

**Velocipede**
1868-1870
Author: Michel Tordeux
wood, iron; wood painting, assembling
157 cm
(Inv. nr.: TR.1309)
Royal Museums of Fine Arts of Belgium
Linked Heritage is an initiative to feed Europeana with new and enriched content. It will address both technical and content issues in order to support Europeana in exploring the world of linked data, persistent identifiers and multilingual thesauri, and establishing partnerships with the publishing sector. The added value of Linked Heritage is the strength of the consortium, which has been working in the digital cultural world for ten years.

Linked Heritage (Coordination of standards and technologies for the enrichment of Europeana) is a best practice network funded by the European Commission within the ICT Policy Support Programme (7th Framework Programme), coordinated by the Central Institute for the Union Catalogue of the Italian Libraries (ICCU, dependent on the Italian Ministry for Cultural Heritage and Activities). It started in April 2011 and will last for 30 months.

The consortium includes 38 partners who represent key stakeholder groups from 20 EU countries, together with Israel and Russia: ministries and responsible government agencies, content providers and aggregators, leading research centres, publishers and SMEs. The Europeana Foundation is involved as a subcontractor in order to ensure alignment between the project’s activities and the development of the European portal; this goal is pursued also thanks to the inclusion of several partners participating in related Europeana ecosystem projects. The Linked Heritage consortium includes also organisations that have not in the past been involved
Bulgarian Woman, Decho Uzunov, 1983
Art Gallery Ilia Beshkov, Pleven
Copyright - Art Gallery Ilia Beshkov, Pleven
and will contribute for the first time to Europeana. Several partners of Linked Heritage have official high level appointments: Italy, France, Germany, Belgium, Greece, Slovenia, Latvia, Estonia, Sweden, and UK partners are also the national representatives in the Member States Experts Group on Digital Libraries (MSEG) of the European Commission.

Linked Heritage is a natural follow-up of the work that was initiated within the ATHENA project; the project activities will bring improvements in many areas. In fact, Linked Heritage will make an important contribution to Europeana in two directions:
I. by delivering 3 million new items to Europeana,
II. by addressing the following areas, each of which represents an opportunity for enhancement of Europeana:

- linked data
- persistent identifiers
Performance of Dostojevskij Fiodor, Crime and Punishment
Státní divadelní studio, Praha, 1966
Photo by Vilém Sochůrek
content enrichment
multilingual terminologies
public-private partnerships
ONIX mapping as the pre-requisite to generating new volumes of publisher’s data for Europeana

The first contribution will use the results of the ATHENA project, i.e. the LIDO³ metadata format and the MINT interoperability services³ as the basis for the mapping and ingestion process; both tools have the goal of adapting the ATHENA results in order to take into account the cross-domain dimension of the project and the evolution of ESE into EDM.

The second contribution will use a significant quantity of content already delivered to Europeana to demonstrate the feasibility of the enrichment process proposed by Linked Heritage.

Europeana is now in the situation of creating awareness of its presence on the Internet. For that a critical mass of information is needed, and the quantitative aspects like the number of digitised items are for that reason in focus. However, the quality aspects will be even more important, and improving them is a complex process. Linked Heritage is confronting this challenge.

One of the added values of Linked Heritage is the involvement of the publishers⁴. A specific work package will address the issues related to public-private partnerships; in particular, it will explore the state of the art in the management of metadata in the private sector, particularly in terms of rights agreements, and identify the most appropriate and useful technologies and facilities to allow the contribution of private sector metadata to Europeana.

Another important issue addressed by Linked Heritage is that of multilingualism and tools that cultural institutions can use to organize their own content according to taxonomies, controlled vocabularies, or thesauri in a multilingual environment, with the ultimate aim of promoting interoperability and improving data visibility in the Internet. These goals will be achieved thanks...
to the creation of a Terminology Management Platform (TMP), a collaborative web service to create, register, manage and SKOSify the various domain terminologies.

Linked Heritage highlights the necessity of raising awareness of the themes it addresses; for this reason it foresees the implementation of a series of training modules. These materials will be available for free download from the project website; video recordings of training events will also be available for download. All the realized learning objects will be hosted in, and accessed through, the University of Padua PHAIDRA (Permanent Hosting and Archiving of Digital Assets and Resources) platform, which is Europeana-compliant.

These learning modules have been also tested on the occasion of training modules offered by the project to content providers and aggregators who require support with Europeana and/or with the Linked Heritage technologies and validation environment.

Linked Heritage is fully aligned with the Council Conclusions of May 2010. This text focuses on many important issues: firstly that the implementation of Europeana should be addressed by European Commission and Member States in parallel, secondly that it is crucial to establish public-private partnerships for digitizing copyrighted content. Linked Heritage is an important
such huge network represents a concrete added value for the project because it is an extraordinary base of content providers from 20 countries and, above all, it involves institutions that have been working together for ten years.

Core leaders of the consortium are ministries of Member States that started working together in 2001 in the framework of the National Representatives Group of the Member States (NRG), which was born to improve coordination of national activities in digitisation. This cooperation
brought the implementation of high value initiatives, above all the 3 MINERVA projects that ran through 2002 and 2008 and that were fundamental for building a strong consensus on the necessity of harmonising the European digitisation policies and programmes to avoid overlaps and implement the Lund Action plan, as part of the eEurope initiative.

During these ten years, the MINERVA network informed and stimulated the cultural institutions from all over Europe into taking part in the creation of a European space for digital information. Rich collections of handbooks, reports, guidelines and publications have been produced and MINERVA has become a reference point for policy makers, cultural managers, researchers, academic courses and European projects.

The MINERVA consortium was able to implement spin-off projects dealing with different aspects of digital cultural heritage: MICHAEL and MICHAELplus for the management of digital collections across Europe, ATHENA of course and its follow up AthenaPlus, DC-NET, INDICATE, and DCH-RP for the relationships with the e-Infrastructures and the research world.

Linked Heritage will benefit from this “human interoperability,” which is as important as technical interoperability for the success of such kinds of projects that are based on the harmonization of multiple voices.
EDITEUR, the international group coordinating development of the standards infrastructure for electronic commerce in the book and serials sectors, is a partner in Linked Heritage, as well as mEDRA (Italy), the multilingual European Registration Agency of DOI, the standard persistent identifier for any form of intellectual property on a digital network.

This important work was taken over in 2007 by the Member States' Expert Group on Digitisation and Digital Preservation (MSEG) within the European Commission.

AthenaPlus runs between 2013 and 2015; it is coordinated by ICCU.

1. www.linkedheritage.org
2. www.ldo-schema.org
4. EDITEUR, the international group coordinating development of the standards infrastructure for electronic commerce in the book and serials sectors, is a partner in Linked Heritage, as well as mEDRA (Italy), the multilingual European Registration Agency of DOI, the standard persistent identifier for any form of intellectual property on a digital network.
7. This important work was taken over in 2007 by the Member States' Expert Group on Digitisation and Digital Preservation (MSEG) within the European Commission.
8. www.minervaeuropa.org
10. www.athenaplus.eu/. AthenaPlus runs between 2013 and 2015; it is coordinated by ICCU.
11. www.dc-net.org
12. www.indicate-project.org
13. www.deh-tp.eu/