Libraries at the Crossroads
Technology, Policy, Economics and Culture

Forum on the Future of Libraries
Lisa Spiro and Geneva Henry
July 21, 2010
Recent Conferences on the Future of Libraries

1. Living Digital: The **Future** of Information & the Role of the Library
2. And Now for Something Completely Different: Our **Future** from Outside the Box
3. Living the **Future**
4. **Future** of Libraries
5. Navigating the New: Charting the **Future** Together
6. Libraries of the **Future**
7. Where Tradition Meets Transformation
8. The **Future** of Libraries, Part III: Embracing the Invisible Customer
9. Digital **Futures**: From Digitization to Delivery
10. Reference Evolution: Envisioning the **Future**, Remembering the Past
11. A Reference Renaissance 2010: Inventing the **Future**
12. Crosswalks to the **Future**: Library Metadata on the Move
13. When the Books Leave the Building: The **Future** of Research Libraries, Collections and Services
Recent Books about the Future of Libraries

1. Self-examination: the present and future of librarianship
2. Access, delivery, performance: the future of libraries without walls
3. Digital convergence: libraries of the future
4. The impact of electronic publishing: the future for publishers and librarians
5. Joint-use libraries: libraries for the future
6. Surviving the future: academic libraries, quality, and assessment
7. Future concepts of library & information services: changes, challenges and role of library professionals
When Was This Said?

“The ideal public library of the future will not only be a warehouse of books ... but a realization of a people's university”

a. In the last year
b. In the last 10 years
c. In the last 50 years
d. In the last 100 years
e. In the last 150 years

Lewis M. Steiner, Enoch Pratt Library, 1890
The Continuity of Libraries

“The future of libraries is about content and community”

Pratt Library CEO Carla D. Hayden, 2010

Enoch Pratt Free Library
http://www.flickr.com/photos/eekim/454801426/
Why Are We So Obsessed with the Future?

http://www.flickr.com/photos/35378394@N03/3280622749/
<table>
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<tr>
<th>THEN</th>
<th>NOW</th>
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<tr>
<td>Resources Scarce</td>
<td>Attention Scarce</td>
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<tr>
<td>Attention Abundant</td>
<td>Resources Abundant</td>
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Library as intermediary

Many sources of information

Lorcan Dempsey in “Libraries of the Future”
Is There Anything New Left to Say about the Future of Libraries?

http://www.flickr.com/photos/photojonny/2268845904/
Re-framing the Question

If you were to open a new research library, how would you approach building the collections?

See our study “Can a New Research Library be All-Digital?”, in *The Idea of Order: Transforming Research Collections for 21st Century Scholarship* (CLIR 2010)

- Synthesis of recent studies on print to digital transition
- Analysis of 6 academic libraries opened since 2000, plus 1 new one

http://clir.org/pubs/abstract/pub147abst.html
Roadmap for Our Talk

- Challenges in Transition to Digital
- Lessons Learned from New Libraries
- Scenarios for the Future of the Library

http://www.flickr.com/photos/electrichamster/96531540/
Environment of Constant Change

It’s difficult to make definitive statements because of ongoing changes in:

- Content
- Technologies
- Policies
- Costs
- Culture

How do you make decisions given such flux?

http://www.flickr.com/photos/ferran-jorda/2168701818/
"Finally, I suggest you burn down the library. All the books in the world are already **digitized**! Burn the thing down. Change it into a gathering place; a digital commons. Stop air conditioning the books!"

*Arizona State University Technology Officer*  
Adrian Sannier, 2008
Most Library Purchases Are Not Yet Available as eBooks (2006-7)

~70% not available electronically

Jason Price and John McDonald, “To supersede or supplement: profiling aggregator e-book collections vs. our print collections,” November 6, 2008
Momentum Toward Adoption of Ebooks

- 2009 e-book sales up 173.9%
- Ebooks now outsell hardcover at Amazon
- Ebooks will sell more than print in next 5 years (Sony executive)
- When (if) Google Books case is settled, over 12 million books will be available

Are readers ready to embrace ebooks?

http://www.flickr.com/photos/43602175@N06/4070018686/
How People Read (Digitally)

NetLibrary

enTourage eDGe

Kindle 2

http://www.flickr.com/photos/pitmanra/4486630439/

iPad
Are Researchers Ready to Embrace E-Books?

- Ithaka’s 2009 survey of faculty:
  - fewer than 20% view ebooks as “very important” for teaching or research
  - 31% think ebooks will be valuable in 5 yrs
- But researchers’ attitudes can change (cf. e-journals, e-mail, mobile phones)
Digital Rights Management (DRM) Limits Usage

- For libraries:
  - Most e-books are licensed rather than owned
  - Concerns about long-term access to subscription materials
  - Interlibrary loan of licensed e-books is still very murky
  - If downloads are allowed, not all devices are supported

- For readers:
  - DRM imposes limitations on what readers want to do, e.g. copying & pasting, printing, accessing on multiple devices, etc.
  - Concerns about privacy & ownership, e.g. Amazon’s Orwellian behavior
Do Libraries Feel Comfortable with Transition to Digital?
The Difficulty of Integrating E-books into Library Workflows

- “evolving” environment (ARL Survey)
- 80% of librarians responding to 2007 eBrary survey found e-book acquisitions models confusing.
- Heterogeneity of:
  - Business models (lease or buy?)
  - Licenses
  - Formats and standards
  - DRM schemes
- Concern about long-term access
What Are the Costs?

http://www.flickr.com/photos/twcollins/751221191/
Economics

• Library’s role as a public good, serving as an intermediary in support of scholarship
• Budget is generally one of the highest – if not the highest – on research university campuses
  ◦ Median overall budget of ARL libraries in 2008: $24.8M
  ◦ Median materials budget: $10.5M
  ◦ Average number of staff: 260
  ◦ Median E-materials expenditure: $5.4M (53% of total materials expenditure)
Cyberinfrastructure costs

hardware + software + services + research + education
Technology Considerations
Costs associated with high levels of staffing can shift
Many services can be provided virtually
Staffing profile will change: fewer staff, but higher salaries (programmers, computer scientists, informatics researchers, data curators)
Collaborative experiments already underway (2CUL, shared print, shared bibliographic services)
Collection development of e-resources may be better achieved by aggregators than local staff
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<td>25.02</td>
<td>31.33</td>
<td>37.46</td>
<td>40.93</td>
<td>46.55</td>
<td>51.46</td>
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<td><strong>Median</strong></td>
<td>22.01</td>
<td>29.81</td>
<td>37.53</td>
<td>43.14</td>
<td>47.68</td>
<td>53.06</td>
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<td><strong>N</strong></td>
<td>111</td>
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*Median Monograph and Serial Expenditures in ARL Libraries, 1986–2008*


Can we guarantee long-term access to content?

http://www.flickr.com/photos/audunv/4585691248/
“The best preservation system ever invented was the old-fashioned, pre-modern book.” (Robert Darnton)

Technical Issues:
- Hardware
- File formats

Social Issues:
- Who has responsibility for preservation?
- Who will pay?
- How can we trust custodians of information?
Digital Preservation Research

- Solutions to digital preservation do not exist in a final form
- Challenging research questions still addressing preservation of formats, media and information
- Research projects leading to emerging standards and practices (e.g. PLANETS)
- Libraries and funders need to acknowledge the necessary investment
Some Libraries Are Already Going Mostly Digital....

- Cushing Academy
- Stanford Engineering Library
- Welch Medical Library, Johns Hopkins

http://www.flickr.com/photos/ajc1/3239062434/
In 2009, cut collection from 20,000 to 8000 books (ultimately 1000)
Offers almost 200 e-ink readers
Goal: “We wanted to create a library that reflected the reality of how students do research and fostered what they do -- one that went beyond the stacks and embraced the digital future”
Results: The library is “the most-used space on campus, with collaborative learning areas equipped with smart boards, sections for quiet study, and screens for data feeds from research sites”

http://www.cushing.org/library
Stanford Physics and Engineering Library

- New library only has 10,000 p-books (85% reduction in collection)
- Offers “brainstorm islands, a digital bulletin board and group event space.”

http://lib.stanford.edu/engineering-library/2010-new-engineering-library-odyssey
Lessons Learned from New Academic Libraries

Broome Library, CSU-Channel Islands
http://www.flickr.com/photos/rittenburg/2733973716/
Libraries We Examined

- UC Merced (Opened in 2005)
- CSU Channel Islands (2002)
- Soka University (2001)
- Arizona Health Sciences Library-Phoenix (2007)
- NYU-Abu Dhabi (2010)
1. Define and support the core mission

- Ask the right questions
  - Merced: Not “where is the reference desk going to be?” but “how are we going to provide reference services?”
  - Olin: “Does this work well electronically or do they need it in tactile form? What makes sense now?”
- Match collections to priorities
  - Olin: Realia collection

http://www.flickr.com/photos/oskay/265899784/
2. Be flexible in delivering information

- “Container-neutral” policy: get information to patrons in the most appropriate format
- Just-in-time rather than just-in-case collections
- Adopting e-journals frees up space & staff time
  - Less processing, cataloging & acquisitions work
  - More space for other purposes, e.g. collaborative areas

http://www.flickr.com/photos/mtsulibrary/2628491132/

http://www.flickr.com/photos/cdnphoto/4017025367/
3. Collaborate with other institutions

- If you’re starting up an academic library, “you better have a good consortium” (Steve Stratton, CSU-CI)
- UC Merced holds about 80,000 print books (600,000 digital books), but it offers rapid access to 34+ million volumes in the UC system
- Consortial licensing
- Shared repositories
- Shared collections
- Shared responsibility for preservation
- Knowledge sharing
4. Develop new service models

- “Libraries will be services-based organizations and not collections-based any more” (Price & McDonald)
- Design services to support institutional needs
  - A.T. Still: Evidence-based medicine
- Plans for NYU-Abu Dhabi Library:
  - Support for analyzing & organizing information
  - Scholarly communication
- Other libraries:
  - Curating data
  - Producing multimedia
  - Community events
5. Re-imagine librarian roles

- CSU Channel Islands
  - all staff work at reference & circ desk, resulting in greater collaboration and common focus on service

- UC Merced
  - “user communication and instruction librarian” rather than reference librarian; team collection-development model

- Olin
  - small staff means everyone has multiple roles
6. Create versatile, engaging spaces for collaboration and reflection

- Library as “third space” supporting collaboration & interaction
- Flexible, configurable
- Technology support, from wireless to special displays
- Special programming for the community
- Libraries as “nerve-center of the community” (Futurist Thomas Frey)

UC Merced Library
The Results? Service Matters

- When people first enter the library, they may be surprised by its small size and lack of books, but “most people know that it’s much bigger than it looks.” (Jacque Doyle, Arizona Health Sciences Library-Phoenix)
- “It’s all about service. I’ve not found anything on the downside to being digital.” (Steve Stratton, CSU-CI)
- Researchers “don’t need to know how we do it, but whether they are getting what they need, and they are.” (Bruce Miller, UC-Merced)

Scenarios for the Future of Libraries, 2030
1. Silent Spring

- The Context:
  - Climate change terrible
  - Focus on sustainability and local communities; IT less important
  - People reject mobile phones for landlines (more healthy, better able to deal with power blackouts)

- Libraries’ Roles:
  - E-books are rejected b/c of energy, concerns about “outsourcing” the mind
  - Libraries become “local information hubs”; central to community
2. How Buildings Learn

- The Context:
  - Fast-paced, global
  - Unease because of information overload
  - Information is co-created
  - People yearn for physical objects
- Libraries’ Roles:
  - Libraries as “urban hubs” and refuge
  - People turn to libraries for reliable information
  - Librarians as information navigators and content creators
3. Neuromancer

- **The Context:**
  - High anxiety because of rapid changes in technology and information; chaotic
  - Energy and bandwidth in high demand/low supply; Internet brownouts
  - Corporate control of information

- **Libraries’ Roles:**
  - Libraries offer access to info for those who can’t otherwise afford it
  - Libraries provide respite
  - Declining staff and funding for libraries
4. Fahrenheit 451

- The Context:
  - “post-literate” world focused on digital information
  - Fast-paced, global
  - Technology as savoir; smart filters on information
- Libraries’ Roles:
  - Niche role
  - Public libraries struggle to find relevance, since people can access info online and buy cheap e-books
  - Libraries offer leisure services like “mental health gyms” and screening rooms to compete, but most library visits are virtual
Which Scenario Seems Most Plausible?

- Silent Spring
- How Buildings Learn
- Neuromancer
- Fahrenheit 451
Towards a Conclusion

- We are in the middle of a transition from print to digital
- Libraries face challenges (or opportunities) to
  - Provide access to information
  - Build community
  - Support knowledge creation
  - Preserve information
- Libraries must plan and adapt

http://www.flickr.com/photos/vermininc/2337307518/
What is the future of....

- Community Relations
- Cataloging
- Collection Development
- E-Books
- Reference
- Librarians in Community Colleges
- Mobile Technologies

Discuss at the roundtables
Resources on the Future of Libraries

- This presentation is available at http://scholarship.rice.edu/handle/1911/27212
Questions? Suggestions?

http://www.flickr.com/photos/valeriebb/3006348550/