Digitising (Historical) Patterns of Power

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DIGITISING PATTERNS OF POWER (DPP)
Peripheral Mountains in the Medieval World

The project focuses on the analysis of the depiction of space in medieval written sources, of the interaction between built and natural environment, of appropriation of space and the emergence of new political, religious and economic structures of power. DPP compares four regions of the medieval world: the Eastern Alps (6th-12th cent.), the Morava-March Region (6th-11th cent.), the historical region of Macedonia (12th-14th cent.) and historical Southern Armenia (Vaspurakan, 6th-11th cent.).

Case Studies
In four Case Studies the project will investigate patterns of power in selected areas of the european middle ages.
...learn more

Geocommunication
In cooperation with the Institute of Geography at the University of Vienna, the Case Studies can be experienced online via a geovisualisation.
...learn more

Digitalisation
In two case studies, manuscripts and editions will be digitized, geotagged and connected with the geovisualisation.
...learn more

Repository
All the collected data will be searchable via an online database. Additionally, shapefiles, KML and articles can be downloaded.
...learn more
Involved Institutions

• Austrian Academy of Sciences
  • Institute for Mediaeval Research
    • Archaeology
    • Mediaeval History
    • Byzantine Studies
  • Project lead

• University of Vienna
  • Department of Geography and Regional Research
    • Cartography and Geocommunication
Case Studies: Representation of Space in Mediaeval Texts

Digitising Patterns of Power: Areas of Case Studies

- **Eastern Alps and Moravia-Thaya Region** 8th / 9th century
- **Historical Region of Macedonia** 11th - 14th century
- **Historical Southern Armenia (Vaspurakan)** 5th - 11th century
Patterns of Power: Appropriation of Land and Areas of Influence
Patterns of Power: Central Places and Infrastructure

Nomadic Infrastructure in the Historical Region of Macedonia (14th C.)

Central place
Temporary settlement (katuni)
Summer pasture
Winter pasture
Current international boundaries
Patterns of Power: Power Structures

The Organisation of Space via Monuments: Nearest Neighbour Network

Clusters of sites more densely connected among each other than to the rest of the network (Newman grouping).

Nearest neighbour network (< 50km) of sites of larger scale building activity in the region around Lake Van in the 9th-11th century.

- Current international boundaries
- Nearest neighbour connections

Data Source: Thierry 1989, J. Preiser-Kappler 2014
Natural Earth, SRTM

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Cartography and Geocommunication

• Map centred online application
  • High quality base map, specific to the research project

• Representation of uncertainty

• Story maps
  • Representation of predefined topics
Ordinance Survey and Ordnance Survey of Scotland First Series

According to the fastest routes from Alexandria to the rest of the Roman world in July, sites are this far away.

- Londinium (47 Days)
- Lutoburum (37 Days)
- Corduba (56 Days)
- Mediolanum (31 Days)

The most distant major sites are:
Database

• Entities taken from written sources
  • Actors
  • Locations
  • Documents
  • Events

• Archaeological remains

• Relations between entities

• Temporal and spatial uncertainty
Project Structure

Digitising Patterns of Power

Scientific Questions, Case Studies

- Eastern Alps and Moaravia-Thaya Region
- Historical Region of Macedonia
- Historical Armenia
- External Data (WMS / WFS)

Dissemination

- Database input GUI
- Map-based Online Platform
- Web Map Services (WMS / WFS)
- Papers

Database

OpenATLAS

Geocommunication
Challenges

• Visualisation of various entities

• Inhomogeneous certainty of data
  • Representation in different scales

• Usability vs. performance vs. flexibility
Thank You For Your Attention!

Homepage: http://dpp.oeaw.ac.at/

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