

## Contents

### Special Issue: Knowledge Organization within the Museum Domain, Guest Editor, Melissa Gill

Melissa Gill.  
Knowledge Organization within  
the Museum Domain: Introduction..... 469

#### Articles

Hannah Turner.  
Organizing Knowledge in Museums:  
A Review of Concepts and Concerns ..... 472

Alexandre Fortier and Elaine Ménard.  
Laying the Ground for DOLMEN: Offering  
a Simple Standardization Starts with Understanding  
What Museums Do ..... 485

Rick Szostak.  
A Grammatical Approach to Subject Classification  
in Museums ..... 494

Lala Hajibayova and Kiersten F. Latham.  
Exploring Museum Crowdsourcing Projects  
Through Bourdieu's Lens ..... 506

Ina-Maria Jansson.  
Organization of User-Generated Information  
in Image Collections and Impact of Rhetorical  
Mechanisms.....515

Adrian Van Allen.  
Bird Skin to Biorepository: Making Materials Matter  
in the Afterlives of Natural History Collections .....529

Andrea Thomer, Yi-Yun Cheng, Jodi Schneider,  
Michael Twidale and Bertram Ludäscher.  
Logic-Based Schema Alignment for Natural  
History Museum Databases.....545

Júlia Magdolna Katona .  
The Cultural and Historical Contexts of  
Ornamental Prints Published in the Nineteenth  
and Twentieth Centuries in Europe:  
A Case Study for the Standardized Description  
of Museum Objects .....559

**Books Recently Published**.....578

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## Contents pages

Gill, Melissa. 2017. "Knowledge Organization in the Museum Domain: Introduction." *Knowledge Organization* 44, no. 7: 469-471. 5 references.

**Abstract:** This special issue is concerned with knowledge organization in the museum domain, exploring the standards and processes for structuring and managing museum knowledge. Museums, like libraries and archives, are memory institutions for recording, preserving, and disseminating the history of material culture. Museums and their collections are exceedingly heterogeneous, reflecting the fields of art history, natural history, anthropology, and the sciences. The diverse range of museum objects necessitates complex and specialized KOSs to describe their materiality and context. Museum knowledge organization is object- and context-specific, sensitive to the unique instantiation of an object and its temporal, geospatial, and cultural relationships. This timely special issue on museum knowledge organization reflects contemporaneous challenges and, more broadly, an adoption of information science methodologies and practices within the museum sphere.

Turner, Hannah. 2017. "Organizing Knowledge in Museums: A Review of Concepts and Concerns." *Knowledge Organization* 44(7): 472-484. 104 references.

**Abstract:** This paper critically analyzes and ties together contemporary perspectives in information studies, science and technology studies, knowledge organization and indigenous postcolonial theory (particularly concerning ontologies and knowledge organization) and defines the development of a field of thought for museum knowledge organization. It also proposes a selection of terms or ideas for the field of knowledge organization in museums and begins to historicize the development of the field. This paper calls attention to the practical and intellectual issues raised when other knowledges "meet" museums systems as well. The history of the study of museums within Foucauldian thought, the origins of contemporary ideas of the socio-technical, the utility of the metaphor of infrastructure, and the notion of technological affordance are all ideas that have been useful in understanding standardized systems in large institutional repositories, especially as museum collections continue to be digitized and circulated widely by communities. This paper plots the issues we as scholars and professionals should be attentive to when studying the organization of knowledge in museums by developing a theoretical standpoint that engages seriously with the ethics and politics of knowledge.

Fortier, Alexandre and Elaine Ménard. 2017. "Laying the Ground for DOLMEN: Offering a Simple Standardization Starts with Understanding What Museums Do." *Knowledge Organization* 44, no. 7: 485-493. 28 references.

**Abstract:** For most museums, online access to their collections is still a challenge. In museum databases, descriptions include descriptive metadata, along with other information that is often irrelevant to the public. Information that would help users to navigate from an object to one sharing similar characteristics is often absent. The conceptual model developed by the International Committee for Documentation, CIDOC-CRM, which provides a formal structure for linking museum objects, is still not widely adopted by institutions, due to its complexity. This project aims to provide a simpler model that could be more easily adopted. For this phase of the project, a sample of 266 Canadian museums with humanities collections (archaeology, ethnology, history, fine and decorative arts) was identified. It is composed of every museum that, during the fall of 2016, was offering to the public at least a part of its collection online. From each museum, a minimum of ten objects was selected, ensuring that the variety of the collections was represented, and extracted the metadata used in the object descriptions. This inventory, which aimed to provide a comprehensive picture of what museums already offer in terms of metadata associated to their online collections, exposed a lack of standardization and interoperability.

Szostak, Rick. 2017. "A Grammatical Approach to Subject Classification in Museums." *Knowledge Organization* 44, no. 7: 494-505. 26 references.

**Abstract:** Several desiderata of a system of subject classification for museums are identified. The limitations of existing approaches are reviewed. It is argued that an approach which synthesizes basic concepts within a grammatical structure can achieve the goals of subject classification in museums while addressing diverse challenges. The same approach can also be applied in galleries, archives, and libraries. The approach is described in some detail and examples are provided of its application. The article closes with brief discussions of thesauri and linked open data.

Hajibayova, Lala and Kiersten F. Latham. 2017. "Exploring Museum Crowdsourcing Projects through Bourdieu's Lens." *Knowledge Organization* 44(7): 506-514. 40 references.

**Abstract:** Museum crowdsourcing projects have drastically changed the ways in which individuals engage with cultural objects. In particular, individuals' participation in representation of cultural objects through creating, sharing, and curating museum cultural objects contributes to the creation of multifaceted and rich representation of cultural objects as well as transgression of institutional boundaries between cultural heritage institutions. Applying Bourdieu's (2010) conceptualization of cultural capital to museum crowdsourcing initiatives, this study suggests that cultural objects should be considered not only in relation to other objects, but also in relation to the social structure of the world and suggests that successful engagement with the crowd is grounded on an understanding of engaged individuals' cultural capital and habitus. This approach will facilitate creation of not only multifaceted and multivalent representation of cultural objects but also ensure sustainable and meaningful engagement of individuals.

Jansson, Ina-Maria. 2017. "Organization of User-generated Information in Image Collections and the Impact of Rhetorical Mechanisms." *Knowledge Organization* 44(7): 515-528. 40 references.

**Abstract:** To collect information with crowdsourcing is a popular method for cultural heritage institutions. User comments in free-text format are especially propagated as empowering users and their influence on cultural heritage. However, in adjusting user-created information to suit the collection management system in use, rhetorical mechanisms of the system have impact on the moderation of the information. This article investigates how rhetorical mechanisms of information systems influence user-generated information and users' possibilities of impacting heritage collections. The results are based on twelve interviews with professionals working with administration of user-comments in cultural-heritage image collections, covering six different systems. Several rhetorical mechanisms of the systems were identified based on professionals' statements about how systems affected decisions made in the moderation process. This article shows that the design of collection management systems can cause user-generated information to be discriminated and lead to decreased data reliability, searchability, and even loss of crowdsourced data. In particular, personal memories and perspectives are among the types of information that are most negatively affected. To conclude, collecting user comments is a problematic method to use in adding multiple perspectives to cultural heritage collections and demands carefully designed collection management systems in order to avoid distortion of user-created information.

Van Allen, Adrian. 2017. "Bird Skin to Biorepository: Making Materials Matter in the Afterlives of Natural History Collections." *Knowledge Organization* 44(7): 529-544. 96 references.

**Abstract:** Examining the material practices of museum genomics, my ethnographic research focuses on the Global Genome Initiative at the Smithsonian National Museum of Natural History in Washington D.C., a project that seeks to preserve vanishing biodiversity for an uncertain future by cryo-preserving half of the families of life in the next six years. Through stuffing a bird skin, taking genetic samples, and sub-sampling tissues for DNA extraction I examine a return to encyclopedic collecting with biotechnological tools, exploring how biotechnology is re-defining and preserving "life itself" (Foucault 1970; Kowal and Radin 2015). This article examines one instance of how museum collections are made, standardized, and shared at the Smithsonian. Contrasting perspectives from ethnographic work in the Division of Birds and the Biorepository, I examine the friction and flow of biodiversity as specimens are transformed into data through material-semiotic practices. I analyze how these data and specimens then undergo multiple re-classifications as categories for new types of museum objects—such as genetic samples—are negotiated. Cryo-collections are "made to matter" (Barad 2003) as ontological embodiments through their preservation, multiple uses, and standardization across disciplines. Through attending to the (bio)materials themselves, I argue the practices currently structuring a shared ecological future become legible.

Andrea Thomer, Yi-Yun Cheng, Jodi Schneider, Michael Twidale and Bertram Ludäscher. 2017. "Logic-based Schema Alignment for Natural History Museum Databases." *Knowledge Organization* 44, no. 7: 545-558. 48 references.

**Abstract:** In natural history museums, knowledge organization systems have gradually been migrated from paper-based catalog ledgers to electronic databases; these databases in turn must be migrated from one platform or software version to another. These migrations are by no means straightforward, particularly when one data schema must be mapped to another—or, when a database has been used in other-than-its-intended manner. There are few tools or methods available to support the necessary work of comparing divergent data schemas. Here we present a proof-of-concept in which we compare two versions of a subset of the Specify 6 data model using Euler/X, a logic-based reasoning tool. Specify 6 is a popular natural history museum database system whose data model has undergone several changes over its lifespan. We use Euler/X to produce visualizations (called "possible worlds") of the different ways that two versions of this data model might be mapped to one another. This proof-of-concept lays groundwork for further approaches that could aid data curators in database migration and maintenance work. It also contributes to research on the unique challenges to knowledge organization within natural history museums, and on the applicability of logic-based approaches to database schema migration or crosswalking.

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Katona, Júlia Magdolna. 2017. "The Cultural and Historical Contexts of Ornamental Prints Published in the Nineteenth and Twentieth Centuries in Europe: A Case Study for the Standardized Description of Museum Objects." *Knowledge Organization* 44 (7): 559-577. 30 references.

**Abstract:** The study focuses on ornamental prints (as components of pattern books) published and circulated all over Europe during the second half of the nineteenth century and in the first decades of the twentieth century. This special object type forms a particular segment not only in the history of ornamental prints and decorative arts in general but also in the history of architecture, applied arts, art education and archae-

ology. Enriched descriptions of these prints therefore have the potential to be of great benefit to scientific research in all the disciplines mentioned. The primary aim of this study is to survey and elaborate the standardized description of ornamental prints, considering them as visual works and describing them as museum objects. The paper attempts to answer questions posed from the multi-layered approach to scientific research, namely how to record ornamental prints that belong to a special object type, consisting of mixed visual and textual contents; and how to group the information in order to obtain the richest possible sets of data. The conceptual model of the standardized description will be elucidated with numerous examples, embedded in the broader art historical context.