



...going one step further



VP753/1

- **Homo steinheimensis (Berkhemer 1936)**
- **Homo sapiens steinheimensis (Campbell 1964)**
- **Group classification: Pre-Neanderthal (Ante-Neanderthal) possibly archaic Homo sapiens**
- **Reconstruction based on Berkhemer Skull without lower jaw.**

The model was developed from a cast of the replica from the collection of the Johann Wolfgang Goethe University of Frankfurt am Main, Institute of Anthropology and Human Genetics for Biologists.

The skull was discovered in 1933 in a gravel pit near Steinheim on the Murr in Southern Germany. Bones of archaic elephants, Merck's rhinoceros and a wide-shovelled giant stag were found in the same layers. On the basis of the attendant fauna it was possible to estimate the origin to be approximately in the upper Middle Pleistocene. A later, more accurate determination fixed the data at approximately 250 000 years.

Hence the Steinheim skull can be allocated to the last part of the Middle Riss Interglacial period. It is consequently much older than the classic Neanderthal man and even the Pre-Neanderthal man. On the other hand it is considerably younger than the Sinanthropus (*Homo erectus pekinensis*) or even the Heidelberg man (*Homo erectus heidelbergensis*).

In the original skull which belonged to an individual of about 25 to 30 years, there are parts missing, for example parts of the upper jaw with the front teeth and the two zygomatic arches. In addition to this the left side of the face showed evidence of serious injuries. The right side of the skull seems uninjured, but may have been shifted somewhat to the left by the pressure of the soil. This made some correction necessary for accurate skull determination and its reconstruction.

Compared to the classic Neanderthal man, and also the Sinanthropus, the skull is very narrow. It is additionally characterized by the fossa canina at the upper jaw below the eye sockets and the deep depression at the root of the nose. There is only a slight projection in the face (slight prognathism) and the bones of the skull are distinctly thinner than those of the classic Neanderthal man. As is the case in the Sinanthropus, the widest part of the cranium is not between the ears but located much higher. With the overall higher skull, the marked indentation of the occiput is not evident. Seen from the rear the head seems nearly square in shape. The mastoid bone at the temporal fossa, however, is extremely small.

Length and width of the skull are 185 mm and 132 mm, respectively, with the cranial capacity being between 1,100 and 1,200 cm³. This suggests a relatively long, rather narrow and altogether delicate skull. Weinert (1936) believes it to be that of a female, as the “**overall diagnosis**” seems to indicate. The form of the forehead, of the eye sockets and the region above the eyes, the region of the glabella and the formation of the ridges above the eyes however, seem to contradict this.

For a long time, the Steinheim Skull was the cornerstone of the so-called “presapiens theory”, which postulates that anatomically modern humans and Neanderthals developed synchronously in Europe. Although even today the Steinheim Skull raises many questions due to its bewildering mosaic of modern and archaic characteristics, the presapiens theory can hardly be upheld in this form any longer. More likely, the skull can be assigned as a female representative of the group of *Homo heidelbergensis* finds or the early Neanderthals.

Weinert (1936) gives a detailed description of the skull, accompanied by many sketches, good photographs and very accurate measurements; even though his diagnosis and conclusions regarding the phylogenetic position of the skull do not agree with modern knowledge. It is therefore recommended that Adam (1988) be consulted.

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