

# Planning Our Future Libraries

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Blueprints for 2025

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Kim Leeder &  
Eric Frierson

*Editors*

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# Introduction

This is not the first book to attempt to forecast the future of libraries, nor will it be the last. The rapid pace of change in librarianship over the past 30 years has created an environment of instability that many are eager to dispel. If nature abhors a vacuum, librarians detest the uncertainty of the future—and with good reason. Libraries throughout the United States have seen their budgets slashed, branches closed, and missions challenged. The short-term economic forecast offers little promise of a reversal. Without some concrete vision through which to redefine their form and function, it appears possible, even likely, that libraries could soon be headed into oblivion.

Those prepared to wail and gnash their teeth in distress, however, can take heart in the pages of this book. The institution of libraries has been challenged before, as described in Brett Bonfield's opening chapter, "Redesigning Library Services Again." Bonfield sets the context for the subsequent chapters by revisiting Michael Buckland's 1992 work of forecasting, *Redesigning Library Services: A Manifesto*, an abridged version of which is available as an appendix to this book. Buckland's treatise sets its foundation, as does *Planning Our Future Libraries: Blueprints for 2025*, on the "first principles" of librarianship. In order to assess the effectiveness of libraries, as he points out, it is first necessary to reevaluate the structure that supports them. Regardless of changes in culture or technology, the first principles of librarianship remain deeply rooted in the "Library Bill of Rights," which has been updated but not significantly altered since it was originally drafted in 1939 (American Library Association 1996). Libraries in the United States and beyond continue to champion intellectual freedom, pursue equitable access to information, and challenge censorship, no matter what platform hosts the information at hand.

With the grounding of librarianship's first principles, it becomes possible to project more objectively and constructively into the future. To that end, *Planning Our Future Libraries: Blueprints for 2025* brings together eight new voices in librarianship whose fresh, unvarnished visions portray a near-term library future that leverages current strengths to evolve and expand the role of libraries in the twenty-first century. By focusing on the most relevant and innovative qualities of today's libraries and librarians, the authors included here share their unique yet overlapping predictions of where libraries are,

or should be, headed. Together they construct a solid, inspiring, and entirely achievable future library toward which the field can advance.

While each chapter in *Planning Our Future Libraries: Blueprints for 2025* stands on its own, a collective reading of the full book reveals several overarching themes that serve as its organizing structure. First, the opening two chapters highlight the importance of patron participation as a key characteristic of a successful future library. Second, chapters 3 through 5 tackle the challenge of reimagining libraries' physical spaces, both in terms of how library buildings might be designed and how library spaces can be reconceived. Chapters 6 and 7 present new ways to reinvent library function and infrastructure through an innovative model of staff time allocation and a proposal to increase and stabilize library funding. Finally, in chapter 8, Lesley Farmer steps beyond these themes to provide an assessment of the current and future state of international libraries in developing nations.

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## Embracing Participation

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The history of libraries is a history of control; until recently, librarians controlled the selection, organization, description, and provision of access to the great majority of information. With the Internet, of course, that control has leaked gradually out of libraries and into the hands of the public. The "Library 2.0" movement that began in the early 2000s, whose origin is attributed to Michael Casey of LibraryCrunch (Casey and Savastinuk 2007), has begun to give way to the broader concept of the "Participatory Library." In the Participatory Library, patrons are invited and empowered to join librarians and library staff in shaping the library to meet their needs. Barbara Fister (2012) recently defined the Participatory Library as an effort to make libraries "a platform for creating and sharing culture."

The first two chapters of *Planning Our Future Libraries: Blueprints for 2025* emphasize the role that patrons play in sustaining the library. In fact, Bonfield suggests that the terms "patron" and "user" don't accurately describe how people will interact with libraries in 2025 and instead considers the term "member" to more accurately reflect the relationship between people and libraries. Librarians and library members, he suggests, will cocreate the new library through conversation, brainstorming, and feedback. In Bonfield's vision of the Participatory Library, the library responds not just to what library members need from the library but to what they need in *life*. Through conversation, members and librarians draw upon a shared pool of knowledge and experience to ensure that the library will succeed. In this scenario, patron-driven acquisitions, aided by widely adopted standards and easy-to-use licensing,

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become a powerful tool that members use to design their own library collections. Acquisitions also serve as a platform for members to share experiences in person and virtually. The Participatory Library is filled with thinkers, readers, makers, and doers, and it provides the tools and the environment for all to flourish.

Dave Harmeyer, in “Radical Trust: A User-Librarian Shared Model,” presents the notion of “radical trust” as a characteristic of libraries that include the people they serve in library decision making. He argues that a transition to the Participatory Library is vital, as it addresses several key challenges that threaten the sustainability of libraries. Because user needs are changing too rapidly for libraries to accommodate, increased member participation enables a library to be more nimble and responsive to the community it serves. In his vision, the library provides avenues for members to engage in planning activities and to set priorities for the library. Harmeyer anticipates that by relinquishing total control of library decision making, librarians will become part of the creation of something entirely more useful: a library that truly reflects the needs of its community and adapts quickly as those needs change. According to Harmeyer, participation and trust extend to all aspects of the library, and what results is a living, growing, and changing organization that remains in sync with its environment.

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## Reimagining Spaces

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The promise of the Participatory Library lies in adopting new roles and services that address member needs. But what about long-entrenched services that no longer serve the community as they once did, such as legacy book collections? In chapter 3, “Meaningful Space in a Digital Age,” Ben Malczewski shares his own reaction to the disappearance of DVDs, print books, and other tangible materials found in a library: *Wait, that’s my stuff!* In his chapter, Malczewski explores the psychological and symbolic meaning of the physical spaces and tangible materials in libraries. Even if all of our content can be accessed via the Internet, will it satisfy us to have a library without codex-lined shelves? He argues that while content can be converted to digital formats, the physical objects provide a sense of place and of self. Furthermore, a library as a collection of physical materials evokes intelligence, research, and reflective thought. Malczewski argues that a computing facility with a robust online collection may not lose *content*, but it certainly loses symbolic value. Meaningful spaces can still be created in a bookless library, however. Malczewski makes the case for “narrative design” in the planning of library space. He encourages consideration of the stories patrons bring to a space: What did they come

there to do? Who did they encounter? Were they comfortable studying there? It is possible, he projects, to design spaces that inspire positive stories. At that point, removing the stacks becomes liberating instead of frightening.

Krisellen Maloney's chapter on the Faculty Commons tackles this challenge. In her vision, the library is a "platform for faculty innovation" that encourages activity by providing the resources required for collaborative work: technology-enriched workspaces, services attuned to the research and teaching needs of a university faculty, and events that draw people together to engage in creative conversation. This library is a new kind of center for faculty life, providing a compelling narrative for the faculty experience. So how do libraries make this vibrant environment a reality? Maloney draws upon the history of library buildings in order to anticipate the obstacles and opportunities that will arise in moving toward this vision. Similar shifts in library space planning have happened before, only to be undone by library staff who struggled to reinvent their identity in the wake of changing user needs. *The solution is a shift from inward thinking to outward thinking.* Rather than designing libraries to meet staff needs, Maloney asserts, librarians should design spaces to meet *community* needs.

To Hugh Rundle, author of chapter 5, "Free-Range Librarianship," physical library spaces only limit the ability of librarians to serve patron needs. He views information as an environment that humans inhabit, equivalent to the natural world. In his vision, librarians serve as expert guides who support and assist those seeking information, much as park rangers work with visitors to national parks. Like a park ranger who roams the park and provides on-demand assistance to hikers on the trail, the librarian travels throughout the information environment, working in coffee shops, visiting local businesses, attending city hall meetings, and checking in anywhere that information needs are likely to arise. In this model, the library space is *everywhere*. Rundle flips the concept of embedded librarianship upside down, viewing the physical library as unnecessary to the work of a librarian. Like park rangers, librarians are visible in the communities they serve, provide in-context assistance, and most importantly, show up in these spaces in person.

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## Building New Infrastructure

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The visions presented in *Planning Our Future Libraries: Blueprints for 2025* are far removed from the current state of libraries. They present a compelling vision of what libraries can become, but to get there, significant changes are needed in the day-to-day internal workings of these organizations. "[A] library will not be able to innovate if management is not willing to invest time in research

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and development,” writes Meredith Farkas (2010, 36). “If you want to create new services and employ new technologies for your patrons, something has to give.” The status quo cannot persist: library administrators will be challenged to develop a positive culture that encourages future-focused change while still grappling with existing financial and cultural challenges. Chapters 6 and 7 of *Planning Our Future Libraries: Blueprints for 2025* present concrete strategies that will change library infrastructure—specifically in terms of budgets and allocation of staff time—and enable the advancement of libraries.

For libraries to effect the sort of change necessary for future success, staff must be encouraged and supported in efforts to reinvent spaces, services, and resources. In chapter 6, “The Constant Innovator,” Megan Hodge envisions a profession characterized by constant innovation and creation. Rather than relying on vendors and other outside organizations, librarians take the reins to redesign their own systems. Giving up vendor solutions and adopting open source products will require new sets of skills, and Hodge advocates new management practices to foster such skill development. She cites Google’s “20 percent time” as a management strategy that will allow library staff to explore, learn, create, and effect change. The 20 percent time model provides employees with a significant number of work hours—ideally 20 percent of their total hours each week—to devote to unstructured, unregulated innovation. Hodge’s chapter describes some practical management strategies for developing a culture of constant innovation, paving the way for immediate changes to take place in our organizations.

The greatest innovations in the world alone, however, are not enough to sustain libraries. Libraries in general—and public libraries in particular—will also need a new funding model that ends their reliance on the mood of local governments by stabilizing and expanding their financial support. In chapter 7, “The Future of Funding,” John Chrastka suggests methods through which libraries across the United States can work together to solve their financial woes. By uniting libraries and strategically positioning them as a group to benefit from the US tax code, Social Impact Bonds, and a national trust, the library of 2025 will enjoy reliable, even generous funding to support new services and initiatives.

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## Leading for the Future

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In the introduction to *Shaping the Future: Advancing the Understanding of Leadership*, Peter Herson (2010) defines leaders as those who set a vision and can influence others to move toward it. Clearly, the authors of *Planning Our Future Libraries: Blueprints for 2025* possess the skills, knowledge, and passion required

to lead our institutions toward the bold futures they envision. It will not be a revised mission statement or a well-written vision statement that will spark change, but rather it will be the leaders in the library field who have both a sense of purpose and the ability to motivate action. Library leaders are charged not only with creating a vision for the future of libraries but also with inspiring and motivating everyone in their organizations to make those visions reality.

So what does the future hold for the library profession? That depends on what today's librarians and library leaders make of it. It is entirely within their power to realize a library of the future that is participatory, responsive, reimagined, and flexible, as envisioned within the pages of this book. *Planning Our Future Libraries: Blueprints for 2025* is intended to be more than just a book; it is a challenge and an inspiration to everyone working toward a more positive future for libraries. The editors hope that the visions presented here will serve as a springboard for discussion at libraries around the country and world. Readers are invited to ask themselves the following: How will the Participatory Library function in my community? What will my future library look like physically? How will my library adjust its management and funding models to support innovation and future change? These are complex and important questions, whose answers become substantially clearer thanks to the diverse and creative ideas presented in the following pages.

Reinventing libraries in the twenty-first century will not be easy; however, it has been done before—successfully—and it will be done again. The key is to keep in mind that libraries are not buildings or legacy book collections, but rather a cultural institution that champions free and full access to information for all. The platforms through which that information is obtained, the spaces in which people obtain it, and the services that support their activities are only the details of their function. The details will always evolve to meet the needs of the community. Regardless of shifts in technology and culture, however, the meaning of libraries is and will always be a constant that ensures their ongoing value in a changing world.

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Part 1

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# Embracing Participation

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## REDESIGNING LIBRARY SERVICES AGAIN

### Revisiting Buckland's Manifesto

*Brett Bonfield*

“Any attempt to explain the past and to predict the future is foolhardy,” writes Michael Buckland (1992, x) in the introduction to *Redesigning Library Services: A Manifesto*. “In this case the importance of the issues seemed worth the effort and the risk.” Fortunately, the two decades since the American Library Association released this 82-page monograph have justified both Buckland’s effort and his risk. For example, I saw Karen Calhoun (2006a, 2006b) present on “The Catalog’s Future” in November 2006, just a few months after she released “The Changing Nature of the Catalog and Its Integration with Other Discovery Tools,” her controversial study on this same topic for the Library of Congress. After her presentation, I asked her what library-related texts she considered her major influences. “Have you read Buckland’s *Manifesto*?” she asked. “That’s the one work I find myself going back to over and over again.” Here is another bit of evidence regarding the esteem in which Buckland’s work is held: as of August 2012, 778 WorldCat libraries held a copy of *Redesigning Library Services: A Manifesto*, even though it was out of print by 1996 and subsequently made available for free online.

Buckland’s manifesto, an abridged version of which is available as an appendix to this book, was the realization of 10 years of research and reflection (1992, x). The idea was to encapsulate the knowledge and beliefs that he had developed over the previous decade in order to help others plan for the *next* 10 years of library services. We have a similar goal for *Planning Our Future Libraries: Blueprints for 2025*, though the editors have chosen writers who are somewhat newer to the profession than Buckland was at the time. He began his career at Bodleian Library of Oxford University, where he was a student. After graduating and earning a library degree at Sheffield University,

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he was hired for his first professional position at the University of Lancaster Library in 1965. He completed his PhD at Sheffield University in 1972, the same year he moved to the United States to take a job as Assistant Director of Libraries for Technical Services at Purdue University. A few years later, he was hired by the University of California, Berkeley, and served as Dean of the School of Library and Information Studies from 1976 until 1984; then he spent 1983 through 1987 serving as Assistant Vice President for Library Plans and Policies for the University of California's nine campuses ("Michael Buckland," n.d.). His goal, both for the University of California and subsequently for *Redesigning Library Services*, was to plan appropriately for the needs of library users and librarians, and for how their interests seemed most likely to intersect with forthcoming changes in technology and culture.

This chapter, in addition to summarizing Buckland's research and evaluating his predictions, mirrors the structure of *Redesigning Library Services*. Buckland looked to the past to help him predict the future, devoting about half his manifesto to a summary of his research into earlier efforts to shape the library of the future. He found that his predecessors in the field had successfully predicted many of the technologies and services that were being instituted at the time he wrote his manifesto, placing his effort into a continuum and providing him with a sensible way to approach his task. Using Buckland's research and ideas as a platform, this chapter takes a similar approach, with a goal of offering useful suggestions about the library in 2025.

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### **Buckland's Assumption and Three Types of Libraries**

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Buckland (1992) based his manifesto on five assumptions, one of which is particularly useful for our purpose. In the introduction, he writes, "[D]isproportionate attention has been paid to new information technology" (2). It is not that too much attention has been paid to computing, data storage, and telecommunications, but rather that too little critical attention has been paid to the older information technologies of paper, card, and microfilm. Some of his assumptions are intentionally obvious, serving as points of departure for his more counterintuitive or debatable assertions, but this point is provocative: the idea that new technology is important but not inherently better or more important than old technology. As Buckland emphasizes throughout his book, the goal is not to replace the means through which library services are delivered but to improve upon the ends by creating services that better satisfy users' wants and needs. For the previous 100 years—from the creation of modern libraries in the late nineteenth century through the 1970s—the means and ends were indistinguishable from one another (Buckland 1992, 4). As Buckland was writing his *Manifesto*, newer electronic technologies were making it

possible to separate the means from the ends, but he was not in favor of thoughtlessly casting aside skills and methods that libraries had spent a century developing. For Buckland, that century of library history was not divided into discrete paradigm shifts; instead, it was divided into a series of three overlapping stages: the Paper Library, the Automated Library, and the Electronic Library.

### *The Paper Library*

During the Paper Library stage of development, which for Buckland comprises roughly the late 1800s through the early 1970s, the library's materials and technical operations were entirely based on paper or other similar materials such as cardboard, vellum, and film. Today, we might call this the Material Library, because Buckland's definition of "paper" could be extended to music CDs, DVD and Blu-ray discs, and even DRM-encoded e-books. That is, they generally require a lot of space to store, typically only one person at a time can use each item, and that person and the item must be in the same place at the same time (Buckland 1992, 10).

Buckland cites numerous examples of pioneering librarians, bibliographers, documentalists, and others who worked in the Paper Library era but understood its limitations and attempted to compensate for them, including the following:

- Paul Otlet and Robert Goldschmidt, who in 1925 envisioned a "pocket-sized" reader for microfilm-based books
- Fritz Donker Duyvis, who in 1931 envisioned the digital circuitry then being developed for telephones as the proper medium for creating devices that could handle complex Boolean and faceted searches
- Walter Schürmeyer, who in 1935 envisioned a time in which readers would access books from their homes through their televisions

For Buckland (1992, 11–14), these pioneers' insights, along with designs by their contemporaries Freemont Rider, Emmanuel Goldberg, Vannevar Bush, and Ralph Shaw, demonstrate that we are capable of looking at the problems we face and the services that would benefit our users, and of describing with considerable precision the solutions that will meet their needs, even if the present technology is not yet able to support these innovations.

### *The Automated Library*

During this stage in library development, spanning roughly from the early 1970s through the 1990s, the library's technical operations were computerized

but its collections retained the properties of paper. The primary innovations during the Automated Library period were standards, particularly widespread implementation of Machine-Readable Cataloging (MARC), which “enables computer-based bibliographic data to be shared,” and the introduction of Z39.50, which “enables retrieval systems to be shared” (Buckland 1992, 20). This sharing of bibliographic data and the introduction of systems that enabled library operations to be automated were the central innovations of the Automated Library. Buckland specified eight requirements for such a library, including the following:

1. The overall bibliographic coverage should be as complete as possible in providing access to the whole of human knowledge.
2. Multiple access points should be provided, minimally by subject as well as author.
3. It should be a distributed system in that everyone should be able to have access to it and that it should be possible for files to be partitioned and copied for efficiency. . . .
8. The bibliographic system should help to protect intellectual property. (Buckland 1992, 37)

Buckland’s requirements reiterate those specified by Henri La Fontaine and Paul Otlet, who developed their Universal Bibliographic Repertory in 1895. The fact that La Fontaine and Otlet, operating at the advent of the Paper Library, could create functional requirements for the Automated Library suggests that Buckland, operating in the Automated Library, could create requirements for the succeeding stage, the Electronic Library. After all, the process of computerizing bibliographic records was similar to the process of computerizing the source material those records described, and in many ways digitizing metadata is more complicated than digitizing source material (Buckland 1992, 47). The design and technology for these projects would require funding and effort, but their realization seemed well within reach. However, Buckland (1992, 40) noted presciently, “It seems likely that conflicting interests between the stakeholders will prove more of a constraint on the development of future library services than narrower questions of design and technology.”

### *The Electronic Library*

During this stage in library development, identified as the late 1980s or early 1990s through at least the early 2000s, library operations are electronic and their collections are available in electronic form as well. Today, we refer to Digital or Virtual Libraries to convey this concept. Buckland described several “characteristics of electronic documents,” including the following:

1. Electronic documents are not localized. Given telecommunications connections, an electronic document can be used from anywhere, without one even knowing where it is stored geographically.
2. In practice several people can use the same database or electronic records at the same time.
3. Electronic documents are easily copied.
4. Documents stored electronically are very flexible. They are easy to revise, rearrange, reformat, and combine with other documents. Hence the popularity of word-processing among people who have to create and, more especially, revise documents. . . . (Buckland 1992, 43)

Support for these electronic documents required a new kind of approach to library service and a more robust technical infrastructure. Based on the characteristics above, Buckland (1992, 64–65) believed that a library user anywhere with a computer should be able, from a single networked access point, to search the entire catalog, including bibliographies and reference works, and retrieve texts, images, audio, video, and numeric data. The terminology did not yet exist, but he was describing a federated search of an entirely digital collection.

These changes would lead to a greater emphasis on enabling self-service and “from a library-centered world view to one that that is user-centered” (Buckland 1992, 75). In many respects, these changes have been implemented and in a user-focused way, although not for those who need access to library-specific information or services in order to fulfill their digital or virtual needs. Electronic resources that can be accessed through Google, including Google properties like YouTube and Google Books, frequently meet Buckland’s criteria—or come close enough to satisfy users. However, when users bring their open web–developed assumptions to the library for the first time,

they are often surprised that so many electronic resources at libraries are inaccessible, poorly designed, or fail to interoperate. These limitations are the result of “conflicting interests between the stakeholders,” such as vendors whose products are confined to “information silos,” copyright- or license-restricted texts, and material that is not yet fully digitally accessible. While we appear to be transitioning to the Electronic Library, as Buckland foresaw, the impediments are rarely technological. For the most part, the technology was available within 10 years of the publication of *Redesigning Library Services* or soon thereafter. The obstacles to libraries offering a user-centered view of the world are now political and financial.

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### **Situating Redesigning Library Services**

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In order to understand the context in which *Redesigning Library Services* was published, and to appreciate what Buckland knew about technology when he wrote it, it is helpful to remind ourselves about the state of computing and networking in 1992. Just over 20 million personal computers were sold that year, with IBM PCs and other PC-compatible computers accounting for about 85 percent of those sales, and Apple accounting for most of the rest, about 12 percent. A typical Apple computer at the time, such as the flagship Macintosh Classic II, had a 16 MHz CPU, came with 2 MB of RAM (expandable to 10 MB), had a 40 MB or 80 MB hard drive, a 9-inch black-and-white screen, and cost \$1,900 (Apple Inc. 2012). In contrast, a base-model iMac purchased in August 2012 would include a processor that is more than 150 times faster, 2,000 times as much RAM, a hard drive that could store 12,500 times more data, a 21.5-inch color screen, and a cost of \$700 less.

Clearly, most people who had computers in 1992 were using PCs, generally still with a DOS operating system, even though Windows 3.0 (released in 1990) and 3.1 (released in 1992) combined to sell 10 million copies during their first two years on the market (Microsoft 2012). In addition, IBM's OS/2 operating system was released in 1992 and attracted a strong initial following, selling about two million copies. It fleetingly appeared as though in the future OS/2 would compete with Windows and Apple's operating systems for a share of the desktop market (Reimer 2005). Instead, that third desktop operating system would eventually turn out to be Linux, which was announced in August 1991 by the 21-year-old Linus Torvalds, a computer science student in Helsinki. The first Linux distributions were released in 1992 and would soon become popular with academics, though Torvalds would not release what he considered a mature 1.0 version of the kernel until 1994 (Hasan 2005).

The Internet had existed for some time by 1992, though it was overwhelmingly text based until the University of Illinois NCSA Mosaic browser was released in November 1993, which was soon followed by the founding of Netscape as Mosaic Communications Corporation in April 1994. In 1992, the number of computers connected to the Internet passed the one million mark (Computer History Museum 2006).

Notably, Buckland refers to neither the Internet nor the World Wide Web by name in his *Manifesto*—it is useful to realize that the most significant technology of the next 10 or 20 years might have been emerging at that moment and may not have been considered particularly remarkable—though he does make several references to hypertext and to the implications of the newly released Z39.50 protocol and clearly understood the importance of computer networking in planning for the future of library services. He mentions, in the first page of the preface, that “[t]he on-line library catalog is probably the most sophisticated computer system of any type in routine, direct use by the general public” (Buckland 1992, ix), but he makes it clear throughout the book that he does not expect that situation to persist: “Paper and pen are being supplemented by desktop workstations capable of using a multiplicity of remote sources” (Buckland 1992, 75). In other words, what he anticipated, and welcomed, was the inexorable transition from the Paper Library, through the Automated Library, to the Electronic Library.

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### The Library of 2025 versus the 100-Year Library

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It is important to acknowledge the difference between making predictions and plans that are useful for 10 or even 20 years, as Buckland’s have proved to be, and those meant to encompass 100 years. What we need to do is calibrate our scale. As Buckland (1992, x) notes, “Bits and pieces of what is predicted here do not require a crystal ball as they are already happening”—meaning that in making predictions for the library of 2025, it makes sense to expand on what is already happening around us and not to invent wholly new ideas or anticipate seismic shifts. From our perspective looking forward 2025 seems far away. But once we have lived through the intervening years, they will seem to have happened quickly.

As a calibrating, complementary exercise, it is useful when making comparatively short-term predictions to spend a moment imagining what the library will look like in 100 years. Could we design that library today, just as La Fontaine and Otlet designed what we now know as contemporary information services almost a century before the technology to implement their design was available? If we could, would we want to start using it now?

These two questions are posed in Paul Graham's, "The Hundred-Year Language" (2003), an essay about designing a programming language. His answer to both questions was affirmative: we could start designing and using the 100-year language now, and we should, because people would prefer it to what we have today. I believe the answer to both questions, when applied to libraries, is affirmative as well. The key, as with any good design, is to match an understanding of what people would enjoy doing with the structural changes necessary to make it possible. The convergence of events that gave rise to modern libraries 150 years ago, and to the modern study of libraries 80 years ago, occurred in vastly different information environments from our own. But the societal values that libraries represent are likely to continue to be valuable for at least another 100 years: the ability to engage in and benefit from communal acquisition, organization, dissemination, preservation, and production of social goods and information, and to do so in person, yet also privately, confidentially, and with intellectual freedom intact.

The interaction of first principles with long time sequences is like the law of large numbers in probability theory: we cannot say with any degree of precision when libraries' first principles will counter the current irrationality of the e-book or scholarly publishing market. It could happen in 2020, 2030, 2040, or later still. But it seems safe to predict that, over the next 100 years, we will figure out immediate and convenient ways to get texts—regardless of their length, medium, or where they were originally published—to the people who want to make use of them.

In the interim between now and 100 years from now, we can also anticipate the next stage in modern library development. We understand the Paper Library and the Automated Library, and though it is not yet fully realized, we also understand what the Electronic Library will look like and how people will use it. What we are only now beginning to conceive of is the fourth stage in library development, the Participatory Library.

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### **The Participatory Library**

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The first line of chapter 1 of *Redesigning Library Services* may, by 2025, be viewed as its most dated: "The central purpose of the library is to provide a service: access to information" (Buckland 1992, 1). Access is a means, not an end. The library of 2025 seems likely to have as its central purpose *enabling connection and creation*. Information in the form of texts and other media can be an ingredient in creation or connection. For instance, one of the primary reasons that many of us enjoy reading is because it connects us to the author,

other readers, and the people who are represented by the characters and ideas in the text. We want to read books immediately after they are released, not only because they hold the promise of an entirely new experience, but also because other people are reading them, too.

We also enjoy creating our own stories and experiences around what we have read, whether extending the author's ideas, dressing as characters from the works, or using the works as a guide in more practical ways, such as learning an academic subject or vocational skill. Although information is frequently necessary in acts of connection and creation, it is often not sufficient. That means libraries need to provide more than just information and need to invest significant time, effort, and money into providing these complementary services—perhaps even more time and money, going forward, than we currently allocate to the activities associated with collecting and organizing information and with making it accessible.

In a recent article on the Participatory Library, authors Linh Cuong Nguyen, Helen Partridge, and Sylvia L. Edwards (2012) trace the genesis of the idea and provide a comprehensive overview of the library activities, services, and technologies that Participatory Library advocates support. The term itself was apparently coined in 2006 by R. David Lankes, Joanne Silverstein, and Scott Nicholson (2006) of the Syracuse University School of Information Studies in an issue brief prepared for the American Library Association's Office for Information Technology Policy. The ideas associated with the Participatory Library, especially the technologies associated with making libraries more participatory such as wikis, blogs, RSS, and social networks, were quickly promulgated, most notably by Michael E. Casey and Laura C Savastinuk (2007); Michael Stephens (2006, 2007); and Lankes, Silverstein, Nicholson, and Todd Marshall (2007). Somewhat more recent works extend the idea of the Participatory Library, including subsequent work by Lankes and by other thought leaders in library technology, such as John Blyberg and Meredith Farkas, who presented an ALA TechSource Webcast called "Building the Participatory Library" in 2010. Unfortunately, the excitement around the idea of the Participatory Library appears to have waned, along with excitement around the buzzwords with which it was initially associated, including Web 2.0, Library 2.0, and the aforementioned wikis, RSS, and other rapidly dated technologies.

The point of Library 2.0 was never about making library websites "cooler," however; it was about engaging library members, and potential members, in conversation. It was about finding out what they wanted, not just from their libraries but in their lives, and working with them to make sure they got it. And it was also about introducing them to new ideas and having them

introduce us to new ideas. Ultimately, the Participatory Library is about a more equitable distribution of knowledge, experience, and opportunity, and about making sure people have as many choices available to them as possible. The ethos of the Participatory Library is the recognition that the more power resides outside the library, the better the library is performing. This is where our first principles are leading us. The point of preserving culture, the end purpose of the work libraries do to ensure privacy and intellectual freedom, is to maximize the power of individuals within the community we serve.

The Participatory Library can be identified by several characteristics, some of which have already begun to take hold. First, records and texts are available via unified search, made possible by more widely adopted standards, universal digitization, and licensing that serves those who wish to make use of texts. As this happens, currently ineffectual techniques like patron-driven acquisition will begin to flourish not just locally, but they will also benefit from network effects across consortia. Second, tasks associated with creation are seen by library members and the library as being at least as important as collection usage, and budgets and job descriptions are adjusted accordingly. This development is foreshadowed by the Maker Spaces movement described by Lauren Britton (2012) in *Library Journal*. Other libraries are pursuing similar efforts by developing hacker or coworking spaces, or have set up 3D printing labs, though many seem to view this as a standalone service rather than the cornerstone of a Maker Space. As creation becomes more central to their mission, libraries will also invest more time and money into helping would-be authors or makers create their work in ways that make it easy for would-be readers or users of their work to discover it.

A third characteristic of the Participatory Library is its emphasis on immersive virtual experiences, which is becoming more commonplace as displays, processing power, bandwidth speeds, and the tools needed to create objects with even richer stores of data proliferate. It is difficult to imagine a time in which these developments will not be made available in waves, with the richest and best-connected individuals having the earliest access, followed by those with fewer resources. In order to balance distribution, and in order to take advantage of efficiencies of scale, libraries will remain a place where people can share in the newest technologies and learn how they work. In addition, as more people have more access to virtual interactions, in-person experiences become more significant both from a financial standpoint and as authentic experience. As is currently the case in music and film, people value opportunities to share in experiences with others. Libraries remain at the nexus of this human impulse. Finally, the Participatory Library is embedded

within its community, much like utilities are today. This is hinted at by Buffy Hamilton and David Shumaker, each of whom released a book in 2012 about embedded librarianship, and by Douglas County Libraries' community reference initiative (Galston et al. 2012).

Buckland refers to his predictions as assumptions and offers them as lists, several of which have been summarized above. I have an assumption/prediction as well: we will recognize the Participatory Library not by a renewed library presence, but by its seeming absence. At this writing, one of the most popular podcasts is a program about design, "99% Invisible," which celebrates the aspects of design we generally fail to notice. A popular current meme was initiated by designer Golden Krishna's (2012) blog post: "The best interface is no interface." As search becomes indistinguishable from the impulse to acquire, as the ability to access resources ceases to be a barrier in the process of creation, as technology becomes better able to imitate life (and the inimitable aspects of life, therefore, become even more highly valued), and as libraries develop the ability to make their services present where and when they are needed, what is and is not the library will be less readily defined, even as its utility as an institution grows exponentially.

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