

## **Content Management Sub-Group: Images**

(Draft submitted by Susanne Javorski, 4/19/06)

### **Domain/Scope**

For the purposes of the Content Management report, the term "image" (read surrogate image) will mean a fixed two-dimensional photographic reproduction of an underlying work or object.

According to "Principles and Definitions" of the Visual Resources Association (VRA), "A photographic reproduction is a surrogate image, the purpose of which is to record the physical appearance of an underlying work. The underlying work is the original created entity which is the subject, or content, of a photographic reproduction. This subject can be a unique object, such as a painting, a sculptural work, or a building. It can also be a work produced in multiples, such as a poster, a manufactured object (e.g. an Eames chair), or a photograph which is itself regarded as an original work of art. It may even be an electronic work, such as an artist's original digital image, so long as it is somehow "fixed" in a tangible form."

The format of the surrogate image may be a photograph, a slide or a digital file. Images may be acquired by purchase or license, by donation, by copystand photography or by scanning.

### **Sub-Group Membership**

Susanne Javorski, Art Librarian  
Susan Passman, Slide Librarian/Visual Resources Curator  
Valerie Gillispie, Assistant University Archivist

Consulted with:

Allynn Wilkinson, Digitization Specialist, ITS  
Rob Lancefield, Davison Art Center, Registrar of Collections  
Shelley Burchsted, Project Manager, University Communications

## **1. Existing Practices**

### **Library Licensed Databases**

The Library subscribes to several licensed image databases – ARTstor, CAMIO (Catalog of Art Museum Images Online), Accunet/AP Multimedia Archive. ARTstor is a searchable database of more than 300,000 digital images and associated catalog data. ARTstor covers many time periods and cultures, and documents the fields of architecture, painting, sculpture, photography, decorative arts, and design, as well as many other forms of visual culture. ARTstor also offers its own Offline Image Viewer for image presentations. CAMIO offers over 90,000 rights-cleared, high-quality art images, accompanying metadata (and sometimes curator commentary) from 24 major museums.

Accunet/AP Multimedia Archive contains more than 700,000 photographs from the Associated Press' current year's photo reports and a selection of photos from their 50 million image print and negative library.

The Library pays \$5000 for an annual subscription to ARTstor and \$3200 for an annual subscription to CAMIO. AP Multimedia Archive is received gratis through iCONN: the Connecticut Digital Library.

The Library subscribes to other databases primarily for textual content; however, several provide means to search image content as well. These would include but are not limited to databases such as Grove Dictionary of Art; American National Biography; Online Historic Newspapers; Factiva; and Harpweek.

### **University Media Database**

The **Media Database**, created and maintained by ITS, is a web-based service for faculty and staff who wish to create collections of images, video, audio, animations and or texts. These collections are accessible to the Wesleyan community or, if the owner chooses, to the world at large. Users need a Media Database account and media directories on condor.wesleyan.edu to add to the database. Users may prepare their own media or contact Digitization Services for assistance.

The Media Database, which uses Oracle software, was created in 2000 and now contains roughly 10,000 images. The database is searchable by several fields; however, metadata/cataloging info is optional. Collections within the database may be browsed by contributor or course. For classroom use, there is a “**Lightbox**” feature that allows students to arrange up to 15 images on screen and save them, along with descriptions, for review by the instructor.

### **Slide Library**

The Slide Library, a campus resource and part of the Department of Art and Art History, is housed in the Davison Art Center. The primary focus of the staff, which consists of two full time professionals and two part time student assistants, is to provide specific visual materials that have been cataloged in a carefully consistent manner, one that allows patrons to readily locate and retrieve necessary images to be used in a variety of curricular situations.

IRIS (Image Resource Information System), a customized FileMaker Pro collaborative application currently used by twenty academic institutions, enables the capture of relevant metadata with a concentration on data structure standards that comply with VRA (Visual Resources Association) core categories as well as reliance on established authorities, such as the Getty Vocabularies (AAT, ULAN, TGN, RILA), LC, and the Grove Dictionary of Art. Currently, the slide collection numbers approximately 250,000 images; these were primarily acquired by in-house copy photography, but a percentage (20-25%) was purchased from commercial vendors.

Circulation statistics for the past five years have ranged between 16,050 and 22,150. As all image collections, academic or otherwise, have transitioned to digital environments, we too have begun to create images in this format.

A digital camera attached to a copy stand, allowing for book capture, and purchases from various commercial vendors have been combined to create a digital collection of images numbering in excess of 2300. These images are accessible in the Slide Library Collection within the Wesleyan University Media DataBase. The original TIFFs are archived in two ways: they are copied to archival quality CDs as well as to a Wesleyan server, in both cases with attached accession numbers that correspond to metadata image records in the IRIS system. In addition, nine course-related art history collections have been created in the Media DataBase; these primarily contain scanned images from the slide collection and directly relate to specific lecture information. Five additional archived (created outside the Media DataBase) study collections are available, as well, and were produced before the implementation of the current system.

Salaries and materials budget are part of the Art and Art History Department.

### **Special Collections and Archives**

Special Collections & Archives (SC&A) in Olin Library is responsible for documenting Wesleyan's history. The department consists of 2 full time professionals and one 20 hour/week paraprofessional. SC&A currently has approximately 40,000 photographic images. These images include photographic prints, negatives, slides, and antique photographic processes (glass lantern slides, daguerreotypes, etc.). An inventory of these photographs is currently being inputted into Microsoft Access.

SC&A has one flatbed scanner that can be used for scanning images. No program for scanning the photographs is currently underway; rather, when photographs are requested, they are scanned for the individual requestor. Server storage space and lack of staff are two major issues preventing a comprehensive scanning program for the photographs, although the photos are popular and frequently requested.

SC&A has also recently acquired (or will potentially acquire) a large number of architectural drawings for campus buildings. At these early stages, the method of cataloging and storing these images is not determined.

Other images owned by SC&A include maps and posters.

Budget: Salary

### **Digitization Lab**

The Digitization Service (DS) of ITS is staffed by one full time professional (Allynn Wilkinson) and 3 student workers who collectively work approximately 25 hours a week.

The purpose of DS is to provide curricular support for faculty by scanning slides, negatives and other images, as well as creating audio and video. DS creates approximately 500 negative and slide images a month and scans approximately 1500 pages a month. DS also scans items like maps and microfilm. Requests are entered into an SMS ticketing system and resulting digitized images are usually given to the person requesting the items by CD. There is no charge for curriculum-related items. The main mission of DS is to support faculty in the classroom and in their research.

The turn-around on projects is often quite fast, but items lack cataloging or retrieval methods. Often, a project is given out on CD with no other form of backup. This (potentially) can lead to duplication by rescanning an image simply because the originally scanned image cannot be located. Allynn Wilkinson currently places especially difficult and/or large items on a server, but this is done at her discretion and items are not stored systematically. Related to this issue is the need for digital space to store items.

Another problem with the system is the lack of a systematic naming system that would provide logical access to scanned items. The need for a naming convention also relates to the lack of input into the Media Database. Wilkinson does not add items to the Media Database, but faculty members can do so at their own choosing.

Wilkinson would like a paraprofessional to assist her, and suggests that more policy be instituted in regard to storing, cataloging, and naming files. She also has concerns about copyright policy and suggests more education for faculty and other people involved in digitization.

Budget: Primarily personnel salary

### **Davison Art Center Digital Imaging Initiative**

The Digital Imaging Initiative, which began in 1998, is now in its production phase of making images from original objects in the Davison Art Center [Collection](#). The digital images serve both pedagogy (resource for offsite study of museum objects before or after class) and preservation needs. Rob Lancefield, Registrar of the Collections, is the sole person working on this initiative. Because of space and staffing constraints, progress is slow. Once or twice a year, in two day sessions, 15-40 raw capture images may be shot in a single day. At present there are available:

Image count as raw capture files: ~400 total (~230 L, ~80 M, ~100 H)

Image count as processed masters: ~230 total (~200 L, ~30 M, 0 H)

Image count as deliverable JPEGs: ~230 total (~200 from L, ~30 from M, 0 from H)

("L" indicates low-resolution masters from prototyping Phase 1, "M" medium-resolution from transitional Phase 2, "H" high-resolution from current Phase 3).

The project has used three successive camera-based digital imaging rigs in ways that lay groundwork for the much higher-volume workflow and production that will be possible

in a new museum facility with dedicated space for collections digitization within museum-standard security and climate perimeters.

Phase 3 hardware: 4x5 copy camera with large-format lenses, lights, and a Better Light digital camera back, recently upgraded to produce raw capture at 8000 x 6000 pixels ("high-resolution") in 14 bits per channel (42-bit RGB carried in 48-bit TIFF files), with raw file size of 274.6MB. This is the standard resolution and bit depth for current (and foreseeable future) raw images.

Primary software used for color management and image processing includes Eye-One products; Better Light capture software, called ViewFinder; Photoshop CS with several third-party plug-ins; Image Info Toolkit (an embedded-metadata tool); and to a lesser degree, DeBabelizer.

Metadata for the images is derived from the print/object information stored in the collections database. Database software is FileMaker Pro. Images are tracked by accession number. At present, the database is searchable only on the DAC premises. Selected images – “Images for Courses” and “Other Systematic Groups of Images” are available for viewing via the DAC’s web page.

Production will increase dramatically when in a new museum facility with dedicated space for collections digitization and staffing that enables a museum person who knows how to digitize collections objects to devote substantial time to that work  
Budget – salary; computer capital request for hardware

### **University Communications Image Collection**

Shelley Burchsted is the Production Manager within the Office of University Communications . Ms.Burchsted works collaboratively with three part time student assistants as well as with the University Photographer, Bill Burkhart. Currently, in excess of 21,500 images have been amassed; half are in 35mm slide format and half are digital images. Digital images, captured in RAW at 36 mgs.each, are archived on a Wesleyan server. Individual manipulation in PhotoShop occurs when images are selected for use in university publications, at university functions as well as for varied other institutional needs.

For the past eighteen months, the images have been cataloged and thumbnails stored in a customized FileMaker Pro database. Unique accession numbers are generated for each, and several data fields capture relevant information. This metadata includes descriptions, locations, use restrictions, event details and copyright limitations. The slides are stored in labeled binders with miscellaneous negatives stored in file cabinets. Understaffing has prevented the film formats to be converted to digital or to be part of the FMP database. More comprehensive cataloging with authority-based naming conventions is also hampered by staff limitations. Future plans include uploading images and related data to the Wesleyan Media Database ensuring that this valuable resource is available to the Wesleyan community.

Budget: Salary

## **2. Strengths**

- Licensed databases: immediate access to whole campus; searchability; personal collections can be uploaded to ARTstor
- Media Database: campus access, searchable
- Slide Library: provides consistent cataloging for all images; participates in IRIS consortium of 20 institutions – shared image cataloging and vocabulary (not images); plans in place for digital projection (TIFF resolution, VRA standards); immediate responses to patrons' needs
- SC&A: immediate responses to patrons' needs (within staff constraints)
- Digitization Lab: immediate responses to patrons' needs (within staff constraints)
- DAC: high quality digital images (within staff constraints)
- Communications: immediate responses to patrons' needs (within staff constraints)

## **3. Weaknesses**

- Licensed databases: doesn't always have desired images; not personalized (although ARTstor's offline presentation viewer allows for uploading personal images); images not owned by Wes – what is long-term viability of any subscription database? Not all library users are aware of the available image databases.
- Media Database: cataloging optional (browse by course or contributor); sometimes long lag time for uploads; only JPEGs
- SC&A and Digitization Lab are currently not cataloging images; personal collections built at University's expense, images not shared, no metadata for retrieval
- DAC: lack of space and staffing for increasing production; larger objects – no good shooting distance; single object set up time.
- Communications: lack of consistent cataloging; not using authorities; non-digitized collection; only accessible via the department
- Lack of consistency in image resolution – varying by departmental needs
- No central manager or overseer (does there need to be?)

## **4. Opportunities**

- Visual Resources Working Group developing requirements for a Media Management System that will be available campus wide.
- Some institutions have delivery systems – not having success they expected – learn by their mistakes
- Collaboration between departments – sharing scanners, cameras
- Smith College Imaging Center and Visual Communication Resource Center - a facility provides image collection development for teaching, image production, cataloging, licensing of digital content, training, and database management  
<http://www.smith.edu/imaging/>

## **5. Threats**

- Licensed databases become unaffordable or defunct
- Slide Library: a mandate to stop making slides would meet faculty opposition; threat to scholarly practice
- SC&A: lack of staffing and time delaying digital projects; public not aware of holdings
- DAC : slow production pace; pressure to produce more within present conditions would compromise accuracy and physical preservation; reputation could be affected negatively and hamper funding ability.
- Images without cataloging – duplication, loss of images, have to redo
- Building personal/departamental collections at expense of a central shared system; lack of contributors centralized system
- Uncertain stability/longevity of images on CDs, DVDs

## **6. Short Term Recommendations**

- Replacement of or recommitment to Media Database as image management and delivery system.
- Visual Resources group should hopefully have in place a good campus-wide media management system.
- Need to identify the system manager?
- Individual training for faculty in digital presentation; classes and training in moving from one format to another
- Library working on “How to find images” web page
- Consider whether or not to subscribe to additional image databases (Corbis, RLG’s Cultural Materials, etc.)

## **7. Long Term Recommendations**

- Consortial (beyond Wesleyan) sharing of institution’s unique image collections
- Metadata librarian (Cornell, Duke, N Carolina State) or image/media system manager in place (could be one or two people)
- Establish an Image Center
- Look into peer-to-peer technology a la Penn State’s LionShare, open-source development project <http://lionshare.its.psu.edu/main/>
- Working in collaboration with multiple units such as the University of Colorado [http://www.colorado.edu/arts/vrc\\_downloads/CU\\_MOU\\_0306.pdf](http://www.colorado.edu/arts/vrc_downloads/CU_MOU_0306.pdf)

## **8. Readings and Links**

- Using Digital Images in Teaching and Learning-A NITLE/Wesleyan University Project Visual Resources Association Conference. March 7, 2006, David Green
- The Visual Resources Environment at Liberal Arts Colleges -- <http://www.nitle.org/index.php/nitle/transformations>
- Visual Resources Assoc.VRA) best practices – <http://www.vraweb.org/resources.html>
- VRA Digital Initiatives Advisory Group - <http://www.vraweb.org/diag/resources.htm>

## **9. Archival Issues**

- DAC – right now, numbers are low, well-protected in house in vault, but in the future with increased production, there will be a need for offsite storage other than halon in the vault
- Stability of CDs and DVDs unknown
- Format longevity questions
- Backed up servers, barring disasters (flooding, power outages, etc)
- Amount of storage space needed?