

2008 DHCS Colloquium  
University of Chicago

PAPER PROPOSAL

***Building and Judging Meaning in Digitized Photographs***

Paul Conway  
Associate Professor  
University of Michigan

**Abstract**

In the past decade, digital humanities scholarship has expanded steadily beyond its foundations in text analysis to find new meaning and knowledge through the creative reuse of digital images of historical photographs. Visual studies scholars in the humanities who wish to work primarily in the digital domain face a fundamental dilemma in the choice either to create a focused collection of images tailored to a specific study or to make use of digitized images created by an archives, a library, or other cultural heritage organization. The dilemma carries with it distinctive technical and economic tradeoffs that in part determine the feasibility and scope of a research undertaking and the shape the final intellectual products. General-purpose Image Digital Archives (IDA) are emerging as ubiquitous components of cultural heritage organizations. IDAs are simultaneously mechanisms for delivering digital surrogates of archival holdings and new archival collections in their own right that reflect the decisions that digital curators make throughout the digitization process. Ross (2007) notes that “if we think more carefully about digital libraries we easily observe that they may be libraries by name, but they are archives by nature.”

Digital humanities scholarship derived from general purpose IDAs is absolutely dependent on the set of semi-codified procedures and processes that convert the rich intellectual and material content of a photograph into digital form and represent that content through computer interfaces. Virtually no research, however, has explored the relationship between building and using digital archives of images. Use studies conducted at Penn State (Pisciotta 2001) and Berkeley (Harley 2006) provide important demographic insights but reach no conclusions about the processes and procedures behind the digital image collections used. Saracevic (2004) reviewed a decade of digital library evaluation studies and found that “more often than not, digital library users and digital libraries are in an adversarial position.” A recent seminar on mass digitization and the humanities (CLIR 2007) called explicitly for research with an archival perspective. “How do traditional archival values migrate into the computationally intensive environment made possible by copious digital data and digital tools?”

Scholars across a wide variety of disciplines are just beginning to explore how theories of visual representation bear upon the creation and use of digital collections. Schwartz (2000) makes the essential connection between the subjective processes of creating an original photograph and the nature of the communication between creator and viewer. Rothenberg (1993) demonstrates that the use of a technological tool alters its application iteratively over time. “A tool realizes a human inventor’s intention, and the realization of this technique suggests new intentions.” Cook (2001) lays out a post-modern approach to understanding the conscious and sub-conscious connections between creating documentation and interpreting it. “No text is an innocent by-product of administrative or personal action, but rather a constructed product – although that conscious construction may be so transformed ... that links to its constructed nature have become quite hidden.” In suggesting that post-modern critique has outlived its usefulness in the arena of visual studies, Mitchell (2003) calls for moving beyond Walter Benjamin’s skepticism of the reproduction by embracing digital image surrogacy as superior. “In a world where the very idea of the unique original seems a merely nominal or legal fiction, the copy has every chance of being an improvement or enhancement of whatever counts as the original.”

The paper directly addresses the overall theme of the 2008 Colloquium – particularly how visual meaning is created and apprehended through the transformation of photographic images from analog (prints or negatives) to digital bitmaps. The paper frames the issue of digitization of photographs and their use in digital humanities scholarship within varying theoretical perspectives on visual representation. The paper incorporates an original model that describes how digitization procedures (guidelines and best practices) express the intentions of the digitizer. It illustrates the mechanisms at play in digital collection building that are most likely to influence the way that visual studies scholars judge the values embedded in the digital representation, particularly image quality and integrity (reliability and authenticity). The paper focuses on the extent to which technical decisions regarding digitization, quality control, and rendering add or diminish the value of digital representations of original photographic resources in ways that may be detectable and important to digital humanities scholars. The heavily illustrated paper will describe the decision model derived from a textual analysis of digitization guidelines and illustrate how digitization decisions play out in two large-scale image digital collections. The paper concludes with implications for digital humanities scholarship of using general-purpose Image Digital Archives.

The findings presented here derive from one-half of an exploratory study supported by the National Science Foundation (#IIS-0733279). The second half of the study (ongoing Fall 2008) investigates the extent to which digital humanities scholars and other visually intelligent users of digital images judge the quality, archival integrity, and relevance of digital image surrogates.

## References

- Cook, Terry. (2001) "Fashionable Nonsense or Professional Rebirth: Postmodernism and the Practice of Archives," *Archivaria* 51 (Spring): 14-35.
- Council on Library and Information Resources. (2007) *Many More than a Million: Building the digital environment for the age of abundance*. Final Report of a One-Day Seminar on Promoting Digital Scholarship. Washington, D.C.: CLIR. <http://www.clir.org/activities/digitalscholar/index.html>
- Harley, Diane, et al. (2006) *Understanding the Use of Digital Collections: A Focus on Undergraduate Education in the Humanities and Social Sciences*. Center for Studies in Higher Education, University of California, Berkeley. <http://digitalresourcestudy.berkeley.edu/>
- Mitchell, W.J.T. (2003) "The Work of Art in the Age of Biocybernetic Reproduction," *Modernism/modernity* 10 (3): 481-500.
- Pisciotta, Henry, et al. (2001) Penn State Visual Image User Study. *D-Lib Magazine* 7 (July/August). <http://www.dlib.org/dlib/july01/pisciotta/07pisciotta.html>
- Ross, Seamus. (2007) *Digital Preservation, Archival Science and Methodological Foundations for Digital Libraries*, Keynote Address at the 11th European Conference on Digital Libraries (ECDL), Budapest (17 September). [www.ecdl2007.org/Keynote\\_ECDL2007\\_SROSS.pdf](http://www.ecdl2007.org/Keynote_ECDL2007_SROSS.pdf)
- Rothenberg, David. (1993) *Hand's End: Technology and the Limits of Nature*. Berkeley: University of California Press.
- Saracevic, Tefko. (2004) *How were digital libraries evaluated?* Paper first presented at the DELOS WP7 Workshop on the Evaluation of Digital Libraries, p. 9. <http://dlib.ionio.gr/>
- Schwartz, Joan M. (2000) "'Records of Simple Truth and Precision:' Photography, Archives, and the Illusion of Control," *Archivaria* 50 (Fall): 1-41.

Paul Conway is associate professor in the School of Information at the University of Michigan. His research involves the challenges of representing and interpreting visual and textual resources in digital form, extracting knowledge from large-scale image databases, and modeling incentive systems for digital preservation and access, particularly in the context of emerging interdisciplinary scholarship in the humanities. Conway teaches courses on digital libraries, understanding archives, preserving sound and motion resources, and digitization for preservation. He has extensive administrative experience in archives and preservation fields and has made major contributions over the past 30 years to the literature on archival users and use, preservation management, and digital imaging technologies. He has held positions at the National Archives and Records Administration, the Society of American Archivists, Yale University, and Duke University. In 2005, Conway received the American Library Association's Paul Banks and Carolyn Harris Preservation Award for his contributions to the preservation field. He is a Fellow of the Society of American Archivists and serves on the editorial board of the *American Archivist*.