MANAGING CULTURAL HERITAGE CONTENT IN THE CONTEXT OF EUROPEANA

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There is a trend in cultural organizations, such as, libraries, museums, archives, to digitize or to make available via the Web digitally born content, which turns to be vital for them. However, this mass digital production arise interoperability issues on metadata schemes, harvesting, protocols and systems and other critical points like access, intellectual property and preservation. In this context, Europeana is developing a common multilingual access point, which will make it possible to search Europe's distributed digital cultural heritage online. The Europeana service tries to manage this cultural heritage content by applying automated metadata harvesting model in a range of distributed repositories. This effort is enhanced by the best practice network project EuropeanaLocal, which will help local and regional libraries, museums, archives and audio-visual archives to make the enormous amount of content that they hold available through Europeana and deliver new services. This paper analyzes the cultural heritage management prototype within Europeana and EuropeanaLocal framework. Finally, it emphasizes, as a case study, on the effort that the Greek cultural content repositories make to incorporate the Europeana's standards, in order to provide Europeana service with cultural heritage content metadata through OAI-PMH automated harvesting procedure.

1. Introduction

This paper analyzes the *European Digital Library* (Europeana) service that is under development and the EuropeanaLocal project's contribution in this effort. The project seeks to enhance the position of regional and local cultural institutions wishing to make their content accessible through the Europeana by putting in place and testing an infrastructure built on common metadata standards and tools supported by Europeana (McHenry 2008). Specifically, the paper focuses on the automated metadata harvesting model that Europeana will apply to distributed repositories, which is based on the *Open Archive Initiative Protocol for Metadata Harvesting* (OAI-PMH). Within this procedure,

interoperability issues are arising. The paper concludes by reporting the effort that is made by the Greek cultural institution, within EuropeanaLocal framework, to follow Europeana standards in order to provide their metadata and content through Europeana service.

2. Europeana and EuropeanaLocal cooperation

Europeana produces a service giving users direct access initially to some two million digital objects, including film material, photos, paintings, sounds, maps, manuscripts, books, newspapers and archival papers, rising to a target of 10 million by 2010 (Davies 2008). The Europeana service (Koninklijke Bibliotheek 2009) is designed to increase access to digital content across Europe's cultural organizations (i.e. libraries, museums, archives and audio/visual archives). This process will bring together and link up heterogeneously sourced content, which is complementary in terms of themes, location and time.

In order to achieve these goals European Union launched in June 2008 the EuropeanaLocal project in the framework of eContentPlus program. Up to 2011, the EuropeanaLocal partners aim to make available to Europeana more than 20 million items, held across 27 countries. At the same time, they are committed to exploring and developing efficient and sustainable processes and governance procedures so that the growing numbers of regional and local institutions can easily make their content available to Europeana into the future by adopting and promoting the use of its infrastructure, tools and standards (McHenry 2008).

Key challenges, like metadata, system and semantic interoperability, the harvesting protocol compatibility, the data format diversity, are arise. EuropeanaLocal will ensure that the approaches, standards and tools developed by Europeana are widely adopted, thereby supporting the interoperability of content. In brief, this will involve the establishment of a harvestable network of OAI-PMH compliant metadata repositories, which will aggregate local content and which will complement the developing Europeana network. In addition, tools such as Europeana's metadata 'installer' and automated metadata conversion tools, will be made available for EuropeanaLocal partners to use (McHenry 2008).

The cultural heritage management prototype that Europeana and EuropeanaLocal will implement is the project's innovation. This distributed and automated metadata harvesting model based on OAI-PMH, is represented in figure 1, which describes the Europeana services structure.
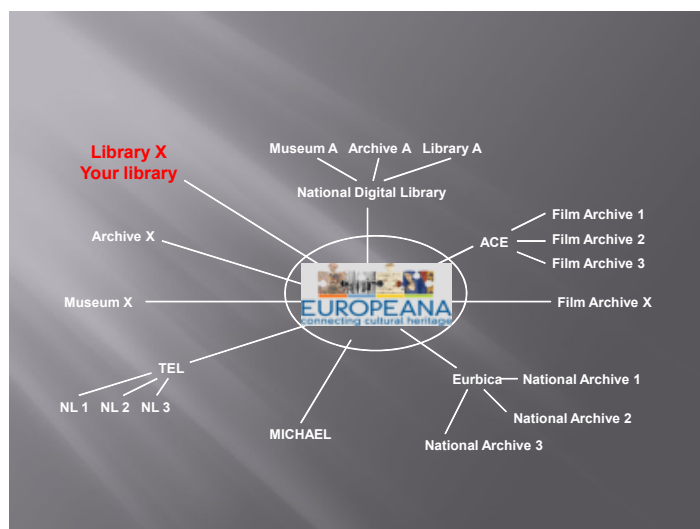
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Figure 1. Possible Europeana structure.

3. The Greek effort in the context of EuropeanaLocal

In order to analyze the "landscape" in Greek cultural organizations, a metadata, content and technical survey was conducted. This survey, was part of the one conducted through EuropeanaLocal partners, from November 2008 till January 2009. The results of the survey are accessible, only for partners, via EuropeanaLocal's website.

The main conclusion derived from the survey, is that some Greek organization that was at the initial plan for participating at the first phase of the project, will not be able to participate at this stage. Some of the reasons are:

- They are hesitated in providing their digital content widely available though the World Wide Web
- The project innovation and the lack of previous experience
- The lack of interoperability standards (e.g. OAI-PMH) that has been adopted by Europeana
- The low level of digitization
- Non-established repositories

However, from the organizations that already participate in the project useful remarks were extracted. Most of them use open-source software to provide their digital content. The majority uses DSpace, which is interoperable in metadata schemes; Dublin Core is usually the scheme that the DSpace implements. They strictly follow Dublin Core v1.1 qualified or their application profiles are compatible with this version. In addition, OAI-PMH has been already implemented, and in cases where is not in use, it is already been embedded into the system. That means that it can be implemented any time.

Finally, the content varies in formats, from PDF files to AVI. However, all types of forms are compatible with Europeana data format standard.

The EuropeanaLocal (2008) helps the Greek cultural organizations to gain new knowledge, to improve their content, metadata, interoperability, and to provide new services. These are some of the reasons that the EuropeanaLocal Greek teem encourages the institutions to participate in the future phases of the project.

4. Conclusions

The widespread adoption of common metadata standards and harvesting infrastructure across the cultural domains through Europeana Portal is the vision of EuropeanaLocal and Europeana. The innovative idea of a unique metadata access point of Europe's cultural heritage and its automated metadata and content feeding is pioneering for the future of cultural organization and European citizens. The question is if the organizations are ready to face this challenge.

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