This repository contains the scrips implemented and raw data used in the article “Reconstructing social networks on the Iberian Peninsula using ornaments”.

Raw data:

1. Similarity matrices

* Early\_Meso.csv:

Matrix containing the similarity values between each pair of ornament assemblages ascribed to the Early Mesolithic phase. This matrix is used as input to construct the Early Mesolithic network where the similarity values represent the weight of the links.

* Late\_Meso.csv:

Matrix containing the similarity values between each pair of ornament assemblages ascribed to the Late Mesolithic phase. This matrix is used as input to construct the Late Mesolithic network where the similarity values represent the weight of the links.

1. IDs for assortativity calculation

* Geo\_Units.csv:

This table relates the ID and geographical unit of each assemblage. This is required by the code to calculate the assortativity.

1. R Script

* Mesolithic\_SNA.r:

The networks were constructed and analysed using the igraph R package, and the similarity matrices above. The script was used to construct the network, where assemblages represent nodes and the similarity between them represent the weight of the links.

The code also plots the networks according to a force-directed layout algorithm (Fruchterman-Reingold) and calculates the values for several global network metrics (density, average degree, average weighted degree and assortativity), and node centrality metrics (degree, weighted degree and betweenness).