JudaicaLink
A Domain-Specific Knowledge Base for Jewish Studies

JudaicaLink is a novel resource which provides a knowledge base of Jewish culture and history. It is based on multilingual domain-specific information extracted from different sources. JudaicaLink can be used for contextualization of metadata, i.e., entity resolution within and linking of metadata to improve resource access and to provide richer context to the user.

Infrastructure: JudaicaLink provides the datasets in N3 (Notation3) and its subset formats, Turtle (Tense RDF Triple Language, TTL). The JudaicaLink website is driven by the static site generator Hugo.

The Hugo sources are collaboratively maintained using GitHub. Every dataset corresponds to a name graph that can later on be accessed in the triple store. Users can download datasets or browse using public SPARQL endpoint:

- Triple store: Apache Jena Fuseki
- SPARQL Endpoint: http://data.judaicalink.org/sparql
- Linked Data frontend: Pubby (DM2E version)
- Management and public access: https://github.com/wisslab/judaicalink-generators
- Static HTML pages of the website: Hugo

Ontology:
The classes and properties used in JudaicaLink ontology are created on the fly based on the information that we encounter and need to be represented. However, we are consistent on the usage of the properties and the coined URI's are stable and unique. 

Sources:
The MeSH unstructured data sources such as encyclopedia available as structured data: Encyclopædias with a focus on Jewish studies were one of the sources of information in this knowledge base. Identified and collected relevant subsets of general purpose knowledge bases. There are also knowledge bases which contain a vast variety of information including facts related to Jewish culture which were also used to extract a focused knowledge graph of relevant concepts to the domain.

Datasets: http://www.judaicalink.org/datasets/

Use Case:

Fachinformationsdienst Jüdische Studien (FID Judaica)

http://numer.sfb.uni-frankfurt.de/judaica

The FID Judaica project is a collaboration between Frankfurt University Library and Stuttgart Media University. The project aims to:

- Create a portal as a central access point to Jewish Studies
- Contextualize the digital Judaica collections
- Enrich metadata
- Correct different data sources as Linked Open Data

For contextualization and metadata enrichment, we identify named entities and subjects in the existing data and link it to data from various sources with complementing information. This particularly includes the identification schemes like the GND authority data.

JudaicaLink was used as a highly interlinked knowledge graph with relevant contextual information in this project.

Maral Dadvar and Kai Eckert

Web-based Information Systems and Services, Stuttgart Hochschule der Medien, Germany