

OUT OF THE ARCHIVES

An introduction to born-digital materials

IN THIS TENTH INSTALLMENT OF Out of the Archives, we introduce the basics of born-digital materials. While this is my last column as the Center's archives manager, my successor, Adrienne Evans, looks forward to digging into this and many other archiving topics. Get in touch with her, adrienne@railphoto-art.org, with your questions and suggestions. I have enjoyed writing this column and getting to know some of you through your questions, and I hope you have found Out of the Archives interesting and worthwhile.

Digital imaging has quickly become the most prevalent technology for photography, and developing best practices for digital preservation is now paramount to archival work. Digital preservation and born-digital materials can be daunting at first, but it is much easier to recognize their intricacies once you dive in and begin to explore the possibilities. To begin, then, what exactly are born-digital materials? The most basic definition of born-digital materials is essentially any information that was created in an electronic form. This may include, but is not limited to: digital photographs and documents, web-harvested content, static and dynamic data sets, and electronic records. Before you pursue any preservation project it is important to not only understand the materials with which you are working, but also to develop and follow a plan for handling them. One good starting point is the National Digital Information Infrastructure and Preservation Program at the Library of Congress, which in 2011 laid out four simple steps of digital preservation:

Identify, Decide, Organize, and Make Copies

Identify. Being able to understand what you are working with and where it is located is crucial to archiving. Consider making an inventory of your files or creating specific folders for your images. Tracking down files can be a frustrating task unless you know what you are looking for and where to find it.

Decide. Next, keep only the images you want to preserve. It may end up saving a lot of time and effort to weed out any files you plan to delete instead of going through them in the future.

Organize. Although time consuming, organization will enable you to later find and retrieve all of your images. This is when you should rename your files following some basic conventions listed later in this column.

Make Copies. You cannot repeat this step too often. Be sure to have a master file from which you can

make any additional copies for edits. Whenever you make any significant changes, make sure to backup your collection, preferably to multiple devices stored in multiple locations.

Electronic file naming suggestions

- Never use special characters except for periods, underscores, and dashes
- Never use spaces in filenames
- Never count on capitalization to distinguish one file name from another; many systems and software treat them as duplicates
- Be consistent in a naming convention

Tools and challenges

You can do much of this work with electronic tools that are easily accessible and manageable, though some are complex to master. Digital photography software comes in many shapes and sizes, not to mention with various features and prices. We may all be familiar Adobe, and while its Photoshop software revolutionized photography editing and Bridge has become a standard tool for organizing, there are many other resources available. Software tailored to photograph management has seen a rise in features, tools, and competition, including programs such as CyberLink PhotoDirector, ACDSSee, Magix, AfterShot, and MediaShow, to name just a few. If you are looking for something less expensive, consider a stock photograph management tool you may already have installed, like Apple Photos for Mac and Microsoft Photos for Windows. A list of resources would not be complete without some of the popular image-sharing resources available online, which include Flickr, Imgur, and Photobucket—as well as file-hosting tools like Dropbox, Google Drive, Mega, and MediaFire.

Digital preservation and born-digital files come with their fair share of hurdles. In 2012, AIMS (An Inter-Institutional Model for Stewardship) born-digital working group laid out several problems specific to the preservation of born-digital materials, including:

1. Difficulty assessing value of files in the present
2. File storage distribution across a variety of platforms and hardware
3. Trouble managing large volumes of information
4. Creation of metadata
5. Migration of information to new formats
6. Copyright issues
7. Bit-rot and obsolescence of hardware and software

STORY

Jordan Radke

PHOTOGRAPHS

Collection of the Center

More traditional, analog materials have their own benefits and concerns. The webcomic on the right from www.xkcd.com succinctly sums up many of these concerns with a graph of digital resource lifespan.

Curation Lifestyle Model

For a more professional overview of managing born-digital files, consider the Digital Curation Center (DCC). The DCC was established in the United Kingdom to address the challenges involved with digital preservation and curation, and to lead in the advancement of research, development, and support. It created a Curation Lifestyle Model that, according to the DCC's website, "provides a graphical, high-level overview of the stages required for successful curation and preservation of data from initial conceptualization or receipt through the iterative curation cycle. ... It is important to note that the model is an ideal. In reality, users of the model may enter at any stage of the lifecycle depending on their current area of need." The key elements of the model include:

Data is at the center of the curation lifestyle, made up of digital objects and databases.

Full Lifestyle Actions appear as the first four concentric rings around the center of the model. "These are activities which take place at any point in the digital curation lifecycle and are relevant to many different sequential actions. For example, preservation planning should be taken into account as the data is conceptualised, when it is being preserved, and when it is used and reused." Actions include: describing and representing information, preservation planning, community watch and participation, and to curate and preserve throughout the curation lifecycle.

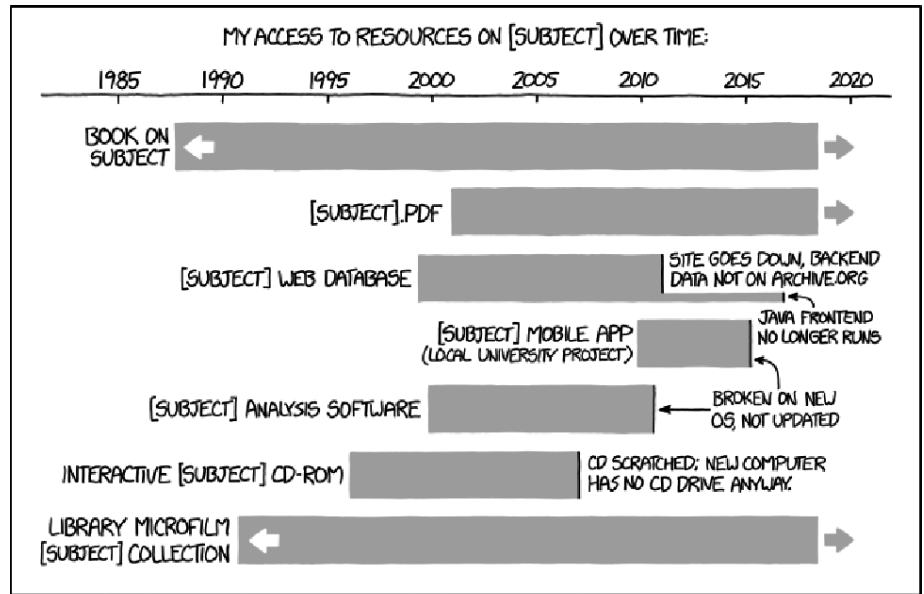
Sequential Actions appear in the outer ring (red) of the model. These are the steps "which are repeatedly taken to ensure that data is curated according to best practices." These actions are to conceptualize, create or receive, appraise and select, ingest, preserve, store, access, and transform all formats of data.

Occasional Actions appear in the outermost areas of the model. They are actions "which interrupt or reorder the sequential actions as a result of a decision. For example, upon appraisal it may be decided that the data in question does not fit the remit of a digital repository in which case data may be transferred to another archive." They include the disposal and destruction of data, reappraising and return of data, and finally the migration of data to different formats.

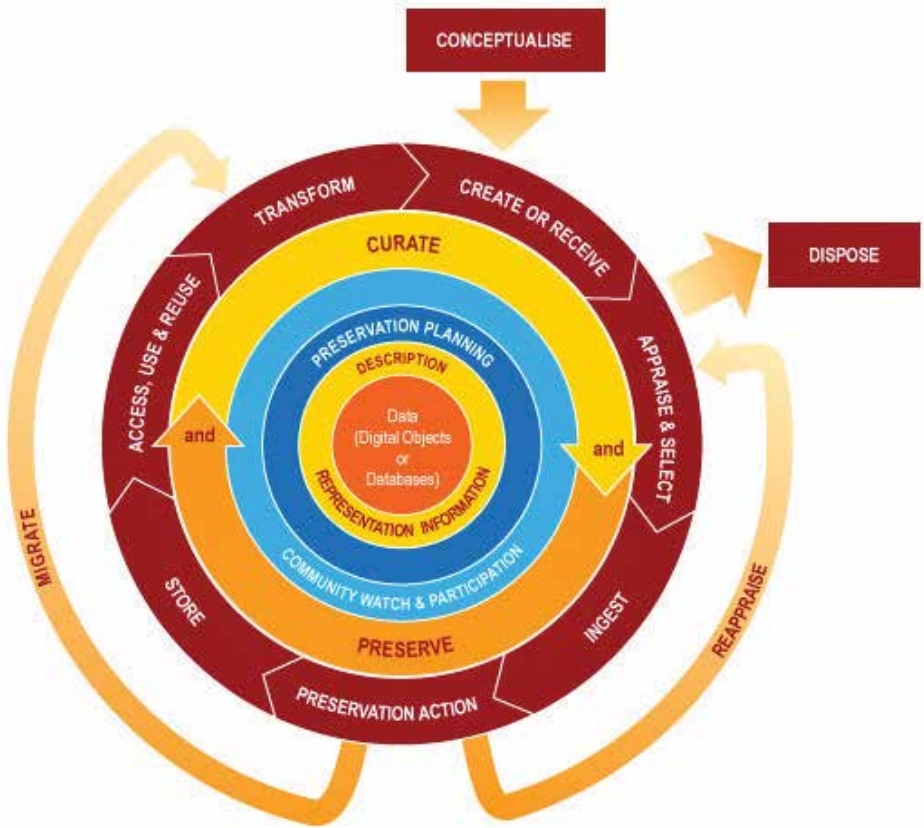
For more information on the DCC's Curation Lifecycle Model, please visit their website at: www.dcc.ac.uk/resources/curation-lifecycle-model

Archival Terms

Like railroading, archiving has its own language. Some terms used in this column appear below, as defined by the Society of American Archivists (SAA). See a full glossary of archival and records terminology at: www2.archivists.org/glossary



IT'S UNSETTLING TO REALIZE HOW QUICKLY DIGITAL RESOURCES CAN DISAPPEAR WITHOUT ONGOING WORK TO MAINTAIN THEM.



Born Digital. Information created in electronic format.
Digital Assets Management System. Software to support the acquisition, description, tracking, discovery, retrieval, searching, and distribution of collections of digital objects.

Digital Photograph. An image originally produced using a digital camera and rendered for viewing as a virtual image or on film or paper; also called digital print.

Top: Digital resource lifespan webcomic from www.xkcd.com

Above: Curation lifestyle model developed by the UK's Digital Curation Center. While the model targets organizational-level concerns, it can be useful for individuals to understand the considerations and actions.



Ann Arbor Railroad passenger train no. 51 meeting a freight train at Vernon, Michigan, on March 29, 1941. Photograph by Robert A. Hadley, Hadley 01-043-05

Electronic Record. Data or information that has been captured and fixed for storage and manipulation in an automated system and that requires the use of the system to render it intelligible by a person.

Railroad Heritage Visual Archive updates

In our Madison office, graduate student intern Erin Rose has finished processing work on the Robert A. Hadley Collection. Currently on loan, it will transfer to the Center's ownership at the end of the year, and we look forward to sharing more selections online. Volunteer John Kelly is continuing metadata entry from our Fred M. Springer Collection so we can post more of it online. I am handing off my work on J. Parker Lamb's color slides and other collections to our new archives manager, Adrienne Evans.

At Lake Forest College, graduate archival intern Colleen O'Keefe is working on Photoshop edits and metadata for selections from the Fred M. Springer Collection that will be added to our website and Flickr, much like our Bjorklund Collection.

You can view highlights and galleries from many of our collections at www.railphoto-art.org, and we post more selections each week to our social media accounts on Facebook, Twitter, and Flickr.

About this column and our collection

"Out of the Archives" brings to light the world of professional archiving, providing a regular forum to share selections from the Center's collections and tips for maintaining your own photographs. Whether you are a photographer, collector, or avid fan, it is important to organize and preserve the materials you create or collect.

The Center's Railroad Heritage Visual Archive includes more than 200,000 photographs. The team in Madison, Wisconsin, consists of Adrienne Evans, archives manager, graduate archival intern Erin Rose, and volunteer John Kelly. We also partner with Lake Forest College, working with Anne Thomason, archivist, and graduate archival intern Colleen O'Keefe, to process and maintain materials housed in the college's Archives & Special Collections in the Donnelley and Lee Library. Scott Lothes, Center president and executive director, and the Collections & Acquisitions Committee of the board of directors provide oversight. [Editor's note: author Jordan Radke has capably managed this column and our collections for the past three years, for which we extend our gratitude, and we wish him well in his future endeavors.]

In keeping with the Center's mission to preserve and present significant images of railroading, with the Railroad Heritage Visual Archive we seek to securely house collections and make their contents accessible. We adhere to established archival principles to ensure safety and accuracy. Our work as archivists includes:

Preservation. One of the Center's main objectives is properly preserving our collections. This includes appropriately caring for and handling our materials by using archival-safe supplies, and providing a controlled environment where our collections are housed.

Processing. Processing materials is a long, tedious, and detailed endeavor. Organizing a collection appropriately sets up the rest of the processing work that includes any digitization and metadata entry. This work is essential to the long-term care and future accessibility of a collection.

Arrangement and Description. To maintain quick and easy retrieval of our materials, we organize every collection down to its individual items, if possible, given the time and resources available to us.

Accessibility. Finally, the Center will make sure that users have access to our processed collections. We create detailed finding aids to describe each collection and its contents and share images electronically through our websites and many social media outlets.