Cultural Similarities between Archaeological Assemblages

based on the ROCEEH ROAD Database

Mapping approach

These maps show the technological and cultural similarities between time-overlapping archaeological assemblages throughout the Pleistocene. The lines represent the similarities as estimated with the Jaccard Index from 32 attributes comprising, for example, lithic and organic tool groups, symbolic artifacts, and combustion and burial features. We used a weighted function based on Euclidean distance and the similarity measure to visualize the cultural links. Brighter colors indicate higher similarities and higher densities of connections.

The ROCEEH database is one of the largest collections of archaeological data integrating sites, assemblages, chronologies, artifacts, human remains, and environmental indicators from 3,000,000 to 20,000 years ago. This study, as of Nov 2021 comprises ~11,000 assemblages from ~2,100 sites. However, the resulting maps presented here should be treated with caution, because data collection from published literature in many languages is still ongoing and the archaeological record continues to grow. We present the results from two cultural periods in the main map (Middle Paleolithic and Middle Stone Age), as well as a selection of nine technocomplexes in the side maps.

Middle Paleolithic
350,000 – 400,000 years ago

Middle Stone Age
300,000 – 300,000 years ago

Similarities between Middle Paleolithic and Middle Stone Age

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