

CURATING DIGITAL HERITAGE BY MUSIS - THE SOUTH-WESTERN GERMAN MUSEUM NETWORK

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Abstract

The paper describes the services of MusIS, the South-Western German Museum Network, for the curation of digital heritage. These services range from an object documentation software and the application of controlled vocabulary to a content management system for presentations on the Web and a joint portal for libraries, archives, and museums (the BAM Portal). The BAM Portal offers the possibility to connect selected content to the German Wikipedia and to improve the access to this content via this online encyclopaedia.

INTRODUCTION

Digital curation of cultural heritage requires a process of coordinated action regarding the application of syntactic and semantic standards and both technological knowledge and equipment. Many museums in Germany, not only the smaller ones, do not have the manpower and specialised knowledge to master this challenge. Therefore they need the professional guidance and the technical support of a museum network which provides expertise and technical equipment. For the museums in South-Western Germany, MusIS (Museum Information System), a subdivision of the

Bibliotheksservice-Zentrum Baden Württemberg (BSZ, Library Service Centre Baden-Württemberg), takes over the task to support the museums by offering a wide range of services and tools:

- technical infrastructure regarding the administration of large databases, the maintenance and long term preservation of data,
- a software for the documentation of museum objects,
- knowledge about national and international standards of documentation,
- controlled vocabulary for describing museum objects,
- a content management system for the presentation on the Web, and
- a joint portal for libraries, archives, and museums.

OBJECT DOCUMENTATION USING IMDAS-PRO, A SOFTWARE FOR MUSEUM DOCUMENTATION

The starting point of the services of the Museum Information System (MusIS) was the idea of a networked museum community, a plan that could be partly realized in a project funded by the Ministry of Science, Research and Art of the federal state of Baden-Württemberg since the mid-1990s. In fall 2000 the MusIS project was established as an organisational branch of the BSZ.

In the mid-1990ies the primary objective of MusIS was to get the working places in the museums connected, then to connect the museums with the world outside. Today it may be difficult to understand that at this time the majority of the museum staff was not much inclined to using computer technology for documentation - nor was the museum management aware of the fact that the collection can only be an asset if the objects are properly documented. A survey for MusIS showed that only a small part of the objects was documented at all – and of these very few in a digitized form: in 1999 the eleven State Museums that participated in MusIS owned some 20 million objects, roughly 2.5% being documented in lists and 5.6% in the inventory and 3.6% in various databases. The goal of MusIS (was and) is to enhance the quality of the museums documentation by supporting museums in documenting their objects. Due to the continuous funding of the Ministry the situation has improved since then: until

now some 750,000 objects are documented in a common documentation system (see below) and according to common standards.

Good quality object documentation in digital form is essential as this is the foundation of all museum work. According to the information scientist David Bearman (1995: 21) documentation in digital form is the first and most basic step – because what is not documented electronically cannot be displayed on the Internet. Therefore the digital documentation of objects should be considered as the number one priority in German museums.

To enable object documentation, MusIS provides its partner museums with an application service with the object documentation software IMDAS-Pro, a product developed by the Austrian company Joanneum Research, a spin-off of the Museum of the Federal State of Styria, Austria. IMDAS-Pro is a highly flexible software that allows a wide variety of objects to be documented ranging from art objects to natural history and technical objects. The high complexity of the software is a consequence of these wide ranging abilities. To reduce the drawbacks of this unsolicited side-effect, for each museum a variety of specific user interfaces with selected data entry fields can be generated to meet the needs of the individual institution and exclude all other unwanted fields and features. In this way, this complex software can be customized and adapted to the essential requirements of each museum. This customizing process is part of the MusIS service. For the future, the intention is to support other museum functions such as exhibition planning with specific user interfaces. Moreover, an even stronger emphasis will be put on the use of controlled vocabulary. IMDAS-Pro is one of the first museum documentation software products in the German speaking countries that supports the integrated application of thesauri from the initiative museumsvoabular.de.

APPLICATION OF CONTROLLED VOCABULARY FOR DESCRIBING MUSEUM OBJECTS

The process of documentation is the very moment to incorporate controlled vocabulary such as thesauri in order to improve the retrievability of the museum

objects, and therefore enhance the overall quality of the documentation. This is a task that requires a lot of coordination and basic groundwork by a central institution to assure the overall quality of this vocabulary. To do so, MusIS cooperates with different institutions, especially the German National Library (Deutsche Nationalbibliothek, DNB) and the German Museums Association (Deutscher Museumsbund, DMB). MusIS engages actively in thesaurus work with a number of specialised thesaurus working groups. In this process, MusIS profits considerably from being a branch of the BSZ as this library service centre can draw from a long experience in working with and creating and maintaining controlled vocabulary. Nevertheless, creating thesauri for museums is a difficult and tedious task as the vocabulary needs of museums are different from those of libraries, because different and in some areas more specific terms are necessary to describe the museum objects. This leads sometimes to extensive discussions with the library community as for example thesauri such as the Subject Headings Authority File (Schlagwortnormdatei, SWD), the Name Authority File (Personennormdatei, PND) seem to become inflated by terms that are of no use to librarians, but essential to museums. However, in the long run it makes sense to use the same vocabulary in libraries, archives, and museums as these institutions start to form a memory institution for cultural heritage online (Dempsey 2000; Hjørland 2007). Furthermore museums in Germany will not be able to develop and maintain their own specific standard vocabulary. The translation of internationally common authority files like the Art and Architecture Thesaurus has not yet and presumably will not be funded by German institutions.

MusIS creates and maintains as editorial department thesauri such as the Object Authority File (Objektbezeichnungsthesaurus), Materials Authority File (Materialthesaurus), Epoch and Era Authority File (Epochen- und Zeiträumesthesaurus). In addition, MusIS is a partner of Vocabulary in Museum Documentation (Museumsvokabular.de), an initiative devoted to prepare, edit and adapt museum vocabulary based on a Creative Commons Licence. Moreover, MusIS has recently started a co-operation with the Getty Research Institute, contributing German geographic names to the Thesaurus of Geographic Names (TGN). The work on TGN will start in fall 2008.

PRESENTATIONS ON THE WEB USING PAN-NET CATALOGUE

After the objects are digitised and the documentation is finished, the next step is the selection of objects for a presentation on the Web. MusIS supports this process by selection lists for data export which allows an individual choice of data for each museum. The exported data are uploaded in a content management system called Pan-Net Catalogue (PNC) for the presentation on the Web as an online exhibition. In addition to this presentation mode for text and images, PNC allows adjusting the web design of the online exhibition to the individual corporate design of the museum by using style sheets from the museum web site (if available). In this way, the appearance of each online exhibition can be adapted to the corporate design of the specific institution. The content of the online exhibitions created by PNC can be integrated into BAM, the joint portal for libraries, archives, and museums.

BAM, THE JOINT PORTAL FOR LIBRARIES, ARCHIVES, AND MUSEUMS

MusIS offers its associated museums and other interested institutions in Germany to incorporate the metadata of their digital objects and information into BAM, the joint portal of Libraries (in German: Bibliotheken), Archives and Museums. The BAM portal allows not only queries using the open source software Lucene/Solr by the Apache Software Foundation. It also offers the possibility to group selected digital materials from all participating institutions together in order to create access points to specific topics, for example Mozart's "Le nozze di Figaro" or Louis Napoleon Bonaparte, the "Emperor from the Lake of Constance". Apart from combining digital materials, these access points can also increase the visibility of the institutions that are in possession of these digital materials by linking them with the German language version of the Internet encyclopaedia Wikipedia. Since August 2007 exists an agreement between BAM and Wikipedia Germany to connect articles with specific BAM access points. Until February 2008 more than 500 links have been created in Wikipedia and the process goes on.

At the moment BAM contains 38,6 million sets of object data contributed by major German academic libraries via online union catalogues such as the SWB for three federal states of Germany or GBV for seven federal states; by sixteen museums and museum networks such as the State Museums of Berlin (Staatliche Museen zu Berlin, SMB) or DigiCult, the museum network for Northern Germany; and several major archives such as the German Federal Archive (Bundesarchiv) or the state archives of the federal states of Baden-Württemberg and Hesse. It is intended to open BAM not only for big institutions, but also for the small ones who will profit from an increased visibility on the Internet via BAM.

From our perspective, BAM is a major contribution to future digital memory institutions on a national and European level, especially the Europeana, the European Digital Library. We consider such a joint portal an essential step toward a European memory institution as described by Lorcan Dempsey: Archives, libraries and museums are memory institutions: they organise the European cultural and intellectual record. Their collections contain the memory of peoples, communities, institutions and individuals, the scientific and cultural heritage, and the products throughout time of our imagination, craft and learning. They join us to our ancestors and are our legacy to future generations. They are used by the child, the scholar, and the citizen, by the business person, the tourist and the learner. These in turn are creating the heritage of the future. Memory institutions contribute directly and indirectly to prosperity through support for learning, commerce, tourism, and personal fulfilment.“ (Dempsey 2000: WWW)

CONCLUSIONS

In this way, MusIS offers a comprehensive service for the digital curation of cultural heritage for its associated libraries, archives, and museums. This service includes an object documentation software, controlled vocabulary, a content management system for presentations on the Web and a joint portal for libraries, archives and museums. MusIS is also willing to take part in enterprises such as the German digital library and the European Digital Library and offer its services and technology for these projects, cooperation projects that no single institution could handle alone.

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