

CDWA LITE AND MUSEUMDAT: NEW DEVELOPMENTS IN METADATA STANDARDS FOR CULTURAL HERITAGE INFORMATION

Regine Stein
- FG Dokumentation im DMB -
Bildarchiv Foto Marburg
Philipps-Universität Marburg
Biegenstr. 11, D-35037
Marburg
Germany
E-Mail: r.stein@fotomarburg.de
URL: <http://www.fotomarburg.de>

Erin Coburn
- CDWA Lite Advisory Committee –
Collection Information & Access
J. Paul Getty Museum
1200 Getty Center Drive
Los Angeles, CA 90049-1687
United States of America
Email: ecoburn@getty.edu
URL: <http://www.getty.edu>

Abstract

To publish core data for museum objects in general museum portals and repositories is an everyday requirement for museums with all kind of collections. Efforts for developing metadata formats that allow for contributing data in a standardized way are currently bundled in a joint initiative of the creators of the CDWA Lite Schema and the museumdat Schema: The common goal of the CDWA Lite Advisory Committee and the Documentation Committee of the German Museums Association is to agree on a single, CIDOC-CRM compliant schema that meets the requirements articulated by CDWA Lite and museumdat and subsequent reviews. The key point of such a schema, as formalized in museumdat, is to combine the best aspects of both - the event-oriented, multi-disciplinary approach of the CIDOC Conceptual Reference Model, and the relative simplicity and core elements offered by CDWA-lite. Current steps of the established working group are presented.

INTRODUCTION

To publish core data for museum objects in general museum portals and repositories is today an everyday requirement for museums. As it is widely agreed that the Dublin Core metadata standard which was originally designed for Web resource discovery and is still the preferred schema for OAI harvesting is not appropriate for describing cultural materials, several efforts have been made for developing metadata formats that allow for contributing data in a standardized way. Currently the creators of the CDWA Lite Schema and the developers of the museumdat Schema are bundling their efforts in a joint initiative to establish a single, CIDOC-CRM compliant schema.

WHAT IS CDWA LITE?

CDWA Lite is an XML schema to describe core records for works of art and material culture, based on the Categories for the Description of Works of Art (CDWA) and Cataloging Cultural Objects: A Guide to Describing Cultural Works and Their Images (CCO). It has been developed by the J. Paul Getty Trust and ARTstor with a special focus on using it together with the OAI-PMH, the Protocol for Metadata Harvesting of the Open Archives Initiative.

1. Object/Work Type	12. Display Creation Date
2. Title	13. Indexing Dates
3. Display Creator	14. Location / Repository
4. Indexing Creator	15. Indexing Subject
5. Display Measurements	16. Classification
6. Indexing Measurements	17. Description / Descriptive Note
7. Display Materials/Techniques	18. Inscriptions
8. Indexing Materials/Technique	19. Related Works
9. Display State/Edition	20. Rights for Work
10. Style	21. Record
11. Culture	22. Resources

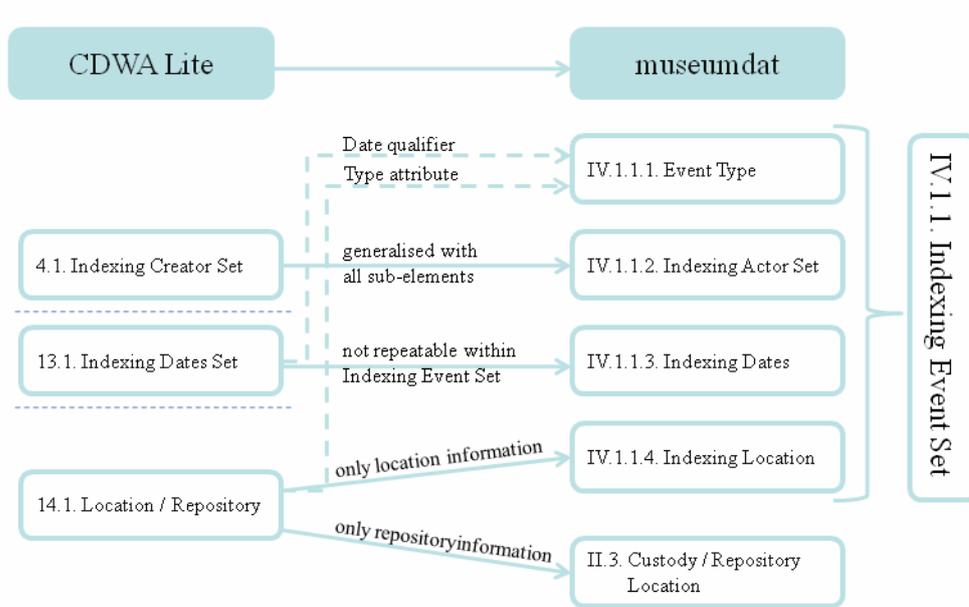
CDWA Lite Element Set

The CDWA Lite element set consists of 22 elements of which 19 are for descriptive metadata and 3 for administrative metadata, 9 are required. A main characteristic of the CDWA Lite format is the division of the descriptive metadata in display elements on one hand, optimised for presentation purposes, and indexing elements, optimised for retrieval on the other hand. Indexing elements, as they usually should refer to authorities for actors, places, or to controlled vocabularies, are provided with attributes for storing a respective URI (termsource and termsource ID), assuring the identity of a term in a larger context.

CDWA Lite has been established as standard delivery format e.g. for ARTstor, and currently a standard export tool is being developed to use it together with the open source software OAIcatmuseum for OAI data providers.

WHAT IS MUSEUMDAT?

museumdat – an XML Schema provided by the Documentation Committee of the German Museums Association – builds largely upon CDWA Lite, but overcomes its specific focus on arts mainly by a reconfiguration of the CDWA Lite elements which takes into account the event-oriented approach of the CIDOC Conceptual Reference Model. This reconfiguration can be described in three steps: 1. Creator Information has been generalized into Actor Information. 2. Repository and Location Information, in CDWA Lite stored in a single element, has been split off into two different elements in museumdat. 3. Actor, Date and Location Elements have been grouped together in an Event Set, qualified by an Event Type.



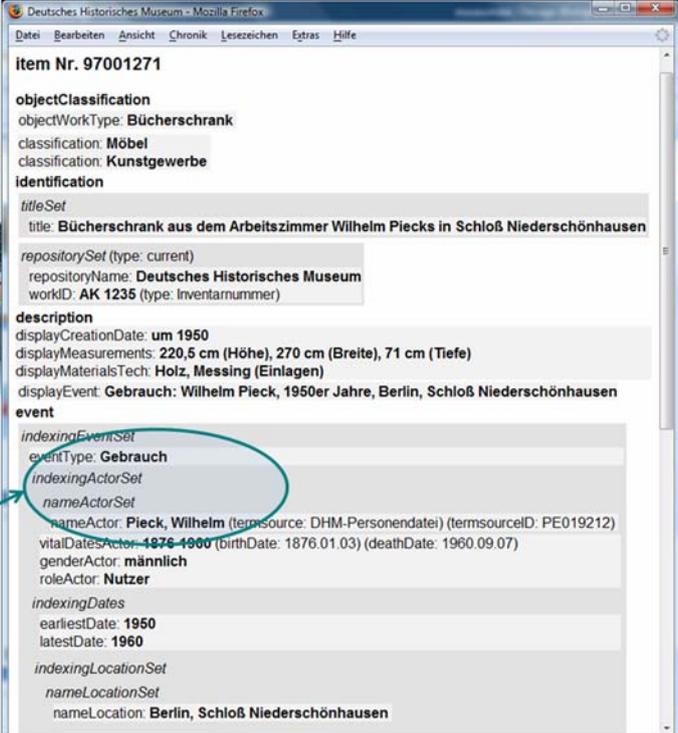
Comparing CDWA Lite and museumdat – main changes

To briefly illustrate the added value which these changes and generalizations add to the format, take the following example: In the collection of the German Historical Museum (DHM) in Berlin we find i.e. the "Bookcase from the studio of Wilhelm Pieck in the city castle of Niederschönhausen". It has been manufactured by an unknown cabinetmaker. Its historic value results strictly only from the fact that it has been used by the first President of the German Democratic Republic. In a search for objects related to Wilhelm Pieck, we would probably like to find this bookcase, too. This is enabled for by the "museumdat"-format by applying here the "event:use", the person of Wilhelm Pieck being the actor in this event.

**Example:
Cultural history**



**Event Type:
Use**



Deutsches Historisches Museum - Mozilla Firefox

Item Nr. 97001271

objectClassification
objectWorkType: **Bücherschrank**
classification: **Möbel**
classification: **Kunstgewerbe**

identification
titleSet
title: **Bücherschrank aus dem Arbeitszimmer Wilhelm Piecks in Schloß Niederschönhausen**

repositorySet (type: current)
repositoryName: **Deutsches Historisches Museum**
workID: **AK 1235** (type: Inventarnummer)

description
displayCreationDate: **um 1950**
displayMeasurements: **220,5 cm (Höhe), 270 cm (Breite), 71 cm (Tiefe)**
displayMaterialsTech: **Holz, Messing (Einlagen)**
displayEvent: **Gebrauch: Wilhelm Pieck, 1950er Jahre, Berlin, Schloß Niederschönhausen**

event
indexingEventSet
eventType: **Gebrauch**
indexingActorSet
nameActorSet
nameActor: **Pieck, Wilhelm** (termSource: DHM-Personendatei) (termSourceID: PE019212)
vitalDatesActor: **1876-1960** (birthDate: 1876.01.03) (deathDate: 1960.09.07)
genderActor: **männlich**
roleActor: **Nutzer**

indexingDates
earliestDate: **1950**
latestDate: **1960**

indexingLocationSet
nameLocationSet
nameLocation: **Berlin, Schloß Niederschönhausen**

Illustrating museumdat: an example from the German Historical Museum

museumdat now applies for all kinds of object classes, e.g. cultural, technology or natural history, and is compatible with the CIDOC Conceptual Reference Model (ISO 21127). It defines a set of 23 elements of which only three are mandatory: a work type, a title or object name, and the data set element with ID and resource – so a large variety of completeness of data is possible, the museums themselves decide which data they may provide for publication. In comparison with CDWA Lite further attributes have been added for introducing multilingualism into the format, providing a mechanism for data conversion control, and handling controlled vocabulary that is not freely available.

museumdat: Harvesting Format for Providing Core Data from Museum Holdings	
Object Classification	Event
I.1. Object/Work Type	IV.1. Indexing Event
I.2. Classification	Event Type e.g. <i>creation, use, discovery...</i>
Identification	Indexing Actor
II.1. Title or Object Name	Indexing Date
II.2. Inscriptions and other Marks	Indexing Location
II.3. Custody/Repository Location	IV.2. Indexing Measurements
Description	IV.3. Indexing Material/Technique
III.1. Display Creator	IV.4. Style
III.2. Display Creation Date	IV.5. Culture
III.3. Display Creation Location	Relation
III.4. Display Measurements	V.1. Indexing Subject
III.5. Display Materials/Technique	V.2. Related Works
III.6. Display State/Edition	Administration
III.7. Display Event	VI.1. Rights for Work
III.8. Description/Descriptive Note	VI.2. Record
	VI.3. Resource

museumdat Element Set

The resulting museumdat XML Schema was published as version 1.0 in October 2007 by the Documentation Committee of the German Museum Association and is in wide use in the German museum community and also on European level, e.g. it is the standard delivery format for museum object data to the BAM-Portal, the regional museum network Digicult Schleswig-Holstein or the image archive Bildarchiv Foto Marburg, and it is part of the discussion on metadata formats for the German Digital Library and Europeana, the European Digital Library. Besides OAI-PHM as communication protocol applications are also being implemented on basis of other protocols, i.e. XMPP, SRU.

THE CDWA LITE / MUSEUMDAT WORKING GROUP

Resulting from community discussions during the CIDOC conference in Vienna and the CDWA Lite Advisory Committee Open Meeting at MCN conference in Chicago in 2007, the CDWA Lite Advisory Committee has established a working group with the charge to agree on a single, CIDOC-CRM compliant schema that meets the requirements articulated by CDWA Lite and museumdat and subsequent reviews.

The Working Group is currently developing a common schema, starting from the changes already formalized in the museumdat XML Schema, and taking into account the results of the CDWA Lite review process as well as further comments and practical experience with museumdat. The key point of such a schema is to combine the best aspects of both - the event-oriented, multi-disciplinary approach of CIDOC CRM, and the relative simplicity and core elements offered by CDWA-lite.

BIBLIOGRAPHY

CDWA Lite: XML Schema Content for Contributing Records via the OAI Harvesting Protocol. Available from http://www.getty.edu/research/conducting_research/standards/cdwa/cdwalite.html

museumdat - Harvesting Format for Providing Core Data from Museum Holdings. Available from <http://www.museumdat.org/index.php?ln=en&t=home>

Nick Crofts, Martin Doerr, Tony Gill, Stephen Stead, Matthew Stiff (editors), Definition of the CIDOC Conceptual Reference Model, October 2006. Available from http://cidoc.ics.forth.gr/definition_cidoc.html

Regine Stein et al., Das CIDOC Conceptual Reference Model: Eine Hilfe für den Datenaustausch?, Berlin 2005, Mitteilungen und Berichte Nr. 31 aus dem Institut für Museumskunde (SMB) Staatliche Museen zu Berlin. Available from <http://www.museumbund.de/cms/index.php?id=534&L=0&STIL=0>

Using CDWA Lite see e.g.:

<http://www.artstor.org>

<http://www.oclc.org/research/software/oai/oaicatmuseum.htm>

Using museumdat see e.g.:

<http://www.bam-portal.de>

<http://www.bildindex.de>

<http://www.museen-sh.de>