

Paul Conway

Tec(h)tonics

Reimagining preservation

Ed. note: Remarks delivered on the occasion of the 35th anniversary of the Northeast Document Conservation Center in Andover, Massachusetts, April 4, 2008.

These are times of extraordinary contrast for preservation—where affection for artifacts rare and common competes with a near fetish for the digital. In the span of only a few weeks, we hear news of the rescue and restoration of an optically based sound recording that predates Edison by nearly 30 years. We see the possible sale of a photogenic print of a leaf that predates Henry Fox Talbot's first photograph by 50 years. We read in the *New Yorker* about the impending death of the newspaper as we know it. The demise of 35 mm microfilm and consumer roll film is not far behind, as is the compact disc format for music, which will go the way of reel-to-reel tape and VHS video as obsolete but ubiquitous media. And then we learn, too, that the University of Michigan has completed the digitization of its 1 millionth book on the way to digitizing 7 million volumes in one of the largest research libraries in the United States—some 2.1 billion page images when the job is done a few years hence. So we are acutely aware that preservation as we know it is in a state of flux, confronting profound challenges and opportunities in the face of mass digitization of our cultural heritage.

A new definition

Eighteen months ago, the Oxford English Dictionary proposed a new definition for the adjective “tectonic: of a change: momentous, utter, vast; chiefly in tectonic shift.” Tectonic shift seems to have replaced “paradigm shift” as a trendy term applied to everything from

economics to sports. Of course we all recognize the word from high school geology as the massive plates of the earth's crust that shift slowly over eons, pushing up mountain ranges and deepening the ocean's valleys – or quite suddenly at the fault lines. The Greek origin of the word—“tectonicus: of or pertaining to building, or construction in general; used especially in reference to architecture and kindred arts”—opens an opportunity to reconsider the implications of building large scale digital collections. By inserting (h) in this three-pronged term, we draw attention to the technological horns of our dilemma—technology as a potent threat to the core principles of our profession versus technology as an alluring tonic—one that complicates our sense of what is doable and achievable in our professional practice. Whichever view you adopt, the choices are not easy and the outcomes of the choice are far less certain than in the past.

The dilemma is most pointedly exposed in the face of the wholesale digitization of our cultural heritage. We see the very real prospect that a huge portion of the world's books and a very significant amount of the paper-based special collections held by prestigious research institutions will be transformed into digital form and will be used almost exclusively that way for any number of purposes. Even though the future of the vast quantities of audiovisual resources from the 20th century does not seem as promising, we shall still witness a significant shift to digital delivery over the next decade. What is not digital will not exist, or may not

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matter, much, except for the sentimental, symbolic qualities of the artifact—culture under glass, representational and stilled.

Massive digitization

It is important to note that the notion of “mass digitization” does not just apply to the supersized transformations that we see with the Google Books project, the Open Content Alliance, and similar programs. Mass digitization also refers to “production-oriented” digitization that requires careful workflow planning and likely outsourcing to vendors. Most important, mass digitization is an *attitude* that favors digital transformation and delivery, an approach that is programmatic and outgoing, and a *commitment* that results in the marshaling of significant resources to keep momentum going for the foreseeable future. In these senses, mass digitization is cumulatively a large scale undertaking and “digitization for the masses.”

The preservation community itself laid the groundwork for massive digitization through decades of experiments that defined best practices.¹ Somewhat controversial policy statements have opened the door to digitization as a preservation strategy.²

Within the past two years, the attention of the preservation community has turned quite sharply to the implications of digitization within the cultural heritage community generally and for preservation practices in particular. Some recent examples:

- A symposium at the University of Michigan (UM) was the first to examine the implications of the Google Books project. Among its nine recommendations are three that call for focused attention to quality (especially of full-text derived from OCR processing), the revision of standards, and the assessment of value to users.³

- Trudi Hahn was one of the presenters at the UM symposium and the person perhaps most focused at the time on the implications of the project for the preservation profession. In her recently published presentation, she is fairly critical of the power that corporate sponsors have wielded over the terms of the

projects and urges preservation professionals to exercise more leadership.⁴

- The preconference symposium last year at the Society of American Archivists annual meeting urged us to go with the flow, focusing on quantity rather than quality. “We must stop our slavish devotion to detail,” the report on the symposium screams. “The perfect has become the enemy of the possible.”⁵

- The Council on Library and Information Resources (CLIR) is also looking at mass digitization activities. With the support of the Andrew W. Mellon Foundation, CLIR is engaging scholars in a five-part plan to assess large-scale book digitization projects and make recommendations to improve the usefulness of the products.⁶ At this point, we can only hope that the scholars are more pointedly effective in their conclusions than when they were asked 15 years ago to advise the preservation community on selection issues.⁷

- CLIR has just released its description and assessment of four major book digitization projects. Oya Rieger’s report makes 13 recommendations across the spectrum of preservation and access issues. The report’s greatest strength is its analysis framework that allows us to look at these projects through our well-polished lens of preservation ethics. Moving ahead on the recommendations themselves deserves significant commitment from the preservation community.⁸

My most serious concern with these and other commentaries on mass digitization is the rush to rewrite the rules on digitization quality (imaging, metadata, and interface) without understanding how and why best practices emerged, how best practices have been applied, and what impact our work has had and is having on users.

Should the preservation community support the lowering of the quality bar when there is no evidence that doing so is either cost effective or a benefit to end users? I do not think so. Should the nascent conversations about defining new technologies for preservation digitization occupy much of our time when the rest of the world is only concerned about access? Perhaps, but only for “last use”

reformatting. Instead, we need to devote our energies and our resources to maximizing the likelihood that digitization programs going forward produce the most useful and usable digital collections possible. For it is through increasing the amount and significance of the use of digital collections that preservation will be guaranteed. In this regard, the socio-economic challenges far outweigh the significant technological ones.

Mitigating factors for preservation leadership

That said, it is going to be very difficult for practicing preservation professionals to exert an influence over either the processes or the products of mass digitization unless they come to terms with three very important limiting factors.

- The first of these factors is what I'll call "The Tyranny of the Local." This factor reinforces the notion that the needs and priorities of individual organizations and specific collections are sufficiently unique that few national or international standards can be either developed or applied. The Tyranny of the Local has played out over two decades in regard to selection for digitization, digital imaging guidelines, workflow processes, cataloging and metadata procedures, and nearly every other aspect of digitization projects. The net result of thinking globally but acting locally is the near complete absence of a conscious consensus on digitization policies and, more troubling, the sense that such a consensus is impossible.

We have to do something about this—beginning with the recognition that professional compromise toward a higher community standard rather than a lower bar is an ethical necessity.

- The second limiting factor I'll label "Proxy Behavior." This factor takes the form of preservation librarians, archivists, and curators thinking and acting on behalf of users without engaging them directly and persistently in the design, development, and delivery of digital products. For the preservation community, the net result of Proxy Behavior is a too-large gap between preservation actions (and the deci-

sions behind these actions) and the impact of these actions on end users.

We have to do something about this—beginning with the formation of strategic alliances with communities of active and creative users of digital products in recognition that the ethics of preservation center more profoundly on the impact of preservation on society than on the materials we handle.

- The third factor limiting the engagement of the preservation community with the mass digitization movement I'll call "Surrogate Artifact." This issue is driven in part by stubborn insistence that digitization is primarily, if not exclusively, the digital copying of original sources to some specified level of "faithfulness." When, in truth, as we are seeing in emerging large-scale digital libraries, digitization is the creation of new products that have significant artifact values worth preserving.

We have to do something about this—beginning with getting over our fear of loss—loss of professional identity, loss of tradition, and even loss of information over time. Digital product development has an important preservation component. Building preservation issues into digital products is prudent risk management. We might have to recognize that we can reduce our investments in book treatment and help our organizations begin triaging our audiovisual heritage aggressively so that we can marshal resources to make a difference in the mass digitization arena.

What the preservation community needs in the face of the unambiguous tec(h)tonic shift to the digital is:

- a loud and clear voice of consensus on digitization standards, forged in principled compromise;
- an enthusiastic re-embrace of technological R&D designed primarily to reinforce that consensus; and
- a focus on preserving the significant artifactual values embedded in digital products.

Final thoughts

This is actually the way preservation used to be before digitization assumed the priority that it now holds in the nation's cultural

organizations. Modern preservation programs emerged from decades of sophisticated work to diagnose the technical source of preservation problems, find a set of commonly acceptable solutions, train practicing professionals, and catalyze national leadership. Until the new digital boom, a spirit of collaboration to define the shared elements of preservation action effectively transcended local preferences and motivated aggressive national action that we do not see enough of today.

The context of massive digitization allows us to re-imagine preservation as the value that motivates the construction of high-quality digital products. The ethicist Raphael Capurro includes preservation in his tight framework of moral rights in the new technological environment, arguing that a basic moral principle “is to share knowledge, or the right to communicate in a digital environment, which includes the right to preserve what we communicate for future generations.”⁹ By associating preservation with the continuum of communication from past to future, we know that digitization is not just a technological but also but a culturally bounded endeavor.

Notes

1. National Archives and Records Administration, *NARA Guidelines for Digitizing Archival Materials for Electronic Access* (Washington, D.C.: NARA, 2004), www.archives.gov/research/arc/digitizing-archival-materials.html.

2. Kathleen Arthur, et al., “Recognizing Digitization as a Preservation Reformatting Strategy,” Adopted as policy by the Association of Research Libraries, October 2004, www.arl.org.

3. “Mass Digitization: Implications for Information Policy,” report from “Scholarship and Libraries in Transition: A Dialogue about the Impacts of Mass Digitization Projects,” Symposium held on March 10–11, 2006, University of Michigan–Ann Arbor (Washington, D.C.: U.S. National Commission on Libraries and Information Science, 2006), www.nclis.gov/digitization/MassDigitizationSymposium-Report.pdf.

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cord,” *Library Resources & Technical Services* 52 (January 2008): 18–26.

5. Ricky Erway and Jennifer Schaffner, *Shifting Gears: Gearing Up to Get Into the Flow* (Dublin: OCLC Programs and Research, 2007), www.oclc.org/programs/publications/reports/2007-02.pdf.

6. Council on Library and Information Resources. “When mass digitization reaches critical mass: Scholars’ evaluation and analysis of major digitization projects,” www.clir.org/activities/details/scholeval.html.

7. Gerald George, “Difficult Choices: How Can Scholars Help Save Endangered Research Resources?” (Washington, D.C.: Council on Library and Information Resources, 1995).

8. Oya Rieger, “Preservation in the Era of Large-Scale Digitization” (Washington, D.C.: CLIR, 2008), www.clir.org/activities/details/mdpres.html.

9. Raphael Capurro, “Towards an Ontological Foundation of Information Ethics,” *Ethics and Information Technology* 8, 2, (2006): 175–86. *zz*

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