

FAMILY RELATIONSHIPS AND SOCIAL ORGANIZATION IN BELL BEAKER CULTURE COMMUNITIES

In a remarkable cross-disciplinary study of burial sites at two Copper Age Bell Beaker culture settlements in South Germany, Sjögren et al. ([PLOS ONE, November 16, 2020](#)) provide a detailed reconstruction of kinship patterns and social organization.

The study involved archeologists, historians, anthropologists and molecular biologists and was coordinated by Kristian Kristiansen (Gothenburg, Sweden) and Volker Heyd (Helsinki, Finland). The work is based on two burial sites, in Irlbach and Alburg, close to the Danube River and 17 kilometers apart. The sites are typical for the Bell Beaker culture, which was predominant almost all over Europe during 2750-2000 BC.

Anthropometric analysis of the skeletons enabled the determination of sex and age at death. Strontium and oxygen isotope ratios in tooth enamel were determined to find out if individuals grew up at similar or different geographical locations. This, combined with the sequence analysis of DNA fragments from bones provided evidence for a patrilocal society in both communities. Whereas males shared a single Y-haplotype there was a much higher maternal genetic diversity, with 23 mitochondrial haplotypes in 34 individuals. The reconstructed pedigrees were consistent with monogamy combined with exogamy, as six of eight non-locals were women.

Thus, successive generations of males remained in these communities and women came from elsewhere. In this way property such as farming grounds could be conserved and inbreeding was prevented. The single Y-haplotype, with a Steppe-pastoralist origin from Eurasia, is still the dominant type in central and western Europe today.