



Entangled Worlds.

Network analysis and complexity theory in historical and archaeological research

**International Conference,
April 13th-15th 2016**

**Institut für Mittelalterforschung & Österreichisches
Archäologisches Institut, Österreichische
Akademie der Wissenschaften**

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MEDCON

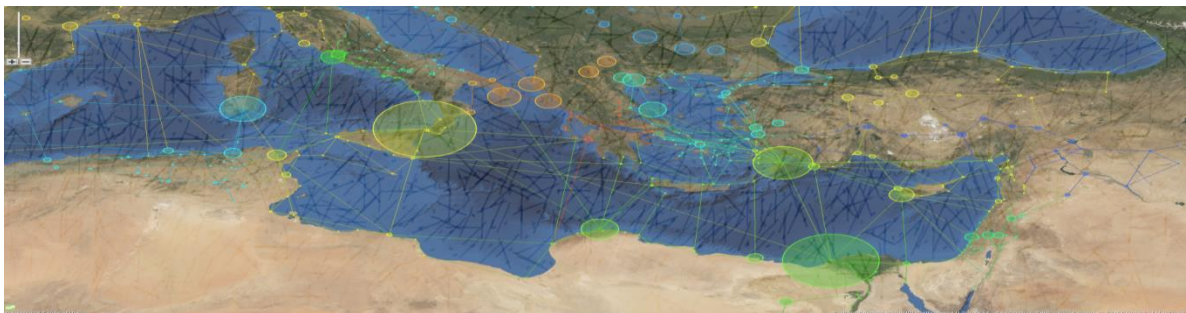
ENTANGLED WORLDS - VERFLOCHTENE WELTEN

How did “social networks” of the past work?

“Social networks” such as facebook demonstrate the global entanglements of the present time on an impressive scale. New methods of Digital Humanities, social sciences and mathematics allow us also to analyse and visualise networks of past societies. The exploration of the complexity and resilience of these social structures is the aim of the conference “Entangled Worlds” of the Institute for Medieval Research and the Austrian Archaeological Institute of the Austrian Academy of Sciences.

Historians, archaeologists, computer and natural scientists will compare past entanglements in geographical regions from the Austrian Alps via ancient Palmyra in Syria to the Himalaya or the social network of a major of late medieval Vienna sentenced to death with the one of a printer in 13th century China. A special focus lies on the relevance of networks in situations of social conflict.

Website: <http://www.dasanderemittelalter.net/conference-entangled-worlds/>



Wednesday, April 13th/Mittwoch, 13. April

Venue/Ort: Besprechungsraum of the Austrian Federal Ministry of Science, Research and Economy (BMWFW), Freyung 3, 1010 Wien

17:00-17:15 **Entangled Worlds. Network analysis and complexity theory in historical and archaeological research – Opening and Welcome**

- Sabine Ladstätter, ÖAI, Austrian Academy of Sciences
- Walter Pohl, IMAFO, Austrian Academy of Sciences
- Karlheinz Mörth, Austrian Centre for Digital Humanities, OEAW

17:15-18:00 **Facebook im Mittelalter? Die Bedeutung und Analyse sozialer Netzwerke in der Gegenwart und Vergangenheit/Facebook in the Middle Ages? The relevance and analysis of social networks in past and present times – Publikumsgespräch/Open discussion with the audience**

- Harald Katzmaier, FAS-Research, Vienna
- Johannes Preiser-Kapeller, IMAFO, Austrian Academy of Sciences
- Moderation: Lothar Bodingbauer, Ö1-Radio

18:00-18:45 **OpenAtlas: an open-source application for archaeological, historical and geospatial data – Presentation and Hands on**

- Stefan Eichert, IMAFO, Austrian Academy of Sciences
- Alexander Watzinger, Software developer - <http://craws.net/>

19:00 **Wine-reception on invitation of the Österreichisches Archäologisches Institut**
(Besprechungsraum des BMWFW, Freyung 3, 1010 Wien)

Thursday, April 14th/Donnerstag, 14. April

Venue/Ort: Institut für Mittelalterforschung, ÖAW, Hollandstraße 11-13/3rd floor, 1020 Wien

09:00-10:30 (3 x 20 minutes presentation, 30 minutes discussion)

Entangling texts and people: the modelling and analysis of networks on the basis of textual evidence and narratives, I (Chair: Petr Elbel, Univ. Brno - OEAW)

- Robert Gramsch, Friedrich-Schiller-Univ. Jena (Germany)
 - „Urkunden, Briefe, Chroniken – der Informationsgehalt mediävistischer Quellen und seine angemessene netzwerkanalytische Modellierung“
- Gerhard Lubich, Ruhr-Univ. Bochum (Germany)
 - „Probebohrungen: Zur Wechselwirkung von Überlieferungsart und Analysemöglichkeit“
- Hervin Fernandez-Aceves, Univ. of Leeds (UK)
 - „The Uncharted Networks of a 'Chartered' Territory: Diplomatic Evidence and Relational Sociology for the Norman Kingdom of Sicily“

10:30-10:45 **Coffee break/Kaffeepause**

10:45-12:15 (3 x 20 minutes presentation, 30 minutes discussion)

Entangling texts and people: the modelling and analysis of networks on the basis of textual evidence and narratives, II (Chair: Christine Glassner, OEAW)

- Ekaterini Mitsiou, Univ. of Vienna (Austria)
 - „Village communities in 13th century Byzantium: networks and microstructures“
- Andreas Kuczera, Akad. d. Wissenschaften und d. Literatur, Mainz (Germany)
 - „Graphdatenbanken - neue Perspektiven für die semantische Erschließung“
- Sonja Dünnebeil, IMAFO, Austrian Academy of Sciences
 - „Fraktionen und Allianzen im Kampf von Maximilian I. um Burgund“

12:15-13:30 **Lunch/Mittagspause**

13:30-15:00 (3 x 20 minutes presentation, 30 minutes discussion)

Entangling texts and people: the modelling and analysis of networks on the basis of textual evidence and narratives, III (Chair: Claudia Rapp, Univ. Vienna – OEAW)

- Lieve van Hoof, Univ. Gent (Belgium)
 - „Networks, Networking, and Social Network Analysis: An Exploration through Libanius' Letters“
- Franz Julius Morche – Mingkin Chu, Univ. Leiden (Netherlands)
 - „Printing and Power: the networks of Chen Qi (1186-1256) and Robert Estienne (1503-1559) in comparative perspective“
- Marios Hatzopoulos, Panteion Univ., Athens (Greece)
 - „The Friendly Society (Philike Hetaireia): Analysing a Post-Napoleonic Europe's Secret Revolutionary Network“

15:00-15:15 **Coffee break/Kaffeepause**

15:15-16:45 (3 x 20 minutes presentation, 30 minutes discussion)

Entangling sites and artefacts: the modelling and analysis of networks on the basis of archaeological and historical evidence, I (Chair: Sabine Ladstätter, OEAW)

- Alexander Sokolicek, Österreichisches Archäologisches Institut, Austrian Academy of Sciences
 - „Antike Netzwerke. Möglichkeiten und Grenzen einer Analyse“
- Søren Sindbæk, Univ. Aarhus (Denmark)
 - „A complex beadwork. Stringing together early medieval exchange“
- Rainer Simon, Austrian Institute of Technology, Vienna
 - „Pelagios: Linking Places, Entangling Data“

17:00-19:00 **Guided tour through the city centre of Vienna** (with J. Preiser-Kapeller, optional)

19:00 **Dinner for participants and chairs on invitation of the Austrian Academy of Sciences:** Restaurant Zwillings-Gewölb, Universitätsstraße 5, 1010 Wien (<http://www.zwillingsgwoelb.at/>; optional)

Friday, April 15th/Freitag, 15. April

Venue/Ort: Institut für Mittelalterforschung, ÖAW, Hollandstraße 11-13/3.Stock, 1020 Wien

09:00-10:30 (3 x 20 minutes presentation, 30 minutes discussion)

Entangling texts and people: the modelling and analysis of networks on the basis of textual evidence and narratives, IV (Chair: Andreas Zajic, OEAW)

- Elisabeth Gruber, IMAREAL Krems, Univ. Salzburg (Austria)
 - „Schauplatz Richtstätte: Ein Wiener Bürgermeister zwischen städtischer Führungselite, Handwerker und Herrscherhaus im späten Mittelalter“
- Petr Elbel, Univ. Brno (Czech Republic) - IMAFO, Austrian Academy of Sciences
 - „Die böhmischen Höflinge Sigismunds und die Sigismund-Partei in Böhmen zwischen Prosopographie und Netzwerkanalyse“
- Günter Katzler, IMAFO, Austrian Academy of Sciences
 - „Netzwerke des Krieges: König Sigismund, Herzog Friedrich IV. von Österreich und ihre Verbündeten im Reichskrieg von 1415.“

10:30-10:45 **Coffee break/Kaffeepause**

10:45-12:15 (3 x 20 minutes presentation, 30 minutes discussion)

Entangling sites and artefacts: the modelling and analysis of networks on the basis of archaeological and historical evidence, II (Chair: Ekaterini Mitsiou, Univ. Vienna)

- Vinod Nautiyal, HNB Garhwal University (India)
 - „Medieval Political and Military Space in Central (Garhwal) Himalaya, India: Studying Changing Networking Pattern in Mountains through GIS Tools“
- Mihailo Popović, IMAFO, Austrian Academy of Sciences
 - „Digitising Patterns of Power (DPP): A Case Study on the “Medieval Serbian Oecumene” and its Borderzones in Byzantine Macedonia (14th Cent. AD)“
- Eivind Heldaas Seland, Univ. Bergen (Norway)
 - „Pastoralism, subsistence and territorial control in Roman period Palmyra: a hydrological approach“

12:15-13:30 **Lunch/Mittagspause**

13:30-15:00 (3 x 20 minutes presentation, 30 minutes discussion)

Entangling data: the organisation of relational data on the basis of historical and archaeological evidence (Chair: Günter Katzler, OEAW)

- Stefan Eichert – Alexander Watzinger, IMAFO, Austrian Academy of Sciences
 - „OpenAtlas - A database system for object oriented modelling of historical relationships“
- Christian Knüpfer, Friedrich-Schiller-Univ. Jena (Germany)
 - „Zur Ontologie der mittelalterlichen Verfassungs- und Sozialgeschichte- Herausforderungen aus Sicht der Wissensrepräsentation“
- Ágoston Zénó Bernád – Maximilian Kaiser, INZ/ÖBL, Austrian Academy of Sciences
 - „Building the Austrian Prosopographical Information System (APIS). A Workshop Report“

15:00-15:15 **Coffee break/Kaffeepause**

15:15-16:45 (3 x 20 minutes presentation, 30 minutes discussion)

Entangling dynamics: the modelling of complex past societies and networks (Chair: Karlheinz Mörth, OEAW)

- Tom Brughmans, Univ. Konstanz (Germany)
 - „The potential of network science for archaeology. Illustrated through a network model of market integration in the Roman economy“
- Aleš Chalupa – Tomáš Glomb, Univ. Brno (Czech Republic)
 - „Generative Historiography of Ancient Religions and the Case of Travelling Deities: How to Model the Spread of Cults in the Ancient Mediterranean“
- Johannes Preiser-Kapeller, IMAFO, Austrian Academy of Sciences
 - „Mapping Medieval Conflicts. A synthetic approach towards political dynamics in the pre-modern period“

16:45-17:30 **Final Discussion, Farewell/Abschlussdiskussion, Verabschiedung**