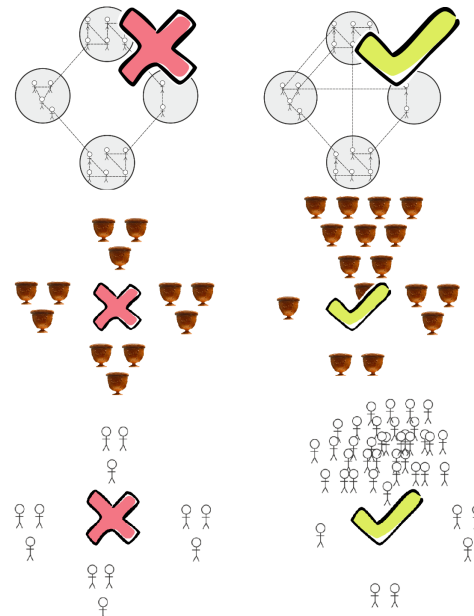


Vortragsreihe des Instituts für Sinologie und der Graduate School Distant Worlds

Kulturkontakte in antiken Welten: Theorien und Fallbeispiele



The Potential of Network Science for Archaeology Illustrated Through a Network Model of the Roman Economy

Dr. Tom Brughmans

Department of Computer and Information Science, University of Konstanz

What determines the usefulness of particular formal network methods for scholars studying past human behaviour? Is it the convenient representation of entities such as islands, objects, humans, sites and the past interactions between them as dots and lines? Or is it the good fit between the past phenomena we are interested in (like trade, transportation and communication), with their abstraction as network concepts? In this presentation I will argue that although these reasons might be sufficient to lead scholars to consider using formal network methods for addressing their research aims, they are not sufficient to motivate the adoption of specific network techniques. Instead, I will argue that scholars should evaluate whether network data is an appropriate representation of their data or hypotheses, and that their archaeological theories and hypotheses should inform the formulation of assumptions about how relationships affect each other: exactly how a relationship can affect the existence of another relationship.

I will illustrate this through a network model of the Roman economy. An agent-based network model was designed to represent hypotheses of the degree of market integration and the structure of social networks connecting Roman traders, through which commercial information and goods flowed. Results of this model will be compared to distributions of Hellenistic and Roman tableware in the Eastern Mediterranean.

Donnerstag, 18. November 2015, 18 Uhr c.t.

Hauptgebäude LMU, Geschwister-Scholl-Platz 1, Raum D209,
gefolgt von einem kleinen Umtrunk in Raum A280 (Halle 2. OG)