Preservation in the Age of Large-Scale Digitization

Oya Y. Rieger
Cornell University Library
**Andrew D. White Architectural Photographs Collection**
The Andrew Dickson White Architectural Photographs document a wide range of 19th and early 20th century architecture of Europe, the Middle East and the Americas, including structures, panoramas and habitats that have vanished due to wars and urban.

http://resolver.library.cornell.edu/misc/4077228

**arXiv.org**
ArXiv.org is a fully automated electronic archive and distribution server for research papers in physics, computer science, mathematics, and other scientific communities. Physicist Paul Ginsparg, the creator of the arXiv, joined the Cornell faculty in...

http://resolver.library.cornell.edu/misc/3932532

**Beautiful Birds: Masterpieces From the Hill Ornithology Collection, Cornell University Library**
Beautiful Birds traces the development of ornithological illustration in the 18th and 19th centuries and highlights the changing techniques during that period. This site highlights Cornell University Library's Hill Ornithology Collection, which...

http://resolver.library.cornell.edu/misc/5458605

**Beyond the Taj: Architectural Traditions and Landscape Experience in South Asia**
The MacDougall Database is a collection of images depicting Indian architecture and culture. Primarily photographed by the late professor Robert D. MacDougall, the images are currently owned by Cornell University. This database is a joint project of...

http://resolver.library.cornell.edu/misc/5745602
Preservation in the Age of Large-Scale Digitization

By Oya Rieger

A white paper examining preservation issues relevant to mass-digitization projects such as those being done by Google, Microsoft, and the Open Content Alliance.

White paper PDF Download (1.4 MB file) >>

Public comments received >>

CLIR will issue a final print and electronic report later this fall. The public comment period is closed.
What is digital preservation?

- Digital reformatting
- Digital preservation
  - Bitstream archiving
  - Enduring access
Are you planning to archive the digitized materials - that is to assume long-term responsibility for preserving the digital books.

<table>
<thead>
<tr>
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<th>Yes - Plans in place</th>
<th>Yes - Plans in development</th>
<th>No - Will not archive content</th>
<th>Have not decided yet</th>
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Comments:

[Input field for comments]
Why preserve?

- Long-term returns on our investment in print collections
- Users want content in digital format
- Significant costs – there will not be a second round LSDI
- If not libraries, who will assume the stewardship role?
Selected Recommendations
Reassess Digitization Requirements for Archival Images
Guidelines for Image Capture
Chapman, S. (Date Created: Feb 1999)

Five topics related to digital image capture are reviewed, with the objective of identifying the points in the reformatting workflow that would most benefit from the development of guidelines. They are: materials handling, systems quality, digital master quality, derivatives, and file naming. Each of the five sections includes introductory comments, a list of issues, a review of technology, and a summary of practice to gauge where perspectives are similar and where they vary. The sections conclude with lists of questions to promote further discussion.

http://www.rlg.org/legacy/preserv/joint/chapman.html

How Should You Store Your Digital Data
TASI (Date Created: May 2006)

This document, in the form of FAQs (Frequently Asked Questions), addresses the issues in the storage of digital image data.

http://www.tasi.ac.uk/advice/delivering/storage.html

Introduction to Imaging: Issues in Constructing an Image Database
Besser, Howard; Trant, Jennifer (Date Created: 1995)

This site introduces the technology and vocabulary of digital imaging as they relate to the development of image databases depicting works found in museum collections. It illustrates the choices that must be made when images are captured, and outlines the areas in which institutional strategies regarding the use of imaging technologies must be developed.

http://www.getty.edu/research/institute/standards/introimages/index.html

Joint RLG and NPO Conference on Guidelines for Digital Imaging
Beagrie, Neil; Elkington, Nancy In: RLG DigiNews (Date Created: 15 Oct 1998)


http://www.rlg.org/legacy/preserv/diginews/diginews2-5.html#feature1
Reassess Digitization Requirements: Create a New Metrics

- Contemporary digitization technologies and image-processing tools
- Ingest and storage experience built over the past several years
- New archival file formats, such as JPEG2000 and PDF/A
- Evolving access formats that are essential to support sophisticated retrieval and use of content such as text mining
- The impact of lossy compression techniques and image processing on future preservation actions
- The correlation between image quality and OCR accuracy
Enhance Access to Digitized Content
THE SUPREME COURT
IN UNITED STATES HISTORY

VOLUME TWO

CHAPTER THIRTEEN
VIRGINIA AGAINST THE COURT
1821

During the year 1820, while the State of Ohio was pressing the question of State Sovereignty in connection with the Bank issue, Republicans (or Democrats as they were about to be known) both in the North and the South were becoming apprehensive as to the effect of the attitude of the Court upon the powers of the States over other subjects of State concern. The important part which it was likely to play in determining the course of vital political and economic questions was now apparent to all who realized the full scope of the doctrines announced by Marshall in the three great
MEMOIR OF CHARLES SUMNER.

His letters to Judge Story and Hillard were read by other intimate friends, and his experiences became quite generally known in Boston and Cambridge. Americans returning from Europe reported his success in English society. His speech at Newcastle, which was read in a Boston newspaper, was much commended. His social career abroad attracted attention at home, and his return was awaited with unusual interest. The general opinion and expectation concerning him may be best gathered from the letters written to him at the time. One cannot fail to notice, even beneath their assurances of confidence to the contrary, serious apprehensions that his rich draughts of foreign life would give him a distaste for professional work.

Cleveland wrote, May 12, 1838: —

"We feel a deep interest in you; your success delights us, your adventures and descriptions entertain us, and your feelings command our sympathies as much as if you were our brother. We feel the same pride and concern for you as we should for 'one of the family,' and when one of your nice long letters comes, we feel that we have got a treasure indeed."

Again, Aug. 22: —

"A letter from you, dear Sumner, is before me, — a spring to exertion, a
Enhance Access to Digitized Content

- Enduring access by enabling online discovery and retrieval of materials for future generations (within limitations of copyright)
- Developing a joint plan for providing aggregated or federated access
- Support new e-scholarship formats & applications
- Understand the impact of contractual restrictions on preservation responsibilities
Outline an Large-Scale Digitization Initiative Archiving Action Agenda
Outline an Large-Scale Digitization Initiative Archiving Action Agenda

- Defining minimum requirements necessary to ensure the persistence of digital materials and associated metadata files to facilitate shared storage and registry initiatives
- Making geographic data-redundancy arrangements among libraries for backup
- Implementing distributed and collaborative strategies such as LOCKSS or exploring Portico-like initiatives
- Sharing open-source preservation applications
- Collaborating to develop access and preservation services as flexible and scalable components to be added to repository models supporting preservation activities
- Exploring how usage statistics can inform preservation decisions in support of priority setting and risk taking – such as assigning levels of preservation
Understand Costs Involved in Digital Preservation Efforts
Understand Costs Involved in Digital Preservation Efforts

- Significant local expenses by participating libraries
- Building and managing a digital preservation infrastructure is neither easy nor cheap
- Share cost information – understand long-term implications
Developing a Joint Agenda

- Institutional differences in opinion, funding models, digital library infrastructures, and strategic goals

- Cooperative efforts should not slow the community’s efforts, but rather complement the ongoing institutional programs

- Join forces among cultural institutions & corporate partners to leverage resources, strengthen causes, control risks, and expand alternative strategies