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Elephas Antiquus depicted at Vermelhosa rock art - Portugal?

Short notes

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Douro river valley, Portugal, the Vermelhosa area



The vertical panel of the Vermelhosa rock 1

A window over Vermelhosa rock art (left bank of the Douro river, near the Côa river confluence – P) was published many years ago in one of the first issues of *TRACCE Online Rock Art Bulletin* (ABREU SIMÕES DE *et al.* 1996; ARCÀ 1996; BRAVO NUNEZ 1996; CAMPOS 1996; FOSSATI 1996) and in the 3rd volume of the proceedings of the XIII UISPP Congress (SIMÕES DE ABREU *et al.* 1998); this last is re-published (full text-image flip book and PDF) in the same issue of this TRACCE short paper. We may remind that the Côa river area houses the main and largest European open-air Palaeolithic rock art complex.

Among the Vermelhosa Palaeolithic scratched figures, an elephant head, or at least what it looks like an elephant head, stands out. In the UISPP paper it is cautiously described as a mammoth head, while in mine TRACCE paper both elephant and mammoth terms are utilised – elephant only in captions – although the figure should “be discussed with specialists”.

Eighteen years later, maybe it's time to discuss it, or at least to recall the attention of Palaeolithic rock art scholars over this case.

Some facts, in brief:

- the scratched figure (Vermelhosa rock 1 - VRM1), despite the fact that it's hardly recognisable, was accurately documented by contact-tracing; it's not fake, it's not a mistake, nor a freak of nature;
- the outline clearly depicts the head and a part of the proboscis of an animal pertaining to the *Elephantidae* family;
- there is no evidence of wool, being the skin of the animal completely hairless;



The scratched elephant head over the Vermelhosa 1 rock
(tracing *Gravado no Tempo*)



Profile views of Asian elephant (left, by www.konicaminolta.com/kids), and African elephant, right (by Brian Snelson)



Mammoth depictions at Rouffignac cave – F (by Postcard © Editions Rene)

- a † *Mammuthus primigenius* depiction should be discarded;
- an † *Elephas antiquus* depiction may be presumed.

Besides the wool, the outline of the head is quite different from the well-know depictions of cave-art mammoth, like the famous Rouffignac ones, where the top-head bump is much more prominent and the tusks are rounded.

And more, the same outline with its frontal sinuosities is much more similar to an actual Asian elephant (*Elephas maximus*) one than to an African (*Loxodonta africana*), which front doesn't show bumps. In fact † *E. antiquus* and *E. maximus* pertains to the same genus, different from *Loxodonta* and from † *Mammuthus*.

The depiction of elephants in Palaeolithic rock art is generally not supported by scholars; regarding this point Paul Bahn (BAHN, VERTUT 1997, p. 150) refers to "erroneous identification as a warm-climate elephant species such as *Elephas Antiquus*". In LEROI-GOURHAN 1971 all trunked-figures are referred as mammoths, so no elephant is recognised, with some caution only for the El Castillo item, captioned at p. 207 as a "*proboscidiën*". Furthermore, mammoth figures are not very common in European cave-art,

having been excerpted by Leroi-Gourhan for this subject only 20 pictures out of 739 in his greatest scientific work (LEROI-GOURHAN 1971), related to eleven sites (France, Spain and Germany), here listed in alphabetical order: Arcy-sur-Cure – F, Bernifal – F, El Castillo – E, El Pindal – E, Font-de-Gaume – F, Gönnersdorf – D, Grotte Chabot – F, La Baume-Latrone – F, La D rouine – F, Pech-Merle – F, Rouffignac – F. We may add the scratched figure over an ivory plate at La Madeleine rock shelter – F, the very accurate 14 figures from Les Combarelles Cave – F, the red and brown painted ones at the Cougnac Cave – F, the low relief at the Grotte de Saint-Front – F and some more recent discoveries, like the red-painted figures and the scratched ones at the Chauvet Cave – F, the scratched woolly mammoth at the Cussac Cave –



E. antiquus reconstruction (model by Manimal Works – Rotterdam, <http://www.manimalworks.com>)



E. antiquus undeterminate molar,
Foz do Enxarrique – P
(by Antunes Cardoso 1992)

F, the scratched ones at the Deux-Ouvertures Grotte – F, the ivory statuette from the Vogelherd Cave – D and the possible carved mammoth figure at Cheddar Caves – UK. Obviously, the presence of mammoths is also testified by the ivory remains, like the spectacular mammoth-bone huts in Ukraine.

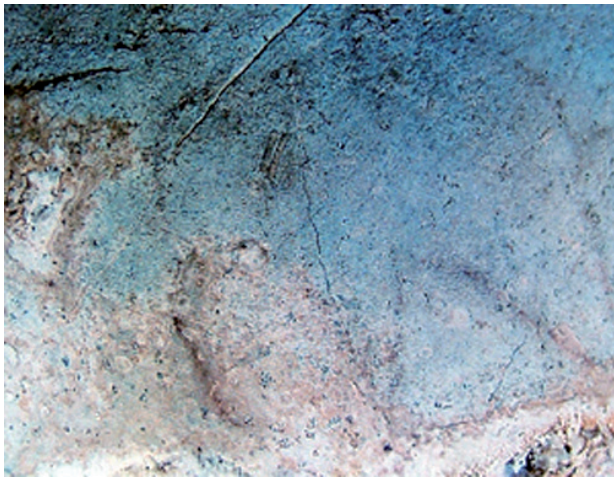
Iberian peninsula, on the other hand, is referred as the last European refuge of the straight-tusked elephant, the *Elephas (Palaeoloxodon) antiquus*, which elsewhere became extinct at the end of the Eemian, 114 Ka ca. Regarding Portugal, João Luís Cardoso (1993) affirms that this species survived till 30.000 BP. This statement is confirmed by the Uranium-series 33-34 Ka dating of a plate from an unworn upper molar from the level C of the Foz do Enxarrique (P) site (ANTUNES, CARDOSO 1992; SOUSA, FIGUEIREDO 2001), near the town of Vila Velha de Ródão, which is located about 120 km south of the Vermelhosa site. To support this, moreover far away from the Iberian peninsula, two *E. antiquus* specimens from the Netherlands (Raalte and Southern Bight of the North Sea) matched a similar 37-32 Ka range (MOLA *et. al.* 2007).

Looking outside Portuguese rock art, elephant depictions in cave art, or better of “naked” mammoth, are very rare, but present, although questioned. According to my weak knowledge of the matter, they can be counted on the fingers of one hand, like one figure each from the El Castillo and El Pindal caves (Asturias – E) and one figure from *La Grotte de l'Éléphant* (the Elephant cave) in the Toulourenc gorge (Rhône-Alpes – F).

It must be specified anyway that at El Pindal, although Breuil (ALCALDE DEL RIO *et al.* 1911) suggested an elephant depiction, the head bump seems more related to a mammoth (BALBIN BEHRMANN *et al.* 1999). One should add the seven polydigital figures with proboscis from La Baume-Latrone cave (Languedoc-Roussillon – F), more often described as mammoths, recently dated (¹⁴C-AMS) to 36.456-38.746 cal BP (AZÉMA *et al.* 2012); in this case the somewhat schematic style may nullify an undoubted zoological identification; anyway some hair seems depicted, mainly around the trunk and the front foot. Regarding Cougnac cave (Midi-Pyrénées – F) five elephants were cited in MÉROC, MAZET 1953. To sum up, and judging on the basis of the un-hairy skin and of the less prominent top-head bump, only the El Castillo and Toulourenc figures, IMHO, likely depict an elephant and not a mammoth silhouette.

Therefore, the pairing of palaeontological and iconographic evidences seems to offer interesting prompts, based on chronological and anatomical evidences. Hoping that these short notes may inspire deeper and exhaustive studies, possibly confirming or denying the main assumption of this paper, we may try to suggest some concluding points, again very briefly:

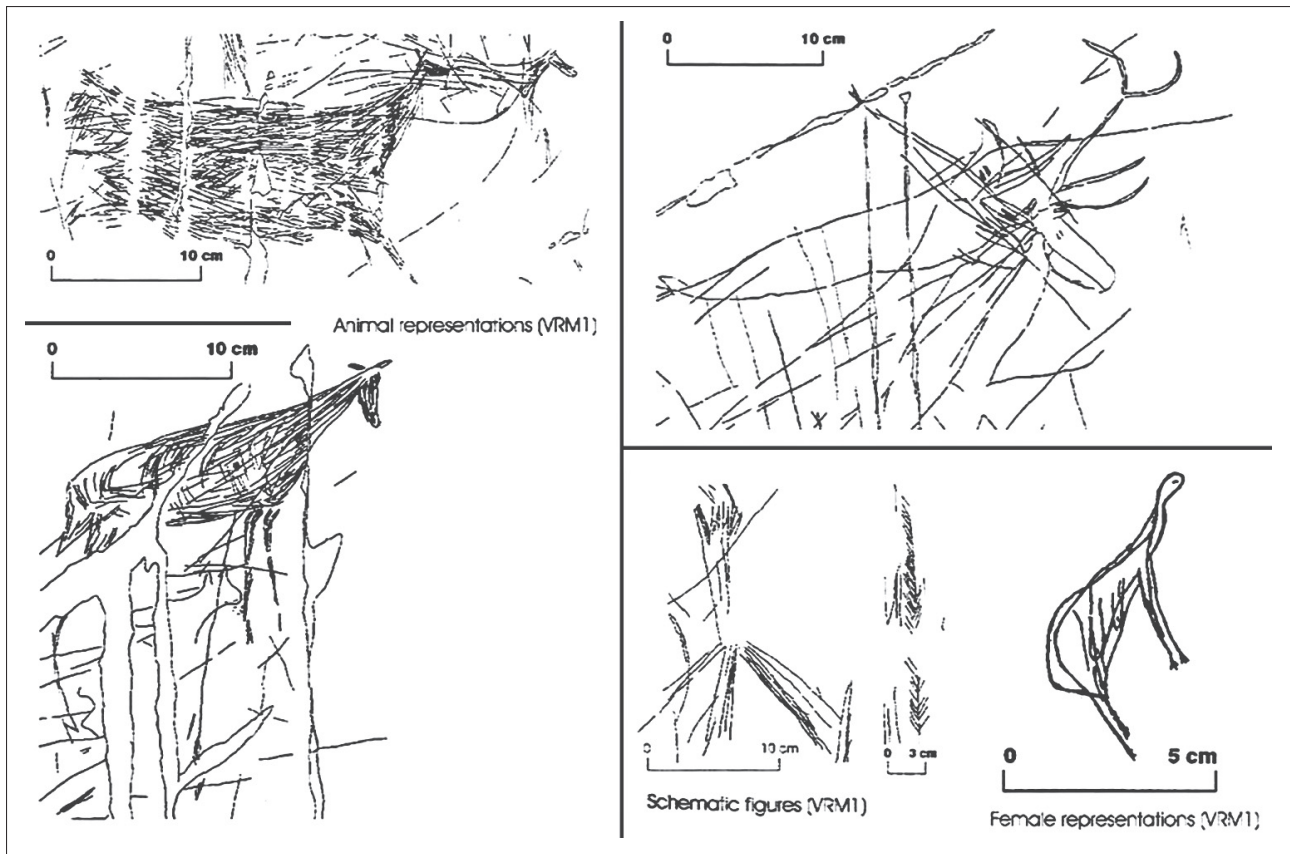
- the chronological frame assigned to the Vermelhosa (VRM1) figures may match, inside an early upper Palaeolithic range, the late



Elephant or naked mammoth figure from *El Castillo* cave – E
(by puenteviesgo.es)



Elephant or naked mammoth figure from *El Pindal* cave – E
(by deyave.com)



Vermelhosa rock 1, other Palaeolithic figures
(tracing *Gravado no Tempo*)



Elephant or naked mammoth figure from Toulourenc cave – F
(by P. Bellin)



Elephant or mammoth figure from Baume-Latrone cave – F
(by gorgesdugardon.fr)

survival phase of the *Elephas antiquus* in the western Iberian peninsula;

- even if statistically weak, the set of exposed data seems at least favourable to support the depiction of an elephant head figure on the VRM1 engraved vertical panel: it's not a *unicum*, and the anatomical silhouette doesn't match with a mammoth profile.

In this way, a positive answer to our question, *i.e.* if the Vermelhosa head can ever have been, among others, the witness of the meeting in Europe between the first modern man and the last surviving elephant, seems to lie on more reasoned grounds.

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REFERENCES

- ABREU SIMÕES DE M., ARCÀ A., FOSSATI A., JAFFE L., 1996, *The Vermelhosa site and the "Etched in time" project*, TRACCE Online Rock Art Bulletin, 5, online <http://www.rupestre.net/tracce/?p=1011>
- ALCALDE DEL RIO H., BREUIL H., SIERRA L., 1911, *Les cavernes de la region Cantabrique*, Monaco.
- ANTUNES, M.T. & CARDOSO, J.L. 1992, *Quaternary elephants in Portugal: new data*, Ciências da Terra, 11, pp. 17-37.
- ARCÀ A., 1996, *Palaeolithic figures in rock n. 1 of the Vermelhosa – Côa Valley area*, TRACCE Online Rock Art Bulletin, 5, online <http://www.rupestre.net/tracce/?p=1033>
- AZÉMA M., GÉLY B., BOURRILLON R., GALANT Ph., 2012, *L'art paléolithique de la Baume Latrone (France, Gard), nouveaux éléments de datation*, INORA (International Newsletter on Rock Art) n° 64, novembre 2012, pp. 6-12.
- BAHN P.G., Vertut J., 1997, *Journey Through the Ice Age*, London.
- BALBIN BEHRMANN R. DE, ALCOLEA GONZÁEZ, J.J., GONZÁLEZ PEREDA M.A., 1999, *Une vision nouvelle de la grotte de El Pindal, Pimiango, Ribadedeva, Asturias*, L'Anthropologie, t. 103, n. 1, pp. 51-92.
- BELLIN P., 1979, *Cavités ornées de Toulourenc et de l'Ouvèze*, Bulletin d'Etudes Préhistoriques Alpines, XI, p. 99-106.
- BRAVO NUNEZ J.A. 1996, *The geology of the Douro and Côa Valley: general aspects of the rock art areas*, TRACCE Online Rock Art Bulletin, 5, online <http://www.rupestre.net/tracce/?p=1047>
- CAMPOS B., 1996, *Do it nice or give you the truth?* TRACCE Online Rock Art Bulletin, 5, online <http://www.rupestre.net/tracce/?p=1054>
- CARDOSO, J.L. 1993. *Contribuição para o conhecimento dos grandes mamíferos do Plistocénico Superior de Portugal*, Oeiras.
- FOSSATI A., 1996, *The Iron Age in the Rock Art of Vermelhosa, Portugal*, TRACCE Online Rock Art Bulletin, 5, online <http://www.rupestre.net/tracce/?p=1020>
- LEROI-GOURHAN A., 1971 [2nd edition], *Préhistoire de l'art occidental*, Paris.
- MÉROC L., MAZET J., 1953, *Les peintures de la grotte de Cougnac (Lot)*, L'Anthropologie, t. 57, 5-6, pp. 490-494, 2 figg.
- MOLA D., DE VOSB J., VAN DER PLICHT J., 2007, *The presence and extinction of Elephas antiquus Falconer and Cautley, 1847, in Europe*, Quaternary International 169–170, pp. 149–153.
- SIMÕES DE ABREU M., ARCÀ A., FOSSATI F., JAFFE L., 1998. *Palaeolithic rock engravings at Vermelhosa, Côa valley archaeological park, Portugal*, in UISPP - International Union of Prehistoric and Protohistoric Sciences, *Proceedings of the XIII Congress*, Volume 3, pp. 121-126, Forlì.
- SOUSA M.F., FIGUEIREDO S.M., 2001, *The Pleistocene elephants of Portugal*, in CAVARRETTA G. et al. (Eds.), *The World of Elephants*, Consiglio Nazionale delle Ricerche, Roma, pp. 611–616.