

ABSTRACT FOR PAPER TO BE PRESENTED AT THE ANNUAL MEETINGS OF THE *AMERICAN ASSOCIATION OF PHYSICAL ANTHROPOLOGISTS*, APRIL, 1993.

The Transitional Nature of the late Neanderthal Mandibles from Vindija Cave, Croatia. J.C. Ahern and F.H. Smith, Department of Anthropology, Northern Illinois University, DeKalb, IL 60115.

The skeletal remains recovered from stratigraphic level G₃ at Vindija Cave, comprise one of the most recent samples of Neanderthals in Central Europe.

Many morphological characteristics of the G₃ hominids, such as the size and form of the supraorbital tori, anterior dentition size, and nasal aperture breadth, have been touted as transitional or 'progressive' in previous discussions. Of particular interest are the five mandibles recovered from G₃, which have been described as having stronger chin development and more vertical symphyses than other, especially earlier, Neanderthals (e.g. Krapina). However, the transitional nature of the Vindija mandibles, particularly in the symphyseal region, has been questioned.

In this paper the Vindija mandibular morphology, especially of the symphyseal region, is examined and compared with an earlier Neanderthal sample from Krapina (Croatia) and a Bronze Age anatomically modern sample from the site of Pod (Croatia). Although the overall morphological pattern of the Vindija mandibles reaffirms the classification as Neanderthals, many features -- such as the internal and external symphyseal angles (measured from the occlusal plane), the degree of pogonion projection, the form of the mental trigon, and the presence of distinctive incurvatio mandibulari -- indicate that the Vindija mandibles lie in between the early Krapina Neanderthals and the modern sample. Further evidence of the transitional nature of the Vindija hominids is demonstrated by their high degree of intra-group variability found for most of the metric and descriptive symphyseal characters. This degree of variability would be expected for a population that is in the process of evolutionary transition, possibly the result of gene flow with more modern populations.