34, rectangular ivory pendant (Isturitz); 35, pointed antler pendant (Rois); 36, elongated stone pendant (Pendo); 37, elongated amber pendant (Isturitz); 38, pointed notched ivory pendant with suspension groove (Tuto de Camalhot); 39, antler pendant on a split based point (Cellier); 40, forked ivory pendant (Blanchard); 41, zoomorphic ivory pendant (Vogelherd); 42, anthropomorphic schist pendant (Galgenberg); 43, flat stone pendant (Isturitz); 44, imitation in bone of a perforated horse incisor (Goyet); 45, imitation in antler of a perforated red deer canine (Istallosko); 46, elongated ivory pendant (Goyet); 47, elongated antler pendant (Goyet); 48, decorated ovoid ivory pendant (Tuto de Camalhot).

Fumane: molluscan shell species presents in the Aurignacian

Jujubinus striatus



Cyclope pellucida

Nassarius circumcinctus

Nassarius incrassatus

Nassarius mutabilis

Cyclope neritea

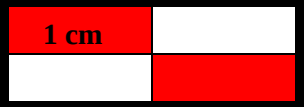
Clanculus corallinus

Clanculus jussieui

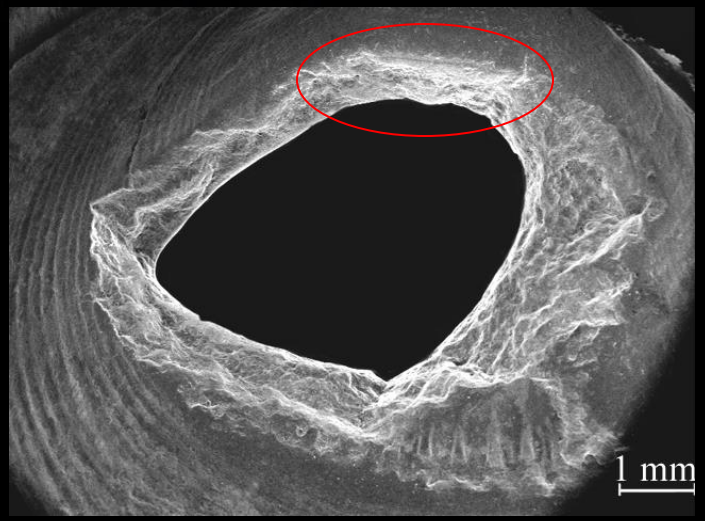
Homalopoma sanguineum

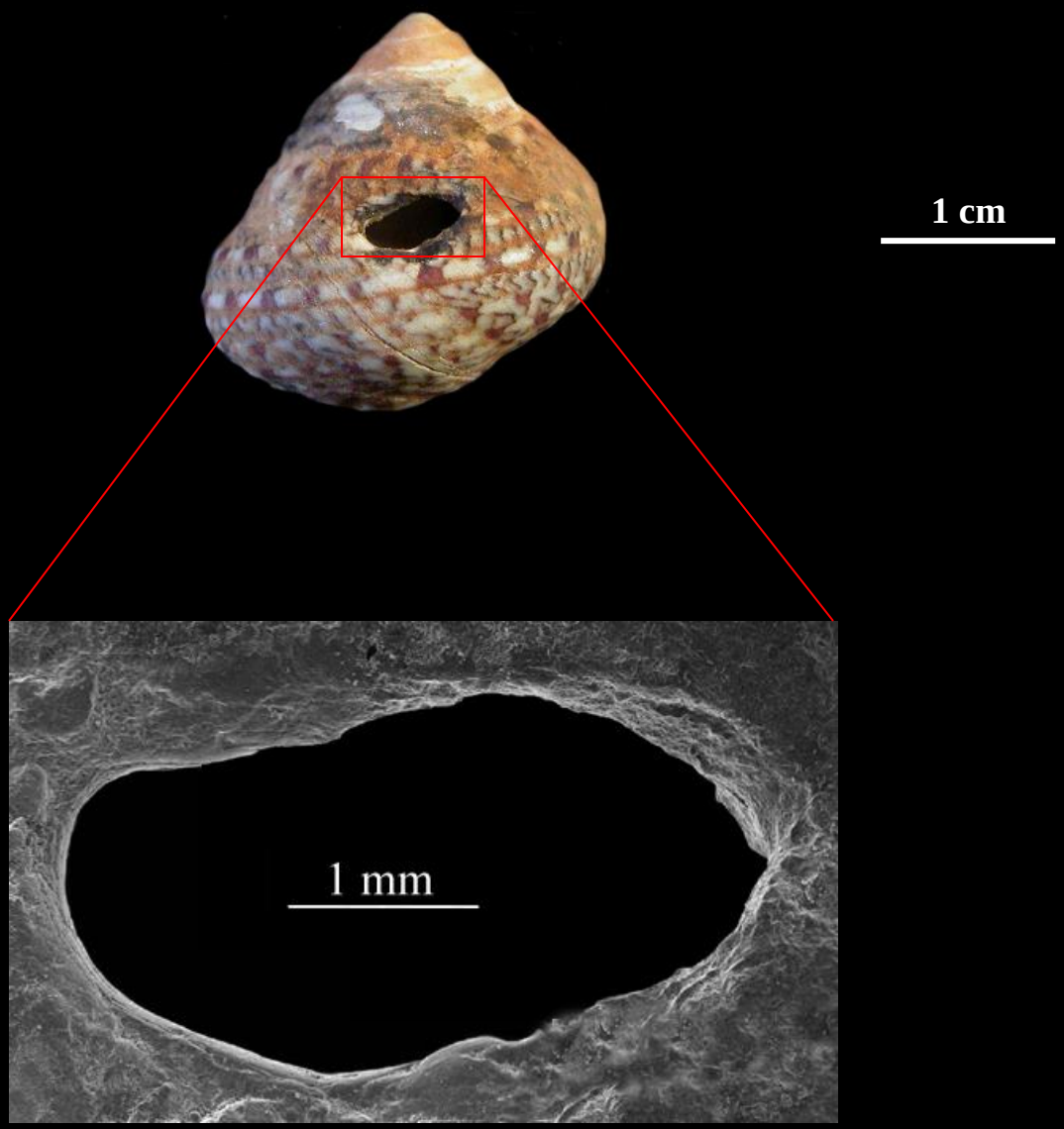
Osilinus articulatus

Glycymeris insubrica



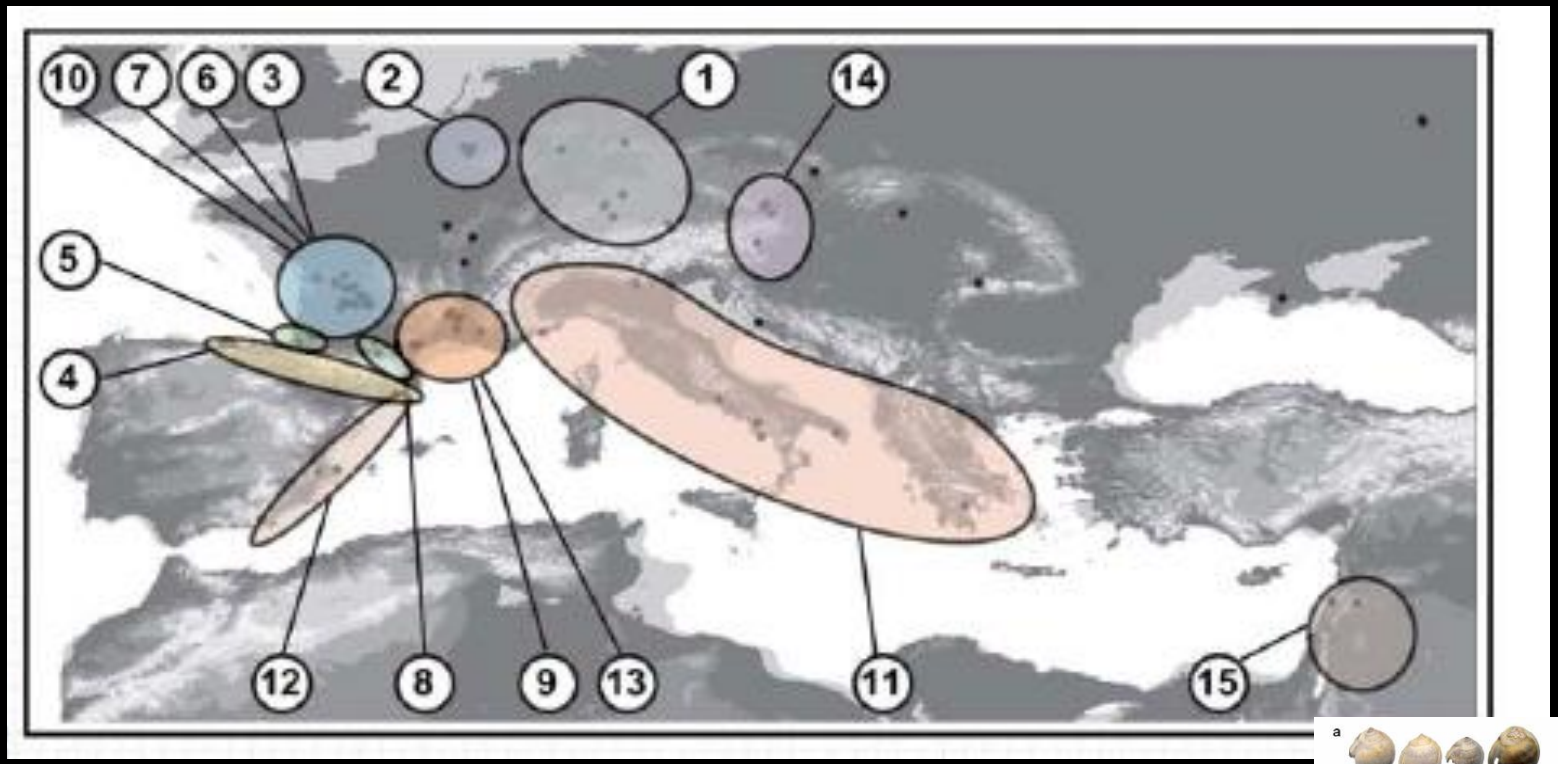

1 cm


1 mm



Osilinus *articulatus* **with punctual abrasions caused by prolonged suspension**

Teeth used as personal ornaments in the Aurignacian. 1, badger canine; 2, bear canine; 3, bear incisor; 4, fox canine; 5, bovid incisor; 6, fox incisor; 7, reindeer incisor; 8, reindeer canine; 9, beaver incisor; 10, horse canine; 11, horse incisor; 12, fallow deer incisor; 13, red deer canine; 14, red deer incisor; 15, hyena incisor; 16, hyena canine; 17, horse decidual incisor; 18, lion incisor; 19, wolf canine; 20, ibex incisor; 21, lion canine; 22, shark tooth; 23, human tooth; 24, wolf molar; 25, wolf incisor; 26, moose incisor; 27, lynx canine; 28, wild boar incisor.



Shells and ornaments:
Europe and Near East, 40.000 yrBP

Aurignacian ethno-linguistic geography of Europe revealed by personal ornaments

Marian Vanhaeren [a,b,*], Francesco d'Errico [c,d]

Contents lists available at ScienceDirect

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The origin and evolution of sewing technologies in Eurasia and North America

Francesco d'Errico [a, b, *], Luc Doyon [a, c], Shuangquan Zhang [d, e], Malvina Baumann [a], Martina Lázničková-Galetová [f, g], Xing Gao [d, e], Fuyou Chen [d, e], Yue Zhang [d, e, **]

Magdalenian needles from Laugerie-Haute Est