A re-examination of ancient human bones from Romania reveals more evidence that humans and Neandertals interbred.

Erik Trinkaus, Ph.D., the Mary Tileston Hemenway Professor in Arts & Sciences at Washington University in St. Louis, and colleagues radiocarbon dated and analyzed the shapes of human bones from Romania's Pestera Muierii (Cave of the Old Woman). The fossils, which were discovered in 1952, add to the small number of early modern human remains from Europe known to be more than 28,000 years old.

Results were published in a recent issue of the *Proceedings of the National Academy of Science*.

The team found that the fossils were 30,000 years old and principally have the diagnostic skeletal features of modern humans. They also found that the remains had other features known among potential ancestors, primarily among the preceding Neandertals, providing more evidence that there was mixing of humans and Neandertals as modern humans dispersed across Europe about 35,000 years ago.

Their analysis of one skeleton's shoulder blade also shows that these humans did not have the full set of anatomical adaptations for throwing projectiles, like spears, during hunting.

The team says that the mixture of human and Neandertal features indicates that there was a complicated reproductive scenario as humans and Neandertals mixed, and that the hypothesis that the Neandertals were simply replaced should be abandoned.

Source: Washington University in St. Louis, By Neil Schoenherr