

FROM SOURCES TO DATA TO KNOWLEDGE: A KNOWLEDGE BASE FOR THE STUDY OF THE GERMAN SOCIETY AROUND 1200



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Planned Project

Social network analysis is a rapidly growing interdisciplinary field of research which has the potential to become an important tool for the digital humanities in the next years. It can be used to create databases which enable new methods for the interpretation and critical analysis of sources and for the visualisation of results.

One difficulty for historical network-analytical research is the digital preprocessing of the relevant data. This project will develop a new approach to this problem. We are planning to establish a medieval knowledge base which represents the necessary knowledge about historical events, persons, geography and the many ties between them and the related sources. This will

1. provide an intelligent access to the represented data,
2. reproduce the historical state of knowledge and discussion in a clearly way,
3. be easily and flexibly expandable to new sorts of knowledge,
4. be usable to answer different historical questions, and
5. provide user-friendly options for the input and the presentation of the data.

The project aims to integrate concrete research on the history of Friedrich I. Barbarossa (1152-90) with fundamental research on data-driven methods for medieval history.

Project Partners

- Chair for Medieval History, **University Jena**:
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- Working Group Artificial Intelligence, **University Jena**:
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- Chair for the History of Early Middle Ages, **University Bochum**:
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- Regesta Imperii online, **Akademie der Wissenschaften und der Literatur Mainz**:
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Network Analysis

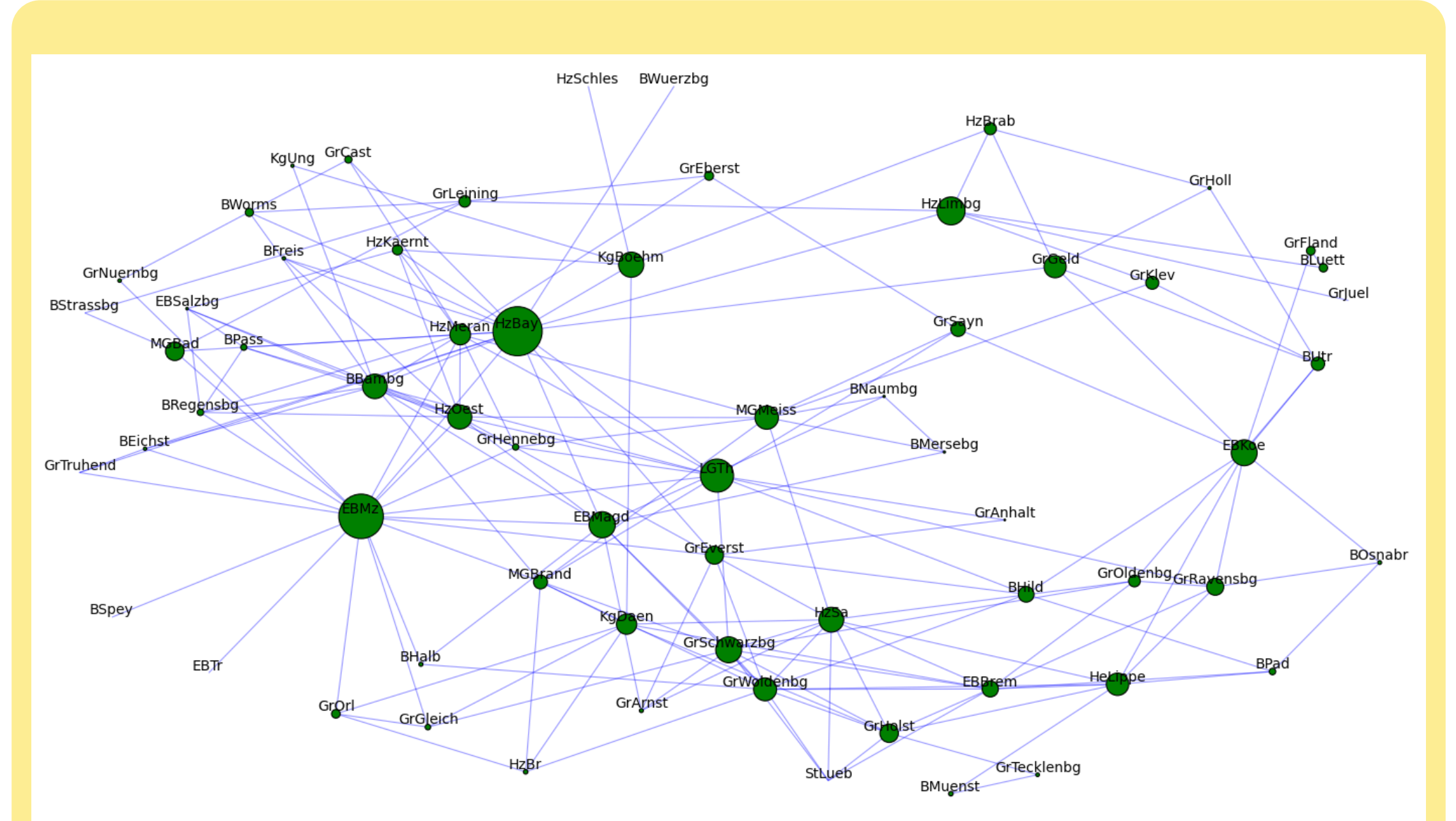


Fig. 1: Network of German princes 1230 (Gramsch / Yose 2015).

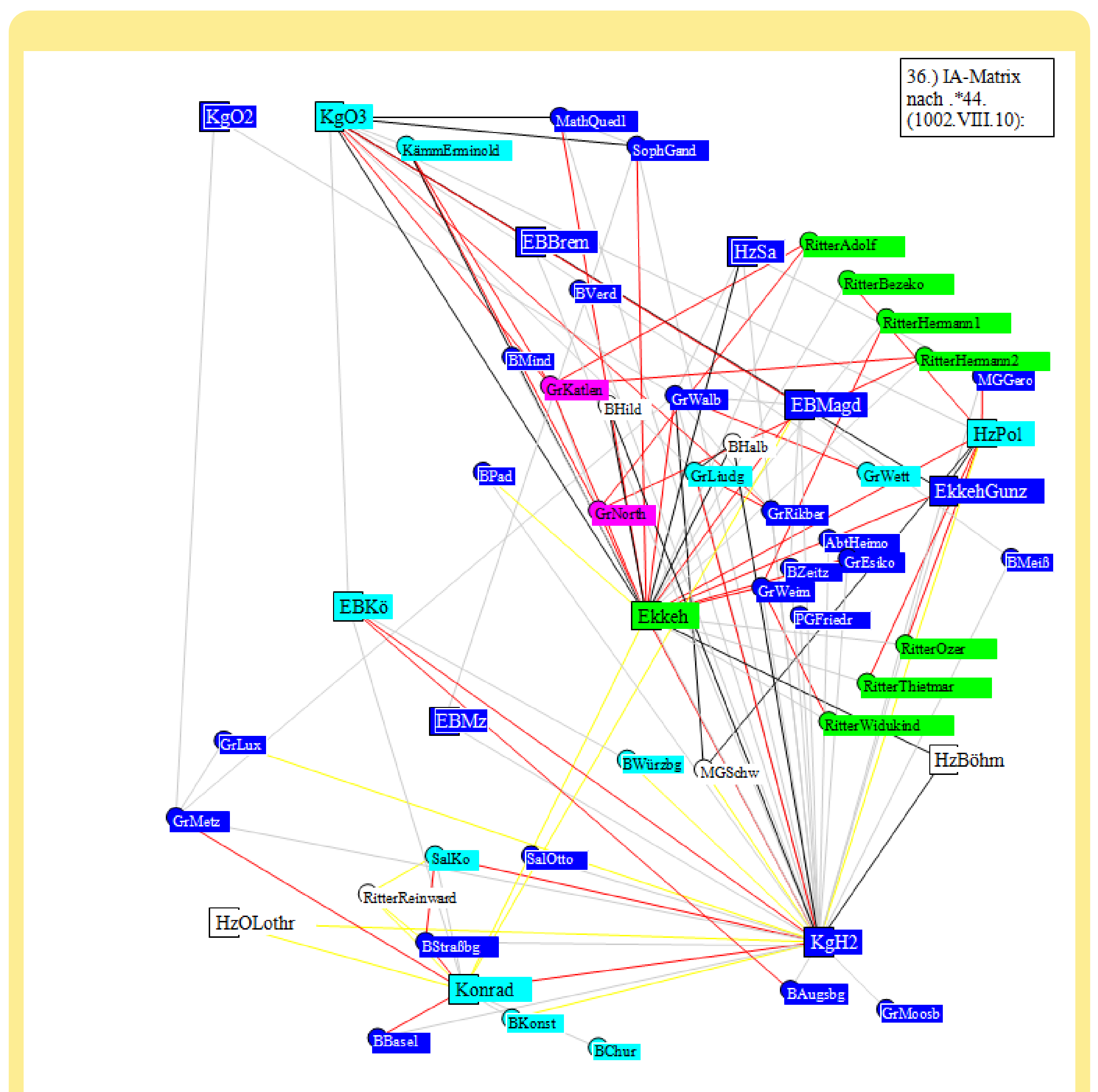


Fig. 2: The struggle for the German throne 1002 according of the chronicles of Thietmar von Merseburg (Book 4 and 5) presented as a network of actors with positive (gray or black), negative (red) and neutral (yellow) relations (Gramsch 2015).

Knowledge Base

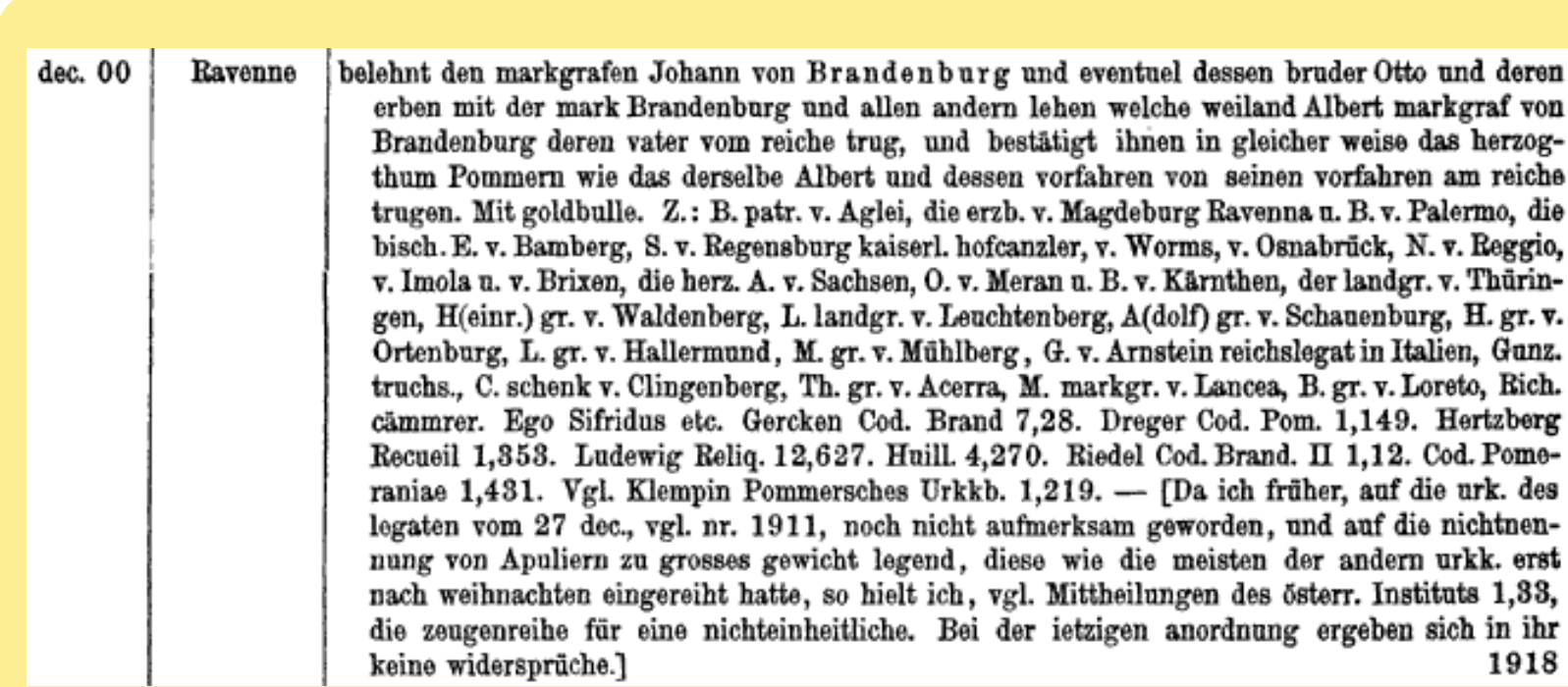


Fig. 3: Regesta Imperii, 5. Abtlg., Teilbd. 1 (1881), S. 381, Nr. 1918



Fig. 4: Regesta Imperii online

Semantic Tagging of a Regest

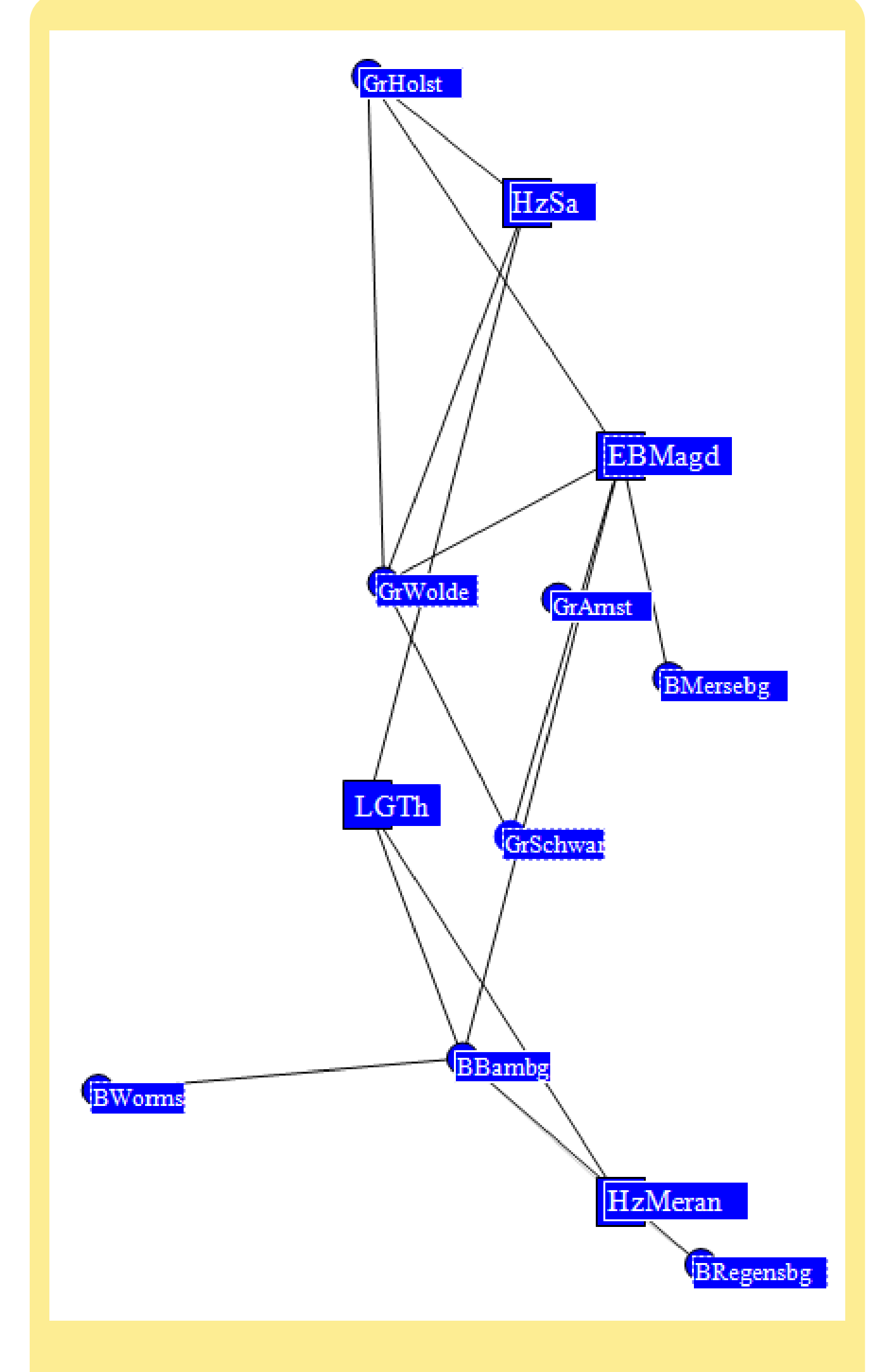
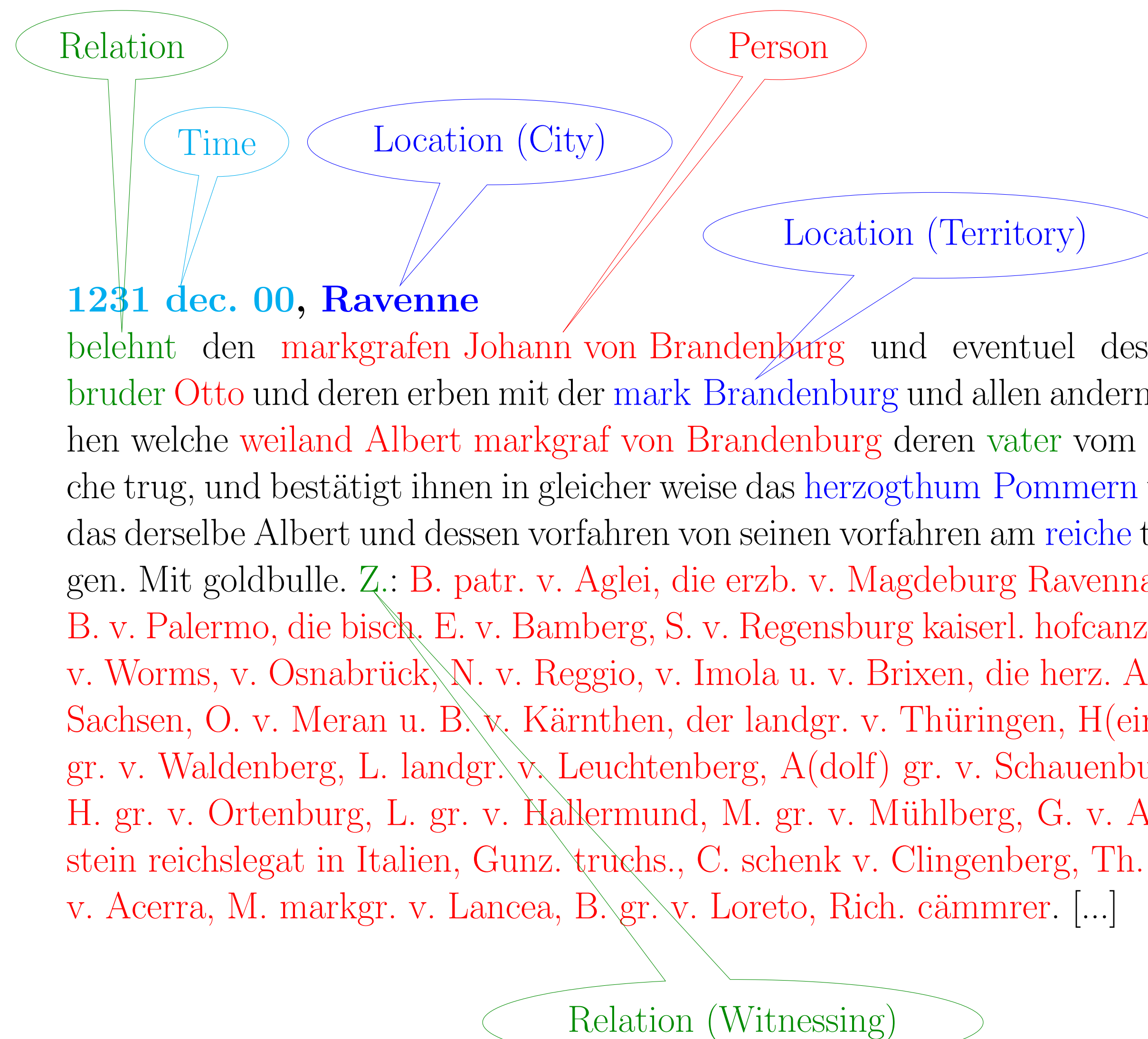


Fig. 5: Entanglement of the witnesses mentioned in the regest.