

Modeling and mapping multilingual and historically diverse content

Recent digitization efforts made archival content more available and even searchable through the Web. History researchers use this content for studying past events in relation to general historiographical issues, which may involve politics, society, ethics, and others. However, for locating relevant content the researcher needs to know the terminology used for the topic in the past. This problem is crucial for history researchers, because it affects the time and quality of their work. Another problem of great importance when dealing with the archival content is multilingualism. Simple translation is not enough to identify a relevant term in another language, because a term may undergo different changes in different social or cultural contexts.

In order to address these challenges, the EU-funded project Papyrus aims to develop tool support for cross-disciplinary information retrieval of news content for historical research. To model both disciplines, i.e. history and news, we developed two ontologies. The News ontology reflects the perspective of news professionals on digital archives by using NewsML-G2 standard, whereas the History ontology models the history perspective on the events and topics covered by the news. The History ontology is based on the CIDOC Concept Reference Model that embraces several standards of modeling information in the cultural heritage domain. To provide a means of communication between two disciplines, we use mappings that establish correspondences between the News and History ontologies.

This work discusses the major challenges in modeling and mapping terms and concepts describing the archival content that is multilingual and historically diverse.

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