Taphonomic and zooarchaeological study of the Middle and Upper Palaeolithic large mammal assemblage from Tournal cave (Bize-Minervois, France)

Pierre MAGNIEZ
CEBP, Université de Perpignan Via Domitia, UMR 5188 du CNRS, Tautavel, France pierre.magniez@hotmail.fr

Levels B and D from unit 2 are correlated with OIS 3 (48 and 38 ky B.P./ESR ; 38 ky B.P./cal 14C).

Levels F1F2 and F3F4 (unit 3) are assigned to Aurignacian (OIS 3/2).

Levels G and H (unit 4) that are respectively dated at 17 ky B.P. and 15 ky B.P. old (cal 14C) correspond to Magdalenian period (Tavose, 1987 and Potau-Mathis, 1994).

Palynological data suggest a cool and humid climate in Mousterian layers and drier in Aurignacian unit (Farbods, 1984).

Reindeer (Rangifer tarandus) and horse (Equus caballus) were the primary prey taxa.

TAPHONOMY

Weathering Stage 2 on a Horse proximal metapodial (A) (Mousterian layer)

Evidence of oxide deposit on a Horse metapodial (B) (Mousterian layer)

Cut marks on a Reindeer centrotrascoid (E) Evidence of burning on a Reindeer astragalus (Magdalenian layers)

Reindeer Mandible (C) and Horse distal Metapodial (D) gnawed by carnivores (Mousterian layers)

Several Neanderthal occupations in Summer and Fall (Horse hunting / Family group) and in Winter (Equids, Bovids and Cervids).

Ungulates may have been procured nearby and transported in full or in large pieces to the cave for meat. No evidence of breakage pattern consistent with marrow processing.

Carnivore destruction of bones following human occupations may have affected skeletal element abundances.

Weathering data suggest that bones were buried after a time of exposure.

At least two Aurignacian occupations in Spring and Summer. Ungulates were transported in large pieces to the cave. Density-mediated bias could be partly due to carnivore roving.

Weathering data suggest that bones were exposed to fewer destructive processes.

Several Magdalenian occupations in Winter and beginning of Spring (Reindeer mass kills hunting / herd structure).

Ungulates have been procured nearby and were transported in full or in large pieces to the cave for meat and systematic breakage pattern consistent with marrow processing.

Possibility of treatment of carcasses on a primary butchering site before treatment in the cave and/or possibility of storage.

Weathering data suggest that bones were buried rapidly.

Distribution of ungulate remains in the archaeological layers: density areas