Over the last decade, many organizations and agencies have been working toward developing data standards for creating descriptions of and retrieving information about cultural objects. Data standards not only promote the recording of information consistently but are also fundamental to retrieving it efficiently. They promote data sharing, improve content management, and reduce redundant efforts. In time, the accumulation of consistently documented records across multiple repositories will increase access to content by maximizing research results. Ultimately, uniform documentation will promote the development of a body of cultural heritage information that will greatly enhance research and teaching in the arts and humanities.

Standards that guide data structure, data values, and data content form the basis for a set of tools that can lead to good descriptive cataloging, consistent documentation, shared records, and increased end-user access. In the art and cultural heritage communities, the most fully developed type of data standards are those that enumerate a set of categories or metadata elements that can be used to create a structure for a fielded format in a database. *Categories for the Description of Works of Art* (CDWA) is an example of a metadata element set. The *CDWA Lite* XML schema and the *VRA Core Categories, Version 4.0* schema are examples of metadata element sets expressed within an XML structure. Although a data structure is the logical first step in the development of standards, a structure alone will achieve neither a high rate of descriptive consistency on the part of catalogers, nor a high rate of retrieval on the part of end users.

Standards that govern the words (data values), and their selection, organization, and formatting (data content) are two other types of standards that must be used in conjunction with an agreed-upon data structure. Far more work has been done in developing standards for data values than for data content, typically in the form of thesauri and controlled vocabularies such as the *Thesaurus for Graphic Materials* (TGM), the *Art & Architecture Thesaurus* (AAT), the *Union List of Artist*
Names (ULAN), and the Getty Thesaurus of Geographic Names (TGN). Along with the Library of Congress Name and Subject Authorities, the Getty vocabularies and other thesauri bring us to the second step on the road to documentation standards and the potential for shared cataloging.

Cataloging Cultural Objects (CCO) takes us to the third step by providing standards for data content. Until now, little published documentation on data content standards has applied to cultural works—standards that guide the choice of terms and define the order, syntax, and form in which data values should be entered into a data structure. The library and archival communities have well-established rules for data content in the form of the Anglo-American Cataloguing Rules (AACR) and, more recently, Describing Archives: A Content Standard (DACS). The cultural heritage community in the United States, on the other hand, has never had any similar published guidelines that meet the unique and often idiosyncratic descriptive requirements of one-of-a-kind cultural objects. Cataloging Cultural Objects has been developed to fill this gap. Building on existing standards, Cataloging Cultural Objects provides guidelines for selecting, ordering, and formatting data used to populate metadata elements in a catalog record; this manual is designed to promote good descriptive cataloging, shared documentation, and enhanced end-user access. It is also intended to inform the decision-making processes of catalogers and builders of cultural heritage systems. In CCO, the emphasis is on principles of good cataloging and documentation, rather than on rigid rules that do not allow catalogers and system implementers to make informed judgments about the information they create and how it will be presented to their users. We hope that, whether used locally as an aid in developing training manuals or in-house cataloging rules, or more broadly in a shared environment as a guide to building consistent cultural heritage documentation, this manual will advance the increasing move toward shared cataloging and contribute to improved documentation and access to cultural heritage information.

**AUDIENCE**

Cataloging Cultural Objects was designed specifically for members of the communities engaged in describing and documenting works of art, architecture, cultural artifacts, and images of these things—museum documentation specialists, visual resources curators, archivists, librarians, or anyone who documents cultural objects and their images. Although the guide is not about system design, it may also be useful to system designers who need to understand the nature and form of cultural object information.

The guide attempts to balance the needs of various audiences but recognizes that each institution will have its own local requirements. Additionally, it is understood that those who describe original objects rather than analog or digital images of objects may require some additional, specialized guidelines. Museum registrars, for example, may require more detailed procedures for measuring an object or describing its condition or conservation. In addition to the bibliography that accompanies this manual, recommendations within the chapters include additional specialized sources for cataloging museum collections.
SCOPE AND METHODOLOGY

Cataloging Cultural Objects focuses on data content standards for descriptive cataloging—standards that guide the choice of terms, and that define the order, syntax, and form in which those terms, phrases, values, and narrative descriptions are recorded. Other types of data standards (for example, data structure, data value, and interchange standards) are excluded, except where relevant to a discussion of data content standards. For example, each chapter references standard tools appropriate to specific elements. Controlled vocabularies and various thesauri are recommended for building local authority files.

The primary emphasis of CCO is descriptive metadata and authority control—data intended to describe a cultural work, data used to create catalog records for that work and images of it. Administrative metadata (data used in managing and administering information resources) and technical metadata (for example, data to record digital image file properties) are excluded except where relevant to a discussion of descriptive metadata. For example, the guide often makes the distinction between controlled fields and fields used for display. Although the guide is system independent, it sometimes recommends using one or both types of fields within a local database based upon the needs of the cataloging institution. CCO includes elements used to describe both works and images, but does not include elements that involve administrative metadata. For example, Chapter 3: Physical Characteristics covers the physical characteristics of the work but not of the image, because physical characteristics of the image such as its size and format fall within the realm of technical metadata.

CCO covers many types of cultural works, including architecture, paintings, sculpture, prints, manuscripts, photographs and other visual media, performance art, archaeological sites and artifacts, and various functional objects from the realm of material culture. CCO is designed for museum collections, visual resources collections, archives, and libraries with a primary emphasis on art and architecture. CCO is not intended for natural history or scientific collections.

The research for CCO began with a review of the literature, emphasizing cataloging applications and best practice. Critical elements from the VRA Core 3.0 and from Categories for the Description of Works of Art (CDWA) were included. A summary of practice related to each element was compiled from the sources under review. Whenever possible, recommendations were based on common practice. The survey of literature produced a short list of published sources consisting of data dictionaries, museum documentation manuals, and standard library and archival sources. To obtain unpublished manuals, a call went out to various electronic discussion lists requesting local manuals and guidelines; these were also used in the initial evaluation of materials.

Some elements were eventually rejected on the grounds that they dealt more with administrative, technical, or structural metadata relating to assets than with descriptive metadata relating to works and their images. The elements that were retained were grouped according to purpose and formed the basis for the nine chapters that comprise Part 2 of this manual.

Both the form and content for the guide underwent rigorous editorial review, as well as the critique of an advisory committee representing all of the various target communities, including library, archival, museum, and visual resources professionals.