

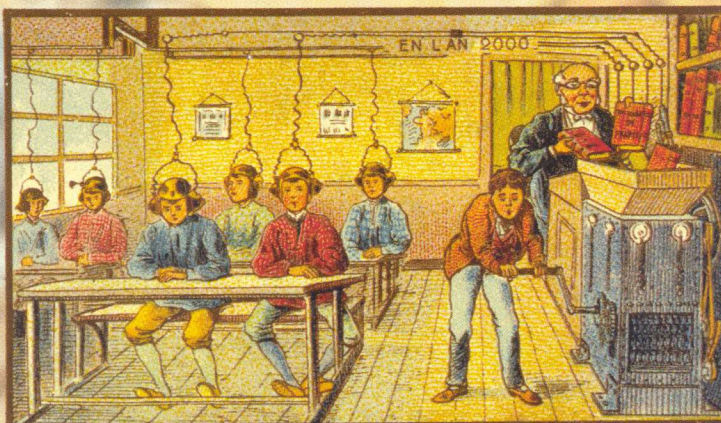
JANUARY 2000

AMERICAN LIBRARIES

THE MAGAZINE OF THE AMERICAN LIBRARY ASSOCIATION

IT'S HERE!

**A look back
at the visions
and vanities
that ushered in**



PLUS

Determining Our Digital Destiny

Life and the Public Library

Why Outsourcing Happens

From Petroglyphs to CD-ROMs

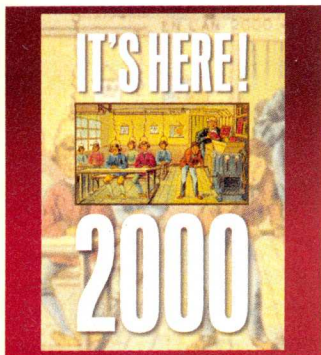
After the War in El Salvador

2000

Determining Our Digital Destiny

By Roy Tennant

THE GAME HAS
CHANGED, AND
IF LIBRARIES
STILL WANT TO
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HAVE TO
INVENT THEIR
OWN FUTURE



What libraries must do:

- Redesign their search engines.
- Become better at innovation and building prototypes.
- Foster and encourage individualists and leaders.
- Integrate access to print and digital materials.
- Begin serving users whenever and wherever they want.

The game has changed; of this I am certain. We face an array of possibilities and challenges that will leave no library untouched. We are, whether we want to or not, about to become much more than we are now—or much less. How we respond to the challenges and take advantage of the opportunities will define our role in modern society for some time to come.

For many years the functions of libraries have remained essentially the same. Books, journals, and an increasing variety of materials have been selected, acquired, and organized to serve a particular community of users. Libraries have been built, outfitted, and staffed to house these collections, to provide services for locating and using them, and to provide a social heart and center for a community. Libraries have been entrusted with the responsibility for caring for our intellectual and cultural heritage as it has been expressed in the written, spoken, and

performed word. When members of a community seek information, they typically and routinely turned to the library for assistance.

The formats of materials have proliferated from a base of books and journals to a cornucopia of options that include microforms, audiocassettes, CDs, and videotapes. But even given this broadened base of resource formats, libraries have historically selected items from a discrete and finite universe of professionally edited and published materials. Whatever the format, we still collect and manage individual, discrete items. We purchase an item, catalog it, put it where it belongs, check it out, and return it to the shelf. We also build and manage systems that help our users and ourselves accomplish these and other information-seeking tasks.

But that is no longer enough. The Internet has transformed how people look for and find information. Whereas before they may have come to the library (either by phone or in person) for assistance after exhausting more convenient resources (friends, colleagues, etc.), now most people with access to the Internet will start there. This is only natural. In many cases, the Internet provides a more convenient, faster, and more current source of information. But as we know, it can also in many cases provide misleading, incomplete, or wrong information. Nonetheless, that is the nature of information-seeking behavior today and

librarians must work with it.

So now, instead of being the premier information resource, libraries are increasingly the resource of last resort. Libraries are what our patrons often turn to only after the Internet has failed them. But even more worrisome are those users who mistakenly believe that the Internet hasn't failed them: the students who cite a few poor Internet resources to support their research paper or the people who find information that appears legitimate but is biased or hateful.

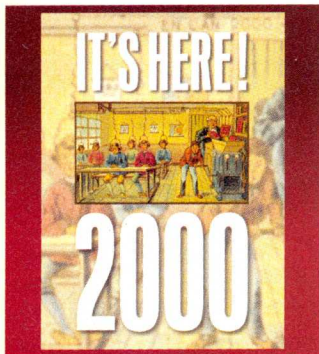
The tools leading them to these resources are Web subject directories and search engines that are nearly all the products of another profession. Where were we when Internet users needed help finding information on the Internet? Many of the popular Web search engines began as computer science research projects—for example, Lycos and Hotbot. To add insult to injury, a couple of Stanford graduate students trying to avoid studying created the single most popular subject directory to Internet resources, Yahoo. ☞

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Another problem we face is an explosion of information. Beginning with desktop publishing and continuing with the Web, almost anyone can now afford to “publish” information in one form or another, either in print or electronically. Besides individuals, organizations that had not previously issued print information are now publishing digitally. Microsoft’s online magazine Slate is but one example. This has led from a situation in which librarians could comfortably be aware of all appropriate items published in their subject area each year to one in which we are certain that we are no longer covering the territory.

Then, when one decides that a resource is worth collecting, how does one “collect” it? Is pointing to it from a Web page sufficient? Should the resource be cataloged in the library catalog? What is a collection? Is it what you own, or everything you can encompass with links as well as walls?

Defying space and time

For a simple example, let’s take a library that has MARC records for 30,000 historical photographs that they have made available online. That library could sell those records to other libraries to load into their library catalog. The records would point to the images in the original location, but as far as the library patrons of those libraries know, the images they are viewing are in the same building in which they’re sitting. With digital collections the barrier of distance (space) has disappeared, but we have yet to take advantage of this development.

The barrier of time has disappeared as well. The Library of Congress is spearheading a discussion of “digital reference” (on its Web site at lcweb.loc.gov/rr/digiref/) that is an interesting effort to examine just what this means for the profession. Imagine a university student in Berkeley who needs some reference assistance with her paper at 11:30 at night when the reference staff is gone. What if she could initiate an online conversation with a librarian in Perth to get the assistance she needs? Why not?

Why not indeed, since by at least one measure the demand for reference assistance is in decline. Statistics collected by the Association for Research Libraries (available at fisher.lib.virginia.edu/newarl/) indicate that the number of reference queries handled per professional staff member has gone down over the last two years at a number of ARL libraries. One can only conjecture as to the reason, but my money is on the Internet. Students find it much more convenient to fire up a connection to Hotbot than to hike down to the library and find the reference desk. This should be no surprise; it’s human nature. But it should tell us that in order to make an impact we will need to rethink our services and how we deliver them. We must be where our patrons are and in a way that they find convenient and useful; otherwise, we should find a better way to spend our time.

A more effective use of our time may be to redesign our search systems. Most library catalog systems are still not

much more than a digital card catalog—a sophisticated card catalog, but a card catalog nonetheless. For example, compare your library catalog with the capabilities of Amazon.com. Amazon can keep track of your reading interests and suggest new titles that you may find interesting the next time you connect. If you search for a title, it can tell you which titles are most popular and other related titles you may wish to consider. And why don’t most library catalogs rank or group results? Have we ever really considered that our users may be more interested in these features than in some of the more sophisticated searching features that we believe to be so essential? The prevalence of simple-to-use yet powerful search systems such as those at Amazon.com and many Web search engines has provided our clientele with something to compare us to, and we often suffer from the comparison.

Then there’s the cultural heritage issue. For years a subsidiary of Microsoft called Corbis has been going around buying up the digital reproduction rights to many of our most important pictorial resources ranging from fine art photography from artists such as Ansel Adams, to news photography of famous people or important events, to paintings by Van Gogh and others. Use of these digital images must now be licensed from Corbis.

So let’s recap. We’re in trouble in a number of areas. Our clientele that formerly started their information seeking with us are now starting elsewhere. We are less able by the day to keep up with all appropriate information resources and make them easily available to our users. The long-cherished role of libraries, museums, and archives as the guardians of our cultural heritage is being bought out from under us. Others (not librarians) have tackled the problem of finding information on the Internet and have been successful enough to build effective tools in the form of Web search engines. Meanwhile, our own search engines are both more powerful and confusing than they need to be, while not offering some capabilities that our users increasingly believe to be basic and essential. And although the Internet has presented us with unprecedented opportunities for collection development and service delivery (the disappearance of the barriers of space and time), we have yet to take advantage of them.

What we must do

All is not doom and gloom. We have a base of strength to work from. We are familiar with information in all its various forms. We have an abiding public service perspective that underlies all that we do. We cherish and uphold basic human rights like intellectual freedom and the right to privacy. We have created a number of consortia, cooperative organizations, and initiatives that harness our individual energies for the good of all. More specifically, we have collectively created the single largest bibliographic database in the world—OCLC’s WorldCat.

But more important than patting ourselves on the back is determining what we must do to put ourselves back into

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the game. We must watch for and spot important trends. Ten years ago we should have seen that the Internet would become an essential enabling technology for libraries. We didn't. We must become better at imagining the future we would like to see, and then creating it. We must become better at innovation and building prototypes. In a profession of consensus builders and followers we must foster and encourage individualists and leaders.

Our organizations must be nimble and able to create and guide rapid change. When we evaluate our peers, we must reward risktaking and innovation and punish loitering. Our print resources cannot be left behind, which means integrating access to print and digital materials as well as making print materials more desirable (for example, by providing tables of contents and indexes online). We must break out of the mold of thinking about desks and operating hours and begin serving our users' needs when, where, and how they wish to be served.

I believe that we have a pivotal opportunity, similar to the late 1960s when MARC was developed. MARC formed a critical infrastructure that enabled an incredible variety of important developments in modern libraries. Now we must form another, much more complex infrastructure upon

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which to build the library services and collections that will be required in the next century.

This opportunity is created by the situation in which most people now find themselves when seeking information. They are increasingly frustrated at their inability to find the information they need from the Internet, but they nonetheless may not wish to go to a library. Meanwhile, they are being bombarded by low-quality information and advertising that they neither want nor need. They need us.

An innovative information infrastructure

Imagine if we had an infrastructure in place that would support the following application program:

➤ A simple search box awaits your input, which may consist of a sentence, disjointed keywords, phrases enclosed in quotes, words truncated with an asterisk, or com-

plex, nested Boolean queries. It will, in a nutshell, do the best it can with what you give it to work with.

➤ When you hit the return key it returns your search results organized in several groupings:

- ♦ Internet resources from a collection of selected and annotated sites;
- ♦ Magazine and journal citations from indexing and ab-

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To make this particular vision a reality would require some key infrastructure elements to be in place. The technological pieces of this infrastructure are relatively straightforward, consisting of such things as a digital equivalent of a library card to store and deliver information about a library user's rights and privileges, standard metadata formats in addition to MARC, and standard ways in which digital objects can be delivered and made available to applications. More difficult will be the organizational infrastructure required to create and support, for example, a

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global 24-hour reference service. But these are exactly the kinds of infrastructure issues that we must solve and solve soon.

Our last, best hope


The problems we face are difficult but not intractable. However, they are tough enough to require that we work cooperatively and collaboratively to build solutions that resolve these problems for all of us, similar to the way in which MARC solved a key problem for all libraries. This essential digital library infrastructure is much larger than the scope of any single institution, and more important than any single consortium. It requires a massive effort that will

bring together expertise wherever it exists, resources wherever they can be found, and ideas from anyone to whom they occur. I call upon the entire library community to accept the challenge of building the technical infrastructure that will take libraries into the new millennium. At this moment, we have the professional opportunity and the imperative to become much more than we are now, or else we will soon end up being much less. ♦

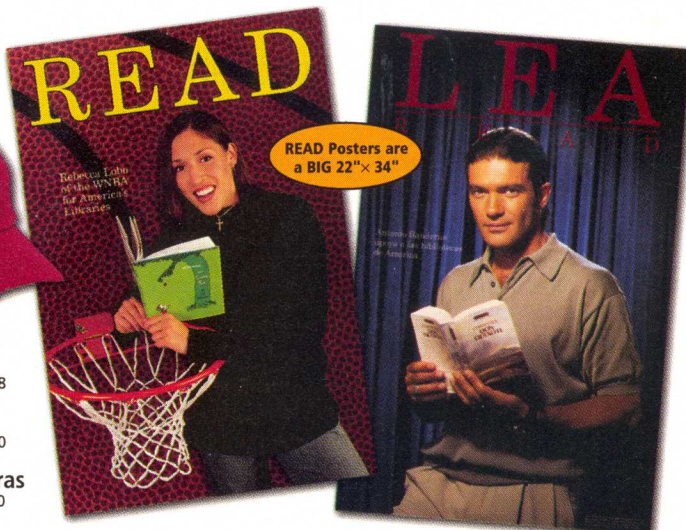
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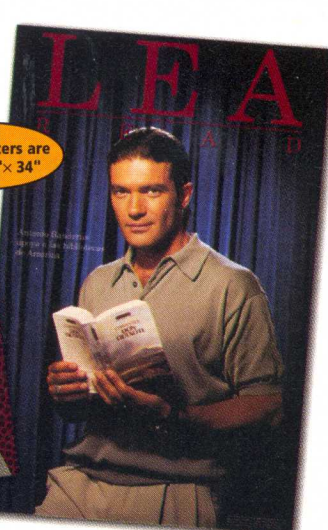


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