## manager's bookshelf

# W(h)ither Libraries?

### The Future of Libraries, Part 1

**Bonnie A. Osif** 

The report of my death was an exaggeration.

-Mark Twain

Are we, as trustees of the future, intently conscious that the whole curious plexus that we call "civilization" is directly and absolutely dependent upon the existence and availability of books?

-Fremont Rider

There are many scenarios of the future—the future of schools, food, energy, the workplace, and libraries. Many predict a world vastly different than the one we inhabit. Education may be an implanted microchip. Food may be a pill or created in a replicator. Our vehicles may be powered by the sun or vegetation. Work will be from home, or maybe there will be no need for gainful employment. Among several options is the common scenario of the disappearing library. The citadels of paper, recordings, film, and more will be gone. They won't be needed. We'll have the vast realm of knowledge at our fingertips (or at the sound of our voices with voice-activated computers) and everyone will be the reference expert for themselves, easily winnowing through cyberspace to the exact piece of information they need—full text, of course.

But that isn't the view of all. The American Library Association (ALA) poster with the original *Star Trek* cast shows them holding bound books as they stand on the bridge of the Enterprise. While the crew and ship presented an image of the future we still aren't close to attaining, they turned to traditional books periodically. Captain Kirk, in particular, could be found reading print works for pleasure in some of the television shows and movies. So, what is the future of libraries—and of present-day librarians and the staff who work diligently to provide resources for work, study, and pleasure to all? Is this another case, like the quote from Twain, of a death being reported prematurely, or are we in the last throes of anything recognizing a library?

A number of people have written about this future. This column will begin a look at possible futures by first taking a look backward to a few past writers to see what they had to say. Then resources from the last few years will be reviewed for another look at the future of books, databases, libraries, and librarians.

# We may repeat that the library is the "heart of the college," but are we acutely anxious that our assent shall be more than lip service?

Licklider's future is here and to some extent gone. In 1965 he was using the year 2000 as his target for his report on "research on concepts and problems of 'Libraries of the Future'... into the applicability of some of the newer techniques for handling information to what goes at present by the name of library work." So, based on his prognostication, how have we done? Licklider noted that we need to "substitute for the book a device that will make it easy to transmit information without transporting material . . . a meld of library and computer is evidently required."<sup>2</sup> He details a number of important criteria that can be summed up as a new, detailed organizational schema, convenient input and output, collaboration, elimination of conflicting terminologies and symbologies, ability to adjust to the needs and sophistication of each user, ability to record user activities, and the ability to handle computer operations, programming, and so forth efficiently.

The second half of the book details studies that were done during the time of the "Libraries of the Future" project. These included studies on natural-language analysis, information retrieval effectiveness, and user-computer interaction. In sum, for some of the topics covered, the future is here and maybe even advanced beyond what he envisioned. Others are still in process and for some it would appear that there are complicating issues not clearly



**Bonnie A. Osif** (bao2@psu.edu) is Assistant Engineering Librarian at Pennsylvania State University in University Park.

22, no. 1 Winter 2008 49

foreseen in 1965. For example, copyright and patron privacy are of greater concern now. Overall, it seems we have advanced in quantum leaps past what was envisioned even by this noted, forward-thinking computer engineer. This is an interesting book to scan for what was thought possible and what was predicted. It is also very encouraging to see how far we have come. Not necessary reading, but recommended for those with an interest in a backwards look at the future.

Lancaster's book is cited often.<sup>3</sup> The paperless society has never happened; quite the contrary, it seems we are drowning in paper. However, the book is still very interesting for its views of the future. He recognized that libraries do not need to be "physical entities bounded by walls" consisting "of whatever resources the librarians have the wit to exploit from those available in the global information network." He states the major tasks of librarians will be indexing and abstracting primary literature, creation of taxonomies, and training.

One last look back several decades is Rider's *The Scholar and the Future of the Research Library*.<sup>5</sup> Scan it for a look when growth was measured in shelf space and micro-cards and the idea of library cooperation were new! Not necessary reading but interesting and written by a person whose writing indicated he loved being a librarian.

Coyle provides an insightful review of some of the early library futurists in her 2006 article. She summarizes predictions of F. W. Lancaster, Marjorie Griffin, J. C. R. Licklider, Eugene Garfield, Frederick G. Kilgour, and more, and notes how many things they actually predicted correctly—computer storage, digitization, word processing, regional catalogs and interlibrary loan, open catalogs, and hypertext. They missed on intellectual property issues, self-service information retrieval, and the movement of information out of the library. It is a great summary and very good introduction to the topic.

Sapp provides a useful bibliography with clear annotations of essays, editorials, addresses, and thought pieces, and some surveys through 1999.7 Each section includes a very good overview essay that grounds the bibliographies in historical and philosophical perspective. His preface is excellent. He summarizes two views of the future of libraries. The cautionary view can be summarized as: "libraries will become increasingly less relevant in the age of electronic information, libraries will receive less and less funding support, information will be controlled by the elite few, librarianship as a profession will cease to exist, ultimately, libraries and the principles they stand for will vanish."8 Contrast this with the visionary perspective: "libraries will provide for all information needs, libraries will prosper in an era in which their services are more highly valued, libraries will champion information rights, librarians will be recognized as the consummate information professionals in society, libraries will thrive." Bibliographies normally aren't read cover to cover but definitely read the essays at the beginning of the chapters and use the book for a guide to the literature for the covered time period.

### Do we have a really compelling conviction that on the richness of the blood stream of books constantly flowing through its heart the vitality of every college depends?

Mandatory reading for all librarians and individuals interested in the future of libraries, *Perceptions of Libraries* and Information Resources, OCLC Online Computer Library Center's long report is actually not heavy reading as it has a large collection of tables and charts that help to summarize the wealth of information gathered. 10 The introduction quotes the 2003 OCLC Environmental Scan: Pattern Recognition's introduction, which stated: "It has become increasingly difficult to characterize and describe the purpose of using libraries . . . the relationships among the information professional, the user and the content have changed and continue to change." 11 And that continues to be true. This report presents survey data concerning library use, familiarity with resources, and perceptions of library missions and purpose. The results are summarized and discussed in four parts: Libraries and Information Sources—Use, Familiarity and Favorability; Using the Library-In Person and Online; The Library Brand; Respondents' Advice to Libraries; and Libraries-A "Universal" Brand. This is absolute must reading, especially the respondents' advice to libraries. The OCLC White Paper on the Information Habits of College Students (www5.oclc.org/downloads/community/informationhabits.pdf ) also may be of interest.

For a brief look that refers to the *OCLC Environmental Scan*, read Martin's article.<sup>12</sup> He notes the need to move from a perspective of information to knowledge and learning. The social aspects of the libraries and the role of "seamless learning infrastructure for learning across all the social agencies and organizations that create, maintain, and provide access to resources that support learning" is crucial.<sup>13</sup> He notes if we don't do this, someone else will. For a more complete look at his thesis, see "Libraries and Learning" in *Advances in Librarianship*.<sup>14</sup>

Some still remember the library described in the beginning of Nelson's article: "The library was a place for serious study and quiet reflection. . . . The card catalog was an arcane system to be mastered to find needed information. . . . Literature searches were preformed only by librarians. . . . The ideal library was a big building with large holdings." <sup>15</sup> Well, things have changed from those days. Actually, Nelson points out that change is constant and fast in our information world. There is a great deal of practical information in this article. She reaffirms the importance of flexible space, keeping current with the new technologies being used by patrons, increasing digital access, as well as consideration of personal preferences and needs in physical arrangements. This is a good, practical summary article worth reading.

Few have summarized the landscape better and more succinctly than Campbell. <sup>16</sup> He writes:

Academic libraries today are complex institutions with multiple roles and a host of related operations and services over the years. Yet their fundamental purpose has remained the same: to provide access to trustworthy, authoritative knowledge. Consequently, academic libraries . . . have long stood unchallenged. . . . Today, however, the library is relinquishing its place as the top source of inquiry. <sup>17</sup>

He continues with a discussion of the increase in digital products, but concludes that "even a revolution as rapid as this still requires a transition period—during which current library operations remain necessary." However, even when that transition is over, there is a strong role for libraries in providing a learning space and reference services (be they physical or virtual), the need for new views of metadata, new views of collections morphing into more licensing issues than physical purchases, and an increase in digitizing and maintenance of the wealth of archival, unique, and local resources.

Lachance has written a fast-reading paper on professional changes needed to thrive in the new information environment. The Special Libraries Association's Competencies for Information Professionals are summarized. Believing strongly that "information professionals are needed more than ever to qualify, analyze, filter, and deliver needed information in an actionable form" she notes that the competencies provide pertinent guidance to managers. Complete online access to the competencies is available at www.sla .org/content/learn/comp2003/index.cfm.

While basically a review of what vendors are doing, Pace's column provided some encouraging insights.<sup>21</sup> Pace states that he is "optimistic when it comes to the future of libraries, especially digital libraries."<sup>22</sup> Also, "What distinguishes libraries is not only a more altruistic outlook toward serving patrons, but ultimately a deep respect for valuable content."<sup>23</sup> One of the most encouraging statements supporting libraries is toward the end of this short column:

Some library prognosticators do see the glass half-empty—a virtual Dark Ages in which the prolific nature of our digital creativity is essentially hidden from future generations or doomed by a lack of good metadata or long-term preservation. I remain optimistic that librarians are the curators of a digital renaissance that has already begun. We are an essential part of, not superfluous to, the digital library of the future.<sup>24</sup>

Marcum provides personal perspective of what the future of libraries would be, some of which is definitely in

play now.<sup>25</sup> The characteristics crucial to the new library include comprehensive resources that are readily accessible and managed and maintained by professionals. She reviews issues that need to be addressed—digitization, organization, copyright, financial issues, collaborations, and more. This is an interesting article, especially from the "distant" past of 2003.

Are we, as educational pathologists continually on the alert that our libraries shall not be attacked by that insidiously fatal disease, bibliographical pernicious anemia?

Quint's columns usually give us something to think about and her digital library column continues in that tradition.<sup>26</sup> Several quotes can easily begin a discussion of the roles and future of libraries and librarians.

Keep believing that the world cannot do without you, that your archival holdings are sturdy vessels that will keep you afloat. . . . But more than anything, focus your efforts on building services that identify, track, archive, access, and promote Web- or Net-based scholarship. . . . That's the marketplace . . . we feel drawn to more and more. . . . We need vision, imagination, a sense of mission, and endless flexibility in means to reach goals set in iron.<sup>27</sup>

The last statement might well be emblazoned over office doors. The challenges are real but librarians can meet all of them.

Schuler's editorial discusses the changes in dissemination of government documents and the implications for libraries. Moving from paper copies in a network of depository libraries to electronic, public access has resulted in rethinking the role of these libraries in archiving records. Service to the public about the resources still remains a primary concern. While written about government documents, the editorial provides a great deal to consider for other disciplines. Who should collect all editions of standards, manuals, or guidelines? Who should collect curricula and textbooks? How should this be organized? He states:

The World Wide Web does not eliminate the need for librarians. It is just another form of information distribution . . . librarians must learn to develop an evolved form of "predictive expertise" that anticipates where public information might shift and change. . . . The digital networks refurbish and recast these "containers" in dozens of ways that speak more to the in-formation needs of communities and audiences that seek the information, and less to the bibliographic traditions of librarians.<sup>29</sup>

This piece is an interesting discussion starter.

With the anecdotes of decreasing gate counts and Google as a first resource, it is interesting to read the article

22, no. 1 Winter 2008 51

by Shill and Tonner on facility usage patterns after major library renovations or building projects. <sup>30</sup> In general, they find most libraries have increased usage. In addition, they find that things like work space, layout, HVAC, ambience, and computer access matter to users, while some others such as campus location, cybercafés, and study rooms don't show a correlation. They conclude their paper with implications for further research that are very pertinent: role of increased e-resources, increased types of room usage, student attitudes toward the physical library, curriculum changes, role of the information commons, and more. This is definitely an important article and worth a look.

Bennett reviews three approaches to addressing the "Conundrum of investing simultaneously in both the highly dynamic virtual space of information technology and the comparatively static physical space of bricks and mortar."31 First is the service and instructional approach which can be summarized as space and services redone to address the new technological and information needs of the users. This partnership and collaboration was studied by institutions that have "consciously created spaces designed to bring together some combination of librarians, information technologists, student services staff, and possibly other academic support staff-all in support of student learning."32 Second is marketing, an approach that considers the library users as customers and uses marketing techniques to study what is important to the users. Last is the mission-based approach. Bennett describes this as focused on "the institutional mission that brings students, faculty, and academic staff together in the first place. This approach could identify specific learning behaviors that students and faculty say are important and design spaces that foster such of these behaviors as advance the education mission of the college or university."33 A good review of research, clear writing, and wonderful summary tables illustrate a critical topic.

Library Trends summer 2004 issue was devoted to organizational development (OD) and leadership. Stephens and Russell provide several definitions of OD including:

a long-term effort, led and supported by top management, to improve an organization's visioning, empowerment, learning, and problem-solving processes, through an ongoing, collaborative management of organization culture with special emphasis on the culture of intact work teams and other teams configuration.<sup>34</sup>

The process is summarized as creating and fostering a healthy organization, monitoring the organization for problems, identifying and diagnosing an issue and determining if action is needed to correct the issue, implementing appropriate action, evaluating results, and intervening again if necessary. This can help the library to address and adapt to change and better position themselves for the future. They state:

Libraries exist to serve users in a fluid environment of evolving expectations, technological influences, and institutional imperatives. As organizations, libraries have always understood their unique role in society and in their parent institutions—always with the mission to serve regardless of the environment. The rapid pace of environmental change requires that libraries become more adept at forecasting the future and in redefining and redesigning themselves organizationally to meet new and sometimes daunting challenges."<sup>35</sup>

If you're interested in organizational development, this article will be a good introduction.

Are we as teachers shadowed by a pressing apprehension lest our instructional ability wither and die for lack of that continual revivification that only books can give it?

Inspired by the appointment of a non-librarian as the new state librarian in the State Library of New South Wales, Australia, O'Connor summarizes the thoughts of Howard Gardner's multiple intelligences, Alistair Mant's leadership ideas, innovation ideas of Eric Von Hippel, and Geoffrey Moore's ideas about technology, and pulls them all together to address the libraries' need to use change, their different intelligences, heretical thoughts, and creativity "in creating the exciting library of the future." The summaries of these other authors may very well inspire you to spend a long weekend exploring their books and articles.

Stoffle has written several papers on the future of libraries. In 2003 she coauthored an article that examines economics, competition, and accountability as it pertains to libraries.<sup>37</sup> Economics is part of our everyday life with both level or falling budgets and increasing costs. Libraries deal with competition from Google and online fee-service reference services. While these pressure the library from one direction, there are also increased calls for accountability and measurement of learning outcomes in the other direction. The authors discuss a number of organizational issues. Librarians have historically gathered data but need to learn to analyze the data for assessment purposes. They cite Jim Neal who "proposes that libraries must reposition themselves to pursue opportunity without regard to the resources currently controlled; in effect, become entrepreneurial organizations."38 Technology has changed the roles

and skills of librarians and staff and each new innovation can have far-reaching and possibly unexpected implications. Logically following a discussion of technology is one of the rapid changes that occur in libraries, what Roy Tennant has called "zooming," and the need to build organizations where "change is second nature." 39 The future as it pertains to personnel will include new competencies, increased diversity, salary considerations (as there will be competition for skilled people), and the need for "values statement and regular values discussions among staff to guide actions before problems arise or decisions have to be made."40 "The values and philosophical framework that librarians bring to information issues sets us apart from other information professionals."41 Other issues reviewed include collections and knowledge management, library as publisher/access systems creator, and instructional services. This should be read by all and the bibliography used for additional reading.

Budd bases his article on A Test of Leadership: Charting the Future of U.S. Higher Education, commissioned by the U.S. Department of Education. 42 The article is a critical evaluation of that report as it pertains to libraries. Some of the issues addressed include access to higher education by all, affordability, cost increases, and inefficiencies in operations. In the discussion Budd notes the need for innovation, which can be costly but is critical. He notes "Learning, as an endeavor, is a phenomenon of the self; the person seeks information that can be transformed into knowledge" and this benefits society.43 Faculty teaching loads, the role of tenure-track, and full-time faculty are discussed, as well as the role of the library. He notes the importance of librarians to the learning process, yet, "only as a systemic, consistent, and timely connection is made with the faculty."44 This is process that takes time, effort, and some level of stability in staffing. Another comment concerns the misunderstanding of costs. He notes the report misses the fact that costs are not independent of other aspects of education. For example, technology that is considered a capital expense may actually benefit students. He concludes with the recommendation that the report is an excellent opportunity for the higher education community and libraries to present considered discussion on the future of higher education and address the shortcomings of the report. This is very worthwhile reading and might be a good discussion starter for a brown-bag session.

It might be interesting to reconsider or rephrase the headers in this column. Is the library still the heart of the college, physically or virtually? Is the vitality of the college dependent on the wealth of resources flowing from the library? Are we aware of, or concerned with, quality information anemia? And are books the only source of reviving us—and others? Has the demise of the library been reported prematurely? The topic of the future of libraries is

too important, not just to those of us who make our livelihood in the library, but to the greater world. We'll continue our look at the topic in my next column.

Author's note: All italicized headings are from Fremont Rider, The Scholar and the Future of the Research Library (New York: Hadham Pr., 1944).

#### References

- J. C. R. Licklider, Libraries of the Future (Cambridge, Mass.: M.I.T. Pr., 1965): v.
- 2. Ibid., 6.
- 3. F. W. Lancaster, *Toward Paperless Information Systems* (New York: Academic Pr., 1978).
- 4. Ibid., 158-159.
- Rider, The Scholar and the Future of the Research Library.
- Karen Coyle, "Managing Technology: The Future of Library Systems, Seen from the Past," *Journal of Academic Librari*anship 33, no. 1 (Jan. 2007): 138-40.
- Gregg Sapp, A Brief History of the Future of Libraries: An Annotated Bibliography (Lanham, Md.: Scarecrow, 2002).
- 8. Ibid., vi.
- 9. Ibid., vii.
- OCLC Online Computer Library Center, Perceptions of Libraries and Information Resources: A Report to the OCLC Membership (Dublin, Ohio: OCLC Online Computer Library Center, Inc., 2005).
- 11. Ibid., vii.
- Robert S. Martin, "Libraries and Librarians in the 21st Century," *College and Research Libraries News* 65, no. 11 (Dec. 2004): 668–71.
- 13. Ibid., 668.
- Robert S. Martin, "Libraries and Learning," Advances in Librarianship 28 (Amsterdam: Elsevier Academic Pr., 2004).
- Patricia P. Nelson, "Current Issues in the Design of Academic Health Science Libraries: Findings from Three Recent Facility Projects," *Journal of the Medical Library Association* 91, no. 3 (July 2003): 347.
- Jerry D. Campbell, "Changing a Cultural Icon: The Academic Library as a Virtual Destination," *EDUCAUSE Review* 41, no. 1 (Jan./Feb. 2006): 16–30.
- 17. Ibid., 16.
- 18. Ibid., 20.
- Janice R. Lachance, "Beyond Competencies: the Journal from Relevance to Mission-Critical," *Online Information* 2004 (Oxford, England: Learned Information Europe, 2004): 131–36.
- 20. Ibid., 133.
- 21. Andrew K. Pace, "Technically Speaking: Is This the Renaissance or the Dark Ages?" *American Libraries* 37, no. 1 (Jan. 2006): 77–78.
- 22. Ibid., 77.
- 23. Ibid., 77.
- 24. Ibid., 78.

22, no. 1 Winter 2008 53

- Deanna Marcum, "Requirements for the Future Digital Library," *Journal of Academic Librarianship* 29, no. 5 (Sept. 2003): 276–79.
- Barbara Quint, "Quint's Online: The Digital Library of the Future," *Information Today* 19, no. 7 (Jul/Aug. 2002): 8, 10, 12.
- 27. Ibid., 10.
- 28. John A. Shuler, "Editorial: Informing the Nation: The Future of Librarianship and Government Information Service," *Government Information Quarterly* 22, no. 2 (2005): 146–50.
- 29. Ibid., 149.
- Harold B. Shill and Shawn Tonner, "Does the Building Still Matter? Usage Patterns in New, Expanded, and Renovated Libraries, 1995–2002," *College and Research Libraries* 65, no. 2 (Mar. 2004): 123–50.
- 31. Scott Bennett, "Designing for Uncertainty: Three Approaches," *Journal of Academic Librarianship* 33, no. 2 (Mar. 2007): 166.
- 32. Ibid., 166.

- 33. Ibid., 171.
- Denise Stephens and Keith Russell, "Organizational Development, Leadership, Change, and the Future of Libraries," Library Trends 52, no. 1 (Summer 2004): 241.
- 35. Ibid., 253.
- 36. Steve O'Connor, "The Heretical Library Manager for the Future," *Information Outlook* 11, no. 3 (Mar. 2007): 16.
- 37. Carla J. Stoffle et al., "Continuing to Build the Future: Academic Libraries and Their Challenges," *portal: Libraries and the Academy* 3, no. 3 (2003): 363–80.
- 38. Ibid., 368.
- 39. Ibid., 371.
- 40. Ibid., 374.
- 41. Ibid., 375.
- 42. John M. Budd, "The Spellings Commission: Challenges to Higher Education and Academic Libraries" *portal: Libraries and the Academy* 7, no. 2 (2007): 137-46.
- 43. Ibid., 142.
- 44. Ibid., 143.

### TRUTH continued from page 48

- Are we addressing the "attitude" competencies enough? At all? Or are we just focusing on knowledge, skills, and abilities?
- Are managers expecting more of employees than they are of themselves? If so, is that acceptable? Do managers have to know all that their employees know?

My guess is at every juncture of our professional history managers have struggled with these same questions. When we got the first high-speed microfilm readers, was everyone supportive? Our first floppy data disk from our

citation-only "database" came and went relatively quickly. Did we angst over needing to install other drives? When we went from 5.25 to 3.5? Or towers? Or LANs? Why are our questions harder now than they were then?

There is small comfort, however, in knowing that "we've always had these or similar questions" when we are struggling to address so many questions at one time now. As we narrow in and focus down and as the world of work comes rushing up to meet us, we must—at the very least—recognize that it is our garbage can after all.