
Refitting bones to reconstruct Neanderthal dwelling space use: the case of Fumane Cave (Verona, Italy)

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Résumé

Neanderthals' spatial organization reflects different types of adaptive modes in response to internal and external constraints. A multidisciplinary study of the archaeological record, spatial analysis, and bone refits, compared with ethnographic data, is used to identify relevant aspects of space management, which constitutes a formal tool for interpreting the Palaeolithic record. The arrangements of artefacts and features within archaeological sites have often been employed to isolate activity areas and draw inferences about site function; this assumes that objects found in proximity were used for the same task and that artefacts were usually discarded where they were used. In this regard, refitting studies provide valuable data to achieve topics like assemblage formation processes, post-depositional dynamics, settlement patterns, definition, and integrity of stratigraphic units. The distribution of remains and documented connection lines allows understanding the space use and, consequently, human behaviour. Although these premises, faunal refits have hitherto been poorly applied in archaeological sites.

This paper aims to present the application of an innovative methodology applied to the Middle Palaeolithic units A9 (47.6-45.0 Ky Cal BP) and A6-A5 (44.8-42.2 Ky Cal B.P.) of Fumane cave (Verona, Italy) that will include refits, spatial archaeology, multivariate statistical techniques and 3D model reconstructions. This latter will be an excellent way to record and transfer scientific information, and the possibility to automate or semi-automate refits of large faunal assemblages would offer new insights into zooarchaeological research methods.

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Mots-Clés: Fumane cave, Neanderthal, behaviour, bone refits, 3D modelling

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