A SMW Referatory for Qualitative Research Software, Workflows and Projects

Cornelia Veja
Julian Hocker
Christoph Schindler
Who are we?

DIPF - The Leibniz Institute for Educational Research and Educational Information

Information Center for Education

- Educational Practices
- Educational Research
- Leibniz Association (Leibniz Education Research Network, Leibniz Research Alliance Science 2.0)
Motivation

• Starts from the necessity to have a central platform which collects and relates projects, software and workflows for specific research methods in Humanities.

• There are many research projects that develop local solutions and develop software to work out a specific problem.

• The necessity to follow the concept of transparency, reproducibility and replication of research in Humanities.
Objectives

- Allows creation of a collaborative and extensible database for eHumanities projects and specific research methods.

- This project is a crowd-sourced referatory that focuses on projects and workflows that might otherwise remain uncatalogued in institutional repositories.

- A Citizen Science (CS) approach, where we defined tasks and invited people from the community to contribute.

- Reuse the experience from other CS projects

- CS, short definition - The ‘inclusion of members of the public in some aspect of scientific research’ [Chiara Franzoni and Henry Sauermann. 2014. Crowd science: the organization of scientific research in open collaborative projects. Research Policy 43(1), 1–20]
Challenges

Interaction and Research Practices in Humanities:

• Follow the iterative research process specific for eHumanities
• Allow collaboration at different levels
• Ease of understanding and use for non technical users

Technical requirements:

• Immediate rewarding
• Easy interlinking internal and external
• Bilingual
• Open license
• Schema curation and completeness
Citizen Science Approach

Based on two pillars:

- Semantic MediaWiki equipped with custom tools as framework
- A CS approach – involve networks of users

Define 2 tasks:

T1: Evaluate metadata schema

T2: Enter entities: Methods, Software, Project and Workflows
Design Approach

**Input schema definition and metadata**
- Entities and properties definition
- Metadata extraction
- Ontologies alignment
- Define wiki templates

**Define Task Templates**
- Entities Extraction
- Relation extraction
- Mapping to vocabularies

**Target Crowd Settings**
(Guidelines)

**Task Workflow Definition**
(protocol)

**Crowd contribution**
- Tasks
  - Metadata schema evaluation
  - Insert entities: Methods, Software, Projects, Workflows
  - Complex aggregated resources
  - Licensing

**Post-Processing**
- Worker spam filtering (semi-) automatic

**Output data analysis**
- Post-evaluate metadata schema
- Refine metadata schema
- RDF Export

**Visual Analytics**

*Paris, 25-27.09.2019 | SMWConFall ‘19*
# Software

<table>
<thead>
<tr>
<th>Software Tool</th>
<th>Link</th>
<th>Description</th>
<th>Methode</th>
</tr>
</thead>
<tbody>
<tr>
<td>OHTool</td>
<td><a href="https://semantic-cora.org/index.php/Documentation/OHTool">Link</a></td>
<td>Dieses Tool erlaubt die Nutzung der Methode Objektive Hermeneutik in einer Wiki-Umgebung</td>
<td>Objektive Hermeneutik</td>
</tr>
<tr>
<td>Test1</td>
<td><a href="http://forschungssoftware.semantic-cora.org/index.php/Software">Link</a></td>
<td>Beschreibung Beschreibung Beschreibung Beschreibung Beschreibung</td>
<td>Objective Hermeneutic</td>
</tr>
</tbody>
</table>

## Workflows

<table>
<thead>
<tr>
<th>Workflow</th>
<th>Title/Title</th>
<th>Description/Beschreibung</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test-Workflow</td>
<td>Usage of the OHI Tool</td>
<td>Dieser Workflow beschreibt die Nutzung des OHTools...</td>
<td>OHTool</td>
</tr>
<tr>
<td>Tt</td>
<td>Workflow for OHI Tool</td>
<td>Beschreibung Beschreibung Beschreibung Beschreibung</td>
<td>OHTool</td>
</tr>
</tbody>
</table>

## Projekt

<table>
<thead>
<tr>
<th>Project/Projekt</th>
<th>Title/Title</th>
<th>Link</th>
<th>Description/Beschreibung</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEDIFOR</td>
<td>Centre for Digital Humanities</td>
<td><a href="https://www.cedifor.de/">Link</a></td>
<td>Digital Humanities Projekt An den Unis Frankfurt, Darmstadt, Mainz und DIPF</td>
</tr>
</tbody>
</table>
# Project Portal - Software

## OHTool

<table>
<thead>
<tr>
<th>Project</th>
<th>Method</th>
<th>Description</th>
<th>Keywords</th>
<th>License</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEDIFOR</td>
<td>Objektive</td>
<td>Dieses tool erlaubt die Nutzung der Methode Objektive Hermeneutik in einer</td>
<td>SMW, MediaWiki</td>
<td>MIT-Lizenz</td>
</tr>
<tr>
<td>Semantic CorA</td>
<td>Hermeneutik</td>
<td>Wiki-Umgebung</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**English**

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<tr>
<th>Project</th>
<th>Method</th>
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<th>License</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEDIFOR</td>
<td>Objective</td>
<td>This tool allows you to use the Objective Hermeneutics method in a wiki</td>
<td>SMW, MediaWiki</td>
<td>MIT</td>
</tr>
<tr>
<td>Semantic CorA</td>
<td>Hermeneutics</td>
<td>environment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Project Portal - Project

Title/Titel: Centre for Digital Humanities
Link: https://www.cedifor.de/
Funding Body/Gelder: DFG
Geo Area/Gebiet: Europe/Europe
Starting date/Startdatum: 2015
Ending date/Enddatum: 2020
Partners involved/Partner: Uni Frankfurt, Uni Darmstadt, Uni Mainz, DIPF
People involved/Beteiligte Personen: Christoph Schindler, Lia Veja, Kendra Sticht
Status: Aktiv/Active

Beschreibung
Digital Humanities Projekt an den Unis Frankfurt, Darmstadt, Mainz und DIPF

English

Description
Digital Humanities Project with Uni Frankfurt, Darmstadt, Mainz and DIPF
Ontology and status

- 2 tasks for citizens
- 5 classes, 45 semantic properties
- Under the development
Evaluation in Teaching Practice

- Used the platform for teaching in a class about digital humanities in the Master’s information science at University of Applied Sciences Darmstadt

- Goals:
  - Evaluation of metadata schema, students developed criteria and user tests

- Other possible uses:
  - Teaching information skills to humanities students
Summing up

• Created a referatory for projects, software and workflows concerning qualitative analysis in eHumanities
• A citizen science approach in the field of eHumanities
• Used the platform for teaching and for student’s research

• Extensible to other similar projects

• For some users, wiki structure is maybe too difficult
• Bilingualism, we are not happy with the solution. Suggestions?
Thank you!

Try it out at:

http://forschungssoftware.semantic-cora.org/index.php/

If you do Citizen Science projects, get in contact with us!

veja@dipf.de                      Julian.hocker@dipf.de