

**MILLENNIAL LIBRARIES: MEDIA AND MEANING**  
**[Summary Version: Excerpts Only]**

**Walt Crawford**

Research Libraries Group

1200 Villa Street

Mountain View, CA 94041

wcc@rlg.notes.org

Personal website: <http://home.att.net/~walt.crawford>

**ABSTRACT:** The all-digital library is dead, as a general proposition—but that’s only a starting point for discussing media and meaning in the years to come. Media, because the way things are packaged and transmitted affects their short-term significance and long-term usefulness. Meaning, because we clear away a lot of nonsense about library functions by thinking in terms of meaning rather than information as such. This talk will cover some aspects of likely media interaction in tomorrow’s libraries, some things we need to consider and (perhaps) learn about the interaction of media and meaning, and some likely principles for the complex libraries of the near future.

**STAKING THE DIGITAL VAMPIRE**

Since this is a group that deals with marine life, I’d like to begin by noting three inevitabilities for today’s world based on predictions from a couple of decades ago:

- Many of us now live and work in underwater cities, thus greatly expanding the space available for human habitation
- We systematically harvest the sea for metals and rare chemicals, greatly increasing our wealth while doing no harm to marine life
- Much of our electricity is generated from great tidal generators. New Brunswick, in particular, gets nearly all its energy from the installation at the Bay of Fundy.

That’s how things are—or at least how they would be if technological projections were reliable. Why should we believe that projections of the all-digital future are more reliable?

## **Faith and Reality**

The raw facts suggested, and continue to suggest, that print media aren't going away. Oddly, that doesn't seem to perturb some of the true digital believers. Perhaps "believers" is the right word for those who still hold to the gospel of an all-digital future. They assert this future because that's the way it must be; real-world evidence is irrelevant.

If you care about real-world evidence, faith in an all-digital future begins to crumble. Technology creates tools. People use tools, and most people don't fall in love with their tools. The all-digital future is a tool-lover's future; it's not one that much interests most people.

## **Tending Toward Complexity**

Life tends toward complexity. That tendency toward complexity may be the single most important reason that the all-digital future makes no sense. The all-digital future is a vastly simplified future.

People like choices. Your choices won't be the same as mine, and there's no reason they should be. Choices include means of delivery as well as what gets delivered; that, too, dooms the all-digital future.

## **THINKING ABOUT MEDIA**

In 1999, using the word "media" in speaking of the future is a political statement. Once we abandon the universal medium, we should consider how each current and new medium works—both in general and for a given library setting. We should also recognize that new technologies can and should create not only new ways to replicate existing media, but entirely new ways of conveying messages: different kinds of media, rather than replacement media. More to the point, new media should support new kinds of messages—new ways to communicate, inform, and entertain. Some of those ways will make sense within library purviews; some won't.

### **Differentiating Media**

There are many ways to differentiate media and their messages—and the differentiations combine in confusing ways. Some of this matters for libraries and librarians, particularly as we consider reformatting for preservation and access—which inherently adds new media and affects the messages carried. For example, media can be differentiated by the level of attention they require or reward, the extent to which they're immersive, the extent to which people contribute to the medium or interact with it, their time dependency, and their immediacy. These factors and many more influence

replaceability—both the feasibility and desirability of moving a medium’s contents to another medium.

### **Addition, Not Replacement**

If we look at both old and new media more carefully, we can see that addition is the rule, not replacement. Consider just three or four of the many new and old media:

- Email is still the heaviest use of the Internet and, in its many permutations, one of the most intriguing “new media.”
- Most books and periodicals aren’t likely to disappear, but some scholars are building new media for scholarly output, media that may suit some of that output better than short-run scholarly monographs and narrow scholarly journals. If these scholars succeed, some of what’s currently published in scholarly monographs and print journals will migrate to new media that do it better and that do things print can’t do.
- The suggestion that Web-delivered audio threatens record companies involves bad hearing and bad economics.

In most cases, new media won’t replace existing media. So why do we get claims of replacement? Briefly, there’s marketing hype; laziness and lack of imagination; a continuing believe in inevitability; a failure to pay attention to people and history; and a narrow view of media.

### **What’s the Point?**

Libraries and librarians should care about these things because libraries deal in messages and meaning. If you’re considering digital replacement, it helps to define a medium clearly before considering whether replacement makes sense. Some messages won’t be affected much by a change in carrier; these may be natural candidates for new distribution methods, if those methods don’t have negative side-effects (such as substantially higher library costs through pay-per-use charging).

### **LIBRARIES, MEDIA AND MEANING**

How do libraries deal with different media? That depends on the library, but there may be some clues in specific media characteristics. Libraries do very well with contemplative and learning-centered media, primarily books. At the other extreme, libraries typically ignore actual broadcast media: few libraries consider radios and television sets to be fundamental to their missions.

Libraries should use whatever medium or resource is best—best for the library’s needs, best for the resources themselves, and best for the users’ preferences. For the foreseeable

future, that means a mix with print collections as a major, perhaps the major, element. It also means a mix that includes library-owned sound recordings, library-owned video in some form, library-owned digital publications, and a changing set of remote resources. It means extending the local collection through local and regional resource-sharing agreements; it means acquiring certain items just in time; and it means providing access online where local collections won't do the job.

### **New Media, New Messages and Meanings**

Digital publishing and distribution, in its many forms, will establish its own niches—indeed, that's been happening for more than a decade. We're already starting to see some interesting digital media: combined or hybrid media. Go into the computer section of any bookstore and you'll see one current hybrid medium: books with CD-ROMs attached to the back jacket. The newest hybrid medium is the online-CD hybrid.

It's one thing to distribute a linear paper digitally, with each reader printing it out for easier reading. But there are new "papers" that aren't linear and can't be printed out in a meaningful way. Web sites and other Internet resources can combine forms and interaction in ways that print can't duplicate; some of these sites offer valuable additions to library resources.

The RLG Union Catalog included more than 50,000 records with electronic access fields in early August 1999. Users can go directly to those resources from the catalog records—and some of those resources would not work as well in print form. Similarly, RLG's Archival Resources service offers scholars the chance to explore thousands of archival finding aids before making travel plans to explore primary information. This new service uses the power of digital access to improve use of rare and unique physical materials.

All these, and many others, are parts of a real future for libraries.

### **Complex Solutions: The Journal Problem**

When someone says that we need a radical solution to the serials problem, they're off to a bad start. There is no serials problem. There is a journal problem, more particularly a journal problem in the fields of science, technology, and medicine, or STM. The problem itself is complex and we can be sure that there's no single or simple solution.

For that matter, we may not be recognizing the problem correctly. Yes, there's an oligarchy of commercial STM publishers, and I don't regard them as either charitable institutions or as particularly pro-library. But another major problem is that academic libraries have done a terrible job of maintaining their support. The amount of funded scholarship done on campuses has risen dramatically; that's one reason there are so many new journals. As more money is spent on developing scholarly output, libraries should

automatically have more money to acquire and organize that output. But it hasn't worked out that way, and that's a big part of the problem.

Many small solutions can help to ease the problem, but none of them scales up readily to a single solution. That's probably appropriate: it's not a simple problem and doesn't lend itself to simple solutions. Fully-digital nonprofit journals should play a role, but so far the track record has been fairly disappointing. I think we need more progress in all of these areas and more besides, recognizing that there just isn't a grand solution.

### **Keeping It: The Archival Dilemma**

If you believe that I don't think digital resources matter, think again. Of course they do, and they will grow in importance. That leads to one of the biggest future problems: making sure that digital resources are available for the next generation of scholars and five generations after that.

This problem is so major that it's one of RLG's primary foci for the next few years. Digital archiving isn't easy and isn't even very well-defined just yet. I'll suggest that a single digital archive is not the solution, partly because one of anything is usually a bad idea where libraries are involved. A distributed archival solution makes more sense, as long as distribution implies some redundancy and doesn't distract from longevity. I can't go a lot further than that, except to say that this is important stuff. I've heard suggestions that, because major library groups recognize digital archiving is important, "somebody" will solve the problem. Wrong. We are that somebody; if we don't solve the problem, it simply won't get solved.

### **Conclusion**

The future means greater complexity: and, not or. For academic libraries, it means consortial tracking and sponsorship of digital collections; it means difficult efforts to assure that just-in-time journal article access (where used) assures long-term availability of historic articles; it means a continuous balancing act among collection development, cooperative access, digital resources, and entirely new ideas and services.

If you're an academic librarian who loves the idea of a neat and tidy all-digital library system, where you don't have to deal with misshelved books, conservation, and limitations on what's right at hand, I can only say: Get over it. The future involves digital and physical, just-in-time and just-in-case, collections and access, the old and the new. That's life.

## Bibliography

I suggest that you go to <http://home.att.net/~walt.crawford>, where my full current bibliography is maintained as part of my Vita. What follows are a few articles and books that may be relevant to this and related topics; in all cases (except as noted), the author is Crawford, Walt.

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