Ontologies and historical archives: a way to tell new stories
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Historical documentary heritage has a high potential for supporting citizens’ awareness about their culture and identity. Historical archives can become useful and attractive if they are exploited in popular contexts, like education and tourism: innovative ICT-based applications can employ documents, pictures, etc. to guide students and tourists in the discovery of interesting stories, connecting the present to the past, and providing a “live” access to original cultural heritage resources.

Our current work:
definition + implementation of an ontology to represent historical events (HEO: Historical Event Ontology), connected to existing ontologies (DOLCE, CIDOC-CRM, EDM, SEM)

Service-Oriented Architecture, acting as a mediation layer: each system used to manage an archive interfaces with an adapter that communicates with the other SOA components and manages the interaction with the specific software system it wraps

Shared conceptualization (ontologies), enriching metadata by connecting them to a shared conceptualization and to historical characters, places, events, ...

User-generated content (crowdsourcing), enabling trusted users (domain experts, researchers, students) to (collaboratively) add information in the semantic layer, thus enriching the characterization of resource content

Automatic information extraction from texts (when available), using NLP techniques, like Named Entity Recognition tools (eg, TextRazor) or Information Extraction systems (eg, GATE)

Crowd sourcing, event mining

LOD

Linked Open Data cloud: LOD as input > LOD are a rich knowledge source, which can be connected to the semantic layer in order to enrich it
LOD as output > enriched metadata can be published as LOD, to improve archive visibility

User Interface

(Open) API

app

Reference:

Three-year agreement (2016-2018) between

Harlock’900 project

Goal = testing the overall framework on a small set of archival resources of the Gramsci institute

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