**Grotta del Broion**

Grotta del Broion is a cave located on the eastern side of Colli Berici (Longare, VI) approximately 150 meters above sea level. Its Gravettian levels yielded 8 atopic canine teeth belonging to *Cervus elaphus*. Five of them are perforated while the remaining three only present with traces of drilling.

**Ornamental deer teeth in Upper Palaeolithic north-eastern Italy: a comparison of Aurignacian and Gravettian processing techniques**

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During the Upper Palaeolithic animal teeth were consistently used by Anatomically Modern Humans as ornamental and symbolic objects used to facilitate individual and group-level interaction. Two key Northeastern Italian sites, “Grotta di Fumane” (VR) and “Grotta del Broion” (VI) show that Cervus elaphus teeth were often used for this purpose. While Grotta di Fumane yielded evidence of red deer incisors with groovings on the root, Grotta del Broion testifies to the use of deer canines and apparently different technological approach based on preparatory scraping and perforation by rotation. An oblique disposition of the groovings channeled to approximatively 3D digital microscope allowed us to uncover a pattern of regional variability in tooth choice and alteration practices that may be linked to the adaptive strategies of Aurignacian and Gravettian hunter-gatherers of Northern Italy as well as to the emergence of a symbolic behaviour which is deeply rooted in human culture.

Keywords: north-eastern Italy, Upper Palaeolithic, teeth ornamental objects, *Cervus elaphus*

**Grotta di Fumane**

Grotta di Fumane lies 350 m above sea level at the southern fringe of the Venetian Pre-Alps (Fumane, VR). The site represents one of the most important stratigraphic sequences of Mediterranean Europe, owing to its rich archaeological record and optimal preservation conditions. The sequence covers more than 80,000 years of hominin prehistory, from the Mousterian to the Last Glacial Maximum. Llacus, faunal remains, hearths and other structures are densely scattered on the ground, particularly in layers A11, A10, A9, A6, A5, A4 (Mousterian), A3 (Ulluzian) and A2, A1 (Proto-Aurignacian). There two last layers yielded four incisions of red deer with grooving at the level of the third intermediate of the root. Both stereomicroscope allowed to identify a similar processing for all teeth. The groove, that at first glance appears circumferential (only in one case, Fig. 10), effectively consists of a series of consecutive traits (Fig. 9 and 11), obtained through repeated and precise scraie. Deer incisions found at Fumane were therefore prepared to host a robust binding which allowed their makers to use them as elements of a border or parure (Fig. 4).

**Bibliography**


**Figures**

- [Fig a]: Close-up view of a perforated canine tooth from Grotta del Broion, showing the perforation marks.
- [Fig b]: Diagram illustrating the process of perforation and subsequent decoration of the canine teeth.
- [Fig c]: Photograph of a perforated canine tooth from Grotta di Fumane, displaying the grooving pattern on the root.
- [Fig d]: Diagram depicting the perforation process and the resulting decorative patterns on the canine teeth.
- [Fig e]: Close-up view of a perforated canine tooth from Grotta di Fumane, highlighting the grooving pattern on the root.