Neandertal frontals from Croatia: new reconstructions and new specimens. J.C.M. AHERN. Department of Anthropology, University of North Dakota, Grand Forks, ND 58202-8374.

The Hrvatsko Zagorje region of Croatia has yielded numerous, important paleolithic finds. Most prominent among these are the Neandertal fossils from Krapina Rockshelter and Vindija Cave. These fossils have proven to be a rich source of data for testing hypotheses about Neandertal evolution, adaptation, and behavior.

This study reports on four new, fragmentary cranial specimens and two newly reconstructed anterior cranial vaults. The four new cranial fragments all derive from Vindija Cave. Two of these are small *stephanion* fragments. Another is a piece of anteroinferior parietal with adjoining pieces of frontal and temporal. The fourth specimen is a frontal fragment preserving a portion of coronal suture.

Of the two newly reconstructed cranial vault specimens, one comprises fossils from Krapina level 4, while the other consists of fossils from Vindija level G₃. The Krapina 27/28 reconstruction is an association of a robust right lateral supraorbital torus with a large portion of central frontal squama and posterior frontal sinus wall. The link between these two specimens was made with Dr. T.D. White’s discovery of a conjoining specimen in the Krapina faunal remains. The newly reconstructed and associated Vindija anterior cranial vault, Vi 230/255/256/284, comprises a right lateral segment of gracile supraorbital torus, a large portion of frontal squama and posterior sinus wall, and a portion of anterior left parietal. These articulated fossils form the best preserved cranial specimen from Vindija Cave.

The newly reconstructed Krapina and Vindija specimens differ significantly. The Vindija specimen combines a gracile lateral supraorbital with thick frontal squama and a large frontal sinus. Kr 27/28 combines a robust supraorbital torus with a comparatively thin and gracile frontal squama. These differences are discussed in the context of the systematic differences between the earlier Krapina hominids and the later Vindija Neandertals.