Digitization in the Real World
Lessons Learned from Small and Medium-Sized Digitization Projects

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Local Objects, Local People, Local History: Creating the Wisconsin Decorative Arts Database

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Abstract
The Wisconsin Decorative Arts Database is a digital collection of three-dimensional artifacts from the collections of historical societies and museums throughout Wisconsin, hosted by the Wisconsin Historical Society and supported by the Chipstone Foundation. Since 2006, the project has documented nearly 1,000 examples of furniture, ceramics, textiles and other decorative arts made by early Wisconsin craftspeople and held in the collections of over 40 institutions throughout the state. This case study examines the genesis of the project, the photographic standards and metadata specifications established for object documentation, and the unique challenges of developing a diverse digital collection of museum artifacts from a wide variety of local and regional institutions.

Keywords: Artifacts, Collaboration, Historical societies, Local history, Metadata, Museums, Photography

In the past decade, the work of state- and regionally-based digitization programs across the country has resulted in an explosion of local history resources available online. These initiatives are collaborative efforts among libraries, archives, and museums to make their
collections freely available to a broad audience of students, teachers, historians, and genealogists. Some of the earliest and most influential of these programs include the Maine Historical Society’s Maine Memory Network, the Minnesota Digital Library, and the Colorado Digitization Project (now known as the Collaborative Digitization Program at the Bibliographic Center for Research). For the most part, programs such as these have focused on what some museum professionals refer to as “the flat stuff”: photographs, books, manuscripts, and other two-dimensional materials. This focus on the digitization of archival materials belies the fact that three-dimensional artifacts form the core of the collections of most local historical societies and museums. Moreover, the everyday objects people create and consume (for example, furniture, clothing, and tools) are considered by many scholars to offer significant evidence for historic research, as much if not more so than historic photographs or original manuscripts. Yet most institutions participating in collaborative digitization programs have not made their collections of three-dimensional objects available online at the same rate as their two-dimensional holdings.

Case studies of statewide and national digitization programs reveal the challenges common to most collaborative digital endeavors, regardless of the types of material being digitized. Roberto (2008) describes the lack of consistent standards in place for describing collections among even the largest and best-staffed museums in Great Britain. When collaborations are expanded to include small, local historical societies and museums, the creation of consistent collections data becomes even more challenging due to a lack of available staff, resources, and expertise (Rowe & Barnicoat, 2009). These obstacles are compounded when working with three-dimensional objects, which require more space, equipment, and technical expertise to photograph and more research and subject expertise to catalog.

This chapter examines the development of one digital collection of three-dimensional objects from multiple institutions: the Wisconsin Decorative Arts Database (http://content.wisconsinhistory.org/decorativearts). This project was initiated in 2006 by the Wisconsin
Historical Society and the Chipstone Foundation of Milwaukee, a private foundation for the study of American decorative arts and material culture. Chipstone and the Society had three goals in mind at the outset of the project: 1) to bring to light objects held in the collections of Wisconsin historical societies and museums and share them with a broader audience, 2) to document examples of furniture, ceramics, textiles, and other decorative arts made by nineteenth and early twentieth-century Wisconsin craftspeople in order to reveal settlement patterns and the persistence of handicraft traditions in the state, and 3) to add the first three-dimensional artifacts to Wisconsin Heritage Online (http://www.wisconsinheritage.org), a research portal that brings together a diverse range of digital collections from Wisconsin libraries, archives, museums, and historic sites.

The Wisconsin Decorative Arts Database is founded on the work of a multitude of “real world” individuals—the staff and volunteers at local historical societies and small museums throughout Wisconsin who work to preserve and share their collections, as well as the men and women who built the chairs, stitched the quilts, and threw the pots that are recorded in the database. In addition, the story of the Wisconsin Decorative Arts Database is a highly personal “real world” story for me, as the project grew out of my interest in the material culture of my home state.

The seeds were planted in 2005 while I was a graduate student studying American furniture and decorative arts in the Department of Art History at the University of Wisconsin-Madison. The time had come for me to choose a subject for my master’s thesis research, and I wanted the opportunity to study objects hands-on and up close. I decided to focus on furniture made in the community of Mineral Point, an important early trade center in southwest Wisconsin—as well as the town where I grew up. During the year I spent researching and writing my thesis, I unearthed a surprising amount of locally-made furniture still surviving in both public and private collections and met numerous Mineral Point residents dedicated to preserving their community’s distinctive history.
This search for furniture made in Mineral Point caught the attention of the Chipstone Foundation of Milwaukee. In 2006, Chipstone approached the Wisconsin Historical Society with the idea to create an expanded fieldwork program that would include furniture, ceramics, textiles, and metalwork made by craftspeople throughout Wisconsin between 1820 and 1920. From the beginning, a central focus of both Chipstone and the Society was to make these findings freely available to the public in digital form. Both institutions were already leaders in the digitization of cultural heritage materials—Chipstone with its Digital Library for the Decorative Arts and Material Culture (http://digital.library.wisc.edu/1711.dl/DLDecArts), developed in collaboration with the University of Wisconsin Digital Collections Center, and the Society with a number of innovative digitization efforts including the award-winning American Journeys (http://www.americanjourneys.org) and Turning Points in Wisconsin History (http://www.wisconsinhistory.org/turningpoints)—so a digital database of museum collections was a natural extension of both institution’s missions.

I was appointed as Chipstone’s Charles Hummel Fellow to manage all aspects of the initiative—fieldwork, photography, research and writing as well as the structure and organization of the digital collection. As my background was in art history, not digital collections, I had a great deal to tackle in order to create an effective online resource. What kinds of materials would be included and how would they be located? How would each object be imaged? How would users search the database? What kinds of metadata should be included? And what exactly was metadata, anyway?

Fortunately, a few pieces of the puzzle were already in place. The Wisconsin Historical Society would host the collection in CONTENTdm, a content management system already in use by the Society’s Library-Archives division. Wisconsin Heritage Online (WHO), a developing statewide digitization program, would also harvest the collection into its central web portal. WHO’s Metadata Guidelines (2006) provided a useful introduction to creating and organizing digital content, as did the Collaborative Digitization Program’s Dublin Core Metadata Best Practices (2006). However,
these guidelines were established specifically for images and text-based materials, not three-dimensional artifacts.

Translating information about chairs, quilts, and pots into the standardized fields recommended by existing guidelines was a bit like trying to fit square pegs into round holes. Developing a crosswalk or a systematized data import process was impossible, because no two museums or local historical societies handle cataloging in the same way. In fact, many institutions do not even use a digital collection management system, instead relying on typed index cards or handwritten ledgers to catalog their collections.

I developed a standard set of metadata elements based on WHO recommendations, mapped them to the fields defined by the Dublin Core (http://dublincore.org/documents/dcmi-terms), and assigned customized local field names. For example, the Dublin Core Creator element became a local “Maker” field, while Dublin Core’s Format.medium became a field called “Materials and Techniques.” In addition to providing images and physical descriptions of each documented object, a central focus of the project was to place each artifact in its historical context by conducting research on the biographies of makers and owners as well as design influences and cultural meanings. This goal called for the creation of multiple Dublin Core Description fields: one for physical description, one for historical information, and one for the citation of research sources.

Another key cataloging decision was the selection of a controlled vocabulary appropriate to the database content. Because it is built into PastPerfect Museum Software, a popular content management system, The Revised Nomenclature for Museum Cataloging, aka Chenhall’s Nomenclature (Blackaby, Greeno, and the Nomenclature Committee, 1995) is used by many local historical societies and small museums in Wisconsin. However, the Getty Research Institute’s Art and Architecture Thesaurus (http://www.getty.edu/research/conducting_research/vocabularies/aat) provides more nuanced and specific terms for decorative arts objects. A significant level of granularity is required to accurately assign object names and subject headings in the database. Using Chenhall’s Nomenclature, a chair can
be described primarily according to function, e.g. “Chair, Dining” or “Chair, Side.” The AAT allows for more precise descriptions of form and style. For example, a chair can be distinguished as a bow-back Windsor chair, a fan-back Windsor chair, or a sack-back Windsor chair. While the differences may appear minute to a general audience, these kinds of distinctions are essential to the work of decorative arts scholars and collectors. — A revised and updated edition of Chenhall’s Nomenclature, Nomenclature 3.0, offering a greatly expanded vocabulary for the description of museum artifacts, was released in late 2009. Future subject headings provided in Wisconsin Decorative Arts Database metadata may incorporate terms from this new edition.

One major question remained before any fieldwork could begin: how to create quality digital images of objects that not only varied widely in size and format but were scattered across the state? Just as few institutions could offer detailed digital catalog records for their collections, few had the resources or expertise available to image their collections extensively, if at all. In addition, as with its metadata guidelines, the WHO Digital Imaging Guidelines (2006) addressed the scanning of two-dimensional materials almost exclusively and offered little support for photographing three-dimensional objects. Much of the available documentation on imaging museum artifacts, such as Stanford University’s Digital Michelangelo Project (Levoy & Garcia-Molina, 2000) and the work of the Graphics Lab at the University of Southern California’s Institute for Creative Technologies (Hawkins, Cohen, & Debevec, 2001) centered on the creation of complex three-dimensional digital renderings using multiple cameras and laser scanning.

It was necessary to develop a simple, portable imaging approach so that photography could be completed quickly (to adapt to the limited schedules of volunteers and busy staff) and unobtrusively (to accommodate the often cramped storage quarters of small institutions). I arrived at my photographic process through a combination of consultation with professional photographers and on-site trial and error. Jim Wildeman, a photographer based in Madison, provided a basic introduction to artifact photography. Selecting the right equipment for the job was essential. The Chipstone Foundation
funded the purchase of a Canon Rebel XTi digital SLR camera as well as a tripod, a remote shutter release, a neutral gray paper backdrop and backdrop stand, and two stationary tungsten lights on adjustable stands. Indispensable incidentals included a long extension cord, tape measures (both fabric and metal), white cotton gloves for handling items, and cloths and brushes for removing dust from artifacts. The entire photography kit could be packed into the trunk of a car and quickly set up on location. Participating institutions need only to provide an electrical outlet and suitable working space.

After the framework of the digital collection was laid out and procedures for photographing and cataloging artifacts were determined, on-site work could begin. Based on my experience with local historic sites and individual collectors in Mineral Point, I knew that putting out a general call for material via an email listserv would yield minimal results. It was much more effective to contact each potential contributor directly, usually with an introductory email or letter and then a follow-up phone call to discuss possible objects before scheduling an in-person visit. Once on site, objects were selected for documentation based on the availability of documented provenance, oral history associated with the item, or stylistic similarities to other known objects.

I began my fieldwork with two familiar sites from my graduate research: the Mineral Point Historical Society and Pendarvis, the Wisconsin state historic site in Mineral Point. Starting with these sites gave me the opportunity to refine my documentation techniques in a comfortable environment. I could take as long as I needed to make minute adjustments in lighting or re-measure the dimensions of a chair or flowerpot. I connected with the next three participants, all mid-sized regional museums, via word-of-mouth recommendations: the Neville Public Museum of Brown County in Green Bay, the Chippewa Valley Museum in Eau Claire, and the Sheboygan County Historical Society.

After working with this handful of pilot institutions, it was clear that the phrase “decorative arts,” while a common academic term, was something of a stumbling block for potential participants. Some
possible contributors read the phrase too narrowly, expressing concern that the objects in their collections were not “decorative” enough, while others interpreted it too broadly, hoping to include items manufactured outside of Wisconsin but used locally or objects that lacked any known history whatsoever. At the same time, I was discovering many artifacts that did not fit my original parameters but were of compelling historical significance.

Although the title of the database remained the same, the selection criteria were adapted to accommodate objects that offered important evidence of Wisconsin craft practices and industrial development, even if they did not fit into an academic definition of the decorative arts. For example, the staff of the Historic Blooming Grove Historical Society in Madison contacted me about their collection of materials from the Frank J. Hess and Sons Cooperage, one of the last manufactories in the nation to produce hand-hewn white oak beer barrels. While not “decorative arts” in the traditional sense of the term, the Hess barrels reveal a fascinating story of an immigrant craftsman who brought a traditional European craft practice to Wisconsin, adapted it to the local environment, and passed it on to a second generation (Holland, 1966).

Although I received a number of word-of-mouth recommendations and direct contacts, most database participants were located through the Wisconsin Historical Society’s Directory of Wisconsin Local History Organizations (http://www.wisconsinhistory.org/localhistory/directory). The Society’s local affiliates include more than 350 county historical societies, local historical societies, community museums and historic house museums. The vast majority of these institutions are run by volunteers or a tiny cohort of part-time staff. Many are open to the public seasonally and for limited hours, sometimes as little as one or two weekends each month. This meant that arranging access to collections hinged on flexible scheduling and the willingness of staff and volunteers to open their doors during non-public hours.

The fieldwork process, an in-person visit to select, photograph, and document individual objects, is the most rewarding, yet also most
exhausting, part of the project. From September 2006 through June 2009, I logged over 10,000 miles traveling to sites across the state. I sifted through all manner of collection storage facilities, some meticulously organized and others packed to the gills with artifacts piled on shelves and stuffed in boxes. I handled thousands of artifacts and toured all kinds of historic buildings. Most excitingly, I met dozens of people who were passionate about their work, dedicated to preserving the history of their communities, and eager to share their collections with new audiences.

Depending on the number of items selected for documentation, a site visit can last from a few hours up to two or three full days. Preparing the material to post online takes much longer. A series of graduate and undergraduate interns from the Material Culture Program and the School of Library and Information Studies at the University of Wisconsin-Madison have helped support this phase of the project. Basic editing procedures, including cropping, sharpening, and color balancing, are performed on each image using Adobe Photoshop or ACDSee. Images and corresponding metadata are uploaded directly to the Wisconsin Historical Society’s CONTENTdm server.

A central mission of the database is to establish an historic narrative for each artifact by investigating the history of the object’s maker and owner as well as its cultural significance and formal influences. Due to the myriad of primary source documents and other historic material now available online, a major portion of this research has been conducted solely in the digital realm. The most useful sources for biographical and genealogical information proved to be the Wisconsin Historical Society’s Genealogy Index (http://www.wisconsinhistory.org/vitalrecords), offering pre-1907 birth, death, and marriage records for the state of Wisconsin, and the full-text-searchable Wisconsin County Histories (http://www.wisconsinhistory.org/wch). The commercial website Ancestry.com was also valuable for searching federal census records.

Participating institutions are required to sign a Memorandum of Understanding that authorizes the Wisconsin Decorative Arts
Database to photograph objects and publish those photographs and associated metadata online. Each institution receives an archival-quality CD containing the image files and retains full rights to those images. (A second CD, along with any paperwork generated during the research process, is archived at the Wisconsin Historical Society and the digital images are backed up on the Society’s servers.) For the most part, participants have readily agreed to these terms. However, a few have expressed concern about making material from their collections freely available online, citing either a desire to retain control over digital images or a fear of theft of the physical collection. In most cases, these fears were abated with the argument that the benefits of participation—particularly the increased opportunity for exposure and publicity—outweigh the risks.

Participation offers historical societies and museums the important benefit of an increased online presence. Most participating institutions maintain their own websites, but many lack the resources to fill these sites with substantive information about their collections. To increase online exposure, each contributor is clearly identified at several points in the database. The metadata for each catalog entry includes an “Owner” field as well as a rights statement with a link to the institution’s own website. The opening page offers users the option to browse the database by selecting a specific participant’s collection. Another page functions as a directory of content contributors, with an image and description of each institution as well as a link to their own website.

Two popular free web features—a blog hosted by WordPress and a gallery on the photo-sharing site Flickr—supplement the database and extend its presence online. I use the blog, Wisconsin Object (http://wisconsinobject.wordpress.com), to chronicle my travels and announce when new content has been uploaded to the database. It also provides a venue for more lengthy examinations of selected artifacts and makers. The Wisconsin Decorative Arts Flickr gallery (http://www.flickr.com/photos/wisconsindecarts), which is linked from the blog, presents examples of recently uploaded database content. While not numerous, user comments on both the blog and the image gallery have provided an important window into the
audiences for this material and the types of objects they find most compelling. For example, the most-viewed image on Flickr is a colorful beaded bandolier bag made by Great Lakes Indians in the late nineteenth century, now in the collection of the Wisconsin Historical Museum. A corresponding blog entry on the cultural significance of bandolier bags is one of the most popular posts. Users who have commented on the blog or added the image to their own Flickr galleries include craft hobbyists and collectors—two major audiences that were not considered at the outset of the project.

The Wisconsin Decorative Arts Database’s regional approach to material culture research is nothing new. Since the 1970s, researchers throughout the United States have worked to document decorative arts made locally and held in local collections. Most notably, the Museum of Early Southern Decorative Arts (MESDA) in Winston-Salem, North Carolina established a fieldwork program in the 1970s and 1980s, supported by the National Endowment for the Humanities, to locate artifacts made by craftspeople working in seven southern states before 1820 (Niven, 2001). This research yielded a vast paper-based archive of photographs and files that now serves as an indispensable resource for scholars studying the material culture of the American South.

While modeled on the work of MESDA and other statewide fieldwork initiatives, the Wisconsin Decorative Arts Database is the first program of its kind to be created entirely in digital form. An online database of regional artifacts offers a number of advantages over a paper archive or a published catalog. New content can be added continually, revisions can be made in response to new research, and related materials can be brought together via hyperlinks. Moreover, making collections available digitally helps small, local cultural heritage institutions remain relevant to students, historians, and other audiences whose research is grounded in the ready availability of online resources.

Since 2006, nearly 1,000 catalog entries have been added to the Wisconsin Decorative Arts Database, representing artifacts from the collections of 40 historical societies and museums throughout
Wisconsin. In September 2009, the database was recognized with an Award of Merit from the American Association for State and Local History. With financial support committed by the Chipstone Foundation and the Kaufman Americana Foundation through June 2011, the program will continue to unearth important evidence of early craft production in Wisconsin. In addition to adding new content, explorations are underway to develop creative ways to expand and promote the project, including both online and bricks-and-mortar exhibitions and publications.

References


