DIGITAL RESOURCES IN THE LIBRARY

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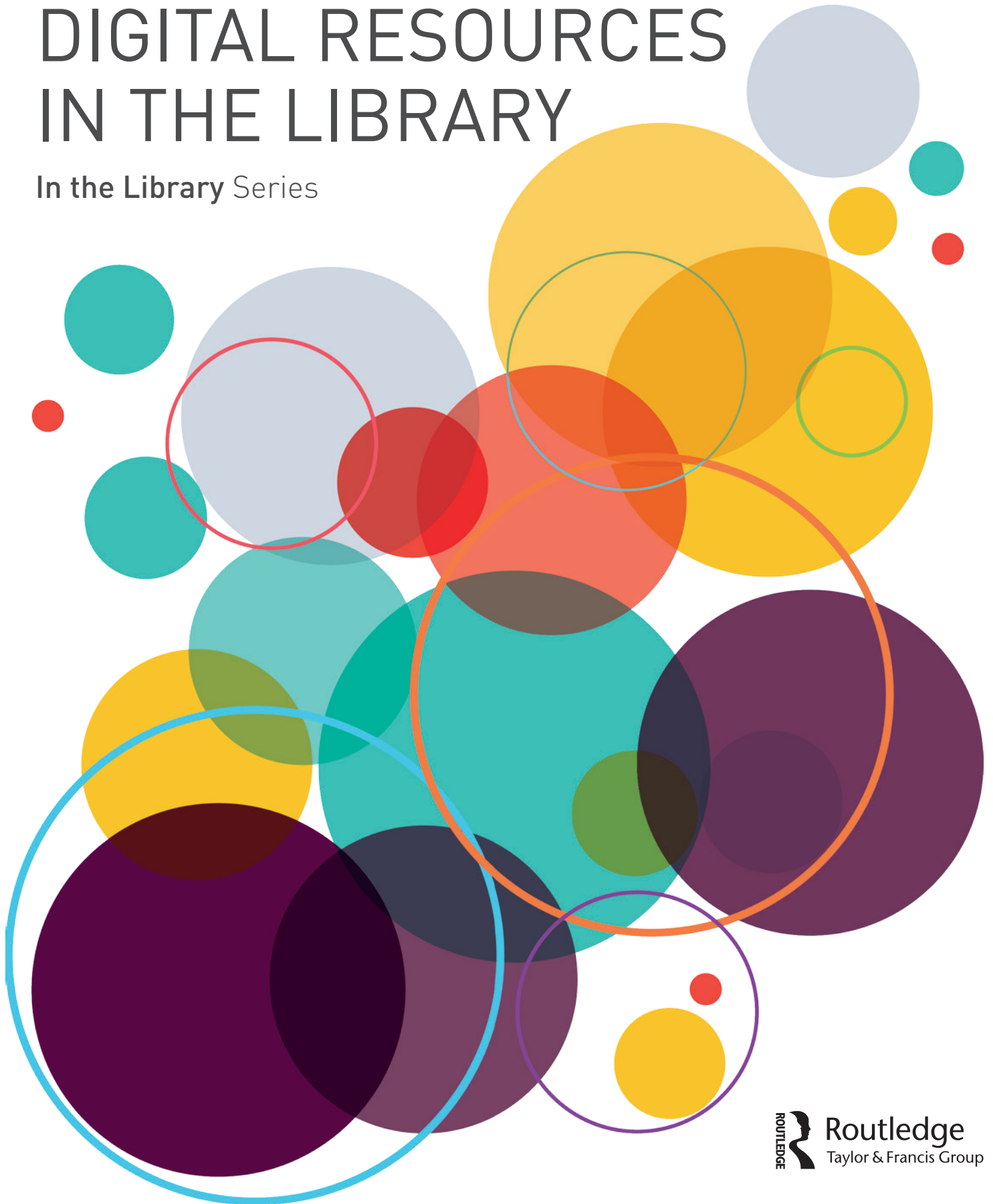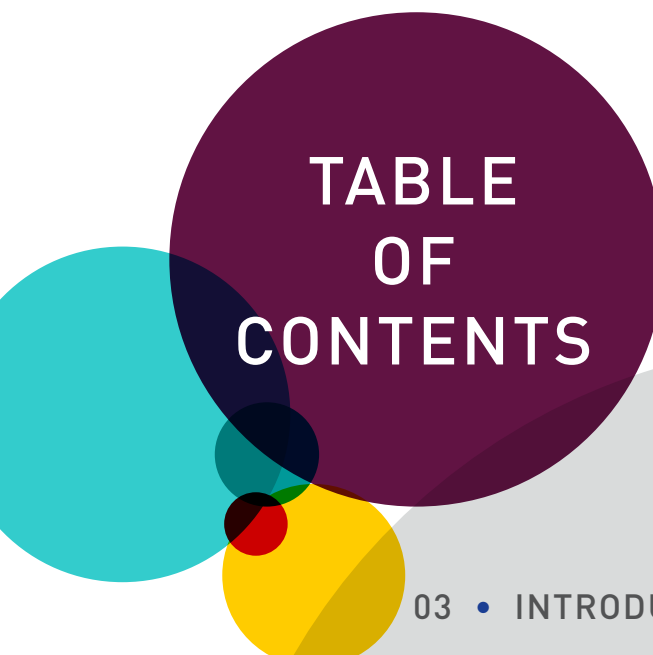
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INTRODUCTION

Print and digital resources can have creative and interesting relationships; they don't need to reside in separate worlds, leaving libraries to promote their combined use. This FreeBook thus provides library practitioners and students of Library and Information Science (LIS) with an exploration of the collective use of print and digital to style libraries as the key players in the academic world of the future, and the digital age – all of which is in light of Digital Resources in the Library.
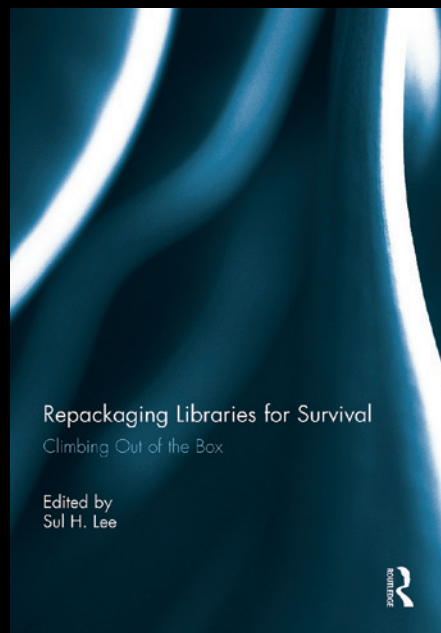
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FINDING SYNERGIES BETWEEN PRINT CONTENT AND DIGITAL INFORMATION

By Joan K. Lippincott

SUMMARY

Print and digital resources can have creative and interesting relationships; they do not need to reside in separate worlds. Libraries can play a role in working with faculty and students in promoting use of print resources to create new digital products and can be partners in creating learning objects that incorporate primary source materials from the library. Librarians can use the digital environment to create exhibits, displays, and community activities that encourage the use of print materials from the library. These are some of the synergies that can be promoted through the combined use of print and digital resources.

KEYWORDS

- Internet
- Digitization
- Digital environment
- Digital libraries
- Primary sources
- Promotion

INTRODUCTION

Print and digital resources can do much more than just coexist in libraries. There are many opportunities for libraries to develop creative linkages between traditional print resources and Internet resources and services, and each can leverage the exposure and use of the other. Typically, librarians think of print resources and Internet resources as two categories of information that either have totally separate identities and associated services or are related only when a digital resource has a direct Internet counterpart, as is the case with many journals. When librarians approach digitization projects, a major, and sometimes sole emphasis is on how to develop the

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most accurate digital representation of a print resource (such as a book, journal article, or manuscript) rather than envisioning, in addition, the broader opportunities of the digital environment. This paper explores the kinds of creative synergies between print resources and digital projects that are being developed or could be developed by librarians, faculty, students, and others.

One of the key purposes that libraries serve is to provide the re sources, access, and environment for people to pursue their interests. In academe, this means that the library provides resources for faculty members' research and teaching and for students' learning related to coursework and to their general interests. How can libraries do a better job of encouraging members of their user community to take advantage of the rich resources, both in print and digital form, that the library offers as they pursue their academic work? Some of the answers lie in promoting the synergies between the print and digital realms. Exposing more users and potential users to the rich resources of the library, assisting users with creating new digital products based on print resources, and providing print resources that extend the learning experiences of online environments, are all strategies that promote the educational mission of universities.

SUPPORTING FACULTY RESEARCH AND CREATIVITY IN SCHOLARLY COMMUNICATION

Faculty are developing content-rich websites as extensions of their research products or as the primary product of research. These websites can bridge print or analog resources and digital resources. Humanities faculty, in particular, build web collections of resources that represent digitized items from Special Collections, including such materials as manuscripts and photos. One of the best-known examples is the Valley of the Shadows website (valley.vcdh.virginia.edu) developed by historians at the University of Virginia. This project contains digitized re sources from two towns, one Union, one Confederate, during the American Civil War. The materials include newspapers, diaries, letters, official records, and maps. The University of Virginia has developed an infrastructure to support faculty work in the digital environment, some of which is provided by the library and some by other campus units. This infrastructure supports scholarship through provision of the primary resources themselves as well as through the availability of hard ware, software, digital storage space, and staff with expertise in digitization, standards, and preservation. Many historians at other academic institutions question how they could develop large-scale digital projects in their own areas of specialization. They believe that their own campuses lack a supporting infrastructure, including hardware and

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soft ware support, the availability of collaborators to assist with technical is sues such as standards and preservation, and an institutional commitment to provide stewardship for digital content and reward faculty for creation of digital products.

Librarians can't provide remedies to the entire spectrum of researchers' needs for support, but they can, at a minimum, examine whether providing support for faculty digital initiatives is the kind of work they should be engaging in today. If librarians are serious about their interest in working with faculty to help ensure that their digital projects adhere to standards and are housed in an infrastructure that will promote stewardship, e.g., an institutional repository, they need to have the re sources to work with faculty, including dedicated staff time, expertise, digitizing equipment, and facilities in which to do collaborative work. Websites such as the Valley of the Shadow are rich resources for scholarship, teaching, and learning. They can create a desire in students to use primary resources in the study of history. Rather than diminishing interest in traditional resources, they can encourage their use. Librarians can leverage their Special Collections materials through partnerships with faculty and others to develop digitized collections that highlight local research interests and the instructional program of the university. The print collections and the digitized collections can be used to support and enhance each other.

While creation of websites is now commonplace, new forms of scholarship are emerging, blending text and digital information in new ways. *Vectors* is "a new international electronic journal that brings together visionary scholars with cutting-edge designers and technologists to propose a thorough rethinking of the dynamic relationship of form to content in academic research, focusing on ways technology shapes, transforms and reconfigures social and cultural relations" <vectors.iml.annenberg.edu>. In one article in the new journal, the author, a historian, created a visual composite of evidence, which she felt was the best way to represent the everyday lives of rural Tuscans in the fifteenth century. Included with the text are images that put together components of a number of paintings and other cultural artefacts to create a new image. For example, one image shows the way in which fields were cultivated for various crops, the types of farm equipment used, and the costumes of peasants. Taking the images of physical artefacts and combining them in new ways using digital technologies provides enhancements to scholarship. The analog resources are used as the basis for new, digital products of scholarship; they are re-mixed to highlight concepts or develop a theme. This kind of re-mixing is a hallmark of a style of creativity on the web, characterized as the "remix culture."[1] Librarians and other information professionals can be important collaborators in

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such projects, assisting researchers in locating useful materials in subject disciplines, assisting with format and standards issues, and providing advice on intellectual property issues related to the use of others' materials and the production of new materials.

We can expect to see an increasing number of innovative forms of publication that blend the virtual and the traditional worlds. Recently, the first Blooker Prize for "blooks," which are books based on blogs or websites, was awarded to the author of Julie & Julia. This book was the result of blog entries that the author wrote about cooking all of the recipes in Julia Child's first volume while living in a small Manhattan apartment <www.lulublookerprize.com>. In this case, the success of the digital content prompted the creation of a print product, which has been well received by the public. While this book is not the product of academic research, it is easy to see that the blogs of some academics could result in the production of traditional, printed books that expand on or extend the ideas that they have developed in their blogs. This development demonstrates another type of creative relationship between print resources and digital resources. Librarians may want to consider how they will preserve selected blogs so that future scholars can study the emergence of phenomena such as "blooks."

DEVELOPING LEARNING OBJECTS

Traditionally, librarians have not been directly involved in curriculum development in the disciplines, other than bibliography courses in the humanities or in encouraging faculty to include information literacy sessions in courses requiring library research projects. In the past, if faculty wrote textbooks, the library's collection would provide underlying resources, but librarians would not get directly involved in the development of the content of the book. Now, as the nature of content in the teaching and learning context is changing, librarians have the opportunity to become more directly involved, as partners with faculty and others, in the creation of curricular materials. They can work closely with instructional technologists, who may work in a different campus unit than the library but who also work closely with faculty. Instructional technologists may be part of a campus centre for teaching and learning, part of the information technology operation, or, in some cases, part of the library. They specialize in working with faculty to develop materials or activities for teaching and learning, particularly those including a technology component. In fact, as libraries renovate their facilities and incorporate information or learning commons, frequently offices and work space for the campus centre for teaching and learning

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are included in the information commons space. The mere location of the centre in the library does not necessarily produce partnerships between the staffs of the two units. Whether or not they are in the same physical location or administrative unit, librarians should seek out opportunities to learn about the kinds of products the campus teaching and learning centre is producing and encourage the incorporation of library materials and in formation literacy activities into the learning objects produced by the centre.

An example of the kinds of products that can be developed by such a centre, incorporating library materials, are those from the Columbia University Centre for New Media, Teaching and Leaming (ccnmtl.columbia.edu/web/index.html), which is administratively part of the library. For example, one of the Centre's projects, "Shakespeare and the Book," incorporates digital images of early editions of Shakespeare's works from Special Collections and provides a context for studying authorship, printing, and early performance issues related to Shakespeare's work. Students' learning is enriched through a blending of text and digital image resources, and partnership among faculty, instructional technologists, and librarians can add value to education through these new types of resources. While developing these types of projects is outside of the usual realm of information literacy, such projects help to accomplish overall learning goals related to library resources, and most importantly, encourage student engagement with the primary re sources of scholarship. The availability of the digital images does not diminish students' interaction with modern, print copies of Shakespeare; it provides a mechanism for them to easily view multiple items in a convenient spot and minimizes the handling of fragile materials. For students at other universities, the web materials provide a means for easy and open access to rare items that they would not likely easily access on their own campuses. The web images can assist in student engagement with the traditional text, thereby encouraging student learning.

STUDENT-CREATED PROJECTS

There is a concern in some quarters that students have abandoned reading and have been totally seduced by video games and multi-media products. They believe that student work incorporating media is facile and lacking in depth. That view is expressed by a quote in a widely-read study that posits that online education has failed: "As most faculty in the US have learned, students have become almost obsessively adroit at 'souping up' their papers, which they submit electronically and which they festoon with charts, animations, and pictures. As one frustrated professor

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who had just spent a half-hour downloading a student's term paper was heard to remark, 'All I wanted was a simple 20-page pa per-what I got looks suspiciously like the outline for a TV show.'"[2] When are student projects "souped up" by non-text elements and when does that content add value? Is a social sciences paper that includes graphs that illustrate points about data unwelcome by traditional faculty? Is an American Studies course project enriched or "dumbed down" by inclusion of images of period costumes, artwork, and the like? Do media-rich student projects generally have less academic merit or imply that students' knowledge is shallower than that of students who produce text-only projects? A closer look at some student-created multi-media projects reveals that they are the products of serious scholarship, built upon the work of standard, scholarly texts. For example, a student at University of Virginia produced a website as a master's project on the film "O Brother Where Art Thou" at University of Virginia.[3] The site includes film and audio clips as well as images, all quite appropriate in studying a film. However, a look at the bibliography of the project reveals that the author relied on many books as background for his research. Alternate media do not negate the need for books; books and other media can complement each other in scholarly work. The use of media in the project was appropriate and helped provide the context for the author's analytical work.

Two students at the University of Southern California (USC) produced a 3-D fly-through simulation of the City of Troy as a student project. The simulation was as detailed, involved, and fast-paced as many commercially available products. Their simulation included finely wrought images of the mythical ancient city. When this author asked the students how they had conceived of the images for their project, whether the images were totally based on their imaginations or on something else, the students replied that they had spent weeks researching their topic at the Getty (Research Library) nearby.[4] Those who would dis miss their product as a "game" to be used merely for entertainment would have missed the important point that the project, as a learning activity, had deeply engaged the student producers and had motivated them to delve deeply into the exploration of their subject.

ENGAGING STUDENT INTERESTS

As librarians think of new ways to engage student interest in books, it is likely that few would think of computer games as a mechanism to use to reach out to students. However, two researchers have found that, "Every time we meet with students, we ask who has checked out a book from the library based on interest generated

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through game play. Roughly half say yes. In fact, nearly every student we've met who has played Age of Empires, Civilization, or Rome: Total War has checked out a book on related topics as a result."[5] Librarians could develop web links, displays in the library, and game nights in the library with an explicit objective of encouraging reading linked to games.

PROMOTING BOOKS AND RESOURCES THROUGH DIGITAL, VISUAL DISPLAYS

Librarians frequently express concern that their users are unaware of the wealth of resources, both print and digital, that are provided by the library. New ways of promoting both print and digital collections can provide a means of exposing the collection to users in creative ways to spark their interest and enthusiasm. For example, Seattle Public Library has an electronic installation, produced by a professor of interactive media at University of California, Santa Barbara, that displays information designed to stimulate community interest in what local people are reading. The display features several panels above the main reference desk that alternately display colourful visualizations of titles of books that have been checked out during the past hour, statistics on the number of books and media that patrons have checked out, titles divided into Dewey classifications, and a "keyword map" that displays terms for items that patrons have checked out.[6] The display is eye-catching and causes library users to pause out of curiosity and view the stream of in formation passing along the display screens. It quickly becomes obvious that the information is related to library holdings, and the visitor is able to understand, in just a few minutes, some of the rich resources held by the library.

The University of California, Merced is installing large screens on the main floor of its new library onto which they will project digital images of materials from Special Collections and information about the li brary.[7] They will enable the library to literally show users the rich resources available through the library's systems.

Both of these display mechanisms use digital environments to promote print collections. They demonstrate creative and innovative juxta position of the print and digital environments.

PROMOTING COMMUNITY

Libraries can plan and implement community activities that promote reading, directly or indirectly, and that leverage the use of digital and print resources. For example,

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the University of Minnesota library runs a campus blog service (http://blog.lib.umn.edu) which promotes a sense of community. Library staff provide advice on ways to incorporate blogs into student learning experiences. and occasionally sponsor on-cam pus, community-building events such as bringing famous bloggers to campus to speak.

Another opportunity for libraries to promote reading are "One Book" programs, where all incoming freshmen read the same book and then campus activities and discussions are planned around it. Public libraries often take the lead in such programs for local communities, but the pro- grams in higher education are frequently administered through orientation or freshman year offices and in many cases, are not linked to the library. However, at Michigan State University, the One Book program partnership (http://www.onebook.msu.edu), which includes the neigh boring city, includes a role for the library-it hosts related events, in one instance screening a film on a topic related to the book.

In the tradition of the "read more about it" program where television viewers were encouraged to visit their local libraries to find resources related to major Public Broadcasting Service programs, libraries can add value to institutionally-related digital collections that are being developed in higher education. For example, the University of California recently announced that it will put a major collection of its educational videos online; it would be a great idea for the affiliated libraries to add "read more about it" web pages to the educational videos. Other institutions will have their own unique opportunities to link faculty or university-produced digital collections to the library's resources.

These types of programs help to make the library a centre for both intellectual activity and social communication on academic subjects. By using the digital environment to promote activities and to provide a venue for communication, and then coupling the digital presence with in-person events and print resources, the library can help enrich the in formal aspects of the academic experience for its community members.

CONCLUSION

Digital resources and print resources do not have to reside in separate worlds. Libraries can benefit by promoting the synergies between print collections and Internet-based content, products, and services. They can gain more visibility for their collections, enrich the academic experience of students, and provide support for the

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creativity of the faculty. As the nature of the products of scholarship change, as more and more rich multimedia resources are produced, and as the information environment becomes more crowded with content, libraries and librarians can distinguish themselves by encouraging new kinds of creative connections be tween print and digital worlds and by providing collections, physical environments, and knowledgeable staff to allow for the creation of new scholarship.

NOTES

1. Koman, Richard. "Remixing Culture: An Interview with Lawrence Lessig." O'Reilly PolicyDev Centre, February 24, 2005 http://www.oreillynet.com/pub/a/policy/2005/02/24/lessig.html.

2. Zemsky, Robert and William F. Massy. *Thwarted Innovation: What Happened to e-leaming and Why*. University of Pennsylvania: The Leaming Alliance, 2004, p. 57 http://www.irhe.upenn.edu/Docs/Jun2004/Thwartedlnnovation.pdf.

3. Cline, John. American Myth Today: *O Brother Where Art Thou?* and the Language of Mythic Space. University of Virginia Master's Program in American Studies http://xroads.virginia.edu/~ma05/cline/obrother/free6/obrother1.htm.

4. The students gave their presentation at "Information Commons: Learning Space Beyond the Classroom." Leavey Library 2004 Conference. University of Southern California, September 16-17, 2004 http://www.usc.edu/isd/libraries/locations/leavey/news/conference/about but there is no record of it on the conference website.

5. Squire, Kurt and Constance Steinkuehler. "Meet the Gamers." *Library Journal*. April 15, 2005.

6. "New Data-driven Artwork Installed at Central Library." Seattle Public Library News Release. September 12, 2005 http://www.spl.org/default.asp?pagelD=about_news_detail&cid=l126554289343.

7. Carlson, Scott. "The Birth of a Research University: Shelve Under 'E' for Electronic." *Chronicle of Higher Education*, April 1, 2005 http://chronicle.com/weekly/v51/i30/30a02401.htm.

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Excerpted from *Print vs. Digital*

THE COOPERATIVE CONUNDRUM IN THE DIGITAL AGE

This chapter is excerpted from

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THE COOPERATIVE CONUNDRUM IN THE DIGITAL AGE

By Dan Hazen

SUMMARY

Our prevailing models for library collections and collections cooperation emerged in the analog era. The electronic environment has changed the terms of both analysis and activity. This paper explores four aspects of the shift. The relationship between de facto systems and explicit cooperative frameworks, and the conceptual framework for library collections, reflect the mental models with which we structure our activities. Both require a new look. The Janus Conference, held at Cornell University in the fall of 2005, sought to recast the agenda for research library collections and cooperation in the digital age. The meeting's prospects and implications, as of the spring of 2006, are thus surveyed as well. Actual responses to these challenges, finally, are likely to play out differently across specific segments of our library community. This dynamic provides a final focus for comment.

KEYWORDS

- Collection development

- Collections cooperation

- Janus Conference

- Ross Atkinson

- Digital resources

- Analog resources

- Collections model

- Research libraries

- Library competition

- Library status

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INTRODUCTION

The language that we use to discuss library collections, the information marketplace, and cooperative action has its roots in the analog era. Much of the narrative, and many of its markers, remain both relevant and essential. But we may find that our rhetoric also limits our perceptions as we move into a digital environment. Several initiatives, involving on-the-ground activity as well as conceptual work, embody new approaches. The cooperative arena is particularly ripe for change.

This essay opens by reviewing some salient features of library cooperation as it has been pursued in the past. Four aspects of our emerging environment are then described at greater length. Two of these-an initial questioning of the relationship between de facto systems and explicit cooperation, and a revised conceptual framework for library collections-focus on the mental models with which we structure our activities. Two others focus on more practical issues, one by describing a fledgling yet potentially transformative collective endeavour among research libraries as a group, and the second by beginning to explore some of the deep-seated divisions within and around this community.

Collections cooperation in the analog world has pursued shared access to tangible information objects, mostly books, microfilms, and journals, that are held in limited quantity and are available-necessarily-with delay. The basic functions include identifying these typically low use and/or high-priced resources; acquiring them for library collections; describing them so that students, scholars, and librarian intermediaries can locate them; and delivering them to users. Arrangements for governance and sustainability, while essential as well, are not always explicit.

Two main models for cooperation have prevailed within this resolutely material universe. The first is based on distributed collections, functions, and costs. Bilateral arrangements, for example, those be tween Duke and the University of North Carolina, or Stanford and Berkeley, are effective and also easy to understand. Each partner assumes primary responsibility for certain collections areas, with shared access to the results. Similar yet more extensive initiatives, say the Farmington Plan or the Conspectus effort, have required more complex acquisitions agreements, governance, and infrastructure. All these pro grams can energize familiar local behaviours, for instance by reinforcing bibliographers' collecting obsessions within carefully delimited do mains. Local autonomy is thereby framed within cooperative responsibilities.

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A second model entails central collections and infrastructure, sustained through shared funding and governance, that draw forth efficiencies of scale and specialized capacities in support of a dispersed user community. The Centre for Research Libraries epitomizes this approach, as do its affiliated Area Studies Microform Projects. The model again presumes that scarce, low-use resources can most effectively be handled through structured arrangements on behalf of a larger group.

A third variant seeks first to create or consolidate a resource of potential community interest, and then to construct an audience. A great deal of commercial microfilming, for instance, has relied on up-front investments to assemble sets of materials that were sometimes scattered as well as scarce or unique. The instantly "canonical" arrays of primary sources thus created have then become broadly available for purchase. Libraries and consortia have sometimes taken the same approach.

These kinds of initiatives have entailed prodigious efforts and immense enthusiasm. Assessments of results, however, are often ambivalent. It's routine to praise the achievements of the Centre for Research Libraries, bilateral agreements, and some cooperative experiments. Large microfilm sets have fostered access to resources that would other wise be unavailable. However, cost and benefit calculations are seldom straightforward, and sustainability is frequently an open question. Projects that privatize and commercialize the public domain raise doubts of their own.

Other sceptical evaluations look at what our cooperative efforts have not managed to achieve. These analyses, taken together, are somewhat bipolar. On one hand, common wisdom has it that our library collections are massively duplicative, with too many materials then receiving very little use. Well-designed cooperation would minimize this redundancy. Conversely, some early comparative collections assessments based on OCLC's massive bibliographic database signal a wide distribution of unique holdings. This in turn suggests a huge, unrecognized common agenda of devising cost-effective means to preserve, share, and collectively care for an underappreciated community resource. Both arguments indicate that we still lack an adequate analysis of when and how hardcopy cooperation can work.

Thus, briefly, our (continuing) hardcopy past. And again, we ask where we've gotten with cooperation, and where we may be going. This inquiry by now includes several interwoven threads. One concerns the very nature of cooperation. Does this activity have to be explicit? To what extent do academic and research libraries already function as a de facto integrated system, regardless of any formal understandings? How does competition among the colleges and universities within which most

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research libraries are embedded (and, indeed, among the libraries themselves) shape our cooperative inclinations? And how do commercial offerings affect our cross-institutional efforts as they structure the information universe and variously inhibit, or stimulate, a coordinated response?

Second, and after some twenty years of often overheated rhetoric, a predominantly digital information universe is finally becoming the norm for many aspects of post-secondary education. Numerous retrospective digitizing projects, plus the growing array of current digital resources, are changing the Information and library landscapes. But we've been slow to develop fully coherent responses-perhaps because we have so far managed to somehow muddle along, perhaps because the technologies have so rapidly evolved, perhaps because today's overlays of intellectual property regimes and rights management structures re main so unfriendly and complex. Only now are we documenting what's been done in the virtual arena; controlling redundancy; articulating a common set of digital priorities; and revamping our services in light of scholarly imperatives, technological possibility, legal constraints, and user expectations.

A third broad concern is illuminated by mass digitization efforts, including Google's large-scale projects. Commercial content providers have, to no one's surprise, structured a market that first and foremost meets their own needs. It's time, and perhaps past time, to see whether the library community can lead as well as simply react to these shifts. The "Janus Conference on Research Library Collections," held at Cornell in the fall of 2005, launched one such exercise. The first of its two central themes involves our current conceptual framework for collection development. This structure was articulated about thirty years ago, when information was conveyed via print publications and libraries were just starting to automate their catalogues. The world has changed, and our models need to adjust.

But the Janus Conference aspired to practical action as well. Libraries are still grinding through the awkward and expensive shift from an entirely analog environment toward an overwhelmingly digital uni verse. The range, requirements, and potential of virtual information are different from those of their hard-copy predecessors. Our organizations, budgets, and procedures tend to separately address the two realms, inflating our costs and reducing our efficiency. How can we accelerate and shape the digital transition?

A fourth broad concern, finally, assesses whether new perceptions of our information context and institutional goals imply specialized roles for different institutions. Our increasingly creaky criteria for library success, epitomized in the ARL rankings, have

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enforced an intractable preoccupation with volume counts and size. We are beginning to acknowledge that achievement can take many forms, suggesting a multi dimensional evaluative mosaic. Just within the collections realm, everyone understands the relentless erosion of libraries' purchasing power: many institutions are by now extremely limited in what they can acquire. But we have hesitated to take the next step by talking openly about which libraries, organizations, informal groupings, and (perhaps) external agencies will most effectively take the lead in addressing particular challenges relating to collections and information.

Each of these four broad themes invites discussion and debate. Each could support its own array of conferences and ancillary arrangements for communication, consensus-building, and action. This essay only be gins to suggest some possibilities.

LIBRARIES AND SYSTEMS

Let us consider ants. Any particular ant, one imagines, wakes up in the morning and launches into its daily routine as an autonomous creature, albeit one whose behaviours are deeply embedded within a complex social structure. Entomologists, of course, look at ants and see colonies and groups, not discrete individuals. The contrasting perspectives of ac tors and observers support radically different conclusions concerning both behaviour and possibility. Similar characterizations apply else where in the animal world, say to bees or guppies or flocking birds, and perhaps well beyond. What of our libraries? Do they fall along their own spectrum that spans a range from self-defined individualism on one end, to communal patterning's on the other?

Anthropomorphism aside, we have yet to adequately analyse libraries as comprising a system as well as standing in atomistic isolation, or even as semi-social organizations whose connections go beyond conscious cooperative programs. If and as we seek this perspective, questions of agency are impossible to avoid. Can a system be purposeful, or even coherent, if no one is in charge? Is there a bibliothecal counterpart to the "invisible hand" of classical economics? Looking to the future, can we escape the intensive work of identifying constituencies and teasing out the political dimensions of a "library project" through which we together confront and create our environment?

Libraries, each unique in its origins and sovereign in its finances, jointly comprise a de facto network. Most of our institutions adhere to common standards and practices. Shared bibliographic databases and, increasingly, metadata harvesting and discovery tools, reflect a higher degree of coherence.[1] (Sophisticated search engines may foster a similar appearance, albeit from a more haphazard base and in a less certain way.)

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Interoperable systems provide a functional foundation for concerted cooperative action. But further movement toward a fully integrated and deliberately interdependent system assumes administration and overhead-in a word, bureaucracy. Is a high level of articulation something we need consciously to pursue? Is the end state desirable, or simply inevitable?

Another way to perceive this progression focuses on interlocking feedback loops of user needs, service improvements, and operational capabilities. Standardized bibliographic control, for example, traces back to common cataloguing codes and classification systems, tools like the National Union Catalogue, and then such automated bibliographic databases as OCLC and RLIN. Interlibrary loan and systematic resource sharing have followed in this wake, engendering their own logic (albeit somewhat spottier of a practice) of specialized collecting and planned interdependence.

Local experiences of overstuffed stacks and reliance on remote storage have, perhaps inadvertently, bolstered the case for conscious coordination. Almost all libraries point to on-site holdings that are readily accessible. Other materials may be in remote storage, with retrieval typically delayed by a day or two. Some multi-library consortia offer expedited interlibrary loan in about the same length of time. The growing trend to ward digital document delivery likewise simplifies quick access to offsite materials. Whether anticipated or not, new interdependencies and also synergies routinely emerge as remote materials come within reach. These systems, whether spontaneous or planned, beg for closer analysis.

MODELS FOR COLLECTIONS AND COOPERATION

COLLECTIONS

Our vocabularies and frameworks for collection development were constructed when hardcopy transactions were the only available option. The information world turned on local holdings, with resource sharing playing a decidedly secondary role. The Conspectus initiative of the 1980s, arguably the community's most ambitious recent effort, reflected the same perspective.[2] We need to rethink our conceptual frame work for today's academic library collections, and then how this may affect the cooperative arena.

Our library resources, whether analog or digital, and whether viewed individually or collectively, fall into four broad "ideal" categories. To begin with, all academic

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libraries support instruction. They thus provide basic bibliographies and reference works, reading list materials, and the core sources fundamental to the disciplines and fields taught in each parent institution. The function is ubiquitous, and understandings of a particular field's core resources tend to carry across from place to place. Second, academic libraries in institutions that support faculty research or advanced study seek to capture some or all of the record of scholarship. This rubric includes the published outputs of colleges and universities, commercial laboratories and trade organizations, think tanks and scholarly societies, academies and associations, specialized agencies and ad hoc research groups. An institution's appetite may vary within this large realm-only American university press publications, perhaps; or a multinational, multilingual sampler; or (in aspiration even if not actuality) exhaustive coverage. These holdings, which recapitulate and chronicle the scholarly record, sustain the ongoing, cumulative process of creating new knowledge.

An immense third category comprises all organized human expression, or the full range of primary sources. These are the raw materials for future scholarship, and their nature has become ever more eclectic. Libraries have always acquired a broad representation of creative literature-novels, drama, poetry, and the like. Selective but significant arrays of local and international newspapers, and of government documents, are enduring mainstays as well. Some collections of particular note have been constructed around the wholesale acquisition of specialized private libraries. Other primary sources have only more recently been acknowledged within the scholarly mainstream. Ephemera and grey literature, pamphlets, popular magazines, visual images and photographs, films and video, manuscripts and archival collections, and sound recordings are all by now considered essential. Digital resources, structured datasets, and web-based products likewise demand attention.

Unorganized raw data, finally, comprise a category of information with which we're only beginning to grapple. Scholars' research notes unruly file cabinets, boxes of scribbles and scrawls-provide a simple ex- ample. Hardcopy data generated in the course of experiments, surveys, and observations are similar. Today's masses of e-mail communications, blogs and chatrooms, digital satellite imagery, remote sensing data, raw survey responses, meteorological measurements, and the like, present challenges of capture and curation that we have barely begun to address.[3] Scholarship and teaching draw upon different blends of these four categories between one discipline and the next. The variations are especially pronounced for primary resources. Research in history or cultural studies typically draws upon an encompassing array of original documents and materials. Scholarship in some other

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humanistic fields, for example philosophy, is often more narrowly framed. But the ground is also shifting, for instance as classical scholarship broadens beyond a confined documentary canon to include material culture and archaeological evidence. Conversely, it's commonplace to assert that the library is the humanist's laboratory, implying that scientific research relies less substantially on the written record. Here, too, we need a more nuanced understanding. Historic field surveys are essential for botanical and zoological research. So, for astronomers, are celestial observations from both past and present. Scholars' need for non-current literature in disciplines like chemistry or physics, by contrast, does for now seem more limited.

The information resources needed to support teaching and scholar ship in specific fields vary in shifting and sometimes unexpected ways. Furthermore, our four collections categories are by no means rigid. Thus, for example, today's pedagogical models routinely require students to grapple with primary sources as well as synthetic texts. The consequent mingling can complicate close-grained collections planning. By expanding the universe of potentially relevant materials, it also reinforces the case for cooperation.

In sum: many disciplines look to broader arrays of research resources than they have in the past. Today's pedagogical models engage learners with primary sources as well as textbooks and summaries. More and more information is available in digital formats, with their complex le gal and economic ramifications. These shifts make it increasingly difficult to interpret and manage collections needs solely from within our institutions.

COOPERATION

Library budgets and collections are under pressure. Some academic libraries are by now pretty much limited to providing only curricular support. We are also changing our definitions of library success, paying particular attention to aggressive service models associated with focused teaching and learning. New instruments to assess measurable out comes and user satisfaction, LibQUAL™ and the like, are another manifestation of change. All these shifts comprise a necessary corrective to the profession's longstanding preoccupation with collection size. This re-cantered perspective also reflects that our collections are no longer what they've been.

Digital resources further affect both the information universe and our perceptions of libraries in system. We've gradually become adept at understanding, documenting, and managing digital objects. Metadata schemas and harvesting tools, format registries, standardized software, and insistent anxiety around preservation, are all

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nudging the digital cosmos toward predictability and control. Our legal regime has lagged, but even here the interplay among user needs, legislative mandate, and commercial imperative may produce workable accommodations. Open access resources, institutional and disciplinary repositories, and new models for scholarly communication are part of the same picture.

Digital information stands to alter cooperative collection development in several different ways. The commonplace recognition that e-re sources are available without regard to a user's geographic location is one cornerstone for enhanced cooperative efforts: the need to store and transport physical objects has vanished. (Questions of long-term preservation and stewardship of course still remain.) The nature of consortia has been similarly liberated as geography becomes less relevant, though convincing new models have not yet emerged. The current roster of high-use digital products has by and large been framed and then created by single-source providers, the profit-driven Elsevier's on one hand, the non-profit JSTORs on the other. Our widely dispersed consumer com munity may generate equally significant results. Production, and not just consumption or funding, can become a distributed function within the virtual environment.4 We have the means to cooperatively create and structure more encompassing digital collections, and our economic constraints reinforce this approach. It's time to act.

Finally, digital reformatting allows added-value activities not feasible in the analog age, when fairly simple tasks like assembling micro film sets out of several source collections were about all we could manage. Electronic products lend themselves to such enhancements as full-text searchability, marked-up content, and links to related re sources. The systems that will allow us to minimize inadvertent duplication, and the repository infrastructure required for long-term digital archiving, are not fully in place.

While digital products could be universally accessible, actual use is typically constrained by license terms and prices. Efforts to re-ground the process of scholarly communication are still incipient. They are also probably most appropriately managed, with library participation, at other levels of our institutions. Libraries have instead focused on formal and informal consortia to leverage our aggregated purchasing power basically buyers' clubs. One can certainly imagine an alternative world in which a unified library community approaches information providers as equals, or even sets the terms by which vendors can address the information needs that we define.5

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Collective action may allow us to more fully shape both the land scape and the marketplace for electronic resources. The traditional co operative emphasis on the expensive, obscure, low-demand resources that we can share without inconveniencing local users might be turned on its head as we together identify and digitally address core materials. Cooperative activities in the digital realm can also cut across and encompass all four categories of collection resources. Plans for a national cyberinfrastructure, for example, particularly emphasize the realm of raw data. These categories will also continue to blur around the edges. The structures to achieve these digital visions, however, are not now in place.

THE JANUS CONFERENCE

Cornell University's long-term Collection Development Officer, Ross Atkinson, for decades helped guide the research library community to ward fuller understandings of library collections and how they could be most effective.[6] Atkinson was the driving force behind a fall 2005 meeting in Ithaca entitled "The Janus Conference on Research Library Col lections: Managing the Shifting Ground Between Writers and Readers." This meeting had two main goals: to update our conceptual framework for library collections; and to implement practical measures to better position academic libraries within the realm of scholarly communication, in order to improve their services to our students and scholars.

These goals were addressed at Cornell by a group of perhaps seventy collection development administrators, and others. The central debate built from three commissioned papers that considered our emerging digital realm from as many different perspectives. Mark Dimunation, from the Library of Congress, emphasized the enduring and unique value of original artefacts-books, manuscripts, maps, and on-whatever the attractions of digital surrogates. The sensory attributes and sensual substance of our cultural heritage convey messages in and of them selves. Mark Sandler, from the University of Michigan, followed with an economics-inflected analysis of the digital realm, its premises and also some of its pitfalls. The "long tail" effect of unconstrained electronic storage space and discovery capacity, customized offerings tailored to niche markets, carefully structured tiers of added value, individualized service options, and on, all offer a subtle and largely encouraging sense of how scholarly resources might evolve. The Universite de Montreal's Jean-Claude Guedon, finally, spoke to the complex interrelationships among readers and texts. This delicate and typically contingent interplay stands to be energized in potentially transformative ways as the virtual world engages new combinations of

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readers and writers who are at once co-participants and co-creators. The digital world challenges and empowers us in ways fundamentally different from what we have known.

These papers formed the backdrop for the meeting's core work. Ross Atkinson confronted the group with the argument that scholarly communication, the information marketplace, and academic libraries are moving inexorably toward an overwhelmingly digital future. Our transition costs, as we sustain dual systems for analog and digital in formation, are immense. Moreover, we are following rather than directing the process. The lack of a coherent, shared strategy limits our ability to shape the new landscape. To that same degree, we have abandoned some of our core responsibilities vis-a-vis the academic community. How can research libraries together mobilize to take charge of change?

The beginnings of an action plan were framed through six deliberatively provocative challenges to the group. Each was presented as a general proposition, followed by a possible scenario for action:7

1. *RECON*. Convert to digital form objects currently only available in traditional form. Action for Consideration: Each research library will transfer 10% of its materials budget annually to a central fund, to be used for mass digitization. Decisions on what to digitize in what order will be made by a committee of research library collection development officers, special collections managers, and technical specialists.

2. *PROCON*. Ensure objects published in the future are available in digital form. Action for Consideration: Subsequent to 1 January 2008, research libraries will no longer purchase materials published in North America or Western Europe that are not in digital form.

3. *Core Definition*. Define collectively the notification objects that compose a core collection in each discipline. Action for Consideration: Building of separate, local collections of basic level materials (2+ level) will be discontinued in research libraries. Instead, committees of subject specialists (operating primarily online) will agree upon what belongs in a basic or core col lection, and all research libraries with at least a basic collection in the subject will automatically acquire those materials.

4. *Publisher Relations*. Negotiate collectively with publishers on the best possible access to notification sources. Action for Consideration: Research libraries will agree upon fair price ceilings for all types of notification sources, and will further agree to buy no materials that exceed these ceilings.

5. *Archiving*. Ensure the coordinated, long-term maintenance of traditional and

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digital holdings. Action for Consideration: With the exception of clearly defined special collections materials, all print materials published be tween 1830 and 1960 should be transferred to a regional print repository (constructed, if necessary, for that purpose). Each regional repository should sell or discard any duplicates it receives that are available in other repositories (so that it retains only one copy). At the same time, all digital objects selected by all research libraries should be added to an OAIS-based repository that can meet the certification requirements as defined by RLG/NARA.

6. *Alternative Channels for Scholarly Communication*. Create a net work of publishing structures that scholars can use as a supplement or alternative to standard scholarly publishing channels. Action for Consideration: Research libraries will agree on the de sign and services of an open access repository. Each research library will select a subject, and, working with local faculty and other appropriate stakeholders, such as scholarly societies, will create an open access repository for that subject, using funding from the materials budget. Supporting the repository will be the materials budget's highest priority.

Participants were randomly assigned to working groups that spent several hours discussing whether and how "their" challenge might be addressed-with some time to consider the other challenges as well. Most groups reported a similar sequence of initial scepticism, focused on problematic terms and aggressive phraseology. But the discussions then gradually moved away from these specifics in a process that resulted in overall group support for most of the general principles behind each proposition. Tellingly, those groups that could consider other challenges tended to replicate the same rather hesitant sequence, usually without enough time to move beyond the initial doubts.

All the group responses were melded together for presentation to the plenary. The contrast between usually positive reactions from each group that "owned" a particular challenge, and other groups' more sceptical assessments, came into sharp relief as the relatively conservative amalgamated opinions evoked spirited dissent from the original "owning" groups. The conference thus swung from radical initial scenarios to watered down overall reactions, with the groups most fully immersed in each challenge most supportive of change; and then to late-day push-back toward a more adventuresome stance. The session ended as self-selected working groups agreed to refine each challenge and suggest action steps as well.

The reworked proposals were then presented for further discussion at the Chief Collection Development Officers session at ALA's Midwinter meeting in January, 2006. These exchanges allowed additional clarifications, and also community

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suggestions for practical measures to advance each "challenge" area. A still-gelling coordinating structure was also established in order to shepherd along the entire process. An emerging sense of priorities among the challenges, and logical sequences for implementation, likewise took shape.

As of the spring of 2006, all six of the original challenges had assumed a new (and lengthier) form on the Janus Conference website. The conversations continue: these versions remain works in progress. Concrete action plans are emerging as well. A few examples of the revised proposals will suggest where things stand:

> *Challenge 1, RECON.* Converting the scholarly record. Collection development and other interested librarians from academic and re search libraries will create a working group to develop and begin implementing a plan for a national mass digitization project to convert holdings in North American research libraries.
>
> The group will accomplish the following:
>
> - recommend a structure for administering and coordinating the project that ensures active support from institutions and associations whose backing will be necessary for the success of the project.
> - recommend selection models and best practices for the initial stages of the project that will demonstrate its value, importance and viability.
> - while actively seeking grant support to begin the work of the project, assume that the research library community must de vote substantial resources, financial and human, to the project and be the primary source of funding.
> - take into account projects already in place nationally and inter nationally, and involve participants in those projects in planning this more global effort.
>
> *Challenge 2, PROCON.* Ensuring future publications are in digital form. Research libraries are committed to moving to an environment in the medium-term future (e.g., by the end of the decade), in which most newly published materials are acquired in digital form. Research libraries will work with scholars, publishers, and each other in order to achieve this. Research libraries agree to shift to e-only by 2008 for those publications that are available in both print and electronic form including: journals, reference books, textbooks, government documents

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and other areas like electronic books as the electronic publishing models develop. A complete transition to digital form by 2008 is dependent on the existence of trusted archives for digital content.

Challenge 4, Licensing Principles (formerly Publisher Relations). Negotiate collectively with publishers on the best possible access to e-content. Research libraries will make every effort to sign no li censes that include non-disclosure clauses, and to share among themselves the terms of agreements with all publishers. Public universities shall publicly post licenses and business terms on their Web sites. Research libraries will make every effort to ensure that licenses include such options as the right to use publications with course management software, the right to use publications for e-reserve, the right to fulfil ILL requests according to existing ILL guidelines and the right of authors to retain copyright and make their publications available in open access repositories or other archives. Research libraries will make every effort to ensure that li censes include provisions for perpetual access and archival deposit of licensed content.

In general terms, progress on the "Archiving" challenge is perceived as a precondition for any other measure that would increase our reliance upon digital objects. The notion of a national approval plan to provide the core literature needed by many libraries, and the degree to which we might be ambitious in reshaping publisher relations and licensing terms, remain under very active discussion. At least two broad obstacles also remain. Janus participants themselves, and others who have only heard of the conference and its proposals, are divided over both the process and the proposals. Framing the initial challenges in terms of highly prescriptive mandates managed by a small inner circle-some conjure up a "librarians' soviet"-may have been threatening as well as provocative. On a different level, all the Janus participants have returned to work lives filled with everyday pressures and distractions. The ongoing commitments required to achieve timely outcomes are by no means assured.[8]

CASTE MENTALITIES AND DIVISIONS OF LABOR

The Janus exercise would mobilize academic libraries in the joint pursuit of common goals. It therefore both assumes and presumes to strengthen a systemic perspective. Some of the conference challenges also focus on particular categories within our four-tiered model for library collections and the information landscape. A shared

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approval plan for "core materials," for example, would focus on the resources that provide curricular support. The overall Janus emphasis on concerted cooperative action, however, may underplay the complementary need to carefully distinguish among the roles and possibilities of the cooperating libraries. Both familiar and less obvious elements may here be in play. Continuing shifts in scholarly communication and the information marketplace likewise affect the analysis.

We typically, albeit rather ambivalently, acknowledge that a few "libraries of last resort" carry our heaviest collections load. The list includes the two dozen or so libraries at the top of the ARL rankings, plus a few others like the Library of Congress and the New York Public Library. These very large academic libraries are like all others in providing core resources and curricular support. They also seek very full representations of the scholarly record. And they pursue generous (though inevitably limited) segments of primary resources or "recorded human expression."

Many other libraries aspire to collections that encompass the same variety of curricular support, the scholarly record, and primary re sources. Strong holdings of local publications are common fixtures of both public and academic libraries, and unique special collections can turn up anywhere. Early results from OCLC's collection analysis service seem to suggest a wide scattering of unique materials among many libraries.[9] One-of-a-kind holdings are everywhere sources of pride and evidence of distinction. Ensuring appropriate arrangements for stewardship may be more difficult, and identifying those libraries whose unique holdings make them de facto centrepieces for coordinated activity is complicated in both political and operational terms.

The picture becomes more complex from a global perspective. North American libraries form one implicit system. Yet this system is complemented and often overshadowed by overseas repositories. Whether the focus is massive national libraries or modest municipal collections, these non-North American institutions provide unparalleled local coverage-even in cases where straitened budgets may preclude their full participation in the developed world 's information marketplace. Large-scale cooperation needs to welcome these libraries into ethical and equitable partnerships that consciously address a range of digital and hardcopy collecting capabilities.

Another challenge reflects the increasingly blurred boundaries among different categories of cultural artefacts. Researchers use materials associated with all manner of custodial agencies, both formal and informal. Search engines likewise cut across informational and also institutional domains. Our careful distinctions between libraries, archives, and museums thus carry less and less meaning. Dividing lines

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between private collections and public repositories are often becoming less relevant as well.

Some of the issues at first blush seem to involve bragging rights: who's biggest, who's best, who's most worthy. They also carry fiscal overtones. The largest libraries and museums, those that have built the most massive collections, are typically presumed affluent. Even when this is true, is it realistic to expect these institutions to finance long-term preservation and digitization on their own, as a disinterested community service? If more broad-based support is in order, how will it be arranged? What role do cooperative entities like the Centre for Research Libraries have to play? If libraries fail to act, will commercial players fill the void? Where will we then stand, if others can more effectively mediate between users and information? The questions significantly outnumber our answers.

CONCLUSION

The language that we use in some respects creates our reality. While the words and concepts with which we describe library collections and cooperation come from the recent past, that past is also very different from the world of today. Its underlying assumptions include free-standing collections of tangible objects within autonomous institutions, for which responses to • environmental, programmatic, and marketplace challenges are pretty much a local concern. We now need to adjust our thinking, looking realistically to see where we can together have a greater impact and how we can most effectively create change. We also need to act, to complement our rhetoric with work, and to buttress our narratives with concrete steps and planned behaviours.

NOTES

1. A recent catalogue of standards and best practices driven primarily by technology is found in Peter Webster, "Interconnected and Innovative Libraries: Factors Tying Libraries More Closely Together," *Library Trends* 54-3 (Winter 2006), pp. 382-393. (Issue title: "Library Resource Sharing Networks.")

2. Newer and very promising cooperative experiments have tended to build back ward from efficient arrangements for document delivery and interlibrary loan, into the collections realm. Both OhioLINK and Borrow Direct suggest some of the possibilities.

3. See, for example, *Revolutionizing Science and Engineering Through Cyber-Infrastructure: Report of the National Science Foundation Blue-Ribbon Advisory Panel on Cyberinfrastructure (2003)* http://dlist.sir.arizona.edu/897, *and The*

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Draft Report of the American Council of Learned Societies' Commission on Cyberinfrastructure for Humanities and Social Sciences (or public comment) (2005) http://acls.org/cyberinfrastructure/acls-ci-publie.pdf.

4. American Memory (http://memory.loc.gov/ammem/index.html), for example, includes separate collections from a number of institutions, so far joined together more as a patchwork than in a seamless cross-searchable aggregation.

5. See the Centre for Research Libraries Request for information: *Joint Venture for the Cooperative Digitization and Dissemination of World Newspapers* (April 18, 2006).

6. Following an extended illness, Ross Atkinson passed away early in March, 2006. He is missed.

7. A complete set of conference-related information, including webcasts of the proceedings, is available on the Janus website: http://janusconference.library. cornell.edu. The jargon in some of the original challenges echoes the terminology of the Conspectus initiative, and also Ross Atkinson's collections vocabulary.

8. These assessments are current as of April, 2006. The conversation continues to unfold, sometimes quite quickly.

9. Early collections comparisons using the OCLC Collections Analysis tool reflect a database that still underrepresents the holdings of many institutions. Several largescale data loads will increase its accuracy in reflecting overall coverage. Careful sampling studies are then needed in order to verify the possible extent of overlapping or duplicative records that could also distort assessment results.

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FINDING THE RIGHT METAPHOR

RESTRUCTURING, REALIGNING, AND REPACKAGING TODAY'S RESEARCH LIBRARY

This chapter is excerpted from

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FINDING THE RIGHT METAPHOR
RESTRUCTURING, REALIGNING, AND REPACKAGING TODAY'S RESEARCH LIBRARY

By Joan Giesecke

ABSTRACT

To change from collection-centric to user-centered research libraries and to survive in tough economic times, libraries face 2 major challenges: 1st, libraries need to change how they are viewed by their constituencies so they are seen as indispensable; and 2nd, libraries need to help the librarians and staff change their own mental models of their roles to remain relevant in these changing times. Metaphors are one way to help people connect terms in new ways so they develop new images of those terms. For more than 100 years, libraries have used metaphors to seek connections that will help people see libraries as something other than warehouses for books. This article will explore various metaphors being used in the library field and how these metaphors can help libraries introduce change to improve their chances of receiving the support needed to survive.

Transitions. Change. Repackaging. Survival. These themes dominate our field as libraries seek to reinvent themselves in a 2.0 world to stay relevant in the competitive information environment. Libraries face two major challenges in implementing change in today's world. First, libraries need to change how they are viewed by their constituencies so they are seen as indispensable. Second, and equally challenging, libraries need to help librarians and staff change their own metal models of their roles to remain relevant in these turbulent times. Metaphors are one way to help people connect terms in new ways so they develop new images of those ideas.

What are metaphors or why is hail always the size of something else? Metaphors, as we all know, are phrases that connect unlike items that actually have something in common or phrases where one thing is used to designate another (Dictionary.com, 2010). Metaphors such as Shakespeare's "All the world's a stage, and all the men and women merely players," presents us with a different image of reality (Shakespeare, n.d.). As another example, Keith Fiels, executive director of the American Library Association (ALA), at the division leaders/BARC Midwinter meeting at the ALA meeting, January 2009, was describing the purpose of an initiative fund used for projects that relate to the ALA Strategic Plan. He noted that the fund helped ALA be more nimble, and then noted that this made ALA a nimble dinosaur. These metaphors are very useful examples of how metaphors help create images for people to see things differently. Metaphors can help us accept new ideas and to expand our views.

What does this have to do with the size of hail? Hail helps explain why metaphors work. There is an established chart for how to describe the size of hail. From the government National Oceanic and Atmospheric Administration (NOAA) Web site

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(2010) you learn that pea-size hail is one-quarter of an inch whereas golf ball–size hail is one and three-quarters of an inch. Scientists learned that people were more accurate in reporting the size of hail when they compared the hail to a known object than when they tried to guess the size in inches. The comparison approach provides an understandable standard way for people to describe an event.

ESTIMATING HAIL SIZE

• Pea = 1/4 inch diameter

• Marble/mothball = 1/2 inch diameter

• Dime/Penny = 3/4 inch diameter—hail penny size or larger is considered

• severe

• Nickel = 7/8 inch

• Quarter = 1 inch

• Ping-Pong Ball = 1 1/2 inch

• Golf Ball = 1 3/4 inches

• Tennis Ball = 2 1/2 inches

• Baseball = 2 3/4 inches

• Tea cup = 3 inches

• Grapefruit = 4 inches

• Softball = 4 1/2 inches

Metaphors have the same power. They help people think differently about an event or activity. They help us change or confirm our mental models. Because metaphors reflect conceptual or mental models, metaphors can be used to identify how someone perceives a particular institution, situation, idea, or how they look at things. Metaphors can provoke powerful images that can persuade others of a particular solution or point of view. They can frame a problem in a way that sets the direction for what solutions might be considered, but they do not result in canned solutions. For example, if the information highway metaphor for networked information conveys the idea that all information is available for free on the highway, then the need to support libraries as a source for information becomes questionable.

Librarians have been using metaphors to describe libraries and librarians since the modern library movement began in the late 19th century. These early leaders, such

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as Melville Dewey, used various images to "locate desirable meanings in other walks of life and associate them with their renewed but misunderstood institutions" (Nardini, 2001).1 Library leaders in the late 1800s sought to redefine libraries in terms of education and schools. Others looked to religious metaphors to describe the importance of libraries to the local community. They sought to overcome the negative terms often used to describe libraries and librarians. Even in the 19th century, libraries were de- scribed as "just warehouses for books" or as "antiquarian museums" (Larner, 1998). Libraries were viewed as dusty collections of print material that were guarded by librarians and not meant to be used. This dismal image is a true contrast to the libraries of ancient Greece and Rome where the scholars who oversaw the private libraries were seen as important members of the community. In Rome, a librarian was a "stepping stone for the ambitious government servant" (Krasner-Khait, 2001).

Our library leaders of the 19th century tried a number of more positive metaphors to describe the profession. They argued that a community library was the people's university. In the academic world, the library was viewed as the laboratory for the humanities. Some leaders described branch libraries as the parish churches of literature and education. Each of these metaphors centres the library with a positive educational or community value.

The beginning of the 20th century saw libraries align themselves with business metaphors, emphasizing efficiency and incorporating business principles into the organization. Libraries also equated themselves with public utilities as institutions deserving public support. Libraries turned to department stores to describe the type of customer service that was needed to help library employees understand the service ethic that was becoming more important.

Not much had changed by the last decade of the 20th century. Danuta Nitecki, in a study of the use of metaphors by faculty, administrators, and libraries to describe academic libraries as reported in the Chronicle of Higher Education opinion pages, found that the following metaphors were used:

• library as storehouse,

• electronic access,

• activist,

• partners,

• location,

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- measure of academic quality,

- object of ownership and

- economic setting. (Nitecki, 1993, p. 262)

Administrators were likely to describe libraries as partners with the campus, while faculty members were more likely to view libraries as repositories for physical information. Librarians attributed an activist role to libraries, yet also saw the library as a storehouse for information. These different perspectives help remind us that the impact of a particular metaphor is influenced by the background and positions of the senders and receivers of the messages as well as by the message itself. Nitecki also noted that additional metaphors found in the literature include library as salon, as a smorgasbord where specialists may diversify their diets, and a window on local events, as a watch tower, and as a multimedia kiosk (Nitecki, 1993, p. 260).

All of these concepts are very familiar to us. We are still seeking the right way to describe the library as more than a warehouse or museum for books. We bring in customer service training and turn to places such as the Disney Corporation to try to help librarians understand how to connect to their constituencies. We talk about our place on the information highway, the well-known metaphor for the Internet. We seek ways to be seen as flexible and agile.

LIBRARIANS

Metaphors have also been used to help recruit new librarians to the field. In Dewey's time, library leaders equated librarians with teachers and educators to bring more prestige to the profession. In the beginning of the 20th century, librarians referred to themselves as businesspeople promoting efficient operations and developing sound operating principles. These leaders hoped that equating libraries with educational institutions and business enterprises would help attract teachers and businessmen or department store employees to the library field.

By the end of the 20th century, the library field had incorporated numerous terms from the computer industry to describe librarians. Librarians were now information engineers, information professionals, and information specialists or information navigators on the information highway. We even referred to ourselves as the new search engines or as middleware. How odd that we equate ourselves to computer programs to raise our status among our constituencies. Research libraries could be described as part of the knowledge management system, participating in the

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dissemination and use of knowledge. Each of these images is an effort to improve the visibility of librarians and to change the way people think about and describe librarians. The images are also efforts to encourage librarians to change and adapt to the complex, information environment.

School librarians have used a number of terms to describe school positions from librarians to media specialists to learning specialists. Today, in the Lincoln Public Schools in Nebraska, the media specialists are also termed teacher–librarians and many are managing both the library and the computer laboratories. Again, librarians are seeking terms and metaphors that indicate librarians are professionals who do more than read and shelve books.

In the 21st century, academic library leaders have sought new metaphors to describe the changes needed in the workforce so libraries can take on new roles. Jim Neal (2006) referred to the "feral professionals" who hold professional positions in our libraries but do not necessarily have a master's degree in library science. These professionals include positions in human resources, development, special collections, and digital initiatives, to name just a few areas. The Council on Library and Information Resources (CLIR) used the term "hybrid librarians" to describe the post-doctoral fellowship program that brings PhD trained professionals into library positions to bridge the gap between the libraries and the teaching departments (Walter, 2008). CLIR fellows have been involved in a variety of projects often centring on new teaching models, digital scholarship, and special collections efforts.

Steven Bell and Jim Shank used the term blended librarians to de- scribe the need for librarians to become more integrated in the teaching process by developing skills in instructional technology and instructional design ("Blended librarian," 2005). Blended librarians become partners with faculty and other academic professionals in designing courses and incorporating information literacy and research skills into academic programs to achieve student learning outcomes. Blended librarians therefore become part of the instructional development team (Bell & Shank, 2007). Blended librarians may be seen as a new metaphor for the librarian–educator metaphor that Dewey used.

John Budd (2009), University of Missouri School of Library Science, writes about the need for academic liaison librarians to be embedded librarians, closely tied to the academic departments they serve. Embedded librarians may have office hours in the academic department or even a joint appointment in an academic unit. This image expands the approach that branch librarians located in branches within academic

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buildings have taken to liaison librarians in a main or centralized library. Having the librarians physically closer to the faculty can increase informal communication and hallway conversations to keep the librarian well informed about and sharing information with the academic department.

In a recent article in American Libraries, Steven Bell (2009) suggested that we needed to move from the metaphor of gatekeeper to the metaphor of gate openers to describe our future. He argues that we need to shift from ¨a focus on creating access to resources to creating meaningful relationship and developing relationships, librarians become an essential part of the community.

LIBRARY METAPHORS

LIBRARY AS A BODY PART

We are all familiar with the concept of the library as the heart of the university, a phrase attributed to Charles Eliot, President of Harvard in the 1860s.[1] At Yale University, that phrase was carved above the entrance of the Sterling Memorial Library, which opened in 1930. But certainly we are also aware of the conversations that the library may be losing its place as the heart and soul of the university. Perhaps those who argue that the World Wide Web had replaced librarians would suggest that the library as the heart of the university is a heart with clogged arteries and in need of bypass surgery. Can we describe libraries as healthy hearts? Will some other body part be a better metaphor for today's research library?

Lorcan Dempsey (2008) of OCLC in his Weblog posed a similar question on May 13, 2008. Is the library the brain, the blood, or the lungs (Dempsey, 2008)? One posting suggests the library is the foot on which the institution rests. The comments on Dempsey's blog entry did not yield a consensus. Edward Shepard, head of collection development at State University of New York, Binghamton, mused about the same question in a report on the October, 2008 Readex Digital Institute (Shepard, 2009). He wondered if the library is more of a muscle pumping information throughout the institution. Perhaps the library is the circulation system uniting the parts of the university. He concluded that the library should be seen as an active muscle to remain effective. While being the heart of the university may be comforting to some, it does not seem to be a metaphor that helps others see the library as an active part of the campus.

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LIBRARY AS CONVERSATION

Another set of metaphors describes the library as the connector between content and the user of the content. Along these lines, J. Z. Nitecki (1993, p. 260) describes librarianship as a communication process involving information content and concepts, the ways that information is relayed, and the recipients of the content. R. David Lankes, Joanne Silverstein, and Scott Nicholson (2007) describe libraries as part of the conversation business, arguing that knowledge is created through conversation. They describe conversation theory, which is a means of explaining cognition and how people learn. People connect ideas and learn through conversations with others and as internal conversations between themselves and the written text. Librarians facilitate conversations or learning through information literacy activities, teaching critical thinking skills, and by preserving the social record so people can connect with history. Further, in today's technology environment, libraries become part of the participatory network or social networks that bring people and content together in ways that allow users to create their own connections. We have finally created the shared minds that Michael Schrage (1995), research associate at Massachusetts Institute of Technology's Sloan School of Management, described in Shared Minds: The New Technologies for Collaboration. He wrote about how libraries can bring people together through technology. Now, libraries join Facebook and Twitter, to engage our constituencies in our world.

LIBRARY AS PLACE

As the need for libraries as physical spaces has come under discussion, the library field has created numerous metaphors to help people imagine the library as something other than a quiet place with dusty books and an unwelcoming environment. Some have equated libraries with bookstores and coffee houses. These are places where people can gather, access electronic information, interact with colleagues without being told to be quiet, and still enjoy a cup of coffee and a snack. Library as Starbucks or library as Barnes & Noble comes to mind. A recent posting on the School Library Journal blog contrasted the idea of library as grocery store and library as kitchen (Valenza, 2008). Library as grocery store is an image of libraries as places where one gets stuff whereas library as kitchen invokes the image of a place where people do things together. Kitchens are seen as social spaces, gathering spaces, and comfortable spaces where family and friends interact. This is the image many of us are trying to create for our libraries.

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Other places are also used to describe libraries. As previously noted, the humanities disciplines describe the library as their laboratory. This metaphor is often tied to the need for some type of start-up funds for new humanities faculty just as universities put together start up packages for lab scientists. For students, we describe the library as their academic living room or place where they can gather and study. Recently our library at University of Nebraska–Lincoln (UNL) was rated by students as one of the best places on campus to grab a quick nap between classes. At least they see the place as safe and welcoming. We are beginning to describe our comfortable seating areas as the mini–bed and breakfast for the campus as students relax in a comfortable chair, get out their laptops, put down their cup of coffee or soda and fall asleep. Again, the challenge is to help students view to- day's academic libraries as a welcoming place for them and not as a large warehouse for books. As already noted, the metaphor of library as a ware- house or a museum for books has been with us for more than 120 years and is still one that we have not been able to eliminate from the conversations about libraries.

DIGITAL, "E," AND 2.0

There are an amazing number of metaphors describing libraries in terms of digital work, electronic resources, and 2.0 anything. We have library 2.0, librarian 2.0 as well as the coming 3.0 versions of these terms. We have digital libraries, digital collections, and digital librarians. We put the letter "e" in front of any format. We even have digital microfilm which again may be an effort to connect an understanding of one format with another format. In each case, these metaphors are being used to help librarians understand the need to change and to incorporate the social networking and technology of our users into our libraries. The terms are also an effort to help users see the library as technologically relevant in a world of Google and Amazon.com. Some research libraries, such as UNL, are now digital publishing services, creating institutional repositories and hosting open access journals. We still need a metaphor for the changing role of the library as publisher as well as the library as a collector of information.

ECOLOGY

One set of metaphors that seems particularly helpful to today's research libraries is to think of the library as an ecosystem that promotes biodiversity. Scott Walter (2008), in an article in Library Journal, noted that libraries encompass "multiple species" including our users, traditionally trained librarians, and a variety of professionals from other fields, and the interactions and relationships among these different

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groups. In this ecosystem, mutualism and coevolution are key to the survival of the library rather than competition and survival of the fittest. In the ecosystem species, will survive who provide mutual benefit to each other. Mutualism does not try to change each specie but rather emphasizes the strengths and benefits that each specie brings to the system. In the same way, in research libraries, each profession brings strengths to the system to help the system thrive and survive.

The metaphor also emphasizes the importance of building relationships and sees the library system as a set of relationships. It changes the library from a collection-centric institution to one that is user-centred. It can help library leaders think in terms of building partnerships on campus, continuing to build relationships among research libraries, and bringing together the variety of skills (or species) that are needed today to provide the services and collections that are essential to our survival. For example, at the 2003 Conference of the International Association of Aquatic and Marine Science Libraries and Information Centres, Peter Fritzler from the University of North Carolina at Wilmington used the metaphor of coral reefs to describe libraries.

Coral reefs, according to Fritzler (2003), are the rainforests of the sea, a very diverse, productive, and ever-changing environment. Fritzler used this image to capture the attention of the faculty and students at the university's Centre for Marine Sciences (CMS). The image helps to describe the set of education and reference services that the libraries could provide to their remote CMS by establishing a symbiotic relationship between the CMS and the library.

Further, the ecosystem and biodiversity metaphors include the concept that each library needs to relate to its local environment. The library can- not just adapt ideas from other fields and implement them in an automatic way. Rather library leaders need to assess options and bring those ideas to their environment that will be mutually beneficial to their own ecosystem. The ecosystem metaphor of positive relationship building and interaction can be integrated with positive organizational psychology, learning organization theory, and strengths-based leadership to help libraries thrive in these difficult financial times.

Finally, the ecosystem metaphor can help libraries incorporate new roles and services that are mutually beneficial to the system. Increasing the visibility of and access to special collections materials is a strength libraries can pursue that will increase the diversity of resources available to researchers. Libraries creating robust institutional repositories and digital publishing units contribute to the overall ecosystem. Having students create digital content and products for use by others in

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the system builds a new cohort of re- searchers who can begin to see the library as more than a collection of books. With so many options available to librarians for how to change, the ecosystem metaphor can help leaders prioritize choices by thinking about the unique strengths of the library and how to best integrate those strengths in an environment of mutual benefit and increased biodiversity.

METAPHORS AT UNL LIBRARIES

At UNL, we have tried any number of metaphors to help our own librarians and staff to imagine new roles, cope with change, climb outside the box, and repackage our services. We have also tried different ways to help the university administration, faculty and students view the library as a vital, relevant part of the scholarly enterprise. Librarians at UNL have faculty status and tenure and have had to review and revise their view of promotion and tenure criteria as the campus has made changes in overall criteria and processes. These various reviews have allowed us to introduce different metaphors for describing the work of the librarians. A number of years ago the librarians adopted the model or metaphor of the scholar–practitioner to describe their role as faculty. The term was borrowed from the College of Education and Human Sciences and nicely describes the need for librarians to be active researchers staying current in the field, while providing good practice. The term also emphasizes that research informs practice so that the libraries can respond to the changing environment. The model has also made it possible for the library faculty to define themselves in broad enough terms that the library faculty includes members with PhD degrees but no MLS degree. It has allowed the faculty to add those involved in digital humanities research, digital initiatives, and electronic publishing to the library faculty on equal terms.

For the library, we have tried a number of different metaphors to de- scribe our changing services. For students, we have used the term academic living room, a metaphor that has been picked up by our admissions office and is used in student recruiting efforts to describe a space for students to study and to gather with colleagues. We have tried a number of terms to describe the addition of digital media services to the libraries. We tried digital learning librarians to describe those involved in digital media services who were hired to help faculty incorporate digital resources into their course assignments. We renamed the microforms area the media services area and moved the digital media computers from the computer area to the micro-forms room. We are still seeking a better way to describe the unit that helps students edit video and audio files, circulates cameras and video recording equipment, and

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now "houses" digital microfilm. As previously noted, we seem to run a bed and breakfast for some students, a social gathering place for others, and a snack and study zone for others. In each case, we are seeking a way to relate our work to our constituencies in terms that will resonant with them.

We have emphasized library as partner to describe ways that we assist departments in electronic publishing efforts. For a number of years, we have worked with other units on campus to create image databases using the ContentDM software. We learned early on that our art history faculty were not inclined to use published image databases but preferred their own slides. We partnered with the department on an internal teaching grant to develop a pilot set of digitized slides from the art history slide collection and to modify the equipment in their large teaching classroom to allow true full- sized dual-image projection of slides from a single computer station. The demonstration project was successful in part because of the partnership approach. The libraries were able to build on this demonstration project and partnered with museums on campus to add digital images of their collections to our database at no cost to the museums. Some groups that work with us do have resources to contribute to the project. For these groups, we provide whatever level of support they need. For example, Nebraska Educational Television is using our software as the search engine for their database of streaming video. For this group, we showed them how to use the software and they took the project from there. They particularly like the fact that their videos can be searched through our catalogue as well as through their own Web site or through Google. By customizing our approach to each group's needs, we have been able to create a variety of digital publishing projects. The partnership metaphor works well for us because it fits with the campus culture and signified that we were not looking for resources from others but came to the project with resources. The deans at UNL also use metaphors to describe the UNL culture. The deans will say that if you like to swim with the sharks, UNL is not the place to be a dean. The shark metaphor helps others understand our collaborative culture that encourages partnerships.

We are also trying to find a term that will better describe the search and discovery tool, Encore from Innovative Interfaces, that runs our cata- log and integrates a variety of content databases into one search. We have partnered with our campus museums to add records for their specialized book collections to our catalogue and to add images from their collections to our ContentDM databases. We have our institutional repository to preserve faculty and student scholarship, provide open-access journals, and publish original scholarly monographs. We have the digital

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humanities scholarship produced through our Centre for Digital Research in the Humanities. And we have our digitized special collections. These various content types, with MARC, Dublin Core, EAD, or TEI records can all be searched through our catalogue. We need a term that describes the complexity of a system that searches all these resources, includes faceted searching, and community tagging. We tried describing the catalogue as central intelligence for the campus, bringing together a variety of resources, formats and publications together through one search engine, but that did not resonate with anyone. The best we have so far is to describe the catalogue as "Google meets Amazon.com."

Finally then for UNL, where we are coping with financial constraints by partnering with other units on campus to remain visible and essential to the academic enterprise, we could be described as a group of scholar practitioners who manage the academic living room, are a publishing partner, and who bring a Google and Amazon.com experience to the search and discovery of scholarly resources to our students and faculty.

CONCLUSION

Library leaders have struggled for many years to find the right metaphor to describe the importance of libraries and librarians. No one has found the perfect metaphor that adequately describes the complexity of the research library in terms that resonant with the world outside our walls. However, the ecology metaphors can be helpful in describing for librarians, professional and technical staff the need to change and why we need new skills in our workforce to stay relevant in a changing environment. While we look for ways to stay relevant, integrate new businesses into our libraries, and a new business model for our library we will continue to seek the right metaphors to describe who we are, what we do, and why we need support.

NOTE

1. From the quote cum adage, "The Library is the Heart of the University," attributed to Charles William Eliot, President of Harvard University.

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REFERENCES

- Bell, S. (2009). From gatekeepers to gate-openers. American Libraries, 40(8/9), 50–53.

- Bell, S., & Shank, J. (2007). *Academic librarianship by design: A blended librarian's guide to the tools and techniques*. Chicago, IL: American Library Association.

- *Blended librarian*. (n.d.) Retrieved from http://blendedlibrarian.org/overview.html Budd, J. (2009). Academic library data from the United States: An examination of trends. Library and Information Science Research Electronic Journal, 19(2), 1–21. Retrieved from https://libres.curtin.edu.au

- Dictionary.com (n.d.) *Metaphor*. Retrieved from http://dictionary.reference.com/browse/metaphor

- Fritzler, P. (2003, October 5–9). Building REEAFS: Repackaging and personalizing library services to remote marine science facilities. *Conference Proceedings for the International Association of Aquatic and Marine Science Libraries and In- formation Centres, 29th Conference, October 5–9, 2003* (pp. 41–46). Mystic, CT: IAMSLIC.

- Krasner-Khait, B. (2001). Survivor: The history of the library. *History Magazine*, 4, 1–7.

- Lankes, R. D., Silverstein, J., & Nicholson, S. (2007, December). Participatory networks: The library as conversation. *Information Technologies and Libraries*, 26(4), 17–33.

- Larner, F. (1998). *The story of libraries: From the invention of writing to the computer age* (pp. 24–26). New York, NY: Continuum Publishing.

- Dempsey, L. (2008, May 13). [Weblog comment]. Retrieved from http://orweblog.oclc.org/archives/001636.html

- Nardini, R. (2001). A search for meaning: American library metaphors, 1876–1926. *Library Quarterly*, 71, 111–140.

- Neal, J. (2006). Raised by wolves: Integrating the new generation of library professionals into the academic library. *Library Journal*, 131(3), 42–44.

- Nitecki, D. (1993). Conceptual models of libraries held by faculty, administrators, and librarians: An exploration of communications in the *Chronicle of Higher Education. Journal of Documentation*, 49(2), 260, 255–277.

- NOAA (n.d.). *Hail … damage to property and crops …* Retrieved from http://www.erh.noaa.gov/cae/svrwx/hail.htm

- Schrage, M. (1995). *Shared minds: The new technologies for collaboration*. New York, NY: Doubleday.

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- Shakespeare, W. As you like it, Act 2, Scene 7. London, England: Laggard and Blout.

- Shepard, E. (2009, September). Heart or muscle? The library in the digital age. *Readex Newsletter*, Retrieved from http://www.readex.com/readex/newsletter.cfm?newsletter=242

- Valenza, J. (2008, August 25). *Library as domestic metaphor*. Retrieved from http://www.schoollibraryjournal.com/blog/1340000334/post/90032209.html
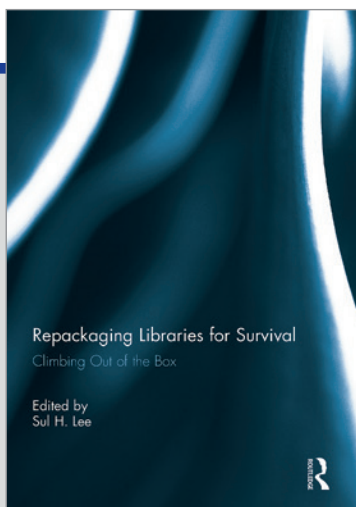
FROM SURVIVING TO THRIVING

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FROM SURVIVING TO THRIVING

By Carla J. Stoffle and Cheryl Cuillier

Excerpted from *Repackaging Libraries for Survival*

ABSTRACT

This article focuses on the need for continual organizational change and new thinking about the work that libraries, librarians, and staff must do to remain key players in the academic world of the future.

Academic libraries are facing a new reality. Even after the current economic crisis abates, no public university will ever be able to entirely recoup the funds that were once available, nor will our libraries. At private universities, as well, steep endowment losses have taken their toll on many institutions' financial health (Blumenstyk, 2010). To thrive, libraries will need to use sound business-management practices, align themselves with campus learning and research goals, nimbly apply new technologies to improve service and reduce costs, utilize benchmarks in implementing best-services practices, and provide value-added library services—all while staying true to the guiding principles of librarianship. Although the way we work may change, our values remain the same. It is our responsibility, as the librarians and staff of today, to work together to build the successful libraries of the future.

Over the last 15 years, much has been written about how economics will drive libraries—especially large research libraries—to make organizational, structural, and cultural changes to maintain their roles as vital contributors to teaching and learning in their institutions (Stoffle, 1995; Stoffle, Leeder, & Sykes-Casavant, 2008). In 1996, Stoffle and her co-authors wrote that "the economic and political climate for higher education, especially public education, is more negative than it has ever been" (Stoffle, Renaud, & Veldof, 1996, p. 215). Unfortunately, that climate is even worse today. One only needs to read The Chronicle of Higher Education daily to see the financial and political hurdles that colleges and universities face (Blumenstyk, 2010; Hebel, 2010).

Stoffle's earlier articles focused on how library costs—skyrocketing in- formation costs and the expense of introducing new technologies—would make it impossible to maintain the collections of the past, manage the libraries of today, and build the libraries of the future (Stoffle, Allen, Fore, & Mobley, 2000; Stoffle, Renaud, & Veldof, 1996; Stoffle & Weibel, 1995). After Stoffle served on the Project on the Future of Higher Education (2004) from 2001 to 2004, it became clear that libraries and research universities, especially public ones, would soon face an economic crisis that would not only threaten how libraries did business but the traditional way of doing business in the entire academy (Stoffle, Allen, Morden, & Maloney, 2003).

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Stoffle's view of the changes needed to overcome these challenges has evolved over time and been shaped by experiences at the University of Arizona Libraries. Though we have had budget cuts 14 out of the last 18 years, our libraries are on the verge of greater integration into the campus's learning and research programs than ever before. That is not to say that we do not need more money (we lost nearly 20% of our wages/operations budget from fiscal year [FY] 2007–2008 to FY2009–2010) and are not stretched mightily (we are down more than 30 positions in that same period). But we are seen by the campus and our students as a strong, vital, contributing force to the university's excellence (University of Arizona, 2000, pp. 51, 77). Thanks to the sweeping changes we have made at the Libraries, and the hard work of our personnel, we are positioned to move forward with new programs.

We are not alone. Many library leaders—not wanting a serious crisis to go to waste[1] —are using the current economic downturn to make fundamental changes that have long been necessary. These changes will ultimately result in our ability to maintain the vitality of the library and allow our rhetoric to change from how we can survive to how we can thrive in service to our campuses.

As a preface to the rest of this article, it is important to stress that although the University of Arizona is used to illustrate what can be done, it is but one experience. It is not presented as the pathway to success, merely one of many possible paths. Each library must assess its own environment and the needs of its campus community to identify how it should adapt to the challenges. Many of the things done at the University of Arizona are not unique. Many libraries are using similar concepts to achieve similar goals. The University of Arizona has been very good at borrowing ideas from other library leaders (e.g., our colleagues at this conference, and people like Rick Luce and David Lewis; see Luce, 2008; Lewis, 1995, 2007). These University of Oklahoma Libraries conferences and our "Living the Future" (University of Arizona, 2008) conferences also are sources of inspiration. Another influential conference was the Association of Research Libraries/OCLC Strategic Issues Forum for Academic Library Directors in 1999, which resulted in the Keystone Principles (Association of Research Libraries, 1999) that have helped to guide our activities.

It is the totality—the breadth and depth—of our efforts at the University of Arizona that may provide some insights into the magnitude of the work necessary to build the successful library of the future. Our basic approach has been to:

- Stay focused on our customers and their changing needs; and
- Enable the creation of library as service rather than library as collection.

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Our efforts can be broken down into five general categories: organizational/cultural changes, planning and budgeting, new business practices, communication, and collection approaches.

ORGANIZATIONAL STRUCTURE AND CULTURE

Let us begin with organizational structure and culture. At the University of Arizona, our objectives are to:

- Empower librarians and staff by flattening our organization and pushing decisions down to the appropriate level.

- Let go of traditional divisions of work. Rather than maintaining rigid organizational hierarchies and bureaucratic rules, we have a team-based structure and have everyone working at the top of their job classifications, knowledge, skills, and abilities.

- Have staff—not librarians—managing in-building services and facilities. Librarians are involved in some training and assessment of these services, but they are primarily focused on integrating the library into instructional and research programs. Meanwhile, we have created four new job classifications for staff and hire at a higher level (Huff-Eibl, Ray, & Voyles, 2008).

- Optimize staffing resources by placing individuals on the projects and activities that are most important to the future, even at the expense of functional daily work.

- Ensure that people have the technology and resources they need do their work, even if it means there are fewer people.

- Encourage diversity and create a climate that welcomes different view-points.

- Reward continual learning and improvement.

In 1993, when we began the task of reinventing ourselves, we decided to begin with our organizational structure and culture. We started there because we felt we could not make fundamental changes in our focus and services using the same old priorities and assumptions, especially those about funding. We realized that we did not have the resources to continue traditional collecting and processing activities, nor could we sustain the resource-intensive bureaucracy that characterized our organization. We decided we had to maximize our human and fiscal resources and that we had to become more nimble and flexible. To get buy-in, we appointed library-wide project teams—ultimately utilizing more than 100 people in the organizational redesign (Bender, 1997)—and introduced the principles of Total Quality Management during the process (Owens, 1999; Phipps, 2001, p. 647; 2004, pp. 90–96). We also experimented

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with Six Sigma process- improvement techniques (Voyles, Dols, & Knight, 2009), including Balanced Scorecards (Holloway, 2004, pp. 11–16).

Our structural redesign in 1993 moved us from a traditional bureaucratic organizational structure that was focused on processing, managing, and storing things to a team-based organization focused on customers and providing value-added services (see Appendix A). We have changed our organizational structure four more times since 1993. The most recent structure was implemented in July 2008. It has been tweaked several times already, for example moving our education programs to the Undergraduate Services Team and changing its name to Instructional Services. Our new organization is composed of nine functional teams and six cross functional teams (see Appendixes B and C).

Ultimately, the numbers or names of units in our organizational structure are not important. The point is what our team-based structure has allowed us to accomplish. The 1993 reorganization reduced administrative overhead from four assistant university librarians and 16 department heads to 11 functional team leaders and one assistant university librarian. This streamlining enabled us to lower overhead and reallocate administrative positions to frontline services.

Cross functional teams, composed of librarians and staff members from various functional teams, were created with decision-making authority to do strategic long-range planning and annual budgeting (with governance representatives and administrators added for budgeting), and to solve over- arching library service problems using process-improvement techniques and data-based decision making. Policy creation, day-to-day management of the strategic plan implementation, and library-wide budget monitoring were delegated to the Library Cabinet. All of these groups learned consensus-based decision making. Over time, most organizational decisions have been made by consensus.

Each time we reorganized, library-wide cross functional teams designed the new structure. Personnel were reassigned to new teams based on their knowledge, skills, and abilities. The daily work of all personnel changed (Diaz & Pintozzi, 1999). Our goal was to place people where they could be the most successful and where the Libraries could most benefit from their talents. In the first restructuring, every team leader but one was a librarian. Today, four out of nine team leaders are not librarians.

In our latest restructuring, services such as chat reference and information desk staffing were moved completely to classified-staff teams. As classified staff have been trained to take on greater responsibilities, librarians' work has shifted to make

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the best use of their library degrees and expertise— focusing on instruction, creating online credit-bearing courses, integrating the Libraries into the university's learning program through its course management system, providing in-depth research support to faculty and students, managing collections decisions, and creating and implementing new systems to allow access to information not previously available.

Today, librarians are primarily divided among the Instructional Ser- vices and Research Support Services teams. Instructional Services is currently charged with reconceiving our educational programs with the goal of integrating the library services and collections into every course on campus as well as creating online credit-bearing courses. Research Support Services is focused on supporting the research and teaching needs of faculty, students, and researchers, especially by providing increased access, assessing the effectiveness of our resources, creating new online resources, and helping the faculty manage content.

Our organizational redesigns were done in order to adapt to changing customer needs and in anticipation of shrinking resources. Our goal was to improve service, but hold costs steady or even reduce them. When planning each redesign, we relied on data and process-improvement techniques. Re- naming teams and services to reinforce a focus on the customer has helped to shift thinking about the role of the library and library personnel, though not without some concern and resistance. This is to be expected. But as Gen. Eric Shinseki, former U.S. Army Chief of Staff, is quoted as saying in The Rules of Business: "If you don't like change, you're going to like irrelevance even less" (Fast Company, 2005, p. 7).

Over time, we have introduced a number of new positions with new du- ties within the Libraries. Early on, we created the position for organizational development, which has now morphed into the director of Project Management and Assessment position. Our Scholarly Communications position is now the director of Copyright and Scholarly Communications. Recently, arising from a need to provide greater direction for our systems and digital library efforts, we created the position of assistant dean for Technology Strategy and established the Technology Architecture Council (see Appendix C) to oversee the Libraries' technology policies, strategies, and directions. Other new positions created include our Director of Marketing & Public Relations, a metadata librarian, and a digital archivist. These represent organizational responses to changing needs and reflect the ability of the organization to respond to new service needs and specialties.

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The most important resource that any library has is its personnel. When employees share the same vision, are empowered to make decisions, have the resources to do their work, and are able to continually learn and grow professionally, that is an environment in which they can thrive.

Despite our frequent budget cuts, the University Libraries have sustained a commitment to maintain funding for training, professional development, research, and the resources and equipment needed to perform the work expected (Amabile & Kramer, 2010). In addition, there has been a commitment to maintain salaries at peer average for librarians and academic professionals, and at midpoint for the classified staff. This has meant eliminating positions where necessary, using process improvement, eliminating work, outsourcing, reassigning work to appropriate levels, and other streamlining. We now have fewer people, but we are trying to provide more support for them and reward them appropriately.

All personnel are expected to work at the top of their classification or rank. They are rewarded for continually learning and applying that learning in service of our customers. People are cross-trained so that essential work is always covered. Core competencies (WebJunction et al., 2010; Holloway, 2003) have been developed for most positions so staff and librarians will constantly know what skills they are expected to possess. All new librarians and staff are hired with the understanding that they may not be in the same position forever. If there is a greater need for their skills and knowledge elsewhere in the Libraries, they could be moved. Staff who continue to learn and develop new skills will not be laid off if their present position is eliminated in a restructuring. This is to keep talent in the Libraries and to enable individuals to exercise creativity and do what is best for our customers rather than worrying about job security.

Each year, we set aside funds for professional development, training, and travel. For 2009–2010, close to $100,000 was available to faculty and staff. Up to 24 days of professional leave a year are granted to both classified staff and appointed personnel for professional development (e.g., conferences, workshops, institutes). We also make available several research grants of up to $2,000 for library faculty.

Diversity has been critical to the success of our Libraries. Competencies for working in a diverse environment have been developed and there are diversity criteria for recruiting all positions. Nearly 29% of our librarians and 37% of staff are from underrepresented groups.2 In addition, there are individuals from countries all over the world, with different sexual orientations, and in different age groups. A diverse workforce helps to improve our overall decision making. Having different viewpoints

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based on life experience outside the dominant culture also helps in the creation of services and programs for our increasingly diverse customer base. More than 30% of students at the University of Arizona are ethnic minorities (primarily Hispanic; see Office of Institutional Research and Planning Support, 2009). Minority student enrolment has climbed steadily over the past 25 years (Office of Institutional Research and Planning Support, 2009) and the University expects it to keep increasing, reflecting the growth and diversity of our state (University of Arizona, 2010, p. 28). So, diversity is also a customer-based business decision, not just a value we hold.

PLANNING AND BUDGETING

The second area to discuss is planning and budgeting. Our objectives here have been to:

- Align our strategic goals with the university's strategic plan.
- Anticipate and influence change, rather than being incapacitated or suffering wrenching change based on budget cuts or other sudden disruptions.
- Look 3–5 years down the road, rather than focusing all of our resources on today's services and collections.
- Make data-based decisions based on ongoing assessments, surveys, customer feedback, and other usage and cost statistics.
- Budget to our plan rather than adjusting our plan to match our budget.
- Reallocate resources based on our highest priorities.
- Have staff-driven planning and budgeting, involving personnel across library teams and job categories.
- Take advantage of new opportunities, such as collaborations and the use of technology, to minimize the impact of shrinking resources.
- Diversify and create new revenue resources to lessen our dependence on state funding.
- Stimulate innovation and creativity among library personnel by providing funding to try new things.

Strategic long-range planning is conducted by a cross functional team made up of faculty and staff members from across the University Libraries. This team starts with the university's strategic plan and, from those goals, assesses the environment: local library, campus, national trends, technology developments, and potential areas for collaborations. They identify service lapses, unmet needs, or emerging needs. The

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planning team then establishes library goals and identifies the critical few strategies that have to be accomplished in the next 3–5 years. Library-wide projects are identified, reviewed by our Project Management Group, and then project teams are appointed from personnel across the libraries. Functional teams then identify team goals and projects that align with the campus and the library goals. All the while, we are concentrating on improving library services and identifying activities, tasks, or services that need to be phased out (the concept of planned abandonment, which will be discussed later in this article).

Library-wide projects have priority over all other projects and functional work in the Libraries. If necessary to achieve our strategic work, team projects are put on hold and individual functional work or tasks are reassigned or dropped for the time being. Continually improving and developing needed new services is our highest priority, even at the expense of some functional daily work. Our approach and philosophy around planning and budgeting is to start with "What does it take to be successful three to five years from now?" then budgeting and working toward those goals. We are not focused on today because we will never have enough resources to do everything today, let alone do that and still build for success in the future.

One of our forward-looking strategies has been to make sure money is available for new opportunities. Regardless of our budget situation, we set aside $500,000 each year (less than 2% of our annual expenditures) to fund strategic projects. We have been doing this since 2006. In 2009–2010, funds enabled us to process and catalogue new items donated to Special Collections, digitize materials for our institutional repository, provide training and buy software to develop new instructional materials, hire a graphic designer and extra graduate assistants for our new online class, buy new electronic resources, and support our Technical Report Archive & Image Library (TRAIL) Project (Greater Western Library Alliance, n.d.) with the Greater Western Library Alliance (GWLA, a consortium of 32 research libraries in the West and Midwest).

In addition to setting aside dollars for strategic projects, we actively seek ways to diversify revenue sources beyond our institutional allocations. The percentage of expenditures that the Libraries get from state dollars has shrunk dramatically, from 91% to 75%, over the past decade.[3]

We also are exploring other revenue sources. Like other libraries, we have invested in staffing for fundraising and grant writing. We have created a café (Arizona Student Unions, n.d.) within the Libraries, from which we receive 50% of the profits. We are building up our capacity for generating revenues from selling reproductions and

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licensing the rights to use some of our materials in Special Collections and the Centre for Creative Photography. The centre also is developing an active loan and traveling exhibition pro- gram, which will generate revenue and provide exposure to the collections. The main library also generates revenue from its Express Document Centre (EDC), which offers a full range of printing, copying, and scanning services. It markets its digitization capabilities to other units on campus.

Our most successful revenue generator is the student library fee, which students have been paying since 2006. This fee provided about 3.5% of our total expenditures in FY2009–2010.4 In April 2010, the Arizona Board of Re- gents approved an increase in the fee from $30/year to $120/year, so we should be receiving about $3.5 million in fee revenue in FY2010–2011. The process for getting student fees approved is political, very time consuming, and often frustrating, but worth it in the end when fees provide a steady and predictable revenue stream. We use student fee money to buy new electronic resources, upgrade equipment and software, do video streaming, increase network speed, provide loaner laptops, and fund digitization projects. The student fee also finances the extra staffing needed for the growing demand for services such as interlibrary loan (ILL), and to keep our facilities open longer. During the fall and spring semesters, our main library is open 24 hours a day, 5 days a week, with reduced hours on Friday and Saturday nights.

Essential to good budgeting is the ability to reallocate resources to higher-priority or new work. The planning and budgeting process is de- signed to use cost and usage data to identify work that can be eliminated, streamlined, or outsourced at a lower cost, or assigned to staff in lower pay ranges. To maximize collection resources, we have used leveraged buying (saving $1.6 million and avoiding $6.5 million in expenditures through consortial purchases in FY2008–2009), participated in Centre for Research Libraries programs including cooperative buying with the Shared Purchase Program, and invested in the development of improved resource-sharing pro- grams through GWLA, RapidILL, and the Research Libraries Group's SHARES Program. We agree with Dan Hazen (2010, p. 120) that "Cooperative activities will become increasingly central to library programs and strategies."

It's also important for libraries to calculate their return on investment (ROI). This can be challenging to do, especially for research. We participate in the University of Arizona's MINES (Measuring the Impact of Networked Electronic Services) study (Association of Research Libraries, n.d.), which examines the usage patterns of electronic information resources and the demographics of users. Results are used to

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identify the indirect costs of conducting grant-funded research and development. Our campus uses the percentage research use of electronic resources (as measured by MINES) to identify the Libraries' contribution to indirect cost recovery. We are investigating other ways to quantify the Libraries' ROI. Carol Tenopir and Paula Kaufman are conducting a three-phase study of academic libraries' ROI, "Value, Outcomes, and Return on Investment of Academic Libraries" (Lib- Value, n.d.), and we are looking at those findings (Kaufman, 2008; Tenopir et al., 2010).

USING GOOD BUSINESS PRACTICES AND BUSINESS TOOLS

Implementing new business practices is another key. Here, our objectives have been to:

- Focus on continual learning and constant improvement of services. This is done incrementally, rather than waiting for outside economic drivers to force immediate wrenching change or, worse yet, erode our ability to stay relevant.

- Apply new technologies at a faster rate to improve service and reduce costs rather than just increasing capacity.

- Evaluate current services and collections, planning the abandonment of those that will not be needed in 3–5 years.

- Improve our decision making by involving those with the knowledge, skills, and abilities (rather just administrators) in the decision-making processes. This also creates buy-in among employees.

- Increase our flexibility and responsiveness.

- Make customers more self-sufficient in their research and learning activities.

- Design services with scalability in mind. By scalability, we mean the ability to ramp up these services and serve more people without needing more staff.

- Eliminate silos and look for improvements in systems and processes rather than tasks and individual jobs. This often means looking for partners and solutions outside the walls of the library.

- Assess staff productivity, schedule staff to the work, and reallocate resources to higher-priority work.

- Only do locally that which MUST be done locally—such as collecting unique items and providing access to these collections. We outsource or give up doing what is already available elsewhere, including at other libraries, even if we have to give up some control.

- Do not let "perfect" get in the way of "good enough." When it comes to service, it

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is not a choice between "perfect" or "imperfect"—it is a choice between "some" versus "none." We have decided that something is better than nothing at all. Of course, once we get a good service into production, we work to improve it and make it great. But we are not striving for perfection before we implement.

When we embarked on our reengineering adventure, the decision was made to identify and use new management tools and sound business practices to make improvements. We began by adopting Total Quality Management concepts—team-based management, focus on the customer, assessing customer satisfaction, continual learning and improvement, process improvement, and data-based decision making.

Early on, we identified three essential services that were not satisfactory to our customers—reshelving time, ILL delivery, and reserves processing times. Using process improvement, we reduced reshelving time from weeks to hours, reduced ILL processing time to less than 24 hours, and reduced reserve processing at the beginning of the semester from three weeks to 48 hours. All of these processes were improved while saving tens of thousands of dollars.

Later, we studied the processes of our Technical Services Team—from acquisitions to cataloguing to book processing—and reduced book order time from 40 hrs to 8 hrs. By using Blackwell's shelf-ready book services and streamlining our other cataloguing processes, we were able to move 11 librarian positions to frontline services and eliminate many staff positions, reducing staffing in Technical Services and Archival Processing over the last 15 years from 46 full-time equivalents (FTE) to 14, which now includes acquisitions and 3 FTE for archival processing. At the same time, we have eliminated cataloguing backlogs (except in Special Collections and the Centre for Creative Photography) and are getting new books from the loading dock to the shelves in less than 24 hrs.

In 2004, we began analysing the types of questions received at our service desks and the levels of skill required to answer those questions. After tracking every question over three 2-week periods, our analysis concluded that students and trained generalists could answer more than 95% of the questions asked at each service site. So we trained classified-staff members to take the place of librarians on service desks. When staff get questions that do require a librarian's expertise to answer, they refer customers to librarians for in-depth reference help. By redeploying librarians from service desks to other library work, we were able to reduce our costs while maintaining quality service and increasing our ability to add needed new services (Bracke et al., 2007).

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Without a doubt, the use of technology has enabled service improvements and expansion in our libraries. We see technology as an enabler. It is not cheap, however, so we have had to find ways to introduce new technologies while reducing other costs. Customer self-sufficiency is one key to this. For example, we have more than 80% of our circulation going through self-checkout machines, virtually eliminating staff and student workers doing this function. (A side note on our express checkout service: When we called it "self-checkout," it was almost unused. When we renamed it "express checkout," it was suddenly an important service innovation.) Many ILL requests are now unmediated, reducing staff devoted to this function. The reserves function has been eliminated in favour of enabling faculty to link our electronic collections to the course syllabus in the course management system or to have resources scanned that they can then add to the course on their own. Movement to digital collections has reduced space devoted to print runs and time spent reshelving, while improving access. Ultimately, some jobs have been changed or replaced by technology.

To manage our technology and make sure we are using it effectively, we recently created a Technology Architecture Council. Led by our assistant dean for Technology Strategy, this group is responsible for formulating our technology policies and making sure that technology architecture is consistent throughout the Libraries. A recent example is our "buy, borrow, or build" policy, which says we will buy or license an off-the-shelf software solution whenever possible rather than customizing or building from scratch.

Generating customer feedback and assessing the effectiveness of our services are critical to our ability to manage our budget resources effectively (Stoffle & Phipps, 2003). To gather customer feedback, we use the Association of Research Libraries' LibQUAL survey, have an online feedback form called library report card, conduct usability studies and focus group sessions, log customer feedback at all of our desks using Desk Tracker software, and survey Information Commons users and do a gap analysis of their responses.

We also measure our performance against quality standards we have set. These standards include:

- The ratio of acquired electronic resources vs. print resources (80% electronic to 20% print by 2012);
- The percentage of holdings open to Web browsers (100% open to most Web browsers by 2012);
- Shelving times (95% of materials shelved within 48 hours);

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- Paging requests (100% paged within 24 hours); and

- ILL processing (90% of all lending requests responded to and/or shipped within 24 hours)

To manage our resources most effectively, we track more than 210 data points and use them to evaluate our operations. This information has helped us make better decisions about services, resource uses, and reallocation possibilities. Usage data—including time of service—allows us to schedule staff to the work, increasing our effectiveness and productivity. For example, we are able to process interlibrary loans virtually 24 hours a day by using the overnight staff at our service desks (Voyles, Dols, & Knight, 2009). From 2:00 a.m. to 6:00 a.m., when there are fewer customers to assist, overnight staff process ILL requests in their spare time.

Recently, we have initiated the use of project management techniques based on training by Ernie Nielsen, managing director of Enterprise Services Portfolio Management at Brigham Young University (Pintozzi, 2008). Since we use so many project teams, we wanted to ensure that the time spent by staff members was optimized. Becoming more efficient and effective in creating new services not only helps us improve more quickly, but has helped us free up resources for other services and work. To date, we have trained more than 115 personnel in project management. Creating and using road maps is an important aspect of project planning for us. These road maps, which will be managed by librarians and high-level staff, provide a detailed 3–5-year plan for the development of all of our products and services.

A fairly controversial practice is the use of planned abandonment (Stoffle, Leeder, & Sykes-Casavant, 2008, pp.19–20)—identifying services

and activities for elimination before their use and demand have completely abated. We make these decisions based on use and cost data, as well as customer feedback, rather than waiting until there is no demand or wasting critical resources that could be redirected to reach a broader audience. Recently, we used this technique to phase out print and electronic reserves. We still digitize journal articles, book chapters, audio selections, and video for on- line course access—but now we encourage faculty to add these to the course management system, Desire2Learn (D2L). Student groups had pushed for re- serve materials to be consolidated in D2L. Now, face-to-face instruction—the 50-minute library instruction session—is in the process of being eliminated in favour of more scalable instruction activities.

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COMMUNICATION

The fourth area to address is communication. Here, our objectives are to:

- Create many opportunities for two-way dialogue inside and outside the library, ensuring that personnel have the information they need to do their work and understand the context of decisions.

- Be actively involved on campus.

- Continually build a jointly shared vision of the libraries.

Good communication—both inside and outside the library—is another key to thriving (Diaz & Pintozzi, 1999). Dean Stoffle stays in frequent contact with the President and Provost, networks with other deans and key administrators, and meets regularly with students. She and other library personnel are involved in key task forces and committees on campus. All of this helps keep us in the information loop, makes the Libraries more visible, and fosters important allies on campus.

When we are considering major changes at the Libraries—such as our recent identification of $976,000 in materials to be cut during spending reductions—we seek faculty and student input. We have found that it is important to stress the context of decisions, not just the outcomes. For these recent spending reductions, we set up a Web site (University Libraries, 2009) to collect campus wide input and explained in detail why the cuts were needed. We also met with key faculty and administrators several times during the process.

We take advantage of multiple channels of communication to reach students, faculty, and staff. We use Facebook postings, e-newsletters to faculty, campus wide e-mails, advertisements on 14 security monitors scattered throughout the libraries, and librarians' interactions with faculty and students. Now we are working on adding mobile communications to the mix. Internally, we hold monthly all-staff meetings and several Conversations with the Dean each month (informal sessions that allow library personnel to ask the dean questions or share what is on their minds). We also hold Team Report Open Houses. Teams produce three reports a year, detailing their progress on projects, listing accomplishments, describing obstacles they have encountered, and reporting whether they have met their quality standards.

Regular contact with student governance groups, student advisory groups, and the Faculty Senate has been critical to garnering support for our student fee increase. Students say they appreciate our receptiveness to their input (not only asking for their ideas, but acting on them) and our track record of transparency and accountability

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(such as providing quarterly student fee reports). We have worked very hard to communicate our financial needs to students and provide plenty of data.

COLLECTIONS, DISCOVERABILITY, ACCESS, AND DELIVERY

The last area to explore is collections. We are managing information, not collections. Our objectives are to:

- Move to primarily digital collections and remove duplicate print copies from our stacks;

- Rely more on patron-driven selection of materials;

- Constantly push the library to our customers so they can have anytime–anyplace access to needed information resources, regardless of who owns them or where they are located;

- Put discovery and desktop delivery of information at the top of our priorities;

- Rely on collaborations with other libraries to jointly buy and keep little-used materials rather than trying to maintain large "just-in-case" collections; and

- Support regional and national efforts to create shared print and digital repositories.

In the past, large portions of library budgets went to buying, processing, managing, and storing large print collections. Maintaining this focus is eco- nomically unsustainable. Libraries must shift their spending from collections to new services and infrastructures to ensure long-term success. We agree with Lisa Spiro and Geneva Henry that "What makes a library unique today is not the size of its holdings but the quality and innovative nature of its services" (Spiro & Henry, 2010, p. 9). As David W. Lewis predicted in 2007, "Academic libraries must find and articulate their roles in the current and future information ecology. If we cannot or will not do this, our campuses will invest in other priorities, and the library will slowly but surely atrophy and become a little used museum of the book" (Lewis, 2007, p. 419).

We already have described the reallocation of processing staff that resulted from process improvement and outsourcing. Additional reallocation has recently become possible due to declining purchases overall and a switch from print purchasing to purchasing materials in digital format (91% of our current serials and 34% of our new monographic purchases are digital). A conscious decision has been made to make the digital format the format of choice for purchases, except in Special Collections and the Centre for Creative Photography. We decided in 1999 to no longer purchase both print and digital copies of materials. In 2005 we became the first official "Virtual

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Federal Depository library" in the United States. We began removing print versions from the collections that duplicated electronic holdings. This freed up space for users and also provided easier access to remaining collections since our shelves were less crammed. We are not maintaining offsite storage facilities for these materials, although some have been sent to the Centre for Research Libraries.

We are working with the University of California Libraries and other regional partners to create the Western Regional Storage Trust (WEST; see California Digital Library, 2010), a shared print repository service. One of our librarians leads the TRAIL Project, mentioned earlier, which is a massive digitization project involving Google, the Centre for Research Libraries, and a number of GWLA academic libraries. For preservation access to the electronic materials we have, we have joined Portico (ITHAKA's digital preservation service; see ITHAKA, n.d.) and Stanford's LOCKSS (Lots of Copies Keep Stuff Safe) Program (Stanford University Libraries, n.d.) rather than building local infrastructure for this purpose.

Having less print requires less storage and management, including binding, repairs, and shelving. While we must admit that electronic book collections are mostly not yet ready for prime time with their usage difficulties, search limitations, and restrictions on number of simultaneous users (and some of our customers are quite unhappy with this option), e-book publishing is improving and gaining a greater market share each year. During 2010, many e-book readers appeared in the marketplace and the release of Apple's iPad had an immediate impact. In July 2010, Amazon.com announced that e-book sales for its Kindle exceeded the sales of hardback books for the first time (Miller, 2010). Academic libraries cannot afford to buy everything so, like many others, we have shifted from a "just-in-case" to a "just-in-time" philosophy (Association of College & Research Libraries Research Planning Committee, 2010, p. 286) and are moving resources from diminishing areas (print) to growth areas such as e-books.

In addition to moving to digital content, we have decided to reduce the staffing going into the selection and purchasing of materials, especially monographs, relying instead on patron-driven acquisitions5 to determine what will be added to the permanent collection. With the huge increases in the amount of available information, even the largest libraries are struggling to meet users' information needs solely with local collections (Jan, 2010). Digital content from suppliers such as Ebook Library (EBL) (Ebooks Coorporation, n.d.), ebrary (n.d.), MyiLibrary (Ingram, n.d.), and NetLibrary (EBSCO, n.d.) can provide our customers with access to

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thousands more titles than we could purchase. Only items that show multiple uses are added to our permanent collection.

With the improvements made in the supply chain for books, it is now possible to move to patron-driven acquisitions for print as well (Hendrix, 2010, pp. 9–10). Records for available materials are exposed to users through the local catalogue and/or OCLC and then only materials selected by users are purchased. Materials can be delivered to the patron in a short period of time, similar to a users' retail book-buying experience. A local Espresso (On Demand, n.d.) print-on-demand system can provide users with nearly immediate access to print content available on that platform.

We also are engaged in ongoing efforts to make more materials discoverable and accessible to users. Ninety-three percent of our collections are now discoverable via Google and other Web browsers. In January 2009, we made WorldCat Local the default search tool on our Web site. Now, instead of searching our library catalogue first, faculty, staff, and students can search the collections of 72,000 libraries around the world. If customers find an item we do not own, they can request it through ILL with the click of a button. From 2008 to 2009, we saw ILL requests rise more than 50%.[6]

In response to requests for best sellers and other popular materials, which we typically do not buy, we recently began a partnership with our county library system. The public library sends its full-service Bookmobile to campus once a month during the school year, allowing people on campus to check out books, magazines, DVDs, books-on-CD, and other items. The Libraries' only cost is $25/month for Bookmobile parking.

In Special Collections and the Centre for Creative Photography, we are concentrating on adding unique images, archival, and rare manuscript materials. We are stressing processing of the collection backlogs and expanding the online availability of finding aids to increase discoverability and access. In addition, projects are under way to digitize these collections and make them available 24/7.

To make more materials discoverable and accessible, we have begun a process of adding other campus collections to the Libraries' catalogue. By March 2010, our catalogue contained more than 36,000 items from the University of Arizona Poetry Centre collection, 15,700 items from the children's literature collection in the College of Education, and nearly 4,300 media titles held by the School of Media Arts (and now available for video streaming in courses). Our repository efforts have been all over the map. We have an institutional repository, UAiR (University of Arizona, n.d.f), but have not really concentrated on building the traditional repository. Instead, we have

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experimented with the "library as publisher" model, creating two electronic journals with faculty (Journal of Ancient Egyptian Interconnections [University of Arizona, n.d.b] and Journal of Insect Science)7, publishing an electronic book (Latino Politics [University of Ari- zona, n.d.d]), digitizing and hosting several campus-produced scholarly journals (such as Rangelands [University of Arizona, n.d.e]), building digital libraries (such as the Geotechnical, Rock & Water [GROW] Digital Library) (University of Arizona, n.d.a), creating access to campus- created instructional materials for use in K–12 instruction (LessonLink [University of Arizona Libraries, n.d.c]), and digitizing materials from the Centre for Creative Photography and Special Collections. The money for these activities has come from our collection budget and our strategic opportunities funding. Our goal is to add value to campus research, learning, and out- reach programs, and to expand national as well as local access to unique collections. We are currently exploring data curation options.

LIBRARY AS SERVICE

We frequently hear the phrase "library as place" in library discussions. But we want to focus instead on "library as service." Throughout all of the changes we have made at the University of Arizona, the concept of library as service has guided us. Library as service focuses on the customer. It results in everywhere-you-are access—pushing the library into the research and learning environment at the desktop, in the lab, and in the classroom. We are doing what Paula Kaufman predicted in 2007: "In the future, many libraries will choose to integrate information fluency instruction into course management systems, develop mass customized path-finding services pushed to students, and offer an array of classroom support services that integrate class readings, information instruction functions, and access to and delivery of content in all media and expertise into the systems the students and their teachers will be using characteristically" (Kaufman, 2007, p. 20).

Library as service penetrates deeply into the activities and programs of the campus, becoming an essential partner in achieving campus strategic goals in all arenas, including outreach. Library as service tries to anticipate needs before there are demands. It empowers and enables customers to be effective information users and creators.

Library as service not only owns resources, it provides discovery, access, and delivery. It also manages and curate's campus information resources regardless of source or format.

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Library as service collaborates to achieve national information objectives, and leverages and extends the resources of each individual library or other collaborator. It makes investments and engages in activities such as open access and system interoperability design that strengthen the national information structure. Library as service supports legislation and the creation and interpretation of information policies that make information available in ways fair to scholarship and education, as well as commercial entities involved in scholarly communication.

Library as service collaborates with other entities such as arXiv (Cornell's e-print repository for physics, math, and computer science; see Cornell University Library, n.d.), regardless of whether there are those who do not pay their share or whether the campus is unlikely to see immediate returns. Library as service shares the philosophy that information is a public good that libraries must protect. Library as service is ultimately an educational entity, teaching not only information discovery, evaluation, and use, but about privacy, intellectual property, information ethics, the cost of information, information politics, etc.

We could go on. Obviously, we do not view library as service as an end in and of itself. It is a special entity on campus closely aligned to the goals of the institution. It is a major player, not just a support service. It is constantly adapting and adjusting to further the goals of the institution. One characteristic of library as service is a commitment to ensuring that core services—those that impact the most people most often—are operating at the maximum quality level. That is why our libraries, after restructuring, focused on improving shelving, reserves, and ILL services. These improvements built confidence in the Libraries and gave us room to make other changes. Learning from this experience, we have made it a practice to improve some aspect of our performance when we move to change or abandon another service. Library as service also creates the physical library as learning and research space, focused on users and their needs rather than storage of large print collections.

As we said before, library as service focuses on the customer. Thinking about users' time has encouraged us to:

• Provide desktop delivery of ILL articles;

• Deliver articles and chapters from our print collections within 24 hrs (document delivery);

• Pull requested books from the collections for customer pick-up within 4 hrs (express retrieval);

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- Stream videos through the course management system; and

- Integrate campus collections, such as the University of Arizona Poetry Centre's, into our catalogue.

Library as service has permeated our concept of space as well. Library space has moved from an emphasis on storage to an emphasis on creating learning environments. By removing print materials, we are putting space for users back into the library. Our 33,000-square-foot Information Commons, which opened in 2002, was designed to be a large, full-service centre for students, not a computer lab (Stoffle & Cuillier, 2010). It features a centralized information desk, 254 networked computers loaded with software, 180 laptop computers available for checkout, 24 group study rooms, two presentation practice rooms, and an electronic classroom. To facilitate group activities, work areas have plenty of extra seating available. We have replaced some of our study carrels with hexagon-shaped tables to enable students to gather around a single computer and work on group projects.

Our instruction program is taking on new dimensions as well. Our organizational structure reflects this new emphasis with the creation of the Instructional Services Team. This team already has been involved in the development of several new products and services. A recently developed libraries "widget" enables students to access reference services through the university's D2L learning management system. The "widget" is embedded into course pages, giving students easy access to the libraries' Web site and catalogue, online guides listing subject-specific library resources, the student's library account, and our ask-a-librarian service. Duke University has developed similar functions for the Blackboard learning management system (Daly, 2010). Use of our ask-a-librarian service has more than doubled since being added to D2L and being added to every single page of our Web site. Our new Library Resource Organizer helps facilitate the creation of course-specific resource pages and automatically links them to D2L. The online tool guides faculty through a step-by-step process of creating these pages, customized with relevant library resources and services. Duke University uses the LibGuides application (Springshare, n.d.) to create course-specific guides and link them within Blackboard (Daly, 2010). In addition, we have taken our traditional support for the English Composition class and morphed the content into a one-credit online course that is under consideration for becoming a requirement in the University of Arizona's general education program.

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CONCLUSION

So, how does this all relate to the theme of this conference—"Climbing Out of the Box: Repackaging Libraries for Survival?" What is the take-home message that you can actually apply to your day-to-day work?

We think it is that we must create the library as service, and that doing so is an ongoing, never-ending process. It is very hard work. There is no magic bullet, no shortcut, no easy way out.

We are in uncharted territory. Even though we have made many changes at the University of Arizona, our work is not over by a long shot. There is no way to say, "OK, we're done now." We have to keep refining and improving. We have to stay nimble, flexible, and always customer-focused. The new reality facing libraries is that change is rapid, constant, and unavoidable. As futurist Joe Flower wrote in "The Change Codes": "You can't 'go back to the way things were' any more than you can unscramble eggs" (Flower, n.d.).

Once again, "The choice is clear. Change now and choose our futures. Change later, or not at all, and have no future" (Stoffle, Renaud, & Veldof, 1996, p. 224). It is up to us to do whatever is necessary to thrive—and be prepared to do it over and over again.

NOTES

1. "You never want a serious crisis to go to waste. … it's an opportunity to do things that you think you could not do before," said Rahm Emanuel, White House chief of staff for President Barack Obama, at the Wall Street Journal CEO Council in Washington, DC, on November 19, 2008.

2. Figures are as of end of FY2008–2009.

3. Changes are from FY1998–99 to FY2008–2009.

4. $957,062 in FY2009–2010.

5. Collection Management published a special issue on patron-driven acquisitions in 2010, Vol. 35, No. 3/4.

6. ILL requests rose from 38,598 in January–November 2008 to 58,822 in January–November 2009.

7. This journal was originally hosted by the University of Arizona Libraries, but is now published online by the University of Wisconsin Digital Collections Centre and the UW–Madison Libraries' Office of Scholarly Communication and Publishing, http://www.insectscience.org.

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REFERENCES

- Association of College & Research Libraries Research Planning and Review Committee. (2010). 2010 top ten trends in academic libraries: A review of the current literature. *College & Research Libraries News*, 71(6), 286–92.

- Amabile, T. M., & Kramer, S. J. (2010). Breakthrough ideas for 2010. *Harvard Business Review*, 88(1), 41–45.

- Arizona Student Unions. (n.d.). *Bookend Cafe*. Retrieved from http://www.union.arizona.edu/dining/ufs/bookend/index.php.

- Association of Research Libraries. (n.d.). *MINES for libraries: Measuring the impact of networked electronic services*. Retrieved from http://www.arl.org/stats/initiatives/mines/index.shtml.

- Association of Research Libraries. (2010). *The keystone principles*. Retrieved from http://www.arl.org/bm~doc/keystone.pdf.

- Bender, L. J. (1997). Team organization–learning organization: The University of Arizona four years into it. *Information Outlook*, 1(9), 19–22.

- Blumenstyk, G. (2010, June 10). Moody's sees continued financial challenges for private colleges. *Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/Moodys-Sees-Continued/65847.

- Bracke, M. S., Brewer, M., Huff-Eibl, R., Lee, D. R., Mitchell, R., & Ray, M. (2007). Finding information in a new landscape: Developing new service and staffing models for mediated information services. *College & Research Libraries*, 68(3), 248–67.

- California Digital Library. (n.d.). *WEST: Toward a Western Regional Storage Trust, Planning Meeting, January 7–8, 2010*, University of California. Retrieved from http://www.cdlib.org/services/collections/sharedprint/WESTMeeting1BackgroundDocumentFINAL.pdf.

- Cornell University Library. (n.d.). *arXiv.org e-Print archive*. Website: http://arxiv.org.

- Daly, E. (2010). Embedding library resources into learning management systems: A way to reach Duke undergrads at their points of need. *College & Research Libraries News*, 71(4), 208–12.

- Diaz, J. R., & Pintozzi, C. (1999). Helping teams work: Lessons learned from the University of Arizona Library reorganization. *Library Administration & Management*, 13(1), 27–36.

- Ebooks Corporation. (n.d.). *Ebook Library*. Retrieved from http://www.eblib.com.

FROM SURVIVING TO THRIVING

By Carla J. Stoffle and Cheryl Cuillier

Excerpted from *Repackaging Libraries for Survival*

- Ebrary. (n.d.). *ebrary*. Retrieved from http://www.ebrary.com.

- EBSCO Publishing. (n.d.). *NetLibrary*. Retrieved from http://www.netlibrary.com.

- Fast Company. (2005). *The rules of business: 55 essential ideas to help smart people (and organizations) perform at their best*. New York, NY: Currency/Doubleday.

- Flower, J. (n.d.). *The change codes*. Retrieved April 30, 2010, from http://www.well.com/bbear/changecodes.html.

- Greater Western Library Alliance. (n.d.). *The Technical Report Archive & Image Library (TRAIL)—Project Site*. Retrieved from http://trail.gwla.org.

- Hazen, D. (2010). Rethinking research library collections: A policy framework for straitened times, and beyond. *Library Resources & Technical Services*, 54(2), 115–121.

- Hebel, S. (2010, March 14). State cuts are pushing public colleges into peril. *Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/In-Many-States-Public-Higher/64620.

- Hendrix, J. C. (2010, February). *Checking out the future: Perspectives from the library community on information technology and 21st-century libraries*. Washington, DC: American Library Association Office for Information Technology Policy. Retrieved from http://www.ala.org/ala/aboutala/offices/oitp/publications/policybriefs/ala_checking_out_the.pdf.

- Holloway, K. (2003). Developing core and mastery level competencies for librarians. *Library Administration and Management*, 17(2), 94–98.

- Holloway, K. (2004). The significance of organizational development in academic research libraries. *Library Trends*, 53(1), 5–16.

- Huff-Eibl, R., Ray, M., & Voyles, J. (2008, December 8–10). *A new model at the University of Arizona: Are staff classification systems reflecting current and future library competencies?* Presented at the Arizona Library Association Annual Conference, Glendale, Arizona. Retrieved from http://intranet.library.arizona.edu/users/stofflec/Classified_staff_competencies_2008.ppt.

- Ingram Digital Ltd. (n.d.). *MyiLibrary*. Retrieved from http://www.myilibrary.com.

- ITHAKA. (n.d.). *Portico: A digital preservation and electronic archiving service*. Retrieved from http://www.portico.org.

- Jan, T. (2010, May 24). *Harvard's paper cuts: School library works to maintain stature in the shift to digital. Boston Globe*. Retrieved from http://www.boston.com/news/education/higher/articles/2010/05/24/for_harvards_library _an_arduous_digital_shift/?page=1

FROM SURVIVING TO THRIVING

By Carla J. Stoffle and Cheryl Cuillier

Excerpted from *Repackaging Libraries for Survival*

- Kaufman, P. T. (2008). The library as strategic investment: Results of the Illinois return on investment study. *Liber Quarterly*, 18(3/4), 424–36.

- Kaufman, P. (2007). It's not your parents' library anymore: Challenges and opportunities in the new webs of complexity. *Journal of Library Administration*, 46(1), 5–26.

- Lewis, D. W. (2007), A strategy for academic libraries in the first quarter of the 21st century. *College & Research Libraries*, 68(5), 418–34.

- Lewis, D. W. (1995). Traditional reference is dead, now let's move on to important questions. *Journal of Academic Librarianship*, 21(1), 10–12.

- Lib-Value. (n.d.). Value, outcomes, and return on investment of academic libraries. Retrieved from http://libvalue.cci.utk.edu.

- Luce, R. E. (2008). *A new value equation challenge: The emergence of eresearch and roles for research libraries.* In *No brief candle: Reconceiving research libraries for the 21st century* (pp. 42–50). Washington, DC: Council on Library and Information Resources.

- Miller, C. C. (2010, July 19). E-books top hardcovers at Amazon. *New York Times*. Retrieved from http://www.nytimes.com/2010/07/20/technology/20kindle.html?r=1.

- Office of Institutional Research and Planning Support. (2009, September 20). *The University of Arizona: Total minority student enrolment trends, fall 1983 to fall 2009*. Retrieved from http://oirps.arizona.edu/files/Student Demo/Enrollment_trends_for_minority_students_1983_2009.pdf.

- On Demand Books. (n.d.). *Espresso book machine*. Retrieved from http://www.ondemandbooks.com/the_ebm.htm.

- Owens, I. (1999). The impact of change from hierarchy to teams in two academic libraries: Intended results versus actual results using total quality management. *College & Research Libraries*, 60(6), 571–584.

- Phipps, S. (2001). Beyond measuring service quality: Learning from the voices of the customers, the staff, the processes, and the organization. *Library Trends*, 49(4), 635–661.

- Phipps, S. (2004). The system design approach to organizational development: The University of Arizona model. *Library Trends*, 53(1), 68–111.

- Pintozzi, C. (2008, October). *Project, program, and portfolio management in the University of ArizonaL and CCP*. Retrieved from http://intranet.library.arizona.edu/xf/projmanage/documents/ProjectManagementOverviewPPT.pdf.

FROM SURVIVING TO THRIVING

By Carla J. Stoffle and Cheryl Cuillier

Excerpted from *Repackaging Libraries for Survival*

- Project on the Future of Higher Education. (2004). *Dealing with the future now: Principles for creating a vital campus in a climate of restricted resources.* Retrieved from http://www.wisconsin.edu/news/2004/02Feb2004/UWPresentation-guskin040205.pdf.

- Spiro, L., & Henry, G. (2010, June). *Can a new research library be all-digital? In The idea of order: Transforming research collections for 21st century scholarship* (pp. 5–80). Washington, DC: Council on Library and Information Resources.

- Springshare. (n.d.). *LibGuides.* Retrieved from http://www.springshare.com/libguides.

- Stanford University Libraries. (n.d.). *LOCKSS.* Retrieved from http://lockss.stanford.edu/lockss.

- Stoffle, C. (1995). *The upside of downsizing: Using the economic crisis to restructure and revitalize academic libraries.* In C. LaGuardia, S. Bentley & J. Martorana (Eds.), *The upside of downsizing: Using library instruction to cope* (pp. 1–13). New York, NY: Neal-Schuman.

- Stoffle, C., Allen, B., Fore, J., & Mobley, E. R. (2000, November). Predicting the future: What does academic librarianship hold in store? *College & Research Libraries News*, 61(10), 894–897.

- Stoffle, C. J., Allen, B., Morden, D. & Maloney, K. (2003). Continuing to build the future: Academic libraries and their challenges. portal: *Libraries and the Academy*, 3(3), 363–380.

- Stoffle, C. J., & Cuillier, C. (2010). Student-centred service and support: A case study of the University of Arizona Libraries' Information Commons. *Journal of Library Administration*, 50(2), 117–134.

- Stoffle, C. J., Leeder, K., & Sykes-Casavant, G. (2008). Bridging the gap: Wherever you are, the library. *Journal of Library Administration*, 48(1), 3–30.

- Stoffle, C., & Phipps, S. (2003). Meaningful measures for libraries. *Library Issues*, 23(4), 1–4.

- Stoffle, C. J., Renaud, R., & Veldof, J. R. (1996). Choosing our futures. *College & Research Libraries*, 57(3), 213–225.

- Stoffle, C. J., & Weibel, K. (1995). *Funding academic libraries.* In G. McCabe & R. J. Person (Eds.), *Academic libraries: Their rationale and role in American higher education* (pp. 125–148). Westport, CT: Greenwood.

- Tenopir, C., Love, R., Park, J., Wu, L., Baer, A., & Mays, R. (2010, June). *University investment in the library, phase ii: An international study of the library's value to the grants process.* Retrieved from http://libraryconnect.elsevier.com/whitepapers/roi2/2010–06-whitepaper-roi2.pdf.

FROM SURVIVING TO THRIVING

By Carla J. Stoffle and Cheryl Cuillier

Excerpted from *Repackaging Libraries for Survival*

- University Libraries. (2009). *Spending reductions for 2009/10 & 2010/11*. Retrieved from http://www.library.arizona.edu/spendingReduction.

- University of Arizona. (2000). *NCA 2000 self-study report North Central Association*. Retrieved from http://provost.arizona.edu/files/NCA2000SelfStudy_Report_Chp4_6.pdf.

- University of Arizona. (2008). *Living the future 7: Transformation libraries through collaboration*. Retrieved from http://www.library.arizona.edu/conferences/ltf/2008.

- University of Arizona. (2010). *Expanding our vision, deepening our roots: Five-year strategic plan 2011–2015*. Retrieved from http://plan.web.arizona.edu/strategic-plan.pdf.

- University of Arizona. (n.d.a). *Geotechnical, rock and water resources library*. Retrieved from http://www.grow.arizona.edu.

- University of Arizona. (n.d.b). *Journal of Ancient Egyptian Interconnections*. Retrieved from http://digitalcommons.library.arizona.edu/holdings/journal?r=uadc://azu_egypt.

- University of Arizona Libraries. (n.d.f). *K–12 LessonLink*. Retrieved from http://lessonlink.library.arizona.edu.

- University of Arizona. (n.d.c). *Latino politics* (eBook). Retrieved from http://uair.arizona.edu/item/292005.

- University of Arizona. (n.d.e). *Rangelands archives*. Retrieved from http://digitalcommons.library.arizona.edu/holdings/journal?r=http://rangelands.library.arizona.edu

- University of Arizona. (n.d.f). *UAiR: The University of Arizona Institutional Repository*. Retrieved from http://www.uair.arizona.edu

- Voyles, J. F., Dols, L., & Knight, E. (2009). Interlibrary loan meets Six Sigma: The University of Arizona Library's success applying process improvement. *Journal of Interlibrary Loan, Document Delivery & Electronic Reserve*, 19(1), 75–94.

- WebJunction, Carterette, P., Lenox, M., Houghton-Jan, S., Iaukea, E., & Gutsche, B. (2010). *Competencies for libraries*. Retrieved from http://www.webjunction.org/c/documentlibrary/getfile?folderId=94651303&name=DLFE-25360002.pdf

DECONSTRUCTING THE LIBRARY

RECONCEPTUALISING COLLECTIONS, SPACES AND SERVICES

The Emerging Research Library
Our Role in the Digital Future

Edited by
Sul H. Lee

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By Sarah M. Pritchard

ABSTRACT

In the digital environment, we still have resources, staff, and facilities that combine in various ways to acquire and provide information. These recombination's challenge traditional definitions of library organization. Students and faculty now have many options for conducting their work, of which the traditional library is only one; the future of libraries—and librarians—will thus be in our ability to differentiate ourselves through unique and value added features. The library is not a single static entity, it is becoming a suite of services through which users locate, use, and (re)create research materials. By analysing the intersection of factors such as subject, level of user, type of need, and proximity, we can develop a fine-tuned approach and customize services across the spectrum of physical, electronic, human, and material resources.

Regardless of the actual year and the specific trends, the professional literature and conferences are replete with writings about the emerging future and the trends in the external environments of education, technology, economic policy, publishing, and social behaviour. Most of these are stimulating and thought provoking and prod us to think about the potential for our particular jobs and institutions.[1] At the same time, many things in research libraries do not change much at all and we seem to muddle through. How do we identify the core mission and values of research libraries, while adapting to enormous and very real shifts in the methods and materials of academic information? We need to "deconstruct" the stereotypical categories of library resource and services, while sustaining the core concepts and models that still shape the nature of our profession. What we keep seeing in the digital environment is that our tools and locations are changing, but our goals and values are not.

When we describe the library's "role in the digital future," we are not talking simply about digital information, but about the transformation of the information environment that is happening as a result of digital technologies in our lives. This information environment still includes print and other physical forms of information; it still includes physical as well as virtual spaces, but these services, formats, and facilities are leveraged and extended, and new services and relationships are enabled through digital infrastructure. This has been an important theme of reports and articles in our field.[2] Digital infrastructure can be defined conceptually to include the spectrum created by interlinked digital content, digitally based business operations, digital communication and dissemination, digital research tools for analysing and visualizing information, and digitally created "surrogate worlds" of which we are just seeing the early stages, things like Second Life or even in this view, MySpace since it has generated an entire social environment. What is exciting yet challenging about

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this infrastructure is that it undergirds even very traditional information objects and services such that librarians must engage in very holistic systems thinking as we organize and deliver services, allocate resources, and fulfill the goals for which a given library was established. All parts of a library are involved, not just some pieces that we can conveniently segregate as a special type of content or a special service.

At the same time, it is clear that the fundamental goals of library services have not changed. Libraries, librarians, and library services, broadly defined, are mechanisms to match people with information. Over the centuries we have made many choices about exactly how to do that matching, using cards, computers, or consultations, being active or passive, being selective or storing up everything just in case. A formal library, however, is today but one of the channels and mechanisms by which these two sides of the equation "find" each other, so we need to define ourselves more as a research information service of which one part might be an organized library. A successful research information service must reflect a dynamic understanding of the changes in three parallel structures:

1. the user community (in this case, the faculty and students, trustees and other stakeholders in higher education institutions)

2. the content (the creators and the publishing and media industries)

3. the interface (organizing systems, technology, direct services and facilities).

In the library and information world, we must constantly keep in mind the changing characteristics of the two external components of this equation, but it is especially the third part, the interface that enables the meshing of people and information, that typifies the work we do. Libraries, whether personal or institutional, are organized systems. If we look at the history of forms of classification, the urge to develop such systems goes back hundreds of years. The assumption seems to be implied that a given system will be able to encompass all present knowledge and be logically expandable to future topics. The store of information for which one needed the system could be brought together and expanded and remain stable in its order, even while growing. Even though new systems were developed periodically, each one was in itself a fixed pattern or approach (a few new numbers or shelves added within an existing system does not imply fundamental change). Therefore, the library as an interface was a set of physical and intellectual systems set up to await the users, one massive and passive array of information.

The digital environment, however, has transformed the passive sense of a building with books, which was in effect an information monopoly over which the user had

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little control, into an environment where the user has numerous choices, and the librarians themselves have numerous choices as to how to procure, deliver, and archive information. A single fixed system, either physical or bibliographic, will not work in the face of the flood of available content; moreover, users expect to be able to interact in a dynamic way with information, creating and reshaping the information and the organizing systems as their needs and mental models evolve. The breakthrough in the library's monopoly has been with the success and ubiquity of the end-user, point-of-service, and digital access to large quantities of relevant information. While users still need ways to get this information and they do prefer it organized, there are countless means of access that substitute for and bypass traditional libraries. Even if librarians are convinced that we have a better way, that message may get lost amidst the cacophony of all the competing messages, and the library just does not seem necessary to some users.

DECONSTRUCTING AND REDEFINING "LIBRARY"

How can the library compete in this environment that is changing so rapidly when we have such a large number of conflicting demands, and we do not have the resources available to large commercial enterprises? How do we decide what to do amidst this plethora of choices? We still have a messy patchwork of different kinds of collections, facilities, technologies, and staff skills, as well as a diverse array of faculty and student demands and levels of institutional readiness. Despite articles encouraging a total redesign of the entire library operation, what might be called "blow it up and start over," most of us find this impractical for reasons of time, money, and politics. You can, however, redefine and "explode" the way you use the resources that you have at hand. We have great familiarity with our users, specifically, the advantage of being close to them physically and organizationally in academia, and we have institutional memory, and most important, credibility. The key is in reorienting our work to a much more refined definition of services, focusing on unique strengths, local needs, and multiple ways of delivering information. There are two trends in digital information that paradoxically converge, and these are the concepts of global and local. The global mass stores of digitized information are crucial and are expanding; their very size and ubiquity is what frees libraries locally to develop customized service directly aimed at our own institutions. This concept also underlies analyses by Betsy Wilson (this volume), Carla Stoffle, and Kim Leeder.[3]

We're all comfortable with recognizing that with digital technologies, the library is an "any time, any place" concept; the library can be defined as an abstract space, not a place. The

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word library, then, needs to be deconstructed. It conveys too much of a single definition of a collection in a building, designed to work in one linear way. The word barely even conveys the notion of people or services; we all have the feeling of invisibility that comes as some faculty swear that the "library" is the heart of the campus but when pressed, they rise not to protect the personnel budget but that for materials. Let's move to using library as a verb, not a noun, as a way of making more visible the level of activity that must happen in order to deliver those materials to the users.

I want thus to frame the research library as a suite of services designed to meet a range of needs. Collections, technologies, processing and public services—even the library building—are all forms of services that can be customized and deployed in different combinations to meet a much greater variety of needs than is the case when we view these things as undifferentiated wholes. Everything should now be (de)constructed and reassembled as an active, planned service, rather than a passive resource that functions according to one predetermined system, like a fixed reference desk open for set hours in one place with one level of consultation provided. Librarians and library staff must be the focus, not the overly vague word "library," because it is the people who are designing and providing the services that are now the key. They can mediate among the many resources, local and remote; they can set up facilities and technologies as appropriate; they can consult and advise on options for information management; they can design the interfaces that deliver the information or the service wherever the user is and in the ways, most effective for the subject, the level of user, and the task at hand. This concept works even if we are simply placing physical books on shelves and letting people browse in the stacks. That is a specific choice that meets one particular need, but it is now obvious that it is only one of the many ways to characterize user needs and to deliver information services.

MISSIONS

It sounds like a worn platitude to say that it is essential to define the mission of the library, but if we do it well, and I do not think we always do, then we gain significant shared understanding with our own stakeholders as to what we do and thus how we are prioritizing our resources. Embedded in that mission statement can be signals that place the concept of services to users at the front while still valuing the assembling of large collections that is the hallmark of research libraries. Research libraries are especially challenged since we do intend to keep materials we acquire from all over the world in many subjects and formats for very long periods of time, and we do not want to get rid of the back forty acres of stuff when we need to make

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room, physically or financially, for new services and publications. Serving the faculty and students of the university has been the conventional way to frame the mission statement, and that itself does imply quite differing levels and types of collections and services. If we also make explicit commitments in our mission to the preservation of important cultural heritage resources and the stewardship of the university's digital academic assets, then we have outlined two areas currently of great importance to research libraries that imply specific services and ways of allocating library resources like space, technology, and staff.

Research libraries have been the gatherers and protectors of nation- ally and internationally significant cultural heritage resources from the beginning. Too often, however, we are not clear about the implications of this for our institution's own goals. This can present a challenge in the higher education environment, though not so much at independent research libraries. Once a library has built an important and distinctive collection of the kind generally described as a "special collection," we have made an implied commitment to the rest of our peer research libraries that we are going to sustain and enhance that collection. Special collections are expensive to acquire, process, house, and preserve, and few libraries are going to start from scratch in an area if they know another library already has exhaustive research level holdings. This may mean spending scarce resources in an area that, in any given semester, could be irrelevant to the needs of the specific faculty and students right there at that time. This can be a risky thing to admit in some public institutions where the legislature may be focused on a very short-term definition of outcomes, and they do not want to invest any more than what is needed to support the research and curriculum being pursued that year. We should show that it is a source of institutional pride and competitiveness to have resources of this kind, and we can appeal to the institution's sense of supporting the greater social good, but we should be honest about the costs. Most libraries can readily itemize the special collections to which they have strong ongoing commitments, and it is not a long list compared to the overall scope of the library. These collections are ones for which we could legitimately say that they are ends in themselves. As I will make clearer a little later, this has direct bearing on how we deconstruct the nature of collections and then focus on more customized services.

The second area in which mission statements can help clarify the scope of library operations and support new roles is that of the stewardship of our parent institution's digital academic assets. This is an extension of the role of university archives that many research libraries already fulfill. In the digital environment, however, it opens up roles

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for librarians in several domains either not dealt with at all or handled in an eclectic and uncoordinated fashion. The long-term curation of university business records in digital form is woefully under-implemented at most institutions including my own. To say there are backups made at the level of the computer system files is not the same as a persistent and retrievable digital archive as we now define those. This is an opportunity to position the library as an active partner with campus IT and administrative operations offices to develop the archiving systems and the data and metadata structures necessary, but as logical as it may seem, it still presents fractious political difficulties. It requires a deconstructing of the word library and even of the word archive to piece apart the specific information services that can be brought to bear at the institutional level and that librarians are often uniquely qualified to provide. Stewardship of digital academic assets extends to institutional repositories for faculty publishing, grey literature, courseware, back files of commercial digital publications, and the library's own digital productions. Defining these together as institutional assets presents a business model in which information services are critical to the long-term history, competitiveness, and sustainability of the university. Such services go beyond traditional definitions of library collections or facilities; thus it is advisable to have this role defined in a mission statement.

USERS

The examples described above in the context of mission statements amount to defining new groups of users that can be primary targets for library services, such as external cultural heritage organizations, university administrators, public stakeholders, and even unidentified future researchers. These are not truly new users or new audiences, but they are users that we can do more to highlight and for whom our services can be highly relevant. They are not the main or the only user group, so it is essential to have a way to balance library resources. To recast its work as a suite of services, expanding and customizing while also sustaining certain traditional operations, a library can develop a detailed matrix of user characteristics that helps identify the information resources and delivery methods appropriate to each group. There are at least three dimensions to this "faceted classification" of users: the subject area of the information need; the level of the user (e.g., lower division undergraduates, grad students, junior faculty, clinical researchers); the task at hand (quick facts, in-depth research, scholarly publishing, integrating media in the classroom). The location of the user also helps define the options for specific services as might individual factors, such as accessibility or language.

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These characteristics should not surprise anyone; librarians have always looked at users in these ways as we have developed collections and facilities. What may be different in the digital environment is the greater ease in developing niche or tailored services. Because the majority of current core collections are increasingly digital, and most users prefer this format for their routine research and educational purposes, we can focus on the fringe areas where the materials are not digital or require specialized interventions, or we can launch new services such as publishing or the archiving of digital scientific data. When I refer to a niche service, the assumption is that not every person needs every service, and therefore, libraries can offer some services that if they were widely adopted, might be prohibitively expensive or logistically impractical. This can also help make up for the loss of traditional services to which long-time faculty have become accustomed, for example, the delivery of books from the campus library to faculty offices if they place a request through the OPAC. This is not a new idea but lots of libraries still do not do it because mail delivery staff object, the campus is too large to have a student assistant truck things around, or it is thought that the workload will be too great. Well, the number of faculty who need large numbers of newly identified print monographs every single day is dwindling steadily. For those who still work this way, primarily faculty using older materials in the humanities and the humanistic social sciences, the delight of getting all the books they flagged in the library catalogue without having to leave their office, promotes better satisfaction with the library and may even help overcome resistance to the shift of hundreds of thousands of volumes to secondary storage. This demonstrates the ways in which the digital environment enables more services even when it is a traditional service; the transactions from the faculty office are part of the digital communications and cataloguing systems, and the fact that the delivery of hard copy is now more manageable is because the larger proportion of daily information browsing is taken care of by digital information resources.

Within the cells of the matrix delineating subjects, levels, and tasks of library users, we have effectively deconstructed the notion of an undifferentiated user, and library staff can analyse how best to apportion resources across the needs and preferences revealed in this way. "Resources" include varying formats of collections, of course, as well as technologies, delivery mechanisms, reproduction services, staff expertise, buildings and facilities, and resources to which we have access through campus or consortial collaborations.

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SERVICES AND SKILLS

Libraries have become more and more service oriented over the past century, though this was not always the mode of a research library and in some countries, today it still is not. If you did not know how to use it, you did not belong there, and the work of digging out the information was the test of the mettle of a scholar. Even if a redefinition of a library as a suite of services seems a self-evident nonissue to many newer in the profession, it cannot be taken for granted that library operations actually are based on this notion or that library staff see their work in this way. A core library service used to be a library's own stacks, or its own databases, or even its own Web site, but those have been exploded or supplanted by the availability of easy external choices for seeking information. The OPAC and the ILSare not controlling or even comprehensive anymore.

Library services present a spectrum of approaches to acquiring, managing, evaluating, synthesizing, delivering, and preserving information; usually this is seen as a centralized or institutional approach, managing the resources owned by the enterprise. We can now add to that a parallel role as information consultants, working with users to help them manage, use and preserve the personal research information they accumulate and generate in their professional work. Librarians' skills can be decoupled, not only from the physical library as their place of work, but also from the collection of items owned by the library. Information management skills are increasingly central to universities at every level, and librarians are poised to deploy them in an exciting variety of settings.

To match information resources and services to users we need to rethink and deconstruct the nature of the collection, the nature of the delivery mechanisms used to move collections and information tools to users, and the staff skills needed for given combinations of those. The group of things that we have lumped together as public services, for example, can be split from their traditional moorings at the desk. Even the split between the departments is blurred as many staff work across those functions. As libraries try to locate new services within typical organization charts, where does one put things like digital publishing, scholarly communication support, or information management consultation, in which we advise faculty about structure and metadata for their own databases and Web sites? These are increasingly important services, yet formalizing them requires taking apart older notions of departments and tasks. Staff expertise helps define an organizational structure that is more focused on services. This has been true in the past with collections' units organized around specific subjects or languages, but the difference I am suggesting

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is that the person, the physical location, and the collections or technologies can each be treated—conceptually, at least—as independent sets of resources to be recombined as needed.

Reference is no longer place-specific as it can be happening through online chat and IM; what does this mean for where the actual librarians can be located in the meantime? Information literacy instruction can be delivered in person, via the Web, or now through podcasts. Library staff with the right technical knowledge can be providing metadata, digitizing, archiving, and related programming work regardless of whether this is in support of the library's in-house needs, faculty research, or other institutional projects. Instead of itemizing a list of trendy innovative library services, I want to outline how new concepts of collections and of delivery are defining factors in reshaping those services.

DELIVERING RESOURCES

The notion of delivery is common in libraries and is usually taken to refer to bookmobiles, interlibrary loan mailings, shuttles between branch locations, and now, digital transmission. Modes of delivering services can be construed more broadly, and it is that broadening that allows a more strategic deployment of resources and almost a modular component approach to designing services to meet specific niches of user needs. In addition to vehicles, mail, and telecommunications, people are a form of delivery, and most interestingly, so are buildings. Buildings, and within them types of rooms, are another way to deliver the services needed by some users. Building-centric delivery is ideal for users that want consultation or group study, want to use rare materials, or do research that integrates the rare and the digital. Central campus library buildings are perfect for people oriented uses, for high-use resources or valuable materials, for collections that require expertise close at hand, and for special technologies that are not widely available. But with the scarcity of campus space and the expense of research library facilities, do we really need to use the main building as the delivery mechanism for all of the general collections? We can move lesser used, nonrare materials and items for which there are digital surrogates to secondary storage while renovating core library spaces to be much more customized for specific types of users, staff and collections. Both faculty and students still want to be in the library buildings but for quite different purposes; by deconstructing the idea of the building as a massive entity, and by viewing it now as one of many choices for delivery, maybe we can stop talking just about "the library" and more about "library services" and, even better, "librarians."

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Excerpted from *Repackaging Libraries for Survival*

The role of librarians and library staff as themselves being methods of delivery is not something new, but it has taken a long time to get the notion out of people's heads that the library is a specific place with physical assets, and you have to go there to get things done and the staff are a pleasant afterthought, if you think about them at all. It is that outdated but persistent notion that leads even sophisticated faculty to say things like "I never use the library anymore, I just go online," or that leads those faculty to vote to protect the collections budgets from cuts while allowing, directly or indirectly, reductions in staff that prevent the very acquisitions and systems design and other services needed to bring them the collections they defended. By putting librarians out there as faculty services specialists, we promote their role as academic partners and we advance the concept that "building" and "collections" are only parts of the array of information services that we can deliver. In some subjects where the traditional collections may be weak or still emerging, the librarian is increasingly the "glue" that helps users by advising on local and remote collections, print and digital, cooperative resource sharing, vendor services, scholarly publishing, and things like reserves, instruction, and course management support. To see the librarians as these independent sources of expertise, they have to get out from behind desks and even out of the physical building. The embedded librarian has long been common in libraries that support corporate projects and research facilities, and we are starting to see them in university settings. These are librarians that hold office hours (or are even permanently based) in the academic departments for which they are liaisons or that staff small service outposts in residence halls or student services buildings. They are near their collections only in the virtual sense; more importantly, they are near their users.

For some subjects and some users, all that is needed is digital delivery. The content, regardless of the owning repository, the consultation through email or live chat, the transactions for archiving, lending, or copying, the tools for authoring and repackaging, and more are all available at the keyboard. This truly decouples the user, the collection, and the facilities and fosters very direct access. It can be so successful that the user is unaware of how much design, programming, and funding went into ensuring that those resources landed on their laptop. There can be clever ways to approach branding screens and nesting Web sites to remind users of a library presence, or maybe we should not worry about the potential for invisibility and just find ways to build in user feedback tools that will help the behind-the-scenes library make the case at budget time.

There is one other form of delivery that is quite common yet not viewed in this context; collaboration. Libraries are excellent at developing collaborative

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relationships with all sorts of partners across campus, with teaching and technology groups, regionally with other libraries, and nationally with publishers, vendors, and professional and educational organizations. In this sense of delivery, some other organization is getting the actual content or service out to the user, but it is through the network of organized collaboration that it is enabled. It is easy to add "collaboration" as another mechanism by which libraries match users with content, and it should be better integrated into our overall planning for how to customize and expand services for particular needs. If we are deconstructing the library, then the result is that we cannot view it as a stand-alone entity. Because there are so many channels for users to get information, in effect, we want to seek out those very channels and collaborate with them to enhance the overall value added for users and for the role of librarians. A prime example of this notion is the number of libraries flocking to work out deals with Google and Microsoft for digitizing, search linking tools, data management, and more. If you cannot beat them, join them. What's great is that they still need libraries in order to get hold of real content, which brings me to the deconstruction of collections.

COLLECTIONS

Collections are not a goal in themselves, even in research libraries. Collections, whether print or digital, are a service, a way of matching information content with the people who seek it, and thus can be built and delivered in different ways depending on the type of information needed and the type of user of the service. This is a difficult shift for some librarians, who have had the luxury of exclusively collection-focused work, to accept. Even though the traditional bibliographer is generally following the priorities of the academic program, in research libraries this linkage can get rather distant. The bibliographer, a word I use purposely for its connotation of an older model, gets into a mesmerizing self-referential inward spiral building for the perfection of the collection as judged against some abstract standard that, even in the more elaborate collection development policies, does not always articulate a concept of users or institutional stakeholders.

Collection management, in the digital environment (by which I do not necessarily mean only digital collections), can be deconstructed into three distinctive areas of work that can each be the focus of an operational service area. First, despite the assertion I just made, some collections are an end in themselves; those are the well-defined "special collections" that are the hallmark of research libraries. These will in fact be even more important as a way to differentiate the strengths of various

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libraries. As more and more libraries subscribe to the same large commercial packages of digital content, the average undergraduate student is going to get the same collection of information everywhere. What will vary is the research level collections, and in addition to the typical special collections, this will include distinctive aggregations of more general materials defined by a subject or language focus. Each library will likely maintain and refine its definitions of what it considers its commitments to special collections because of the expense and time commitment these imply. By definition, they cannot be purchased or catalogued consortially; they may not be part of vendor-provided packages; they may require local cataloguing from scratch, customized piece by piece digitizing and preservation and extra security. The special collections are the parts of a research library being built for the greater good of the worldwide network of cultural heritage organizations and often for an unknown future user.

What has been defined as the "general collections" will be increasingly developed through massive digital stores paired with secondary storage, just-in-time digital delivery, and interlibrary lending, as is already some- what the case. This body of information resources must be acquired and delivered to meet the needs of the current faculty and students. Librarians need to view collection development work as one of a set of services they deliver to faculty along with support for course-specific instructional sessions, reserves, media, consultation about scholarly communication, data archiving, and the other things I mentioned earlier. Faculty are too absorbed in their own work to be expected to remember all sorts of names and locations for who does what in the library, and the people they trust are the ones that understand their field. We need to work on their terms and not expect them to fit our models. The subject librarian can function as the liaison for any information service needed, working with the department faculty as an academic partner and later making the arrangements with the relevant units behind the scenes at the library. In effect, this is a public services and outreach function where the faculty and upper division students and graduate students are the targeted groups.

The third facet of collection management, as I'm deconstructing it, is defined by a group of services and vendor relationships that has become increasingly technically complex. Except for special collections, acquisitions has become more a function of elaborate aggregated packages, approval plans, consortial contracts, and content bundled with metadata and end-processing services. Selection of items on a one by one basis is just not how we are building large general collections, and therefore, it should be managed as a technical and business operation and not as part of the

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subject-specific liaison function. Furthermore, the electronic resource management systems needed to track these packages and contracts, the specific titles and subjects covered by each, and the licensing provisions and allowable uses are a specialized support function that must integrate with other inventory control, cataloguing, and vendor ordering systems.

In this model, collection development has been redefined as a combination of three areas: general collections—which become a public services/liaison function; technical acquisitions and resource management; and special collections.

REMAPPING THE DOMAIN

It is a bit of a contrivance to use the concept of "deconstruction" in this study of organizational strategy because it is not really a direct extension of the meaning that the term has in literary theory. It does turn out, however, that even the literary theorists cannot give a simple definition of what deconstruction stands for. As an analytical model, however, it forces us to think on several levels including taking something apart that had been previously built or taking elements from within the "text"—which one might say is the library as a living narrative—and using them to undercut the purported meaning of the whole. Library leaders and staff need to do this deconstruction so that stagnation does not set in, and we can incorporate new services and collections while still living within the same budgets and buildings. Right now, this is especially critical because of the speed with which the digital environment has permeated our entire world and, as I have been emphasizing, because of the many ways our intended audiences may now find research information without entering a formal library. We need to flip things over and look at them from a different angle. There are other metaphors that can accomplish this, one of which might be cartographic: this is a remapping of both the conceptual and physical domains called "the library." Cartography, or perhaps holography, could be what we need to get a three-dimensional map of the intersection of types of users, different subject needs, and physical and virtual forms of delivery; at each node of intersection we can craft a service, and it is that matrix array, that suite, which is the library.

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NOTES

1. Strategic planning frameworks for libraries stress these factors, such as the ACRL Research Committee, Environmental Scan 2007 (Chicago: Association of College and Research Libraries, 2007), http://ala.org/ala/acrl/acrlpubs/whitepapers/Environmental_Scan_2.pdf (accessed March 1, 2008); and the *SOLINET Member Scenario Planning Discussions* held April 23, 2007 (Atlanta, GA: Southeastern Library Network, Inc., 2007), http://www.solinet.net/emplibfile/scenarioplanningreport.pdf (accessed March 1, 2008).

2. See for example Campbell, Jerry D., "Changing a Cultural Icon: The Academic Library as a Virtual Destination," EDUCAUSE Review 41, no. 1 (January/February 2006): 16–31; and Lougee, Wendy Pradt, *Diffuse Libraries: Emergent Roles for the Research Library in the Digital Age* (Washington, DC: Council on Library and Information Resources, August 2002).

3. Stoffle, Carla J. and Kim Leeder. "Where Next? Library Transformation," presented at *Living the Future 6*, April 5–8, 2006, Tucson, AZ, http://www.library.arizona.edu/conferences/ltf/2006/documents/LTF_transformation.ppt (accessed March 1, 2008).

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OUT OF THE GREY TIMES

LEADING LIBRARIES INTO THE DIGITAL FUTURE

The Emerging Research Library
Our Role in the Digital Future

Edited by
Sul H. Lee

This chapter is excerpted from

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LEADING LIBRARIES INTO THE DIGITAL FUTURE

By Deborah Jakubs

ABSTRACT

Past practices, policies, and staffing patterns have served as a solid foundation for research libraries. New challenges require a fresh—and very different—look at much of what we have taken for granted over decades. This presentation will discuss the changes in philosophy, organizational models, and recruitment that are needed to reposition libraries for the digital future.

Two decades ago, when my older son was just about four years old and still an only child, one of his favourite pastimes was to watch reruns of the original "Lassie" shows. We often watched together, immersed in the adventures of Timmy and his brave dog, familiar to me from my own childhood. The sense of continuity was comforting, a link from the present to the past, another connection between us.

One evening, out of the blue, he asked, "Mommy, were you and Daddy alive in the grey times?" At first I did not grasp his meaning, but then it dawned on me: Lassie and Timmy lived in the grey times, and we lived in the Technicolor times. Black-and-white TV shows portrayed the grey times, before the world changed and became much more complicated, varied, and beautiful. A lot like Kansas before Oz, or maybe Pleasantville.

I have carried this memory with me for the obvious reasons related to family (it is a favourite story), but lately I have also begun to see it as a metaphor for the work and lives of libraries (and librarians) as we face and embrace the digital future. We did, in fact, live and work in the "grey times," though we did not know it; we were satisfied, comfortable, and even happy. The challenges were predictable, and we understood the world and our role in it. People came to us for help, and we provided that authoritative assistance. Our help was of critical importance to their success. We anticipated their needs and provided services to meet those needs, from collection development to cataloguing, from inter-library loan to reference desks.

I mean no disrespect by saying we lived in the grey times; it was the world we all knew and understood and in which we thrived. Now, however, we have stepped out of that world. Indeed, we are already living in the digital future in which users of libraries have many other options when it comes to seeking information, in which we know much less what to expect, in which our patrons are becoming experts themselves. This has been stimulating and unsettling at the same time. It has left some librarians wondering about the value of all they have contributed over their careers. It is incumbent on us to facilitate this transition, to position our libraries and prepare our staff for the rapid changes of the digital present and the digital future, as

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far ahead as we can see. We must be careful, at the same time, to respect the legacy of the grey times.

The role of the research library, it is no secret, has become more complex. Library buildings and the purposes for which they are being designed and utilized have changed dramatically. Relationships between library staff and the user communities (on-site as well as remote) have expanded, and their interactions have grown more sophisticated. Librarians are developing new facility with technologies and are engaged in new, closer ways with researchers. Formerly places in which primarily to engage in quiet reading and contemplation or from which to retrieve materials to take away and use, our research libraries are now twenty-four-hour beehives of group work, social interactions, and the creation of innovative scholarship that spans formats. The expanded role of the library, and of librarians, means we must anticipate, and reach to provide, the most advanced technological access to a wide array of digital resources without losing sight of our most basic commitment to the preservation of scholarship in print form. Our special collections have come to distinguish one research library from another as our online collections become more and more similar through licensed access to e-resources by the thousands. Creating better access to the old, establishing new links to all materials that support scholarship, and extending the reach of our special collections are important ways we are heading into the digital future.

CREATING INTELLECTUAL COMMUNITY

The reinvigoration of libraries has come as a surprise to many, including university administrators and the general public, who have questioned whether there is even a need for the physical library given the availability of digital resources. Not only is there a need, but it is even more compelling as the range of activities the library supports grows wider. As a Duke first-year student remarked, "The library is where intellectual communities are formed," explaining the late-night scene in the reading rooms in which students learn from one another about courses they are taking, projects in which they are engaged, and ideas they are pursuing; it is obvious that learning is increasingly informal, complementing the formal. Another student commented that she goes to the library "when I want to get serious." It is possible to study in one's dorm room, but students do not generally do so. This is due to the "push" factors—noise, interruptions, the discomfort of spending even more time in such a small space—as well as the "pull" factors— inspiring environment, access to scholarly resources, comfortable and varied seating options, a coffeehouse, and a socially stimulating setting—of the modern library.

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Student demand for longer hours has led us to keep the libraries open twenty-four hours most days of the week. The library has become that "third place," described in The Great Good Place, where people can gather simply for the pleasures of good company and lively conversation, putting aside the concerns of work and home.[1] Similarly cited in Pattern Recognition, this is the place "whose mission is defined by service, where people can work unobserved and can develop as they wish."[2] This vitality and our newfound popularity, bring us pleasure and pride, as we see how central the library is to the social and intellectual lives of our students. The role also requires some adjustments: expanded staffing (Duke now has reference librarians on duty until 2:00 AM in our two principal libraries); additional security and housekeeping services; enhanced user spaces, often at the expense of on-site physical collections; and relaxed food and drink policies, given that students are now practically living in the library during certain times of the semester.

Just as library users seek different kinds of study and research spaces, they also expect new library services. Those expectations are predicated on having immediate and round-the-clock access to information, books, e-reserves, answers to questions, and online delivery of articles. Once, not that long ago, e-mail reference service was a great innovation; now it is too slow for students and has been replaced by chat, instant messaging, and virtual reference service. At Duke, in just two years, chat reference questions increased by 212 percent, IM questions by 256 percent, and virtual reference (Tutor.com and Velaro) questions by 155 percent. The trend continues upward. At the same time, from 2005 to 2007, reference transactions at the desk saw a small overall decline while the number of content and extended questions rose somewhat. We know that users have a choice of where to get information, and libraries still seek to be among the first, most reliable, and trusted locations to satisfy those needs, whether in person or virtually.

In the grey times, libraries boasted excellent public service, but in developing those services, paid relatively little attention to what users wanted, what users preferred, and how users did their work. Today, in comparison, we have very savvy users who come to us with more sophisticated questions, abilities, and suggestions and higher expectations. Librarians feel the pressures and potential of these heightened expectations, along with the hot breath of the Googles of the world with which our services often compete. We must adapt and innovate and stay at least a step ahead of our users if we are not just to survive, but to thrive.

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FLEXIBLE, NIMBLE, RESPONSIVE

Research libraries have always taken their cues from the universities of which they are a part, responding to new program development, curricular changes, and shifts in the directions of research. As the digital landscape becomes more complex and the range of resources needed to support teaching and research expands, libraries must continue to prove their value to the university and demonstrate that the very significant investment made in the library is well directed and well spent, an investment not only in our buildings, staff, and collections, but also in the academic success of students and faculty. As new technologies are integrated into the academic realm, libraries must be flexible, nimble, and responsive. The challenge of maintaining both print and digital collections is mirrored in the need to provide technology services and support to a wider spectrum of users, from the researcher still firmly grounded in the grey times to the most innovative scientist.

As the increased use of the physical spaces and the undeniable value of the diverse services we provide become more obvious to the university administration, it is a time of great opportunity for the library. This can lead to an even more central role for the library. At Duke, for example, a new library addition that essentially doubled our space opened in fall 2005, and our popularity as a destination for students skyrocketed. The administration could not help but take note (there was a 40 percent increase in the number of people coming to the libraries, a 25 percent increase in print circulation, and we are now a hot stop on the regular tours for prospective new students), and soon we were engaged in collaborative planning with the provost, the deans, the chief information technology officer, and faculty to renovate what was to have become technical services space on the lower floor and convert it to a Teaching and Learning Centre (TLC) offering classrooms, breakout rooms, and other creative spaces, all well equipped with technology tools. Thus the libraries will facilitate the full spectrum of learning, from informal to formal, professor to student, student to student, and librarian to student, inside and outside the classroom. We will also put in place an integrated, highly collaborative, "all things technology" staffing model among the libraries, the Office of Information Technology, and Arts & Sciences. The evolution of the TLC is an excellent example of adapting our plans as we see how the building is being used, learning from our patrons. To some, the idea of turning library space into classrooms might seem like a slippery slope, giving away to "them" something that is "ours;" I see it as an exceptional opportunity to partner with other units on campus and to prove once again the renewed centrality of the libraries to the academic enterprise.

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Excerpted from *Repackaging Libraries for Survival*

THE CHALLENGE OF INTERDISCIPLINARITY

Like many other universities, Duke has placed a renewed emphasis on interdisciplinary scholarship. Far from the old model of a team-taught course that featured two professors from different departments, the new interdisciplinarity has many versions. Cross-school faculty appointments, the creation of new institutes, e.g., for global health, brain sciences, or visual studies, and boundary-crossing from the humanities to the sciences—all are examples of this new dynamic, which also frequently engages faculty from other universities, often beyond the United States, in collaborative research projects. What does this mean for research libraries? In the grey times, we organized our staff and our budgets around disciplinary divisions, with bibliographers or liaisons for this or that department, carrying out collection development and monitoring the materials budget for their respective fields, attending academic department meetings, serving as conduits for information moving in both directions—department-library and library-department. Now, we are challenged to provide new kinds of services that target the research and teaching that is not restricted to a single discipline. Team-based program liaisons—including librarians from the professional schools, librarian links to a customized set of resources on course Web sites, and more flexible budgeting—are all among the strategies required to meet this new challenge. We are also called on to produce reports that combine data from multiple areas and across schools to demonstrate how a given interdisciplinary program is supported by the library. Adding to the complexity is the need to assess the relevance and impact of those many databases that cross traditional disciplinary lines. In the grey times, we could easily say what the library spent on sociology, art, or biology—but those strictly disciplinary divisions are losing relevance.

In response to a more interdisciplinary focus, the libraries at Duke are making several changes. Facing the renovation of the building in which the chemistry library was located, and given the very slim possibility of seeing the construction of a new consolidated sciences library, we made the decision (in consultation with a faculty committee) to integrate the library into our main (now expanded) library. Thus, chemistry, its staff, and part of its collections became part of the main library in 2007. Over the next two years, we will add two other branch libraries for math, physics, computer science and engineering, and the biological and environmental sciences. We will merge the staff of these branches with central staff and look forward to the consolidation of a truly interdisciplinary library with highly responsive and robust services to all users. The Provost fully approves of this direction, and has provided not

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only moral support but also significant funding ($3.5 million) to acquire thousands of e-journal back files so we can move all the physical volumes offsite rather than into the main library. Naturally, faculty and students are very pleased to have this enhanced digital access to the journal literature and find the newer main library spaces to be more inviting and conducive to group work than the much older branch spaces. We expect to retain several (bookless) library "satellites" among the science buildings as reading rooms and study spaces featuring librarian office hours and delivery points for materials from our offsite stack facility as well as interlibrary loan.

Much interdisciplinary work relies on data and GIS. Another important change we have made is to create a Data Services unit to provide expertise to the campus. Several academic departments, including economics and the School of the Environment, have partnered with the libraries and are providing graduate student assistants who complement the work of the professional librarians who staff Data Services. As more seniors at Duke opt to submit an honours thesis (the number has risen from 16 percent of the senior class to over 30 percent), we are seeing much more use of primary data among undergraduates. This new unit will respond well to that need.

CHALLENGES ARE OPPORTUNITIES

The heightened expectations of users and interest among our administrators in ensuring that our libraries can meet those expectations compel us to engage in fresh thinking about how we are organized, what skills we seek in new hires, and what leadership we provide. Of course it is not possible to begin completely anew and construct the "dream team," but it can be a provocative basis for productive discussion to contemplate what staffing, service, and collections models we would devise if we were starting from scratch in this digital world.

First of all, we need to put energy into revising the image of the library and the people who work there to reflect the true nature, extent, and sophistication of the services offered. In short, we need to stop talking just to ourselves and market the library better. In the grey times, people sought us out because they needed us; we were the only game in town when it came to finding trustworthy information. Times have changed, and an information-rich society surrounds us. A traditional image no longer describes the research library accurately. Of course nothing spreads the word better than excellent service and satisfied library users, but we must be energetic and enthusiastic in promoting our collections and services.

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Reorganizing, retraining, and rethinking what we do are among the most difficult yet potentially most rewarding challenges we face. For many staff, particularly those who have been working in libraries since the grey times, it can be a stressful transition. For example, as we incorporate more elements of Library 2.0, inviting users (wherever they may be) to contribute metadata to describe digital collections, or as we link to Wikipedia for quick access to information, or as we pursue new avenues of access to the information in our online catalogues, it may seem to some that the library's role as the authoritative, trusted source of good, solid, and accurate information is eroding dangerously and that we are even helping that process along. It is important, as leaders, to be sensitive to staff concerns and to convey an appreciation for the critical role they have played in establishing the foundations of today's library services. We could not have emerged from the grey times at all were it not for the dedication of our staff and their commitment to providing excellent services to our users.

That said, we must also encourage librarians and other staff to take on new roles and to see the benefits of enlarging their perspectives and experiences. Our people should be playing with the same technologies and tools that our students and other users are employing, becoming familiar with new approaches to research and information-seeking. staff should be expected to learn about new tools and new approaches to research and should be responsible for pursuing their continuing education. They should be encouraged to read widely and to pay attention to trends. The library can facilitate that learning through presentations, seminars, classes, conferences, and open discussions.

We must actively recruit new staff with the skills, creativity, and curiosity to enable the library to innovate and then set them loose to do so. Although a number of library schools are preparing students to take on these challenges, there are many roads to research library work. It behoves us to look broadly for new staff with the appropriate talents and not just the usual credentials. As Stanley Wilder has commented, "The need for new kinds of expertise has driven ARL libraries to hire a substantial and growing number of individuals with no library education."3 This is due in large part to the more complex role of libraries, the expansion of services and programs, and the ubiquity of technology.

As Wilder goes on to discuss, these new functions have led us to look to different groups, people with skills in instructional technology, systems support, budgeting and assessment, digital archiving, etc. We need—and should welcome—them all.

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The issue is reminiscent of the 1990s focus on the future of area studies librarianship and the perceived shortage of specialists with the deep knowledge of regions and languages that would be required to support academic programs. Acknowledging that there may be multiple paths to library work, the Mellon Foundation established several programs to attract recent PhDs to the field, in area studies and the humanities. The implication that the MLS might not be an absolute requirement for professional librarian positions stimulated concern about the future of the MLS since non-MLS "librarians" were increasingly being hired into professional positions in research libraries. Concern was raised about a possible trend toward hiring "feral librarians."[4]

The word "feral" implies wild, untamed, and in need of domestication; rather than trying to "civilize" those individuals and to bring them to see the world as librarians do, we should take advantage of the chance to diversify our staff. More "feral" tendencies and different experiences can enrich our organizations. After all, even if these professionals do not have degrees in library science, presumably they have used libraries, whether for pleasure or for research. Their perspectives as sophisticated library users can help shape future library services. Paying more attention to the skills and less to the need for an absolute set of credentials will go far to bring about fundamental, beneficial changes in our libraries. This is, after all, another kind of diversity.

MIDDLE MANAGERS AS CHANGE AGENTS

Our middle managers play a critical role in effecting change and in preparing staff for the digital future. This group has the responsibility both to advocate for their staff and their departments and to interpret and implement the strategies of the library leadership, two tasks that may seem at times to be in mutual conflict. Wilder's work on the "greying" of the profession stresses the urgency of recruiting the next generation of librarians. I believe that the key to transforming our organizations is to put in place middle managers who can envision the future and provide effective leadership while also working collaboratively across departments for the greater good of the organization. They should model the attitudes and behaviours that will enable our libraries to progress and our staff to face the future with a willingness to entertain and embrace new ideas. These managers should engage their staff in determining the future and bring the best ideas to the attention of the organization as a whole. They should be mentors too and ensure that their staff members have the professional development opportunities they need and deserve, whether they are

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taking on new responsibilities or acquiring new skills. They should help identify things we can stop doing and free staff to pursue departmental and institutional priorities. They—and we—should reward innovation and creativity, and curb fear of change by successfully articulating the purpose and value of a particular initiative or direction. These are key appointments in our organizations and central to efforts to lead our libraries into the digital future.

OVERCOMING RESISTANCE

Librarians have the well-deserved reputation of being the experts, the authorities, and the interpreters. The digital world increasingly demands that we take our cues from users, learning as much as possible about how they do their work and then designing services that facilitate that work, anticipating their needs. This is the case especially with students, as each year's freshman class is more adept with technology than the previous. We also have more opportunities to collaborate with faculty and other researchers and to provide a different kind of expertise than we have in the past. The recent report from the Association of Research Libraries, Agenda for Developing E-Science in Libraries,[5] states, "E-science has the potential to be transformational within research libraries by impacting their operations, functions, and possibly even their mission… [T]rends in e-science… impact collections, services, research infrastructure, and professional development." It is imperative that we expose our library staff to the latest trends—this is not optional—and that we engage the organization in active planning to embrace these new opportunities for deeper, even more satisfying involvement in our universities. The possibilities are exciting and we should encourage our staff to direct their energy towards innovative programs and ways to showcase new services. There may well be staff resistance to "lowering our standards," for example, in the great Wikipedia debate (to link or not to link), as we take our lead more and more from library users and shape our services according to what they want. There is nothing to be gained and much to be lost by stubbornly adhering to the position that only through the library can one find information of value. Rather than fearing and resisting the fact that users can now find useful information on their own, our libraries should be shoulder-to-shoulder with those very users, understanding how they do their work and where the library can add value to that work. We should assume a position of strength, not weakness. Rather than being defensive about "threats" to the traditional position of libraries, we should tout the advantages of the contemporary research library. There may be more than one information "game" in town, but ours has plenty to offer.

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FINDING THE FUNDING

Among the most pressing challenges of bringing the research library fully into the digital future is determining how to pay for it. This is a process that requires that we identify and weigh the trade-offs and determine what we can give up in order to take on new roles. The impact on the materials budget of acquiring both print and digital resources is old news now, not a relic of the grey times, but a familiar challenge. Rising costs of electronic journals and databases are well documented and have plagued us for some time. Now we face other new costs related to expanding our services. Keeping buildings open for twenty-four hours, for example, has budgetary implications, particularly for security, housekeeping and maintenance, student workers, and the replacement of computers and printers. Expanding e-reserves has meant that more is spent on staff in those units as well as on mundane items such as paper and toner cartridges. Providing to the campus the specialized expertise of scholarly communication experts and launching copyright education among faculty represent other relatively new library functions and important services to the university.

Actively marketing the full range of library services means that more resources are needed for communication, publicity, and maintaining connections with alumni and library donors. Surfacing our rich special collections through digital means and promoting their use, positioning the library to lead in the establishment and maintenance of digital repositories, and ensuring that library staff and services are connected to Blackboard sites and closely involved with other instructional technologies all require either new positions or the redeployment of vacant ones. Making sure that our staff has the conference travel opportunities, professional training, and retraining they need to participate fully in these exciting new roles also requires an investment. As we seek to hire larger numbers of talented new library staff, we face stiff competition and higher salaries.

Where will the funding for these new initiatives come from? It is essential that we not only communicate to the university administration that the role of the library has been completely transformed by providing examples of enhanced services that provide added value to the academic community; we must demonstrate the worth of those services. There is no better publicity for the library than the testimony of satisfied users—especially when it reaches the ears of the deans and the provost. Returning to the theme of reorganization, finding ways to redirect positions that previously supported functions we can now abandon or adjust can offer a creative solution that permits us to meet new needs. As we publicize our successes, we also develop a more compelling case to attract donor funding, particularly if we are

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embarking on a capital campaign. Packaging opportunities to support the library in new ways that convey the dynamism of our people and our services, as well as their vital connections to faculty and students, is another way to attract the resources needed. Inviting potential donors to come and see first hand how the library has changed, how we have emerged from the grey times, can stimulate new contributions and long-term, productive relationships.

SPACE AS CATALYST

While a new and/or expanded building is, obviously, not required to bring about the changes needed to move the library fully out of the grey times, it certainly has been a major impetus for change at Duke. The Perkins Project, the renovation and expansion of the libraries, comprises multiple phases that will be completed over several years. Such an ongoing project could be seen as a disadvantage (construction noise, disruption, confused users), but in fact it has had a silver lining: the ability to learn as we go, to observe how the new spaces are being used, and to introduce changes or adaptations in subsequent phases. For example, our new building opened in fall 2005 and a year later we relocated the reference desk—not far, but to a place that makes much more sense given the traffic patterns between our two main connected buildings. We have reconfigured the furniture in The Perk, our coffeehouse, in response to students' requests for ample library study tables to replace some of the smaller cafe´ tables, which are more suitable for one-on-one consultations. We have redistributed the functions of the public documents and maps department, creating a new service point for GIS and Data Services. The list goes on.

Perhaps most significant of all, we are moving our technical services operations offsite to a newly remodelled location a ten-minute campus bus ride away, more spacious and comfortable than their original intended destination in our renovated building. This relocation is enabling us to implement a limited reorganization, to consolidate technical services for public documents and for special collections, along with gifts processing (formerly within Collection Development) with our main acquisitions, cataloguing, and electronic resources/serials units. The space that had been earmarked for technical services onsite will now house the Teaching and Learning Centre described earlier. Staff that will move offsite have been fully engaged in planning for their new "home" in everything from furniture selection to ergonomics and workflow analysis, building design to parking and outdoor beautification. The libraries' popularity following the renovation led directly to the decision to emphasize and expand user services onsite. As we proceed through the next phases, we will

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continue to observe and to listen to students and other library users and adapt both services and spaces to meet existing needs and anticipate new ones. The building is just a shell without a well-designed and effective program inside, but careful design of the building should facilitate the successful implementation of that program.

IN CONCLUSION: TELL THE STORY OF SUCCESS

No one can really see into the future, digital or otherwise. We do our best to see around the next corner, to predict, based on trends, studies, and observations, what research libraries might be like, could be like, and should be like in the years ahead. One thing is clear: the roles of various units on our campuses are blending and converging when they used to be clearly separate. The recent Ithaka report, University Publishing in a Digital Age,[6] suggests that libraries and university presses should form new partnerships; the development and management of digital repositories will call on the expertise of campus information technology staff as well as archivists and digital collections experts within the library. A 2008 article in the Chronicle of Higher Education suggested there should be a closer relationship between university IT operations and libraries and that they each have a great deal to contribute to planning for technological changes within the university.[7] All of this suggests that changes we are facing include not just intra-library cooperation of a sort that we have not traditionally seen but much broader university-wide collaboration across units that have had separate orbits, a dynamic that did not really exist in the grey times. Our paths will intersect more and more; our ability to lead libraries and to thrive in the digital future will be dependent on forging close relationships on campus and beyond.

As we know, the traditional image of the library, its people and its services, as well as it may have served in the grey times, has not kept up with the current reality. Dramatic change is evident in every aspect of our operations, collections, spaces, attitudes, and philosophy of service. The pace of this change may seem breathtakingly rapid at times, piling on new responsibilities that require competence with an array of skills that have not been part of our tool kit and prompting library staff to update their knowledge almost constantly. Our leadership will be essential to the creation of an environment in which change is welcomed, as is the chance to play an even larger and more significant role in the intellectual lives of students and faculty. We need only catch our collective breath, confidently seize the opportunities that are coming our way, and set loose the best thinking among our talented staffs. The success story of the research library needs to be told more broadly, more loudly, and in full colour, well beyond the walls of our busy buildings.

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NOTES

1. Oldenburg, Ray, *The Great Good Place: Cafe's, Coffee Shops, Bookstores, Bars, Hair Salons and other Hangouts at the Heart of a Community* (New York: Marlowe & Co., 1999).

2. *The 2003 Environmental Scan: Pattern Recognition* (Dublin, OH: OCLC Online Computer Library Centre, Inc, 2004), 60.

3. Wilder, Stanley, *ARL Bimonthly Report 254* (Washington, DC: Association of Research Libraries, 2007), 3.

4. Neal, James G., "Raised by Wolves: Integrating the New Generation of Feral Professionals into the Academic Library," February 15, 2006 http://www.libraryjournal.com/article/CA6304405.html (accessed June 23, 2008).

5. http://www.arl.org/rtl/escience/eresource.shtml (accessed June 23, 2008).

6. Brown, Laura, Griffiths, Rebecca, Rascoff, Matthew, *University Publishing in a Digital Age* (New York: Ithaka, June 2007).

7. Foster, Andrea, "Strains and Joys Colour Merger Between Libraries and Technology Units," *Chronicle of Higher Education*, January 18, 2008.

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