

NATIONAL AUTHORITY FILES - BUILDING THE A-M-L INTEROPERABILITY IN THE CZECH REPUBLIC

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Abstract

Librarian authority files are cooperatively built from scratch and extensively used for many years. Although having some limitations resulting from historical adherence to MARC formats, they can be adopted for use in museums and archives where semantic content of most terms commonly used for description of museum items is still not unambiguously defined.

The project "National authority files in museum environment – interoperability with the National Library of the Czech Republic" is trying to find such authority files that could be of significant use for museums and to create a logical and technological interlayer which will make them available for access via web browser and/or directly via the Collection Management Systems (CMS) used in museums. This interlayer can also be easily upgraded to core knowledge basis so as to be able to accommodate other information common to many objects across collections of various memory institutions. The expected benefit is to enable the museum/library/archive visitor to find the requested object under any convertible term in any institution, plus to provide access to related data in Wikipedia style.

INTRODUCTION

Each scientific discipline has its own methodological approach and uses its own terminology. Considering the memory institutions (archives, libraries, museums) as a specific part of science, we can't be surprised that experts of this branch use their own terminology, ontology and specific workarounds for dealing with difficulties of their disciplines. Although this is very useful for the

efficiency of their work, communication among different disciplines can be affected by nonexistent common language and many misinterpretations.

Librarians (who are a step ahead, at least in Czech Republic) have already found that cooperation on their joint catalogues, book registers and other database sources is unconceivable without common naming indexes. Most national libraries have already accomplished this mammoth work and their centrally controlled vocabularies - called "national authority files" - are available for wide public, including museum people.

How does it work? One example is a synonymy of many alternative terms used for the description of museum items. It's common to find one biological entity under more names in natural sciences. This situation simply reflects the advancement of scientific theories and the validity of one or the other name articulates the contemporary state of the art. That's why e.g. Gray Sedge can be found under more scientific names whereas only one name (*Carex guestphalica*) is nomenclatorically valid at this time. You don't have to be a biologist to run into trouble with synonyms. Creative artists often use (and sometimes over-use) pseudonyms for authorisation of their works. Paintings of notable workmanlike painter Karl Kaufmann (1848 - 1901) can be found under at least 20 various autographs. We are still able to say which name is "the right one" in this case - it should be the real citizens' name of the painter. This name becomes a national authority with valid name status and other names are simply linked as synonyms or other relevant forms. The strong advantage of the Collection Management Systems (CMS) over fixed thesauri is that authority files are centrally maintained and available on-line at any moment the curator needs them. But the museum sphere is different in one thing, not so essential in libraries: it's the need for keeping the plurality of views. While some curator thinks that a specific museum object should be named "pomlázka", he also has to respect the scientific opinion of another ethnologist who means the name used in local community instead of the name codified in literary Czech language should be retained. Curators also use the CMS not only for simple cataloging of objects, but also in a much broader extent for knowledge retention, as an expert system. Offering them authority files used by librarians would probably lead to a limited use of them. Thus we decided to accept authority files of the Czech National Library as a reference authority and to complement them with a "museum authority layer" which allows to maintain specific data used by museum curators. This layer

facilitates even storage and retrieval of such data as personal profile, biographic data or even relations with other persons (teacher - student, kinship...).

The suggested technological solution of the museum authority layer is based on the model used in present National Authority Files of the National Library of the Czech Republic. Mapping the specific museum data fields to MARC21 categories enables the maximum re-use of existing and proven facility based on a robust database engine plus special service environment. The curator registering a record in his/her favorite CMS will get an authority term automatically while writing into a particular authority-controlled field (using the "suggest" function or choosing from the scroll-down list), or can access and consult the museum authority files through internet browser at any place and any time. There should be an option to choose even a non-valid name if it is properly registered in the system and interlinked with the other names. In case that the name entered does not still exist in the system, the curator will be able to suggest a new authority record for museum authority layer. His proposal has provisional status until the supervisory board acknowledges it, but it can be used by this curator and the other ones too for entry into CMS fields. The process of record validation in museum authority layer is closely linked with the creation of corresponding master record in National Authority Files or connection to a record already existing there. Authority files give an opportunity to adjust the documentation of museum objects to the formally described ontology of the given discipline and to share knowledge with other memory institutions using not only the same, but virtually any terminology – supposed the terms used are semantically consistently mapped to National Authority Files.

Considering the potential contribution of museum experts to widening and deepening of the original scope of the National Authority Files, there is no wonder that the interest of librarians in this kind of cooperation is growing. The project has been supported by the Czech Association of Museums, the Ministry of Culture is favorable to it and first positive signals have come from archivists too.