



New discoveries and interpretations of hominid fossils and artifacts from Vindija Cave, Croatia

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Abstract

Beginning with excavations during the 1970s, Vindija Cave (Croatia) has yielded significant Middle and Upper Paleolithic fossil and archaeological finds. We report on seven recently identified hominid fossils, a newly associated partial hominid cranial vault from level G₃, nine possible bone retouchers, and a revised interpretation of the Mousterian artifact assemblage from the site. This new information reinforces our knowledge of the complex biocultural phenomena revealed in unit G and earlier deposits at Vindija. Six of the new hominid fossils derive from stratigraphic units G and I, while one lacks exact provenience. All specimens preserving diagnostic anatomy are from Neandertals. One of the postcranial remains, a radius fragment which exhibits Neandertal-like anatomy, comes from level G₁ and is congruent with the previously established association of Neandertals with an early Upper Paleolithic industry at the site. The partial cranial vault represents the most complete Neandertal from Vindija. The possible retouchers derive from unit G. Our analysis of these artifacts suggests that both percussion and pressure techniques may have been used by Neandertals in the final stage of tool production (retouching).

This paper also presents a revision of the artifact analysis for late Mousterian level G₃. We separated raw materials into two main groups due to the differing ways that the materials fracture and the differing morphology of the debitage. The use of raw material in level G₃ is different from earlier Middle Paleolithic levels at Vindija. This indicates that the G₃ late Neandertals were making choices regarding source material somewhat more like the Upper Paleolithic people at the site. When interpreted within a larger regional framework, the Vindija archaeological and hominid fossil remains demonstrate a complex, mosaic pattern of biocultural change in the Late Pleistocene of south-central Europe.

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