## EDITORIAL

## A singular moment in time

Here's a quiz: Can you identify the significance of the following two dates and their importance for the development of libraries?

First is the year 1451 and, second, December 15, 1994. The first one is easy for librarians—the date we associate with Gutenberg perfecting the moveable type press. (Even though some recent research appears to show that it was not Gutenberg and probably was not 1451, we are still pretty sure that it happened in Germany sometime in the middle of the 15th century.)

Now for the hard one: most people, when asked, will associate this date with the Internet in some way—a natural guess, given the context in which I ask the question. Of course, the Internet has been around a lot longer than that. Often, they will say, "the World Wide Web"—that is close, but the Web was actually invented back in 1990.

The significance of December 15, 1994, is that it is the date that Netscape was first released. It marks the day when the Internet and the Web shifted from being the turf of academics and computer geeks to the vast swampy mess of fact, opinion, and speculation in which most of us now flounder around on a nearly daily basis, doing everything from sending Grandma an animated birthday card; to shopping and banking; to trying to find answers to our myriad questions, mundane and complex; to promulgating our own solutions to the problems facing the world.

The Gutenberg revolution came about through the confluence of a number of independent technologies that had reached maturity in the previous decades—the screw press itself came from winemaking, and metalsmithing had reached the point where it was possible to do the finely detailed work required for making the type. High-quality paper, in sufficient quantity, had begun to surpass parchment as the preferred medium for books, and inks of multiple colors and adequate stability were being produced in significant volume.

The second half of the fifteenth century witnessed an explosion of invention and innovation in Europe as people tried to figure out how best to exploit this marvelous new ability to mass-produce texts. The publishing industry was invented; the form of the book, as we understand it, became standardized; and, all across the continent, fortunes were made and lost as entrepreneurs rushed into the void and experimented with business plans. It was the beginning of the book culture that we all grew up in. It looked a lot like the 1990s in Silicon Valley.

A similar transformation began when the freely available graphical browser, represented by the release of Netscape, opened up the Web to a mass audience. Computers, telecommunications networks, graphic interface design, a robust financial infrastructure based on dedicated financial networks, a couple of decades of experience with searching online databases---all of these and more had to come together at the right point in time. Then some smart kids, with some risk-taking venture capitalists, had to put it all together, and that happened in December of 1994. Just over nine years ago. Not even a decade.

Because the primary audience of this journal is practicing librarians, it is a safe bet that nearly all of you reading these words will have used the Web via a graphical browser on the same day that you read this article. Many of you, in fact, will be reading it *on* the Web, via a graphical browser. It is also a safe bet that nine years ago, many of you, perhaps the majority, had not yet *heard* of the Web, and, for those of you who had, only a small fraction had any significant experience with it. While we all knew that computers and networks were going to have a big impact on our profession, we were still firmly rooted in the world of print.

It took fifty years for the first phase of the print revolution to mature. If the analogy holds true, we are just in the very beginning years of a revolution of equal import. In the fifteenth and sixteenth centuries, European librarians had to learn how to shift from being copyists and guardians of rare and unique texts to developing systems for organizing and managing collections that could now grow at previously unimagined rates. It was the beginning of modern librarianship.

A similar challenge faces us as we take librarianship into the twenty-first century. A woman I knew early in my career used to say that the card catalog was one of humanity's greatest intellectual achievements. As a tool for organizing information, it was unprecedented. But it was a tool of the print world, and it was a common feature in our libraries for less than a century. It paved the way for the electronic catalogs that we all rely on now, but, as we move further into the digital age, we become increasingly less satisfied with those systems.

In fact, *all* of the systems that we use-not just our computer systems, but all of our processes for managing workflow, designing job descriptions, organizing our libraries, and developing services for our patrons-are based on a way of thinking that is bounded by the print world. All of our systems are rooted around the notion of a physical object existing in a particular place in a particular time and are designed to enable us to know where that object is (or ought to be), move it to where it needs to be, and then get it back to its appropriate place, tracking it carefully all the while. Now, we are faced with a world in which there are no physical objects to track, and our systems are failing us. We need to do similar things but in a world where the objects that we are trying to track have no physical form. What good is all of the time spent by serials librarians laboriously inputting prediction patterns into serials control systems when there is no physical issue arriving or not arriving on time to trigger the next action?

Yes, it is frustrating, but think of how incredibly fortunate we are to be librarians at such a time! We are faced with a challenge and an opportunity the like of which has not been seen by our colleagues in five hundred years: to reinvent librarianship for a new age.

I recently spent an evening with a group of librarians discussing the need for more long-range planning for libraries. We spend so much of our time together at meetings and conferences, talking about today's problems-which, during the fall of 2003 at least, had principally to do with the ever-spiraling costs of electronic resources. It was apparent to this group that we need to spend more time taking a long range view as well. Can we develop a vision for where we want to be in a decade or more, so that we have a clear goal in mind while we make our daily decisions? Rather than just worrying about how we are going to make it through the next difficult budget year, can we envision a future that takes full advantage of the new technologies in an effective and efficient (and affordable) way? Near the end of the evening, one of the participants phrased the question something like this, "What is the impact of electronic resources and institutional repositories and all of these new technological possibilities on our collections and our collecting practices? We need to figure these things out. After all, building collections is what libraries are all about!"

I responded by saying that building collections is not what libraries are all about. "Libraries," I said, "are about getting people to the information that they need in the most effective way possible. That is as true for us now as it was for the Sumerian librarian seven thousand years ago, scratching out the count of the wheat harvest on clay tablets. For over a century, the most effective way for us to do that was to build huge comprehensive collections, but that was always the means, not the end." The challenge for us now is to figure out new means to that same end.

In assembling this issue of the *Journal of the Medical Library Association,* I was struck by how that challenge is reflected in almost every article that gets submitted these days. Certainly, it is true of the articles that you will find here.

We are at a point in the history of our profession where we do not even have a clear consensus on what our fundamental purpose is. The range of articles in this issue reflects that tension well. Managing collections, both in print and in electronic form, is clearly very important, although what an "electronic collection" might actually consist of is still a rather ambiguous proposition. But there are so many other things that we get involved with. The educational role, in particular, is increasingly important. Developing systems, processes, and programs to provide services to people who never need to come into the library building is important. But the buildings themselves still perform critical functions; while understanding exactly what those functions are and how they can best be met has become more problematic.

Personally, I find it all quite thrilling. I remember a woman I worked with some years ago saying grumpily one day, "Whoever says they look forward to a challenge is faking! I'd just as soon get through the day without any more challenges." I am sympathetic to that feeling and probably feel it myself more than one day a week. The workday that unfolds in a predictable pattern, when I get the chance to actually make it halfway through my to-do list and do not have to improvise the solution to some unexpected crisis that has come bursting through my office door is certainly welcome, if rare. But most of the days, most times, I like wrestling with the challenges and the changes; I like looking ahead and trying to imagine the

world that we are in the process of creating. I love sitting down with the crew I work with to try to hammer out a plan for a new service, knowing that there is not a "solution" that we can come to and that we will not know if we have been successful until we have jumped into the unknown and tried something.

At the gathering I mentioned above, some of the participants questioned whether libraries would even exist in a few years and whether there would be a need for librarians. If our business is building collections, then that is a reasonable fear. Our libraries will become museums, and it will take but a few of us to tend them. But if I am correct that our purpose is to bring people and information together in the most effective ways possible, then the need for librarians has never been more critical.

Librarians will still need physical spaces to work from—even though they will not spend nearly as much time in them as they used to. Those spaces may not look any more like today's libraries than today's libraries resemble the scriptoria of the middle ages. But I think we will still call them "libraries."

The articles in this issue range across the spectrum of new ways of doing things that we are faced with as the century unfolds. They describe some of the new roles, new skills, and new relationships with the people we serve and the institutions in which we work.

The transition from a literate culture based on manuscript books to one based on the printed book took about half a century. When we think about the pace of change that we face today, we may be tempted to think that the transition from the print world to the electronic world will be accomplished in a much shorter period of time, but there is no particular reason to think so. Changing the way that we work, changing our expectations, developing new methods and relationships—these are things that are dependent, not on technology, but on the ability of people in society to learn how to incorporate those

technological changes into the way they work and live. We have a pretty good idea now about what the technological changes are and what they are capable of. But we still have a lot of uncertainty about what those changes will really mean for our day-to-day practice. The one thing that we can be very sure of is that the world of librarians will be quite different in five, ten, and twenty years.

The authors of the articles in this issue are in the process of creating that future. So are many of you reading this editorial. The challenge is for us to be as creative and nimble as we can possibly be, using all of our history, traditions, and talents to figure out how to make the best use of the new tools to accomplish the same mission. It is not easy and there is no certainty of success. But that's where the fun is.

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