# ILLINOIS

## PRODUCTION NOTE

**Buildings, Books, and Bytes:
Perspectives on the Benton
Foundation Report on Libraries in
the Digital Age**

Herbert Goldhor
Issue Editor

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# L I B R A R Y

# TRENDS

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# Buildings, Books, and Bytes: Perspectives on the Benton Foundation Report on Libraries in the Digital Age

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# Introduction

HERBERT GOLDHOR

THE VARIOUS ISSUES OF *LIBRARY TRENDS* are usually concerned with the past
and/or the present circumstances of a given topic in an attempt to under-
stand and to explain the developments that have taken place. This issue is
somewhat different in that its main focus is on the future in an attempt to
perceive what is likely to happen rather than to analyze what has already
taken place.

In November 1996, the Benton Foundation in Washington, DC, pub-
lished a report, *Buildings, Books, and Bytes: Libraries and Communities in the
Digital Age.* For the convenience of readers, the full text of the report has
been reproduced at the end of this issue of *Library Trends*, with the kind
agreement of the Benton Foundation. The study on which this report is
based was commissioned by the W. K. Kellogg Foundation which has given
substantial funds over the years to help libraries cope with the problems
of computerization. It was the opinion of the Publications Committee of
the Graduate School of Library and Information Science that this report
by the Benton Foundation is of sufficient importance that an issue of
*Library Trends* should be devoted to it.

Following the usual procedure, an issue editor was selected, and
consultations were held to choose the persons who would be invited to
contribute their views on the report and (as they saw fit) on the likely
future of libraries, especially public libraries, in the coming digital age.
We were able to secure the cooperation of many of the names which were
initially selected; where we failed was to get substantial input from people
who are computer experts and not librarians—such people are likely to

have a point of view different from that of librarians on the central issues of the Benton Foundation report. In reviewing the articles in this issue of *Library Trends*, the editor is satisfied that a wide array of responses to the report have been presented and that most of the major issues arising from the study have been addressed.

There remain only a few personal observations of this writer, based on almost sixty years of association with libraries. I can remember when hand-stamping of circulation cards was standard practice, when typing of catalog cards was considered high tech, and when interlibrary loan was a highly unusual favor to be granted only to faculty engaged in research. The reader of today can readily imagine the vast distances which have been covered in these and other regards in the last few decades, and almost always because of the use of computers. Let no one doubt the ability and will of librarians to adjust to changed circumstances and to utilize new technology. And let no one doubt that circumstances and technology will change again in the future, and maybe even more than in the past.

Will libraries in the future consist mainly of computer files and not of books? No one can be sure but, as things stand now, over 50,000 new titles are being published each year in this country alone, not far from the record high total of about 57,000 titles in 1987. It helps to look at the past in this regard. The future of the book has been pronounced dim so many times in the last century that we are well advised to be skeptical of this latest threat; the bicycle craze of the late nineteenth century, the rise of motion pictures, then of radio, and then of television—all were predicted to be the death knell of books and reading. Against this is the fact that the circulation of American public libraries is today at an all-time high.

One final consideration involves the widespread development of bibliographic databases which were seen as making unnecessary the services of a reference librarian. In fact, what has happened is that most scientists have no interest in keeping up to date with the various protocols of and improved access tools to the computer files, and usually prefer to rely on the librarian to produce what they need. And today the Internet is said to have (almost) everything that is to be found in books but the lack of standard subject headings, and the fact that almost anyone can put almost anything in means that finding just what you want and knowing whether it is correct or not are not easy tasks. What the Internet needs is the organizing skills of some good librarians.

The motto in the computer industry is "If it works, it is obsolete." The tremendous advances in computer science and in their practical application should make all librarians cautious in saying that they can remain vital and not become relics of the past. It is hoped that the readers

of this issue will find herein some of the guidelines that need to be observed in coping with the vast changes sure to come in the future.

Because those invited to contribute were asked to "critique" the report, it is not surprising that most of the authors are quite critical of it, and some vehemently so, although all seem to agree that it is useful as at least a thought-provoking document. While some of the authors in this issue deal primarily with methodological problems that they see in the study, others focus on the interpretations and conclusions, with methodology as a secondary issue.

Bryce Allen and Douglas Zweizig, whose strengths include statistics and research design, both deal heavily with methodological weaknesses in the study. Allen finds it seriously flawed, not so much in the collection of the data as in how it was interpreted. Zweizig claims that the methodology is "naïve." Moreover, the conclusions presented are simplistic because they ignore important "externalities" such as the fact that the provision of high quality information to the individual may, in the long run, benefit society as a whole. Making it more difficult for the individual to get needed information—for example, by increasing costs or complexity of access—reduces benefits to all.

Michael Gorman's main criticism is that the study tells us the obvious. It deals with questions for which answers are already known. He, more than the other authors, believes that libraries, in more or less their present form, are not threatened—either by technology or by competition from other institutions. He deplores the fact that the library leaders involved in the study seem to want to impose their vision of the library of the future on the users of libraries even though no evidence exists that library users share that vision.

Charles McClure and John Bertot agree with Gorman that not much in the report is new. Moreover, it offers very little guidance on what libraries need to do as the resources they deal with become increasingly electronic. It is not clear, they claim, what the intended audience for the report really is. Since it tells knowledgeable librarians little that is new, perhaps it is more suitable for reading by those outside the profession. They also have problems with the methodology underlying the study that agree substantially with those of Allen and Zweizig.

William Birdsall, while he considers the report to be a worthy addition to the literature on the role of the public library, judges its primary assumption—that it is technology that threatens public libraries—to be erroneous. It is not the technology itself that is the threat but a "technology ideology" that is associated with broader public policy issues involving increasing government deregulation and decreasing government support for public services.

Maurice Line, who presents a British perspective, agrees that the focus on the impact of technology is too narrow. There are broader issues,

such as the increasing globalization of society, that may have significant impacts on the library, but these are not addressed in the report. Also not addressed significantly are certain new opportunities presented by the technology, such as the expanded role that libraries could perform in supporting lifelong learning.

One of the points made by Herbert White is that the library "leaders" participating in the study are not necessarily leaders at all. A well-established manager is unlikely to be a real leader because he or she may not be willing to take risks, as true leadership requires. He is also critical of the whole report, beginning with its title, because it focuses on "concretes"—books, buildings, and computers—instead of the more important human resources. Why focus on libraries rather than librarians?

Glen Holt is very critical of the focus group component of the study on the grounds that the group involved is quite atypical of public library communities in general. Quite different results have been obtained in the community served by the St. Louis Public Library. Using the report as a springboard, he presents his own views on the challenges facing public libraries today. In his opinion, the study does not go far enough toward informing us on the needs of library users and the priorities for libraries. A new *Public Library Inquiry* is required.

Kathleen de la Peña McCook agrees in many ways with Holt. Since the opinions reported in the study were collected from very unrepresentative samples, the United States depicted in the report is just not the United States in which most citizens live. Her discussion throughout implies that the study is elitist, giving little direct attention to large segments of the community that are, in some way, disadvantaged. Moreover, the present mood of society is not one of anxiety, as the report suggests, but one of expectation.

Richard Sweeney offers no particular objections to the methodology of the study but believes that its conclusions and interpretations reflect a dangerous complacency. If public libraries are to survive, they must give users much more than they expect, not merely try to meet present expectations. The report fails to address this.

Andrew Odlyzko is the only contributor who is not in the library field. It is interesting to find, then, that he is least critical of the report. On the other hand, it is clear that he is the contributor who believes most strongly in the inevitility that print on paper will be completely replaced by electronics. So, probably, he has least confidence that libraries will continue to exist, at least in anything approaching their present form. The articles of Odlyzko and Gorman represent opposite extremes of views on the future.

Finally, Leigh Estabrook, who played a prominent role in the study and the preparation of the report, responds to the critics. It is for the reader to judge whether or not she is persuasive in her defense of the methodology and conclusions of the study.

# The Benton Report as Research

BRYCE ALLEN

## ABSTRACT

THE BENTON REPORT IS APPARENTLY INTENDED to be read as presenting research findings. When its research methods are assessed, however, a consistent pattern is found. The data were collected carefully but have not been analyzed, reported, or interpreted with the care one would expect. The statistical analysis of the public opinion poll data leaves much to be desired. The focus group anecdotes were presented too prominently given their unrepresentative nature. The visions of the future of public libraries presented as coming from library leaders were invalidated by a failure to establish the leadership status of the informants. The overall pattern of findings of this research seems clear and persuasive, but caution is advised in accepting the detailed claims presented.

## INTRODUCTION

The report *Buildings, Books, and Bytes* (Benton Foundation, 1996) presented ideas about the role and function of public libraries in a period during which digital information is becoming increasingly important, with a view to influencing the direction in which public library services will evolve in the future. Any report that seeks to influence the evolution of public libraries, or to contribute to the ongoing debate about the role and function of public libraries, must present ideas that are credible and persuasive. One way to achieve credibility and persuasiveness is to base the ideas presented on sound research. The use of rigorous and accepted research techniques helps to assure the reader that the ideas

presented are based on fact rather than speculation and on careful observation of the real world rather than on unsupported opinion.

Although new research methods are sometimes introduced, scientific research has gradually developed a body of research methods that maximize the validity of the results obtained, minimize the probability of error, and enhance the reliability of the ideas generated. This is the understanding of research and the body of knowledge that can be found explicated in textbooks on research methods, or in the many research methods courses taught in schools of library and information science. Research conducted using accepted methods provides a foundation for the credibility and persuasiveness of the findings of research and for the ideas that are associated with those findings.

It should be noted parenthetically that research is not the only way to obtain credible and persuasive ideas. Some people are persuaded by the revelations of scripture. Some believe the horoscope to be a reliable and credible predictor of future events. Others trust intuition or the speculation of pundits to direct their thinking. In the long-term debate about the evolving nature of public libraries, however, appropriate research must play an important role. Just as the Public Library Inquiry report (Berelson, 1949) provided a basis for the development of contemporary library services, so today's research may suggest persuasive and credible options for future roles and services in public libraries.

Research is defined as a systematic investigation of some phenomenon. In considering the Benton Report from the perspective of research, the first question that must be addressed is: Is the Benton Report a research report? In other words, does this report present ideas that are based on the systematic investigation of phenomena? The second question that must be addressed, and which follows from the first, is: If the Benton Report is based on research, is it based on good research? In other words, should the research methods used inspire confidence in the reliability and validity of the results obtained and thus lend credibility, persuasiveness, and influence to the ideas generated?

## RESEARCH IN THE BENTON REPORT

There is internal evidence that the authors of this report understood it to be a research report or at least to contain research. The first sentence of the preface refers to the document as "this study" (page 1), and the terms "study" and "findings" are repeated throughout the preface and the executive summary. Further, one specific aspect of the report, the public opinion poll, is specifically labeled "research" twice on page 3. It is interesting to note that the term "research" is used throughout the document to refer to the public opinion poll, but it is never used to refer to the process of gathering opinions from Kellogg grantees or to the focus group. This pattern of language use may suggest that the authors

held different opinions about the various components they were assembling, accepting the public opinion poll as research while relegating the remaining elements to some other status.

On the basis of this internal evidence, it appears that there is adequate reason to proceed under the assumption that this report was intended to be read, in whole or in part, as presenting research. This assumption provides justification to proceed to the second question and to examine the nature of the research methods employed. Before examining those research methods, however, it is necessary to identify the research questions addressed in the Benton Report. In research, as in the Mikado's justice, one must "let the punishment fit the crime." The research methods used must be appropriate to the research questions asked. Unfortunately, the report does not explicitly present its research questions. As Hernon and Metoyer-Duran (1993) and Metoyer-Duran and Hernon (1994) noted, the omission of a clear research question is not an uncommon phenomenon in library and information science research. In the case of the Benton Report, it is possible to infer the research questions from the text of the preface and the executive summary.

One of the purposes of this report was to inform Kellogg grantees "about where the public supports—or fails to support—libraries as they confront the digital world" (p. 1). Stripped of its rhetoric, this statement becomes the simple research question, Does the public support libraries? One further emendation, altering the too-general term "libraries" to the more accurate term "public libraries," produces a plausible first research question for this report:

1. Does the public support public libraries?

Further, the report was intended to reflect "both the library leaders' visions and the American people's expectations" (p. 1). From this statement we can infer two additional research questions:

2. What are library leaders' visions of public libraries? and
3. What are the American people's expectations of public libraries?

RESEARCH METHODS: APPROPRIATENESS AND QUALITY

*The Public Opinion Poll*

To investigate the first and third research questions, the Benton Foundation hired Lake Research and the Tarrance Group to conduct a nationwide public opinion poll and supplemented this poll with a focus group. This combination of survey and market research methods seems entirely appropriate to address research questions that focus on public attitudes and perceptions.

The telephone survey was completed by Opinion Research Corporation of Princeton, New Jersey. Trained interviewers contacted a national

probability sample of 1,015 adults using a random-digit dial approach. Interviewers asked respondents the questions developed for this survey, perhaps as part of a larger interview session that included questions from other surveys, and recorded the answers using a computer-assisted telephone interviewing system.

As one would expect from the research organizations that conducted the research, a competent and professional job was done. The sample was chosen using appropriate sampling techniques and was of adequate size for the purpose. The Benton Report notes that the maximum margin of error for questions asked of all respondents was ±3.1 percent. Presumably that margin of error is based on a 95 percent confidence interval. What the report does not emphasize is that, of the twenty-nine questions listed in the appendix, only nine were asked of all respondents. The remaining twenty questions were asked of split samples. Although the overall sample size was 1,015 respondents, the sample size for twenty of the questions was only 507 or 508 respondents. This does not in itself present problems for the margin of error. A quick calculation of the margin of error for question 6, which was asked of 507 respondents, shows a margin of error of ±4.3 percent, which seems perfectly acceptable in this kind of survey. The use of split samples does place additional burdens on the researchers to present their descriptive data clearly. This issue is addressed below in the discussion of the report's presentation of descriptive data.

In response to a request from this author, the Benton Foundation provided a copy of the data file generated by the polling firms. Accordingly, the comments in this article that reflect on the handling, presentation, and discussion of the survey data are based on more detailed information than is available to the ordinary reader of the Benton Report. One of the key elements that is missing from the report is a complete account of the questions asked on the survey. The appendix lists the twenty-nine questions that solicit opinions and perceptions about public libraries or related topics. Not listed in the appendix are the demographic variables that were also obtained from all respondents. For the record, the following demographic variables were found in the data:

**Variables relating to the location of respondents:**
    Area code
    State
    Zip code
    Census region
**Variables relating to the respondent:**
    Gender
    Is respondent head of household (Y/N)
    Employment status
    Occupation

Marital status
Own/rent dwelling
Education
Age
Race
Income

**Variables relating to family of respondent:**
Dual income family (Y/N)
Number of members of household
Ages of children

**Variables relating to technology in respondent's household:**
Cable television
Number of household phones

*Presentation of Descriptive Data*

In the Benton Report's appendix, proportions of responses to each question were given. These proportions appear to be accurate, although some slight differences between the published proportions and the statistical file have been introduced through rounding. It seems clear that the proportions quoted were based on weighted data: the sampling system weighted the individual responses to produce results that more closely reflected the age, sex, geographic region, and racial distribution of the population. Fortunately, the weighted proportions were generally within a few tenths of a percent of the unweighted proportions, so the selection of which proportions to report is not of concern.

Within the text of the Benton Report, a number of descriptive findings were highlighted, and some of these give rise to concern about the care with which the data have been handled. One example: "Equal numbers of Americans believe libraries should spend their resources on digital information, as opposed to book and other printed information" (p. 18). It should be noted first that there was no question on the survey that opposes digital information acquisition to print information acquisition. The comparison made by this statement was apparently based on an interpretation of the pattern of responses to questions 10, 11, 19, and 20. Yet the pattern of responses to these questions fails to support the contention of equality in consumer preference. Rather, there was a much stronger preference for print materials than for access to digital information. Only by combining the responses for very, moderately, and slightly important is it possible to obtain an apparent equality among perceptions, and combining the responses in this way is at best misleading.

Similar problems with the presentation of descriptive findings occurred elsewhere in the report. For example, also on page 18, the report stated that "the public says it is willing to pay additional taxes and fees for these services" (i.e., "digital and traditional collections"). Again, it is important to note that no question asked of the respondents to the survey provided these data. There was no single question that asked if people

would be "willing to pay additional taxes and fees for digital and tradi-
tional collections." This statement was an interpretation, presumably of
responses to question 28, which asked about providing additional funds
to "continue operation." And, given that the only other choice offered to
respondents was "reducing the services the library offers," it is hardly
surprising that most respondents opted for tax increases or user fees to
continue library operations. It is hard to interpret choices made in this
kind of devil's alternative as constituting a high level of willingness to pay
extra taxes or fees. The authors apparently were aware of the tenuous
nature of their interpretation and qualified it somewhat in a later discus-
sion (p. 23).

Another area in which the discussion in the Benton Report can be
faulted relates to the decision of the polling companies to split their
sample. Although this split, and its rationale, was not discussed in the
report, it appears that the researchers wished to ask some questions in
two different ways. They split the sample to ask about libraries as com-
munity activities centers. Half of the respondents were asked question 6
while the other half were asked question 7. Similarly, the researchers
apparently wanted to distinguish between the importance of certain li-
brary services to respondents personally and the importance of these ser-
vices to respondents who were thinking about libraries in the context of
the community they serve. So they asked half of the respondents ques-
tions 10-18 and the other half questions 19-27. In the report, however,
the authors tended to ignore the results from split sample *B* and to report
only the results from split sample *A*. This occurred in the discussion on
page 19 of the ranking of library services, in the discussion on page 25 of
the roles of librarians, and in the table on page 27. Ignoring half of one's
data is not the best way to present descriptive results.

Finally, there were at least two important misstatements of fact in the
Benton Report. On page 20, the report stated that "34 percent of respon-
dents agreed that this [i.e., setting up computers to access library infor-
mation at remote locations] was a very important service." The results
show that the correct percentage here was 19 percent. This seems to be a
case of repeating the number from the previous sentence rather than
citing the correct number. Then, on page 21, the report stated that: "Al-
together, 81 percent of those queried said they had access to a personal
computer either at home or at work." This finding is impossible given
that 40 percent of respondents to question 1 stated that they had no ac-
cess to computers. In fact, as indicated in the report, 44 percent had
home access and 37 percent had work access. But 22 percent had access
to computers at *both* home and work. Thus the total who had access to a
personal computer either at home or at work is 59 percent and not 81
percent.

The presentation of the descriptive data in this report shows signs of

an excessive degree of interpretation on the part of the authors and of a lack of care in their handling of the data. Readers must, accordingly, be very cautious in accepting the report's statements about what the public opinion poll revealed. While the general pattern of results may be sufficiently clear to be immune from errors of interpretation and reporting or from misstatements of fact, the details of the findings as communicated by the Benton Report appear to be less than completely trustworthy.

*Presentation of Effects*

The Benton Report presented as facts a variety of influences, associations, and correlations among variables. In the language of statistical analysis, these are sometimes called "effects" since one variable is said to affect another. In the Benton Report, two types of effects were discussed: (1) the association of demographic variables with opinions or perceptions, and (2) the association of opinion or perception variables with each other.

Much of the text of the report that discussed the public opinion poll was devoted to a consideration of demographic effects. Age, gender, minority status, education, income, and the presence of children in the household were all seen as influencing opinions about public library roles, services, and finances. There is, however, some question about the basis for these claims of demographic effects. Effects such as these are typically established by hypothesis testing. The researcher establishes a hypothesis that a certain demographic variable affects a certain opinion variable, and specific statistical tests are applied to test that hypothesis. Certain outcomes of the statistical tests are held to support a hypothesis, while other outcomes lead to the rejection of the hypothesis.

In the Benton Report, there was no indication that any hypothesis testing was done. No statistical tests were presented or discussed, nor was there any indication of whether the hypotheses were supported (or not supported) by the analysis. There are several possible explanations of this failure to follow standard research practice. First, it is possible that the authors of the report wished to have their prose unencumbered by the usual arcane apparatus of statistical reporting. In a report of this sort, this desire would be quite understandable. However, in such a circumstance one would at least expect a footnote or parenthetical remark to note that appropriate statistical tests were conducted, and that all effects reported were significant at $p < .05$. Since such a note was omitted from the Benton Report, the reader is left uncertain about the credibility of the effects reported.

A second explanation of the absence of statistical reporting is that no hypothesis tests were actually done. Some researchers suggest that public opinion polling is descriptive research rather than hypothesis-testing

research. Frequently, the questions are asked of respondents, not because a theoretical foundation has given rise to specific hypotheses but rather out of a sense of curiosity. In such descriptive research, hypothesis testing might be considered to be unnecessary. Such an approach to survey research is, however, quite unacceptable. In descriptive research, there is one question for which the answer must be established clearly: Does the effect occur only in the sample or can it reliably be generalized to the population from which the sample was drawn? Hypothesis testing clearly distinguishes those effects that can be generalized to the larger population from those that are found only in the sample (and accordingly may be attributed to sampling error). If the authors of the Benton Report wished to say, as they did on numerous occasions, that their results reflected the opinions of the American public, then they had to establish the reliability of that claim through hypothesis testing.

The final explanation for a lack of statistical analysis in this report is that the authors simply "eye-balled" the data and drew conclusions on the basis of their impressions. There is some evidence that this explanation is the correct one. As a spot-check on the effects reported, hypothesis tests were conducted on the data from the opinion poll that related to the reported demographic effects on opinions about the importance of funding for library buildings (i.e., questions 14 and 23). In the report, age, education, and income levels were reported as affecting the respondents' opinions on this topic. Using data supplied by the Benton Foundation, Spearman rank-order correlations were calculated for these six effects. The results are presented in Table 1.

Table 1. Demographic effects on opinions about funding for library buildings

|           | Question 14                 | Question 23                  |
| --------- | --------------------------- | ---------------------------- |
| Age       | $rho = -.076, p > .08$      | $rho = -.073, p > .1$        |
| Education | $rho = .051, p > .28$       | $rho = .108, p < .02*$       |
| Income    | $rho = .1, p < .05*$        | $rho = -.025, p > .6$        |

Two of these hypothesis tests (indicated with an asterisk) indicated effects that can be generalized to the larger population, while four tests showed that the effects were not significant and cannot be generalized. In the cases of both education and income, the effects of the demographic variables on opinions about the importance of funding for library buildings were equivocal. When the question was asked one way, there was a slight but significant correlation, but when the question was asked the other way, the effect disappeared. There was no significant correlation between age and the opinions solicited in these questions.

In the Benton Report's statements concerning demographic effects on opinions about funding for public library buildings, there were a num-

ber of errors. These included reporting effects that were actually not significant and failing to account for ambiguous findings. This pattern of errors is consistent with researchers "eye-balling" cross-tabulations without conducting the appropriate hypothesis tests. It follows that much of the discussion of the findings of the public opinion poll is suspect. Readers should exercise great caution in accepting the effects claimed for demographic variables on opinion variables in this report.

As noted above, the Benton Report also made reference to effects in which one opinion or perception variable was associated with another. Probably the most prominent of these references is on page 17, repeated on page 21, that associated library use with bookstore visits and access to personal computers. These associations were also analyzed using appropriate hypothesis tests to ascertain whether this set of reported effects was supported. In this case, the Spearman rank-order correlation between self-reported frequency of bookstore visits and public library visits was $rho$ = .471, $p < .001$. The Cramer's $V$ measure of association between computer access and frequency of bookstore access was $V = .359$, $p < .001$, while the measure of association between computer access and frequency of library visits was $V = .244$, $p < .001$. All of these hypothesis tests were highly significant, indicating that the findings reflected associations that are found in the population as well as in the sample. But the magnitude of the correlation and associations was somewhat overstated in the Benton Report. Rather than "high" correlations, they were moderate at best. And in one case (the association between public library visits and computer access), the magnitude of the association was modest. This analysis supports the suggestion that the authors of the report did not make use of appropriate hypothesis tests and based their statements on impressions garnered from cross-tabulations. Again, readers would be well advised to treat statements in this report regarding the effects of opinion or perception variables on other opinion or perception variables with great caution.

*Presentation of Multiple Comparisons*

Once hypotheses have been tested and effects have been found to be significant, it is frequently appropriate in research of this type to conduct multiple comparisons to determine the origin of the significant effect. For example, if a positive association were discovered between household income and perceived importance of spending money on library buildings, it would be appropriate to investigate which income groups considered this particular expenditure of funds to be more important.

In the Benton Report, one multiple comparison assumed a role of prominence. On page 4, it was stated that, "the youngest Americans polled, those between the ages of 18 and 24, are the ... least enthusiastic of any age group about the importance of libraries in a digital future." This

point was restated on pages 18 and 19 and perhaps in a rather vague reference on page 17 that stated that this age group "registered weak support for library digital activities." In order to assess the quality of the reporting of multiple comparisons in the Benton Report, this statement was selected for careful analysis. There was clearly a significant effect of age on perceptions of the future importance of public libraries. But multiple comparisons revealed that this effect was associated only with the age group 21-24, whose opinions differed from the opinions in all older age groups. The age group 18-20, on the other hand, expressed opinions about this question that did not differ from any of the older age groups. Accordingly, this is not an effect that can be appropriately described in terms of young respondents differing from older respondents. Rather, it is a case of one small and idiosyncratic group of respondents differing from all others. The interpretation of the age effect that emerged from careful statistical analysis differs in an important way from that presented in the report. Caution in accepting the statements in the report about the opinions of specific age or other demographic groups is recommended.

In summary, the public opinion poll was conducted in a professional and competent manner. However, it appears that the data were not analyzed appropriately nor presented carefully. Because of these deficiencies of analysis and interpretation, it is difficult to place confidence in the findings presented in the Benton Report. This survey plays a major role in addressing two of the three research questions of the project. Of the first research question, Does the public support public libraries? the answer is clearly positive. The problems of analysis and interpretation outlined above cannot obscure the clarity of this general answer. It is only when the report considered the differences in support among different population segments or for different services that its results lack credibility.

The third research question of this report, What are the American people's expectations of public libraries? was also addressed by the public opinion poll, and the answer again was unequivocal. The American people's expectations of public libraries are clearly traditional yet evolving. Their expectations of the role and function of public libraries include the traditional elements of a place with books and services for children and the role of digital information provision. Again, the general response to the research question is not called into question by the deficiencies of data handling and analysis, but the details about the expectations of different population segments, or the expectations regarding particular services, must be treated with caution.

*The Focus Group*

Focus groups are an important tool in marketing research. They

permit the collection of rich data about consumer attitudes. At the same time, care must be exercised to ensure that the participants in the focus group represent the marketplace in some reasonable manner. This is usually accomplished by using multiple focus groups to account for the natural variability of opinions among individuals and among social groups.

The particular focus group used in this research consisted of eleven participants, all white. They were more highly educated than the respondents to the public opinion survey. And they represented a single geographic area. Since public library services are intensely local in nature, it is far from clear that people's experiences in Montgomery County, Maryland, can be representative of the American public's experiences with public libraries. To their credit, the authors of the report qualify their discussion of the focus group findings by noting that it should not be taken as representative (page 31). On the other hand, it is hard to understand how conscientious researchers, acknowledging a major gap in the way their research was conducted, would fail to make any effort to improve its quality. With the time and resources available to the Benton Foundation and its partners in this research, surely two or three additional focus groups could have been organized and the additional findings analyzed.

The discussion guide prepared for this focus group by Lake Research, and provided to the author by the Benton Foundation, was an admirable instrument. It led the participants through a discussion of many different roles and functions that public libraries serve, then allowed the participants to ruminate or speculate about the future of public libraries. Given the high quality of this guide, it can be assumed that the focus group was conducted in a professional manner, and that its discussion was tape recorded and transcribed following standard focus group procedures. At this point, however, a gap appears. At no point in the report was the analysis of this transcript described. It is to be hoped that standard content analysis was applied (see Allen & Reser, 1990) but, given the gaps in statistical analysis of the opinion poll, this hope may be rather too optimistic. In the absence of a description of the analysis upon which the report of the focus group session was based, it might be wise to withhold judgment about the specific details reported. And since the focus group session was clearly not representative of public attitudes in general, the attention given to specific positive or negative user experiences in the report might be considered to be out of place.

On the other hand, the findings of the focus group, when taken on the whole, correspond to the "traditional, but evolving" picture of the library's role that emerged from the opinion poll. There was a remarkable lack of consensus about the direction that the evolution might take, and this lack of consensus is hardly surprising. From the research per-

spective, it would have been more appropriate to limit the discussion of the focus group in the report to this general level rather than to focus attention on individual anecdotes.

### The "Library Leaders' Visions"

Neither the public opinion poll nor the focus group addressed the second research question inferred for this project. This was, "What are library leaders' visions of public libraries?" To address this research question, the Benton Foundation began by defining library leaders as "the institutional grantees of the Kellogg Foundation" (p. 3). Representatives of these institutions were first asked to prepare "written vision statements," then were interviewed by telephone to obtain further elaboration of their opinions. Finally, they participated in a workshop that allowed them to discuss their opinions in a variety of settings.

It is not the purpose of this article to discuss the nature of the opinions of these informants, nor the desirability of including "leaders' visions" in this project but rather to comment on the research methods employed in this part of the research project. If the research question posed above were to be directed to any research methods class in an examination setting, a passing grade would be assigned to any student whose answer included and elaborated the following three steps: (1) identify the leaders, (2) collect the data, and (3) analyze the data.

It is the first step that obviously was missing from this project. It is not the intention here to cast aspersions on the leadership status of any of the institutional grantees of the Kellogg Foundation but simply to point out that such status would be better demonstrated than assumed. Leaders exist because there are followers. In other words, leaders are those who are recognized by a community as being influential and as having ideas that challenge and stimulate the members of that community. Here, the community in question is clearly the public library community: a large aggregation of public library staff members, administrators, and trustees whose opinions are far from uniform, but who (it may be assumed) recognize certain individuals as opinion leaders.

Fortunately, there exists an excellent model for identifying library leaders in the dissertation of Alice Gertzog (1989) which has been widely published (see for example, Gertzog, 1992). The Benton Foundation team could have adopted some or all of Gertzog's methods for identifying leaders or could have taken the criteria that she isolated and applied them to the public library community as a whole. Either of these processes would have produced a credible list of library leaders. In the absence of the crucial first step of systematically identifying the opinion leaders of the public library community, however, the collection and analysis of opinions from a group of individuals was meaningless from a research perspective. It is, accordingly, hardly worthwhile to critique the

methods employed in the preparation of the "library leaders' visions" component of the Benton Report. For what it is worth, the collection of data appears to have been done in a credible and professional manner, including the collection of written "vision statements," the completion of follow-up telephone interviews, and the generation of a variety of discussions at a national conference. As in other phases of the research, however, little or no evidence of the quality of the data analysis was provided by the authors. As in the case of the focus group, one can hope (without much basis for that hope) that standard content analysis techniques were employed. It is disappointing that the Benton Report does not include visions from public library leaders that were obtained using acceptable research practices.

## CONCLUSION

The picture that has emerged from this analysis is a consistent one. In terms of data collection, the research was generally solid. In terms of data analysis, interpretation, and reporting, the research left much to be desired. Indeed, the data analysis was so inadequate that the reader would be well advised to discount any details presented by the report. On the other hand, these shortcomings cannot obscure the general pattern of findings which mirror those of other public opinion research on this topic.

In the specific instance of the "library leaders' visions" component of the research, the entire process of collecting and analyzing the data was invalidated by the failure to appropriately identify library leaders. From the research perspective, readers would be well advised to ignore the sections of the Benton Report that presented those opinions. The opinions in the report may be stimulating and of interest, but they fail entirely to address the research question. Viewed as research, the Benton Report was seriously flawed, but there remains a possibility that, in judging its quality as research, one is doing the report and its authors an injustice. Perhaps the authors had no intention of producing a report that would pass the rigorous standards of research. Perhaps they were hoping to achieve a level of persuasiveness and influence in the debate about the future of public libraries through some other mechanism than through research. Perhaps readers should approach the text of the report as they would a newspaper article or a piece in a popular magazine, ignoring all of the heavy details of statistical analysis, content analysis, and validation of leadership status.

If this interpretation of the Benton Report is appropriate, and it seems at least plausible, then the reader is left to judge the report on its rhetorical impact rather than on its research rigor. It is possible that the report will have greater influence on the debate about the future role and services of public libraries as rhetoric than as research. But if readers care

about the accuracy, reliability, and validity of the ideas presented, they will exercise great care in interpreting its findings.  The research was simply not of adequate quality to support the report's ideas and claims.

## REFERENCES
Allen, B., & Reser, D. (1990).  Content analysis in library and information science research.  *Library and Information Science Research, 12*(3), 251-262.
Benton Foundation. (1996).  *Buildings, books, and bytes: Libraries and communities in the digital age.*  Washington, DC: Benton Foundation.
Berelson, B. (1949).  *The library's public: A report of the Public Library Inquiry.*  New York: Columbia University Press.
Gertzog, A. (1989). *An investigation into the relationship between the structure of leadership and the social structure of the library profession.*  Unpublished doctoral dissertation, Rutgers University.
Gertzog, A. (1992).  Leadership in librarianship. *Library Trends, 40*(3), 402-430.
Hernon, P., & Metoyer-Duran, C.  (1993).  Problem statements: An exploratory study of their function, significance and form.  *Library and Information Science Research, 15,* 71-92.
Metoyer-Duran, C., & Hernon, P. (1994).  Problem statements in research proposals and published research: A case study of researcher's viewpoints.  *Library and Information Science Research, 16,* 105-118.

# How Firm a Foundation?

## DOUGLAS L. ZWEIZIG

### ABSTRACT

THE BENTON FOUNDATION REPORT, *Buildings, Books, and Bytes: Libraries and Communities in the Digital Age*, bases its conclusions on three separate data collections: a gathering of insights from Kellogg Foundation grantees, a telephone survey, and a focus group interview. In order to judge the weight that can be placed on the report, the quality of the information obtained through these investigations is assessed in terms of the methods used. A concluding discussion raises ignored issues in the determination of the role of the public library.

### INTRODUCTION

The advent of a new medium of communication is often seen as a threat to public libraries—as competition for the customer base of public libraries that will result in a decline in their use. This concern was expressed widely with the introduction of both paperback books and television. At a surface level, this expectation seems reasonable and, perhaps it may even, on occasion, be correct. Today, however, both paperback books and television are highly popular, and usage of public libraries is as high or higher than ever. Nevertheless, with the advent of personal computers in a significant number of homes and with the rapid expansion of the use of the Internet to seek information, this fear of the irrelevance of public libraries in the near future arose again to produce a cluster of investigations conducted for the W. K. Kellogg Foundation by the Benton Foundation.

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The publication *Buildings, Books, and Bytes: Libraries and Communities in the Digital Age* is simultaneously a report, discussion, and expansion of the results of these investigations. The publication has been widely distributed through extensive mailings and publication on the Internet.

It is difficult from this slim and repetitious volume to determine the nature of the investigations carried out and, in some cases, the basis for observations offered, but it appears that there were three studies conducted:

1. A type of "key informant" study for which the informants were the grantees for Kellogg Foundation funds and who are designated as "library leaders" throughout the discussion. The grantees were asked individually to generate vision statements for the future of libraries. One of the grantees reviewed the written vision statements and interviewed the other grantees by telephone, following up on themes, probing for areas of agreement and divergence, and pursuing additional questions.
2. A telephone survey conducted in April 1996 of a stratified sample of adults (18 years and older) to pursue questions on computer usage, book purchasing, public library use, expectations of the library's future, valuation of library services, and opinions on funding options. Results of survey questions are reported in the appendix to the report in terms of percentages of responses.
3. One focus group interview in the spring of 1996 with eleven adult public library users who reside in Montgomery County, Maryland. The group was homogeneous—white and with at least some college education—although of "mixed gender."

The results of these studies were discussed in a conference of grantees in May 1996. Because these studies are the foundation for the report's observations and conclusions, this article will follow the practice of the building inspector and "spend most of the time in the basement" assessing the quality of the evidence offered in support of the report's many statements on the state of public libraries.

## THE QUALITY OF THE EVIDENCE

*The Key Informant Study*

There are eighteen Kellogg Foundation grantees listed inside the back cover of the report. They are characterized as "span[ning] the library and information science world," but they do not appear to be representative of libraries in the United States, of library education, or of any other easily recognizable collection of library agencies. Of course, they were not selected as grantees because they were in the mainstream of library practice but because the foundation believed that they were

atypically able and likely to make a unique contribution through their supported efforts. The rationale for selecting them as grantees is sound enough, but attempting to have them simultaneously serve as "library leaders" whose observations on libraries and predictions for the future should receive special attention is less sensible.

A key consideration whenever soliciting information from respondents is whether they have the capability of answering the questions asked. In this case, presumably, each of the grantees could produce an individual library vision statement, but what the report really sought was a collective vision for the future of libraries, and it is not at all clear that the summing of individual vision statements would produce a useful collective vision, nor that these individuals were the correct group to attempt to generate a vision statement that would serve for public libraries across the United States.

The Benton Report gives too little information about this phase of the study to be able to place much confidence on necessary controls being employed. For example, the reader is not told about the instructions grantees were given for preparing their vision statements. In addition, examples of the vision statements produced are not given, so the reader's idea of these vision statements must remain vague. No information is given about the interview schedule used to follow up with an unreported number of individual grantees after the vision statements had been "distilled" or about the form in which the results of these interviews was shared with the grantee conference participants. From the presentation of method, it seems as if this phase of the study was used to produce a form of discussion guide for the conference, but observations from the interviews are presented throughout the report as if they are findings.

*The Telephone Interview*

The purpose of the telephone survey was "to test public support for libraries in the digital age." Some of the details of the survey are reported, such as the number of completed interviews and the margin of error for questions asked of all respondents. But not reported were the number of unanswered, refused, or uncompleted interviews so the response rate is unknown. Other standard pieces of information about the quality of the data are also missing, such as the probability of the margin of error, the margin of error (and probability) for those questions (over half of the survey) that were asked of split samples, or the number of responses on which reported percentages are based. It is important to be continually aware that the reported percentages are estimates with a probability of being wrong but, in the Benton Report, that awareness is blunted by the reporting of the results as if they were the outcome of a national referendum: "Americans support..." "Americans want..." "Americans are evenly divided..." and so on throughout.

Some review of previous work on public use of, and support for, public libraries is provided in a box on pages 28 and 29 of the report, but this summary does not provide general observations derived from a collection of studies; rather it selects individual, headline-type findings from individual studies, presented in bullet form. Such a listing lends no conceptual or theoretical underpinning for the present survey, and no rationale is given for the questions asked in the survey nor are any expectations or hypotheses stated for the results.

Although some advanced data collection methods were used, the survey study is a relatively unsophisticated effort to obtain descriptive data about behaviors, such as computer use and library use, and about perceptions, such as respondents' thoughts about the future of libraries or the importance of library services. Many of the variables on which information is sought appear to be measured for the first time in this study, and the constructs which they are intended to tap are not discussed or defined. Since the report does not reveal what was intended to be measured, it is not possible to know whether the questions asked were the appropriate ones nor to interpret findings.

Question 8 asks: "As more and more information becomes available through computers, some people say that public libraries will change. Thinking about the future, as the use of computers continues to grow, do you think public libraries will become more important than they are now, less important, or that their importance will not change much?"

This is a classic example of a question that the respondent does not have the capacity to answer. Surely, if library professionals (and "library leaders") are uncertain about the future course of libraries—whether libraries will respond successfully to the challenge of electronic information or not—asking clients to make such a prediction makes little sense. And, if the respondent can have no clear idea of the nature of libraries in the future, then the respondent can make no judgment of whether they will grow or lessen in importance. Therefore, the results of such a question are uninterpretable. For example, what does it mean that 38 percent of respondents think that there will be no change? (This same question was asked of focus group participants with similarly confused results.)

Further, assuming that the authors believe the results of the survey to be sound, too little is made of the data. Results are presented in simple descriptive form in the appendix to the report and cry out for some comparison with the demographics or other characteristics of the respondents (descriptive statistics on the demographics of the respondents are not provided). For example, the reader is told that 32 percent of the respondents did not go to a public library in the past year. Since statements are made throughout the report about how young Americans differ from older Americans (and therefore the profession should worry about the future of public libraries), the reader wants to know whether

these persons not going to public libraries are disproportionately younger. This reader also wants to know if the people who have access to computers at home or work (p. 21) are the same people who went to bookstores and public libraries.  Similarly, it could add much to our understanding to know the library and computer use characteristics that relate with ratings of the importance of different library services, opinions regarding funding for libraries, and so on.  In the absence of such analysis, there is no explanation for the findings of the survey.  There are occasional indications that such analyses were performed, but there seems to be no systematic examination of these key relationships, and the comparisons are not provided for the reader in tables or in the appendix.

In summary, the reader is given no information to allow a judgment of whether the questions used do measure the constructs intended or whether they measure them with adequate reliability (the margin of error reported assumes perfect reliability in measurement).  These difficulties are to some degree present in any data collection, and they call for a more qualified presentation than "Americans support."

The telephone survey, then, is a naïve investigation that, like the vision statements and subsequent interviews, was intended to support discussion among the grantees regarding the future of public libraries.  It is questionable whether it would serve well for that purpose, but it is clear that it is not suitable to frame a national discussion of the desired direction for public libraries.  It has not approached its overall study questions (which are largely unexpressed) with any conceptual rigor, and the confidence with which it can support insight into public perceptions is unestablished.

*The Focus Group*

Little information is provided about the focus group other than its size and composition. Its purpose, the guiding questions, the degree of structure to the interview, and the rationale for using a single group and selecting such an atypical one remain unknown. The reader is warned to remember that the findings from this group should be interpreted "with some caution," but the authors of the report often forget that caution themselves.  At the end of the executive summary (p. 7), there is the startling statement: "And many Americans would just as soon turn their local libraries into museums and recruit retirees to staff them."

This did not come from "many Americans" but from the focus group as described on pages 30 and 31. On page 39, these observations are attributed to "pollsters" as if they resulted from polling: "Americans are ready to turn librarians into volunteers" and "the public perception that libraries are museums of old information."

And the caution about interpretation should be stated even more strongly.  Experience with Montgomery County and its libraries would

show that it is a particular library environment. Its residents are remark-
ably well educated and take libraries as a natural part of life—i.e., to be
taken for granted, and even to be berated and, at the same time, to be
used heavily. These users are willing to "wait in line forever" even though
they complain about it; they place heavy demand on books of current
interest and assume convenient availability. In its intensity, this profile
matches only a few fortunate communities in America, and the repeated
reference to this single and particular focus group as "these Americans"
is misleading at best.

Focus groups have become a popular means of obtaining the per-
ceptions of various groups of interest. They need to have carefully de-
fined questions of interest, need to contain within their membership a
full range of responses to those questions, and need to be repeated with
a number of different groups before any confidence can be placed on
the insights obtained. This investigation fails on all three conditions.
The questions of interest are not stated and cannot be inferred; the selec-
tion of participants as frequent library users from Mongomery County,
Maryland, guarantees that the range of responses to the presumed ques-
tions of interest would be restricted; the study conducted a single focus
group.

Finally, the focus group study is misused in a way that betrays a funda-
mental misunderstanding of its capabilities. Focus groups can alert the
researcher to the kinds of responses people may have but cannot tell the
researcher how many people might have that response. If the results of
survey studies can be seen as elections, the results of focus groups should
be seen as nominations. This report intermixes the results from the fo-
cus group, findings from the telephone interview, and opinions from the
key informant study as if they provide the same quality of information.

In summary, the foundations of the report are extremely weak. The
vision statements are a questionable basis for any generalizations about
the condition or future state of public libraries. They were never in-
tended as such. The telephone interview may have been well conducted,
but there can be little confidence that it asked the right questions or that
the report makes sufficient use of what was found. The focus group is so
flawed that it would have been better left out of the report entirely; no
weight can rest on it. The rest of the report is discussion and conjecture
on topics of concern to those interested in the institution of the public
library.

## POLICY ISSUES

Having spent most of the time checking over the foundations for the
Benton Report, at least a word should be said about some of its policy
implications. Briefly, the report's authors do not appear to understand
that the tax-supported provision of public library services is based upon

the contradiction of market forces.  Of course, market forces represent the basis of our economy, and an unrestricted market is held to be the ideal.  But there are instances where the market does not function well or has undesirable effects, and in those instances society works to counter its functioning.  Of all the possible instances, this article will discuss two that the report overlooks—externalities and diversity of information.

*Externalities*

The basic assumption of the market is that each individual makes economic decisions independently and that the consequences of an economic decision are enjoyed or suffered by the individual.  In this way, the demand by individuals for a good or service is regulated by the costs to those individuals.  However, in some cases, this self-regulating system does not work.  One such case is where "spillovers" or externalities occur.  In this case, other parties enjoy or suffer from the economic decisions of others.  An example would be the decision by a utility to use high sulphur coal.  This decision would be economically sensible for the utility because high sulphur coal is cheaper, but others would suffer from the consequences of this decision through poor air quality.  So the results of the decision by one party spill over to affect others.  It has long been held that education of a child not only benefits that child but also the society in which that child resides.  So spillovers can be positive as well as negative, depending on the effects.

The related economic principle is that if a good or service has negative externalities, buyers will overconsume that good since they are not paying the full costs (others are paying part of the costs).  And if a good or service has positive externalities, buyers will underconsume that good since they do not receive the full benefits.  When the self-regulating mechanisms of the market do not work (that is, in this case, where the societally optimal amounts of a good or service are not consumed), a government needs to intervene to contradict the market's undesirable consequences.

In the case of air pollution, the federal and state governments impose penalities or regulations that raise the costs to make them equal the benefits. In the case of educating children, the state and local governments provide education through tax support and require attendance so that the positive spillovers of education will not be lost to the society.

An argument can be made that the consumption of information possesses strong positive externalities. While the externalities may be greatest for the young, the uneducated, or the poor, the use of high quality, relatively unbiased information can be seen to have general positive consequences beyond the benefits received by the individual.  Therefore, the consumption of quality information would be undesirably low if its provision were left to the marketplace.  The Benton Foundation report gives no recognition to this important basis for public funding of public

library services. Both the survey and the focus group asked respondents whether they would be willing to pay fees for services or willing to pay increased taxes. Asking individuals what they would do in their individual interest is to replicate the market. Each person will repond based on individual perceptions of costs and benefits; spillover effects will be ignored. The concept is also ignored in the discussion of fee-for-service on page 36. The report cites the problem of low-income persons being deprived of services when fees are charged but overlooks the positive externalities that will be lost with the imposition of a fee. Since more library services will be used at a lower cost, the price has been set as low as possible in order that use would be maximized. Increasing the cost of use will result directly in a reduction in use for all users, not just those who cannot afford the fees.

*Diversity of Information*

Marketplace forces work toward concentration of ownership and standardization of products. In the information industry, recent and continuing mergers lead to an ownership of information sources and channels in a limited number of hands. Examination of television content finds a remarkable homogeneity of content; publishers seek to duplicate past successes by publishing more of the same.

Yet there is a societal interest in the availability of a wide diversity of information. Because it cannot be determined that any answer is the final answer, society has a strong interest in promoting access to the broad range of possible answers, since the one needed may not be the one prevalent. The public library has served as a counter to the market forces of concentration and standardization by collecting widely and by not simply duplicating the Best Sellers List in its collecting. Along with the information published for the market, the library collects government documents, publications not distributed in the commercial sector (such as the Benton Foundation Report), pamphlets, back copies of magazines, and so on. Further, the library retains this diversity of information long after it is no longer in print. The library user can review a range of information on a question, not just what is available in the local bookstore at the moment. (This provision of diversity of information may help explain the continued high use of public libraries along with the growth of the relatively homogeneous information sources of paperback books and television.) Ironically, with the exponential growth of information on the Internet and enthusiasm for this new and potentially diverse information source, there is some concern that use of the Internet will be by those pursuing specific interests intently and will not foster interaction with the diversity of information available. This effect is likely to become stronger as the Internet becomes ever more populated and complex and as searching tools become more sophisticated. Further, the commercial effects on the

Internet in terms of information diversity are just beginning to be felt. So the questions go far beyond what the costs of using the Internet will be and who will have access, to what information will be made available, what will be lost if the mandate for public libraries is removed, and what functions will need to be performed if society is to make optimal use of this potential.

These aspects of public policy—the provision of positive externalities for society and the preservation and promotion of diversity of information sources—seem central to the discussion of the future role and function of the public library. While the publication of this perhaps over-distributed report has performed a service by stimulating discussions of the role of the public library, such as the discussions in this issue of *Library Trends*, it will be unfortunate if the limited and distorted lenses of the Benton Report define the terms and scope of those discussions.

# Living and Dying with "Information":
# Comments on the Report *Buildings, Books, and Bytes*

MICHAEL GORMAN

ABSTRACT

CONSIDERS THE "BENTON REPORT" IN LIGHT OF its stated aims and pronounce-
ments. Finds the analysis of the present situation of libraries shallow and
unconvincing. Discerns a hidden agenda of imposing "virtual libraries"
on a public that, according to the testimony gathered by the report itself,
wants real libraries. Deplores the application of half-baked business con-
cepts to the present state of, and future prospects for, libraries. Laments
the elitism that pervades the report.

*Parturient montes, nascetur ridiculus mus*—Horace

## INTRODUCTION

The worthy Benton Foundation, funded by the equally worthy Kellogg
Foundation, has produced a report on the future of libraries (not explic-
itly restricted to public libraries but clearly to be read as such) based on
interviews with "library leaders," public opinion surveys, and colloquies
to consider both. The result is, alas, replete with windy generalizations,
unestablished premises, and specious assertions.

To begin at the beginning (with the opening words of the Executive
Summary on page 3): "This report is about librarians and the challenges
they face in the digital world." Which "digital world" would that be? The
report offers no definition of this curious term and not even the sketchi-
est description of a digital world is given. It appears to stem from the
implications of the pervasive notion, advanced by academics and some

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"library leaders" (many not librarians) and pushed by Big Computer Busi-
ness, that the ubiquity of computers is changing society, life, and learning
to a degree not seen since Herr Gutenberg. There is no evidence that
this is so, despite all the pundits and prognosticators who have asserted it
in thousands of books and articles (all printed on paper). As if the "digi-
tal world" were not enough, the third sentence of this report solemnly
informs us that libraries face "the onset of the digital revolution, a seis-
mic social shift." Wow!

The report is bedeviled, like most of its kin on the future of libraries,
by the use of the word "information" to mean everything and nothing. In
normal usage, "information" is taken to mean facts, data, small stand-
alone texts, and images. There is another definition of "information," of
course. In that definition, apparently embraced by this report, "informa-
tion" is used to mean all human communication (a Rembrandt is "visual
information," *Citizen Kane* "cinematic information," and *Moby Dick* "tex-
tual and nautical information"). The problem is that, in meaning every-
thing, "information" means nothing. Information, as normally under-
stood, is not even the primary good with which libraries deal or have ever
dealt. Who goes to a library to find out about the weather, highway traffic
reports, TV/radio schedules, or a supermarket sale? Library users do
come to the library for information but, far more often, they come for
what makes libraries special—literature, entertainment, learning, and re-
corded knowledge in all its forms. The reason why technophiles stress
information is very simple: computers are very good at storing and trans-
mitting information and no good at all when it comes to preserving and
making available leisure reading, literature, and recorded knowledge in
all its forms.

What are we to make of the use in this report of the term "paper
information resources" (p. 4)? It clearly is intended to include, say, *War
and Peace, The Origin of Species, The Double Helix, The Guns of August,* and,
come to that, *Library Trends.* Do the authors really think that these, and a
myriad other, publications are about information or is this a calculated
reductionism to disguise the central flaw in their central notion that we
live in an "information age"? If we librarians and library users can be
persuaded that libraries are about information and nothing more, then
we can be persuaded that real libraries, librarians, and library collections
have no future, and we should resign ourselves to the oxymoronic "vir-
tual library" and all the rest of the real agenda of reports such as this.
The facts say otherwise. One odd contradiction in the report is a low-
level anxiety about the "competition" for libraries from mega-bookstores
(Barnes & Noble and such). This anxiety, however misplaced, betrays
the fact that ordinary people know the difference between the kind of
stuff (data, images, and other information) that they can find using a
computer and, on the other hand, literature, leisure reading, and cu-

mulative recorded knowledge—all of which are, and will remain, best provided by the sustained reading of books. Librarians with any sense of their history and environment know that libraries and bookstores complement each other and, far from being in competition, often increase each other's use. Also, who would not prefer a Barnes & Noble to a "virtual library"? Fortunately, that is not a choice we will have to make.

Given the inability of this report to define the "digital world" that it says, in some parts, is imminent and, in other sections, is already here, and its inability to recognize that information (as commonly used) is not the touchstone of the destiny of libraries, what remains is a collection of bits and pieces of varying interest and importance. For instance, absent these definitions, how should we construe: "Libraries are thus at a crossroads [sic], for they must adjust their traditional values and services to the digital age" (p. 7). My understanding of our traditional values is that they comprise, most importantly: service, intellectual freedom, a commitment to literacy, learning, democracy, and the preservation of the records of humankind. Even if one grants we are in a "digital age," which of these values needs to be "adjusted"? I do hope that we are not being told we must abandon our unique historic role as the preservers of the records of humankind just because electronic records are notoriously transient, mutable, fragile, and expensive to maintain. Perhaps we are to "adjust" our commitment to literacy because the "digital age" is also a post-literate age?

How about: "with the onset of the digital age...libraries must expand beyond the confines of the traditional library building" (p. 7)? One of the problems of reports by people entranced by technology is that they are shockingly ahistorical. Libraries have *always* reached out beyond their walls: interlibrary loan, service to shut-ins of all kinds (the sick, prisoners, etc.), telephone and mail (including e-mail) reference services, shared cataloging, mobile libraries and the rest may lack the glitz of electronics, but they are long-established aspects of library services. Given that history and commitment, do libraries really need a report to tell them that they can use electronic communication to reach out (something they are all doing already)? This beyond-the-library-walls theme hits a note of hysterical inanity with: "Your computer is a library, say those who carry this concept the [sic] furthest. It is outside library walls but it can carry you deep into library and other information collections" (p. 10). Your computer is *not* a library; most recorded knowledge and information is *not* available electronically. The information that is available using your computer is, to a great extent, disorganized, random, and lacking in secure provenance and authenticity. In short, your computer is about as far from being a library as it could be and it certainly cannot take you "deep into" a library.

## THE THOUGHTS OF "LIBRARY LEADERS"

As are most librarians, I am especially interested in ideas about the future of my profession and turned to the section on "The evolving librarian" (p. 11) with interest, particularly as it seemed to promise a Darwinian perspective. We are told that some library leaders (here and elsewhere, mercifully anonymous) believe that we are destined to become "knowledge navigators" (interestingly, the term ditches "information") instead of "caretakers of material." I know of no self-respecting librarian who is, or ever sees him- or herself to be, a caretaker of materials. It is an old rhetorical dodge to set up a negative strawperson to be demolished in advancing your own idea, but this is really a bit much. Of course we should take care of our collections but this is only part of the role of the librarian as understood for more than 100 years. The lack of historical understanding or the blindness to history induced by technological zeal is patently obvious to those familiar with the writings on the complexity of the librarian's role by, among many others, Dewey, Ranganathan, and Shera. The role of the "knowledge navigator," as envisaged by these library leaders, is, "to aid users to tap more effectively the resources of the Internet and other digitized collections...[and to] become coaches rather than information authorities" (p. 11).

I have read the last five words five times and still have no idea what they mean. Dewey wrote about the role of the librarian as teacher in the early years of this century and, if that is what is meant, the report is again telling us to be what we have been all along. Perhaps the analogy is to sports, in which case it eludes me, but then I have never considered myself an "information authority" either. Also, why is the "knowledge navigator" only going to concern her- or himself with the Internet and digitized resources? Are the "traditional collections," which the report tells us *seriatim* we are to be allowed to keep, to be the province of unrecyclable and unevolved librarians or, as I would guess, do the library leaders in their secret hearts think that there will be no "traditional collections" at all and we will all be navigating the electronic wilderness and that alone?

The report talks of the "library as definer of American culture" (p. 11) and asserts the value of open access to all. I think this is fine as far as it goes but also think it should be expanded. Libraries do aid in the furtherance of the American values of democracy, education, etc., but the culture of all civilizations should be our province, especially in this time of global awareness and diversity. The section also cites one way in which the "digital library" can enhance our mission by making historical American documents widely available. This is true and laudable but hardly dependent on the existence of a "digital library." All that is needed is electronic resources (online, CD-ROM, etc.) being made available in real libraries—as they are in many libraries this very day.

We are told that, as part of our evolution, we, "need to be retrained

[and]...will need new tools to search for information from digital sources. Some caution that, in the process of becoming digitally fluent, librarians must not lose their humanistic origins" (p. 12). Leaving aside the prose (what the Dickens is "digital fluency"?), we are told that we must do what we have been happily doing for about a decade–incorporating electronic resources into our services and learning their ins and outs. Have none of these library leaders been to an ALA conference recently? Instructing us, *de haut en bas*, to do what we are doing already verges on the insulting, whereas the idea that electronic resources and humanistic values are inimical verges on the weird. What is less humanistic about the *Encyclopedia Britannica* online than the printed version? It is a lot harder to read but that is a practical, not a moral, matter.

One of the ideas that comes up often in these discussions is the notion of the library as a publisher. "Some library leaders assert that libraries in the digital age will create, publish, and manipulate information. This vision transforms libraries from collectors and disseminators to actual information creators" (p. 9). I suppose this to be an offshoot of the notion that the "digital age" will make everyone a publisher and free us all from the bothersome concepts of standards, security of provenance, filtering, and all the other aspects of the print publishing industry. If everyone is to be a publisher, why not libraries? The fact is that no one has proposed or even sketched an economic model for electronic publishing. Almost all electronic documents that aspire to be more than aggregations of information are by-products of the very successful, profitable, and innovative publishing industry. From newspapers to scholarly journals to magazines to "electronic books," we see an industry that is using the fact that its processes are already computerized to produce electronic versions of their real product—print publications. True electronic publications—CD-ROMs, online databases, etc.—are enhancements to the world of communication and only replace print publications when they deal solely in information—indexes, bibliographies, ready-reference works, etc. The libraries-as-publishers scenario greatly underestimates the intellectual and other labor that goes into print publishing—soliciting manuscripts, working with authors, editing, copy editing, marketing, etc.—and concentrates on printing and distribution, which is erroneously assumed to be "free" in the "digital world." This last is but one of the economic truths that are elided or ignored in such discussions. Electronic distribution is not "free" and, even if it were, accounts for only about 10 percent of the cost of producing a book. Are these publishing libraries going to assume responsibility for the editorial and other duties of publishers or are they just disseminators of anything they happen to find? If the former, how are they going to afford it; if the latter, why are they needed anyway?

The library leaders agree that: "Libraries in the digital age must find

their competitive niche." One library leader is quoted as saying that: "We don't have the franchise anymore to be sole providers of information in our communities and we need to stop acting as if we did" (p. 13). I cannot imagine how anyone familiar with libraries can hold the opinion that libraries once had a monopoly on the provision of information or anything else. Libraries have always co-existed happily with other agencies with missions that overlapped with ours. In this section of the report, the idea that we are in competition with, and have something to fear from, mega-bookstores rears its head again. I find this recurrent theme of competition and fear quite baffling and can only ascribe it to a combination of the angst that seems to afflict those who believe in all this "digital world" blather and the importation of business ethics and jargon into library administration. The report actually touches on this last: "One librarian suggested that libraries cannot continue to be a gateway for everyone—that they must evaluate their roles and function like a business, sizing up the competition and carving out niches" (p. 13).

All this red-in-tooth-and-claw speculation seems to me to be quite misplaced. We have never attempted to be the "gateway for everyone." We have, or should have, a fairly established view of our role and function and need not descend into the profit and loss speculations of businesses, and we have everything to gain from cooperation and co-existence with bookstores, publishers, computer services, and all the other hobgoblins that haunt these library leaders. Libraries are about community, learning, recreation, literacy, and social advancement, and we should work with (not in competition with) anybody or any agency that enables us to advance those goals.

Throughout the report, the importance of the library as physical place is stressed or, more accurately, has lip service paid to it. The subtext of the report tends in a quite different direction, nowhere more so than in the last part of the library leaders section (pp. 14-15). The American public is strongly in favor of public libraries and expresses that support financially and in other ways. As the report states: "The library is a symbol of trust and a locus of community culture, values, and identity that even non-users care about" (p. 14).

One would have thought this an unmitigated blessing, but some of our library leaders think this image of the library, "makes it difficult politically for libraries to remake their image and surge forward in the digital age" (pp. 14-15). The implication is that, fueled by fear and a desire to be with-it, library leaders are telling us that we have to take the trust of decades and the faith and confidence of our users and sacrifice them on the altar of the digital age. It does no service to anyone to recommend this course of professional suicide, and I hope the readers of this report will think long and hard before accepting this dangerous and anti-social nostrum.

## THE THOUGHTS OF THE PUBLIC

The other lengthy section of the report deals with the results of an extensive and expensive public opinion survey and how the views of the public mesh or not with those of the library leaders. Most social science surveys are machines for enumerating the blindingly obvious. This is no exception. Much is made, here and elsewhere in the report, of the fact that the lowest support for libraries is among the 18-24 age group. I suppose the idea is that this is a generation that will never favor or use libraries. Of course, that is not the case, and I dare say that one would have come up with exactly the same finding thirty-five years ago when the middle-aged, who now support and use libraries heavily, were 18-24 and did not think much of libraries at all. The tendency for library use to be high in childhood, to drop off in adolescence and young adulthood, and to rise thereafter has been an observable phenomenon for all the forty years that I have been in libraries. It does, after all, arise from perfectly understandable human and societal factors.

The survey also finds: "There is a high correlation between those who are frequent library users, frequent bookstore patrons, and those who have access to a personal computer" (p. 17). I suppose it is a good thing, but did we really need a survey to tell us that the library leaders' fear of "competition" (p. 17) is nonsense?

Another finding that establishes the obvious is that nonusers are less in favor of library financing than library users. I imagine those without children are less in favor of school funding than those with, and those who do not take mass transit less in favor of funding it than those who do. Fortunately, the majority of Americans do use public libraries, and there still remain some vestiges of the notion of the public good, so this unsurprising finding need not be the calamity the report thinks it to be.

One strong opinion that surfaces is that libraries are important to children and families with children. The survey finds that the public rates children's services first in its priorities for libraries (followed by the provision of books and library buildings). Is the conclusion not inescapable? Public libraries should continue to emphasize its services to children (books, story hours, other media—including affordable appropriate electronic media), the provision of books and other "traditional media" for the general public, maintenance of the library building as a community asset, and enhancement of those services by the provision of access to electronic resources. Perhaps this is too mundane a solution for those who want to be "knowledge navigators" in a "digital world," but it seems to me to be the only sensible way to proceed.

## KEY PUBLIC POLICIES

The report identifies four "policy themes" that are germane to the future of libraries. All four revolve around questions of electronic access

and, though largely unexceptionable in themselves, thereby reinforce the idea that the true agenda is to replace real libraries with virtual libraries. First Amendment rights are considered only in the "networked environment" and thus the report ignores all the First Amendment issues that come up daily in real libraries. Universal service and access, in their view, involves "as a matter of public policy, affordable access to, and use of, networking tools." What about the need for guaranteed access to a decent collection of books and journals? Intellectual property issues are discussed only in the electronic context—a milieu in which this difficult question verges on the insoluble, something that digital library advocates, as here, tend to gloss over. Lastly, funding is considered only for "new and expanded activities" and for a future in which "the traditional link between library service areas and local property taxes is uncoupled through networked services and collections." Did it not occur to anyone connected with this enterprise that that future could be avoided by regarding electronic resources as an enhancement to, not a replacement for, real libraries?

## A COORDINATED COLLABORATIVE EFFORT?

The report closes with the product of a two-day conference of library leaders, Foundation staffs, and pollsters.

> What emerged was a proposal to propagate "new life forms," in which libraries team [sic] with other public service information providers to form community education and information networks open and available to all. With some communities already experimenting with collaborations and cyberspace creating myriad cyber-communities for information exchange of all kinds, libraries should create broad-based, real-time networks with public service partners that can facilitate this exchange of information. (p. 40)

My heart had been sinking all the time I was reading this document and, I thought, reached the depths when it came to "new life forms." But there was worse to come. "As this report makes clear, the public loves libraries. But the libraries they love are sometimes at odds with the library leaders' visions of libraries' future roles" (p. 41). So, that is what it all boils down to. The public is too dumb to see that the libraries they love should be replaced by new life forms that library leaders want. What a pity and a shame that we should have come to this.

# Creating a Future for Public Libraries: Diverse Strategies for a Diverse Nation

CHARLES R. MCCLURE AND JOHN CARLO BERTOT

ABSTRACT

PUBLIC LIBRARIES CURRENTLY FACE a number of significant challenges and opportunities as they move into the digital future. The report *Buildings, Books, and Bytes: Libraries and Communities in the Digital Age* is a useful catalyst to continue the discussion concerning the role of public libraries in this global, networked, digital future. This article raises some concerns regarding the method used in the study, selected findings, and the lack of specific recommendations. Findings from other recent studies do offer some strategies and recommendations for making this transition effective. Moreover, global strategies for how public libraries, as a group, can effectively make this transition may miss the mark. At issue is how each library, individually, offers a vision, promotes that vision, responds to its community, and takes a leadership stance as to what its role should be in this electronic networked environment. Public libraries will need diverse strategies that depend on a range of factors to be successful.

## INTRODUCTION

The release of the report *Buildings, Books, and Bytes: Libraries and Communities in the Digital Age* (Benton Foundation, 1996) has brought increased attention to issues related to the role of public libraries in the digital age. A number of issues and findings that resulted from the study are fueling debates concerning what public libraries are, should be, cannot be, or might become. Those interested in the societal role of public libraries certainly will appreciate the attention that will come to the public library

community as a result of the study. The report, however, offers very few specific strategies, suggestions, or recommendations as to what public libraries need to do now given the varied public opinion and evolving professional view of public libraries in the developing digital environment.

A key finding of the report is that Americans continue to have a love affair with their libraries, but they have difficulty figuring out where libraries fit in the new digital world (Benton Foundation, 1996, p. 7). But there are a number of warning bells, such as the view that it is possible to replace trained librarians with volunteers to serve cappuccino as well as perform more traditional library services (Benton Foundation, 1996, p. 31).

These and other findings suggest that the public has distinctly different perceptions of the public library than do public librarians. A close read through the Benton Report can both stimulate and depress those who have wrestled with the general topic of public libraries and the digital age. Indeed, the issues, topics, and many of the findings are not new for many public librarians. The Benton Report may offer significant interest, however, to some trustees, citizens, and government officials who have not been engaged in this discussion. Thus, the image of public libraries and issues to address, as painted by the report, will affect different audiences in different ways as they interpret its content.

As academics and consultants who serve regularly in the trenches, we consider the report as a bit of an anomaly. We are certainly pleased that the Kellogg and Benton Foundations supported the project and brought increased visibility to issues related to public libraries in the digital age. But there are numerous issues related to the study, its development, its findings, and its use that may result more in muddying, than clearing, the waters of where public libraries fit in the digital age. The purpose of this article is to review the Benton Report with an eye toward clarifying key issues, offering some recommendations for public libraries as they enter the digital age, and drawing upon findings from some of our recent research related to the future of libraries in the digital age. Given less importance, but still important, is to examine the technical aspects of the report in terms of its development and method. Indeed, the findings from the report must be considered in light of the report's data collection and analysis processes.

Overall, the authors believe that, while there certainly is useful information in the report, not much of this is new to the public library community. For example, the finding that different librarians and different users have differing, and sometimes conflicting, views of what the public library should be in the digital age is well known (McClure et al., 1995a). Furthermore, the lack of clarity concerning the study's method and data collection techniques hinders the usefulness of the discussion and find-

ings. And by the end of the report the authors were left asking: "Given these findings, what needs to be done, if anything, to resolve the issues concerning public libraries in the digital era?"

## THE TECHNICAL DEVELOPMENT OF THE REPORT

When the Benton Foundation released its report, there was a big splash of media coverage, discussion on the network lists, and conversations among public librarians as to its findings. The report describes its findings as based on survey and other data-collection activities. Indeed, it promotes the credibility of its findings due to the empirical nature of the study. But a number of issues should be considered in the technical development of the report when interpreting the findings.

### Purpose of the Report and Intended Audience

The Kellogg Foundation initiated the study to inform its Human Resources for Information Systems Management (HRISM) grantees "about where the public supports—or fails to support—libraries as they confront the digital world." Furthermore, the foundation wanted "to help its grantees develop a public message about American libraries that reflected both the library leaders' visions and the American people's expectations" (Benton Foundation, 1996, p. 1). These grantees include a broad range of library types and organizations. Note that the purpose had to do with libraries and not "public" libraries. As such, the primary benefactors of the study were those organizations and individuals that received support from the Kellogg Foundation. One might wonder why, after supporting their various projects, the foundation then determined that they needed to be informed about these issues.

But the report took on a much larger purpose than only informing grantees. Ultimately, it was a very public document, and the audience certainly shifted from the grantees to the public at large. Who, specifically, the report targeted as the intended audience other than the grantees, however, is unclear. The presentation and style certainly suggest it was not intended for researchers, public librarians knowledgeable about the general topic, or governmental policymakers looking for solutions and recommendations. Perhaps it was intended for trustees and local community members? In short, the range of possible audiences for this report is extensive, and writing a report that targets all these audiences at one time is difficult at best and confusing at worst.

Also curious is the usefulness for the grantees to develop a public message about libraries (or public libraries as it turns out). The report does not divulge the identity of the grantees, although it does provide a list of organizations with which the grantees are associated. It is, therefore, difficult to determine the basis on which they do, or should, speak for the public library community. Without such information, readers of

the report are left to speculate as to the ability and/or credibility of its grantees to make judgments or predictions for the role of public libraries in the digital environment, as they provided much of the input to the study.

*Method and Data Collection*

A problem throughout the Benton Report is that it indicates its findings come from a research study but then fails to provide adequate information about the method and data collection (Benton Report, 1996): "This study compares library leaders' visions for the future with the public's prescriptions for libraries, *derived from public opinion research that forms the backbone of this study* [authors' emphasis]" (p. 3).

Some information about the method and data collection appear in the Preface (Benton Foundation, 1996, pp. 1-2), some regarding telephone interviews with grantees on page 12, some regarding the public survey on page 24, a bit about the focus group of library users on pages 26-27, and an appendix of the survey on pages 42-46. There is, however, no coherent overall discussion of the method and data collection techniques. Space does not permit a detailed dissection of the report's research methodology. The authors note, however, the following unresolved issues:

- *Grantees as public library leaders and knowledgeable about public libraries* (Benton Foundation, 1996, p. 3). Much of the input that represents the library leader point-of-view is based on that received from the grantees. The reader does not know who that includes except that, to be a leader, one had to have received support from the Kellogg Foundation.

- *Grantees' visions of the future.* Although unclear in the report, grantees apparently submitted written vision statements for analysis. Questions remain as to whom grantees submitted these responses, the number of responses received, how these responses were analyzed, and how, specifically, these responses were used as input to inform the study (Benton Report, 1996, p. 1).

- *Details on the public opinion survey.* As part of the study, the Kellogg Foundation arranged for Lake Research and the Tarrance Group to conduct a telephone survey. Details concerning the development, methodology, and analysis of the phone survey are sketchy at best. The reader learns that the survey findings are based on 1,015 completed telephone interviews using a "stratified random-digit replicate sample and weighted...to ensure that the sample accurately reflects the total population 18 years and older" (Benton Foundation, 1996, p. 24). There is, however, no discussion of the methodology, weighting criteria (e.g., why not weighting on household income?), generalizability, or types of statistical analysis performed.

• *Content, method, and analysis of telephone interviews with grantees* (Benton Foundation, 1996, p. 12). The report provides no detail as to how many interviews occurred, the composition or demographic make-up of the interviewed grantees, the types of questions asked or topics discussed, or how the data were recorded and analyzed.

• *Focus group of library users.* This comprised eleven all-white participants who were residents of Montgomery County, Maryland, identified as library users, and all but one being a college graduate. The report cautions use of these findings and then goes on to ignore its own warnings by quoting the phrase resulting from the session that libraries are "behind the curve" throughout the report. Clearly, this group of participants is not representative of library users. For example, 1995 census data show that the median household income in the United States is $34,076 (U.S. Bureau of the Census, 1996). According to 1990 census data (the most current for county-level data), the median household income for Montgomery County was $54,089 (U.S. Bureau of the Census, 1990). Allowing for a 10 percent household income fluctuation between 1990 and 1995 would yield a medium income range of $48,681 to $59,497, well above the national median household income level. Furthermore, the group contradicted many of the findings from the public opinion survey. It is unclear as to how participants were selected, the specific topics that were covered during the focus group, or the means through which focus group responses were analyzed and summarized.

• *Quality of the data.* There is no mention of the steps the investigators took to ensure the collection of reliable and valid data during the focus groups, telephone interviews, or the analysis of the mission statements.

• *Lack of references and use of literature.* Especially frustrating for those trying to use the study's findings is the reference to other studies and previous work for which no bibliographic citation is provided. For example, a two-page table of findings from other surveys and sources presented in the report offers no references (Benton Foundation, 1996, pp. 28-29). Moreover, there are no references to other writings on the general topic of public libraries in the digital age, suggesting to readers that no one has dealt with these issues previously. Finally, there is no bibliography for additional reading.

In fairness to the Benton Foundation, when asked by one of the authors for detail on method and data collection, a representative provided some additional information and referred us to Lake Research and the Tarrance Group. Questions remain, however, as to the study's methodology and conclusions derived from that methodology. The average reader

may neither be aware of these concerns nor seek to resolve them and thus will take on faith the accuracy of the discussions and findings.

*Need for Information on Method and Data Collection*

The problems identified with the technical development of the Benton Report as described briefly in this section are serious concerns that, unfortunately, bring to question the usefulness and credibility of the report's findings and discussion. Minimally, the report needed an appendix that:

- provided readers an overview figure describing the components of the method;
- detailed the study methodology, data collection instrument development, and administration of the data collection instruments; and
- described the techniques used for data analysis.

That the report lacked content and an organization of information related to method and data collection is very curious. One would assume that those involved in the data collection activities—Lake Research and the Tarrance Group, study developers, and the Benton Foundation—are aware of these issues. All are respected researchers and/or research institutions that deal daily with issues related to ensuring credibility of their reports and products. It may be that the contributors to the report did take steps to deal with some of the issues identified in this section. Without such methodological information, it is difficult to assess and interpret the study's findings.

Despite the above research methods reservations, the reported findings of the Benton Report raise several issues worthy of discussion. The following section, therefore, centers on the findings of the report rather than on the technical aspects of the report.

## DISCUSSION OF SELECTED ISSUES AND FINDINGS FROM THE REPORT

There is inadequate space to deal with all the various issues and findings raised in the Benton Report. Estabrook (1997) offers her view on some of these issues as do others in this special issue of *Library Trends*. Nonetheless, it is useful to highlight some of the issues and findings and offer comment and analysis on those especially interesting.

*Lack of Agreement Among Participants*

Although there were some areas where the "leaders" agreed, there seem to be many instances where they did not agree. The findings from the views of the leaders often begin with "some" thought, or "others" believed, or "several" pointed to such and such (Benton Foundation, 1996, pp. 14-15). In other instances, the grantees reported a point of view in their mission statements—e.g., enthusiastic—as serving as a safety net, and then in the telephone interviews had reservations about this role (Benton Foundation, 1996, p. 12).

Overall, there is a wide divergence between the views reported by library users and those reported by library leaders. Estabrook (1997) characterizes these competing views as "polarized perceptions" (p. 46). In other instances, for example, focus group participants stated that bookstores were genuine competitors to libraries (Benton Foundation, 1996, p. 30), but responses from the survey indicate "a significant correlation between heavy library use, frequent bookstore patronage, and home computer use" (Benton Foundation, 1996, p. 21).

*The Public Library and the Electronic Networked Environment*
The Benton Report details numerous roles for public libraries in the electronic networked environment (pp. 8-10)—e.g., access points to the National Information Infrastructure (NII), creators and maintainers of digital collections, and community-based digital hubs. Moreover, the report indicates that libraries of all types will "electronically merge" (p. 9), and in some cases merge physically, to create expanded digital collections and library entities.

The Benton Report, however, noted a tension between both the provision of public library digital and print services and expanding library services beyond the boundaries of library walls. Participants could not agree on whether public libraries would:

- forego printed material for electronic;
- maintain strong print-based collections; or
- become "hybrids" (p. 9) with a presence in both print and electronic media.

Also, participants could not agree as to the extent to which public libraries should expand the availability of their network-based services beyond availability within library buildings—e.g., through remote access capabilities.

The public library cannot be all of the above. This is particularly true as focus group participants indicated that the public library of the future is "far from being a technology leader, [but] would function as an information archive" (p. 5). Public libraries are therefore caught in a dilemma. On the one hand, library leaders want to provide state-of-the-art digital services that make libraries central to their communities. On the other hand, patrons do not view public libraries as advanced technologically, nor are they willing to provide public libraries with increased financial resources to provide digital services. Whatever path a library decides to take, however, must incorporate the interests of the library and its community.

*There is No Public*
The Benton Report regularly refers to "the Public" (e.g., pp. 14, 17-18). We would argue that there is no general public but rather a collec-

tion of stakeholders and communities with different views and needs re-
garding the public library. Further, the particular demographic make-up
for one particular library is likely to be very different from that for an-
other library. This diversity in community make-up provides an impor-
tant context for a specific strategy for how one library moves successfully
to the digital setting. Thinking that there is a monolithic public from
which to base services is not productive.

Interestingly, the survey data from the Benton Report are most use-
ful when reported in terms of specific demographic characteristics rather
than findings about the public. Indeed, successful public library direc-
tors know that specific demographics about their community are more
important than nationwide data. The public library in a particular vil-
lage or town does not serve the public; it serves its specific community
however defined. Thus the views of selected Maryland library users have
an important story to tell for the libraries that comprise that particular
community and is probably much less a useful story for a rural town li-
brary in Missouri.

*Policy Issues are Complex*

The discussion of key public policy issues (Benton Foundation, 1996,
pp. 33-37) lists four topics that require attention: Universal Service and
Access, First Amendment Rights, Intellectual Property Rights and Copy-
right, and Funding. Although there are other equally important policy
issues, one might argue, as does the report, that these four certainly are
critical and require the attention of the library community and policy
makers. Again, the literature and debate regarding these four policy is-
sues is extensive. One only has to check the Web homepage of the Ameri-
can Library Association Washington Office for discussions about these
and other topics (see <http://www.ala.org/oitp/>).

The discussion of these issues in the Benton Report, however, is sim-
plistic and fails to provide adequate detail and information to assist those
who are uninformed about them (McClure, 1996). Furthermore, there
are no references to other writings, Web sites, or public advocacy groups
that readers could contact for additional information. Thus, if this sec-
tion of the report is intended as a primer on these policy issues, it is not.
If it is intended to demonstrate how these important policy issues affect
vision and mission of public libraries in the digital age, it does not.

*The Impact of Public Library Digital Services on the Marketplace*

The Benton Report discusses numerous public library-based elec-
tronic network service possibilities. All are couched in the publicness of
the library institution—that is, the public good aspect of public libraries
and the services that they provide their communities.

The more that public libraries engage in digital information services,
however, the more likely public libraries will compete with information

and network service providers. The authors argue that there are those services—e.g., access to e-mail accounts, dial-in capabilities—that some public libraries provide that compete directly with Internet service providers (ISPs). These relationships are not akin to the bookstore/library relationship referenced by some Benton Report participants and place public libraries in the digital marketplace. In this role, public libraries are not community institutions but rather providers of goods and services for marketplace consumption.

This issue is extremely complex and potentially detrimental to the public library institution. There is no clear understanding of when, exactly, the public library would enter the marketplace through digital services. For example, is a public library competing with ISPs and other for-profit entities when it:

- provides access to the Internet, either on-site or remotely?
- provides electronic services, e.g., e-mail accounts, databases (either library created or through site licensing), or research services?
- enhances (i.e., adds value) publicly available data and repackages it for public consumption?
- charges for any of the above?

Further complicating this issue is that: (1) public libraries, in general, provide electronic network services through the use of public funds, and (2) public library electronic network services are not regulated as are those provided by ISPs, Regional Bell Operating Companies (RBOCs), Interexchange Carriers (e.g., AT&T, MCI, and Sprint), or cable companies.

It is perhaps useful to view this issue as a matrix (see Table 1). It is relatively clear that public libraries in the Low Technology Sophistication/Access Services quadrant are not in competition with for-profit organizations. Less clear, however, is the competition factor for public libraries that reside in the other quadrants. The authors realize the simplistic nature of the matrix presented in Table 1, particularly considering definitions of technology sophistication and access versus enhanced services. The matrix does, however, offer a beginning point for discussion of the role of public libraries in the electronic networked environment both within the public library profession and the communities in which public libraries reside.

TABLE 1. Public Library Marketplace Competition.

|  | Enhanced Services | Access Services |
|---|---|---|
| High Technology Sophistication |  |  |
| Low Technology Sophistication |  |  |

The above discussion serves to highlight selected findings and issues within the Benton Report. The next section details findings from research conducted by the authors. These findings serve to inform the debate concerning the roles of public libraries in the electronic networked environment.

## WHAT WE HAVE LEARNED FROM OUR RESEARCH

The notion that public libraries can service all the needs and/or desires of their service area is false. Research that the authors and others have conducted over the years indicates that public libraries do not service their entire population. Rather, they focus on providing services to their "patrons" (Bertot & McClure, 1996a; McClure et al., 1996, 1995a). Inherent within this subtle, but key, distinction is that no two public libraries will provide their patrons exactly the same services in precisely the same way. This is particularly true of public library-provided digital services.

There are, however, some issues that cut across public libraries in the electronic networked environment. These include, but are not limited to:

• Developing and planning for an adequate information technology (IT) infrastructure. The IT infrastructure a public library has determines the types of digital services it can provide. For example, a public library that connects to the Internet through its OPAC using text-based terminals cannot provide multimedia services to its patrons. Should a library wish to provide multimedia services, it will need to plan for the requirements of such services (e.g., facilities upgrades, procurement, wiring, workstation selection, etc.).
• Considering the decreasing life cycle of IT and increasing pace of change in the electronic networked environment, such planning is most successful if conducted in an evolutionary and incremental manner.
• Assuming that library patrons are only those that come to the library is a dangerous assumption. One of the many aspects of the digital environment is that it removes the constraints of geography and time. Through remote access and dial-in capabilities, library patrons can be virtual, and frequent, patrons. Public libraries need to redefine the notion of patron and find new ways to serve virtual patrons.
• Focusing services on the "have nots" is a problem. Unless a public library is in a large urban inner-city environment, the typical library patron is college educated and middle class.
• Promoting public libraries as a safety net does not appeal to the majority of public library patrons and communities. This does not negate the importance of public libraries as "safety nets." Rather, it implies

that the safety net role of public libraries is particular to certain librar-
ies in particular circumstances.

• Developing statewide networking initiatives is possible and necessary
to equalize and provide access to a broad range of electronic networked
services and technologies. Not every public library will be able to af-
ford to connect to and provide electronic network-based services. State-
wide networking initiatives, such as Maryland's Sailor project, can serve
to create a level playing field by building a statewide IT infrastructure,
enhancing the public library IT infrastructure, negotiating statewide
database license agreements, and promoting content development.

• Developing ways to measure and evaluate electronic networked ser-
vices is critical. The digital environment requires a rethinking of ways
in which to measure and assess the use of library services. As network-
based services become routine public library services, libraries will need
to move from circulation counts to downloads, from patron counts to
network traffic measures. Moreover, libraries will need to develop the
techniques through which to assess these measures as a means to evalu-
ate public library services.

• Assimilating electronic networked services into routine public library
activities is necessary. It is not the case that public libraries must either
provide traditional services (e.g., books) or digital services (e.g.,
Internet). Public libraries can do both and need to determine the
strengths, weaknesses, and most appropriate applications for both in
their settings (Bertot & McClure, 1996a; Bertot et al., 1996; McClure,
1996; McClure et al., 1995a, 1995b).

Embedded in each of these issues, however, is the tension between gener-
alizing to all public libraries and the exceptions at the individual public
library level.

As an example, the Maryland Sailor project has been a success pri-
marily due to the balance between statewide and local networking activi-
ties (Bertot & McClure, 1996a). The backbone building and mainte-
nance, selected databases, and key content development activities are state-
wide functions. Connected library systems (all twenty-four in Maryland)
are free and encouraged to develop local partnerships with a variety of
organizations (e.g., schools, local governments) to enhance Sailor's con-
tent and provide local information to patrons. Moreover, each library
system has the ability to go beyond core Sailor network services (some
library systems, for example, provide e-mail account services). Building
digital libraries is, therefore, an iterative and collaborative process that
allows for the incorporation of both aggregate and individual library in-
terests.

POSSIBLE STRATEGIES
     To a great degree, the report left these writers with the sense that

there are many different views regarding the role of public libraries in the digital age. And, moreover, it would behoove the public library community to chart a better path and vision into this new digital age. Since at least the early 1990s, these authors (among others) have also suggested the importance of charting a vision to transition into the digital age.

Estabrook (1997) finds three major suggestions for strategies from the report: "Take advantage of changing demographics due to increased minority populations that tend to support enhanced library services; Increase collaboration between the public library and other community groups; and Librarians must increase their political knowledge and involvement" (pp. 47-48). Again, the authors would suggest that these are good but well-known suggestions that have been promoted to the public library community frequently over the years.

The strategies suggested in the Benton Report encourage the idea of a "Coordinated Collaborative Effort" (pp. 38-41). This vision sees public libraries as access for all, built around a unified and integrated resource hub. This would be a new life form, with other public information providers as partners, and would tackle the community's information needs and problems (p. 39). Again, this view of the public library has been promoted by a number of people over the years. While this view may be useful, we would offer the following specific recommendations for public libraries as they move into the digital age:

• Promote and sell a vision of the public library in the digital age. Each public library has the responsibility to engage in a process that results in a vision for that library in the digital age. That vision must be informed by the unique needs and strengths of its community. When the community asks, What is the role for our library in the digital age? there must be a clear, concise, and exciting vision in response. That vision, however, is likely to vary considerably from library to library. There is no universal vision statement that will work for all public libraries.

• Redeploy resources and re-engineer services. Public libraries must deal with the reality that there is unlikely to be a huge influx of additional resources to facilitate their transition into the digital age. Resources from existing traditional services will need to be redeployed to digital resources and services. Budget lines (as well as other lines) for print-based collection building may need to be reduced to obtain access to an extensive amount of electronic resources. Circulation, interlibrary loan, and reference services can be re-engineered to exploit the digital library.

• Determine the desired level of electronic networked services and build a library's infrastructure around that determination. The types and quantities of digital services a public library intends to provide will

define the technology and staffing infrastructure necessary to provide
such services. For example, libraries that want to provide remote dial-
in services for both Internet and library OPAC access will need to in-
stall additional telephone lines, modems, and routers. Moreover, if
libraries do not currently provide dial-in services or do not have the
staff expertise to engage in such services, libraries will need to con-
sider hiring such staff, training existing staff, or outsourcing for the
management of the dial-in services.

- Consider an electronic network strategy that incorporates statewide,
regional, and local networking activities. It is not the case that each
public library needs to create and manage its own digital services. There
are appropriate and differing roles for state libraries, regional library
systems, and public libraries in creating a networked and information
infrastructure. For example, state libraries can facilitate the develop-
ment of statewide backbones to connect all public libraries, provide
technology grants to enhance in-library technology (e.g., multimedia
workstations), and negotiate favorable statewide licenses for databases.
Regional library consortia can do much the same but on a smaller
scale. With state libraries and regional library consortia handling the
technology and selected content issues, individual public libraries can
concentrate on local information content, special collections develop-
ment, and tailoring the available electronic networked services to their
communities.

- Redefine and expand upon the library patron. Public libraries need
to rethink who, exactly, is their user community. The electronic net-
worked environment is such that a library patron can be anywhere in
the community, state, country, or another country. A library patron is
no longer defined, therefore, as that person that walks through the
doors of the library. Given that most public libraries receive a major-
ity of funding from their local communities, libraries will not necessar-
ily want to serve patrons beyond their communities. Public libraries
will, however, need to consider ways in which to provide access to digi-
tal resources to those individuals and/or institutions that will not en-
ter the library building—e.g., schools, local governments, and resi-
dents with in-home computers.

- Measure and evaluate the impact of electronic networked services.
Many of the difficulties public libraries face in justifying the provision
of digital services is attributable to a lack of systematic and quantifi-
able collection of both network performance and impact data. There
is a growing body of literature for the collection of such data (see Bertot
& McClure, 1996a, 1996b; Newby & Bishop, 1996; McClure & Lopata,
1996; McClure, 1994), and libraries need to begin the process of in-
corporating such data collection activities into their more traditional
collection processes (e.g., circulation counts). Without such data, pub-

lic libraries will have to rely on the limited power of anecdotal data to sway community leaders, patrons, and policy makers of the importance of library-provided digital services.

• Train, train, and train some more. Libraries cannot move into the digital age without knowledge of the key components that comprise that digital age. The experience of these writers is that too many public librarians are unfamiliar with basic networking and desktop technologies. Until the profession is computer and network literate, and can apply this literacy to the provision of services, development of a vision and transition to the digital will be difficult indeed.

These only comprise the beginning or first level of specific strategies that one can recommend for public libraries to be successful in the digital age. But, to a large degree, that success will be determined by the individual leadership, vision, and planning of the library director and staff.

## DIVERSITY OF LIBRARY COMMUNITIES

One of the most interesting changes that will affect public libraries is defining their community. As public libraries establish their presence on the net, their *community* will include not only their local geographic community but also their virtual community of users. Already we see how the virtual public library is drawing new communities together. The notions of the public and the community as used in the Benton Report will need to be recast for service roles of public libraries in the digital age. Indeed, public library communities in the digital age are likely to only become more diverse.

In a famous quote attributed to Tip O'Neil, then U.S. Representative to Congress from Massachusetts, O'Neil quipped that "all politics are local." With apologies to Tip O'Neil, the authors would argue that "all public libraries are local." By this we mean that each library will have to develop specific strategies for what will work best in its particular setting and for its particular community—geographic and virtual. In short, national roles, national visions, etc., while possibly helpful, will not remove responsibility for public librarians to design their particular strategy to move to the digital age in "their" particular "community" setting.

In a recent special Fall 1996 issue of *Daedalus* titled "Books, Bricks & Bytes," a number of excellent papers discuss the future of public libraries and their transition to the digital age. Marcum (1996) notes that findings from case studies that the Council on Library Resources conducted (with Kellogg funding) showed: "In traveling to these libraries, the Council's staff realized that there is no single answer about how technology can be used by public libraries to serve their communities or to provide greater public access to information resources" (p. 94). Marcum further notes that the successful libraries looked to their communities for partnerships with local organizations and various individuals to help

set goals and objectives; that they had strong leaders with vision; resources (relatively speaking) to use digital technology; and community-centered strategies for making the transition.

The Benton Report found little agreement among librarians as to strategies for entering the digital age, and reports that "polarized perceptions" between librarians and the public are not surprising. Research that lacks input from a diverse set of participants often fails to identify solutions, as participants fall into a "Group Think" situation. More useful for many public librarians is a "Best Practices" approach as outlined in Fidelman (1997) for moving to and exploiting the Internet in a public library environment. He notes, however: "Finally, keep in mind that while you are not a pioneer, your own situation is unique. Each community and library has its own character, staff, base of preexisting facilities, and external context of existing and planned networks" (p. xi). Many public libraries will find the time spent on reading Fidelman's book more worthwhile, as it offers specific strategies for public libraries to enter and sustain their presence in the electronic networked environment.

In our work with a range of public libraries, we find that, not only are there multiple answers about how to use technology successfully, but also that one or two champions and leaders on the library staff can almost single handedly bring the library into the digital age successfully. Leaders do make a difference. The battles for successfully transitioning into the digital age will be won and lost by the degree to which individual library leaders develop strategies that offer a vision, that draw upon the community's strength and inputs, and that marshal resources to reach that vision. These strategies and visions will be diverse because public libraries live in very diverse communities with diverse people, diverse politics, diverse needs, and diverse dreams. Which vision and strategy a public library selects may be less important than having a vision and strategy.

REFERENCES

Benton Foundation. (1996). *Buildings, books, and bytes: Libraries and communities in the digital age.* Washington, DC: Benton Foundation.

Bertot, J. C., & McClure, C. R. (1996a). *Sailor assessment final report: Findings and future Sailor development.* Baltimore, MD: Division of Library Development and Services.

Bertot, J. C., & McClure, C. R. (1996b). Developing assessment techniques for statewide electronic networks. In S. Hardin (Ed.), *Global complexity: Information, chaos, and control* (Proceedings of the 59th Annual Meeting of the American Society for Information Science) (pp. 110-117). Medford, NJ: Learned Information.

Bertot, J. C.; McClure, C. R.; & Zweizig, D. L. (1996). *The 1996 national survey of public libraries and the Internet: Progress and issues.* Washington, DC: National Commission on Libraries and Information Science.

Estabrook, L. S. (1997). Polarized perceptions: A Benton Foundation finds library leaders and users at opposite ends of the debate over the roles of libraries in the Digital Age. *Library Journal, 122*(2), 46-48.

Fidelman, M. (1997). *All-out Internet access: The Cambridge Public Library model.* Chicago, IL: American Library Association.

Marcum, D. B. (1996). Redefining community through the public library. *Daedalus, 125*(Fall), 191-205.

McClure, C. R. (1994). User-based data collection techniques and strategies for evaluating networked information services. *Library Trends, 42*(4), 591-607.

McClure, C. R. (1996). Libraries and information policy. *Journal of Academic Librarianship, 22*(May), 214-218.

McClure, C. R.; Bertot, J. C.; & Beachboard, J. C. (1995a). Policy initiatives and strategies for enhancing the role of public libraries in the National Information Infrastructure (NII).(ERIC Document Reproduction Service No. ED 386 202).

McClure, C.R.; Bertot, J.C.; & Beachboard, J. C. (1995b). *Internet costs and cost models for public libraries.* Washington, DC: National Commission on Libraries and Information Science.

McClure, C. R.; Bertot, J. C.; & Beachboard, J. C. (1996). Enhancing the role of public libraries in the National Information Infrastructure. *Public Libraries,* (July/August), 2-8.

McClure, C. R.; Bertot, J. C.; & Zweizig, D. L. (1994). P*ublic libraries and the Internet: Study results, policy issues, and recommendations.* Washington, DC: National Commission on Libraries and Information Science.

McClure, C.R., & Lopata, C. (1996). *Assessing the academic networked environment: Strategies and options.* Washington, DC: Coalition for Networked Information.

Newby, G., & Bishop, A. P. (1996). Community system users and uses. In S. Hardin (Ed.), *Global complexity: Information, chaos, and control* (Proceedings of the 59th Annual Meeting of the American Society for Information Science) (pp. 118-126). Medford, NJ: Learned Information.

U.S. Bureau of the Census. (1990). *1990 census of population and housing 040 Maryland 050 Montgomery County.* Available from: <http://sailor.lib.md.us/mdcounty/md_census/income/montgom.3.txt>.

U.S. Bureau of the Census. (1996). *Money income in the United States: 1995* [P60-193]. Washington, DC: USGPO.

# A "New Deal" for Libraries in the Digital Age?

WILLIAM F. BIRDSALL

## ABSTRACT

THIS ARTICLE MAINTAINS THAT THE CHALLENGE to the American public library is not information technology but the *ideology* of information technology. This ideology is a coalescence of technological determinism, free market values, and neo-conservative politics that advocates radical government deregulation and the withdrawal of support for public services. In the face of this challenge, the article proposes a role for libraries in a learning economy and for librarians as political activists in the arena of telecommunications public policy.

## INTRODUCTION

> Social institutions with long continuity of essential structure and with professionally organized personnel are sensitive to the values of tradition and tend to stress awareness of the past. They serve as conservators of the classical and permanently valuable in knowledge, morals, and taste. Contemporary culture is characterized, however, by a wealth of invention and experiment which impose steady pressures on institutions for alterations in their structure and habits. The changes are often far-reaching, at times even involving the shift of functions from one institution to another. This is especially true of the impact of technological inventions, which seem to possess a highly volatile character compared with nonmaterial elements in culture. (Leigh, 1950, pp. 10-11)

This quote could easily be from the Benton Foundation report, *Buildings, Books, and Bytes: Libraries and Communities in the Digital Age*, a study undertaken to ascertain what the public library can contribute to Ameri-

can society during a time of technological change (Benton Foundation, 1996). But the quote is not from the Benton Report. It is from an earlier study that was undertaken a half-century ago, the Public Library Inquiry (Leigh, 1950). This major study by a group of prominent social scientists, initiated by the American Library Association, was also an effort to determine the public library's contribution to American society during a time of dramatic change. Librarians were anxious to assess what the role of the public library should be in the post-war society. The Public Library Inquiry serves as a benchmark for subsequent efforts to assess the role of the public library. Interestingly, despite the explicit reference to technological change, there is actually little discussion in the Public Library Inquiry's various reports about technological developments. Nevertheless, the report was certainly correct in noting the challenge of technology to such traditional institutions as the library.

As librarians coped with rapid post-war change, they continued to explore the role of the public library and to test the public's views. A recent example that directly foreshadows the Benton volume is the Fall 1996 issue of *Daedalus*, "Books, Bricks, & Bytes," and in particular the essay by Deanna B. Marcum (1996). Like the Public Library Inquiry, the Benton Report acknowledges the proud heritage of the library as place, but it also reveals that, over the past fifty years, public librarians, as well as the general public, are acutely aware of the challenge to libraries of technological developments. In contrast to the Public Library Inquiry's sparse attention to technology, technology is the central concern of the Benton Report.

When the Public Library Inquiry was undertaken, it revealed the extent to which the public library as a civic institution and central component of community was firmly embedded in the imagination of the American public. It declared that: "It takes its place along with the courthouse, the school, the church, and the town hall as an integral part of the American scene" (Leigh, 1950, p. vii). The Benton Report reveals that there remains strong remnants of this vision. Indeed, the very rhetoric of the Public Library Inquiry is repeated when the Benton Report states that the library leaders surveyed were "nearly unanimous in their belief that libraries, along with schools and the courts, are among our fundamental civic institutions" (Benton Foundation, 1996, p. 10). It also acknowledges that libraries "occupy an almost sacred place in the American community psyche..." (Benton Foundation, 1996, p. 15).

The Benton Report suggests that there is a reservoir of goodwill that libraries should draw upon, but it also warns that this place in the American imagination is threatened. According to those surveyed, libraries are in some respects invisible to the public, are not seen as central to the digital revolution, can be run by retired volunteers, are not supported by younger Americans, and are expected to be little more than museums in

thirty years. Clearly, a message of the Benton Report is that librarians must forge a vision that will ensure that the public library continues to be a vivid element in the American civic imagination.

The challenge to libraries, according to the Benton Report, is information technology. The report does not entirely ignore accompanying social, economic, and political change; nevertheless, there is a strong element of technological determinism suffusing the document. There is no denying the importance of technological developments, but the report's focus is askew in the centrality it gives to technology as the primary challenge to libraries. The acceptance of information media—telegraph, telephone, radio, movies, television, computers, etc.—is not just a technical consequence but is due to economic, cultural, and political factors as well (Lubar, 1993; Winner, 1977). In my view, the greater challenge to the public library is not from change driven by information technology but rather from what can be characterized as the *ideology* of information technology. Giving attention to this ideology helps to consider various findings of the Benton Report as they relate to libraries, community, and telecommunications public policy.

What is the ideology of information technology? (Birdsall, 1996). It is an ideology that evolved over the past twenty years or so that is a conjunction of neo-conservative politics, *laissez-faire* free market economic values, and technological determinism.

Elements of the ideology of information technology became evident in the 1970s when U. S. federal science and technology policy began to emphasize research and development in the private and public sectors that would contribute directly to economic productivity (Dickson & Noble, 1981; Manchak, 1991; Schiller, 1984). This public policy strategy was reinforced by scholars, management gurus, and popular futurists who asserted that technology is driving us from a second wave industrial society into a high-tech, post-industrial, third wave, information economy. The convergence of free market values and information technology was accelerated by the success of the new Right in advancing a political agenda advocating less government through the privatization of traditional public services. It became the accepted ideology of information technology that the increasing use of information, more sophisticated technologies for manipulating and distributing it, and the privatization of all means of its production and distribution were crucial to increase productivity in a global information economy.

Because the ideology of information technology envisions the use of information technology conjoined with the adoption of free market values, it does not embody a public policy role for the nation state in a global economy. This ideology favors a public policy of radical deregulation. It asserts that, not only will the implementation of free market values assure economic development, the application of these values should

also be applied to social and cultural issues that might currently be ad-
dressed by government or subject to its regulation. A totally unregulated
free market demands that all cultural and social issues be subordinated
to, and resolved by, the marketplace. Consequently, knowledge as a pub-
lic good is reconceptualized into information as a commodity to be sold
on the open competitive market. Indeed, distinctions among data, infor-
mation, and knowledge are collapsed into a vague all-encompassing con-
cept of "information," a commodity that can be packaged into electronic
bits and marketed directly to consumers through electronic networks.
Thus, tax supported services such as libraries should be replaced by pri-
vate initiatives. As knowledge is reduced to the commodity called infor-
mation, so the informed citizen is distilled into the info-tainment con-
sumer.

By turning the citizen into a consumer, this ideology has no concern
for community, a concept that is linked to libraries in the Benton Report
title itself. Any individual's commitments, activities, values, or concerns
beyond economic ones are superfluous; indeed, they may actually hinder
the efficient operation of the market. Allegiances to family, union, local
culture, institution or organization, neighborhood, or church are of value
only to the extent that they contribute to the individual as an economic
consumer.

This lack of commitment to the local community and its institutions
is characteristic of the workers favored  by the ideology of information
technology, the symbolic analysts so trenchantly described by Robert B.
Reich in his book, *The Work of Nations*. Symbolic analysts "solve, identify,
and broker problems by manipulating symbols" (Reich, 1991, pp. 178-
79). With their skills, for which they are well rewarded financially, they
can easily move from one culture, company, or economy to another. They
are global cosmopolitans who have little or no commitment to local com-
munity. Reich observes that: "While symbolic analysts pledge national
allegiance with as much sincerity and resolve as ever, the new global sources
of their economic well being have subtly altered how they understand
their economic roles and responsibilities in society" (p. 253). Thus, while
their ability to pay for public services is greater than the rest of the work-
ing force, their commitment to doing so is diminishing while more of the
tax burden shifts to those less able to pay. Because of their free-floating
cosmopolitan orientation, symbolic analysts make the ideal worker for
the global entrenchment of the ideology of information technology; how-
ever, the result is a potential decline in support of public services among
the educated and economically elite of society.    Political scientist Ben-
jamin R. Barber clearly captures the essence of the ideology of informa-
tion technology's personal ethos when he states that: "Markets preclude
'we' thinking and 'we' action of any kind at all, trusting in the power of
aggregated individual choices (the invisible hand) to somehow secure

the public good. Consumers speak the elementary rhetoric of 'me,' citizens invent the common language of 'we' " (Barber, 1995, p. 243). When we think of citizenship, we think of those assertive opening words of the preamble to the U. S. Constitution: "We, the people...."

What is the technology of choice in the ideology of information technology? When considering such critical issues as universal service and the information highway, the earlier regulatory and technological developments of the telephone systems are the model. The general framework was a trade-off of a regulated monopoly for universal access, at least until the breakup of the Bell System in the 1980s. This strategy was successful in achieving widespread accessibility to telephone service. The Benton Report itself references the telephony model when it points out that traditionally universal service meant "person-to-person voice communications through telephones to all Americans at prices made affordable through a system of subsidies." Now, the convergence of communications technologies forces a reconsideration of the concept of universal service beyond "plain old telephone service" (Benton Foundation, 1996, p. 34). However, I would argue that the model technology for the ideology of information technology is not the telephone but another media that is as much if not more ubiquitous—television.

In addition to its almost universal presence in every household (as well as schools, bars, airports, and other public spaces), television is the largest electronic market, largely free of regulation, primarily privately owned, consumer oriented, and driven by market forces—i.e., advertising revenues aimed at promoting consumer needs. In the world of commodified information, television provides the model for the information highway. Microsoft corporate management claims that the personal computer is about to become the next mass medium with penetration rates of over 90 percent. Their feedback from consumers is that the PC should be as easy to use as the television set ("Expect More Computers," 1997, p. 31).

Television is the technology of choice for the ideology of information technology because it is itself a form of consumption and thus promotes the conversion of citizen to consumer. Not surprisingly, technologically the electronic industry is pushing the rapid development of PC TV. As for its programming, television is predominately commercials, especially as programming and commercials merge as in the case of MTV. When consumers can buy what they watch, "you have united television and mall-dom..." (Barber, 1995, p. 146). In my own province, the telephone company provides a vivid example of this television mall-dom in a glossy publication it distributed on the advantages of the information highway. It includes the following brief scenario to illustrate the virtues of the information highway: "A child shops for an appropriate Father's

Day gift at an electronic mall, safe at home in front of the TV" (Maritime Telephone and Telegraph, 1994, p. 6).

Does this conjunction of politics, free market capitalism, and information technology, entwined in the ideology of information technology, represent a historical turning point as those committed to the ideology of information technology claim? I think not. What we are witnessing is a recurring manifestation of the dynamics of the free market. Economist Robert Heilbroner observes in his brilliant series of Massey Lectures on *Twenty-First Century Capitalism* that: "Certainly capitalism's most striking historical characteristic is its extraordinary propensity for self-generated change" (Heilbroner, 1992, p. 25). Capitalism has always required bursts of technological innovation, many of which have related to communication technologies, such as telegraphy, railroads, telephony, radio, television, movies, and the automobile, to name a few. While these technological developments have had major impacts on social and cultural life, it is not technological innovation that is the fundamental force for change. The change arises out of the need to generate and accumulate capital through a free market economy. The free market requires technological change to perpetuate a thriving economy.

Information technology is only the latest in a long cyclical history of technological developments required of a free market economy rather than being a totally unique force for fundamental change. The building of an information infrastructure, the demand for sophisticated software, and the potential consumer markets for information services and hardware represent vast opportunities for investment and profits involving billions of dollars, but they are not the total break from the past as is so often claimed. Nor can they be divorced from politics. Information technology, then, is not the dominant force for change. A more profound cause is the *ideology* of information technology. Thus, the defining issue is not technological but political.

Some would argue that values attributed to the ideology of information technology are well entrenched in the American psyche. Jorge Schement and Terry Curtis claim that Americans will choose one information policy direction over another within a set of underlying assumptions. They assert that Americans expect that information policies will conform to at least most of these assumptions. If we look at these assumptions, we can certainly see values of the ideology of information technology (Schement & Curtis, 1995):

- the public's needs as consumers rather than as citizens should determine policy choices,
- the private sector is more efficient than the public sector, therefore, the government should only intervene in the marketplace in exceptional cases,
- the marketplace itself is most efficient under conditions of maximum competition,

> • when government intervention is required, it should be through oversight bodies rather than through direct government provision of the service,
> • Americans have greater faith in their judicial system for resolving disputes between the public and private sector than through government agencies,
> • when government does intervene or provide a service, its value is judged in terms of costs and benefits rather than on some social goal or value. (pp. 164-65)

It is not difficult to find elements of the ideology of information technology among the assumptions just noted: the preference for the private sector over the public, the emphasis on productivity over social goals, the citizen perceived as consumer, and competition in the marketplace as the preferred mode of allocating services. And the consequences are evident in the pressures for public library fees for services, increased costs for government publications and data, copyright legislation favoring creators over users, corporate sponsorships in libraries, and the emerging battle over who will build, own, and provide access to the information highway.

In the political arena, left and right vie for leadership in fulfilling the goals of the ideology of information technology. The likes of Alvin and Heidi Toffler and Newt Gingrich call for a Third Wave political ideology in the Toffler's book, *Creating a New Civilization: The Politics of the Third Wave*, with a foreword by Gingrich (Toffler, 1995). To counter the "lowbrow" ideologies of the Second Wave mass industrial society, the Tofflers urge the "highbrow" knowledge elites to develop their own Third Wave political ideology appropriate to a global free market information society. For the Tofflers, the Democratic Party, with the possible exception of Albert Gore, is too wedded to a nostalgic allegiance to the industrial second wave and its workers. It is the Republican Party that has the opportunity "to seize the future—lock, stock, and barrel." They claim that: "This is the message that Newt Gingrich...has been trying...to deliver to his own party. If Gingrich succeeds," according to the Tofflers, "and the Democrats remain chained to their pre-computer ideology, they could, for good or ill, be trampled in the political dust" (pp. 77-78).

The Tofflers want a Third Wave political ideology; it already exists in the ideology of information technology, an ideology that is basically accepted by both political parties. Indeed, in early 1997, there is considerable irony around the question of who has seized the future "lock, stock, and barrel" and who is "trampled in the political dust." The Clinton Administration, under Vice President Gore's guidance, has captured the initiative on this issue. The administration makes much of its drive to promote a national and global information infrastructure while pointing with pride to its efforts to ensure universal service and that public libraries have affordable access to the information highway. These are wel-

come initiatives, but the core thrust of their strategy does not deviate far from that of the ideology of information as well. Gore's initial advocacy for an information infrastructure was a key component of an *Economic Leadership Strategy* (my emphasis) announced by him and other senators in the early 1990s (Gore, 1992). And the objectives of the Telecommunications Act reform is to accelerate deregulation and to promote greater competition. Thus, Benjamin Barber, who does not doubt Gore's sincerity, nevertheless cautions that the claims of universal service are: "Pretty thoughts, but about as unlikely as any thing imaginable in the hostile climate of antigovernment sentiment and transnational markets that dominates our times" (p. 149). Indeed, it is well to keep in mind that, ever since Vice President Gore launched the Economic Leadership Strategy as a senator, the underlying idea has always been the need to promote economic renewal through technological initiatives and free market competition.

   In addition to the politicians, business leaders, and futurists, there are some librarians who would embrace the ideology of information technology. They are ready to abandon the library as place to become freelance information brokers providing their services for a fee in the electronic library (Birdsall, 1994, pp. 123-34). In language reminiscent of that of the ideology of information technology, library leaders interviewed for the Benton Report are concerned about the library's "competitive niche in a marketplace of exploding information resources." One leader, as reported by the Benton Report, maintained that the library can no longer be a "gateway for everyone"; instead the library's role must be evaluated like "a business sizing up the competition and carving out niches" (p. 13).

   Library leaders are especially concerned that the use of computers at home and the emergence of the super bookstores would create severe competition for libraries. However, it is perhaps noteworthy that young adults between the ages of 25 and 34 were particularly supportive, a group in which we might expect to find many of Reich's disinterested cosmopolitan symbolic analyzers. The study also found that those who use bookstores and computers—again symbolic analyzers?—also support libraries. In my own visits to super bookstores I was immediately struck by how much they resemble libraries with their periodical collections, large stocks of books, audio-visual materials, casual seating, and check-out counters arranged like a circulation desk. Indeed, the public may actually be confusing the bookstores with libraries. One person interviewed for the Benton Report related the story of how she observed someone coming into one of the super stores with an armful of library books and asking "Where do I return these?" Elsewhere, a Canadian bookstore manager reports that people feel they can spend several hours in the store be-

cause: "It's almost like a library atmosphere" (Ross, 1996, p. C3). This imitation can be interpreted as a form of flattery and evidence of the public's need for public spaces and, in particular, the library as place.

So, then, how pervasive is the ideology of information technology? Are Schement and Curtis correct that Americans want less government involvement with information policy? There is encouraging evidence in the Benton Report that the American public is not prepared to accept either the narrow consumer role for themselves or the restricted role of government called for in the ideology of information technology. According to the Benton Report: "Despite fears voiced by library leaders that current anti-government sentiment will hamper libraries' ability to raise money to support digital and traditional collections, the public says it is willing to pay additional taxes and fees for these services" (p. 18). Americans consider the public library an important institution in the digital age and are willing to support it financially through taxation. Furthermore, they see digitized information as a public good rather than a commodity and, again, are willing to support libraries to ensure access to it.

There is other evidence to support this view. In another Benton study based on a representative sample of 1,000 potential voters on "What People Think About New Communications Technologies," it was found that: "A strong majority of Americans support government's taking an active role in addressing issues of access, knowledge, and cost to make these services universal" (Lake, n.d., p. 1). Those surveyed do not want a wide gap to emerge between information haves and have-nots. They support the idea of government providing grants to libraries to assist them in making information technology available. In short: "There is broad, consistent support for an activist government in the arena of communications technologies" (Lake, n.d., p. 4).

Those who advocate the free market and deregulation maintain that unfettered competition will promote universal and equitable service. But, as we observe the frantic mergers, alliances, and acquisitions going on among the various information hardware and software providers, telecommunications companies, broadcasters, movie studios, cable companies, and so forth, are we not really just giving up a regulated monopoly for an unregulated monopoly? Before we give ourselves over to the *laissez-faire* advocates of the ideology of information technology, it is worth considering further the relationship between the economy and the state.

As we noted, those who assert that the development of telecommunications services will be most efficiently accomplished in the arena of a competitive free market want government to step aside and adopt free market values as a public policy framework. My position is that there always has been and will continue to be some degree of government intervention. The critical issue is finding the appropriate balance between intervention and competition.

Proponents of the unfettered free market often cast the working of Adam Smith's invisible hand as natural law. There is, of course, no such natural law. As Reich observes: "The idea of a 'free market' apart from the laws and political decisions that create it is pure fantasy anyway. The market was not created by God on any of the first six days (at least, not directly), nor is it maintained by divine will. It is a human artifact, the shifting sum of a set of judgments about individual rights and responsibilities" (p. 186). Not only is the economic free market a human creation, it is a fairly recent one at that. I think it is important to have some understanding of these developments in recent history. There is the danger that the public and librarians will assume they must abandon the field to those who see the free market as a pervasive divine law that should be strictly applied to all economic, cultural, and political issues. Neoconservatives would have us return to the classical economic liberalism of the nineteenth century; therefore, it is important to see what that means.

In England, where the free market first emerged, until the nineteenth century the economy was closely regulated by government. This system collapsed. The apparent failure of state intervention in the closing decades of the eighteenth century is the backdrop to the nineteenth century's liberal commitment to *laissez-faire* economics. Liberals at the time promoted the idea of a free market in opposition to the feudal ties that bound English economy and politics. These constraints were largely eliminated with the Poor Law Reform Act of 1834. However, as economic historian Karl Polanyi (1944) observes, a market economy, to be totally self-regulating, requires a market society: society must be subordinated to the needs of the market.

As soon as England moved more toward the liberal ideal of free market economics, there was a spontaneous countermovement to the market's harshest impacts. This countermovement was evident in a whole range of ways including government regulations relating to public health, factory conditions, public utilities, municipal affairs, and educational institutions. As well, there were countermovements outside government, including trade unions and other types of voluntary collective efforts. By the 1880s there had evolved such an array of government and other measures to moderate the free market that die-hard liberals became alarmed. Herbert Spencer (1965), noted liberal thinker of the time and a founder of modern sociology, in an essay attacking "over-legislation," was appalled by measures enacted to administer charity, to inspect passenger ships and coal mines, to set hours of labor, to promote vaccination, and to provide tax supported public libraries (p. 162). It was at this time that classical liberals, who in the twentieth century would be characterized as conservatives, began to incorporate into their ideology the idea that whatever failures arose out of the free market were due not to the market but to government interference.

This would become a common theme down through the years which in itself attests to the continued involvement of the state in the economy. The state and economy have always been mutually supportive. The market has needed the physical and educational infrastructure and other benefits provided by the state. The state, in turn, has needed a prosperous economy to meet the needs of its citizens. Consequently, as Heilbroner (1992) observes: "Far from 'crowding out' the private sector, the government has made way for it to move in" (p. 56).

The extent of the inter-relationship between state and economy has waxed and waned over time. Nevertheless, there has always been an inherent link between economy and state. As McGill University management expert Henry Mintzberg (1996) warns, the current insistent enthusiasm for free market values threatens to create an imbalance between the private over the public sector. He urges that we recognize that public institutions are necessary to meet certain needs while other needs can best be served through the private sector market. If we take this position with regard to telecommunications policy specifically and the role of the library, it means that we should not get bogged down in an ideological war of words about deregulation versus regulation, more government versus less government, but instead focus on achieving, through the political process, an equitable balance of intervention.

If librarians accept that there will always be a need for government intervention to modify the working of the market in telecommunications, and that there is public support for such an interventionist strategy, then it is the role of librarians to participate in the political process to find the appropriate balance of intervention. The Benton Report stresses that it is the responsibility of librarians to articulate what that intervention might be and to engage in the public policy debate necessary to achieve it. However, library leaders were not sure that the profession was ready to "step up to the plate." Many of those interviewed felt librarians at the local and national level were reluctant to embark on such an endeavor. Yet, it is rightly pointed out in the Benton Report that it is critical that librarians embark on an active political role assessing the policy implications of the recently passed Telecommunications Act of 1996. The critical issues identified are not new to librarians—e.g., universal service and access, freedom of speech, intellectual property, and funding for services.

While communication technologies contribute to the complexity surrounding these issues, it is the political and cultural context that is crucial to their resolution. It may appear that recent communications developments are a new phenomenon impinging on libraries but, in fact, libraries and telecommunications both have their roots in the late nineteenth century and thus have a shared history. After all, 1876 was not only a seminal year in the history of modern librarianship but also the

year that Alexander Graham Bell uttered his historical sentence: "Mr. Watson—come here—I want to see you."

Those who are currently on the front lines of public policy formulation reinforce the need for such activism. The American Library Association foresees the need for librarians to become more engaged in the telecommunications public debate. Fred W. Weingarten (1996), ALA senior policy advisor, claims that the communications policy is no longer the sleepy backwater that it once was. He foresees an extended period of public policy debate and negotiation requiring new alliances among stakeholders. He warns that "libraries had better be prepared to engage in the debate for a long time, on many fronts, and at many levels of policy making" (p. 47).

How do librarians prepare for and participate in such debates? Karen Adams, executive director of the Canadian Library Association, asserts that the spheres of librarianship—public policy and telecommunications— each of which have their own set of values, have reached a point of intersection that requires greater attention by librarians. She maintains that students entering the profession must learn telecommunications issues; that continuing education on these issues is required for practitioners; that more research needs to be undertaken from the library and information studies point of view; and that there is a need to develop advocates from both within and without the library community to support affordable, equitable, and universal access to information (Adams, 1996).

Pursuing Adams's agenda of teaching, continuing education, research, and advocacy requires librarians to contribute to the development of a political economy of communication. Developing a political economy of communication means returning to dimensions that have been increasingly neglected by librarians. These dimensions, as delineated by Vincent Mosco (1992), include, "a commitment to history, to the analysis of the social totality, and to moral philosophy" (p. 43). This is frightening territory avoided by those librarians longing for the neutrality of an "information science." Within the context of these dimensions, the formulation of a political economy of communication "requires...the scrutiny of decision-making processes, the identification of the participants as far as it is possible to do so, the weighting of their relative influences, and the factoring in of fiscal, administrative, and technical acts of commission and omission" (Schiller, 1984, p. 83).

Confronted with the ideology of information technology, what role can be advocated for the public library? We noted that one of the fundamental concepts of the ideology of information technology is the notion of the information economy, an economy where information is a commodity to be sold on the open market through the use of communication technologies. Such an economy has no real role for the public library. But other conceptualizations of the economy are possible. Rather than

adopting uncritically the idea of the information economy, it is more productive to give consideration, as more economists are doing, to the concept of the "learning economy." By doing so we will find a traditional but central role for the public library.

The ideology of information technology advocates the application of information technologies to promote economic growth and productivity. However, economists have been baffled by what is known as the information technology "productivity paradox." This is the dilemma that, since the 1970s, productivity growth has slowed in industrialized countries despite the increasing use of information technologies. Studies comparing investment in information technology, whether by country, industry, firm, or various economic indicators, have not established strong correlations between technological investment and productivity growth (OECD, 1991; Landauer, 1995; Soete, 1996). It is not necessary to delve into the debate among economists and policy makers surrounding this issue. What is important to us is that they have been forced to look beyond the simple introduction of technology as a panacea for stagnant economies.

Increasingly economists are moving beyond focusing on technological innovation alone to generate, manipulate, and distribute information as a means of promoting economic growth. While we can acknowledge that our current economy is more concerned with the production and use of knowledge than before, it is also necessary to recognize that human skills and competencies are necessary to the development of any economy; perhaps more so now than ever before (Foray & Lundvall, 1996, p. 12). As important as technological innovation is, a critical element in long-term economic growth is the investment in human capital. As Foray and Lundvall stress, "knowledge and learning have become extremely important in determining the economic fate of individuals, firms and national economies" (p. 25).

Concerned about the lack of productivity and job growth despite the increased use of information technologies, the G-7 countries requested the OECD to undertake a comprehensive examination of this issue. After two years of study, the OECD issued its report on *Technology, Productivity and Job Creation* (Soete, 1996). Among a variety of public policy initiatives, the report calls upon firms and governments to promote investment in human capital to ensure that individuals have the appropriate qualifications to enter the workforce and to undertake lifelong learning. In addition, there is a need for closer coordination and balance between technological and human resource development. The report notes that technology has always been recognized as a critical physical embodiment of capital. What is new is the recognition of its embodiment in human capital and the need to ensure that there is adequate investment by the

private and public sectors in developing the skills required to use, adapt, and maintain physical technologies.

While the competitive free market values embodied in the ideology of information technology and the narrow focus on information technology can undermine community, it can also devalue the worth of the individual and erode the support of public institutions. In contrast, the OECD report expresses the need for government to adopt public policies that will encourage the development of learning economies that contribute to social cohesion in the face of global forces that are leading to a deterioration in the living standards of the underskilled. Foray and Lundvall (1996) stress that: "Promoting broad access to skills and competencies, and especially the capability to learn, is the key element in any strategy aiming at limiting the degree of social exclusion." They warn that: "There is a growing risk that IT [information technology] become an acronym for Intellectual Tribalism. A 'New New Deal' is called for, focusing on the uneven distribution of knowledge and information" (p. 29).

When the Public Library Inquiry was initiated in the late 1940s, the United States had only recently experienced the New Deal era. If a "New New Deal" is called for in the learning economy, the public library is in an excellent position to contribute to that objective. Lifelong learning, skill development, literacy, and adapting to social change, all of which are called for in the learning economy, are well established roles of the public library. These roles will have to be shaped to the new environment to be sure, but the public library can continue to enhance individual life chances and community bonds (Birdsall, 1994, pp. 135-50). Such a role was confirmed by the Benton consultations, a role "in which libraries team with other public service information providers to form community education and information networks open and available to all" (p. 39).

To achieve "community education and information networks," the library will have to form alliances with others, as the report asserts. This should not be a problem as others are ready for an alliance as well. For example, in a book that should be read by every librarian, *Civilizing Cyberspace: Policy, Power, and the Information Superhighway*, computer expert and activist Steven Miller recognizes the public library as among those institutions that can help ensure universal access, contribute to the training necessary to access electronic sources, and serve as one of the building blocks of community (Miller, 1996). Prominent educator Ernest L. Boyer (1991) laments the loss of community and promotes the need to create "neighborhoods for learning." Such neighborhoods should consist of "learning stations" such as museums and libraries. He feels libraries can play an especially important role in preparing children for school, a role for which the Benton Report found considerable support. These are only two examples of those outside of librarianship who look to libraries

as an important part of the social fabric and who suggest the possibility of effective allies.

In this article it is suggested that the Benton Report is a worthy addition to a long history within librarianship of examining the role of the public library through various reports, surveys, and studies. It is an encouraging report in that it does not opt for either the library as place or the electronic library but foresees a role for a "hybred" library that preserves the best of the past while meeting the challenge of the digital age. The report rightly emphasizes the need for librarians to address the public policy implications of the new telecommunications environment. While the Benton Report focuses on libraries, it claims that: "It uses libraries as an exemplar of what can happen to even our most cherished public institutions when they face the onset of the digital revolution, a seismic societal shift" (p. 3).

The report is correct in focusing on libraries for they can serve not only as a barometer of the health of public institutions but of civilization itself (Wallerstein & Stephens, 1978). On this point I have argued that the critical element is not the technology of the digital revolution but the values in which it is enveloped, the ideology of information technology, an ideology that devalues the role of government, of public institutions, and of citizens. The challenges of the values embodied in that ideology requires librarians to become more knowledgeable about telecommunications issues and public policy processes. As well, they will have to become even greater political activists at the local, national, and international levels.

A 1978 report prepared for the New York Governor's Conference on Libraries concluded that "it is when our political and economic institutions are on a sound basis, when they reflect collective energy, needs, and will, that our culture is resplendent. Our libraries are central to such flourishing, as its instrument and its evidence. We make of our civilization what we wish to make of it. We preserve and enhance it, or we do not" (Wallerstein & Stephens, 1978, p. 45). The Benton Report makes clear that, over a quarter century later, the challenge to preserve and enhance our civilization still confronts not only librarians but "We, the people...."

## REFERENCES

Adams, K. (1996). *Telecommunications and public policy: Implications for Canadian librarianship in the 21st century.* Unpublished paper presented at the Dalhousie University School of Library and Information Studies, November 1, 1996, Halifax, Nova Scotia.

Barber, B. R. (1995) *Jihad vs. McWorld.* New York: Ballantine Books.

Benton Foundation. (1996). *Buildings, books, and bytes: Libraries and communities in the digital age.* Washington, DC: Benton Foundation.

Birdsall, W. F. (1996). The Internet and the ideology of information technology. *INET Proceedings 96.* Available from: <http://www.free.net:8001/Docs/inet96/e3_2.html>.

Birdsall, W. F. (1994). *The myth of the electronic library: Librarianship and social change in America.* Westport, CT: Greenwood Press.

Boyer, E. (1991). *Ready to learn: A mandate for the nation.* Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

Dickson, D., & Noble, D. (1981). By force of reason: The politics of science and technology policy. In T. Ferguson & J. Rogers (Eds.), *The Hidden election: Politics and economics in the 1980 presidential campaign.* New York: Pantheon.

Expect more computers. (1996) *Daily News,* Halifax, Nova Scotia,Canada, January 24, p. 31.

Foray, D., & Lundvall, B-A. (1996). The knowledge-based economy: From the economics of knowledge to the learning economy. In OECD, *Employment and growth in the knowledge-based economy* (pp. 11-30). Paris, France: Organization for Economic Co-operation and Development.

Gore, A., Jr., (1992). The Information Infrastructure and Technology Act. *EDUCOM Review, 27*(5), 26-29.

Heilbroner, R. (1992). *Twenty-first century capitalism.* Concord, Ontario: House of Anansi Press.

Lake, M. (n.d.). What people think about new communications technologies. *Communications Policy Briefing 2.* Benton Foundation. Available from: <http://www.benton.org/cgi-bin/lite/Catalog/Brief2/brief2.html>.

Landauer, T. (1995). *The trouble with computers: Usefulness, usability, and productivity.* Cambridge, MA: MIT Press.

Leigh, R. (1950). *The public library in the United States.* New York: Columbia University Press.

Lubar, S. (1993). *Infoculture: The Smithsonian book of information age inventions.* Boston, MA: Houghton Mifflin.

Manchak, M. P. (1991). *The integrated circus: The new right and the restructuring of global markets.* Montreal, Canada: McGill-Queen's University Press.

Marcum, D. B. (1996). Redefining community through the public library. *Daedalus, 125* (4), 191-205.

Maritime Telegraph and Telephone Company. (1994). *Life in the fast lane: Nova Scotia's information highway.* Halifax, Nova Scotia, Canada: MT&T.

Miller, S. E. (1996). *Civilizing cyberspace: Policy, power, and the information superhighway.* New York: Addison-Wesley Publishing Co.

Mintzberg, H. (1996). Managing government, governing management. *Harvard Business Review, 74*(3), 75-83.

Mosco, V. (1992). Dinosaurs alive: Toward a political economy of information. *Canadian Journal of Information Science/Revue Canadienne des Sciences del'Information, 17*(1), 41-51.

OECD. (1991). *Technology and productivity: The challenge for economic policy.* Paris, France: Organization for Economic Co-operation and Development.

Polanyi, K. (1944). *The Great Transformation: The political and economic origins of our time.* Boston, MA: Beacon.

Reich, R. B. (1991). *The work of nations: Preparing ourselves for 21st century capitalism.* New York: Knopf.

Ross, V., & Strauss, M. (1997). Buy the book. *Globe and Mail,* January 11, C1, 3.

Schement J. R., & Curtis, T. (1995). *Tendencies and tensions of the information age.* New Brunswick, NJ: Transaction Publishers.

Schiller, H. I. (1984). *Information and the crisis economy.* Norwood, NJ: Ablex Publishing.

Soete, L. (1996). *Technology, productivity, and job creation: The OECD jobs strategy.* Paris, France: Organization for Economic Co-operation and Development.

Spencer, H. (1965). *The man versus the state.* Caldwell, ID: Caxton Printers [reprint of a work first published in 1884].

Toffler, A., & Toffler, H. (1995). *Creating a new civilization: The politics of the third wave.* Atlanta, GA: Turner Publishing.

Wallerstein, I., & Stephens, J. F. (1978). *Libraries and our civilizations: A report prepared for the governor of the state of New York.* New York: Governor's Conference on Libraries.

Weingarten, F. W. (1996). Technological change and the evolution of information policy. *American Libraries, 27*(11), 145-147.

Winner, L. (1977). *Autonomous technology: Technics-out-of-control as a theme in political thought.* Cambridge, MA: MIT Press.

# The Public Library in the Future: A British Reaction to *Buildings, Books, and Bytes*

## MAURICE B. LINE

### ABSTRACT
THE FUTURE OF PUBLIC LIBRARIES HAS BEEN a matter of earnest debate in the United Kingdom as well as in the United States, spurred by financial problems and government policies as well as technology. Many of the same issues are raised in *Buildings, Books, and Bytes*, and similar public support for public libraries is evident. Macro trends with implications for public libraries are globalization, social instability, lifelong learning, and self-directed learning; support for these last two ought to be a main function of the future public library. The provision of books will remain libraries' core service, but the principle of equalizing access to information must be applied also to electronic materials. They can serve also as community information centers. They will still have importance as places but should become increasingly centrifugal. The crucial problem of financing may be alleviated by close partnerships both with other local services and with the private sector but is unlikely to be solved.

## THE BRITISH CONTEXT

The library situations in the United States and Europe have many features in common, but there are also significant differences, due partly to tradition and partly to different political situations and ideologies. The United Kingdom stands somewhere between the continent of Europe and the United States in library matters as in so many others. It should be noted too that there are wider differences within Europe, even within western Europe, than between the United Kingdom and the United States.

My response therefore starts with a personal observation of the present situation in England.

In both the United States and the United Kingdom, public libraries have received a great deal of attention in recent years. In the United Kingdom, which is exceptionally well served with statistics of expenditure and use, thanks largely to the Library and Information Statistics Unit at Loughborough University (England & Sumsion, 1995; Sumsion et al., 1996; Sumsion & Creaser, 1996), several major reports have appeared recently, some of them produced at the instigation of the relevant government department of the time, the Department of National Heritage.

The reports deal with similar concerns to those in the Benton Report, but they are given greater point by recent government policy over the last decade or so, which has had several prominent features:

- minimal government
- reducing public expenditure
- "public sector bad, private sector good"
- payment for services good in principle
- concentration of power on central government and on unelected "quangos" (quasi-autonomous nongovernmental organizations).

As will be noted, these policies are motivated partly by economics, partly by ideology, partly by political considerations. The motives for most features are mixed—e.g., minimal government (ideological) means less public expenditure (economic), which means lower taxes (political). Most of them will be familiar across the Atlantic, except the centralization of power, which may appear (and not only to superficial observers) to conflict with the principle of minimal government, and which the British government is inclined to deny; the fact remains that many activities that used to be carried out at the local level, and many powers that were exercised there, are now the responsibility of bodies accountable only to central government—not, it may be noted, always to Parliament, to which quangos do not report. Local government expenditure has been "capped" in places at levels that make it difficult for local authorities to provide services approaching those of the past.

There is one feature of the United States that does not exist to the same extent in the United Kingdom—the tradition of community self-help. The British are generally good at giving to charities, but they are less used to supporting voluntarily local services such as schools and hospitals—and libraries. They expect these services to be provided from public funds, and many are moreover afraid that, if they do give extensively to local services, the government will see less and less need to take any responsibility for them. This may indeed be part of the government's intention as part of the process of weaning people away from the welfare

state. As it is, however, most people wish their libraries etc. to have more funding and, even if they are willing to see local rates raised to achieve this, rate-capping makes it impossible.

The British are also reluctant to pay directly for public services they have received as a right—in the case of public libraries, for nearly 150 years. Libraries can and do charge for reservations of books on loan, for overdues, and (not very logically) for the loan of sound recordings; these charges are accepted. Many also make charges for some so-called "value-added" services to local business ("so-called" because "value-added" is a poor term for additions to basic library operations and services that are themselves value-added, in that selecting material and organizing it for use adds value). These are often little more than public relations exercises; they do something to help business but, at best, usually only recover marginal costs. Also, over 40 percent of public libraries that offer Internet services charge for them (compared with 3.6 percent in the United States). In any case, all these things combined do not bring in sums that are sufficient to make good reductions in funding (as noted above, they may even be used as an excuse for reductions).

There is debate on these issues in continental Europe as well, but it has been less intense. Similar economic and political pressures on public services exist there, but they are not so acute, as their governments are not so ideologically driven as the previous British government. Interestingly, the pressures are greater in some countries of eastern Europe, as they begin to work on the immense task of developing new economies from the wrecks of the old communist ones. This applies even to countries like Hungary which have strong communist elements in their governments; there is no going back to the old ways. As they try desperately to keep services going, they apply measures that are unthinkable in the United Kingdom, such as charging an annual fee for membership to public libraries. The public service ideology may be intact, but it is made in practice to yield to hard economic reality. The debate taking place in Britain is in fact of more interest to these countries than to western European countries.

Another factor is that public libraries in Britain have an exceptional tradition, so that decline is felt more keenly than it would be in, for example, Spain or Italy. British public libraries still compare favorably with the best in Europe (Hanratty & Sumsion, 1996), excepting those in the Nordic countries and the Netherlands, many of which are better. Since of all European countries the Nordic ones are the most keen to maintain public services, even if it means high taxes, there is less reason for debate there, at least on financial grounds.

Public libraries in Britain, although they have been using computers since 1960, are also quite backward in their use of information technology; a survey in December 1995 (Ormes & Dempsey, 1995) showed that,

while many larger libraries were connected to the Internet, fewer than 1 percent of service points (as opposed to library systems) were connected.

Restructuring and "rationalization" have been very popular in public services as they have been in industry. The aim is often to reduce expenditure and streamline administration (this is not always achieved), but the result is often to combine public library services with other departments to form departments such as Culture. The chief librarian then ceases to be what used to be known as a "chief officer"; (s)he has less authority, has to report through a superior officer, and may have less access to the local council to make a case for more funds. The fact that several chief librarians have been elevated to a superior post does not change the situation; indeed, some nonlibrarians have been appointed to be chief librarian. The net effect of all this is that public librarians have lost a good deal of status and power in recent years.

In the pursuit of efficiency, or in a desire to put pressure on services under their control, many authorities have imposed reviews on libraries—sometimes two or three within a few years. Yet another current factor in Britain is another round of local government reorganization (British governments embark on one every decade or so), which changes many local authority boundaries. As a consequence, some library authorities are effectively being deconstructed and recomposed: a disturbing and disruptive process.

These changes and pressures in combination generate a sense of excitement in some public librarians and a feeling of resignation, not to say exhaustion, in others. It is not easy to maintain a high level of motivation under all the circumstances. It is to the credit of public library staff that most of them have made great efforts to maintain and develop their activities, and services in many libraries have in fact improved. Several public libraries have used TQM (rarely a full-blooded TQM program, but the principles and some of the techniques) to improve performance, and service-level agreements have had success in raising standards as well as in proving to be a good public relations exercise.

Public libraries can improve their efficiency up to a point and have done so. But beyond that something has to give: stock, or services, or both. Over the United Kingdom as a whole, libraries have not done as badly as might be supposed from the well publicized reports of a few conspicuous examples (Sumsion, 1996), but the last few years have not been good ones (Sumsion et al., 1996; Sumsion & Creaser, 1996). Over the last decade, numerous public library branches have closed, opening hours in many libraries have been cut, in some libraries acquisitions have dwindled to a trickle in one or two years, and book issues are showing a downward trend. It is not surprising that some senior librarians have taken early retirement, on good financial terms admittedly, but often largely from frustration.

British public libraries are not in immediate crisis, if by crisis is meant the prospect of rapid erosion to the point of eventual nonexistence. But there is widespread concern about their future. This concern is not confined to financing, but most public librarians are so engaged in coping from year to year (not to say month to month) that there is less discussion among them about where public libraries are going than one might expect. Another reason for this is that they have much less of a tradition of writing about their concerns than academic librarians; also, they have their present jobs to preserve, and statements that might appear critical of present policies are risky. Though public librarians react to reports, they do not in general instigate debate. The debate has largely been stimulated and kept alive by staff in departments of library and information studies, the Department of National Heritage (from a mixture of motives, not all of them sinister), some from the then politicians Opposition, the Library Association, and some sectors and individual members of the general public.

Two British reports in particular, which have incidentally yielded a mass of data of varying interest and utility, have generally concluded, as did the Benton Foundation report, that public libraries were very widely appreciated. According to the Comedia (1993) report, the public library "is by far the most popular and widely used cultural institution in contemporary society" (p. 1). In fact, 60 percent of the population use public libraries at some time during the year, 30 percent once a fortnight. Among functions they serve, in addition to the core one of making books available, are picture lending, story-telling, and providing space for public meetings. The great strength of the public library, according to Comedia, is that it does so many useful things all together: "the sum is greater than the parts [but this is also its weakness, since] public libraries suffer from trying to be all things to everybody" (Summary, p. [3]). The report emphasizes that public libraries need to sort out their priorities, since, valuable though most of their activities are, they cannot sustain all of them—but does not suggest any reduction of functions. So should public libraries go on giving an ever-wider range of services in a more and more diluted way, or be selective and do a few things well—and if so what things?

The popular esteem in which public libraries are held is evident too from the surveys carried out (or used by) the government-commissioned Aslib report (*Review of the Public Library Service*, 1995). This states that three-fifths of the population (24 million people) use them, half as regular users (p. 113). Much of the report is concerned with the potential use by public libraries of information technology (IT); its exploitation is regarded as vital if public libraries are to remain relevant to their communities, and the report believes that IT is capable of transforming their services. To this end, major investment is needed to link them to the information superhighway. Among other suggestions are regional library

centers to help "to form tighter-knit regional groupings to share resources; develop joint ventures, and bid for funding" (p. 26); "kiosks or microlibraries" (p. 26) in such places as shopping centers, telecenters. or "electronic cottages" (p. 31); proactive information services (p. 31); and improvements in services to children and adults engaged in lifelong learning (p. 31). Dynamic leadership will be called for.

There are several suggestions in the Aslib report as to how all this is to be funded, none of them likely to provide anything approaching the required sums. There is expressed willingness on the part of some people to pay for some services, but it is not clear how far this expression would be converted into practice; and, while charging full costs for some services—and this is very rare—might support those services, it would do little to solve the bigger issues of funding. As for greater public funding, there may be plenty of public support, and there are regular pleas and protests, but when it comes to the crunch, what Galbraith (1992) calls "the culture of contentment" (the fact that a majority of people have been getting better off and want the process to continue) makes it very hard for parties who want to gain or stay in power to go against the trend by imposing higher taxes. No party has had the courage to tell the public that they cannot logically complain about an erosion of public services *and* demand lower taxes.

The previous government's response to this report eventually appeared in February 1997 (United Kingdom, Department of National Heritage, 1997) (interestingly, while the Aslib report related to England and Wales, the government's report relates only to England). It looks at first sight an unimpressive document, mixing statements of the obvious—"Public libraries provide opportunities for learning and self-improvement, for businesses, the local community and in developing young people" (p. 4)—and injunctions to do what is already done—"Public libraries should ensure that the needs of the disabled are taken into account..." (p. 4)— with recommendations that are virtually impossible to fulfill without more money— "Public libraries should be open when their users want them to be" (p. 4). There are few proposals as to where money might come from except that: "Public libraries should increase financial and other support from outside the public sector" (p. 5). Public libraries are also "encouraged to make more use of volunteers" (p. 4) and to "apply for a Charter Mark" (p. 5) to recognize the quality of their services—fourteen of these have already been awarded to public libraries.

However, there are positive things in it—i.e., basic performance measures are put forward, and every library will be obliged to produce an annual Public Library Plan (p. 5). Most importantly, the document is generally supportive; it states the government's belief in the electronic role of public libraries and, to the relief of librarians (Usherwood, 1997;

Hare & Daines, 1997), it does not suggest any fundamental change to the structure of current public library services.

Attempts are being made to ensure that all public libraries are connected to online services. The Library and Information Commission, set up by the government two years ago, joined forces with the Library Association, under the umbrella of a new organization called Information for All, to make a £50 million bid to the Millennium Commission to connect all public libraries to the Information Superhighway (Information for All, 1996). Unfortunately, the commission decided in February 1997 that the bid should not even be "longlisted" giving as its reason that it "would not have as distinctive an impact as other bids received." The validity of this judgment cannot be assessed without knowing more about the other bids, though it seems doubtful if the commission fully appreciated the likely impact of such an extension of public library capabilities. Information for All will now consider alternative ways of achieving the objective. Meanwhile, there is some compensation in the above-mentioned DNH document (United Kingdom, Department of National Heritage, 1997), which states that: "Public libraries will benefit from that part of the £300 million of National Lottery funding that the Government plans to direct towards the wider introduction of information and communication technology after the millennium" (p. 4).

In the new Labour government, the Department of National Heritage has been superseded by a Ministry of Culture, Media, and Sport, with a seat in the Cabinet, and therefore higher status. It remains to be seen whether public libraries will benefit and, if so, in what ways?

## RELEVANT CURRENT TRENDS

True to its subtitle *Libraries and Communities in the Digital Age*, the Benton Report is concerned largely with the potential impact of electronic technology on libraries and their potential users. It is true that technology is having massive effects on society and on libraries that serve society, and there is a good deal of literature devoted to these effects. But there are other trends that cannot sensibly be ignored. Some but not all of them are themselves influenced by technology, but they are nonetheless separate trends. Any report that does not take account of these trends is, in my view, incomplete. Having outlined the present situation in the United Kingdom, this discussion will now examine some of these unmentioned trends.

### Political and Economic

One of the most visible macro trends is globalization, given a massive boost by information technology. Many national governments now have little power over their economies. Not only are trade and industry globalized, all professions will need increasingly to operate in the world and not just in their own countries. Much publishing in the more com-

mon languages has always aimed at an international market. Likewise, most of the large secondary databases are international in coverage (though with a heavy bias toward the developed world) and in their market. Some of the world's major research libraries too have had an international body of users; much of the use of the British Library, the Bibliothèque Nationale de France, and the Library of Congress is by foreign users. But their accessibility has been mainly limited to consultation. This is changing. Not only their catalogs but the catalogs of many other libraries are becoming globally accessible and so is their stock. Nor do libraries any longer have to think only in terms of their own stock, and countries too do not now need to plan for total national self-sufficiency (Line, 1996a). Tomorrow's public librarian will need to have not only a national and regional but a global awareness.

Another macro trend is toward social instability, in mature democracies as well as other regimes. This is due to the diminishing power of national governments and the almost universal acceptance of market forces as an essential feature in any economy that is to grow or compete with the economies of emerging nations. The social damage caused by large-scale unemployment and by widening gaps between rich and poor may destabilize economies, just as the huge gap between rich and poor nations is in danger of destabilizing international politics—and eventually the political systems of advanced countries as pressure is placed on them by poor nations.

Setting aside the longer-term possibility of economic destabilization, public libraries will have to operate in more and more dangerous neighborhoods, serving as safe havens for customers but also working at rather greater risk to themselves. Another effect is that their clientele will include more unemployed—the "unemployed" consisting not only of people who are unwillingly out of a job but of people who have retired early (a rapidly growing number in Europe), which will include many well educated and intelligent people. Both groups will seek not only entertainment but ways of using and updating their skills and abilities and of learning new skills.

*Technological*

Libraries are affected more profoundly by information technology than any other sector of activity except publishing, since the very material that they handle is fundamentally affected by information technology. It opens up new possibilities, but by enabling others to do many things that libraries do, it may limit their options: examples are the increased capacity of the private sector to do much of what libraries have done, the ability to transfer information almost instantly from almost anywhere to almost anywhere, and the consequent ability of individuals to bypass libraries for an increasing amount of the information they want.

The World Wide Web is responsible for changes in the provision and dissemination of information that would have been inconceivable only five years ago. It is of course these developments that are the chief concern of the Benton Report. This article will return to them later.

In fact, the whole information world is in some confusion. Few publishers are bold enough to predict where publishing is going or can even say what "publishing" means when anyone with a computer can produce and distribute material. The future of indexing and abstracting services is less and less certain. Boundaries between publishers, the book and periodical trade, database producers, and libraries are now very fluid, and there is little sign yet of where new boundaries will fall. As new technologies develop, new ways of using them are found. New modes of information packaging are sure to develop; some CD-ROMs show innovative features, and there will be more to come when successors to CD-ROMs appear. New modes of online use will also emerge.

## Lifelong Learning, Self-Directed Learning

There is one major trend whose implications for libraries are still being grasped: the move to lifelong learning. The content of most academic courses, in science especially, begins to go out of date within five years, and after ten years much of it is obsolete. The elements in higher education that are of permanent value, apart from a solid core of basic knowledge, are a general level of culture and, especially, the knowledge of how to learn.

In today's unstable job market, where some jobs are declining and new ones are coming into being, and where lifelong employment in one sort of job, let alone with one employer, is very much the exception, the ability to update existing knowledge and gain new knowledge is vital. One major consequence is that lifelong learning will not only be necessary but will become more important than a first degree. Some large firms have recognized this and created what are effectively their own academies to educate and re-educate staff. One would expect institutions of higher education to play a large part in the process of lifelong learning at higher levels: in the case of large firms, a supporting role, in the case of smaller ones, a main role. If they do not play a role, they will be missing a huge opportunity. If they do play a role, it will certainly involve a great deal of remote learning for which the technology is gradually becoming more adequate. The whole system of qualifications will need rethinking.

The shift to lifelong learning is one fundamental change. Another change, more closely connected with information technology, is a shift from teaching to learning. This is being forced on academic institutions by financial constraints—teachers typically account for about 70 percent of a university budget in the United Kingdom—and enabled by IT. It is

also good in principle since self-instruction is a much more effective form of learning than being taught. Personal instruction has a very important place, but its importance is largely supportive and inspirational rather than as a means of imparting knowledge.

Self-directed learning and telecommunications together enable distance learning, which for some reason has received more discussion in the literature than self-instruction itself (e.g., "Libraries and Learning," 1996; "Perspectives on...," 1996; Stephens, 1996). Self-instruction ties in with two other related trends: an emphasis on individual responsibility—the onus is on the learner to learn rather than on the teacher to teach; and the extension of the "customer is king" policy to the public sector—people want and expect a choice and will shop around or keep demanding until they get what they want.

These two trends—lifelong learning and self-instruction—mean that learning at all levels will be vital and will need to be only remotely linked to academic institutions. These institutions will have to do some fundamental rethinking—i.e., they will have to reengineer themselves. The implications for public libraries are also potentially profound. They could become centers for self-instruction and lifelong learning for all levels of society, from the specialized graduate who wants to update him/herself to the technician who wants to learn new skills, and the manual worker who wants to improve him/herself. This has always been a function of the public library, but never, until now, has there been such an opportunity to fulfill it.

POSSIBLE USES OF INFORMATION TECHNOLOGY

The idea that electronically stored publications will supersede printed ones is perhaps less dominant than it was a few years ago. It is not necessarily true that economics will force libraries to hold less and access more, since it is by no means clear that access is cheaper except in the short term. Holdings are never likely to give way completely to access (Line, 1996b)—few information media have ever been totally superseded: even stone tablets still exist in the form of tombstones and walls with inscriptions. Each new medium is added to existing ones, taking over a few of their functions and finding new functions that only they can perform. Since books are very efficient at conveying some types of information and are uniquely convenient, they will continue to be issued. If the contents of such books as (to take three recent examples) Dawkins's (1995) *River out of Eden,* Schama's (1995) *Landscape and History,* and Pinker's (1994) *The Language Instinct* were available only online, so many people would want to download them, print them out in a decent format and on decent paper, and bind them into a compact form, it makes more sense to produce them in this form in the first place. Dawkins and Schama would benefit from more pictures and diagrams, and Pinker would also

benefit from sound; this suggests that they should also be available on CD-ROMs. There is no reason, other than perhaps economic, why we cannot have such books in more than one version. Either books or CD-ROMs would be superior to online access. Conventional materials, "hand-held" electronic media, and online access will all be needed; it is not a case of either/or but of the best balance among them.

Since printed books will continue to be produced in large quantities, they will continue to be the core of the public library service, but they will have to be supplemented increasingly by CD-ROMs. Much of the use of computers by public libraries will be (is already) for exploiting these resources by enabling users at home (or elsewhere) to search library catalogs, suggest items for purchase, and make reservations and renewals. This may incidentally result in fewer visits to the library.

Public librarians are bound to explore how they can make use of the extension of computers into society. Providing access to information in electronic form for those who do not have computers with modems is one obvious role, fully in line with the traditional (and basic) function of equalizing access to recorded knowledge. Pervasive though computers may become, and though the percentage of households owning computers will certainly grow from the present 25 percent in the United Kingdom, there will always be people who do not have these—just as there are people who do not have cars or television and, of those who do have them, there will be many who do not have modems. Increasingly people will have access at work. Of the people who do have access, 74 percent have it only at their place of work or study, and much information is not related either to people's work or their study. Those who own computers with CD-ROM drives will not purchase all CD-ROMs they would like to use any more than even the most avid book buyers acquire all the books they might wish to read. If a wide selection is ever to be accessible, public libraries are an obvious place to provide them if only for consultation (whether the lending of CD-ROMs will ever be allowed and, if so, based on what conditions, is not clear).

Another obvious role is to assist users in gaining direct access to electronic information. On the one hand, search software and navigation aids continually improve, reducing the need for help; on the other, the sheer volume of information keeps on increasing, and help is beginning to be needed even in the selection of navigation aids. Some people will enjoy searching the Internet, just as some people enjoy exploring large collections of books, and some will have time and inclination for both and others will not. One can imagine libraries providing their own simple systems for inexperienced users, or users who want to use only small parts of the information universe—just as libraries now provide printed guides, and, where necessary, personal guidance, for their book users. Libraries may *humanize* an otherwise impersonal information world.

New forms of information access and storage will appear from time to time (the intervals seem to get shorter), and librarians clearly have to be alert to what is happening and explore how they might make use of new developments.

The public library will still be a place, and it makes sense to use that space as a combined center for the future provision of, and access to, printed material, audiovisual and electronic media such as CD-ROMs, and access to remotely stored electronic material, together with the expertise that is necessary to organize both material and access. But it will be more of a centrifugal place than it is now, reaching out to the community it serves. One of the means of reaching out is by remote workstations in shopping centers and other public places (the Aslib report's "micro-kiosks"). This idea may not have been greeted with much enthusiasm by the Benton Report sample, but the reason for that may simply be unfamiliarity.

Public libraries have always supported learning. They serve schools in various ways, sometimes supplying school libraries, sometimes having to act as substitutes for them. Self-instruction is becoming more common in schools, at least at the secondary level, where pupils are often given small projects to do. A public library can offer better access to electronic sources and a lot more expertise than most schools will be able to offer. All schools will need to be linked to local public libraries.

Support for learning is however not the same as making it a central feature of the service. Public libraries can have a brilliant future as centers of lifelong learning, offering the same sort of facilities as those suggested for universities, perhaps at a "lower" (i.e., less academic) level. This suggests a further blurring of roles, this time between the academic library and the public library. The academic learning/research/information resource center of the future could serve people with "academic-type" information, whether or not they were members of the academic institution—they might be in industry or business or members of the wider public. The public "library" would remain a source of general culture and recreation but could also act as a purveyor of information on less academic matters—on matters as varied as building regulations, language instruction, social problems, and so on. They could serve too as two-way communication channels between the public and local and national government, attracting and using input from the public as well as serving them with official information.

Serving as a meeting and discussion center is perhaps in itself of marginal relevance to the public library as such, but the more people that are brought in the more use is likely to be made of it. The library then acts as a cultural as well as an information center. As noted earlier, the role of safe haven in busy towns and cities—a place where mothers

can take small children and old people can feel safe—is appreciated by the public.

To fulfill these roles, and to gain the necessary financial support, public libraries will need to be linked with one another, with other types of libraries, and with libraries in other countries. They will also need to be closely connected with other sectors—to form alliances (not mere links) of two types. One is with other public services such as education, culture, and recreation. The merging of British public libraries into larger departments need not be seen as a relegation to lower status; it can be an opportunity. In fact, while the overt reasons may be to save money, the trend to dissolve boundaries is a sign of deeper undercurrents of change, which the library can turn to its advantage. Moreover, and crucially, it is hard to see any other way of obtaining the money needed. The other necessary alliances are with the private sector, especially television.

CONCLUSION

It is not difficult to think of things for public libraries to do and keep them in existence. This should not however be our main aim—which should be to ensure access to all kinds of information for everyone. If this can be done in other ways, they deserve to be looked at, and if they are more likely to be cost-effective, it would be foolish to preserve the "public library as we know it" for sentimental or other reasons. That said, it is hard to see any other sort of institution that would combine all the desirable functions that public libraries perform. Even if some functions come to be done elsewhere as well as they are done in the library, that does not mean that the library should abandon them if they fall within its range of roles.

There is little in the above comments that is not mentioned or adumbrated in the Benton Report or indeed in the Aslib report (ASLIB, 1995). My vision is similar, but I would place more emphasis on the (self-)educational role of libraries. I share the view too that continued pressure and publicity are needed to ensure that public support is accompanied by greater understanding and translated into action. Libraries need champions. In Britain, the Library and Information Commission, while it cannot act as an overt champion, since its role is purely advisory, may build on the various reports and make a good public case for support.

The case for the public library may be very powerful, and governments may be persuaded to make supportive noises, but while new opportunities are there to be grasped, expenditure on public services is not increasing in line with inflation, and libraries have to compete for funds with other services such as health and education, to which even the most passionately dedicated librarian would find it hard to give a lower priority. The more closely associated with other public services libraries—in

particular education—can become, the better they are likely to fare, but the financial problem will remain.

## FINAL NOTE

Since the text of this article was completed in the Spring of this year, the election of a Labour government in May has led to some changes. The Department of National Heritage has been superseded by a Ministry of Culture, the Media and Sport, with a seat in the Cabinet. A rather more sympathetic attitude to libraries can be expected but, for the immediate future, tough controls over public spending will continue. The new government is making education a high priority, and this may have a spinoff for libraries.

## REFERENCES

ASLIB. (1995). *Review of the public library service in England and Wales for the Department of National Heritage, final report*. London, England: ASLIB.
Benton Foundation. (1996). *Buildings, books, and bytes: Libraries and communities in the digital age*. Washington, DC: Benton Foundation.
Comedia. (1993). *Borrowed time? The future of public libraries in the UK*. Bournes Green, Gloucs., England: Comedia (*see also* my review in *The Bookseller* under the title "What's wrong with libraries?", 20 August 1993, 35-36).
Dawkins, R. (1995). *River out of Eden*. London, England: Weidenfeld & Nicolson.
England, L., & Sumsion, J. (1995). *Perspectives of public library use: A compendium of survey information*. Loughborough, England: Loughborough University, Library and Information Statistics Unit. London, England: Book Marketing Ltd.
Galbraith, J. K. (1992). *The culture of contentment*. Boston, MA: Houghton Mifflin.
Hanratty, C., & Sumsion, J. (1996) *International comparison of public library statistics*. Loughborough, England: Loughborough University, Library and Information Statistics Unit.
Hare, G., & Daines, G. (1997). Reading our future. *Public Library Journal, 12*(2), 31-32.
Information for All. (1996). *About the millennium libraries bid*. Available from: <http://www.ukoln.ac.uk/informall/bid-details.html>.
Libraries and learning. (1996). [Interview with Nicky Whitsed and Philip Adams]. *Electronic Library, 14*(5), 424-426.
Line, M. B. (1996a). National self-sufficiency in an electronic age. In A. H. Helal & J. W. Weiss (Eds.), *Electronic documents and information: From preservation to access* (18th International Essen Symposium, ... 1995. Festschrift in honour of Patricia Battin) (pp. 170-193). Essen, Germany: Universitats-bibliothek (Publications of Essen University Library).
Line, M. B. (1996b). Access versus ownership: How real an alternative is it? *IFLA Journal, 22*(1), 35-41.
Ormes, S., & Dempsey, L. (1995). *Library and Information Commission public library Internet survey. First public report*. Available from: <http://www.ukoln.bath.ac.uk/public/lic/html>.
Perspectives on ... distance independent education (issue topic). (1996). *Journal of the American Society for Information Science, 47*(11).
Pinker, S. (1994). *The language instinct*. New York: William Morrow & Company.
Schama, S. (1995). *Landscape and history*. London, England: HarperCollins.
Stephens, K. (1996). The role of the library in distance learning: A review of UK, North American and Australian literature. *New Review of Academic Librarianship, 2*, 205-234.
Sumsion, J. (1996). Staying in the top flight. *Bookseller*, 29 November, 20-26.
Sumsion, J.; Creaser, C.; & Hanratty, C. (1996). *LISU annual library statistics 1996: Featuring trend analysis of UK public and academic libraries 1985-95*. Loughborough, England: Loughborough University, Library and Information Statistics Unit.

Sumsion, J., & Creaser, C. (1996). *LISU review of public library statistics.*   Loughborough,
    England: Loughborough University Library and Information Statistics Unit.
United Kingdom.  Department of National Heritage. (1997). *Reading the future: A review of
    public libraries in England.* London, England: Department of National Heritage.
Usherwood, B. (1997). I have read the future and.... *Library Association Record, 99*(4), 196-
    197.

# Who Will Lead the Unsuspecting Lemmings Over the Cliff?

HERBERT S. WHITE

ABSTRACT

THE STUDY AND REPORT BY THE BENTON FOUNDATION relies heavily on informa-
tion supplied by the general public, which has already shown in previous
contacts its total inability to select among alternatives, to rank order, and
to relate desires to funding options. This information is then compared
to recommendations made by representatives of organizations identified
as library "leaders." However, the report confuses leadership with man-
agement authority and ignores the fact that managers and leaders have
different and frequently contradictory priorities. Finally, this article ar-
gues that any meaningful strategy must come directly from the analysis
and professional judgment of librarians unfettered by what outsiders might
consider desirable or reasonable, and suggests ways in which such a strat-
egy might be developed.

A study examining the prospects for our profession's future as we
prepare for the next millennium is certainly welcome and very much
needed, particularly when it is undertaken by the prestigious Benton Foun-
dation and funded by the W. K. Kellogg Foundation, both groups which
have shown their interest in, and support for, the concerns of this profes-
sion. That the profession of librarianship faces an uncertain and perhaps
even frightening future can hardly be doubted. Declines in support for
public library and academic library activities, reductions in both staffing
(particularly professional staffing) and funding, a decline in an insistence
on the professional degree in hiring, and lack of support for continuing

education—these are just a few examples. Other indicators of decline include the closing of many of the most prestigious institutions which prepared our future professionals (and without future professionals we become a dying breed), and the continuing trivialization of what we are and what we do by all branches of the media (e.g., the annual return of "It's a Wonderful Life" in which, in the absence of faith, something horrible like becoming a spinster librarian could happen). In the last few years, this trend has been aggravated by slick television ads for computer hardware and systems manufacturers which inform us that going to the library is no longer necessary since all information is "easily" and "rapidly" accessible on the system we are about to purchase. Finally, one needs only ride on airplanes a few times to discover the discomfort and puzzlement brought on by learning that one's companion for the next few hours actually teaches and researches in the profession of librarianship. These are simply random examples of problems in public perception and public support of which we are all aware. A study leading to a new and assertive strategy would be very welcome.

The first suggestion that this report is going to be disappointing comes from its very title, because *Buildings, Books, and Bytes*, while certainly a catchy title, is as much an example of trivialization as those cited above. Buildings, printed material, and computer access to information in other than printed form are merely tools for the carrying out of our mission and responsibility, if indeed we can ever decide what that is, rather than wait for others to tell us. Buildings, for example, are a necessary means to an end but never an end in themselves. Inadequate physical facilities make it difficult or impossible for librarians to do their jobs; adequate buildings at least increase the potential. In speaking at the dedication of a new public library in Findlay, Ohio, this writer congratulated the assembled civic officials and Chamber of Commerce representatives on making such a good start, but then asked them if they had considered how they now wanted to use this new opportunity to enhance public library service for the citizens, and what additional funding they were considering for access and staff. They were surprised at my comments, because they assumed that in building a new structure they had completed their task. Perhaps the most garish recent example comes from the city of San Francisco, where a new $134 million library has been completed without any thought to additional professional staffing. This is more than a waste; it is a danger, because the citizens of San Francisco now think they have supported their public library, when in reality they have perhaps only improved their skyline.

Books and bytes, as the report calls them rather simplistically, are also not the issue, but rather only among the options which allow librarians to bring more and better needed information and knowledge to the citizens of the community. Those options have always been subject to

change and will continue to change. None of us recall what concern and anguish might have arisen when printed books began to appear next to manuscripts in libraries, but there was undoubtedly fear that libraries would now be spoiled forever. We do know that the introduction of type-writers and their use in preparing previously handwritten catalog cards caused much alarm.

If people think that changing the mix between printed books and computer access somehow "changes" what libraries are supposed to do, then that conception is both wrong and simplistic. When it appears in the opinions of the general public, this is not surprising because the pub-lic has always been initially suspicious of significant change as an attack on tradition and comfort. There was a similar outcry at the introduction of automobiles and the fact that they would frighten horses. Public nega-tive reaction is temporary, provided that there is professional leadership from those qualified, through education and study, to know. What is significant in the introduction of computers in libraries is the fact that, when added to more traditional (which only means earlier) formats, they allow for far greater access to information than had previously been pos-sible. In other words, all libraries, including small and geographically isolated ones, now become windows to the world's knowledge. That is the good news, but there are three pieces of potentially bad news, al-though the bad news is trivial by comparison. The first piece of bad news is that all of this will produce access to tremendous quantities of informa-tion, and that this will require filters. As syndicated management guru Tom Peters has noted, "a flood of information can be the enemy of intel-ligence." Expanded information access will require gatekeepers and evalu-ators. The second piece of news, which stems from the first, is that all of this will require a great many more professional librarians, because this is the most cost effective alternative. The third, of course, is that funding for libraries will have to increase dramatically. However, there is no ac-ceptable alternative, because the alternative is stupidity and particularly stupidity while others are getting smart.

The issue of concern is not buildings, books, or computers; it is pro-fessionals to shape and manage the institutions we now call libraries. But what we call them does not really matter. What happens there is what does matter. The key issue of professionals is certainly never addressed by the general public in this survey, which never mentions librarians but only libraries. Indeed, there is evidence that they confuse librarians not only with the clerks who do important work in our institutions but even with the people who work in bookstores. That is not surprising and there-fore not really disappointing, although the medical profession would never allow such confusion in responsibility to remain. What is disappointing is that the importance of professional librarians as the crucial element in addressing this problem is never addressed in the study title and content

or by the presumed "leaders" whose only reference is to the fact that somehow librarians will "have to change."

It is perhaps time to review the definition of a profession and the roles of professionals to see whether we qualify or even want to qualify. The issue is certainly not assured within, let alone outside, the field. Also, as will be noted later, a number of library educators at prestigious universities have suggested that educational programs must distance themselves from the "field" of librarianship to avoid being swamped in the undertow. However, it is the premise of this article that we are and should be a profession, and that indeed the problems we face in the next century can only be addressed by the leadership of a profession which informs the general and political public of what it has no reason to know. That, of course, is what doctors and lawyers do but also what plumbers and garage mechanics do. It is, for this writer, the crucial issue in all of our consideration, and it is totally ignored in the report.

*Merriam Webster's Collegiate Dictionary*, 10th ed. (1994) tells us, in part, that a profession is "a calling requiring specialized knowledge and often long and intensive academic preparation." A slightly different but similar definition is provided by Andrew Abbott (1988), who argues that the tasks of professions are human problems amenable to expert service. Professions compete for existing and newly emerging problem jurisdictions; they work to retain jurisdiction over their problems, to change or extend their jurisdiction, or to preempt the jurisdiction of other professionals. It is easy to see how Abbott's point relates to our own field. Increasingly, our jurisdiction has been taken over by the computer and business fields which understand, even if we do not, the value of the territories called information and knowledge. It is hard to see how any study, and this study in particular, could hope to produce useful information for librarians without dealing with issues of professionalism and issues of territorial jurisdictions. But then the study hardly discusses librarians at all, and the general public being surveyed never talks about them. The emphasis is on libraries, but libraries are places which contain things. They have no innate value of their own, they are only what their professionals make of them.

The survey of the general public continues to tell us nothing more than what such attempts to quiz our users have always told us. This is not their fault because we continue to empower them without explaining the options and choices. We have seen in two White House Conferences that the general public wants everything, that it is not willing to prioritize, and that it does not want to talk about higher taxes. The first White House Conference in 1979 ended with over 100 unranked and uncosted recommendations, and such a wish list is politically unmanageable even if some in power might want to implement some of it. Of course, both this and the succeeding White House Conference assured their irrelevancy

by insisting that the individuals being asked to decide first prove that they understood neither library issues nor library problems.

Thus these respondents indicate that they really want everything, and what they personally may not use is still also an acceptable addition. Thus, they want nice buildings, they want books (presumably the ones mentioned by Oprah Winfrey and also the classics), and they want computer access. Those with children, not surprisingly, want computer services, and there is general support for having the library play a role as a safe haven for latchkey children and adults who are functionally illiterate. We are told that senior citizens have a high regard for public libraries, but they were not asked why either they or their fellow senior citizens, as a group, consistently vote against all public funding initiatives, including those for libraries. Respondents had no objection to the role of librarians as path-finders and guides, although some were surprised at such a role. That may be explained by the realization that some respondents don't even know who librarians are, as compared not only to the clerks in our own libraries but also to the employees in book stores.

What can we make of such a range of responses, which espouse the value of everything and the cost of nothing? Very little if anything. The report suggests that there is optimism in the finding that a great majority of the public is "willing" to spend more in support of libraries, but that response cannot be believed. Support in the abstract is worth nothing, and the elected and appointed politicians understand quite clearly that there is greater safety in lower taxes than in better libraries. Even this last statement can be understood from the response that is, for this writer, the most depressing of all. Despite cuts in budget, in staffing, in services, and in hours of opening, the public is not distressed. It thinks libraries are "wonderful." Politicians know what that means. It means it is safe to cut the budget of libraries again. Police protection, on the other hand, is not "wonderful," and that budget must be enhanced. Nor are garbage collection and pothole repair considered wonderful. Money goes not to where people are happy but where they are unhappy. We have done a singularly incompetent job in making our users unhappy and angry, but this is never mentioned.

If library patrons can have their answers easily explained away, what of the responses of those individuals whom the report calls "leaders?" They are never identified as individuals, but they represent the institutions named by the Kellogg Foundation as Information Systems Management Grantees. This list of eighteen organizations includes professional societies, major universities, large public libraries, and major library education programs. The spokespersons who represented these institutions are not identified by name, but it can be assumed that they are in high positions of administrative responsibility. That makes them managers, but does it make them leaders?

Perhaps as individuals they are leaders, but certainly not as a group, and it can be argued that successful managers, who have already achieved posts of high prestige and high salary, are particularly unlikely to expose themselves to the risks that leadership entails. The political process provides the most obvious example. Historians are now reaching the conclusion that the last United States president who was a leader was Harry Truman. Truman, we will recall, fired General Douglas MacArthur for usurping powers that belonged to the Chief Executive, although he knew that this would expose him to a storm of protest. He could, at worst, have assigned this task to an unlucky cabinet official and let that individual take the blame, but Truman fired MacArthur personally. We have seen examples of the other approach often since that time, most directly embodied in the decision by loyal staffers to "protect the President," presumably even from his own improper act. Most recently we have begun to confuse the style of individuals who tell us eloquent things with leadership. However, before they take any public stand they receive polls that tell them what the public wants to be told. That is not leadership.

The point of this digression is to explain why major officials, in professional society, elective office, and in the executive corner offices of major public and academic libraries, can hardly be expected to be leaders and risk takers. They have already achieved what they sought to achieve; why would they now want to antagonize those who elected them, or the university president, or the mayor? None of this then is their fault. The fault is with the study methodology which confuses leaders with important people. Important people tend to become more conservative because they have more to lose. In selecting the Kellogg Foundation grantees, the Benton Foundation researchers may have made what was for them a safe and perhaps politically expedient choice, but they have destroyed the ability to compare responses from the two disparate groups because, to a large extent, this second group says exactly what it knows the first group expects it to say.

Even with all of this explanation, there is one piece of unforgivable mischief. After stating in their public responses what they were expected to say—that libraries would continue to do everything and more even in the face of declining staffs and budgets—some of the participants then respond privately that what they had said publicly might in fact not be possible. It is unfair to brand such a double standard as hypocritical, but is this what any field (the report does not describe a profession, only "libraries") has the right to expect from its "leaders?" Management writers have understood for a long time that the characters of managers, who tend to be bureaucratic, and leaders, who tend to be impatient of organizational structure, are not only different but in large part contradictory. Cosgrove's 1988 analysis in *Campus Activities Programming* was then related to our field in an article (White, 1990), but it may be that the officials in

the Kellogg and Benton Foundations do not read our literature. They can, however, identify top level managers. That part is easy.

The Kellogg and Benton Foundations are certainly correct in their sense of timing, because it is essential that librarians make some decisions about their future directions. Two possible roads beckon to us. The first is outlined by Peter Drucker, who in 1993 postulated that the most exciting future profession would be that of knowledge workers. This is because knowledge workers will do what is essential, and yet what the general public (and even corporate management and academia) will be unwilling and unable to do for themselves—unwilling because information is a means to an end and not an end in itself. This is particularly true in the working environment where individuals are judged by what they accomplish and not by how much time they spend looking for things. That realization will dawn even on the present population of 18 to 24 year olds who, quite typically for their age, are incapable of admitting any weaknesses. As these individuals enter the "real" world of the workplace, they will quickly learn that their managers are not impressed with how much time they spend online, particularly in chat rooms.

Drucker (1993) is undoubtedly correct in his prediction, but what is not known is whether the future knowledge workers will be librarians or others who can see the power base and the economic opportunity. Certainly a new commercial sector identified by the British journal *The Economist* (1993) as the meatware industry (meatware being the human beings who use the hardware and software on our behalf) falls into that category, and it has been identified as one of the hottest future growth industries. The question is not whether or not there will be meatware or knowledge workers, but whether librarians will be a part of this process. There are two things against us. The first is the public assumption that we are neither interested nor capable (although we certainly are better prepared for this work than any other field), the second is our own reluctance or perhaps lack of confidence, as indicated in this study through the reactions of our "leaders."

The second possible road is described in the daily national newspaper *USA Today*, which lists ten occupations (Kelly, 1996) for which the paper sees no future. These include telephone operator, bank teller, and librarian. The connection is obvious. These are three groups of people who, in the opinion of the newspaper, do clerical and routine work that computers can do more effectively. To some extent we still have choices but, as noted by John Barlow (1994), we will most certainly be relegated to *USA Today*'s perceived future for us if we insist that our business is containers of information rather than the content of those containers. Computers can manipulate containers far better than we can.

What then do the designated "leaders" see as our future? According to the report, they perceive the library's role (not even the librarian's

role) as trusted guides, coaches, and path finders. If this does not send a shiver of excited anticipation down the spines of the reader, it is not surprising. A self-selected role in these areas, particularly at a time of downsizing and a fierce competition for funds, appears totally suicidal. This writer cannot imagine a U.S. president, governor, mayor, academic administrator, or corporate executive calling a news conference to announce that one of the higher priorities for his or her administration is the selection and nurturing of guides, coaches, and path finders. If we want to chart a unique professional role for the profession of librarianship, it must be by creating the unique jurisdiction about which Abbott writes so forcefully, without mentioning librarians (nor, of course, does Drucker). Only *USA Today* finds us worthy of specific identification. Our argument must be that what we do either uniquely or at least better and more cost effectively than anyone else is crucial, and that therefore we must be empowered to do it. Most directly, we must attack the absurd notion (certainly in management terms) that what librarians do has a cost, while what end-users do is free.

Another way of describing these options might be in terms of the animal kingdom. Archilochus observed that "the fox knows many things, but the hedgehog knows one great thing" (7th century BC). Do we want to be the equivalent of hedgehogs, or rather, instead of foxes, guides, coaches, and path finders to the knowledge of foxes? Another alternative is posed, even if starkly, by library educators Nancy Van House and Stuart Sutton (1996). They suggest, although they are writing about library education and not librarianship, that we are likely to go the way of the panda: cute, well loved, coddled, and nearing extinction. It is these deans and other educators who also suggest that library education programs must distance themselves from libraries in order to survive. The intent of the Kellogg and Benton Foundations is commendable, but if they really want to come up with a document that this profession can use as a plan, they need to start over. First, they need to stop asking library users what they think. We already know what they think, and that unranked and uncosted wish list cannot be fashioned into any sort of strategy. Besides, why should we keep asking people who obviously don't know? Have we no confidence in our own expertise and our own judgment?

Second, they need to convene a conference of real leaders and potential leaders and not just of high level managers. Potential leaders in our field do exist but, unless we encourage and support them, we may stone them to death, because leaders are not always comforting or popular. The foundations might begin with some students in our library education programs who chose this career not because they wanted to emulate present librarians, but because they were certain that there must be a better way. Such students have to be identified early, before the bureaucracy of the library workplace, particularly in the demand that they be

pleasant members of the mediocracy-driven "team," drives them to silence or to leaving the field. The foundations might also seek individuals who, as public, academic, and state library directors, have been censured, and perhaps even fired, for daring to suggest that librarians know more about planning and managing libraries than nonlibrarians. In both cases we have lost sight of the general management principle that good subordinates make far more trouble than bad ones, but they are worth it. In all fairness, it may not occur to professors of business administration that this applies to librarians.

For a third group of potential leaders, the foundations might look to working professional librarians, particularly reference librarians, who are frustrated by administrative policies that keep them from providing proper and adequate reference service, because administrators insist on pretending that the now decimated staff is still "adequate." These librarians may also be frustrated by the fact that much of what little time they have is spent in answering the routine and directional questions that clerks could easily answer, except that: (1) there are not enough clerks so the professionals become clerks; or (2) the patrons cannot tell who is a professional librarian, who is a clerk, who is a student, and who is a volunteer.

There are no guarantees, but a group of these free-spirited thinkers, unfettered by the realizations of their management bosses of what is or is not "reasonable" or "possible," might even come up with something we can use as a battle plan. And a battle plan is exactly what it must be.

## REFERENCES

Abbott, A. D. (1988) *The system of professions: An essay on the division of expert labor.* Chicago, IL: University of Chicago Press.

Barlow, J. P. (1994). A taxonomy of information. *Bulletin of the American Society for Information Science, 20*(5), 13-17.

Drucker, P. F. (1993). *The post-capitalist society.* New York: Harper Business Books.

Kelly, K. (1996). Future jobs to bank on: Therapists not tellers. *USA Today,* April 11, p. 1-D.

London. (1993). *The Economist, 328*(7821).

Merriam–Webster, Inc. (1994). *Merriam Webster's Collegiate Dictionary* (10th ed.). Springfield, MA: Merriam–Webster, Inc.

Van House, N., & Sutton, S. (1996). The panda syndrome. An ecology of LIS education. *Journal of Education for Library and Information Science, 37*(2), 131-147.

White, H. S. (1990). Managers and leaders: Are there more differences than similarities? *Library Journal, 115*(11), 51-53.

# Balancing Buildings, Books, Bytes, and Bucks: Steps to Secure the Public Library Future in the Internet Age

GLEN E. HOLT

## ABSTRACT

THIS ARTICLE IS AN INVITED ANALYSIS of the Benton Foundation's *Buildings, Books, and Bytes: Libraries and Communities in the Digital Age* (1996). The article critiques the Benton Foundation's use of a single focus group as a counterpoint to a national survey on citizen use of public library services. It draws on various St. Louis Public Library research studies to demonstrate how conclusions different from those of the Benton Foundation authors can be supported by its own national survey data. Although disagreeing with some of the Benton Foundation's methodology and findings, the author supports the foundation's goal of creating a strong national marketing campaign to gain support for public libraries. To be successful, he suggests, such a campaign needs to be mission-driven, balance books and computers, recognize the public library's cultural values, use electronic as well as print marketing, and frequently use collaboration as both a marketing and programming tool. The ultimate purpose of such a campaign, the author concludes, should be increased funding to install and support networked computing in public libraries. The article ends with a call for greatly expanded research to help improve library practice and effectiveness.

## A FRAMEWORK FOR THE CRITIQUE

Two quotations frame my approach to this article, an invited critique of the Benton Foundation's (1996) *Buildings, Books, and Bytes: Libraries and Communities in the Digital Age*. The first is from American publisher

and author Elbert Hubbard (1865-1915) who wrote: "To escape criticism—do nothing, say nothing, be nothing" (Jarmin, 1993, p. 8). In playing a role in the development of *Buildings, Books, and Bytes*, its collaborators—to paraphrase Hubbard—have said much and done much to help public libraries realize a bright future. I thank the Kellogg Foundation for funding this project and the Benton Foundation for organizing and publishing the study.

The second quote is from film star Marilyn Monroe (1926-1962) who once remarked: "I've always felt those articles [about my acting] reveal more about the writers than they do about me" (Jarmin, 1993, p. 10). Like those authors who wrote about Monroe, what I write here reveals at least as much about what I believe needs to be done to yield a bright future for public libraries as it does about the Benton Report's methods and its conclusions. I trust the Benton Foundation will take this article as it is meant: an effort to help move forward the initiative the report suggests (Benton Foundation, 1996, p. 40).

## GOALS OF THE BENTON REPORT

The Benton Report (p. 1) articulates two goals. First, the Kellogg Foundation wanted to find out "about where the public supports—or fails to support—libraries as they confront the digital world." Second, the foundation set itself a more difficult task: "With more Americans turning to home computers and the Internet for information, the Kellogg Foundation wanted to help its grantees develop a public message about American libraries that reflected both . . . library leaders' visions and the American people's expectations."

The Benton Foundation discerned much about public support for libraries by conducting a telephone survey with findings modified by a "counterpoint" focus group. The second goal proved more difficult to attain, and the report concludes not with a coherent public message but with a series of suggested next steps followed by a question and an admonition: "What will determine the course of libraries in the digital future? The way that library leaders and visionaries respond to public opinion and the public policy context—as well as their own visions. The library world thus has its work cut out" (Benton Foundation, 1996, p. 41). This article is part of that work. It critiques the Benton Report's findings and makes suggestions for building public support and a coherent library message.

## TECHNOLOGY AND CHANGES IN BOOKS AND LIBRARIES

"Technology is a queer thing," English author and physicist C. P. Snow (1905-1980) once wrote. "It brings you great gifts with one hand, and it stabs you in the back with the other" (Jarmin, 1993, p. 237).

Nowhere is Snow's observation more true than in libraries, where technological adaptation is a way of life. Long before customers could order a book at Amazon.com on the Internet, they could use public catalogs to check a library's electronic inventory of materials and place reserves. And a decade before barcode scanners appeared at supermarkets, library clerks were checking out materials electronically. Moreover, most public library users already have benefitted from OCLC's networked catalog; a free-standing or networked magazine index from IAC, UMI, or EBSCO; and even online searching by staff using DIALOG or staff Internet terminals. More recently, the latest computer-based networked machines, with their digitized on-site and networked content, have found rapid acceptance in most libraries that could afford to install them. Paraphrasing Snow, while technology has brought great gifts to libraries, its "stabs in the back" are just as apparent in the world of libraries and books. Some examples follow.

### College Textbooks

Technology struck a heavy blow to college textbooks. Desiring to teach from current scholarship rather than the two-year-old material found in "new" textbooks, many college professors took copies of colleagues' draft papers, public documents, their own writings, and noncopyrighted Internet material and organized their own sets of course readings. These materials were reproduced at a commercial copier or on a computer disk available at the college bookstore. High-speed electronic reproduction and networking thereby catalyzed a mass movement to customized college textbooks, which hit the traditional college textbook market hard (Darlin, 1995; Magner, 1993).

### Reference Books

Paper-based encyclopedias also fell victim to electronic media. As the once-mighty *Encyclopaedia Britannica* began to issue separate CD-ROM and Internet versions, which one recent reviewer called "unsurprisingly, authoritative and gray," *Encarta '97*, which had energized the trend to electronic encyclopedias, appeared as two CD-ROMs, "with twice the multimedia" and "wired . . . for cyberspace" (White, 1997, p. 115). Paper encyclopedias are dying or dead, killed by personal computers (Whiteley, 1995). So too are other paper-based reference books, as librarians increasingly turn to frequently updated CD-ROM products or online subscriptions so that reference answers can be as current as users' requests. Electronic publishing, with its easy capacity for continuous updating, is dramatically altering the reference book market (Holt, 1996a).

### Journals and Magazines

The quick successes of electronic journals mark the change from paper to bytes in scholarly publishing. A 1995 Association of Research

Libraries publication listed "675 electronic journals, newsletters, and re-
lated titles, . . . .a 450% increase since the first edition of July 1991"
(Saunders & Mitchell, 1996, p. 6). With paper, ink, and postage costs
rising faster than inflation as electronic publishing charges drop, many
niche market journal communities seem destined to follow the same path
(Strangelove, 1996). Attempts to create popular mass-market electronic
journals have been less successful, but public libraries still are shedding
paper subscriptions (Glaberson, 1995; Wilson, 1995; Alsop, 1995). To
save money, and to gain broader ranges of back issues and electronic
indexing and abstracts, St. Louis Public Library (SLPL) already has traded
some paper subscriptions for electronic coverage. Though SLPL still
purchases numerous paper subscriptions for current browsing at mul-
tiple sites, other low-use paper subscription reductions seem inevitable to
reduce costs and for easier subject searching in archived back issues.

*Public Demand for Multimedia Materials*
    Public library customer demand is shifting toward multimedia mate-
rials. At St. Louis Public Library, where all multimedia is fully cataloged
in MARC format, the circulation of multimedia (CDs, audiotapes, video-
tapes and, soon, computer software) now constitutes 25 percent of all
circulations. Other circulation categories have grown as well, but multi-
media circulation has skyrocketed. Throughout public libraries, this mass-
use trend will impact collection budgets if it has not done so already.

*Public Use of Library Computers*
    Serving a population of 350,000, SLPL currently utilizes 450 com-
puters. Sixty percent (270), arrayed in various LAN, WAN, and Internet
configurations and loaded with many different information products and
learning games, are used exclusively by the public. The number of pub-
lic computers will double by the year 2002. If past use is any indication of
future demand, this number could double again, and the public's desire
for library-operated electronic products and Internet connections could
not be met. Networked computing is redefining library use, including
picking up new pre-teen and teenager constituencies that previously found
excuses to avoid a visit to the library. At St. Louis Public Library, the
availability of networked computers has created such a steep demand curve
that SLPL professional staff cannot yet discern its peak.
    The trend to networked computing in libraries is ongoing, occurs at
different rates in different systems, and is regarded rightly by staff and
library customers alike as part of a continuing transition without a dis-
cernible end in sight. Amid this "life on the edge of chaos" (Holt, 1996a,
p. 56), it is no surprise that the Benton Report's authors encountered
difficulty in discerning a unified, bright, digital future for public librar-
ies.

SNAPSHOTS AND NEW PORTRAITS: UNDERSTANDING THE LIBRARY
MARKETPLACE

The core of the Benton Report is a 1996 survey of citizen attitudes about public libraries. Surveys are snapshots, synoptic impressions caught in time (Spaeth, 1992). The Benton Foundation survey snapshot, like other national surveys, shows "strong public backing for public libraries" (Benton Foundation, 1996, pp. 28-29). While 77 percent of all survey participants had access to computers at home or school, 78 percent of participants thought that libraries would remain as important or grow in importance as computer use increased. And "a majority of those polled" voted to spend an additional $20 on library software rather than buy it themselves (pp. 17-18, 42-45). If these levels of support had shown up in an SLPL survey, the system's community relations advisor immediately would have recommended beginning a new campaign for increased financial support. Elected officials would regard one of their cherished issues as next to unbeatable if it achieved numbers like these.

Political reality is in the details, however, and the Benton Foundation survey is suggestive rather than definitive in detail. Before creating a new strategic message for libraries, several specific constituencies deserve more attention. Rather than recounting findings from other national surveys already reported in the library literature and summarized in the Benton Report (pp. 28-29), I have used SLPL survey findings in considering these constituencies.

*Nonusers*

In March 1995, SLPL conducted a qualitative in-depth telephone survey of twenty-two individuals who had not used any St. Louis Public Library service in the past three years. Although its numbers were small, the survey group was balanced evenly for the city's population by age, sex, race, and socioeconomic status and represented nearly every city zip code.

As a group, the participants had a high level of awareness of the library but little detailed sense about its varied resources. When material and service alternatives were listed, participants stated they did not use the library because "they do not have an interest in these materials, they do not make the effort or take the time to use the library, or they are obtaining their resources and information through other means (i.e., they already have enough reading material, buy books, watch television)." Although the survey was open-ended, strikingly, no one mentioned getting information from computers, either at home or at the office (Cluff, 1995, pp. 1-3).

Are these St. Louis responses typical of other nonusers nationally? Is nonuse a function of lack of interest, lack of need, not knowing about services, or some combination of these? Will a library move to adopt

more networked technology "turn off" or win the support of most nonus-
ers? Is there a message powerful enough to convince even nonusers to
support financially the work of their public library?

*Entertainment Users*

A 1990 SLPL telephone survey of nearly 500 citizens found that "plea-
sure reading," at 48 percent of all circulation, constituted the pre-emi-
nent reason that participants used SLPL collections and services
(Ackerman & Holman, 1990, p. 20). Using fiction circulation as a sim-
plistic surrogate for "pleasure reading" in 1996, this use category still
accounts for about 36 percent of all circulations. No other circulation
category is higher.

Though fiction circulations are rising absolutely, the category has
declined from 48 percent to 36 percent of total checkouts over the past
decade. Yet when the 1996 fiction circulation total is added to check outs
of videos, CDs, and audiotapes, the total represents 61 percent of all SLPL's
circulations. Surveys conducted for the Minneapolis Public Library, the
Free Library of Philadelphia, and the Atlanta-Fulton County Public Li-
brary all revealed "that more users selected the Popular Materials Library
role as a reason for coming to the Library than any other single reason
for coming to the library" (D'Elia, 1993, p. 18).

In spite of Tisdale's (1997) recent ahistorical critique of public li-
brary entertainment activities, this category remains predominant in most
public libraries. Much of this "entertainment" usage, of course, masks
learning. SLPL's Signature Series (1997), for example, brings in renowned
authors like Susan Sontag, David Halberstram, Gail Sheehy, Jane Bryant
Quinn, David McCullough, and Toni Morrison for free lectures to the
people of St. Louis. Such appearances not only entertain but enlighten.
So, too, does SLPL's participation in ALA's public programs which bring
literature, history, and the arts into libraries across the nation
(Brandenhoff, 1997).

In constructing the library's strategic message for the future, how
should library entertainment services and collections be handled? How
will networked computing change constituent demand for library enter-
tainment services?

*Business Users*

The Benton Report survey did not contain questions concerning
business use of public libraries. Yet every public library in America spends
enormous time and a good deal of money especially on business users,
and networked computing already has affected business use. SLPL sur-
veyed business users in a detailed 1989 mail survey (Watts et al., 1989)
and, as part of recent service-valuation studies, has organized several fo-
cus groups specifically for business users.

This survey and the focus groups have revealed both the strengths and the weaknesses of library business services. In SLPL studies, business users represent the most demanding group for current information, specialized online searching, and expensive compiling and sorting of information into personalized packages useful to one entrepreneur or one corporation. Because of their strategic and time-sensitive operations, businesses are the first group of sophisticated users that public libraries will lose to contract information providers providing direct-to-office services via electronic networks.

What role is networked computing playing in filling current demand for library business services? Will networked electronic resources radically change business public library user demands? How can national library surveys be constructed to reflect business user demand for services as part of regular adult demand?

*Women*

Just as they constitute the majority in American wealth holding and in voter turnout, women historically are heavier library users than men. A thin-but-growing literature on gender and electronic media, added to SLPL experiences and focus group findings, shows that women regard electronic media and information technology differently, use it differently, and value it differently than do men (McAdoo, 1994). In planning a new branch library, for example, SLPL has accommodated preteen and teenage females' desire to be away from males of similar ages as they explore computer learning options.

What do women, including preteens and teens, think about electronic media in libraries? Do they desire different elements in the technological complex, different content, and even different settings? And, what digital future do women, especially women voters, want for public libraries?

*Youth*

The Benton survey's two questions (12 and 15) involving children received stronger positive reactions than any of the other twenty-seven responses. If survey respondents are not clear on anything else, they want public libraries to use both traditional and electronic means to help kids be successful in school.

Desire for library help with schoolwork for children (and for adult learners as well) has been a consistent SLPL survey and focus group theme. In a 1990 survey (Ackerman et al., 1990, p. 20), "school" (24 percent)was second only to entertainment as a reason for going to the library. A 1990 focus group to assess how best to organize services in a new branch showed children's education as the greatest service demand. Focus group participants also wanted the library to have plenty of public-access computers to help children succeed in school and prepare for life (Marketing

Edge, 1990; Holt, 1997a). In St. Louis and at the Carnegie Library of Pittsburgh, new computer labs have attracted new youth users in such numbers as to become a staffing and safety issue as well as a benefit.

Will electronic learning environments draw and hold teens and pre-teens as library users? What impact will home-computer Internet connections have on demand for library homework help? Will networked computers add to or detract from parental willingness to send their children to the library for materials, programs, and services?

*Younger Adults and Men*

The Benton Report notes: "Research is especially needed with various target groups, such as younger adults and men" (p. 31). The Benton Report collaborators found it disturbing that survey participants ages 18 to 24 were more willing to spend $20 for their own software rather than to give the same amount to a library which would share the product. Would that group's answer have been any different had the query been about any other library or educational material?

SLPL has the capability of arraying card use by age of user. When that usage is portrayed on a graph, it is nearly a flattened bell-curve extending from age zero to age 92 with one exception—those ages 18 to 24 form a sharply walled deep valley of nonuse.

Is that different from the past? Or, has that valley always been there? Has the availability of networked computing accentuated the valley? Will the valley carry forward to set a new adult pattern? Who knows? This group, indeed, merits research.

Like young adults, adult male use of public libraries requires more focused study. When SLPL lines up "sophisticated users" of its business services for focus groups, males almost always constitute 60 to 80 percent of those who volunteer. On the other hand, library special events directed toward fiction readers nearly always attract 60 to 80 percent women. These male-female patterns of library use are worth more attention, especially if focused on how networked computing is added as a variable in the service mix.

On average, do men use public libraries less than women or differently from women? Is men's support for public libraries generally less than women's support? With the coming of networked computing in homes, offices, and libraries, are men's views of public library value changing more or less than are women's?

## FOCUS GROUPS: MONTGOMERY COUNTY, MARYLAND, AND ST. LOUIS, MISSOURI

The most problematical device in the Benton Report (p. 31) is the use of a single focus group as a "counterpoint" to a carefully structured national survey. The weakness of this device is made worse because the

focus group was drawn from a single locale, Montgomery County, Maryland.

It is hard to imagine a less typical American county than Montgomery County, a Washington, DC, beltway grouping of subdivisions clustered around "edge cities" largely inhabited by federal government employees, including thousands of scientists and technicians who work at the National Institutes of Health in Bethesda, Maryland, and in the high-technology corridor which adjoins Interstate 270 between Bethesda and Fredericksburg, Maryland. Good jobs, nice homes, excellent schools, and well-designed residential settings have attracted an upper-class cosmopolitan population. Almost every schoolroom in Montgomery County looks like a committee meeting of a junior United Nations. Municipal services are generally of high quality but, given the socio-economic status of the county, per capita support for public libraries is relatively low.

From this population, in the spring of 1996, "eleven white, mixed-gender participants" were chosen for the Benton Foundation's focus group. "All but one had at least some college education," indicating the group's socio-economic level. All participants were described as "sophisticated library users," though no definition is offered of what criteria makes a "sophisticated" user (Benton Foundation, 1996, pp. 26-27).

Given their life experiences, their residential setting, and their library system, their perceptions about public libraries are hardly surprising (Benton Foundation, 1996, pp. 30-31).

* With a high level of disposable income, for the latest in fiction books, they shop at Borders or Crown Books, not at their local library. Bookstores are seen as "genuine competitors" to libraries.
* They view public libraries as behind the curve technologically, and they will/should remain behind the curve.
* With a high percentage of families having computers at home and with computer-based instruction already taking place in area schools, they do not believe that public libraries should be on the cutting edge technologically.
* Residing in a politically active, high-tax, high-service society, they believe that all tax fights, including those for additional public support for libraries, should be avoided.
* In a community where scientist moms volunteer to develop science units for elementary schoolchildren, it is easy for focus group participants to suggest that public libraries should recruit retired research scholars to help out in public libraries.

"Admittedly," the Benton Report concludes, "these focus group findings should be understood as one group of citizens' responses to a set of directed topics." That being so, compare the Montgomery County find-

ings with the findings from two St. Louis focus groups, each just as valid as the Benton survey group findings.

St. Louis is an old Midwestern city. It is 45 percent African-American and about 2 percent from all other foreign-born and racial groups. Almost 20 percent of its families live below the poverty line, and nearly 40 percent of its children live in poverty. Almost 40 percent of its adults have reading problems of sufficient magnitude to affect them negatively in the workplace. Reflecting these realities, the focus group participants were parents, teachers (including home schoolers), and care-givers who worked in licensed day-care settings. They ranged from a high of "middle income" through those who admittedly get along with a lot less; more than half were African-American, with one Asian-American. Reflecting regular library users in the care-giving categories, focus group participants were 80 percent female. Regular library users were defined as those who visited a facility to use library services, checked out materials, or dialed into the library's electronic services at least once a month through the previous year.

During the two open-ended focus groups, participants were asked three sets of questions. They were not provoked or checked, though every possible attempt was made to ensure that every participant answered in each question series. In this way, no person was allowed to dominate the opinions that emerged. The questions were these:

* How do the library services you use fit into the lives of your children and you? Are the services essential or something extra? Are there services that ought to be improved? How do you value the library services you use? Can the services be assigned a dollar value?
* Finally, what would make you stop using public library services and start using other similar services, including those of for-profit vendors? And, where would you go for library services if your library didn't exist?

What emerged from the sessions was a sense of why these parents, day-care providers, and teachers valued their public library. Because the questions were open-ended, the participants used their own terms for talking about their library experiences. Given the Benton focus group's low opinion of library electronic media, the most intriguing aspect of these conversations was how participants integrated SLPL computers into their perception of the library's value. The title of each discussion section is a term used by one of the participants which seemed to capture the essence of what others were saying.

*Family Shopping Mall*

The most important overall role the groups articulated was the library as family shopping mall. They saw it as a place of intentional vari-

ety, offering products (books), services (reader's advisory, answering ques-
tions), computers (magazine full text, kids' learning games, and the
Internet), and special events (local and nationally renowned authors, folk
music, story telling, and self-help of all kinds)—all in a welcoming envi-
ronment where staff not only smiled and answered questions but volun-
teered help.  One participant called the library "a complex service, . . . a
source of stuff of all kinds."  Another said, "It's like a whole person."

*A Safe Place*
    In today's America, safety—especially for children—is never a given.
One mother noted that: the library staff does "a great job of taking care
of kids."  Another called her library "a safe educational place that is fun
in my neighborhood."  A third saw the library as safe because it offered
"age-appropriate materials."  Because libraries were safe places, many par-
ents attested to sending their children by themselves to the library.

*Community Meeting Place*
    One mother said she had heard her child tell another child:  "Let's
meet at the library."  A teacher whose branch library is closed for renova-
tion, remarked:  "There's no community meeting place in our neighbor-
hood.  We're wayward."  A parent said that the library's value is in its
"community interaction. . . .It's what you get when you come together
and do together.  You can't get the same thing any place but at the li-
brary—and it's free."  Another parent commented:  "We can look at other
mothers at story hour [and] know that others are experiencing things
like us."

*Community Anchor*
    The library, said one mother, "binds the community.  We all use it."
Another said: "It's bigger than home.  [Our library system is] something
to take care of.  [It provides us with] a bigger sense of belonging than just
home."  A third noted: "We don't have to tiptoe here.  We can enjoy and
touch and have pride."  A fourth stated: "The community is merged . . .
into the library.  The community and the library . . . have rapport."  Li-
brary literature is nearly silent on the function of a library as community
anchor.  Yet a real estate agent called recently (as others have in the past)
to ask when a branch library renovation would open so the fact could be
included in a residential listing, and city aldermen lobby the library board
regularly for new branches as part of neighborhood revitalization efforts.

*Children's Doorway to Adulthood*
    "My branch library," one parent stated, "offers a new horizon to open
up the education for children. . . . They can pick out something they want
to read.  They can make their own decisions."  Another asserted that the
library helped children become responsible for their own actions.  The
trips to Magic House, a program which the library organized, "opened

up experiences for our children." Another parent spoke about how children "need ways of going to space, of becoming parents. They need to see more than just their home. . . .The library lets them know they will never be alone."

*Focused on Education*

If there is a continuing theme that joins most St. Louis Public Library user discussions of library services, it is that of life-long learning, though no participant ever used that term. Home-school mothers led in making the point. "My branch library is a home school haven," one home-schooler mother declared. It is "like an open classroom, with its books and videos forming the substance of the curriculum." "I'm delighted with the kids' computers," another home-schooler mother declared: "My child can go on the Internet." While her child was picking out CDs for music lessons, she got research material for her graduate courses.

Another education value was sounded by an African-American mother who declared: "The books at my library helped me raise my worth. They provided material for me to understand myself and my race."

The library's multiple computer environments also came in for praise. One father noted: "We can dial in from home and put requests for books on the library's bulletin board. They drop us a card or call when the books arrive. . . . They also deliver to the kids' [high] schools."

One mother commented on how computers allowed her to get to a specific article fast. "Computers are very valuable for children. They go to the computers first. They start always with programs like Encarta. [My] kids use [library] computers to play and to get information. . . . They have pictures, color and [are] action oriented. . . . [Kids] are stimulated by what they see on [library] computers."

And finally there came another parent comment that "our library has more on the computers than the Internet . . . . The parameters of the library's [children's] computer system are very well thought out. Whether they want a poetry book, experience with children's games, like Mind Maze, they find it on the library's computer."

## COMPARISONS WITH MONTGOMERY COUNTY

This summary of the two St. Louis focus groups provides a sharp contrast to the views of the Montgomery County focus group. Neither focus group is more "right" than the other. But the different groups in the two communities represent different socioeconomic strata, draw on different lifestyles and, rather obviously, they have experienced sharply contrasting public library experiences.

The two groups have very different opinions about the place of electronic media in libraries. The Montgomery County focus group regards library computing as an option at best and has little faith in the idea that

public libraries ought to be on the technological cutting edge. The St. Louis groups expect their public library to furnish computers with appropriate content. For most of the Midwesterners, library computers, networks, and electronic content have become an essential part of their family lives.

The lesson of this exercise: Single focus groups are not good "counterpoints" to methodical and precise national telephone surveys. If the Benton Report collaborators realized this fact—as they state they did (p. 31)—then the group's specific conclusions, especially its quotations, should have been inserted into this policy document with a far lighter hand.

Instead, the focus group findings are used as a foil to allow the Benton Foundation's compiler-author to turn from reporting and analysis to exhortation. This preachment is delivered in a lengthy paragraph concluding the focus group report. It reads:

> the single focus group proved a useful counterpoint to the optimism of the aggregate survey data, revealing areas of public confusion and restraint that the survey data mask. And, for library leaders eager to cling to the reassuring notes of the survey results, the focus group revealed how quickly public support can erode when arguments are leveled by even a friendly opposition. While it would be a gross misinterpretation to derive American public opinion about libraries from one participant's quotable "just behind the curve" metaphor, the language and the tone of this discussion among a group of sophisticated library users should nevertheless make library leaders cautious about what happens when citizens are left in an information vacuum to reason through the library's role in a digital future. If the library is indeed "invisible," as some library leaders admit, then its story and mission are vulnerable to new, more assertive arguments and advertising that substitute other institutions as information navigators. (pp. 31-32)

These points could have been articulated without the crisis language derived from an inappropriate use of a focus group as a "counterpoint" to a national survey. Rhetoric aside, the report's policy findings are these:

• The Benton Report survey shows strong support for public libraries and considerable support for library development of essential networked computing services for children and adults.
• Libraries need to be on the cutting edge technologically.
• Libraries need to collaborate with other community agencies to maintain their essential social roles and to use resources to maximum advantage.
• To create a favorable opinion climate and to gain additional financial support, most especially to develop their networked computing capability, library leaders need to effectively present a unified coherent

message.  The Benton Foundation will take a leadership position in developing this message.

- If libraries do not develop and deliver this message effectively, their competitors will marginalize them by getting out in front of them on technology and will convince a majority of the public to pay for the electronic information services and bookstore products they use and let the poor do without.
- Concomitantly the public library will become a backwater eddy rather than an essential American institution.

These are significant findings.  But, as radio commentator Paul Harvey is fond of saying: "There's more to the story."

The remainder of this discussion is an effort to explore policy issues that will affect the ability of public libraries to develop a bright future and to convey a coherent unified message to the public about that future.

## Defining "the Cutting Edge" of Library Technology

The Benton Report suggests that public libraries ought to lead in technology, not be "behind the curve" (pp. 3, 31).  In an 1884 book introduction, pioneer psychologist Havelock Ellis (1859-1939) reminded his readers: "To be a leader of men one must turn one's back" (Bartlett, 1980, p. 689).

This warning is appropriate for technology innovators.  At one time or another, Apple, IBM, AT&T, and a host of other technology and telecommunications companies stepped out to play a "cutting edge" leadership role, then a short time later bled profusely because of its pioneering effort.  Libraries are no different.  All library professionals have seen promised "cutting edge" automation vaporware which at first was delayed and then proved difficult to use.  And they have seen individual technology innovators swept away because of their pioneering (Holt, 1997b).  Many more libraries will reap grim results if they join in the telecommunications battles like that being played out between Rupert  Murdoch's "Death Star" digital communications networks, television cable companies, and the diminished monopolies of the regional telcos (Roberts, 1997).

What is the public library's technology cutting edge?  Is it simply how to use the Internet?  Lancaster and Sandore (1997) state that "public libraries have lagged behind academic libraries in the exploitation of the Internet resources" (p. 242).  Without any U.S. government or library association recommendations in place, Lancaster and Sandore turn to the Library Association of Great Britain for recommendations on how public libraries ought to adopt Internet innovations.  According to the Library Association (1995), public libraries should:

- use their skills to identify information, whether in text, image, or sound, and route it as appropriate to people in need of it;

- provide network access points, free or fee-based, as appropriate;
- provide opportunities for education and training in the use of the net-
  work;
- use open information systems and broadband communications to inte-
  grate use of the network with mainstream library services;
- publish appropriate information—e. g., catalogs, community informa-
  tion, and archives—over the network;
- apply their skills to the management of the vast amounts of informa-
  tion on the networks;
- as appropriate and in partnership with the academic sector, provide
  information from the network to students and distance learners (pp.
  548-49).

Few library professionals would claim that every one of these recommen-
dations has been implemented in all U.S. public libraries. That should
not surprise anyone. The development of public library innovations, like
public library governance, is not communitarian but localistic in nature.

Within that localistic context, the public library field over the past
two decades has seen dozens of examples of connectivity innovation.
Among large and middle-size public libraries in 1997, only a minority do
not offer Internet connectivity, often including value-added services like
e-mail accounts, community information systems, and files filled with
local culture and history information.

In moving forward with such innovations, public libraries are at the
"cutting edge" of current Internet issues. As the editors of a special
section of the *Scientific American* pointed out recently, that edge is not
connectivity but "bringing order from chaos." Recognizing that connec-
tion delays and even limited access are not permanent conditions but are
caused by rapid growth, the journal's editors write: "The more serious,
longer-range obstacle is that much of the information on the Internet is
quirky, transient, and chaotically shelved" (The Internet, 1997, p. 50).

These introductory comments are followed by essays authored by six
eminent technological writers, each covering an aspect of how "bringing
a measure of organization and structure to an inherently fluid medium
like the Web may help realize the 18th-century French encyclopediasts'
vision of gathering together all the world's knowledge in one place" (The
Internet, 1997, p. 51).

One of the *Scientific American* articles is by Clifford Lynch(1997), di-
rector of library automation at the University of California's Office of the
President. Lynch advocates:

> combining the skills of the librarian and the computer scientist . . .
> [to] help organize the anarchy of the Internet. . . .The librarian's
> classification and selection skills must be complemented by the com-
> puter scientist's ability to automate the task of indexing and storing

> information. Only a synthesis of the differing perspectives brought
> by both professions will allow this new medium to remain viable. (p.
> 52)

Many public libraries already are engaged in innovative organizing of
Internet sources. Visits to the homepages of Berkeley Public Library, Kan-
sas City Public Library, and St. Louis Public Library provide three very
different views of how this organizing should be handled for area con-
stituents—and the kinds of local content that should be added as well.
Other sites abound with different approaches. These attempts to provide
local information electronically are hardly new. Margolis (1996) recently
reminded readers that Pike's Peak Public Library in Colorado Springs,
Colorado, has had an electronic community information network oper-
ating since 1980.

   Director of Los Angeles Public Library, Susan Goldberg Kent (1996),
puts her finger on the cutting edge relationship between innovative pub-
lic libraries and the Internet when she writes: "The key for us now is
content—and the Web and the Internet are, if nothing else, full of con-
tent, constantly changing minute by minute; more importantly, so too
are library-created and vendor-created data bases. . . . This type of con-
nectivity—to *content*—is the most exciting and important aspect of the
library of the future" (p. 215).

   Electronic content—how connections are made to it, how it is orga-
nized and presented to users, and what unique local content is mounted
—is the cutting edge of the public library's digital future.

## A CAMPAIGN FOR PUBLIC LIBRARIES

### Defining the Campaign Goal

   The most hopeful part of the Benton Report is the foundation's in-
terest in:

> creating a joint multifaceted, multimedia, umbrella communications
> and outreach campaign, based on a model developed by the Benton
> Foundation for the Coalition for America's Children. This campaign
> would begin to lay the groundwork for new perceptions of the role
> of libraries and other public service media in fostering healthy com-
> munities. . . .
>
>    With the role and impact of personal computers still fluid in
> this emerging digital world, now is the time for libraries to seize the
> opportunity and define their role with an aggressive public educa-
> tion campaign [at the local and national level]. (p. 40)

The greatest contribution which the Benton Foundation can make to
America's public libraries is to help institutional leaders develop this cam-
paign. As Kent (1996) writes: "It is no longer enough to be . . . esteemed
by politicians only to be funded at the minimal level, to be admired for
giving good service but devalued as anachronistic and outmoded" (p.
213). Slogans such as "Americans can't wait" and "Libraries change lives"

sound good, but what do they change? The answer to Kent's question, of course, is nothing that is important.

"What we do not do aggressively enough," Kent writes, "is assume a key leadership role as the major player in a society that is now based on information and knowledge." It is this essentiality which must be at the core of a new message campaign for public libraries. And the object of that campaign needs to be leveraging new funding that allows public libraries to play the important national role into which technology and user expectations have thrown them. To quote Kent (1996) again: "The American public library can no longer stand alone" (p. 214). To that should be added: Public libraries should no longer be funded as if they stand alone.

## ELEMENTS OF A SUCCESSFUL CAMPAIGN

### A Mission-Driven Message

When America's public libraries want to send a coherent message to the public about their place in the digital future, they need to articulate their common reason for existence and the place of networked computers in that rationale. Paraphrasing the Benton Report's main themes, that mission-driven message ought to read something like this:

> The American public library will innovatively use all its resources—including the Internet and other networked electronic media, alliances with other organizations, and all funding sources—to improve and sustain quality reading and information services needed by the people as they and their families engage in lifelong learning to benefit themselves, their families, and their communities.

By articulating its readiness to "improve and sustain" community life, this mission-driven message makes libraries essential, not peripheral, in the development of the fabric of American family, cultural, and economic life (Holt, 1996b). Such a message also informs a taxpaying public that proactive library professionals are creative enough to use technology as a tool to help each of their constituents carry out her/his life's ambitions; strategic enough to make useful alliances, especially to utilize resources effectively; sufficiently focused on the public interest to add value to the public's library investment by obtaining private funds to supplement tax income from the public purse; and adequately in touch with public opinion to recognize that the library's progress in electronic media cannot be accomplished to the detriment of the organization's traditional community work on behalf of books, reading, and literacy.

Furthermore, when libraries state a commitment to innovation, they are promising to change continuously as society's needs change. Carrying out that mission will not be easy. But the message that the library is a responsible and creative innovator is the one the public wants to hear; it is what libraries politically ought to promise; and it has the additional

advantage of being both a reasonable and principled statement of how modern proactive public libraries ought to behave as they increasingly become part of the networked world.

This message—that libraries are "masters of innovation"—is not coincidentally the primary theme of America's most admired companies. In opening a discussion of *Fortune's* most admired companies, Brian O'Reilly (1997) writes: "Companies that know how to innovate don't necessarily throw money into R&D. Instead they cultivate a new style of corporate behavior that's comfortable with new ideas, change, risk, and even failure" (p. 60). These same traits identify the admired and successful digital public libraries.

*Balance Books and Computers*

Those who engage in technology innovation may feel technology backlash. The latter theme was apparent in San Francisco even before the opening of the high-tech "New Main" (Holt, 1997b). Other examples abound: Nicholson Baker's *New Yorker* attacks (Baker, 1994, 1996; Dowd, 1996) on electronic conversion of card catalogs; Baker's and Michael Gorman's attacks on library technology generally (Gruchow, 1995); Ingrid Eisenstadter's *Newsweek* attack on New York Public Library's Science, Industry and Business Library for replacing open stacks of bound science serials with rows of computers (Eisenstadter, 1997); and Sallie Tisdale's more general 1997 *Harper's* lament for a public library as a quiet place where quiet people engage in quality activities, not including entertaining themselves in a noisy way.

These technology-backlash reactions, whether judged in retrospect as fair or demagoguery, remind public library professionals that technological control of any collection has up sides and down sides. The advantages are preservation of rare or delicate originals; convenient retrieval in seconds; and copies that take up "millimeters of space on a magnetic disk rather than meters on a shelf." The down sides include loss of easy browsing; a limited way—often only one—to actually find an item; and, because most users when given a choice between online and printed works, chose online, anything which is not digitized becomes an "orphan" for the discernible future (Lesk, 1997). Such criticisms and such limits should make library professionals self conscious about balancing the needs of book users in their plans for the digital future.

*The Social Value of the Library*

Before the public library was a technological innovator, it was a social creation. Princeton University President Howard T. Shapiro(1997) explains:

> the traditional library is much more than a book warehouse. It is a
> critical component of a vast social strategy that includes authors,
> publishers, copyright laws, booksellers, scholars, etc. designed to

further education, innovation, and the forces of social progress. The current publicly accessible research libraries are not an inevitable outgrowth of the invention of printing. They are instead a special social form adopted by those societies and reflect particular social attitudes about the preservation and transmission of knowledge that had begun to develop even before the invention of printing. The wide scope of their collections reflects less about the technology of the book than about society's particular attitude toward learning and knowledge that happen to have been prevalent at particular times and places. . . . The overarching question is not whether libraries will survive, but what their continuing social function will be.

The need for a thoughtful social strategy—as opposed to a technological strategy—can also be demonstrated by considering the present state of the Internet. For the most part, while there is a huge storehouse of information on the Internet, there is no social agency providing any assessment of the quality of this information. Nor . . . are adequate tools available to help us navigate to our destination. Furthermore, predictions regarding the role of the Internet usually assume it will be available at a very low cost to everyone. This, however, is a critical and unexamined social and economic assumption. In our society we have traditionally prized public access to knowledge as a key component of equal opportunity. If this stance is to be maintained in the "electronic," "digital," and "information" age, we need a social and economic strategy for ensuring that these new sources of information storage and retrieval will be reasonably available to all.

A primary emphasis in setting up any campaign message for public libraries is the need to deal with the library's social value. What is likely to happen to the costs of usable networked information? Who will pay the costs of making Internet information more useful? A coherent public library message campaign needs to have social value issues well in hand. Such a program will have to be values-based so that public funding can assure that "new sources of information storage and retrieval will be reasonably available to all," a goal shared by the Benton Foundation and library leaders.

*Recognize the Library's Role in Constituents' Lives*

Any public library message campaign needs to be realistic about how people look for information. The Benton Report survey finding (p. 42) that people look first for information on using computers to somebody they know, or go to a computer store or take a class before going to the library fits with other survey data on how people behave when they need information.

A 1988 SLPL phone survey found that a majority of local survey participants looked first at the phone book, then asked a relative, friend, minister, or doctor. Only after making these attempts did participants turn to the library (Jones, 1988, p. 1). Science researchers behave the same way. A 1991 Faxon study found that science scholars looked first at

the material they had accumulated in their offices, then asked colleagues personally, then phoned or e-mailed colleagues on other campuses, and only after they had exhausted all these sources did they go to the library (Almquist, 1991). To be realistic, a public library message campaign needs to take the public's information-seeking behavior into account.

*Electronic Marketing*

In most libraries, the first step in solving a major problem is to create a written document, and the first tendency in marketing public libraries is to work on the print press. If libraries are to compete for the attention of their busy constituents, then another document will not do much good —and the chances of any particular citizen seeing an article in a typical American daily newspaper is less than two out of ten. The chances of any particular citizen seeing (and remembering) a news story on television is more than seven out of ten(MediaMasters, 1992, pp. 9-14).

Libraries need to market themselves electronically. To quote the Benton Report, they need to engage in a "multimedia" campaign. Such campaigns do not come cheaply but, as St. Louis Public has discovered through its radio advertisements, the benefits are extensive. The purposes of a public library multimedia campaign should be to: (1) build library use; (2) encourage current library users to "cross over" and use other library services; (3) inform nonusers about new and existing services and how they fit into their busy lives; and (4) inform users and nonusers alike that public libraries are giving value for tax dollar received from the funds that taxpayers are providing.

Part of multimedia marketing is for libraries to become familiar with how virtual markets differ from traditional markets. Hagel and Armstrong (1997) explain how organizations can feed useful information into the substantial (and often hypercritical) net communities growing up on the Web. Success brings real advantages. The authors note: "Vendors should take advantage of communities not only to improve their understanding of individual key customers but also to build a track record of good service and responsiveness to their needs. The loyalty they create in the process will be based on performance" (p. 198).

The new net communities are exactly the kind of markets where performance-oriented library and information professionals can hone their institutions' bright images based on meeting real needs. And the net is only the most recent and most dynamic of electronic outlets that needs to be part of a public library multimedia campaign.

*Collaboration: Solving Commonweal Problems*

There is an old word which is not heard much any more in public issue discussions. That word is "commonweal," which means "the welfare of the public." Public leaders—elected and appointed officials; civic,

community, and neighborhood leaders; and citizens generally—are supposed to look out for "the welfare of the public."

The Benton Foundation has a commonweal vision of collaboration: sharing resources for the welfare of the public. To quote the Benton Report, the public library should be the one key participant in "access for all built around a unified and integrated resource hub. This would become the 'new life form' with other public information providers as partners, and would tackle the community's needs and problems" (p. 39).

Like so many other visions for the future, this one is based on what already is happening in many American cities and towns. As with so many other public libraries, SLPL is up to its neck in collaborations. At the February 1997 Urban Libraries Council meeting at the Washington, DC, meeting of the American Library Association, eighteen different systems —SLPL among them—reported more than sixty-five different collaborative programs—just with the museums in their communities (Urban Libraries Council, 1997).

The down side of collaboration is that government policymakers and civic leaders too often use the term to cover an activity in which two or more agencies "collaborate" to do still more work with less resources. The 1990s have become what cartoonist Herblock calls the age of "push-down politics." That is, it is a time when federal officials, in order to cut the budget, push down commonweal work to the state level. Then state officials, to cut the budget, push down the same work to the local level. There local officials, in order to cut their budget, push down the activity to local charities—who then are supposed to go out and find donations to do what the federal government once did. Welfare reform is a specific example of "push-down politics," and churches and food pantries already are shaking their heads over their new "charity" responsibilities which previously were funded by federal and state taxes (Feinsilber, 1997).

A paramount problem for today's public libraries is that, while they have captured the public's attention as potential problem solvers, they have not grabbed commensurate attention as deserving of improved commonweal funding, especially from state and federal governments. Collaboration is a worthy endeavor—i.e., if both partners together have the resources necessary to get the collaborative job done. Public libraries engaged in successful collaborations recognize that finding adequate resources is a major component in successful partnering.

*Finances: Public Funding*

"Money," W. Somerset Maugham reminded his readers, "is like a sixth sense without which you cannot make a complete use of the other five" (Metcalf, 1987, p. 167). Public libraries, especially those with public library leaders whose systems suffer from lack of adequate funding, will

know immediately what Maugham meant. Acting alone, public libraries have had varying successes in gaining local funding.

Public libraries already cooperate, both informally and through contract, to save money. Interlibrary loan, reciprocal lending, and cooperatively contracted database purchasing are just three current examples. But these collegial and collaborative efforts to save money are small when compared against the differences among the fifty states' funding support for public libraries and the even greater differences in funding among public library districts.

Technology economics guru Don Tabscott writes: "Networked Interactive Multimedia (NIM) will be a trillion dollar [economic] sector in North America alone by the end of 1997. At its current rate, there has never in history been an engine of economic growth like NIM. What's going on is a revolution" (Winning in the Digital Economy, 1997). The whole annual operating budget of all public libraries is about $5 billion, and a quarter of American public library districts have annual operating budgets under $25,000.

Solving this funding riddle is now nothing less than a national imperative if public libraries are going to play an expansive role in the National Information Infrastructure. Susan Goldberg Kent (1996) writes:

> Almost all public library funding is local, usually coming from taxes paid by local residents for local services. Library governance, concomitantly, is also local. . . . Recently, there has been a backlash from local taxpayers, in all areas of the country, who believe that their tax dollars should remain local and that library services, as well as other governmental services, should be provided *only* to those people who pay for them directly. . . . What will it mean when a city decides to restrict public library usage to their residents only and that city's library has a Web page with information readily available to the entire Web universe?. . . Can we freely take information from "others" if we do not allow "others" to take information from us?

As the Benton Foundation kicks off the organizational work in preparation for its innovative library campaign, a good deal of attention needs to be given to the shape and significance of the monetary message to be conveyed. Most public libraries are bursting at the seams with current activities. Technology has only added to the expense—and the service opportunities. Conceptualizing how to solve the public library funding riddle is a substantial problem before new powerful multimedia messages are generated for a public library campaign.

PUBLIC LIBRARY RESEARCH

Half a decade ago, I suggested the need for a second *Public Library Inquiry* in order to build scholarly knowledge about public libraries (Holt, 1992, pp. 23-26). At the conclusion of this article, that call is repeated.

One important message in the Benton report (pp. 5, 31, 40) is its stated advocacy for further research on public libraries.

To appropriately use networked computers and new communications technology to carry out their nationally significant work, public libraries need applied research that results in:

- exemplary applications of networked technology that improve and innovate services;
- explanations of successful pathways in rapid technological migrations;
- role models, job descriptions, and training models for professional librarianship as technology increasingly affects most library work;
- rules for collaborations in which all partners and the community benefit through measurable improvements in services;
- well-articulated programs for obtaining funding in the public and private sector for the technological advancement of libraries;
- strategic marketing programs that not only improve the public library image locally and nationally but which are likely to result in increased institutional capacity to deliver quality services; and finally
- measurements that place dollar values on library activities so that library leaders can demonstrate the economic benefits of public investment in libraries.

Public library leaders will find it easier to move into the electronic-media dominated twenty-first century if "profound, connected, sustained and . . focused . . . research *about* and *for* the American public library" is carried out in a careful expeditious way and communicated in a systematic way to the public library community (Holt, 1992, pp. 24-26). Well-informed cosmopolitan library leaders are most likely to be successful advocates for a bright public library future.

The Kellogg and Benton Foundations should be commended for the research and the communication attempted in the Benton Foundation report. It is hoped that the two foundations will follow through on what they have accomplished in *Buildings, Books, and Bytes*, and that this report marks the beginning of a sustained effort to support serious research and ongoing communication among and about America's public libraries.

REFERENCES
Ackerman, A. S.; Holman, R. G.; & the staff of Attitude Research Corporation. (1990). *St. Louis Public Library. Coro Foundation market survey report.* Unpublished report by Caro Fellows.
Almquist, E. (1991). *An examination of work-related information acquisition and usage among scientific, technical, and medical fields.* Unpublished paper presented at the 1991 Faxon Institute Annual Conference: Creating User Pathways to Electronic Information. Reston, VA (April).
Alsop, S. (1995). On-line publications and commercial services don't mix at the business end. *InfoWorld, 17*(18), 102.
Baker, N. (1994). Discards. *New Yorker, 70*(7), 64-85.

Baker, N. (1996). The author vs. the library. *New Yorker, 72*(31), 50-62.

Bartlett, J. (1980). *Familiar quotations: A collection of passages, phrases and proverbs traced to their sources in ancient and modern literature* (Fifteenth and 125th anniversary edition, revised and enlarged). Boston, MA: Little, Brown and Company.

Benton Foundation. (1996). *Buildings, books and bytes: Libraries and communities in the digital age.* Washington, DC: Benton Foundation.

Brandehoff, S. (1997). Turning libraries into cultural centers. *American Libraries, 38*(3), 41-43.

Cluff, C. (1995). *Non-library user qualitative market research study. Prepared for Communication Partners, Inc., and the St. Louis Public Library.* St. Louis, MO: Cluff & Associates Marketing Research.

Darlin, D. (1995). Reprieve. *Forbes, 156*(2), 62-66.

D'Elia, G. (1993). *The roles of the public library in society: The results of a national survey. Final report.* Evanston, IL: Distributed by the Urban Libraries Council.

Dodd, D. (1996). Requiem for the discarded. *Library Journal,* (May 15), 31-32.

Eisenstadter, I. (1997). A tangled info web. *Newsweek, 129*(7), 16.

Feinsilber, M. (1997). Churches put little faith in Clinton's welfare idea: Most congregations can't afford to hire the poor. *St. Louis Post-Dispatch,* (March 9), 12A.

Glaberson, W. (1995). Press. *The New York Times,* (May 1), Sec. D-9, col. 3.

Gruchow, P. (1995). Ransacking our libraries. *Utne Reader, 69* (May), 30-32.

Hagel, J., III, & Armstrong, A. G. (1997). *Net gain: Expanding markets through virtual communities.* Boston, MA: Harvard Business School Press.

Holt, G. E. (1992). Research for change: Creating strategic futures for public libraries. In L. S. Estabrook (Ed.), *Applying research to practice: How to use data collection and research to improve library management decision making* (Proceedings of the 33rd Annual Allerton Institute, October 27-29, 1991) (pp. 5-39). Urbana-Champaign, IL: University of Illinois, Graduate School of Library and Information Science.

Holt, G. E. (1995). Pathways to tomorrow's service: The future of rural libraries. *Library Trends, 44*(1), 188-213.

Holt, G. E. (1996a). Life on "the edge of chaos." *Library Journal,* (March 3), 56.

Holt, G. E. (1996b). On becoming essential: An agenda for quality in 21st century public libraries. *Library Trends, 44*(3), 545-571.

Holt, G. E. (1997a). As parents and teachers see it: The community values of a public library. *Bottom Line, 10*(1), 32-35.

Holt, G. E. (1997b). A San Francisco story: Economics and politics in the age of electronic media. *Bottom Line, 10*(2), 81-85.

The Internet: Bringing order from chaos. (1997). *Scientific American, 276*(3), 50-51.

Jarmin, C. (Comp.). (1993). *The Guinness book of poisonous quotes.* Chicago, IL: Contemporary Books.

Jones, Terrance, & Associates. (1988). *St. Louis Public Library: Citizen views.* Unpublished typescript.

Kent, S. G. (1996). American public libraries: A long transformative moment. *Daedalus, 125*(4), 207-220.

Lancaster, F. W., & Sandore, B. (1997). *Technology and management in library and information services.* Urbana-Champaign, IL: University of Illinois, Graduate School of Library and Information Science.

Lesk, M. (1997). Going digital. *Scientific American, 276*(3), 58-60.

Library Association. (1995). Information superhighways: Library & information services and the Internet. *Electronic Library, 13,* 547-550.

Lynch, C. (1997). Searching the Internet. *Scientific American, 276*(3), 52-56.

Magner, D. K. (1993). Copy shops, publishers still seek common ground on permissions process. *Chronicle of Higher Education, 29*(41), A15-A16.

Margolis, B. A. (1996). A paradox for the public library. In L. Saunders (Ed.), *The evolving virtual library: Visions and case studies* (pp. 31-66). Medford, NJ: Information Today.

Marketing Edge, Inc. (1990). *The Julia Davis [Branch] Library focus group report.* St. Louis, MO: The Marketing Edge.

McAdoo, M. (1994). Equity: Has technology bridged the gap? *Electronic Learning, 13*(7), 24-31.

MediaMasters. (1992). *Media training handbook: Complete preparation for television, radio and print interviews.* St. Louis, MO: MediaMasters.

Melman & Lazarus. (1993). *St. Louis Public Library poll results.* Washington, DC: Melman & Lazarus.

Metcalf, F. (Comp.). (1987). *The Penguin dictionary of modern humorous quotations.* London, England: Penguin Books

O'Reilly, B. (1997). The secrets of America's most admired corporations: New ideas, new products. *Fortune, 135*(4), 60-64.

Roberts, J. L. (1997). Rupert's death star. *Newsweek, 129*(10), 46.

Saunders, L. M., & Mitchell, M. (1996). The evolving virtual library: An overview. In L. Saunders (Ed.), *The evolving virtual library: Visions and case studies* (pp. 1-16). Medford, NJ: Information Today.

Shapiro, H. T. (1997). The future of the library. *Alumni Weekly [of Princeton University].* Undated faxed clipping in author's files.

Spaeth, J. L. (1992). Perils and pitfalls of survey research. In L. S. Estabrook (Ed.), *Applying research to practice: How to use data collection and research to improve library management decision making* (Proceedings of the 33rd Annual Allerton Institute, October 27-29, 1991) (pp. 63-88). Urbana-Champaign, IL: University of Illinois, Graduate School of Library and Information Science.

St. Louis Public Library. (1997). *The first edition of the Signature Series: Lectures and discussions led by great authors of our time.* St. Louis, MO: St. Louis Public Library.

Strangelove, M. (1996). Current and future trends in network-based electronic journals and publishing. In L. Saunders (Ed.), *The evolving virtual library: Visions and case studies* (pp. 135-145). Medford, NJ: Information Today.

Tabs, E. D. (1991). *Public libraries in 50 states and the District of Columbia: 1989.* Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics, NCES 91-343.

Tisdale, S. (1997). Silence, please. The public library as an entertainment center. *Harper's Magazine,* (March), 65-75.

Urban Libraries Council. (1997). *Public library—museum collaboration examples. Urban Libraries Council* (Responses gleaned from the ULC Director's listserv). Unpublished typescript.

Watts, A.; Kofron, C. P.; & CPK Consulting Services. (1990). *St. Louis Public Library business users survey* (Assessment of business information and library needs through a structured mail survey. A five-page survey instrument was mailed to 2,800 businesses in the City of St. Louis, geo-coded by zip code. Statistical reliability tests applied. Survey formed the basis for major policy shifts and the development of a Business, Science, and Technology unit).

Westin, A. F., & Finger, A. L. (1991). *Using the public library in the computer age: Present patterns, future possibilities: A national public opinion survey report by the Reference Point Foundation, in cooperation with the American Library Association.* Chicago, IL: ALA.

White, R. (1997). Refer madness. *PC Computing, 10*(1), 115-116.

Whiteley, S. (1995). Hard times: Encyclopedia publishing in the 1990s. *American Libraries, 26*(7), 640-642.

Wilson, S. (1995). Out of print—Barnes Conde Nast. *Folio: The Magazine for Magazine Management, 24*(8), 22.

Winning in the digital economy: The intranetworked corporation [Special Advertising Section]. (1997). *Business Week,* (February 17).

# The Search for New Metaphors

KATHLEEN DE LA PEÑA McCOOK

## ABSTRACT
The current economic upswing and apparent full employment give the
illusion of prosperity. If accepted prima facie, the Benton Report pro-
vides a façade of well-being vis-à-vis the future of libraries. It must be
remembered that there are complex demographic factors to consider as
we search for new metaphors for library service.

## INTRODUCTION

The Benton Report (1996) provides the basis for discussion about
the future role of librarians and libraries in the United States of America
but characterizes our sociopolitical milieu as "an age of anxiety" (Benton
Foundation, 1996, p. 4). W. H. Auden's 1948 Pulitzer Prize winning poem,
*The Age of Anxiety*, or Leonard Bernstein's Second Symphony used as the
score for Jerome Robbins's 1950 ballet, *The Age of Anxiety*, are reflective of
the chaos of World War II and the era of the nuclear bomb. However,
this half-century old metaphor used to describe the mood of the citizens
of the United States on the brink of a new millennium by the writer of
the Benton Report is indicative of the degree to which the report misses
fundamental realities.

This article will use the Benton Report to suggest new metaphors for
our time that reflect the role of librarians and libraries more aptly. First,
the United States of America reflected in the report is not the United
States of America in which most citizens live. Second, two central issues
identified by the Benton Report will be used as a focus of discussion:
(1) exploration of the nexus between the library and technology; and

(2) the evolving role of the librarian. Finally, the need for an aggressive public education campaign to define libraries' roles (Benton Foundation, 1996, p. 40) is definitely in order but must be initially reactive.

## THE UNITED STATES OF AMERICA IN WHICH WE LIVE

Throughout the Benton Report, references to "Americans" abound. This commonly used descriptor of citizens of the United States is increasingly distasteful to citizens of Latin and Central America. In this post-NAFTA time of hemispheric upheaval, when the future of libraries and information services is posited, it must be kept in mind that a homogeneous United States is a bygone concept. Guillermo Gómez-Peña (1996) proposes a new map "of the New World Border—a great trans- and intercontinental borderzone, a place in which no centers remain. It's all margins, meaning there are no 'others,' or better said, the only true 'others' are those who resist fusion, *mestizaje*, and cross-cultural dialogue" (p. 7).

While the Benton Report identifies attitudes toward libraries by respondents to a public opinion survey, the respondents described all live in private households and exclude citizens of American Indian, Eskimo, Aleut, Asian, or Pacific Islander descent. More disheartening is the enormous weight given to the focus group of eleven suburban white library users. The comments of these eleven are woven throughout the text of the report like a mantra—with one respondent's observation that "libraries should stay just behind the curve" repeated *seven* times.

The persuasively described statements of the focus group do have a seductive appeal. Gated and walled housing developments are proliferating all over the nation and gentrification of some urban neighborhoods provides a visible impression of economic well-being. Although home ownership has remained stable at about 64 percent over the last twenty years, the size of homes has increased by 40 percent (Samuelson, 1995, pp. 52-53). It is easy to understand why the remarks of library users who represent white middle-class affluence dominate the Benton Report. A drive through the expanding suburbs of most United States cities finds the deed-restricted, picturesquely named, enclosed development—complete with golf course and recreation center—a dominant feature of the landscape.

Yet travel a "blue highway" and find mobile homes, farmworker camps, and "affordable" housing for workers that service the fortified middle-class. Detour from the rehabbed urban brownstones through deteriorating low income housing to recognize that the Benton focus group does not speak for all who live in the United States. Real median family income has not grown since 1973, though the effect has been ameliorated by adding family members to the workforce. Those with higher incomes have become more wealthy, while the poor have become poorer in both relative and absolute terms (Bronfenbrenner et al., 1996, pp. 52-53).

Why not replace the solo white suburban litany that dominates the Benton Report with a chorus of diverse voices? By the year 2000 the population of the United States will be 12.2 percent African American; 4.1 percent Asian, Pacific Islander; 11.3 percent Hispanic; .7 percent American Indian, Eskimo, or Aleut; and 71.6 percent white (U.S. Bureau of the Census, 1995, p. 19). A note of diversity does sound in Leigh Estabrook's (1997) article, "Polarized Perceptions," which examines some of the Benton Report data in greater detail with an amplification of opinions by African Americans and Hispanics (p. 47). However, the separation of Estabrook's analysis from the distributed report dilutes her overall impact.

A focus group held in a community such as Monterey Park, California, which in 1990 was 11.7 percent white, 31.4 percent Hispanic, 56.4 percent Asian, and .5 percent African American might give a very different picture of perceptions about libraries. This middle-class community surrounded by Los Angeles freeways is a microcosm of the grassroots meanings of diversity, immigration, class, and ethnicity (Horton, 1995, p. 9).

Some concern was expressed by library leaders in private interviews that, contrary to written statements about the library as a safety net for the "information have-nots," libraries might become marginalized and lose support from middle-class taxpayers (Benton Foundation, 1996, p. 12). Perhaps it is for this reason that the report disproportionately reflects the observations of the white affluent middle-class.

Statistical analysis and presentation of polling data often combine to smooth out ambiguity. The proliferation of telecommunications devices to the point that "anytime, anywhere" communication capability seems ubiquitous (at least to Beltway consultants) means that the pollsters failed to recognize that some citizens still do not have telephones and thus were absent from their national survey "that accurately reflects the total population 18 years and older" (Benton Foundation, 1996, p. 24). In fact, at least one similar two-county study factored the lack of telephones by the working poor into the research design at the insistence of the counties' library board. Citizens were surveyed at various Wal-Mart locations in an effort to identify a more accurate section of the population (McCook et al., 1992, pp. 168-86). Indeed, an indicator of the growing lack of resources among the poor to establish ongoing telephone service is the growing availability of "phone cards"—especially in urban and rural low-income areas and among migrant farmworker populations. These permit the poor to make calls but certainly leave them out of the pollsters' stratified random-digit replicate sample (Benton Foundation, 1996, p. 24).

Poverty issues are among the stated policies of the American Library Association. The "Library Services for the Poor" policy was approved by

the ALA Council in 1991, yet repeated efforts to implement the policy have been tabled while corporate partnerships have been expanded (ALA, 1996, pp. 48-49). Sanford Berman, chair of the Social Responsibilities Round Table Task Force on Poverty Issues, addressing the Advisory Committee to ALA's Office for Literacy and Outreach Services in February 1997, argued persuasively for attention to the "Library Services for the Poor" which members of the Advisory Committee identified as a top priority during 1997-1998 (ALA/OLOS, 1997). However, none of the Advisory Committee members are counted among the library leaders whose voices are heard in the Benton Report.

It will be a hard struggle to sustain attention to the library-related needs of people at the margin, people on the border, people in the microrepublics of the Third World (the "kilombos" of East Los Angeles, Pilsen/Chicago, Little Oaxaca, and the Bronx) (Gómez-Peña, 1996, p. 242), and people who are homeless.

Though no accurate count of the homeless in the United States is available, most researchers agree that, on any given night, 500,000 people are without permanent shelter (Cheney, 1995, p.171). The Welfare Reform laws going into effect in 1997 are sure to expand these numbers. The homeless, a central concern to most public libraries, are not mentioned in the Benton Report, while Bruce Springsteen's (1995) ballad, "The Ghost of Tom Joad," refrains, "the highway is alive tonight, but nobody's kiddin' nobody about where it goes."

It does not seem that Springsteen is singing of the Information Superhighway. It does not seem that the eleven white suburban focus group respondents whose opinions are so fully described in the Benton Report speak for the citizens of the United States who are working two jobs to feed their families or taking reading classes to pass a citizenship test. It does not seem that any attempt has been made to understand, in the words of Michael Morgan and Susan Leggett (1996), "how cultural boundaries are constructed, maintained, subverted, merged, and crossed" (p. xi). There is no convergence of the real United States of America with the nation that the focus group respondents inhabit.

## ISSUES IDENTIFIED BY LIBRARY LEADERS

The Benton Report devotes one chapter to "Public Visions, Private Reflections" of library leaders. These leaders represent grantees of the Kellogg Foundation Human Resources for Information Systems Management. It is a little unclear in most cases which "leader" provides the statement for each grantee (for instance, who spoke for the New York Public Library, the Library of Congress, or National Video Resources, Inc.?) with the exception of the Urban Libraries Council, the University of Michigan, and La Plaza Telecommunity Foundation, whose leaders are men-

tioned by name (Benton Report, 1996, p. 39). It is clear, however, that none of the library grantees are located west of the Mississippi and, though some are national in scope, their leaders reside primarily in New York or the Washington, D.C. area. While these facts do not negate the sound-ness of the leaders' opinions, the leaders are located in sophisticated upscale urban centers and reflect to a degree the bias of the East Coast. It might be conjectured that the New York-Washington, D.C. corridor is the recon unit for the nation but, then again, this might not be an inexorable truth. In the next section, two central issues identified by library leaders are examined.

## THE NEXUS BETWEEN TECHNOLOGY AND THE LIBRARY

The public visions of library leaders include broadly sketched asser-tions about the linkage and electronic merger of all types of libraries into a single entity, with the elimination of geographic and temporal barriers (Benton Report, 1996, pp. 9-10). But what of other visions for the future of the book and information?

Richard J. Cox (1997) has observed: "The real matter is that we understand, regardless of what might replace the book, the nature of information and knowledge in our society. It is what any society or cul-ture is held together by, the book being a part of the memories and sym-bols of a society" (p. 55). If books are viewed as information, arguments for their preservation become weak. Replacement by electronic access to data with links to related data, video clips, and audio certainly provide an experience more like Web-TV than the solitary experience of reading. The leaps and connections once made by the individual are made by a thousand helping assumpters who anticipate the user's need for connec-tions and supply it in hypertextual riot.

Entertainment, not information, may be the key feature of our era, observes David Puttnam (1996): "The most effective information tech-nologies, whatever their purpose or content, increasingly depend upon graphic skills, the story-telling techniques, the effects, the music, the mar-keting strategies; in fact, the whole compelling panoply of entertainment...rapidly becoming the dominant force, 'colonising' the whole world of information with devastating speed and power" (p. 2). To keep up with this demand, libraries, universities, and individuals must invest more and more of their funds in ever more powerful computing resources and less in static items like books. As society encourages in-stant gratification, speed and volume are favored over integrity and depth (Nethe, 1996, p. 14).

Storage rooms hold 386 paperweights bought four years ago piled upon slide-tape kits and microcard readers. Joachim Krautz (1996) has noted: "One of the insidious characteristics of modern technology is that it is invented to be sold...once we buy into it,...it deprives us of our free-

dom by narrowing our options to a set or pre-programmed choices" (p. 22). Development of digital resources are expensive. Just as with motion pictures, the blockbusters appeal to the broadest common denominators.

Access to digital resources *should* be a function of libraries, but moderation is needed as well as consideration to the imbalance of human and financial resources piled before the altar of bytes. Daniel Mark Epstein's (1996) poignant essay, "Mr. Peabody and His Athenaeum," asks: "When the accountants explain, as they must, that the maintenance of the Peabody Library for a few hundred eccentrics is less cost effective than a new computer system that will be used for thousands, who will stand up to defend the library?" (pp. 175-76).

It need not be a dichotomy, but if the library "as place" becomes the rationale for continuing—why not as a place for books? In "The Fate of the Book," Sven Birkerts (1996) plumbs to the essence between "screen" and "book" technologies. The book represents the ideal of completion, while screen technologies, by way of a circuit, are open and available at multiple entry points. To read from a screen is to occupy a different cognitive environment than when reading a book. "The book has always been more than a carrier of information or entertainment—it has traditionally represented a redoubt against the pressure of public life, a retreat wherein one can regroup the scattered elements of self" (p. 266). Additionally, says Birkerts, "if the screen becomes the dominant mode of communication, and if the effective use of that mode requires a banishing of whatever is not plain or direct, then we may condition ourselves into a kind of low-definition consciousness...a loss of subjective reach" (p. 269). Birkerts not only defends the book against dissolution into coded bits but calls for questioning the rush to interconnectivity: "Certainly the survival of that archaic entity called the soul depends upon resistance" (p. 272).

Most startling about the library leaders' vision as reported in the Benton Report is the seeming unilateral acceptance of the digital onslaught. Print collections were built with care and selectivity over decades, but digital information systems seem to be heralded as an unquestioned solution to all information needs. Part of the vision for the future should include identification of valid sources and items reviewed and subscribed to with the same care and attention that have been given to print. Librarians must remember that "the first virtual reality is that unique near-mystical state created when words are read" (McCook, 1993a, p. 628).

Perhaps one of the most eloquent rationales for digitization appears in *Digital Image Collections: Issues and Practice*, a publication of the Commission on Preservation and Access, by Michael Ester (1996). His assessment of the way to identify items from the collection to digitize reflects

the best skills of collection development. A careful reading of Ester's treatise will reassure those who are concerned about heedless digitization.

## THE EVOLVING ROLE OF THE LIBRARIAN

Libraries are viewed by their leaders as provider and protector of equal access and equal opportunity and as community builder, civic integrator, and community activist in a digital world (Benton Foundation, 1996, pp. 10-11). Of course it is not "the library" that will accomplish these goals, but the people who work in libraries—the librarians. Working together, librarians can create institutions that provide and protect equal access, that help build communities, that integrate civic activities, and that activate change. Rather than separate roles of the library and the librarian, it is more to the point to discuss the types of individuals that will realize these goals.

At the outset, some attention needs to be given to the role of the library as an information safety net for the "information have nots." Characterization of any group of people as "have nots" is a circumlocution that bears examination. J. Robert Hilbert (1996) has written of the need of the affluent to understand the system that perpetrates economic injustice. He notes that programs for the poor look at poor people from the vantage of the middle-class, not the other way around. Such programs are developed not to serve the poor but to adjust poor people so they can fit middle-class structures (pp. 15-17).

The reason produce prices in the United States are so low is that farmworkers who pick crops are still at wages below the level for sustenance. If consumers would be willing to pay a fair price for produce, some of these "information have-nots" might be able to work fewer hours and return to school.

The equal access promoted emphasizes access to digital collections but makes no note of the fact that access via computer is like a vehicle without fuel if one is not literate or if one's language is not English. While it is commendable that "the digital age merely extends the traditional notion of the library as 'the people's university' " (Benton Foundation, 1996, p. 10), issues of literacy are more fundamental to the access needs of those in poverty.

So, if the library is to become an information safety net, the people who will make it so, the librarians, must develop an empathy and understanding of the needs of the poor from the vantage point of the poor— not from the vantage point of fitting the poor to meet the structures formulated for them.

The view of the librarian as community builder has merit, but little understanding of the meaning of community is shown in the Benton Report. It is not a new idea that librarians should become intervenors

and activists in the communities they serve. In her thoughtful Occasional Paper, *The Evolution of Library Outreach 1960-75 and Its Effect on Reader Services,* Kathleen Weibel (1982) identified four service styles: (1) making traditional services relevant to a community; (2) participation in the life of the community by the library staff; (3) storefront services; and (4) extension of services through cooperation with other agencies (p. 14). Her paper squarely defines community involvement as a core activity of the librarian.

The focus on technology and more nebulous information provision has wrenched away current understanding of this aspect of librarians' work. The addition of technology and training has been at the expense of the community/library interface. It is futile to identify community building as a goal if staffs are trimmed to support escalating computer costs.

Library leaders see librarians becoming information navigators who can equip the "information have-nots" with the tools and equipment to give them parity with more affluent users (Benton Foundation, 1996, p. 11). They also suggest librarians must become involved in community organizations.

These are interesting observations made at a time when some programs of Library and Information Science (LIS) are dropping the word "library" from their title to be able to lay claim to mastery over a broader discipline of "information." The irony that emerges is the fact that everyday people recognize the profession of "librarian" and not "information professional."

Daniel O'Connor and J. Phillip Mulvaney (1996) have made a clear case for the viability of LIS programs within the university as based in librarianship. They note "the revolutionary position for an LIS program might be to declare its allegiance to librarianship and to focus itself on this objective. Within a framework, all manner of library and information science research can still be accomplished, but it will be done in a way that is understandable to our practitioners and to university faculty and administrators. It might work to reestablish the unifying culture LIS lost some twenty years ago" (p. 315).

It is the very unifying culture described by O'Connor and Mulvaney that the leaders quoted in the Benton Report identify. Yet this culture has been abjured amidst preoccupation with the mastery of technology. As the interstate highway ripped through the nation's cities these past decades, working class communities and inner city neighborhoods were torn by elevated lanes of cement. The fascination with arrival dominated the energies of engineers and urban planners. Similarly, librarianship has poured resources into getting information from faraway places and focused its energies on digital access while neighborhoods and commu-

nities languish. The library leaders cited in the Benton Report are right to identify community building as part of the core of values needed by librarians.

The professions are always under scrutiny. In his thoughtful volume, *The Careless Society*, John McKnight (1995) asks why the United States has become so dispirited. He observes that the usual solution—call for institutional reform—through addition of new technologies, notably new highways for information, will fail because the problem is not ineffective service-producing institutions but weak communities.

McKnight struggles to analyze why professional service providers have difficulty in building community. He identifies three main causes: (1) inefficiency—the more resources poured into service agencies, the less they seem to accomplish; (2) arrogance—secure civil service employment isolates the professional from having to care about clients; and (3) the iatrogenic argument—negative side effects of technical specialized professionalism are more harmful than good (pp. 18-21).

To become community builders, librarians must seek the intuitive spirit, strive for integration of service with peoples' needs, and reconnect the library with users of all types. The fragmentation of service from community in practice has come about because of the strong recent emphasis on technology. While technology has the long-term potential to open a vast storehouse of remote information to everyone, the outreached hand that brings in the child or the adult new reader may be pulled away to tap at a keyboard. It is all about balance.

To some degree, as we rush forward, we forget our history. It was only six years ago that the recommendations of 100,000 citizens were put forth at the 1991 White House Conference on Libraries and Information Services (McCook, 1993b). The goals and recommendations of that conference lend weight to the visions of library leaders for a just and productive society.

The evolving librarian, like the evolving health care worker, will use new technologies to provide better service. However, the technologies must be used with a strong commitment to long-standing goals and recognition that human skills are as critical as technological. If librarians are allowed to work in more flexible bureaucracies more oriented toward innovation, and if they see users as participants in collective efforts to solve community problems, the evolution of the librarian is well on the way (Rabrenovic, 1996, pp. 203, 212).

## AN AGGRESSIVE PUBLIC EDUCATION CAMPAIGN

In the summary at the end of the Benton Report, libraries are directed to "seize the opportunity and define their role with an aggressive public education campaign" (Benton Foundation, 1996, p. 40). This plan

is a good one; not a new one, but a good one.  However, the game has already begun.

A number of articles in the broadest possible circulation magazines have taken to task the movement of libraries into the digital age.  Undoubtedly the most well-known are a pair of articles by Nicholson Baker (1994, 1996), "Discards" and "The Author vs. The Library," both of which appeared in *The New Yorker*.  Baker's dissatisfaction with the San Francisco Public Library delineated in *The New Yorker* was catalyzed by a core of "traditionalist" librarians over the library's "desecration" (Golden, 1997, p. 1, 10:1).  Kenneth Dowlin, director of the library, considered a visionary by many, the "father" of the new main library, rejuvenator of twenty-six branches, and implementer of computer technology, resigned on January 26, 1997.  Though Dowlin's reasons included the city's handling of library finances, critics stated that Dowlin "sacrificed the library's basic mission in pursuit of his high-tech goal" (Epstein, 1997, A, 1:2).

Commenting on "vision" in his editorial of February 15, 1997, John N. Berry III, editor-in-chief of *Library Journal*, stated, "Ken Dowlin was just inducted into that relatively small "hall of fame" for visionaries who clung to and pursued their vision until it did them in" (p. 84).  Berry also comments that close attention needs to be paid to the visions of the "former" library school programs that offer up newly created information systems courses to replace more traditional librarianship.

The Jeremiah of *Library Journal* intones: "Be warned that there is a growing divergence between these visions for an, as yet, ill-defined future and the realities and expectations of the librarian alumnae and the citizens they serve" (p. 84).

Indeed, Berry's admonitions were almost immediately realized by a February 17, 1997, *Newsweek* "My Turn" column, "A Tangled Info Web" by Ingrid Eisenstadter, science editor of *InJersey* in which the Science, Industry and Business Library of New York Public is criticized for difficulty of access.  "Who made the decision," asks Eisenstadter, "that everyone who is not computer-literate—very computer literate, in the case of our new library—could be left out in the cold" (p. 16)?

And hot on the heels of *Newsweek* comes a March 1997 article in *Harper's* by Sallie Tisdale, "Silence, Please: The Public Library as Entertainment Center."  Tisdale has done her homework.  She has attended PLA and interviewed librarians.  She has read through library literature which she finds, "strangely infatuated, unquestioning, reflecting a kind of data panic" (p. 68).  Her article ends with the sad recognition that a Barnes & Noble bookstore reminds her of the library that was.

This is probably more "popular" press than the library has had in one concentrated time in decades, but it is not the right kind of publicity.  The writer of the Benton Report was right, an aggressive campaign of

publicity is needed—but it is not needed to get out a message of our new directions, it is needed to assuage multifaceted attacks.

Bert R. Boyce (1997), dean of Louisiana State University, School of Library and Information Science and winner of the American Society for Information Science teaching award is to this writer a sensible sounding board on the information science side. He has suggested that the single most salient finding of the Benton Report was that the public does, indeed, want access to digital resources, but these need not be described as replacing traditional collections and services (Boyce, personal communication, February 27, 1997).

How is the message to be developed—ironically, through another Kellogg supported initiative that promises to clarify the issues alluded to in the Benton Report. Deanna B. Marcum (1996) has summarized a Council on Library Resources program to look more closely at public libraries that would attempt to explain how twelve especially innovative libraries are dealing with the new age of electronic information and how their communities are responding. But this study cannot be relegated to an academic report, it must be read as widely as the articles in *Newsweek*, *Harper's*, and *The New Yorker*.

## A NEW METAPHOR

Ours is not an age of anxiety. We do not fear that another great war will come and annihilate us into radioactive waste. Ours is an era of expectation. This is a time when transformations in the way we communicate, retrieve information, and store images are at a threshold of unprecedented change. While these new techniques offer new possibilities, they make us afraid that old traditions will shatter. There is intense dialog. There are those who wish to wire us all and start anew. There are those who believe that technologies will run parallel for a good long while. The challenge to us is to move forward without discarding the wonders of the past.

REFERENCES
American Library Association. (1996). Library services for the poor. In *ALA handbook of organization, 1996/1997: An annual guide to member participation* (pp. 48-49). Chicago, IL: ALA.
American Library Association. Office of Literacy and Outreach Services Advisory Committee. (1997). *Minutes of the Midwinter Meeting, Washington, DC* (February 17, 1997). Chicago, IL: ALA.
Baker, N. (1994). Discards. *New Yorker, 70*(7), 64-85.
Baker, N. (1996). The author vs. the library. *New Yorker, 72*(31), 50-62.
Benton Foundation. (1996). *Buildings, books, and bytes: Libraries and communities in the digital age*. Washington, DC: Benton Foundation.
Berry, J. N., III. (1997). "Vision" is not enough. *Library Journal, 122*(3), 84.
Birkerts, S. (1996). The fate of the book. *Antioch Review, 54*(3), 261-272.
Bronfenbrenner, U.; McClelland, P.; Wethington, E.; Moen, P.; & Ceci, S. J. (1996). *The state of Americans: This generation and the next*. New York: The Free Press.

Cheney, D. (1995). The homeless. In N. L. Herron & D. Zabel (Eds.), *Bridging the gap: Examining polarity in America* (pp.167-195). Engelwood, CO: Libraries Unlimited, Inc.

Cox, R. J. (1997). Taking sides on the future of the book. *American Libraries, 28*(2), 52-55.

Eisenstadter, I. (1997). A tangled info web: Don't be deceived; even a high-tech library still needs shelves of books and journals. *Newsweek 129*(7), 16.

Epstein, D. M. (1996). Mr. Peabody and his Athenaeum. In S. Birkerts (Ed.), *Tolstoy's dictaphone: Technology and the muse* (pp.165-177). Saint Paul, MN: Graywolf Press.

Epstein, E. (1997). Head of S.F.'s library resigns under pressure: "Visionary" chief blamed for deficit. *San Francisco Chronicle,* January 22, p. A1.

Estabrook, L. S. (1997). Polarized perceptions. *Library Journal, 122*(2), 46-48.

Ester, M. (1996). *Digital image collections: Issues and practice.* Washington, DC: The Commission on Preservation and Access.

Golden, T. (1997). A high-tech library ignites dispute over computers vs. books. *The New York Times,* January 26, p. 1, 10:1.

Gómez-Peña, G. (1996). *The new world border: Prophecies, poems & loqueras for the end of the century.* San Francisco, CA: City Lights Books.

Hilbert, J. R. (1996). A compassionate vision. *America, 175*(6), 15-17.

Horton, J. (1995). *The politics of diversity: Immigration, resistance, and change in Monterey Park, California.* Philadelphia, PA: Temple University Press.

Krautz, J. (1996). The information superhighway: A road to misery? *Contemporary Review, 268* (1560), 22-27.

McCook, K. d. l. P. (1993). The first virtual reality. *American Libraries, 24*(7), 626-628.

McCook, K. d. l. P. (1994). *Toward a just and productive society: An analysis of the recommendations of the White House Conference on Library and Information Services.* Washington, DC: U.S. National Commission on Libraries and Information Service.

McCook, K. d. l. P.; Rolstad, G. O.; & Taffae, S. M. (1992). *The context for planning: A report to the Jackson-George Regional Library System.* Baton Rouge, LA: Gulf Coast Investigations (ED 351 036).

McKnight, J. (1995). *The careless society: Community and its counterfeits.* New York: BasicBooks.

Marcum, D. B. (1996). Redefining community through the public library. *Daedalus, 125* (4), 191-205.

Morgan, M., & Leggett, S. (Eds.). (1996). *Mainstream(s) and margins: Cultural politics in the 90s.* Westport, CT: Greenwood Press.

Nethe, R. H. (1996). Mixed blessings: Second thoughts on the information explosion. *Humanist, 56* (5), 12-16.

O'Connor, D., & Mulvaney, J. P. (1996). LIS faculty research and expectations of the academic culture versus the needs of the practitioner. *Journal of Education for Library and Information Science, 37* (4), 306-316.

Puttnam, D. (1996). Citizens of the information society. *Journal of Information Science, 22* (1), 1-11.

Rabrenovic, G. (1996). *Community builders: A tale of neighborhood mobilization in two cities.* Philadelphia, PA: Temple University Press.

Samuelson, R. J. (1995). *The good life and its discontents: The American dream in the age of entitlement, 1945-1995.* New York: Times Books.

Springsteen, B., & Plotkin, C. (Producers). (1995). The ghost of Tom Joad. In *Bruce Springsteen: The ghost of Tom Joad* (CD). New York: Columbia Records.

Tisdale, S. (1997). Silence please: The public library as entertainment center. *Harper's Magazine, 294*(1762), 65-74.

U.S. Bureau of the Census. (1995). *Statistical abstract of the United States: 1995* (115th ed.). Washington, DC: USGPO.

Weibel, K. (1982). *The evolution of library outreach 1960-75 and its effect on reader services: Some considerations* (Occasional Papers Number 156, December 1982). Urbana-Champaign, IL: University of Illinois, Graduate School of Library and Information Science.

# Creating Library Services with Wow!
# Staying Slightly Ahead of the Curve

Richard T. Sweeney

## Abstract

THE BENTON REPORT (BENTON FOUNDATION, 1996) IS A THOUGHT PROVOKING
study that must be widely read. It is impossible to envision any modern
organizations, including libraries, succeeding by staying slightly behind
the curve of service improvement as presented in the metaphor discussed
by users and leaders in the report. Being behind the added-value service
curve means: (1) the needs of the majority of the people are being met
elsewhere; (2) the loss of a passionate new generation of users, and (3) a
scenario set for failure. Staying slightly ahead of the curve means creat-
ing library services with Wow!—i.e., giving users expected services but
also surprising them with added-value that they did not expect. A variety
of ideas for adding value (Wow!) to library services are discussed. Spe-
cific examples are given including time shifting, time saving, site shifting,
improving quality, reducing noise, customization, personalization, and
so on. In the Benton Report, users thought libraries should take a reac-
tive role, adapting to, rather than pioneering, new technologies. Since
digital technologies can and already do offer previously impossible new
services that can greatly improve consumer satisfaction and added value,
a reactive role to technology is not a prescription for success. Providing
sophisticated, value-added services, enabled by proven powerful new
nonlocal technologies, supports and fosters the library's local higher pur-
pose (public good).

## Introduction

The next generation public library must re-create the excitement

and passion for libraries, personal enrichment, and curiosity for learning that characterized the public library of the early twentieth century. The most crucial strategy is to rekindle the enthusiasm of the younger generation who have just become or soon will be voters. The future prosperity of the public library depends upon re-creating such passion through a clear, unique, essential, compelling vision that is a real public good and providing more attractive services of far greater value to a larger percentage of the potential user population.

Passion for libraries will derive from added-value service satisfaction, not from technology, telecommunications, computing, and buildings. Technology is an opportunity, in a number of essential ways, to add value to user services, but it is a means, not an end. Digital libraries, though very complex and with their own accompanying problems, can enable enormous innovative service opportunities—i.e., storing and retrieving dynamic integrated documents; providing exciting multimedia; reducing the constraints of time and place; enabling customization and personalization; involving through interaction and participation; promoting collaboration; and reducing the costs to author and to publish documents and to create libraries. Sometimes simple low end technology can also often be employed to enable high impact user service satisfaction.

The public library must reinvent itself by incorporating new services that provide quantum leaps in added value to users. Such reinvention will require new organizational structures, new staff skills, constant learning, collaborative partnerships, more focused and compelling visions, technology, and strong leadership. Innovative library services and structures are essential and will require extraordinary imagination, nerve, and resourcefulness. These are huge tasks, requiring strong leadership, with profound implications for the library profession and current library stakeholders. Leaders are especially needed in this time of great change.

The Benton Foundation's (1996) *Buildings, Books, and Bytes: Libraries and Communities in the Digital Age* is a thought- provoking study that must be widely read. It should help public librarians, their leaders, politicians, users, and the public understand how both library users and library leaders think about the future of public libraries. It has shown us that "the general public's ambivalent attitude toward libraries' identity and role"(p. 39) places "libraries firmly in the past"(p. 30). This demonstrates that many users, especially the younger generation, currently lack passion and enthusiasm for library services. The evidence presented in this report suggests that the library leadership has failed to sell a compelling vision of the future public library to the average citizen. The report says that the public library has failed among young adults to generate more than 27 percent support for the "notion of the libraries' increasing importance..."(p. 19). In short, the young do not see much of a future for public libraries.

In spite of some impressive public library examples of compelling future library visions, innovations, and services, citizens, particularly the younger generation, remain either largely unaware or unconvinced. Perhaps this is because many library staff either lack the vision and/or find the future vision to be troubling, uncomfortable, or painful. If public library leaders do not boldly, constantly, and publicly sell their vision for the future, then certainly libraries will be firmly rooted in the past.

Public surveys, such as the Benton Report, are a valuable source of current customer attitudes but are not a good way to create a vision of the library of the future. Public libraries need leaders with strong and compelling visions of the future, who know what is possible, who convincingly sell that vision to the citizens, and who are willing to take the necessary risks to make that vision a reality.

Robert Lutz, vice chairman of Chrysler Corporation, said: "Let's face it, the customer, in this business and, I suspect, in many others, is usually, at best, just a rear view mirror. . . .Being customer-driven is certainly a good thing, but if you're so customer-driven that you're merely following yesterday's trends, then, ultimately, customers won't be driving your supposedly customer-driven products!" (p. 84).

Almost any corporate executive will tell you that the average consumer does not possess a compelling vision of the future. Rather the average consumer wants the best that they have ever seen from choices they have been presented. The majority of consumers do not possess the necessary knowledge, skills, or creativity for composing a compelling vision of the future in a particular endeavor such as libraries. This is the work of visionary management and staff. It is the work of library leaders.

STAYING SLIGHTLY AHEAD OF THE CURVE

"The 'behind the curve' metaphor permeated these Americans' views of libraries..."(p. 30). Can public libraries survive, as the survey participants suggested, and "stay just behind the curve? " (p. 30). Perhaps this is the most disturbing part of the report.

What is the curve discussed? The curve, mentioned in the report, represents technology use over time within libraries. The curve should have meant the number of users, over time, who are satisfied with the added value of a service enabled by proven new technologies. The curve of those using enabling technologies always precedes the curve of users satisfied by a service. The curve of service satisfaction means pioneering huge service improvements or new services enabled by new, but proven, technologies.

It is impossible to envision any modern organization succeeding by staying slightly behind the curve of service improvement. If the public library is not viewed by the majority of the voters as current, relevant, and meeting their needs, then it very likely will lose both political and eco-

nomic support. As with most new products and services, the earliest adopt-
ers and those who arrive behind the majority of service providers, share
the same fate, a high probability of failure.

Being behind the added value service curve means that the needs of
the majority of the people are being met elsewhere. This is a scenario for
failure. The majority of users who find satisfaction elsewhere will not
usually be motivated to switch later to the public library. They will also
be less likely to politically support the public library. Competitors such
as Barnes & Noble, Blockbuster, and Internet providers, have demon-
strated not only that they can quickly deliver new services and greater
added value for a fee but also that they can attract many former users of
the public library.

If public libraries lose more economic middle-class users they will be
increasingly viewed as the agency for the poor and those on the margins
of society. While this is a worthy group of users who indeed must be
satisfied, it will be increasingly more difficult to obtain adequate political
and/or economic support. The public library must cultivate a large pas-
sionate group of middle-class users especially among the young voters.
These voters are people who have needs that are not being met currently
because they do not have the time to come to the library, or because the
public library does not have the services, materials, equipment, informa-
tion, and/or just because it is just too inconvenient to use. Society has
changed, but many public libraries remain very traditional in their ser-
vices.

If some public library administrators or boards of trustees blindly
follow the "behind the curve" metaphor, it will become a self-fulfilling
prophecy, and those libraries will become a "kind of museum where people
can go and look up stuff from way back when" (p. 30) as the report
describes. The demise of public libraries as we know them can happen
only with failures of imagination and nerve. There is little doubt that
there will be a continuing "Great Debate" between those within the li-
brary profession who favor continuing the status quo, traditional library
services delivered in traditional ways, and those who favor innovative new
services and great improvements in existing services with much more value
added.

Leigh Estabrook (1997), in a recent *Library Journal* article, says that:
"The existence of digital libraries, home computers, super-bookstores,
and private information providers requires that libraries change. *BB&B*
provides insights into how" (p. 3).

Improvements in service, by definition, require change. Accelerated
improvements mean accelerated changes. Every improvement involves
change although not every change is an improvement.

Everyone is aware of the pervasive acceleration of our society. Alvin
Toffler (1970) spoke of this coming acceleration in *Future Shock* as early

as 1970. We are both the beneficiaries and victims of this acceleration in our work, play, recreational, and spiritual lives. The very turbulence of the changes makes it difficult to stay current, to compete professionally, and to keep time for ourselves. Yet we are benefiting from new and improved services and much greater value added.

The politics of the status quo is always easier, at first, than the politics of great improvement. Change causes friction between those who want the status quo and those who want improvement. Many call the politics of status quo "institutional inertia." Public institutions that seem to successfully resist great improvements (i.e., changes) are ultimately superseded. Furthermore, change will be resisted by those most vested with the status quo and with the most to lose through change. Institutional and personal inertia, no matter how well intentioned, often blocks and or stalls improvements. That is precisely why the library profession now has the "Great Debate" which will be mentioned later.

Those organizations which are slightly ahead of the curve stand the best chance of success. Public libraries, like other organizations, must be far enough behind the earliest adopters to learn from their initial mistakes (i.e., those with far more resources), and far enough ahead of the majority to achieve a large market share. As will be discussed later, success in the digital environment will go to those with the largest market share.

Public library "market share" is twofold: (1) those who use and depend upon public library services, and (2) those who vote to be taxed in support of the services as a public good. Public libraries must strategically and dramatically increase the market share of both groups in their local service districts, and this cannot be done by being behind most of their users. Progress can only be accomplished by staying slightly ahead of the curve—i.e., staying ahead of library user expectations.

Imagine the enthusiasm of a young woman obtaining her driver's license or new multimedia computer. Now imagine that young woman generating that same wonder, excitement, curiosity, and passion using new library services. The public library of the future, like all organizations, must create what Tom Peters calls Wow! Libraries must not only give consumers what they want but surprise them by giving them some added value that they did not expect.

Library use is and will be discretionary and must have a noble public good. It must stimulate and excite user interest. Future libraries will compete with all sorts of other attractions for our time, attention, and dollars with alternatives that pique user curiosity, stimulate learning, promote enjoyment, and uplift our spirit. The vision of the public library of the future must engender passion and satisfy user personal interests, lifestyles, values, learning styles, pace of living, and so on. And the public

library must clearly be in the public interest—i.e., it must satisfy a clear public good needed by society.

What happened? Why doesn't the new generation share the same passion for libraries held by the previous generations? Is the public library doomed to ultimately decline until it is of marginal use and need? Will the developments of the digital world zoom past the future public library as many library users claim in the Benton Report?

It is not too late. There are already powerful new service innovations, ideas for services, new and proposed organizational structures, and systems for generating renewed passion, but they are not widely known or used. In addition, the profession has just barely begun to generate such creative services and, more importantly, to recruit bold visionary leaders who can make them happen. Which library boards and leaders will be bold enough to take the necessary risks?

## ADDING VALUE

When you, as a customer, say "I got a great value" what do you mean? More often than not, you mean that you got more than you expected for the money you paid. Creating library services with Wow! is about adding value to user's lives. Providing Wow! means that libraries must not only give users what they expect in added value but surprise them by giving them some added value that they did not expect.

Understanding the Wow! of the library of the future means understanding how a library adds value: (1) to individual public library users, and (2) to the community in the form of a public good. Specifically, the public library must add specific agreed upon value to the community as a whole. This is why the public library is a community institution funded primarily with tax dollars.

The concept of adding value to and through services is not well understood. There is no direct and automatic cause and effect between work performed and value added. Although a lot of work may be performed, user value does not necessarily increase and can actually decline in some situations even though a lot of effort, time, and money have been spent. Value added occurs at the end of a process when the total steps, activities, tasks, and resources produce an output which the user judges as value added. Even high quality processes/services do not necessarily add value from the customer's perspective. Value added means providing real benefits from the customer's, and only the customer's, point of view.

Value as seen by a customer is not measured by the quality of the service per se but by the quality of the result for the customer. In short, we need to measure our progress by what our users tell us even when such measurements may be "soft." Hard counts, such as circulation, may

be easier to measure but do not let us know about user perceptions of added value.

Value added also means that the service is valuable in relation to direct user costs. Sometimes users prefer to purchase an equivalent but improved service elsewhere rather than use a free library service since it provides the minimum added value they require.

Recently, this author's twenty-six year old daughter decided to spend $50 of her own hard earned money to become a member of a larger public library, about six miles further away than her local public library, because the amount and availability of books, videos, and services was so much greater. In short, the local public library is currently insulated from dissatisfied library users taking their tax dollars and going elsewhere. If this continues, the library community can expect competition in the form of political erosion as our younger users find better services elsewhere.

The value of a specific service must also be judged in relationship to the user's personal time and effort spent. Only the user can judge this. For example, one user may be willing to pay a higher personal cost for a service in order to save time, while another user may find the extra cost prohibitive.

Imagine that a user goes to the library and looks for a specific book— e.g., *Angela's Ashes*, which a friend has highly recommended. *Angela's Ashes* is not owned, so the user takes out four others that might be of some interest. The circulation count might show an increase of four, but the user leaves disappointed and has to tell her friend that she could not obtain *Angela's Ashes*. The four other titles, on the other hand, may or may not prove to satisfy her. She may order *Angela's Ashes* through inter-library loan and get it in a few weeks which might be enough to satisfy her or perhaps that would be too late. The point is that only that particular user can tell whether she was satisfied and what would have improved or added additional value.

The circulation function of a library is one which usually adds no value to a person who is standing at the desk ready to check out his/her books. The user's objective is to leave the library or go onto something else with the books already in hand, in the shortest possible time, and with the least amount of hassle. Circulation adds no positive value to that particular user.

It may appear difficult to add value by saving time with some services such as charging out a book. However, there are ways to decrease the time a user must spend waiting to charge out a book. Circulation adds value in the form of some security (i.e., insurance) to stimulate getting books returned so that the next user can obtain them. Incredibly enough, libraries often spend far more money on staff salaries to get books returned (i.e., circulation) than they do on purchasing new books. The

added value of circulation for the user is to minimize the wait, hassle, and cost (less noise) of borrowing books from the library *and* to increase the stock of interesting titles. The best circulation process is one with no wait and no checking, invisible to the user. Value can be added to the immediate user by removing hassles and "noise." Self-check-out circulation, while still not 100 percent effective, may finally be the needed improvement in minimizing user noise and hassle.

By comparison, it may be easier to understand the user's attitude when thinking about standing in line at a motor vehicles department when all the person wants is to be able to drive legally and without annoyance. The purpose of motor vehicles departments is to ensure safe drivers and vehicles, not to grant paper licenses, permits, registrations, and make people wait.

Value can be added in many ways, cannot be taken for granted, and must be continually assessed. Adding value may involve but is certainly not limited to:

- making a service easier to physically and intellectually access and use;
- providing a more desirable document format;
- supplying more accurate, current, and reliable information and documents;
- providing all of what the user wants and only what the user wants;
- saving user energy and resources;
- saving user personal time;
- shifting user service to a more convenient time;
- reducing noise and unwanted distraction;
- saving user money; and
- adapting input and output in a personalized or customized manner that makes personal and group work flow easier or faster (some of the added value concepts noted were suggested by Taylor [1986]).

Value can be added with or without technology. For example, library service may be expanded by adding more convenient hours, increasing value. Sometimes technology can add value, such as when a user can search the library catalog from home without traveling to the library to find out whether the item is available. Sometimes technology does not provide direct user benefit such as the early online circulation systems that required more time to charge out books even though they were more thorough.

## SAVING TIME
Saving user time means that a user perceives that the amount of personal time collectively and cumulatively spent has been reduced in order to access and receive satisfaction from a particular service. Saving time may also include the time spent preparing to use a service or the time

spent integrating the output of that service into later work—i.e., personal or group workflow. For example, if a user is going to cut and paste some quotes into a paper that he/she is writing, then providing the output of the article as ASCII text or a word processing file may be time saving in the long run, even though it may take slightly longer in obtaining the direct service. Libraries have traditionally only considered the user's time in receiving a service and usually only at the library.

Sometimes a librarian might not completely understand the user's need. A user may rely on a single particular online, less complete, resource. The librarian may assume that the user is not getting the best quality since the search was not comprehensive. The user may decide, given his/her limited time, that it is worth trading off a comprehensive search in the best available sources in favor of a faster search. The user may not even have the time just then to learn a new database even when it may be a far better source. This is the very reason that "value added" can only be judged by the user.

Saving users' time may be the fastest growing added value in importance, since every person has a limited fixed amount of time and attention, for which there is increasing competition. In a world of accelerating improvements—i.e., also accelerating change—most users want services that save more of their time, their most valuable personal resource. In this world of accelerating change, the library risks losing users (and their political clout) when they feel that the library has not saved them more personal time. Saving user time may be the key to increasing the number of middle-class public library users.

## Shifting Time

Shifting time means providing more convenient times (alternatives) when the user can access and receive the service. Shifting time is different than saving time although they can overlap. Scheduled library hours are one traditional way of time shifting. All time is not equal. There are times when many activities demand and require a user's attention and others when the user has more freedom or latitude to choose where to focus. A library which understands this will be more successful and add value to user services by adding many more convenient hours.

ATM machines are a great example of time shifting where services such as withdrawing cash, making deposits, and checking balances can happen anytime. ATM machines probably will absorb less consumer time since customers can ordinarily bank at off-peak times (time shifting) and wait less (time saving). Ironically, the actual time to complete a bank transaction may be the same or even longer than when a teller was delivering the service, but the ultimate overall value added is what counts.

One example of a new library service which provides time shifting is relatively simple technology: lockers with one-time user combinations

(e.g., American Locker Security Systems, Jamestown, New York). In this service, a library builds a lobby adjacent to it that can be accessed at any time even when the library is closed (similar to an ATM lobby). The lobby itself could be locked and accessed with a combination, or a library card, or even left unlocked. When a user has searched and discovered a book but cannot get to the library because it is closed, the user may request the item to be placed in a locker. Books are placed into a computer-controlled locker from a secure staff area, usually circulation. The user is called or sent an e-mail message or fax with the locker number and the combination. The user, and only that user, can then stop at the library anytime, enter that unique combination, and pick up the book(s). Once that locker has been opened it can no longer be opened with that combination. There is even an audit trail of activity. The user both shifts time by not having to be present during regular library hours and also saves time.

Digital libraries shift time when the user is satisfied from home, school, office, etc. over the network. Indeed users are able to obtain library services when and where they otherwise would not have the opportunity. In the early 1980s, the Public Library of Columbus and Franklin County, Ohio (now the Columbus Metropolitan Library), joined in an experiment called Channel 2000 along with OCLC and Bank One. In this experiment, users were able to search the library catalog from home and order books which would then be mailed to them. Any book would be mailed free, hardback or paperback. This service predated personal computers in most homes. It was enabled by telephones, televisions, and a special box (primitive computer). The service was so popular and easy to use that the library finally had to place a limit on the number of books which could be borrowed at one time (nine). Interestingly, the primary users of the service were not heavy users of the traditional library. The users were professionals, bankers, lawyers, and others too busy to get to the library during regular library hours. Channel 2000 was a great example of time shifting.

One other observation about the service was that at the end of the experiment, the service also ended. It was estimated that providing the service to the entire metropolitan community might cost about the same as two large branch libraries which politically could not be sacrificed.

In a speech to the Public Library Association in San Diego a few years ago, this author suggested that the library profession should pursue the library's equivalent of the ATM, called the Automatic Library Machine (ALM), which would be placed in many public locations and neighborhoods. Automated kiosks (e.g., PIKinc Germantown, Maryland) are now available and provide searching and retrieval of information and faxes to public machines but do not yet provide books. The ALM, still just a concept, goes one major step forward by permitting the borrowing

of books.  The ALM could store a collection of several hundred books with some titles available for immediate circulation to the next user.

Other ALM titles could be placed on reserve by users who request that the library deliver that particular title to their local ALM.  Imagine that you can search a public library catalog from home; locate an available book, video, or audio CD title; and have that item delivered to a local ALM in your neighborhood within twelve hours any day or night. You could then charge it out at your convenience.  Imagine also that, when a user returns a book, it is immediately charged back and automatically placed in an available slot so that it can be borrowed by the very next library user.  Such a machine would involve an elaborate delivery system. However, consider the value added for users (time shifting, time saving, and site shifting).  Such ALMs could be jointly owned and operated consortia of public, school, college, and other types of libraries all sharing the same machines. The ALM could become a virtual local branch library until the day occurs when it is feasible to deliver and print out books over the network from user homes and offices.

### SITE AND LOCATION SHIFTING

Libraries have been providing site or location shifting for years through branch libraries, bookmobiles, and books by mail.  Location shifting, reducing the importance of geography in obtaining a specific service, is expected to have even greater impact on library services in the future.  Branch libraries have made it possible to use a "local" library rather than to have to travel further distances to main libraries. Of course, the branch library often has hours which are fewer than the main library (less convenient time shifting), and they typically have fewer books, videos, and services (less user-satisfying service).  Yet branch libraries flourished and still do.  They are visible, concrete, bricks and mortar, and they fit a sense of community.

Bookmobiles are mobile, but they lack the permanence (much less convenient time shifting), and have much smaller collections, greatly limiting usefulness to different user groups.  Bookmobiles did increase site shifting convenience but usually not enough to offset their weaknesses for most people.

Books-by-mail programs began in rural America but also brought library services to people who otherwise would be totally unserved because of geography.  They were excellent at time saving, time shifting, and site shifting, but they greatly delayed user satisfaction and were initially very costly.  They usually involved the printing and distribution of expensive book catalogs which were often only a small subset of the total number of books available at the library.  In order to control expensive mail costs, many were limited to paperbacks.  Such books-by-mail services

lack the visible concrete political presence of a nearby branch although the service is still very important to many user groups.

Today the service options available to libraries to increase time shifting, site shifting, and service satisfaction have exploded due to the Internet which makes it easy to search and retrieve articles from home or almost anywhere. The catalog of the books-by-mail programs can be replaced at far less cost through a Web server.

## QUALITY

Value can be added in the form of precision, reliability, accuracy, and consistency—i.e., quality. This is the heart of quality. Users expect precise accurate targeted services. If the expected service requested is a book borrowed from another library by a particular date, the consumer will not be satisfied if it is late. If no date is given then the user will expect that the timeliness will meet his/her unspoken needs. This seems so obvious that it is easily overlooked. Users expect a consistent level of service, however, whenever and whoever delivers that service. This takes a lot of care, training, and preparation and is not easy. Quality is perhaps the most important aspect of adding value in a service. Does the user get the service that was paid for?

Users and librarians are very familiar, unfortunately, with searching the library catalog and finding an apparently available title and then not being able to find it on the shelf. This can happen for a variety of reasons but it suggests to the user that the library is not able to deliver a consistent level of access and quality.

Studies of reference services by Crowley and Childers (1971) have shown that most reference questions answered by public library staff are inaccurate. The rate of inaccuracy has not changed much over time. Part of this was due to having out-of-date library reference sources and information, part to inadequately trained or insufficient library staff, part to a poor communication interview, and part to a lack of precision or comprehensiveness in resources. The average citizen may not usually think of the public library as their first choice on answering important and timely information questions accurately. One library, or even one librarian, may be better than others, and collections may vary widely from community to community, thus there exist few quality standards in reference services.

It is now possible, given the new technologies, to greatly improve reference accuracy. This can be accomplished with co-operative or collaborative databases. Librarians have an opportunity to immediately correct what is inaccurate and add more complete and timely information (i.e., higher quality). This has happened in cataloging with OCLC, where librarians have had a chance to correct errors and note appropriate revisions that their colleagues might have missed. When a database is up-

dated continuously, and when all librarians who use it have an opportu-
nity to update, add, correct, or comment upon the data, it is much more
likely to be reliable and timely.

Quality reference service also requires a widely implemented train-
ing program in all of the reference sources to ensure consistency. Clearly,
the accuracy or currency of an answer to a professional reference ques-
tion should not depend upon chance.

## PERSONALIZATION/CUSTOMIZATION

"As companies gather, organize, select, synthesize, and distribute in-
formation in the marketspace while managing raw and manufactured
goods in the marketplace, they have the opportunity to 'sense and re-
spond' to customers' desires rather than simply to make and sell prod-
ucts and services" (Rayport & Sviokla, 1995, p. 85).

When a consumer buys a shoe, he/she understands the importance
of the right fit. Yet, when libraries provide services, generally, one service
is designed for all. Future library services will no doubt be more custom-
ized and sometimes even personalized.

Personalization is developing as a result of advanced automation tech-
niques and the understanding that each user has his/her own require-
ments. Personalization is happening in service industries at an unprec-
edented rate since it adds great extra value to users. For example, the last
time that I ordered shirts from Lands End™, the customer service repre-
sentative asked me if I wanted my shirts like the last time I ordered them,
monogrammed, straight collar, extra stays, and so on. Not only did it
save me time, but it kept me from forgetting and having to return the
shirts for what I really wanted. It was real value added.

Has the day yet arrived when libraries can provide such customization
and personalization? Years ago when a user went to the local public li-
brary he/she was provided a personal service called reader's advisory,
which over the years became impossible to sustain because of increased
volume. If the librarian knew that the user liked John Grisham novels,
for example, and that most users who liked Grisham also liked Tom Clancy
novels, he/she would recommend a Clancy title if one was available on
the shelves. This could easily be duplicated in today's public libraries by
keeping statistical data and by comparing personal usage with local pat-
terns. Of course, all librarians would immediately argue that circulation
systems must protect user privacy by not keeping personal data on users
once books and materials are returned. Smart cards now make it pos-
sible to store every book that a user ever borrowed and other informa-
tion that could personalize the library while protecting the user's privacy.
Furthermore, such data go home in the user's wallet and are encrypted
should the card ever be lost.

EASY TO USE

Library systems which may seem straightforward and easy to use by staff are often impossible to use by new or casual users. For example, the library typically has been organized using a single classification system rather than providing alternatives easily adapted to different users and their styles. Public library users may have a problem when they search an academic library organized by the Library of Congress Classification scheme if they only know Dewey; or when they try to search for "electronic" libraries in the catalog and miss the material cataloged under "digital" libraries; or when they misspell a search term and have the catalog tell them that there are no books on that subject; or when the catalog gives a call number with a collection name but does not explain how to locate that collection. The examples are endless.

About two and a half years ago, this author took his fourteen-year-old daughter to the local public library to conduct a search for articles about Montreal attractions. She wanted to show that she could search the CD-ROM. After coming up with five citations that were among the local library's magazine subscription list, she proudly gave the citations to her father and asked him to retrieve them. She indicated that the librarians must personally retrieve the articles out of a back room and that they would respond better to adults than children. After waiting in line with three other adults for about fifteen minutes, the author gave the librarian the citations. The librarian returned in about five minutes with two of the five citations. Two issues were missing, and the librarian was too busy to get the fifth at that time.

Today such New Jersey libraries have digital access to articles, some on CD-ROM, and some available over the Internet/Web. There are designated geographic regions of the State Library of New Jersey (e.g., InfoLink) which have contracted with EBSCO using state funds to provide EBSCO Master File 1000, a networked database of abstracts and indexes to about 3,000 journal titles and the full text (ASCII) to about 1,000. Any public (or other) library in that region can immediately provide articles from 1,000 journal titles free to users and can interlibrary loan articles from the other 2,000 easily. The New Jersey State Library (Libraries 2000 Plan, a practical but visionary plan led by Jack Livingstone, state librarian) is even attempting to fund equipment and training for network access in every library, even the smallest. The user can obtain the articles from those titles directly and without waiting.

These services enable users to retrieve magazine articles directly without assistance and with virtual certainty that the magazine issue was not stolen. They can retrieve the articles faster and with less effort. From the user's point of view, value has been added to the service since they are assured of completeness and availability (quality—no missing issues) and since they do not have to wait or spend the time searching for and photo-

copying the magazine (save time). In the future, users will want that same service delivered to their home (site shifting and time shifting).

The Benton Report suggests: A third (35 percent) think it will be most important for libraries "to be a place where people can read and borrow books." Another third (37 percent) believe it will be most important for libraries "to be a place where people can use computers to find information and to use on-line computer services" (p. 22). Estabrook (1997) notes: "As increasing amounts of information are available electronically and home ownership of computers becomes ubiquitous, the library's hold on these first two 'places' becomes tenuous" (p. 47).

This means that users will want to search and print out the articles ultimately from home, completely bypassing the physical library. From the user's point of view, it will save time since they can accomplish their work without traveling to the library and expend far less effort and personal cost. It will also be far more convenient since it can be used late at night and at off-peak times when the library is closed. In short, a large amount of value can be added.

Recently this author conducted a search from his office on UMI's ProQuest Direct business database, found what looked like a relevant article in *Fortune*, downloaded and printed it at his desk. The most interesting part was that this article was dated March 3, 1997 but was printed on February 25, 1997. The currency of the information in this case was far better than the CD-ROM copy out in the library. In fact the article was available at about the same time that it was published on the newsstands. While this is not true of all UMI titles (due to their contracts with publishers), online information has the potential of being much more current. Currency is the future of publishing on the Internet and a way to add great value for users.

Many libraries are worried that direct user service such as ProQuest will "bypass" the library—i.e., that companies will do direct marketing. The library selects and licenses such databases and ensures that users know about it, and how to use it, and subsidizes the cost. This is added value. It means that less staff labor will be spent and this is certainly an issue that must be faced with library staff stakeholders. The point is that users will find a way to get this service whether the library delivers it or not. If libraries do not provide it, then they will lose relevancy, and political and, ultimately, economic support.

Value can also be added by making services easier to use, requiring both less effort and knowledge. The library catalog, in spite of our best efforts, is not easy to use when compared with other search tools. The library is often not open the very hours that users need it most. The catalog often does not give enough information to locate an item on a specific shelf. The catalog requires searching for music by text. Users

cannot yet browse the major movement of different recordings or perhaps the trailers of films in the catalog. Imagine searching films of full motion showing, for example, the images of all of the Stephen King films by speedily browsing little screens. Search tools have improved greatly but are still not particularly user friendly. There is work occurring here which will create future catalogs that will be more like Flight Simulator than our current OPACs.

Public libraries can be formidable to use. The user's chance of going to a particular public library and walking out with a specific desired title is fairly low. The distance to the library, the lack of parking, lack of good signage, and so on often means that the library is not easy to use. The library does a pretty poor job of weeding out irrelevant material and users desperately need assistance and easy-to-use tools to filter out the unneeded material.

Another added-value library service comes in the form of alternative document formats to suit a particular user's needs. Many public libraries do pursue alternative formats. However, they often operate these services as though such formats were either a luxury or marginal and/or incidental to "fundamental" public library services—e.g., books.

Because of the time pressures already mentioned, many users now want audio books rather than printed books. This service enables users to capture time already chosen for one activity (e.g., driving a car or jogging) and use it simultaneously for other activities (e.g., listening to a book). In short, they can save time and provide a pleasurable or informative experience (e.g., language tapes). For many people, such audio document formats are the only way that they will use library services given their limited time. Are these users any less important than users of printed books? Does the library provide as comprehensive a collection of audio tapes as it does for books?

## SERVICES ENABLED BY DIGITAL LIBRARIES

The Benton Report states that users think that, "libraries should not take the lead in providing services in the digital age. . . .In fact, they [users] thought libraries should take a reactive role, adapting to, rather than pioneering new technologies" (p. 30).

Digital technologies can and already do offer previously impossible new services that can greatly improve consumer satisfaction and added value. If public libraries fail to take timely advantage of the opportunities of digital technologies to improve services, they will surely lose both market share and relevance to their users. Even so, digital technologies are only important as they enable quantum leaps in service innovations and huge gains in value added.

Libraries have never been, are never likely to be, and should not be in the business of technology research and development. They do not

have the capital, expertise, or mission to create new technology. Libraries have historically relied on vendors to research and develop new technologies such as the OPAC. Libraries are in the business of satisfying users' information and document needs, and this means taking a proactive role in identifying and effectively using proven new technologies that can deliver value-added as soon as feasible. Libraries cannot afford to be alpha or beta test sites on delivering production services to all users. No libraries should pay vendors for unperfected and/or not yet adapted technology to deliver production services affecting all or most users. Libraries should only test new services using new or unproven technologies in carefully limited ways that do not negatively affect their users.

"A library is more than its collections or buildings; it is part of a social strategy to create 'progress in the Sciences and Useful Arts,' in the words of the Constitution. How might a digital library support the new kinds of research and creativity of an Information Society?"(p. 3). Peter Lyman (1996) states, "they suggest that even the most elementary kind of digital library will require more than an evolutionary change" (p. 10).

Just as physical documents—e.g., books, videocassettes, audio CDs, etc.—are the knowledge objects of the traditional library, digital documents are the knowledge objects of the digital library (e.g., digital representations of books, computer programs, interactive multimedia, etc.).

Digital documents can appear in many formats and, in some cases, can be transmitted and stored digitally, then printed and bound in a custom format when and where needed. Digital documents most certainly can and will frequently involve hard copy output. Digital documents can actually interact with the user and respond to the user's requests. For example, readers who have poor vision might change the document to increase the font or image sizes. Some interactive documents also enable users (not just authors) to directly add value in the form of new information.

Multimedia digital documents excite a greater number of our senses with much more information, including full motion images, animation, sound, speech/voice recognition and synthesis, graphics, numerical data, databases, process representations, and anything which can be represented digitally. Multimedia documents capture the imagination, are more memorable, and pique the curiosity of users.

Digital documents are cheaper to store, market, and distribute and therefore greatly decrease the cost of publishing as well as the cost of creating and maintaining libraries. Personal and small group digital libraries will soon become affordable and easy to operate. No inventories are required and no huge buildings are needed to house "collections." The decreased cost of publishing and distributing digital documents will provide less expensive opportunities for authors, artists, film makers, poets, vocal artists, and a whole group of other document creators to create and

sell documents to a much larger market. Publishing will boom in this digital era, and individuals and small groups will be the creative source for much of this publishing.

Digital documents can change dynamically. The updated version of digital documents can instantly supersede and replace older documents whenever desired. For example, a *Consumer's Report* on a new model car can be made instantly available to assist potential buyers.

The digital library reduces the constraints of time and locale (time and site shifting and time saving) so that users can browse, search, select, and use published documents 24 hours per day, 365 days per year. The digital library potentially enables almost immediate access to needed documents. Of course, this will not happen when the systems are down or too slow.

Current telecommunication costs are relatively expensive and inhibit remote access to huge digital documents (e.g., movies) for long periods of time. The experts are now predicting, based on improved technology, that the costs of bandwidth (bits per second) will be about 1,000 times less in ten years while computer power will cost about 100 times less in ten years. The cost of distributing, marketing, and selling digital documents will continue to fall while the cost of hard copy publishing continues to rise (e.g., journal prices). Public libraries must understand and position themselves so that they can take advantage of service improvements as the technology becomes feasible.

The digital library enables an extraordinary level of customization that is a change in the very notion of traditional institutional libraries. Traditional book stores, video stores, and libraries appear the same to the user. The digital library enables each user to customize the library in the manner in which documents are organized and arranged, to decide where they are to be stored, to decide what the format and appearance of each document will be, and how the documents can be integrated into the user's work flow. Such extraordinary customization actually can enable the digital library to appear personal and unique.

In short, it is not only possible but desirable to customize digital libraries to the unique needs of individuals and small teams of users. For example, a certain group of documents can be arranged in order of importance based on some rating system that the user has established, by the date documents were added to the DLB, or by the order in which they were read or used and so on. The possibilities are endless.

Digital documents have a number of obvious inherent advantages when compared with physical documents. They require much less space and therefore cost less to store. The quality of the digital document does not degrade over time. Movement of the digital documents from great distances is virtually instant when compared to moving physical docu-

ments.  Not only are digital documents stored and moved electronically, but they may be produced as hard copy when and where needed.

The problems of the digital library are immense and will grow as the profession learns more.  The problems include, but are certainly not limited to, preservation, physical access, intellectual access, intellectual freedom, universal access, content quality, privacy, security, and so on.  For example, one recent discussion on the public listserv was how to place public personal computer screens so that other users cannot invade the privacy of the user and so that library users who are just walking past are protected from potentially disturbing material.  The problems are many, but the potential opportunities for providing services with Wow! are much greater.

"The virtual value chain redefines economies of scale, allowing small companies to achieve low unit costs for products and services in markets dominated by big companies" (Rayport & Sviokla, 1995, p. 84).  "As companies gather, organize, select, synthesize, and distribute information in the marketspace while managing raw and manufactured goods in the marketplace, they have the opportunity to 'sense and respond' to customers' desires rather than simply to make and sell products and services" (p. 85).

This means that not only will software decrease in cost, but digital publishing is likely to be much less costly than its hard copy counterpart.  It is a shift from supply side to demand side thinking.

For example, in the near future, it will be possible for public libraries, realizing the power of the digital library, to create new and innovative services that really get that Wow! from users.  They may actually collaborate and "publish" an online networked reference database which might include encyclopedias, dictionaries, atlases, and a collection of the 1,000 most used reference tools.  This is a project that might be the library profession's equivalent of the Human Genome project.  Perhaps this will be the logical, much more expanded, and better funded successor to the Internet Public Library sponsored by the University of Michigan (www.ipl.org).

Imagine every citizen getting access from home or office to such information which will be kept constantly current and linked to local information as well.  Public libraries could provide 24 hour reference services, sharing the costs and labor in a huge collaboration effort crossing states and regions of the country with professional librarians providing expert assistance when needed.  Such collaboration, already exemplified by the history of OCLC, can provide enormous and exciting service opportunities that libraries individually could not hope to accomplish.

Many libraries institute, maintain, and/or collaborate and provide critical local community information which is fully supported by the local citizens and is not only accessible in the library but from home as

well. Local community calendars, agencies, organizations, clubs, and other local lists; local newspaper indexes; interactive multimedia courseware; job ads; employment opportunity files; business, economic, and census data; child care provider information; state, regional, and federal databases; local school and college information; and so on may be part of this. Some libraries provide higher end computers, peripheral equipment, and software for users, and distance learning site facilities for colleges, collaborative activities with museums, art galleries, theaters, and other cultural agencies. Some offer Internet provider services and meeting areas for the community.

Digital library services are not the only way to add value. Perhaps new branch libraries will become lifestyle branches rather than just geographical neighborhood branches. Imagine a local branch library that is dedicated to the health, exercise, nutrition, and the environmental consciousness of users. Or imagine a public library branch that is exclusively a community learning facility where users can study packaged courseware, discuss the material with other students, and collaborate with external degree programs and/or local community colleges. Perhaps some branch libraries could be generational and follow users as they grow older. Imagine, for example, a Generation X branch library, tied to local colleges and the YMCA/YWCA, new parents groups, and other agencies that are currently related to that generation. It is somewhat amusing to consider that such libraries might no longer fit very well with Dewey's useful but dated classification scheme.

## FINDING AND DEFINING THE PUBLIC GOOD

All public libraries are local. This may seem obvious but it bears examination. All public libraries define their own public good (i.e., public interest). The public good served by the public library in Springfield, Illinois, is different from the public good served by the Genesee District Library in Flint, Michigan. Public libraries which aimlessly provide specific services offered in other libraries without considering why such services are in the local public interest are bound to drift into trouble. Can the public library prove to local taxpayers and voters that the community has and will benefit from some new or improved service, and that it meets their higher purpose?

It should be understood that, while every public library is local, the digital library makes possible enormous value-added services that cross traditional service, district, state, and even national lines (i.e., the world). This requires a much more intense focus on discovering services of mutual interest among libraries and other agencies that may never have collaborated before. While the purpose of the public library is local, many of the services and processes that will provide great added value are not.

The government obligation to promote the public interest distin-

guishes public administration from private management. In a moral and basic sense it must serve a "higher purpose." The public library may not be the only local organization or company performing a specific service, but it needs a higher purpose for taxing voters to do so. The public library must have a higher purpose, a moral mandate and, in some cases, stand diametrically opposed to for-profit organizations. The public library is not a book or video store or Internet provider. The Benton Report suggests that the growing numbers of younger voters and future taxpayers do not have the vision of that higher purpose.

Some libraries and their supporters believe that taxes should only pay for basic services and that users should pay for value added services. A California Joint Task Force, in a 1995 report, recommended for California: "To give public libraries the authority to charge fees for 'value-added services.'" This was motivated by the erosion of traditional tax support for libraries. This raises several questions which in fact will have an effect upon what library services or parts of library services are in the public good. It will also certainly impact the willingness of individual users to pay fees and voters to subsidize fee-based services. Almost certainly there will be extreme confusion over what services tax dollars pay and what services fees pay. It also may result in poorer overall tax supported services.

"Once you say to politicians that there are services that people must pay for and are not worthy of tax support, then you are exposing the whole spectrum of services to the question of which ones are worthy," said *Library Journal's* Editor-in-Chief John Berry, a long-time opponent of fees that provide a barrier to access between the citizen and the information (in St. Lifer & Rogers, 1995, p. 20). "When you start talking about 'value-added' information services—which means that if you have the money you can get the better, more efficient search—that discriminates against the poor," said Berry. The bottom line is that, if only new and improved services are offered to paying customers, political and tax support may further erode. This is both a case of preserving the traditional value of the public library and serving to stop erosion of voter support.

The recent public controversy surrounding the construction of the San Francisco Public Library is a great example of a situation where consensus was lacking on how the library adds value to the community. The discussion centered around a new main library building which added a lot of new technology but which provided the same or less space for books. This created open warfare (Great Debate) between many staff who wanted more books and the library director, Ken Dowlin, who wanted more information services using the available technology. The library director was fired recently, ostensibly for an apparent overspending of the budget, but one has to wonder whether this was a battle between the status quo and change. It is not at all clear that the citizens of San Francisco

were heard and had reached a consensus. At the very least, the discussion and consensus should have been reached through sufficient dialogue with the participation of the full community *before* the library building was even constructed. Library services and building decisions are too important to be left exclusively in the hands of the reporters, media, the library staff, library commissioners, the library director, and the politicians. Library services must follow the public agenda and the community needs and values (higher purpose).

If the community (not the staff, director, library commissioners, politicians, and media) had a consensus on library services in San Francisco which had Wow!, then it is doubtful that this debacle would have occurred.

Indeed, other libraries are flourishing. "I think staff morale is higher because of the challenges offered through the WWW, free public access to the Internet, etc. I'm very optimistic about the future of our public library. I think we do a great job and if usage is any indicator so does our public," says Christine Hage, director of the Rochester Hills Public Library (Hage to author, personal communication, January 27, 1997).

HIGHER PURPOSE: VISION

The public library must add value to the community as a whole, and this must take the form of a higher purpose and vision. This is why the public library is public and funded primarily with tax dollars. For example, the public library might promote the dissemination of knowledge, promote community renewal and re-examination, provide a vital information safety net, foster community collaboration, and stimulate self-learning. These are important values which can have a very positive impact on the health and vitality of the community. Such values must be translated into a consensus upon specific, effective services in a continuous full community dialogue. It means the full participation of the public library in helping to discover and pursue the community agenda.

This author finds the words of a recently deceased, passionate library user to be an excellent example of the higher purpose, value, and motivation behind services that provide Wow! "The library connects us with insights and knowledge, painfully extracted from nature, of the greatest minds that ever were, with the best teachers, drawn from the entire planet and from all of history, to instruct us without tiring, and to inspire us to make our own contribution to the collective knowledge of the human species" (Sagan, 1980, p. 282).

This quote is a passionate and personal description of a library from a library user, a scientist, who loved libraries and knowledge. The quote is insightful since it does not directly associate the library with "buildings, books, or bytes." Yet it is a compelling definition of a library, written over sixteen years ago before there were PCs and networks in libraries. The word "connects" suggests network, the heart of the digital library, but it

more importantly speaks to a critical bond between people. It is about all of "us" real people. The words "insights and knowledge" tell us about the essence of the library. The library connects us to people both living and dead. It connects us across time and space which is where the new digital library excels and where the library of the future most certainly will be. "Without tiring" suggests that it has continuous, permanent, and lasting value. And lastly, the library is not static and passive but is an active participant in "stimulating the contributions" of new insights and knowledge from many users. This quote is passionate, noble, worthy, and compelling, and it was not crafted by a librarian, library director, or politician. The next generation of library users must feel just as passionate and committed as Carl Sagan. That's the challenge.

REFERENCES

Benton Foundation. (1996). *Buildings, books, and bytes: Libraries and communities in the digital age.* Washington, DC: Benton Foundation.

Berry, J. (1995). Public Library of Charlotte and Mecklenberg County, North Carolina. *Library Journal, 120*(11), 32-35.

Cisler, S. (1996). Weatherproofing a great, good place: The long range forecast for public libraries: Technostorms, with rapidly changing service fronts. *American Libraries, 27*(9), 42-46.

Crowley, T., & Childers, T. (1971). *Information service in public libraries: Two studies.* Metuchen, NJ: Scarecrow Press.

Dowlin, K. E., & Shapiro, E. (1996). The centrality of communities to the future of major public libraries. *Daedalus, 125*(4), 173-190.

Estabrook, L. S. (1997). Polarized perceptions: A Benton Foundation report finds library leaders and users at opposite ends of the debate over the roles of libraries in the Digital Age. *Library Journal, 122*(2), 46-48.

Fagiano, D. (1995). Fighting for customers on a new battlefield. *American Salesman, 40*(20), 20-21.

Flint, J. (1997). Company of the year Chrysler has the hot cars; more important, it has a smart, disciplined management team. *Forbes, 159*(1), 82-87.

Gilder, G. (1994). Telecosm: The bandwidth tidal wave. *Forbes, 154*(13), 162-173.

Lawrence Berkeley National Laboratory Human Genome Center. Progress. Available at: <http://genome.lbl.gov/>.

Lyman, P. (1996). What is a digital library? *Daedalus, 125*(4), 1-33.

Margolis, B. A. (1996). A paradox for the public library. In L. M. Saunders (Ed.), *The evolving virtual library: Vision and case studies* (pp. 34-35). Medford, NJ: Information Today, Inc.

Peters, T. (1995). *The pursuit of Wow! Every person's guide to topsy-turvy times.* New York: Random House.

Rayport, J. F., & Sviokla, J. J. (1995). The value chain of the marketplace and marketspace: Exploiting the virtual value chain. *Harvard Business Review, 73*(6), 75-85.

Rosenbloom, D. (1989). *Public administration: Understanding management, politics and law.* New York: Random House.

Sagan, C. (1980). *Cosmos.* New York: Random House.

St. Lifer, E., & Rogers, M. (1995). California joint task force seeks new existence for PLs. *Library Journal, 120*(10), 20.

Stewart, T. A. (1997). When change is total, exciting—and scary. *Fortune,* (March 3), 169-170.

Toffler, A. (1970). *Future shock.* New York: Random House.

# Silicon Dreams and Silicon Bricks: The Continuing Evolution of Libraries

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## ABSTRACT

THE DIGITAL REVOLUTION WILL EVENTUALLY LEAD TO DRAMATIC CHANGES in libraries as print is eclipsed by electronics. However, while some changes, especially in research libraries, are imminent, others will be drawn out over several decades. To survive, libraries will have to rethink their basic mission.

## INTRODUCTION

Communication and computing technologies are leading to "a mixture of excitement, nervous anxiety, and paranoia" among librarians (Young, 1996, p. 103). It is widely expected that substantial changes are imminent. The Benton Foundation report, *Buildings, Books, and Bytes: Libraries and Communities in the Digital Age* (Benton Foundation, 1996), is a valuable snapshot of library leaders' current thinking about their role and also of the public's views of libraries. It helps to discuss this report along with two other recent publications about libraries, the special issue of *Daedalus* entitled "Books, Bricks, and Bytes" (*Daedalus*, 1996) and the book "Future Libraries: Dreams, Madness, & Reality" by Walt Crawford and Michael Gorman (1995). I will present just a few impressions gleaned from reading these works.

All three publications provide a wealth of concrete information as well as a diversity of perspectives. What seems not to be sufficiently emphasized in these publications are several key points that are likely to be crucial in determining the evolution of libraries:

1. The desirability and inevitability of dramatic change. Printed matter will eventually be relegated to niche status.
2. The contemporary library is a relatively recent institution, resulting from a combination of the awkward print technology and the sizes of modern information collections.
3. Research and community libraries have different functions and will be affected by the digital revolution on different time scales. It will be necessary to recognize, for example, that the main function of community libraries is to provide entertainment.
4. Evolution of libraries will be determined by competition with other institutions just as much as by technology itself.
5. Adaptation to electronics is not a matter of one-time change, but an evolution that will take several decades. This implies prolonged upheaval and simultaneously offers opportunity for gradual adjustment.

The points above are explored at greater length in the next five sections. The last section discusses the Benton Foundation's report in greater detail.

## THE DIGITAL REVOLUTION AND ITS PREDECESSORS

The attachment to the printed word is surprisingly strong. Peter Lyman (1996) declares that, "[t]he computer will not replace the book any more than the book has replaced speech" (p. 4). James Billington (1996) writes that: "The book, that most user-friendly communications medium, has a long life ahead of it. I do not believe that our great-grandchildren will be reading the plays of Shakespeare or 'Moby Dick' on computer screens." Billington also claims that: "Free democratic societies were born out of the book culture and may not survive without it" (p. 51).

For a historical perspective, it helps to consider the reaction of the scholarly community to the invention of printing. Bernard Hibbitts (1996) has pointed out in detail the analogies between current critics of electronic publishing and the defenders of handwritten works. Thus history records statements such as the following paraphrase by Martin Lowry (quoted in Hibbitts, 1996) of Filippo di Strata (late 15th century): "the world has got along perfectly well for six thousand years without printing, and has no need to change now."

Johannes Trithemius, in his tract "In Praise of Scribes," declared: "Printed books will never be the equivalent of handwritten codices....The simple reason is that copying by hand involves more diligence and industry" (an amusing observation is that Trithemius's tract, which was written and first circulated in manuscript format in 1492, owes its widespread notoriety to its printed edition of 1494 and later reprints).

In addition to the analogies that Hibbitts shows between critics of

printing of five centuries ago and those of electronic publishing today, we can go even further back in history. Writing came before printing and is more important. However, writing also had its critics. Here is how it was treated in a classic of world literature:

> this discovery of yours will create forgetfulness in the minds of those who learn to use it; they will not exercise their memories, but, trusting in external, foreign marks, they will not bring things to remembrance from within themselves. You have discovered a remedy not for memory, but for reminding. You offer your students the appearance of wisdom, not true wisdom. They will be hearers of many things and will have learned nothing; they will appear to be omniscient and will generally know nothing; they will be tiresome company, having the show of wisdom without the reality. (Plato, "Phaedrus")

If Plato had the benefit of what we have learned in the last two and a half millennia, his indictment of writing would surely have been much more sweeping. There is environmental degradation (through deforestation, for example), physical maladies (such as extensive nearsightedness), and psychological problems (as seen in the plague of asocial bookworms), all caused by writing and its descendent, printing. With such evidence of its harm, would any government allow writing to spread were it to be invented today?

It is easy to argue that Plato was right, that something precious was lost when writing replaced oral transmission and memorization. Still, all those who quote T. S. Eliot's, "Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?" in arguing against electronic publishing, should bear in mind the similar sentiments of Plato. And where would we be if Plato's argument had led to the abandonment of writing?

The simple reality is that, while oral traditions did give us the Agricultural Revolution as well as the poetry of Homer, they would not have sufficed for much more than that. Similarly, handwritten works brought us the Renaissance, but printing was needed for the modern era with its more complicated society and therefore greater information needs. To handle the information needs of the future, we will have to use electronic forms of information.

We will not only have to use information in electronic forms to deal with the variety and volume of it, but we will prefer to use it that way. Lyman (1996, pp. 1-33), Crawford and Gorman (1995) and others argue that the computer will not replace the book, just as the book has not replaced speech and television has not killed radio. However, writing is a different medium than speech and television differs from radio. A better analogy is that of the replacement of vinyl LPs by music CDs (a point grudgingly conceded by Crawford and Gorman), where the two fulfilled the same function, and one was clearly superior to the other. Currently

paper is far superior to the screen for sustained reading. To quote from Crawford and Gorman (1996): "Print is not dead. Print is not dying. Print is not even vaguely ill" (p. 14).

That will change, though. Electronics is advancing rapidly, much faster than print technology. While the number of books sold each year is growing, it is growing at rates that are a tiny fraction of those for electronic information. Eventually we will have high resolution displays that will be light and flexible, and we will prefer to curl up in bed with them rather than with bulky printed volumes. Creating such screens does not require discovery of any new laws of physics. Once they are created, print will be truly obsolete.

Some foreseeable events are not worth worrying about. The Sun will eventually become a red giant and incinerate the Earth, but this event is too distant to concern us. The arrival of electronic displays that will almost completely replace books will come much sooner—during the lifetimes of most of us—and so needs to be planned for. Contrary to the Billington quote above, we cannot leave the decisions to our great-grandchildren. However, the transition will take several decades and will be gradual. The flexible high resolution screens that will be needed have not yet been demonstrated even in laboratory prototypes. After they are shown to be feasible, it will take several years for them to show up in specialized applications, and then after awhile in devices costing a few thousand dollars, aimed at the power users. Judging from the history of technology, it might then take a decade to bring screen prices down to the $300 range of the mass consumer market. Another decade might be required for them to become inexpensive enough that people will have several such screens around the house and will allow their toddlers to play with them.

Although the complete replacement of printing by electronics (aside from niche markets, such as are occupied today by hand-crafted documents) will not occur for several decades; the transition will be gradual and is already noticeable. As displays improve, the material available in electronic form grows, and people get accustomed to working with digital data, usage will be shifting to electronic forms.

This will require libraries to change to prevent them from becoming "a kind of museum where people can go and look up stuff from way back when" (a quote from Benton Foundation, 1996, p 30).

## THE LIBRARY AS A RECENT INSTITUTION

It is necessary to recognize that the modern library is a recent institution, and its future is not guaranteed. The phenomenon of the free (i.e., tax-supported) public library in almost every town in the United States dates only to the beginning of the twentieth century. Funding and stimulating this development is surely Andrew Carnegie's greatest contribu-

tion. For most of the preceding two centuries, libraries in the United States were primarily private operations, either operated for profit or by voluntary associations that charged dues. The Library of Congress, one of the greatest in the world, also did not start out as a public institution and is not one even now. It exists primarily to serve Congress. While James Billington (1996), the Librarian of Congress, says that the knowledge in libraries "must be openly accessible to all people" (p. 37), his article also reveals that it was only in the last quarter of the 19th century that the Library of Congress was opened to the public (for the first few years of its existence, it was not even open to the President of the United States). For a long time our civilization survived without public libraries.

To understand the modern library, we have to appreciate the extent to which it is a response to the modern scale of publishing. The Library of Alexandria is supposed to have had approximately half a million scrolls. However, that was the only institution of such size in antiquity. Collections have tended to be much smaller until recently. When the Library of Congress was burned by the British during the War of 1812, it contained about 3,000 books. To replace it, Congress purchased Thomas Jefferson's private collection, "the largest and best in America" (Billington, 1996, p. 41). It consisted of 6,487 volumes. For contrast, let us note that the Library of Congress contains around 100 million cataloged items today (with approximately 20 million books). Amazon.com offers to supply any of 2.5 million books in days or weeks.

It will be helpful to list the current annual production rates of various "information goods":

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| major movies | 500 |
| books | 50,000 |
| scholarly articles | 2 million |
| newspaper articles | 100 million |

These numbers are only rough estimates. The book figure, for example, is only for new English-language books, and the newspaper article figure is a conservative underestimate based on the UN statistic of almost 10,000 daily newspapers in the world. We do not need precision for our discussion.

University administrations and even scholars complain about the costs of running libraries. Let us therefore consider a thought experiment in running a research library. Suppose we fire the librarians and tell the scholars to run the library themselves (purchases of books and journals consume only a third of the budget of a research library, so the savings would be immediate and substantial). When scholars need a book, they can order it themselves, catalog it in, and put it on the appropriate shelf. When they borrow a book, they are to be responsible for bringing it back

and putting it on the shelf it came from. Also, each time they come to use the library, they should pick up a wet mop and clean 100 square feet of floor. It is ridiculous to even think of such a proposal. It certainly is ridiculous when dealing with a library of a million volumes.

However, it is not a ridiculous idea when the library has, for example, 1,000 volumes. That is how some small private departmental libraries in universities operate today (aside from the wet mops). It is also how most libraries operated two centuries ago. What has changed is the scale of operations. It was this change in scale that led to the invention of such standard tools as the card catalog (in the nineteenth century).

"Librarianship as a definable occupational category began in the fourth quarter of the nineteenth century" (Carpenter, 1996, p. 80). The first library school opened at Columbia University only in 1887. Through the middle of the nineteenth century, librarianship was a low-status occupation: "[T]he librarian's function was clerical: recording books loaned and returned, accounting for fines, copying out brief records for catalogs, and the like" (Carpenter, 1996, p. 82). This should not be a surprise. We don't require specialized higher education institutions to train the clerks for Blockbuster Video, and we do not need a Dewey Decimal nor a Library of Congress classification scheme for movies. The annual production of videos is comparable to the annual production of books a century and a half ago and does not require much sophistication to handle.

While current libraries and librarianship are the products of the scale of the volume of information in our society, they are also products of the print technology that dominated in the past. When reaching a book in the stacks of a major research library takes a five-minute walk or an hour wait for it to be brought from closed storage areas, it makes sense to have classification schemes that minimize such waits. That may not be necessary for digital data. Either automated searches or else links informally provided by scholars may suffice. I am not saying they will, only that they may (these two approaches are named the Warren Weaver and the Vannevar Bush strategies by Lesk). The 100 million items cataloged by the Library of Congress is not much more than the 31 million pages that AltaVista indexes. However, even if automated searches and informal links do not suffice, the economies of scale that digital libraries offer are huge. In an earlier article (Odlyzko, 1995), I projected that fewer than fifty professionals (many trained librarians) employed by *Mathematical Reviews* could provide, in a fully digital scholarly publishing environment, all the services that over a thousand librarians working in mathematics libraries currently do.

Libraries have to expand to cover the torrent of new information that is becoming available in a variety of new media. Otherwise they will have to shrink as their traditional functions become increasingly automated.

THE DIVERSITY AND FUNCTION OF LIBRARIES

Many writers discuss libraries as if they were uniform (typically think-
ing of either academic research libraries or neighborhood public librar-
ies). However, there is a whole spectrum of libraries between those two
types, as well as many other, more exotic libraries. Crawford and Gorman
(1995) and Kent (1996) are especially effective in describing the variety
of functions that libraries fulfill (for an interesting historical account that
emphasizes the variety of libraries, even in the early years of these institu-
tions, see Carpenter, 1996). There is no single prescription that will fit
all these institutions. Research libraries are the ones that have been af-
fected by the electronics revolution the most so far, and they are the ones
that will lead the transition to the digital world. At the Science, Industry,
and Business Library of the New York Public Library, digital information
already accounts for about 20 percent of the acquisition budget (com-
pared to about 2 percent in 1987). At most research libraries, that frac-
tion is 5-10 percent, and at public libraries it is much smaller. The main
function of research libraries currently is to provide access to scholarly
journal articles, and in that area modern technology provides much less
expensive methods for operation, and the economic and sociological in-
centives are likely to lead to drastic changes within a decade (see Odlyzko,
1997, for example, for a fuller discussion and references).

Public libraries are in a different category. Their evolution will be
much slower for a variety of reasons, some of which will be mentioned in
later sections. First, though, let us mention a fact that is seldom empha-
sized. While libraries are usually presented as dedicated to uplifting the
public, in practice public libraries are primarily providers of entertain-
ment. Most of their lending is of fiction.

Furthermore, they have increasingly been developing collections of
music CDs and videotapes. I am not making this point to reproach librar-
ians for this course of action. It is helpful in developing a wide constitu-
ency for libraries and also serves to make people familiar with more re-
spectable information sources that libraries provide. Also, fiction can be
an effective educational medium.

Still, it is helpful to remember the dominant role of entertainment
among the functions of public libraries. (The tension between "the best
books" and "the best that people will read" in libraries is old. See Car-
penter, 1996 for a brief account and references.)

In a similar spirit of reconsidering the function of libraries, let me
quote from an earlier publication (Odlyzko, 1996): While librarians do
not think of themselves as providers of inferior data, to a large extent
that is what they have been doing since the beginning. Personal posses-
sion of a book is usually far superior to borrowing a copy from the li-
brary. (The qualifier "usually" is used advisedly here, since in some situ-
ations, especially in academic research, libraries can provide a much bet-

ter service than a personal collection. A friend of mine told me that his father, a famous historian, started selling off his large book collection when he realized that he was often taking an hour to travel by subway to the New York Public Library to look up information in a book that he owned but could not locate.) That is largely what allowed libraries to coexist with bookstores. For publishers of fiction (and novels are, and traditionally have been, over 70 percent of what the general public borrows), libraries help in segmenting the market, charging different prices to different users and thus maximizing revenues. A novel is typically published in hardcover first with the aim of extracting high prices from those willing to pay more to read it right away. Once that market is fully exploited, a cheaper paperback edition is made available to collect revenue from those not willing to pay for the hardbound copy. Libraries coexist with this system since, to use library copies, patrons have to put up with the inconvenience of waiting for their turn on the reservation list, going to the library to pick up the book, having to read it in just a week or two, and so on. Thus libraries serve a different segment of the market than bookstores (the used book stores serve yet another part of the market).

One finding of the Benton Foundation report was that the public is very supportive of library purchases of electronic materials, but assumes that such materials will then be easily accessible from homes. If, as I suspect, that will not be the case, and instead there are requirements for inconvenient physical visits to the library for many materials, then public support will be harder to sustain.

## COMPETITION AND COOPERATION

A finding of the study in the Benton Foundation (1996) report is that: "While some library leaders fear that computers and bookstores will increasingly draw library users away from libraries, at least for now this concern appears groundless—one market seems to draw sustenance from the other markets" (p. 6).

Similarly, Mason (1996) states that: "Some libraries. . . .have been offering Internet access to the public for several years and have found that instead of replacing the conventional use of the library, electronic access (even to full texts) has stimulated book borrowing, browsing, and use of printed reference material" (p. 168). The whole world is moving toward an information economy, so the information business is booming, and at the moment all its segments are benefiting.

It might be best to think of the information industry as an ecology. Libraries are a genus that fills some ecological niches, and publishers, bookstores, newspapers, TV, and computer companies fill other niches. They all depend on each other. (The preceding section discussed how libraries evolved to coexist in the print world with bookstores. For an

interesting historical study that compares evolution of libraries to that of video rental stores and how they interacted with their sources, see Varian & Roehl). It is useful to point out just how small the niche is that libraries occupy. In the United States, annual purchases of books are as follows:

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| individuals | $20 billion |
| public libraries | $1 billion |

This is somewhat misleading in estimating impact, since library books tend to be used much more than those purchased by individuals. Also, total public library costs come to about $5 billion. Still, the basic conclusion is that libraries are a significant, but not a dominant, factor in providing information to the public (another fact is that newspapers collect about $12 billion per year from subscribers and around $35 billion from advertisers).

Even in a stable biological environment, there is constant evolution, and some species do better than others. In information dissemination, though, we do not have a stable environment, but instead are going through the early stages of the digital revolution. This revolution involves explosive growth. However, that does not have to translate into proportional growth, or any growth at all, for all players. Cars and airplanes were the primary beneficiaries of the growth of the transportation industry in this century. Railroads survived, while Pullman, which was a prominent and profitable transportation company around the turn of the century, is gone. One of the first major casualties of the digital revolution might be the newspaper industry. So far it has been growing in revenues and profits (although circulation has been roughly steady), but it could easily be forced into major restructuring. The most likely immediate cause of such change might be less the shift of readers to electronic information sources (which is likely to take longer, although it will happen eventually) than a move of classified advertising online where it can be used much more efficiently. (I am not predicting that newspapers will not survive, just that they will have to go through a painful transformation. Their news gathering and filtering functions will be salable products in cyberspace. However, the economics of paying for such services will have to change.)

Libraries, especially research libraries, face the problem that information sources are proliferating. As one small example, I do use the Library of Congress online catalog (which has become available in the last few years). However, for current books, I prefer to use Amazon.com. It has a better user interface, has information about forthcoming books, and facilities for alerting me to books in areas I am interested in. Not infrequently the convenience of being able to do this from my study leads me to buy a book through Amazon.com that formerly I would have obtained through a library.

Library usage may not be decreasing, but general usage patterns appear to be shifting. Relative declines are likely to be concealed by the general growth of the information industry. Unfortunately we do not have current updates to the valuable studies that were carried out in the 1970s, such as by King, McDonald, and Roderer (1981) and Machlup (1978). There is much greater use of informal sources of information facilitated by the Internet. What is most dangerous for libraries is that users appear to be able to compensate for cutbacks in library services by relying on other sources. As Susan Rosenblatt aptly put it at a recent conference, "available information drives patterns of usage." When some research libraries had to drastically cut back on their journal or book purchases, or else when large parts of their collections had to be moved to much less accessible off-site storage, there were protests, but they were limited. Scholars somehow managed to adjust, and nobody has been able to document any serious damage to the research enterprise. Corporate libraries in particular have been cut back severely, and again there is little evidence of grave consequences.

This is likely to lead policy makers to demand a faster transformation of libraries than might have occurred otherwise (Odlyzko, in press). The task for libraries will be to show not only that their services are useful, but that they are provided better and more economically by libraries than other institutions.

It has been almost universally true that established players were not the leaders in taking advantage of new technology. Apparently only between 4 and 6 percent of the printers who worked before 1500 had started out as professional scribes (see footnote 20 in Hibbitts, 1996). Newcomers, unburdened by tradition, overheads, and old expectations, have usually been the ones to take over. That is the danger facing libraries. One often hears librarians bemoaning the chaotic state of the Web. The implication seems to be that some large grant should be provided to allow librarians to study how to cope with the new phenomenon, and in the meantime development of electronic information sources should pause. Yet Yahoo! is providing a classification for the Web. Another frequent complaint is about the lack of archiving on the Net. Well, aside from all the small private archives that are being set up, we have Brewster Kahle's project. What these new players do may not fit the traditional requirements that librarians would have insisted on, but it may be sufficient and even more appropriate for a new medium.

Even in low-tech areas, new competition is springing up. The Benton Foundation report mentions the perception that the new giant bookstores from Barnes & Noble and Borders, with their attached coffee shops and an atmosphere conducive to browsing, can be serious competition to libraries. That seems to be a well-founded fear. Bookstores of this type do not have to fill all the functions of a library to draw away some of the

usual attendees. Further, while some of these bookstores are already branching out into computer software, there is nothing to stop them from offering access to electronic databases, or even from lending books for a fee.

One ecological niche that librarians are naturally well-positioned to hold onto and expand is that of providing restricted access to information. As the citation in the preceding section showed, this is something they have always been doing. In the future, this function is likely to be much more explicit. Since "bits are bits," there will be no natural distinction between lending and selling digital works. Therefore we are likely to see a variety of artificial restrictions imposed, with different quality products offered to libraries than individuals (Odlyzko, 1996; Varian,1996). Many, perhaps most, digital products are likely to be available through libraries only to those who physically come to the library in order not to inhibit sales to individuals and companies. Librarians will thus become enforcers of usage restrictions.

## CONSTANT CHANGE

Library leaders want the library of the future to be a hybrid institution that contains both digital and book collections (Benton Foundation, 1996, p. 4). The current library is already a hybrid institution. It has been that way for a while and will continue to be so for the foreseeable future, since some print collections are likely to remain even in the public library for a long time. However, there is no fixed mix of digital and print collections that will be satisfactory over any length of time. Libraries face not a single adaptation to the digital world, but several decades of constant change, with books being constantly displaced (at least on a relative basis) by bits. That the change will not be sudden, especially for community libraries, reflects the advantages of books and of the current library system.

The Crawford and Gorman book (1995) argues extensively that libraries are likely to survive in close to their present form. It is a valuable work in pointing out the many strengths of the contemporary library. While the discussion is useful, it seems necessary to first say a few negative things about it. Some of the arguments in that book are ludicrous. For example, the authors argue (Crawford & Gorman, 1995, pp. 55-56) against Jerry Pournelle's idea of a "CD-ROM Library-of-the-Month Club" in which CD-ROMs with 500 to 1,000 book-length texts would be sent out each month to subscribers. Crawford and Gorman claim that this would never work since each writer would insist on royalties of at least 30 cents per work per CD-ROM. If true, this would drive the cost of each CD-ROM to at least $150 each just for royalties, and so the price would be far above the $20 that Pournelle was suggesting.

However, the basic argument is fallacious. I for one would be happy to accept royalties of 1 cent per CD-ROM if that CD-ROM were going out to a million customers and my work could not be expected to attract more than a couple of thousand readers in a print format (after all, how many of the 500 or 1,000 texts arriving in a participating household each month could possibly get read?). It is not the royalty rate per unit that matters but the total amount.

There are many other faulty arguments in Crawford and Gorman (1995). Many estimates about electronic information (for example, for the cost of digitizing existing books) are exaggerated. However, the basic thrust of their book is correct. Technology and economics do currently favor the book over digital formats, especially the popular book that is read in a sustained way. Practically nobody is willing to read a novel on a screen (see Hsu & Mitchell [1997, p. F12] for a detailed listing of the advantages of print over screen with today's technology). Furthermore, a 300-page novel that costs $20-30 in a bookstore would cost that much to print on a small printer, and the resulting copy would have lower resolution, would not be bound, etc. (The economic case is completely different for scholarly articles. A typical specialized paper brings in revenues of about $4,000 to the publisher [Odlyzko, 1995, 1997] but seldom attracts more than a couple of hundred readers who might want to read it carefully enough to print it out. In that case, it is much cheaper to distribute the work electronically and print it out only for those who need it. That is a basic reason that research libraries will change faster than public ones.) However, as display technology improves, the balance will inexorably swing toward electronics.

While Crawford and Gorman are persuasive in making the case against a precipitate move away from books, they could easily lead to dangerous complacency. Their claim that "[p]rint—books, magazines, newspapers—will survive as an important medium of communication for the indefinite future" (Crawford & Gorman, 1995, p. 180) is surely incorrect. Print does have a few more decades as a significant medium, but that is not "the indefinite future," since most people alive today are likely to see print completely eclipsed by electronics. Crawford and Gorman assert that most thoughtful people "will also recognize that most of the library's *information* services will be supported best by electronic technology and that its *knowledge* services will be supported best by physical collections supplemented by electronic resources." This assignment of only the inferior information services to electronics is unrealistic. However, it does recall similar sentiments from the past. One can easily imagine that Plato might have claimed that all those marks on clay, papyrus, or parchment might possibly be good for keeping track of taxes, but all true wisdom would reside in works that people memorize. Johannes Trithemius

in his "In Praise of Scribes"did claim that: "The printed book is made of paper and, like paper, will quickly disappear. But the scribe working with parchment ensures lasting remembrance for himself and for his text."

Trithemius's claim has turned out to be wrong, and so will that of Crawford and Gorman. Electronic resources already support knowledge as well as information services and will increasingly dominate. What we have to prepare for is the transition.

## RECOMMENDATIONS FOR THE FUTURE

There will surely be demand for the "discriminating knowledge navigator who will add the value judgement and the warmth of human mediation" (Billington, 1996, p. 39) to digital as well as print information. Whether they will be called librarians or be the current generation of librarians is another question. The aim for research librarians should be to get into that role. The tricky part will be how to use the existing large print collections as leverage to get into the new game and not as ballast holding them back. In the future, when almost all information is in digital form (a future that is likely to be held back more by legal issues, such as those discussed in Okerson, 1996, than by technology), those "knowledge navigators" will not have to be physically present in any building called a library. (The access restriction role mentioned before could be performed by another group with much lower skill levels.) However, with current rudimentary computing and communications equipment, personal contact can provide much better service. Furthermore, the physical collections still require guidance and care. These advantages should enable librarians to transform themselves into those "knowledge navigators." This would not only keep them employed but would be socially useful in a broader sense in providing a gradual evolution of our information systems.

For public libraries, change will be slower but change is unavoidable. Many of the prescriptions that are proposed are questionable. It helps again to consider the scale on which libraries operate. The current budgets for some prominent public institutions (in the United States) are approximately as follows:

| | |
|---|---|
| elementary and secondary education | $250 billion |
| religious organizations | $60 billion |
| public libraries | $5 billion |

These figures all by themselves show that libraries are not major community institutions, a point that the public seems to understand much better than library leaders (Benton Foundation, 1996). Yes, libraries are important community institutions, but they are not among the dominant ones.

The idea that libraries could be used to teach computer skills to the public or to provide access to the Internet to many people is unrealistic. There is simply no space! Libraries are primarily storehouses of printed information and manage to serve as many people as they do because they loan materials to be read at length at home.

If anyone is going to teach Web surfing on a massive scale, or provide Internet access, it will have to be schools. They are the ones with the budgets, space, and people to do it. Libraries are just too small. (Even schools are not likely to be in that role for adults for long. The information revolution will provide high-speed links to the home, and that is the natural place for Web surfing and the like.)

Yes, libraries can provide a small measure of connectivity to the Internet, but only on a small scale. This might be useful for public relations purposes but is not likely to have much impact.

The idea that "librarians must become involved in community organizations" (Benton Foundation, 1996, p. 12) falls someplace between silly and dangerous. What "community organizations" would librarians be encouraged to participate in? The John Birch Society? Some value might be gained from participation in organizations that would offer librarians ways to advertise their services, but it is important to avoid partisan groups. The impartiality of the library has been a source of strength and public support, and it would not be advisable to give that up.

Most of the recommendations in the Benton Report are excellent. They are about incremental changes that draw on the libraries' strengths and the wide public support libraries enjoy. The American public library system is a unique and uniquely effective part of society, representing a public sector service and a safety net that actually works. The newly unemployed looking for help in writing résumés or mounting job searches; those planning to start small businesses; people attempting home decorating and repair; children learning to associate reading with pleasure; those who need to learn just a little bit about a new topic; and those who want to broaden their horizons with pleasure reading of any stripe—all these and more benefit from the common good of public library collections and services (Crawford & Gorman, 1995).

The task is to build on these strengths. In addition to the prescriptions in Benton (1996) and Crawford and Gorman, (1995), there are other steps that can be taken. Since Amazon.com and Barnes & Noble are competitors (as well as allies) of libraries, why not learn from them? Make the library as inviting to visit as possible. Amazon.com offers automatic alerting and filtering functions. Why shouldn't the library do the same? Use the data about what particular individuals borrow (with suitable safeguards for privacy and making sure customers are willing to allow it) to point them at other books they might enjoy reading (see Esta-

brook, 1996 for example). There are many other low-tech ways that can be effective and can strengthen the library as it evolves toward the digital future.

## ACKNOWLEDGMENTS

## REFERENCES

Benton Foundation. (1996). *Buildings, books, and bytes: Libraries and communities in the digital age.* Washington, DC: Benton Foundation. Also available at: <http://www.benton.org/Library/Kellogg/buildings.html>

Billington, J. H. (1996). Libraries, the Library of Congress, and the Information Age. *Daedalus, 125*(4), 35-54.

Books, bricks, and bytes. (1996). *Daedalus, 125*(4).

Carpenter, K. E. (1996a). *Readers & libraries.* Washington, DC: Library of Congress.

Carpenter, K. E. (1996b). A library historian looks at librarianship. *Daedalus, 125*(4), 77-102.

Crawford, W., & Gorman, M. (1995). *Future libraries: Dreams, madness, & reality.* Chicago, IL: American Library Association.

Dowlin, K. E., & Shapiro, E. (1996). The centrality of communities to the future of major public libraries. *Daedalus, 125*(4), 173-190.

Estabrook, L. S. (1996). Sacred trust or competitive opportunity: Using patron records. *Library Journal, 121*(2), 48-49.

Hibbitts, B. (1996). Yesterday once more: Skeptics, scribes, and the demise of law reviews. *30 Akron Law Review, 267* (special issue). Available at: <http://www.law.pitt.edu/hibbitts/akron.htm>

Hsu, R. C., & Mitchell, W. E. (1997). Books have endured for a reason.... *New York Times,* Business Section, May 25, F12.

Kent, S. G. (1996). American public libraries: A long transformative moment. *Daedalus, 125*(4), 207-220.

King, D. W.; McDonald, D. D.; & Roderer, N. K. (1981). *Scientific journals in the United States. Their production, use and economics.* Stroudsburg, PA: Hutchinson & Ross.

Lamm, D. S. (1996). Libraries and publishers: A partnership at risk. *Daedalus, 125*(4), 127-146.

Lesk, M. (1995). *The seven ages of information retrieval.* Available at: <http://community.bellcore.com/lesk/infret.html>.

Lyman, P. (1996). What is a digital library? Technology, intellectual property, and the public interest. *Daedalus, 125*(4), 1-33.

Machlup, F., & Leeson, K. (1978). *Information through the printed word: The dissemination of scholarly, scientific, and intellectual knowledge,* vol. 2. New York: Praeger.

Marcum, D. B. (1996). Redefining community through the public library. *Daedalus, 125*(4), 191-206.

Mason, M. G. (1996). The yin and yang of knowing. *Daedalus, 125*(4), 161-171.

Odlyzko, A. M. (1995). Tragic loss or good riddance? The impending demise of traditional scholarly journals. *International Journal of Human-Computer Studies* (formerly *Internatioanl Journal of Man-Machine Studies), 42* , 71-122. Also in the electronic *Journal of Universal Computer Science,* pilot issue <http://hyperg.iicm.tu-graz.ac.at>. Also available from: <http://www.research.att. com/~amo>.

Odlyzko, A. M. (1996). On the road to electronic publishing. *Euromath Bulletin, 2*(1), 49-60. Available at: <http://www.research.att.com/~amo>.

Odlyzko, A. M. (1997). The economics of electronic journals. *First Monday, 2*(8). Retrieved

September 4, 1997 from the World Wide Web: http://www.firstmonday.dk/issues/issue2_8/odlyzko/index.html

Odlyzko, A. M. (In press). The slow evolution of electronic publishing. In F. Rowland & J. Meadows (Eds.), *Electronic publishing '97—New models and opportunities* (Proceedings of an ICCC/IFIP conference held at the University of Kent at Canterbury, United Kingdom, 14-16 April 1997). Washington, DC: ICCC Press.

Okerson, A. S. (1996). Buy or lease? Two models for scholarly information at the end (or the beginning) of an era. *Daedalus, 125*(4), 55-76.

Varian, H. R. (1996). *Versioning information goods.* Retrieved September 2, 1997 from the World Wide Web: http://www.sims.berkeley.edu/ ~hal.

Varian, H. R., & Roehl, R. (1996). *Circulating libraries and video rental stores.* Retrieved September 2, 1997 from the World Wide Web: http://www.sims.berkeley.edu/~hal>.

Young, P. R. (1996). Librarianship: A changing profession. *Daedalus 125*(4), 103-125.

# The Benton Report: A Response

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## ABSTRACT
A BRIEF DESCRIPTION OF THE W. K. Kellogg Foundation's HRISM initiative
provides a context for understanding the Benton Foundation's study and
their methodological choices. The author argues that findings from the
Benton study regarding the traditional way the public views public librar-
ies support earlier studies of D'Elia and Rodgers and the Library Research
Center at the University of Illinois. The Benton Report is, in turn, sup-
ported by more recent evidence, in particular a study of librarians and
municipal officials, also conducted by the Library Research Center at the
University of Illinois.

## INTRODUCTION

These *Library Trends* articles approach the Benton Report from a va-
riety of useful perspectives. Most critical are those which find fault with
the research methodology or research questions. The study has its limits.
It was exploratory, the focus group was only one group of white middle-
class users, and the report—written for a popular audience—does not
present as much detail about the methods or findings as it would were it
presented in a scholarly paper. At the same time, its findings are power-
ful.

Over 20,000 copies of the Benton Foundation's report have been
distributed with much discussion resulting from people's reading of it.

When I speak or write about the findings, I have found intense interest from librarians, many of whom comment that the findings mirror issues they are confronting on their jobs. What do the findings mean? To what extent are they valid? Do they suggest we need to alter public perceptions of the library in the digital era? Or do libraries need to change their services? Perhaps it is the thinking of library leaders, as defined in this report, who are out of sync with the field or the public?

Before trying to answer these questions, it seems helpful to begin with some background about the report—why did the Benton Foundation conduct this study? Some of the criticisms seem to come from a misunderstanding of its purpose and potential use.

## BACKGROUND

Three years ago the W.K. Kellogg Foundation began what it has called the HRISM (Human Resources for Information Systems and Management) initiative. Driven initially by the vision of Dan Atkins, dean of the School of Information at the University of Michigan, this initiative expanded to include at least three other schools of library and information science (including the University of Illinois at Urbana-Champaign), the American Library Association, the Urban Libraries Council, Libraries for the Future, the Council on Library Resources, Harvard University, a school for disabled children, the Library of Congress, and the New York Public Library, among others.

The Kellogg Foundation's mission is to help people help themselves, and they have become convinced that information services are critical to achieving that mission. The Kellogg Foundation strongly believes in libraries and has been willing to support them as institutions, but the foundation's commitment is not to libraries. It is to services for which they believe libraries are central—i.e., making sure that communities, social service agencies, and people have access to the rich information resources of this "digital era." The Kellogg Foundation has invested in libraries and library associations in the hope that these will play a central role in our changing society, but I have heard at least one foundation spokesperson say that if libraries fail to take up that role, they will look to other ways of carrying out this initiative. In other words, if libraries are not responsive or do not move quickly enough to assert leadership in providing access to, and increased use of, digital information, Kellogg will fund other agencies that will.

Several years into this initiative, the Kellogg Foundation brought together all the HRISM grantees to see how the different organizations could work together, particularly in building a common and united focus. Included in this meeting were representatives from the Benton Foundation. A major strength of this foundation is creating public messages for public causes.

It was a difficult and frustrating meeting. As one might expect, given the diversity of the group of grantees and their significantly different foci, it was difficult for us to discern how we might work together in any formal sense. Moreover, during that meeting, it became apparent that many of us differed in our thinking about what role libraries, in particular public libraries, should play at this time of rapid technological change. We could not reach consensus on what a public message might say that succinctly and clearly captures the essence of the role that libraries play. This is what led to the Benton study, funded by the Kellogg Foundation. (It also drives a follow-up grant from the W.K. Kellogg Foundation to the Benton Foundation to expand on this initial project. Among the activities included in that grant is a set of additional focus groups.)

The study sought to accomplish what a meeting of HRISM grantees and other library leaders could not: first, to understand the shared beliefs of library leaders about the future of libraries in a digital era as represented by the HRISM grantees; and second, to understand how the American public views libraries in a digital era. These were in the context of saying, "if we were going to try a national public relations campaign—which requires a common voice—for libraries, what should it look like?"

The methodology of the study began by looking to see if the written grant proposals of HRISM grantees revealed any shared vision. Then, drawing on the themes of the written proposals, it sought to explore further the vision of these leaders of the public library in the digital era.

I concede that the group of HRISM grantees is not necessarily the best group from which to derive a professional view of public libraries and the future. I conducted the interviews of HRISM grantees for the Benton Foundation and quickly discovered that the knowledge about public libraries of many of those to whom I was talking extended only to their personal encounters as a user. These interviews did provide valuable insights into the types of roles libraries may play in the digital era, and they guided in part the questions for the national survey.

The more important part of the study was that designed to understand how the public views public libraries today. This included a focus group of white middle-class heavy users of libraries and a national poll representative of the American population. The focus group was attended—behind a one way mirror—by the HRISM grantees and by political pollsters from the two major parties. Findings from the focus group were used not as a statement of national opinion but to expose both the viewing grantees and the readers of the report to some sobering opinions, albeit opinions of a small group. Of greatest interest is the national opinion poll conducted with adults 18 years of age and over. As noted on page 24 of the Benton Report, questions for the national poll drew on a

number of previous studies, including the U.S. Department of Education funded survey conducted by George D'Elia and Eleanor Jo Rodgers and the 1991 poll by the University of Illinois' Library Research Center of public opinion and librarians' attitudes.

The library leaders did not represent a random sample of directors, deans, or association heads. They were selected by virtue of their having received one of the Kellogg Foundation's HRISM grants. Nonetheless, these interviews revealed important dynamics and concerns that are echoed in the field's literature. What is most striking is the lack of consensus from these individuals, the real contradictions in their statements, and the palpable uncertainty and concern that emerges. These leaders envision public libraries in a digital era to be much like they are today: institutions with collections (in both digital and print form), with buildings as a center for community life, as an essentially middle-class institution (several expressed the fear of libraries becoming the information safety net for the poor, lest they become marginalized into that role), and with staff who help users navigate new information tools.

At the same time, many expressed fears that our profession does not have the leadership capable of transforming libraries the way they need to be. How can we develop the leadership capacity of those already in our field? How can we teach our students to think of themselves as assuming leadership roles? Several talked about competition with book stores (and this is not surprising, given the way in which the Borders, Barnes and Noble, and other stores have become centers for programming as well as browsing and coffee along with books to buy). Even more telling is what was *not* said in the interviews I conducted. Few individuals talked about the broader political climate of libraries, the economics of support for all public and cultural services. The roles they envisioned are essentially the roles libraries play today.

The national poll of public opinion about public libraries are in many ways consistent with the leaders' supporting the notion that public libraries can stay the course and are not being asked to change roles dramatically. This study agreed with others that indicated that almost 70 percent of the public have visited a public library in the past year (this compares to almost 80 percent who say they have visited a bookstore). Over half the sample said that it is very important for the library to serve as a neighborhood or community activity center. Fully 40 percent said that "as more and more information becomes available through computers," that libraries will become more important (19 percent said less important and 38 percent thought there would be no change). Of concern, however, is the fact that people who own computers are more likely to say that libraries will become *less* important.

Also of concern is the way the role of the librarian is envisioned. The most important roles envisioned by the respondents in the Benton

study were: (1) providing reading hours and other programs for children; (2) purchasing new books and other printed materials; (3) maintaining and building library buildings; (4) providing computers and on-line services to children and adults who lack them; and (5) providing a place where librarians help people find information through computers and online services. The role of professional librarians is obviously seen as less important because the primary service they provide is ranked fifth in the above list. Only 10 percent indicated that if they wanted to learn more about computers, they would go to a library.

It is in this context that the findings of the focus group that was also held are examined. Led and observed by experts in public opinion polling, the group included a dozen or so middle-class, mostly middle-age, white library users.

When asked what they remember about their public libraries, their stories are about closing and having shorter hours. Among the key points made by the focus group participants were the following:

1. Libraries should depend on charity and corporate support. These individuals did not want increased taxes. They are committed to the institution but do not want to go to their pocketbooks to pay for it.
2. They believe that libraries' biggest commitment is to children and education. They see the library as a safe space, particularly for women.
3. They believe that libraries are a source of information, but the needs of the information have-nots will not hold up against a need for more money. What is central to a democracy is equality of access to information, not the quality of information. Although they do not dispute that libraries will move into the computer world, they do not want libraries to do this aggressively.
4. The group members have given little thought about a standard of excellence for libraries. It is all right for libraries to be behind the curve in technology or to use volunteers as librarians.
5. The fundamental value is access to information, not equality; libraries are preservers of information, not preservers of quality.

These comments were elaborated on by the political strategists who viewed the focus group. Republican pollster Brian Tringali noted that citizens will support services until they have to pay for them. There is strong citizen interest in finding alternative funding sources.

It is easy for those of us in academia to dismiss the thinking of such a focus group, but subsequent groups, also held by the Benton Foundation and with participants divided by race and education, not only support these findings but also those from the national survey.

OTHER INDICATORS OF CONCERN

The Benton Report is only one of a number of indicators of public

perceptions that suggests that libraries must rethink what they are doing. Several weeks ago I received a telephone call from a trustee of a public library. She was concerned about her library director who, in response to a Board question about whether the library was affected by the recently revealed Baker and Taylor pricing scandal, responded that she would wait until *Library Journal* "told her." As a follow-up, this trustee wrote me the following:

> I have been thinking I was wrong to support higher salary ranges for our director and staff. We do not seem to expect management be- havior from any of them, and indeed they don't generate it on their own and respond ineffectively to specific requests. They work merely as caretakers of public assets, and as such, any salary higher than clerical is inappropriate, even at the director level. (Personal com- munication to Estabrook, February 11, 1997)

I recently completed another revealing study: a comparison of mu- nicipal officials and public librarians on the perceived effectiveness of the public library. The CEO and chief financial officers of communities were matched with the head public librarian in their communities and asked some of the following questions:

A. *Please think about the local public library in comparison to other tax-sup- ported services in your community such as police, fire, streets, mass transpor- tation, public health, and parks and recreation. On such features below, how does the public library in your community rate in comparison to other tax- supported services?"*

The answers of the library directors and public officials differed markedly. For example, 72 percent of the library directors rated the li- brary as higher or much higher than the other mentioned public services compared to only 43 percent of the public officials. Of the library direc- tors surveyed, 65 percent rated the library as higher or much higher in responsiveness to the needs of citizens. Only 43 percent of the public officials did. In serving special groups such as minorities, the aging, and others, 61 percent of the library directors compared to only 45 percent of the public officials rated the library as higher or much higher than other community services.

Despite these differences, library directors and public officials are in close agreement concerning the performance of the local library com- pared to "an ideal public library for this community" on such factors as responsiveness to the needs of citizens, contribution of the library to in- dividual or community well being, and quality/relevance of library mate- rials. But in comparing their library to an ideal library, only 55 percent of the public officials rated their library's level of understanding of com- munity politics as high or very high. In other words, only about half the officials felt the public library was doing as well as it ideally might in

understanding community politics. In contrast, 74 percent of the offi-
cials felt the police had a high or very high understanding of the political
process in the community, and 71 percent thought that schools were also
doing well.

Even more striking are responses to a question about how well differ-
ent agencies are able to compete with other public services for an equi-
table share of the tax dollar. The police are rated highly by 80 percent of
the officials; public schools by 76 percent of the officials; and the public
library is rated as doing well by only 39 percent of the officials.

These studies reveal a public that thinks libraries are important and
good but seems to be satisfied with average and quite traditional service.
They reveal public and professional perceptions that librarians are not as
political or integrated into the community as they might be. Although
there are many communities in which both municipal officials and the
general public see ways the library can be a vital force in bringing new
information resources to their communities, many do not. I was startled
recently by a conversation with a local community (computer) network
manager during which he said he really saw no connection between what
he was doing with local computer-based community information and his
local public library—he did not foresee ways they could cooperate or
connect services.

But why worry? In a recent U.S. Department of Education study, 65
percent of the public indicated they had used the public library in the
past year and 44 percent had used it in the past month. In households
with children under 18, an impressive 82 percent indicated they had used
a public library in the past year. We need to worry because in most com-
munities those same individuals who are our strongest supporters are
also those who most easily can "substitute" for many of our core services—
either through buying books or going online, as the Benton Report points
out. Indications that this may already be happening are the declining
circulation statistics of a number of libraries, the reshaping of bookstores
to become centers for both children's and adult programming, and strong
evidence that many students are going first (and often last) to the
Internet—through home or school computers—for reference and re-
search.

Other trends in our economy and political climate are bound to im-
pact libraries. The recent summit on volunteerism can only put enor-
mous pressure on institutions to substitute volunteer labor for paid staff.
It was only one voice of one focus group participant in the Benton Re-
port that remarked that libraries under funding pressure could restaff
with volunteers—but many of us know that it is a feeling shared by oth-
ers. We face an anti-tax political climate. We face a public that is increas-
ingly suspicious of "professionals."

Simultaneously, libraries undergoing change often have a hard time

doing so. The recent storm surrounding the design of the new San Francisco Public Library (SFPL) leading to high profile media coverage like Nicholson Baker's article on the destruction of the card catalog and Sally Tisdale's yearning for the quiet library of her youth is a caution to any librarian who seeks to integrate new information technologies more fully into his or her library. The headline of the January 26, 1997, *New York Times* article catches the flavor of the dispute: "A High-Tech Library Ignites Dispute Over Computers vs. Books." Whatever the merits or problems with how Ken Dowlin dealt with the SFPL developments, the media commentary demonstrates the depth of issues all libraries face.

We are caught in an extraordinarily difficult situation. We have foundations like Kellogg encouraging us to change, encouraging us to make sure that we are leaders in making new technologies and new information resources accessible. We have a vocal public that wants libraries to hold onto their nineteenth-century roots and is suspicious of our involvement with computers. We have funders—municipal officials—who are satisfied with mediocre performance. What do we do?

## What Does This Mean for Librarians—How Should They Respond?

Findings from the Benton Report and other studies suggest that libraries are very much in the position library schools were a decade or so ago when a number of them were closed by their colleges or universities. Some of the schools closed had both students and faculty of high quality. They were closed by university administrators who felt that the schools did not meet their standards of quality, centrality, and demand—i.e., they were not perceived as meeting the standards of quality to which other departments were held, they were not central to the mission of the university, and there was insufficient demand—either for students or for employment after graduate school. The schools were left alone until such time as university budgets became tighter and universities became more concerned about justifying themselves. The schools that were closed were ones that were seen as marginal to the university's work. We see similar signs of concern in libraries.

In the survey of municipal officials reported earlier, we sought to identify those factors that predicted whether libraries had experienced any financial difficulties that resulted in a cutback of holdings or services. Of those surveyed, 26.8 percent indicated that they had had financial difficulties in the past year, but none of the expected measures were correlated with those cutbacks. We looked at total operating expenses, total circulation, number of volumes held, number of library visits, and population of legal service area—none of these factors was significant. What was significant was the extent to which the librarian and municipal officials in a community agreed on key factors of the library: the goals the

public library should pursue, the importance of the public library com-
pared to other public services, the quality and relevance of library hold-
ings, the importance of the library to the well being of the community,
and the need for the public library to take an active part in community
activities. Those libraries which had financial difficulties in the past year
were the ones in which the librarian and the municipal officials indicated
they did not agree.

And the poor will get poorer. When librarians were asked, "During
the next two years, do you think that local tax support for your public
library (in real dollars) will increase, decrease, or stay the same as it is
now?" and also, "What about the outlook for local tax support over the
next five years?" it is the libraries who have experienced cutbacks in the
previous year who were most likely to say they expected resources to de-
crease.

The Benton Report issues a strong call for librarians to become more
political, not just at the local level, but also in taking up issues surround-
ing universal service and access, intellectual property rights, and fund-
ing. The second approach suggested by the Benton Report is to build
new kinds of community institutions—not just coalitions. As the Benton
Report says:

> This research suggests that libraries have their work cut out for them
> if they do not want to reside on the margins of the revolutionary
> new digital information marketplace. This battle is not the librar-
> ies' battle alone. At issue is the very notion of a public culture—that
> nexus of schools, hospitals, libraries, parks, museums, public televi-
> sion and radio stations, community computer networks, local public
> access, education, and government channels of cable television, and
> the growing universe of nonprofit information providers on the
> Internet. This public opinion research affirms the need for alli-
> ances among these institutions to define their relative and collective
> roles in an expanding marketplace of information. (p. 3)

The Kellogg Foundation has invested in libraries, in the Benton study,
and in other initiatives because it believes that libraries have a unique
opportunity at this point in history to assert leadership in how new infor-
mation technologies are used by regular not-rich ordinary human be-
ings. They believe we are the ones who can shape public policy and who
should be shaping public policy, but they feel if we do not take the initia-
tive, they cannot afford to wait. Too many changes are happening too
fast and too much money is being bandied about by people hoping to get
rich.

Librarians can look at many of the findings from the national Benton
poll—and other recent surveys—and say, "We are well regarded by the
public." Scholars can dispute the quality of the research, and they can
readily say of significant parts of the study, "Why should I take seriously
the concerns of a rogue group of library leaders and a bunch of white

folk from Montgomery County, Maryland?" It is easy to be dismissive of the Benton Report. That so many people are not willing to dismiss the findings and that the findings are supported by other types of data, including some of the research reported in this issue of *Library Trends,* indicates how significant the work of the Benton Foundation is for public libraries as they seek to chart a future in difficult and uncertain times.

# Buildings, Books, and Bytes:
# Libraries and Communities in the Digital Age

## PREFACE

Informing the study were the grantees' visions of the future, as em-
bodied in written vision statements and telephone interviews; the public's
view of public libraries; and the public policy agenda currently under
discussion, especially as reflected in the Telecommunications Act of 1996.
Grantees were asked to submit examples of how they were presenting
their vision of the future of libraries in print and in public statements.
The ways that grantees presented these visions publicly were distilled and
later discussed with them in private telephone interviews. Augmenting
the public visions and private concerns of library leaders were public opin-
ion surveys—including one conducted in April 1996 by Lake Research

and the Tarrance Group for this report—and a single focus group of so-phisticated library users observed by library leaders.  The results were discussed at a conference of grantees in May 1996 in Washington DC. The conference concluded with sessions to chart a strategy for the future.

The Benton Foundation had several key collaborators in the design and management of the Conference in May 1996 and in the preparation of this study: Leigh Estabrook, Dean of the Graduate School of Library and Information Science at the University of Illinois; Lake Research, a Washington DC public opinion firm; and the Tarrance Group, a survey research firm based in Alexandria, Virginia. Additional survey data were obtained from the Roper Center at the University of Connecticut.

At the Benton Foundation, Senior Program Associate Laura Weiss wrote this report. Program Officer Susan Bales and Laura Weiss super-vised the research and sessions that contributed to the report.  Executive Director Larry Kirkman provided project oversight.  Program Officer Andrew Blau wrote the section on public policy.  The Benton Foundation wishes to acknowledge the many contributions of Tom Reis, Director of Marketing and Dissemination for the Kellogg Foundation, whose guid-ance was invaluable in the design of this project.

## EXECUTIVE SUMMARY

"You can take your kid to the library, but you can't take your kid to a website."—18-year-old high-school student
"If you plopped a library down. . .30 years from now. . .there would be cobwebs growing everywhere because people would look at it and wouldn't think of it as a legitimate institution because it would be so far behind. . ."
—Experienced library user

This report is about libraries and the challenges they face in the digi-tal world.  But it is also about every noncommercial institution—from public TV to the freenets— that provides information to the public.  It uses libraries as an exemplar of what can happen to even our most cher-ished public institutions when they face the onset of the digital revolu-tion, a seismic societal shift.  The report's findings about the intersection —and divergence—of library leaders' visions with those of the public hold lessons for everyone who values and wants to promote the public sphere of information and communications.

This study compares library leaders' visions for the future with the public's prescriptions for libraries, derived from public opinion research that forms the backbone of this study.  For the purposes of this study, library leaders are defined by the institutional grantees of the Kellogg Foundation.  This research suggests that libraries have their work cut out for them if they do not want to reside on the margins of the revolutionary new digital information marketplace.  The younger generation—wed-

ded to desktop computers—may provide a particular challenge. But this battle is not the libraries' battle alone. At issue is the very notion of a public culture—that nexus of schools, hospitals, libraries, parks, museums, public television and radio stations, community computer networks, local public access, education, and government channels of cable television, and the growing universe of nonprofit information providers on the Internet. This public opinion research affirms the need for alliances among these institutions to define their relative and collective roles in an expanding marketplace of information.

*How Library Leaders See the Future*

Library leaders want the library of the future to be a hybrid institution that contains both digital and book collections. And they assume that it will be the librarian "navigator" who will guide library users to the most useful sources, unlocking the knowledge and information contained in the vast annals of the information superhighway. Some library leaders envision a digital "library without walls" in which users gain access to almost unlimited amounts of information through home computers or at remote terminals located around the community. They also envision a time when one library's collection will, because of growing electronic capabilities, become everyone's collection. Library leaders see a continuing role for the library building. As a central and valued community meeting space, the library will become more of a civic integrator and a locus of community information on health, education, government, and other local services. Library leaders also express considerable concern about the "information have-nots," individuals who do not have access to computers or online information. And they argue for a social activist role for libraries in which citizens could receive literacy information or acquire health and job information. They nevertheless express reservations about the library becoming marginalized by taking on exclusively the role of information safety net.

*Public Backing for Libraries of the Future*

The public loves libraries but is unclear about whether it wants libraries to reside at the center of the evolving digital revolution—or at the margins. Trusting their libraries and seeing them as a source of comfort in an age of anxiety, Americans support their public libraries and hold them in high esteem. They support a combined role for libraries that links digital and traditional book and paper information resources. And they accord equal value to libraries as places where people can read and borrow books or use computers to find information and use online services (see the box below). Americans also strongly support the key roles of libraries, ranking the following roles as "very important":

• Providing reading hours and other programs for children.

• Purchasing new books and other printed materials.
• Maintaining and building library buildings.
• Providing computers and online services to children and adults who lack them.
• Providing a place where librarians help people find information through computers and online services.

*Warning Bells*

But the public sounded some warning bells as well. For example, the youngest Americans polled, those between the ages of 18 and 24, are the least enthusiastic boosters of maintaining and building library buildings. They are also the least enthusiastic of any age group about the importance of libraries in a digital future. And they voted to spend their money on personal computer disks rather than contribute the same amount in tax dollars to the library for purchasing digital information for home use. Moreover, men were less enthusiastic than women on almost all aspects of the library. And a strong plurality of Americans said they preferred to acquire new computer skills from "somebody they know," not from their local librarian. While only a fifth of respondents said they thought libraries would become less important in the digital age, those with access to computers were most likely to feel this way.

A focus group of frequent library users affirmed much of the polling data, endorsing America's trust in libraries and sounding warnings about the need to remain relevant. In many respects, focus group participants saw libraries as playing an important role in their communities. For example, they seconded the library leaders' vision of a hybrid institution, containing both books and digital materials. They also warmly endorsed the concept of the library as a place that provided equal and free access to information, especially to the information have-nots.

Yet, in other important ways, the focus group participants placed libraries at the fringes of modern life, especially in relation to the technological revolution. Most telling, they did not see libraries leading the way in the digital revolution. In fact, they thought libraries should take a reactive role, adapting to new technologies. Libraries "should stay just behind the curve. We don't need them to be on the curve because most people aren't," as one participant put it. Indeed, in a world of tight budgetary constraints, these Americans did not want to invest in libraries as technology leaders.

The "behind the curve" metaphor permeated the focus group participants' views of libraries in other significant ways. When asked to think about the role of libraries in the future, they placed libraries firmly in the past. In 30 years, they said, libraries would be relegated to a "kind of museum where people can go and look up stuff from way back when." Thus, the library of the future, far from being a technology leader, would

function as an information archive.

The super bookstores, such as Borders and Barnes and Noble, surfaced as strong competitors to libraries. Not only did these stores have popular books in stock (something libraries fell down on), but they created a welcoming atmosphere with comfortable chairs, coffee, and music playing in the background.

The focus group participants presented an equally diminished view of the future role of librarians. They acknowledged that librarians could perform a useful role as navigators in the as-yet difficult-to-navigate universe of the Internet. Yet they just as easily sanctioned the notion that trained library professionals could be replaced with community volunteers, such as retirees. For these sophisticated library users, the concept of "librarians as trained professionals" was nebulous at best.

And what about funding? The focus group participants were unwill-

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*America's Love for Libraries: Among other Key Findings of the Public Opinion Research*

• There is enormous overlap among library users, bookstore patrons and home computer users. While some library leaders fear that computers and bookstores will increasingly draw library users away from libraries, at least for now this concern appears groundless—one market seems to draw sustenance from the other markets.
• Americans favor spending more tax dollars and charging extra fees to supplement library operating funds and to purchase computer access and information. Given $20, they would rather spend it on taxes to aid libraries that want to purchase digital information and make it available through home computers than spend that $20 on their own computer software.
• Library users favor increasing taxes more than nonlibrary users, who prefer a pay-as-you-go fee system in which individual charges would be levied for certain services.
• Like library leaders, Americans place high value on library buildings. But unlike the library leaders, Americans are less sure that the library is a significant community meeting place.
• The public ranks high the notion that librarians should take on responsibilities for aiding users who want to navigate the information superhighway. But when asked where they would go to learn more about using computers, a strong plurality said they would ask "somebody they know," not their local librarian.
• Families with children were particularly strong library supporters as well as heavy computer users.
• Garnering strong public support is the library's role in providing computer access to adults and children who otherwise lack it.
• Minorities favor providing computer services to information have-nots and are strong supporters of building more libraries. They are also willing to pay extra taxes and fees for more library-based digital services. Lower-income Americans are least likely to ask a friend for help in mastering computer skills, so they might be particularly receptive to librarians acting as digital information trainers.

ing to increase taxes to support library services, including the provision of more technology. Their solution to funding needs was to turn libraries into charitable institutions, to which individuals could make tax-deductible contributions. (The fact that libraries already rely on charitable donations to supplement their public support had escaped them.) Given several notable discrepancies between survey and focus group findings, additional research on these topics is imperative to probe specific aspects of the public's vision and values and to create a more coherent context on which the library community can build a communications strategy.

*Public Policy Context*

The vision statements suggest key roles for libraries as collections, institutions, and community resources in the digital age. Many of the roles identified in these statements rely on public policies that support— or at least do not undermine or contradict—these outcomes.

Four public policy issues will affect the realization of library leaders' visions for their professions and the ways that people use libraries:

• Universal service and access, through which libraries would provide affordable access to and use of computer networking tools.
• Freedom of speech and the host of policies that support or limit libraries' ability to collect, create, and make available materials—including those that invoke controversy—in the digital age.
• Intellectual property issues, including copyright and the "moral rights" of artists and authors to their work, which will affect both libraries and library users.
• Funding or support mechanisms, especially with the decoupling of library services and the local tax base as more collections are part of digital networks with no geographic boundaries.

*Strategies to Move Libraries into the Digital Age*

At the spring 1996 conference of library and information management leaders, participants analyzed the implications of the public opinion research findings with the aim of exploring common communications messages and strategies that would move libraries productively into the digital age. Participants worked to build a bridge from the language and concepts of their library visions to the general public's ambivalent attitudes toward the library's identity and role, testing messages and strategies in small groups and generally arriving at a consensus. Participants acknowledged that libraries cannot and do not exist in a vacuum—that libraries must join forces with the entire landscape of institutions that contribute to public culture. They pointed to examples of libraries teaming up with other public service information providers—such as public television and radio, community computer networks, and local nonprofits —to form community learning cooperatives. Several of the grantees mentioned that such collaborations already are flourishing in some areas.

They imagined the possibility of a coordinated communications campaign, based on public opinion research, to position libraries as key players in this new cooperative venture. Participants said that the opportunity is open to create and promote models of "community learning collaboratives" or new forms of "public service media" in which libraries play a key role—and to actively define the public interest in the digital age. Participants also identified the need for creating a broader, educated constituency familiar with the impact of the Telecommunications Act of 1996—which creates a new federal framework in which libraries and their partners must work if they are to articulate their key messages about public access, learning, and community service.

*In Sum . . .*

Americans continue to have a love affair with their libraries, but they have difficulty figuring out where libraries fit in the new digital world. And many Americans would just as soon turn their local libraries into museums and recruit retirees to staff them. Libraries are thus at a crossroads, for they must adjust their traditional values and services to the digital age. But there is good reason for optimism as libraries and their communities take up this challenge. Libraries have enormous opportunities nationwide to influence and direct public opinion because strong public sentiment already supports key visions for the future of libraries. Moreover, the growing use of home computers seems, at least at this juncture, to complement—not compete with—library use. So libraries and their leaders now must chart a role for themselves, giving meaning and message to their future institutions and their central role in community life.

## PUBLIC VISIONS, PRIVATE REFLECTIONS

Both publicly and privately, many library leaders welcomed the digital age and said that electronic information will broaden libraries' traditional ability to provide broad access to a rich and ever-expanding store of information. Others expressed concern in their public statements that the digital revolution could create a class of information have-nots. And in private interviews, some registered concern that libraries would be tagged as "safety net" institutions dedicated exclusively to serving this population.

The private interviews also raised issues—and anxieties—not addressed in the formal vision statements. These included the degree to which libraries need to carve out a competitive niche in the exploding information marketplace, the extent to which the public will continue to provide political and budgetary support, and the possibility of alliances with other information providers, such as schools, local governments, and other public service media. Not surprisingly, given the digital

revolution's enormous impact on information production and retrieval, the library leaders failed to agree on many key issues.

*Technology and the Library: Where is the Nexus?*

Many library leaders see libraries as the natural jumping off point for the National Information Infrastructure (NII). Building the NII around libraries expands and enhances an already-existing information infrastructure. It eliminates the need to create an entirely new one. Most librarians want to marry the explosion of digital resources to traditional library values: service to people, education to meet information needs, broad access to library resources for all, the provision of quality information and knowledge, and building and inculcating democratic values and American history.

The electronic age will allow libraries of varying types, serving varying populations, to link together and even merge. Thus, say some library leaders, the local public library and the university library will merge, electronically, into a single entity. The links will extend to form a worldwide digital library, making the library a bulwark of the global community and potentially serving a worldwide audience.

Library leaders emphasize that libraries are places that acquire, catalog, preserve, and disseminate collections. Many leaders now expand that vision to include "virtual collections" of digitized information. This vision implies a fundamentally different relationship between libraries and "their" collections: libraries will have access to vast collections but may not actually control them.

Some library leaders assert that libraries in the digital age will create, publish, and manipulate information. This vision transforms libraries from collectors and disseminators to actual information creators. Other library leaders say libraries' core mission is to maintain and distribute collections.

While some library leaders envision the book and other print publications as playing an increasingly marginal role, others anticipate a "hybrid" library—one that combines traditional print publications and new digitized information. Few look forward to a time when the book and other traditional print publications will cease to be a fundamental cornerstone of library collections. Most library leaders acknowledge, however, that room must be made on the library "shelf" for digital information sources. Libraries will continue their roles as lenders of information and as facilities for browsing. Some fear that the digital explosion could undermine libraries' lending role because individuals will be able to easily replicate (and therefore "own") any online document. But the digital library also greatly extends the traditional idea of "browsing" into the boundless archives of cyberspace.

*Libraries with and without walls*

Library leaders are struggling to find a place in the digital age for the physical building most Americans traditionally associate with the library. Most library leaders say without hesitation that libraries constitute a physical space that holds collections. Libraries are also a space for learning and reflection a public space that brings together diverse populations into one community to learn, gather information, and reflect.

Traditionally, libraries have been collections of items stored in a site-specific facility. Access is limited to those who can travel to the library site or can arrange a loan. Thus time and space define the nature of the library as physical space.

With the onset of the digital age, many library leaders say libraries must expand beyond the confines of the traditional library building. Because of the electronic revolution, libraries now can embrace government archives, business databases, and electronic sound and film collections that previously were not considered part of the libraries' own collections.

Some carry this notion one step further. They say libraries need to evolve into entirely new organizational forms that take into account the digital library-without-walls and that acknowledge that information today can be gathered, disseminated, and created at any time in any place. The digital library reduces—even eliminates—geographic and temporal barriers. Libraries, which traditionally have provided links to additional information through connections to other branches and library systems, will now be providing links through cyberspace.

Your computer is a library, say those who carry this concept the furthest. It is outside library walls, but it can take you deep into library and other information collections.

But others still see a role for the library "place" in a digital world. The notion that you can get any information from a desktop computer threatens the communal nature of the library, which is rooted in its physical space.

*The Library as a Provider and Protector of Equal Access and Equal Opportunity*

Providing equal access for all Americans to library resources is a bedrock value. The free-flow of information to all who desire it, regardless of race, income, or other factors, is vital to the functioning of a free society. Libraries should act as an information safety net for the information have-nots, especially as Americans move into the digital age.

A vision subscribed to by all the library leaders is that underserved communities must have free and unfettered access to libraries, including traditional and digital collections.

Public libraries are uniquely suited to provide equal access gateways onto the NII, connecting people in underserved urban and rural areas to

information resources. The digital age merely extends the traditional notion of the library as "the people's university."

Libraries should provide training, equipment, and information to the information have-nots. Information—or lack of access to it—should not become a new barrier to achievement and social mobility, keeping some individuals from realizing their fullest potential as wage earners, parents, and responsible citizens.

*The Library as Community Builder, Civic Integrator, and Community Activist in a Digital World*

Library leaders are nearly unanimous in their belief that libraries, along with schools and the courts, are among our fundamental civic institutions.

Libraries are civic integrators. They are community nerve centers. They constitute, along with other vital local institutions, the basis of civic life. They provide a forum through which community members interact with each other, both through the use of meeting space and through the collection, dissemination, and implementation of information. They offer programs, services, and collections that support direct civic participation.

Libraries draw the community in through literacy, after-school, pre-school, and other programs. Some library leaders stress that libraries and library users should play an active role in community revitalization. Libraries should become intervenors and activists in the communities they serve, especially in low-income and other underserved communities. Whether they are offering online job services, after-school programs, links among community activists, access to government information, or literacy programs, libraries must be forces for positive social change in their communities.

Libraries are directly tied to a community's quality of life. If libraries are weakened or fail because of budgetary or other constraints, the community's quality of life depreciates.

The digital library can be an extension of the traditional communal library. It is a new expression of the old American idea of providing the widest possible access to knowledge to the community.

But some library leaders add a cautionary note. The digital library—and the digital age—can undermine the notion of the library as a community institution and a building block of American culture. If the cost of technology becomes a barrier, entire segments of the community may be left out. If the desktop computer replaces the library as a community "place," the library's community functions may wither, and its traditional function as an identifier and shaper of the American experience may start to decline.

*The Library as a Definer of American Culture*

Libraries must continue their tradition of providing a window onto American culture, values, and traditions. They do this through open access to all—any citizen can acquire the knowledge he or she needs to function effectively in a democratic society.

Some librarians believe that the digital library can enhance this traditional function. The digital library preserves and makes broadly available original icons of American history. No longer will Americans have to travel to specific locations to view important American historical documents and artifacts. They will be available through a computer terminal.

*The Evolving Librarian*

Some library leaders see a basic redefinition of the librarian's role. Instead of being caretakers of materials, they will become information navigators, aiding users to tap more effectively the resources of the Internet and other digitized collections. Librarians will become coaches rather than information authorities. They can become trusted guides for a person who knows what he or she needs but is unsure how to find it. They can point to electronic tools and resources as well as to card catalogs and other traditional information repositories.

Other library leaders try to marry a more traditional view of librarianship with the exigencies of the digital age. They want to join together the basic values of librarianship—service to people, education to meet information needs, broad access to library resources for all, the provision of quality information and knowledge, and building and inculcating democratic and American values and history—to the NII. In fact, they view these basic values as critical adjuncts to a wide-open, confusing digital age in which users will need more, not less, assistance to understand what it is they don't know and what they need to know.

Librarians are the guardians of the fundamental library principle of equal access. They can equip information have-nots with the tools and equipment to give them parity with more affluent users.

In the view of some library leaders, librarians play a critical role in ensuring that libraries become organizers and mediators of knowledge, not just purveyors of raw information. These observers fear, in fact, that the information explosion will supplant the quest for knowledge. Libraries must "rehumanize" the torrent of information flowing from the NII —and become trusted translators, knowledge mediators.

Some observers believe that librarians must become involved in community organizations—and network with the community to ascertain community information needs and reach out to underserved populations.

Librarians will need to be retrained. They will need new tools to search for information from digital sources. Some caution that in the

process of becoming digitally fluent, librarians must not lose their humanistic origins.

*Agreements and Departures*

Following the analysis of the written vision statements submitted by the library leaders, Leigh Estabrook, Dean of the Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign, conducted a series of telephone interviews with the Kellogg grantees. Estabrook asked the library leaders to reflect and expand on the ideas expressed in their vision statements. The interviews were designed to probe further areas of consensus and divergence among the grantees. Estabrook also posed additional questions to solicit these library leaders' views on topics not touched on in the vision statements, specifically their assessment of the library's political base of support and potential competition with other information providers.

The interviews captured many of the sentiments expressed in the written vision statements, and many of these areas of agreement can serve as initial areas of consensus. There was, however, some significant divergence between the vision statements and the interviews. A host of new and intriguing issues arose in the interviews that the sector may want to examine as it seeks to forge its identity in the emerging digital world.

Two key departures from the written vision statements cropped up during the series of telephone interviews, perhaps because of the direct nature of the questions asked or the less formal interview format:

The grantees, in their written statements, were enthusiastic about the role of the library as an information safety net for the information have-nots. The grantees, in their telephone interviews, expressed reservations about serving in this capacity, especially if it was the library's exclusive role. Some of those interviewed feared that if libraries serve primarily as information safety nets, they would become marginalized and lose political support from middle-class taxpayers.

The written vision statements contained several affirmations of the library's role as democratizer. Some library leaders also stated in their documents that they believed libraries should actually become intervenors and activists in the communities they serve, especially low-income communities. During the interviews with the grantees, however, these notions barely surfaced.

*New Areas of Concern*

In contrast to the grantees' assertive written vision statements, the telephone interviews exposed a profession more tentative about its role in the digital age. The vision statements, though differing on the specifics of how libraries should envision their futures, set out bold agendas. The interviews were much more ambivalent, raising more questions than

answers.  Indeed, several new issues arose that were only hinted at in the written vision documents:

The degree to which libraries need to carve out a competitive niche in an exploding information marketplace.  Super bookstores, such as Borders and Barnes and Noble, were viewed as posing as big a threat to libraries as an individual's ease of access to the digital information from personal computers.

The extent to which libraries will be able to ease these competitive forces by forging relationships with other information providers, including other libraries, schools, local governments, and commercial information providers.

The extent to which the public will continue to provide political and budgetary support to libraries in the wake of strong antigovernment sentiment, competition from commercial purveyors of home-use online products, digital collections not "owned" by locally supported public libraries, and public ambivalence about the significance of libraries.

The degree to which the library field has developed leaders who can "step up to the plate," as one interviewee put it, and define and assert the role of libraries in the digital future.

*Libraries in the Digital Age Must Find Their Competitive Niche*

Many of the interviewees expressed great concern about the library's competitive niche in a marketplace of exploding information resources. One librarian suggested that libraries cannot continue to be a gateway for everyone—that they must evaluate their roles and functions like a business, sizing up the competition and carving out niches.  As one interviewee said, "We don't have the franchise anymore to be sole providers of information in our communities, and we need to stop acting as if we did."

Interestingly, the interviewees were just as worried about the super bookstores as they were about the individual surfing the Net on his or her home computer.  Libraries' traditional middle- and upper-income supporters are finding it easier to purchase books at these stores than borrow them from the local public library.  Moreover, many of these stores are increasingly emerging as community meeting centers—complete with story hours—a traditional, core role for local public libraries.

The individual clicking a mouse while sitting at his or her home computer is seen as a threat to the library's future.  As one interviewee put it, "If people can get all the information they need all by themselves at home on their computer without any intervention from the library, we have a problem."  Another interviewee wondered about the role of the library —and the librarian—in an "any time, any place" information world.  Still others worried about the continuing meaning and viability of the "local" public library in a world without information boundaries.

Others were more sanguine.  They envisioned the librarian-naviga-

tor as the "bait" for luring customers into the library and keeping libraries competitive in the new mix of information resources. "It will be a long time before information technology replaces the human intermediary for a lot of information retrieval, so the library building is not a place where books are, but a place where somebody is sitting," explained one librarian.

Other interviewees expressed the notion that libraries could carve out a competitive niche by becoming creators or publishers of digital information, such as local job lines and other sources of local information. Some local community information networks are not connected to the public library, however, and do not see themselves becoming so in the foreseeable future. Thus local community information networks could be a potential source of competition.

Some library leaders expressed optimism that the availability of the super bookstores would create more readers, and therefore more library customers. "It enhances . . . it gets people more excited about wanting to read stuff, instead of just watching television all the time," was one interviewee's assessment. Other library leaders suggested creating partnerships with bookstores.

In the view of some library leaders, the public even may be starting to confuse these bookstores with their public library! As one interviewee recounted: "My favorite moment at Barnes and Noble was when somebody came in with her arms full of library books and said, 'Where do I return these?'"

Also mentioned as a source of competition was the ability of individuals today to purchase collections of digital materials from companies producing online products that heretofore were available only at one's local library.

*Collaboration with Other Information Providers May Offer a Solution*
While the library leaders expressed concern about competition from various information providers, they also voiced some optimism about the possibility of collaborating with these same competitors.

Some librarians described the potential for partnerships between local public libraries and university libraries to expand collections and provide cost-sharing for expensive digital collections. Others talked about collaborations with local schools and governments—even with bookstores. Still others looked to partnerships with high technology and other businesses. Few offered concrete steps that could start to forge these partnerships, however.

One library leader pointed out that forging alliances can come with a political downside. Cooperative agreements with businesses or educational institutions, he said, means giving up some power and control.

But another pointed out that collaborations are essential because libraries can no longer rely exclusively on public funding to support themselves fully.

*The Public's Love Affair with Libraries: Myths, Money, and Political Might*

As most of the library leaders agreed, everyone loves their local public library. It is a "warm and comfy" place, as one put it. The library is a symbol of trust and a locus of community culture, values, and identity that even nonusers care about.

But as many of the interviewees also agreed, this idealization of the library can be as much a curse as a blessing. First, it is this traditional view of libraries that makes it difficult politically for libraries to remake their image and surge forward in the digital age. Second, this sentimental view of the library provides a shaky foundation on which to appeal for public funds. On the other hand, it may be this strong sentimental attachment that carries the day for library bond issues, other interviewees said.

At the same time that libraries may occupy an almost sacred place in the American community psyche, they are in many other respects "invisible" to the American public. As one interviewee put it, "Who's against libraries? Nobody's against them; it's just nobody much notices." Or as another interviewee acknowledged, "The public counts on libraries to be there, but they don't have a very good sense of what they might be counted on to do."

But several library leaders pointed out that despite these trends, libraries are definitely not off Americans' radar screen and in fact are enjoying considerable public esteem. A measure of this, suggested some interviewees, is the library building boom in several of America's major cities.

Others raised the issue of whether Americans will lend budgetary support to libraries if they come to primarily house computer terminals and digital collections and whether, to support these collections, libraries will have to start charging fees. Why should taxpayers support information that they can get from their desktop computer? Others posed the question, Why should taxpayers support digital information with local bond issues when, by definition, digital information is not locally owned? At the same time, one library leader cited a local community that seemed reluctant to support a bond issue for building more library buildings unless a strong digital component was factored into the planning process.

The apparent migration of middle- and upper-income Americans—traditional library boosters—to the super bookstores may also have implications for future library support, according to some library leaders.

*Librarians must Become Active in Articulating a Leadership Role for Their Profession*

A sense of urgency pervaded library leaders' remarks about the need for the profession to "step up to the plate" and strongly define and assert its role in the information age. Many interviewees thought that librarians, at both the local and national leadership levels, were too reluctant to take on this role.

If nobody "much notices" libraries, then it is the librarians' job, in addition to being information navigators, to make the public notice and become advocates for the profession, the interviewees said. Library leadership needs to be able to state its case, be more aggressive, and as one interviewee put it, "be, in the public view, worthy of investment."

Many thought this assertiveness was particularly essential, given the current antigovernment political environment in which public institutions across the board are fighting for survival.

One library leader suggested that the profession actively recruit student government and other leaders in high school and college to consider entering the profession and to renew its leadership ranks.

Some of the leaders who were interviewed expressed optimism that the spring meeting in Washington DC—to discuss the sector's public message campaign—would spur this sort of activism. But others expressed caution: "One questions the extent to which the public library directors, their staff, and their boards actually understand the profound nature of the change that's under way."

Library leaders, as expressed in their vision statements and personal interviews, are at a crossroads in trying to define their profession. Their vision is firmly grounded in the library as a physical space, a hybrid of digital and book collections, and a community information resource, and in the librarian as a vital information navigator. Still in dispute is the library's competitive niche in an expanding marketplace of information. The individual user who once would have sought out the library is now being his or her own "librarian"—or at least is attempting to assume this role. Another key question is whether the public will support these roles politically and financially and whether the sector can reach a sufficient consensus to exert its leadership in the new information environment.

## PUBLIC SUPPORT FOR LIBRARIES

Library leaders should be encouraged overall by findings of the public opinion survey conducted for this report that revealed that the public stands behind libraries. Notably, the survey documents that the public is willing to back up this support with financial resources—even to the point of paying extra fees beyond taxes already paid to support digital library services. And the points on which library leaders and the public agree are substantial.

But the survey—and the subsequent focus group—also sound a note of caution. The youngest Americans surveyed—the 18-24 age group—registered weak support for library digital activities and for library buildings. Nonlibrary users were not enthusiastic about paying more taxes to support libraries and preferred a pay-as-you-go approach. A strong plurality of Americans said they would ask "somebody they know" to learn more about computers, rather than their local librarian. Perhaps this reflects a sentiment voiced in the focus group: that libraries' rightful place in the emerging digital age is "behind the curve," rather than in front of it.

Among the survey's key findings:

- The public strongly supports public libraries and wants them to take a leadership role in providing access to computers and digital information. At the same time, the public voices substantial support for maintaining such traditional library services as book collections and offering reading hours and other programs for children.

- There is a high correlation between those who are frequent library users, frequent bookstore patrons, and those who have access to a personal computer. This would seem to suggest that some library leaders' fears that bookstores will win away library customers may be groundless. In fact, rather than competing with one another, as one leader suggested, bookstores, libraries, and computers may be cross-fertilizing each other's constituencies.

- A majority of Americans do not think libraries' importance will decrease as personal computer use becomes more widespread. Equal numbers of Americans believe libraries should spend their resources on digital information, as opposed to book and other printed information. Thus library leaders' vision of a hybrid library may be winning some adherents among the public.

- Despite fears voiced by library leaders that current antigovernment sentiment will hamper libraries' ability to raise money to support digital and traditional collections, the public says it is willing to pay additional taxes and fees for these services. A cautionary note should be added, however. Library users are willing to pay more taxes, but nonlibrary users want fees charged to individual users instead.

- Some of the library leaders expressed concern that home computers would compete directly for library users. But a majority of those polled, when asked how they would spend $20 on digital resources if they had a computer at home, voted to spend that money in taxes to allow the local public library to develop an information service that could be accessed from home. Only a third wanted to use the money to buy their own computer disks for individual use.

- The survey found that families with children are much more likely to have computers at home—and also to use their local public library.

This suggests there is a strong nexus between children, computers, and libraries, one that librarians should take note of and consider carefully as they seek to attract growing numbers of library supporters and users.

- The public values the notion that librarians should take on responsibilities for aiding users who want to navigate the information superhighway. When asked where they would go to learn more about using computers, however, a strong plurality of Americans said they would ask "somebody they know," rather than their local librarian. Nevertheless, the potential exists to develop the librarian's information navigator role, especially if it can be promoted as the institutional equivalent of that "somebody you know."

- Maintaining and building library buildings was ranked third among all the library functions listed in the poll, right behind providing children's services and books.

- The public favors using libraries for community meetings, although this role is ranked lower than all but one of nine other roles and library activities read to survey respondents.

- The public voices less enthusiasm than library leaders for setting up computers in remote locations like shopping malls to ease access to library information.

- Americans divide along demographic lines on some key issues affecting libraries. For example, the youngest Americans polled, those between the ages of 18 and 24, are the least enthusiastic boosters of maintaining and building library buildings. They are also the least enthusiastic of any age group about the importance of libraries in a digital future. And they vote to spend their own money on computer disks rather than contributing the same amount in tax dollars to the library for purchasing digital information for home use. Older Americans, the poll revealed, want the library to provide these services and generally are less enthusiastic about computer services in the library than younger respondents. Minorities favor providing computer services to so-called information have-nots, are strong supporters of more library buildings, and are willing to pay extra taxes and fees for more library-based digital services. Lower-income Americans are least likely to ask a friend for help in mastering computer skills; this group might be particularly receptive to librarians as digital information trainers.

*Libraries Enjoy Substantial Public Support in the Digital Age*

For the vast majority of Americans, libraries are a highly valued institution—even with the advent of virtually unrestricted access to information from one's home computer.

Respondents say that libraries will be at least as important in the digital age as they are now. Respondents were asked whether they thought

public libraries would become more or less important than they are now, as the use of computers continues to grow. A majority of Americans don't think libraries' importance will decrease. That majority split evenly between those who said libraries would become more important (40 percent) and those who thought their significance would not change (38 percent). A fifth of respondents indicated that libraries' importance would decline. While this is a small group, it should be noted that it is twice the percentage recorded in a 1995 survey (see the box below).

The responses to this question, though certainly positive, should be interpreted with some caution. In the survey, 24 percent of those with access to a personal computer said libraries would become less important, as opposed to 16 percent of those who lack such access. These findings suggest that as access to computers swells, the number of Americans who say that libraries will become less important in the digital age may well expand.

Another possible pitfall is that the group with the lowest level of backing for the notion of libraries' increasing importance was the 18-24 age group, which registered only 27 percent support for this view. This population is the one that is most at home with the notion of obtaining information from a desktop computer without the help of the library. Still, as this independent-minded and computer-literate group ages and has children, they may migrate in larger numbers to libraries.

Respondents rank traditional and computer-related services highly. Americans hold in high regard nearly all of the nine current and potential library services tested among those polled. When asked to rank these services, every service received substantial support, whether it was expressed in terms of personal preference or in terms of what public libraries should provide to their community.

Ranked highest were services to children. Eighty-three percent of those queried rated them as "very important." Close behind was purchasing new books, at 72 percent. Maintaining, repairing, and building public library buildings won support from 65 percent of respondents, and providing computers and online services to children and adults who don't have their own computers ranked fourth, with 60 percent judging this service "very important."

Other computer-related services also drew strong popular support. The role of librarians as information navigators was rated as "very important" by 58 percent of respondents, with 85 percent saying that "providing a place where librarians help people find information through computers and online services" was "very important" or "moderately important." A large number of respondents said that enabling people to access library information through their home computers was a worthy goal, with 78 percent rating this function as either "very important" (46 percent) or "moderately important" (32 percent). A total of 70 percent agreed

that providing community meeting space was "very important" or "mod-erately important," but only 34 percent labeled this function as "very im-portant." Setting up computers to access library information at remote locations scored lowest; only 34 percent of respondents agreed this was a very important service.

Of those respondents who ranked each library service as "very im-portant," there were some notable differences among the demographic groups probed. Women ranked such services as children's reading hours, purchasing books, maintaining buildings, and providing computer ser-vices to those who lack them, higher than men. For example, 79 percent of women thought it was "very important" for libraries to spend their money on purchasing new books; 65 percent of men shared this view. Men and women polled nearly evenly on two key computer-related ser-vices: establishing links from libraries to home computers and purchas-ing computers and providing online access.

Minorities generally were more interested than whites in spending money on library services, although all groups were highly supportive. For example, while 57 percent of whites thought it was very important for libraries to provide computers and online services to those who lack them, 76 percent of African Americans and 86 percent of Hispanics felt that way. A total of 65 percent of Hispanics and 62 percent of African Ameri-cans thought it was "very important" for libraries to allocate funds to al-low people to access library information from their home computers. Only 43 percent of whites agreed with this view. Finally, 58 percent of Hispanics thought libraries ought to allocate their financial resources to providing community meeting space; only a third of whites and 39 per-cent of blacks supported this view.

Age seemed to play a part in determining how much importance a respondent placed on various library services:

- Only 49 percent of college-age respondents between the ages of 18 and 24 rated maintaining and building libraries as "very important," as opposed to 67 percent of the 25-34 age group and 70 percent of the 65 and older age group.
- Those at the other end of the age spectrum, ages 55 and older, assigned low priority to providing access to library materials through home computers and to purchasing computers and access.
- Young adults, those between the ages of 25 and 34, ranked providing access to computer services to those who lack them at 73 percent, far higher than other groups.
- Only 30 percent of the 55-64 year-olds thought that providing com-puter services to information have-nots was very important.

Household income and education were related to the importance Americans placed on building and maintaining library buildings and on

providing computer access to those who lack it. As detailed below, lower-income groups supported library building activities substantially more than higher-income groups. Those with less education also voted in favor of the importance of library buildings in greater numbers than more highly educated respondents. Education, more than income, appeared to play a role in the level of support for providing library access to those without computer access.

Libraries may be drawing on decades of good will when the public displays such unequivocal support for their continuing service to communities—even with the advent of the digital age. The library leaders noted the esteem in which libraries are held. Perhaps this high regard will provide a safe pathway on which libraries can navigate the transition from their traditional book-only role to a book-plus-digital role. Several cautionary notes emerged from these findings, however. Support for library buildings and for providing computer access to those who do not have computer access at home or work, while generally strong, displays weakness in some demographic subgroups.

*Americans Support Digital Library Collections, Access, and Services*

The survey reveals that while Americans are using computers in substantial numbers at home and at work, they are also heavily patronizing their local library and local bookstore. Americans are divided over whether it is more important for libraries to invest in digital resources as opposed to books and other paper information resources, with both points of view drawing equal numbers of adherents. Yet Americans are willing to spend extra tax dollars and fees on library computer and digital services and books. Finally, the survey reveals that Americans would be willing to have additional tax dollars invested in digital information accessible from a home computer, rather than spend that same amount on a computer product for their own individual use.

There is significant overlap between Americans who use libraries, bookstores, and home computers. One of the survey's most important findings is the high correlation between library use, bookstore patronage, and home computer access.

A total of 44 percent of respondents said they had access to a computer for personal use at home; 37 percent said they had such access at work; 10 percent had school access. Altogether, 81 percent of those queried said they had access to a personal computer either at home or at work. At the same time, 69 percent of the respondents said they went to a public library at least once in the last year. A total of 78 percent of Americans reported that they went to a bookstore in the past year to browse or purchase a book.

The survey reveals that home computer use and library use are highly correlated. People with home computers were more likely to have gone

to a public library at least once in the past year (79 percent) than those who lack computers (60 percent). They are also more likely to have gone frequently (52 percent more than five times) than those who do not have computers (30 percent more than five times). Thus, as computer use and ownership spreads, library use may actually swell, rather than decline, as some library leaders have feared.

The survey also reveals a significant correlation between heavy library use, frequent bookstore patronage, and home computer use. Of those Americans who have gone to the library at least once in the past year, 88 percent went to a bookstore at least once. Of those respondents who have not used the library, only 56 percent went to a bookstore.

Of those Americans who own home computers, 79 percent went to the library at least once, 90 percent frequented a bookstore at least once. Those who lack a home computer were far less frequent users of either service. Only 60 percent of those individuals went to the library at least once, while 69 percent went to the bookstore at least once.

People with home computers are also more likely to have gone to a bookstore frequently (57 percent more than five times, 36 percent more than ten times) than those who do not have computers (34 percent more than five times, a fifth more than ten times).

The findings would seem to suggest that though Americans are patronizing bookstores in large numbers—and using personal computers in growing numbers—they do not seem to be abandoning libraries. Quite the contrary, the three activities appear to cross-fertilize one another.

*Americans are Evenly Divided Over whether Libraries in the Future Should be a Place for Books or Digital Information*

The public seems to be almost evenly split over which functions should take precedence as libraries move into the future. A third (35 percent) think it will be most important for libraries "to be a place where people can read and borrow books." Another third (37 percent) believe it will be most important for libraries "to be a place where people can use computers to find information and to use online computer services." Only 10 percent felt it would be most important for libraries to provide meeting space and community information. These findings were extremely consistent across all demographic categories.

These results are encouraging for those library leaders who support the concept of a "hybrid" library, because they seem to suggest that there are substantial blocks of public support for both the traditional and digital functions. On the other hand, these findings suggest that library backers who seek political and financial aid will need to bow to the concerns of both camps as library supporters launch public awareness and funding campaigns.

*Americans want Libraries to Provide Digital Information—and They are*
*willing to Spend Tax Dollars to make this Happen*

When survey respondents were asked, if they had a personal com-
puter at home, would they choose to spend $20 a year in taxes to enable
the library to have an information service that could be accessed from a
home computer, or would they prefer to spend the money to buy disks to
install on their home computer, a majority of respondents said they would
rather pay for the library-based system. Exactly a third said they would
prefer to use their tax dollars to buy their own disks. A majority—52
percent—said they would rather spend those funds to enable the public
library "to have an information service that you could access from your
home computer." As discussed below, Americans also are willing to be
charged extra for library computer and online services above and be-
yond the taxes they already pay.

Surprisingly, income level played virtually no role in determining
support for home- or library-based digital information. There was some
differentiation by age, however. The strongest support for buying one's
own disks came in the youngest age group, at 47 percent, and declined
steadily to 21 percent of those Americans who are 65 and older. Also,
individuals in households with children lean toward favoring buying their
own disks, with 41 percent of those with children between the ages of 12
and 17 supporting this approach, while only 29 percent of childless indi-
viduals favor individual purchase.

Overall, the support for spending tax dollars on library-supplied digi-
tal information that can be accessed from home is a positive finding on
several scores. First, when pitted against the notion that individual PC
users don't need or want libraries as they become more able to navigate
online information on their own, the library comes out ahead. Ameri-
cans would rather have the libraries collect digital resources than pur-
chase them on their own. Second, these findings may help ease some
library leaders' concerns that the current antigovernment mood might
infect libraries' ability to move forcefully into the digital age. Clearly,
Americans see libraries as an important public institution and are willing
to pay for them to play an expanded, digital role.

Finally, these findings would seem to suggest that Americans see digital
information as a public, rather than private, good and are willing to pay
to see this vision realized. It should be noted, however, that respondents
were told the library information would be available on their home com-
puter. It would be interesting in future surveys to probe whether this
support would hold up if the library's digital collections were available
only at library branches.

The survey also revealed that Americans are willing to spend extra
tax dollars or pay extra fees for library services, particularly computer
access and information. A plurality of Americans—43 percent—favored

increasing taxes to cover costs if their local library needed additional funds to continue operation and another 39 percent said they would back charging a fee to people who use the library. These findings are almost identical to those recorded by a 1991 University of Illinois poll (see the box below). And Americans in significant numbers (60 percent) are willing to pay—in addition to taxes—extra fees to pay for access to personal computers and online services at the library. Of these, 27 percent would pay $10 a year, 27 percent would pay $25 a year, and 6 percent would pay $50 a year, while 35 percent would be willing to pay nothing.

Americans' endorsement for paying more taxes to libraries may be weaker than it first appears because it is library users who are most behind a tax boost. Nonlibrary users want to pay fees as they need the library—they are less interested in general public support for the institution. For example, of those who have gone to the library at least once in the last year, 49 percent favored increasing taxes to cover costs, while only a third of nonlibrary users agreed with this approach. The percentages are reversed when it comes to backing fees: 46 percent of nonlibrary users support library charges; only 34 percent of library users would back this type of assessment.

The youngest age group (18-24 year-olds), at 71 percent, was far more willing to pay for these services than the oldest age group (65 and older), at 36 percent. Nearly three-quarters of African Americans (72 percent) said they would pay a fee, while only 58 percent of whites indicated a willingness to do so. Not surprisingly, those with higher incomes and more education were more willing to pay charges than were those with lower incomes—as were people with children, who at 72 percent were far more willing to pay charges than were childless individuals at 54 percent.

*Families with Children are Much More Likely to have Home Computers and Use Libraries*

The survey found that families with children are much more likely to have computers at home—and to use their local public library. Half of all families with children have computers at home. Only 37 percent of childless households have home computers. At the same time, library usage among families with children is also substantial. Fifty percent of such families have gone to their public library more than five times in the past year. This suggests that librarians may want to target this population since it exhibits strong attachments to computers and libraries.

*Americans are Uncertain about Librarians' Roles as Trainer and Navigator for the Information Superhighway*

As noted above, the notion of librarians serving as navigators—"helping people find information through computers and online services"—for the information superhighway was ranked high by Americans. A solid majority—58 percent—thought this function was "very important." Alto-

gether 85 percent believed this service was important.

When Americans were asked where they would go to learn more about using computers to find information through the Internet and other online services, however, only 10 percent listed the library. A strong plurality of Americans—41 percent—would ask "somebody they know." All other categories—buying a book, going to a computer store, reading a magazine, using an online computer service—ranked in the single digits.

Women and older Americans were more interested than other Americans in taking a class to learn computer skills. A fifth of women and roughly a quarter of older Americans said they would take this route. African Americans and Hispanics were among the least likely (at 32 percent and 24 percent, respectively) to ask somebody they know for assistance. The lowest-income Americans—those with household incomes less than $15,000 a year—were also among the least likely—32 percent—to ask a friend or acquaintance for help, while nearly half, or 47 percent, of those with incomes of $50,000 or more were the most likely. This is perhaps because lower-income Americans may have fewer friends or acquaintances who own personal computers than more affluent Americans.

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*Details of the Public Opinion Survey*

In spring 1996 the Benton Foundation commissioned a national survey to test public support for libraries in the digital age. The poll was conducted for Lake Research and the Tarrance Group between April 18 and April 21, 1996, by the Opinion Research Corporation (Princeton, New Jersey). Telephone interviews were conducted by paid, trained, and professionally supervised interviewers using a stratified random-digit replicate sample. A total of 1,015 interviews were completed, and respondents were limited to adults (18 years and older) living in private households in the United States. Interviews were weighted by age, sex, geographic region, and race to ensure that the sample accurately reflects the total population 18 years and older. The maximum margin of error for questions asked of all respondents is ±3.1 percent.

This survey builds on earlier research that is now in the public domain. A primary source is a survey funded by the U.S. Department of Education, conducted by George D'Elia, Associate Professor in the Information and Sciences Department, Carlson School of Management, University of Minnesota, and Eleanor Jo Rodgers, now with the Urban Libraries Council, as well as the University of Minnesota Center for Survey Research and the Gallup Organization. This complex and rich survey set out "to describe for librarians what the public considers to be the important roles of the library in society." The survey compares responses from several populations: a national sample of 1,001 adults, a sample of 401 African Americans, a sample of 846 Caucasian Americans, a sample of 399 Hispanics, and a sample of 300 opinion leaders. Also important to the development of the HRISM survey was a survey conducted for the Library Research Center of the Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign, which surveyed 1,181 adults and 390 librarians in 1991 to gauge their interest in and support for a range of library services. Finally, the Roper Center at the University of Connecticut was examined for relevant survey findings.

Also, nearly a fifth of the lowest-income Americans said they would go to the library to learn computer skills, the highest level among all demographic groups except African Americans. Twenty-four percent of African Americans and 15 percent of Hispanics indicated that they would use the library to learn how to access online information.

This finding may not be as discouraging as it first appears. Librarians may be able to promote themselves effectively, given most Americans' warm feelings toward libraries, as exactly that "somebody you know"— the person to go to when you need to learn about computer information gathering and access. Also of interest is the fact that minority and lower-income Americans may turn with increasing frequency to libraries to perform a digital information safety net training function.

*Americans Look to Libraries to Provide Computer Services to Individuals Who Don't have Their Own Computers*

Indeed, an overwhelming 85 percent of Americans think it is important or moderately important for libraries to "provide computers and online services to children and adults who don't have their own computers." Americans ranked this service fourth, both in terms of their personal preference and its importance to their communities. This may signal broad public support for the notion of the library performing as a safety net for the information have-nots.

Hispanics registered the strongest support of those who said spending library money on providing computer access to information have-nots was personally "very important" to them, while whites registered the least. A total of 57 percent of whites favored this position, 76 percent of African Americans, and 86 percent of Hispanics. When support for this view was framed in terms of how public libraries should spend money in their communities, support among whites stayed the same, but backing among minorities dropped somewhat, to 65 percent of African Americans and 78 percent of Hispanics.

*Library Buildings Score High*

Americans value maintaining and building public library buildings. Americans support using library budgets to preserve and erect library buildings, placing this activity third in the poll's rankings of library services they would spend money on. A total of 65 percent felt this was "very important"; an almost identical number, 62 percent, thought this should be a library priority.

Women favored this activity more than men, with 71 percent of women saying they favored supporting library buildings as opposed to only 58 percent of men. Minorities registered very strong support, especially African Americans, 84 percent of whom felt it was very important to spend

library money in this way. Support among minorities dropped off for this position somewhat when the question was asked in terms of libraries' priorities. In this case, only 67 percent of African Americans thought it was very important for libraries to expend funds on their buildings.

Clearly, the American public agrees wholeheartedly with the library leaders that the American public library building is an intrinsic part of the library's identity. It is important to note that support for this function comes only after purchasing new books and computers and computer access, and that all three categories polled extremely well among all groups.

*Americans are Mixed in Their Support for Libraries as Community Centers*

Americans support using libraries for community activities—but less strongly than they support other library services. A large majority—70 percent—say it is very or moderately important for libraries to serve as neighborhood or community activity centers to provide meeting rooms and auditoriums for community groups and public activities. When asked which locations actually serve in their communities as community activity centers, however, libraries were ranked third at 16 percent, behind schools (32 percent) and community recreation centers (28 percent). Moreover, providing community meeting space was ranked next to last when Americans were asked how they would like their public libraries to spend money, with only 33 percent expressing strong backing for this role.

*Summary of Focus Group Findings*

The focus group participants—convened by the Benton Foundation in spring 1996 to further probe these findings—were all residents of Montgomery County, Maryland, a suburb of Washington DC. All eleven white, mixed-gender participants were library users. All but one had at least some college education, and three participants had children in the home. Although these findings should be interpreted with some caution because they represent the views of only one group of Americans, they do signal some potential trouble spots for libraries. After all, if these sophisticated library users raise doubts about libraries, then what support can we expect from less-experienced users?

In many broad respects, these Americans share many of the visions articulated by library leaders. Americans generally see public libraries as playing an important role in their communities. Libraries provide free and equal access to information to all members of the community, including the information have-nots, said these Americans. As one participant put it, "I think as we are seeing the population . . . stratifying along class lines in a huge way . . . the library is one of those symbolic things that is left, that is a cornerstone of 'we all do this for everyone' so that everyone can use it."

These Americans also have adopted the concept of the library as a hybrid institution, containing both books and technology. Libraries were seen as a particularly vital resource for children; indeed, Americans see children as central to libraries' primary mission. Another highly touted service was the ability to find hard-to-locate resources at the local library, particularly local master plans and other government documents. One participant mentioned his difficulty in locating an industrial handbook. After a futile search on the Internet, he found it at his local library. Others valued the library for providing a plethora of community resources, such as zoning master plans and other government documents.

But along with these positive responses to libraries, these Americans also mentioned several pitfalls that they had encountered in their attempts to use library services. They applauded libraries' free and equal access policies. But, said several participants, the materials on hand—especially works of fiction—may not be those people are seeking. "[I]f it's hot, it's not [available]," proclaimed one participant, adding: "If you want to get the book that everybody is reading right now, it is just not in." Others suggested that bookstores were the place to go for popular books and even some reference works. One older participant, who claimed to check out a half dozen books from his local library every other week, said, "We don't . . . read the latest books. We don't get those at the library. We get those at Borders or Crown Books. . . . "

Also mentioned as an impediment was the library's "mind boggling" resources, as one participant put it, which she found impossible to navigate on her own. As for asking for assistance: "I always seem to be waiting in line forever," she said. Others mentioned libraries' restricted hours, especially on holidays and weekends, as obstacles to greater and easier use.

And in many other important ways, these Americans placed libraries at the margins of their day-to-day lives, especially regarding the technological revolution. When asked, for example, if libraries are more or less important than they used to be, participants' responses were equivocal. Many cited the growing trend in which individuals retrieve information from their desktop computers at home and saw the library reduced to the role of a place where isolated people, chained to their desktops, could escape "to find other people." So, they said, libraries would perform a social role: "I think [libraries] will stay around . . . because people would then . . . go out where they can find other people," concluded one participant when asked whether libraries would continue to be as important as they are now.

Most telling, participants said libraries should not take the lead in providing services in the digital age. In fact, they thought libraries should take a reactive role, adapting to, rather than pioneering, new technologies. Libraries "should stay just behind the curve. We don't need them to

*How important are these library services to you?*
*Survey participants respond.*

|  | Very | Moderately | Slightly | Not | Don't know |
|---|---|---|---|---|---|
| (1) Providing reading hours and other programs for children. | 83 | 12 | 2 | 3 | 1 |
| (2) Purchasing new books and other printed materials. | 72 | 19 | 5 | 3 | 1 |
| (3) Maintaining, repairing, and building public library buildings. | 65 | 25 | 5 | 5 | 1 |
| (4) Providing computers and online services to children and adults who don't have their own computers. | 60 | 25 | 8 | 6 | 1 |
| (5) Providing a place where librarians help people find information through computers and online services. | 58 | 28 | 9 | 5 | 1 |
| (6) Making it possible for people to access library information through their home computers. | 46 | 32 | 10 | 8 | 3 |
| (7) Purchasing computers and providing access to information and online services through computers. | 42 | 34 | 12 | 9 | 3 |
| (8) Providing meeting rooms and auditoriums for the use of community groups and for public activities. | 34 | 36 | 17 | 12 | 1 |
| (9) Setting up computers in public places such as shopping malls and community centers so that people can access library information from these places. | 19 | 28 | 22 | 29 | 2 |

be on the curve because most people aren't," as one participant put it. Indeed, in a world of tight budgetary restraints, these Americans did not want to invest in libraries as technology leaders.

The "behind the curve" metaphor permeated these Americans' views of libraries in other significant ways. When asked to ponder the role of libraries in the future, they placed libraries firmly in the past. In 30 years, they said, libraries would be relegated to a "kind of museum where people can go and look up stuff from way back when." Thus the library of the

future, far from being a technology leader, would function as an informa-
tion archive. As one participant summed up this view, "If you plopped a
library down . . . 30 years from now . . . there would be cobwebs growing
everywhere because people would look at it and wouldn't think of it as a
legitimate institution because it would be so far behind. . . . "

Focus group participants presented an equally diminished view of
the future role of librarians. They acknowledged that librarians could
perform a useful role as navigators in the as-yet difficult-to-navigate uni-
verse of the Internet. Yet these Americans in the next breath recom-
mended that trained library professionals be replaced with community
volunteers, such as retirees, who would be dispatched to serve cappuccino
as well as perform more traditional library services. For this particular
group of Americans, "librarians as trained professionals" was a nebulous
concept at best. "In the business that I'm in," said one, "I find people in
their fifties and sixties that were in prominent positions. . . . Many of
those people will wind up in libraries because they will . . . want to feel
useful. Maybe that is the avenue that the libraries [should take]; they
should start recruiting for librarians [among] those people."

These Americans ranked bookstores as genuine competitors to pub-
lic libraries. They saw these superstores, in fact, as models that libraries
should strive to emulate. To revitalize libraries, several participants rec-
ommended a Borders-style approach, with coffee shops and music. "It is
a social event," commented one participant about a trip the super book-
store. "Make it more welcoming," was her advice to library leaders as one
path to the future.

These library users were also well aware that the library must com-
pete for tax dollars with other community resources in order to provide
the "free" information resources they so highly valued. "It's not free. We
pay for it," commented one participant. "The only way that libraries are
going to be able to keep up with getting the newest books, the newest
technology . . . it takes money." "If somebody is not paying for it some-
where, it is not going to happen," said another participant. Notably, these
library users were not willing to sustain a tax increase in order to support
library services. One participant recommended turning the library into
a charitable institution as an alternative to tax levies. "Maybe the way to
save the library system . . . is to allow people that want to contribute to the
library to get a tax deduction."

Most telling, these library users retained a fuzzy image of the recent
history of their local community library. The only time any one of them
could recall libraries having been in the news was when the local libraries
were threatened with closing.

Admittedly, these focus group findings should be understood as one
group of citizens' responses to a set of directed topics. More research is
needed if we are to understand the feelings behind the survey data, and

## EARLIER SURVEY RESEARCH REVEALS STRONG PUBLIC BACKING FOR PUBLIC LIBRARIES

The 1996 survey confirms in many respects earlier surveys of public attitudes about libraries. But it also expands this earlier body of work. The following key points are offered as context on issues most germane to the 1996 survey and the vision statements of the library leaders.

### Computer Access and Library Use: The Future is Now

As early as 1991, two in five Americans (40 percent) said they had used a personal computer. Only 29 percent indicated that they had a personal computer at home (University of Illinois 1991).

More than two-thirds of Americans (68 percent) said they had used library services in the past year, with a little more than half (52 percent) saying they had used library services at least one to four times a year (University of Illinois 1991).

More than half of adult Americans (54 percent) took their child to the library at least once or twice a month (National Parent Teachers Association/Newsweek, February 1993).

One in seven Americans (14 percent) are hard-core library users who say they borrowed something in the last seven days from the public library (Barna Research Groups, January 1994).

More than half the adult public (56 percent) is already using a computer at the library to find what they are looking for (U.S. News & World Report/Gallup, October 1995).

About two-thirds of the adult public (65 percent) said their library had its books and materials listed in both a computer and card catalog (U.S. News & World Report/Gallup, October 1995).

More than half the adult public (52 percent) said they had used a computer to search for information at their library (U.S. News & World Report/Gallup, October 1995).

In 1993 three-fourths of adults (77 percent) said they would be extremely or somewhat interested in retrieving books and articles or doing library research over interactive TV (Wirthlin Quorom, November 1993).

### Roles of the Library

The most important roles of the public library for the general public were to support the educational aspirations of the community and to provide access to information, outranking eight other missions that were offered to respondents. A total of 88 percent ranked as "very important" the library role as educational support center for students of all ages, the top choice (Urban Libraries Council 1992).

Opinion leaders also ranked this function first in importance with an identical number—88 percent—favoring this role (Urban Libraries Council 1992).

The public clearly sees a role for libraries in the digital future. A 1995 survey asked people to choose between the following statements: "Some people think libraries will no longer exist in the future because of all the information available through computers. Other people think libraries will still be needed despite all the advancements of computers." Only 9 percent said they thought that libraries would no longer be needed; an overwhelming 91 percent believed that libraries would still be needed (U.S. News & World Report/Gallup, October 1995).

*The Library and the Community*

Only one in five Americans (21 percent) said they had attended a library program like a story hour, lecture, or movie (University of Illinois 1991).

Only 17 percent of adult Americans said they had visited the library in the past year to hear a speaker, see a movie, or attend a special program (U.S. News & World Report/Gallup, October 1995).

Popular and opinion leader support for libraries serving as community activities centers was weak. Among ten possible roles for the library, this ranked last for the general public (41 percent agreeing) and eighth among opinion leaders (46 percent agreeing)(Urban Libraries Council 1992).

*Paying for Libraries and Liking What You Pay For*

The public was evenly split on how to pay for library services in hard times. A strong plurality of the public (44 percent) favored increasing taxes, while 41 percent favored charging people fees for use of library materials if their local library needed additional funds to continue to operate (University of Illinois 1991).

An overwhelming majority (87 percent) of heads of households indicated they were satisfied with their local public libraries (Family Circle Magazine, June 1993).

Eight in ten Americans (81 percent) said that libraries in their area served the needs of people either very well or pretty well (Barna Research Group, July 1993).

the ambivalence just below the surface of the forced-choice options that surveys measure. In fact, the survey foreshadows some of the more pessimistic focus group comments, when segmented by types of users. Research is especially needed with various target groups, such as younger adults and men.

But the single focus group proved a useful counterpoint to the optimism of the aggregate survey data, revealing areas of public confusion and restraint that the survey data mask. And, for library leaders eager to cling to the reassuring notes of the survey results, the focus group revealed how quickly public support can erode when arguments are leveled by even a friendly opposition. While it would be a gross misinterpretation to derive American public opinion about libraries from one participant's quotable "just behind the curve" metaphor, the language and the tone of this discussion among a group of sophisticated library users should nevertheless make library leaders cautious about what happens when citizens are left in an information vacuum to reason through the library's role in a digital future. If the library is indeed "invisible," as some library leaders admit, then its story and mission are vulnerable to new, more assertive arguments and advertising that substitute other institutions as information navigators.

KEY PUBLIC POLICIES AS THE CONTEXT FOR LIBRARIES

To realize their visions, library leaders must take into account the public policy context in which they operate. They must judge whether these public policy imperatives will support or impede their visions—and

whether the current debate over these policies takes these visions into account. The following section addresses these issues and also presents the policy issues that will overlay the public's vision for libraries.

The vision statements suggest key roles for libraries as collections, institutions, and community resources in the digital age. Many of the roles identified in these statements rely on public policies that support— or at least do not undermine or contradict—these outcomes.

This section describes the areas of policy that are most significant to realizing the libraries' visions. The vision statements do not invoke policy concerns on a one-to-one basis. Instead, four policy themes will most affect the viability of the visions articulated by the group:

Universal service and access, which includes the mechanisms by which each library would be guaranteed, as a matter of public policy, affordable access to and use of networking tools.

First amendment rights and those policies that support or limit the library's ability to collect, create, and make available a wide array of materials, including potentially controversial material, in the networked environment. The most widely publicized debate to involve these questions for libraries was that around the "Communications Decency Act," which became part of the Telecommunications Act of 1996.

Intellectual property issues, including copyright and the "moral rights" of artists and authors to their works, which may support or inhibit the library's role as holder and lender and may in some scenarios even affect the ability of library patrons to browse material freely in digital formats.

Funding or support mechanisms, including federal, state, and local support for library services, acquisition, and operating expenses. Questions include the sources of support for new or expanded activities, and the implications for local funding when the traditional link between library service areas and local tax bases is uncoupled through networked services and collections.

Other, very broad, policy issues may also affect whether the roles imagined by library leaders can be realized. For example, current efforts to bar access to public schools and health facilities for illegal immigrants may spill over to other public institutions such as libraries. Finally, certain policy decisions that will be key to realizing the visions articulated by library leaders are not a matter of public policy but library policy. Specifically, many of the themes of libraries as community institutions, and the services they provide under that umbrella, are choices to be made by library boards, not policymakers.

*Universal Service*

While the visions for American libraries in the digital age vary in how active libraries will be online, all the visions articulate a place for libraries and their constituencies in cyberspace. What are the funding

mechanisms to get libraries connected?  What policies guarantee that
this will happen?

Universal service, as defined in the Telecommunications Act of 1996,
creates some of these mechanisms.  For years, universal service has meant
providing person-to-person voice communications through telephones
to all Americans at prices made affordable through a system of subsidies.
Today, converging communications technologies expand the concept of
universal service beyond "plain old telephone service" to the benefits of
new communications capabilities—including enhanced phone and com-
puter networks—to most Americans.

The Federal Communications Commission (FCC) is working to imple-
ment the "Snowe-Rockefeller" provision of the Telecommunications Act,
which requires the FCC to ensure that public libraries, as well as schools
and rural health care providers, can get telecommunications services "at
rates less than the amounts charged for similar services to other parties."
The Act goes on to specify that the discount is to be enough "to ensure
affordable access to and use of such services by such entities." The amount
of the discount has not been determined.  These rates will ultimately
determine how these institutions get to use these services.  The FCC is
also required to establish rules to enhance access to advanced telecom-
munications and information services for libraries as well as public and
nonprofit classrooms and health care providers.

Many states are not waiting for the result of the FCC's deliberations
to create their own universal service policies for libraries and schools.
Some states, such as Wisconsin, have created an advanced telecommuni-
cations fund to support the extension of new technologies into institu-
tions such as libraries.  A handful of other states offer somewhat reduced
rates for basic telephone service to libraries.

*Freedom of Speech and the Communications Decency Act*

If the universal service provisions of the Telecommunications Act
assist libraries in getting online, the "communications decency" provi-
sions were an attempt to determine what libraries make available online
and the degree to which they are responsible for materials that patrons
access through library facilities. The Communications Decency Act (CDA)
restricted the transmission of "indecent" material, yet it relied on a very
broad definition of indecent, which courts have traditionally ruled is pro-
tected speech under the First Amendment.  "Indecent" is a vague legal
term and could be stretched to include health information, art, and cul-
tural materials.  Libraries could be held liable for making information
available to minors through library controlled facilities, and there have
been suggestions that congressional proponents of these measures in-
tended to keep libraries responsible in order to create publicly account-
able "choke points" for controversial materials.

A number of public interest groups—including the American Library Association and libraries such as the Carnegie Library of Pittsburgh—challenged these provisions in court as overbroad and unconstitutional. The Center for Democracy and Technology reports that a panel of federal judges in Philadelphia ruled earlier this summer that the CDA was unconstitutional and that the government could not enforce it. Later that month a federal court in New York City reached a similar verdict.

While the injunction of the CDA was an important victory for advocates of First Amendment rights, the battle for free speech online is far from over. The debates on this issue will continue in at least three arenas. First, the Justice Department has appealed the Federal Court decisions and has taken the CDA case to the Supreme Court. The Supreme Court should hear the case in late fall or winter of 1996, with a decision expected in early spring. Second, given the political potency of "decency" concerns in this new medium, even if the court finds the CDA unconstitutional, legislators will most likely introduce similar guidelines into another bill at the soonest opportunity. Finally, as in many other areas of policy development, key decisionmaking is taking place at the state level. According to information on the ACLU's website, at least 11 states now have legislation regulating speech online, with strict guidelines for who is responsible for the transmission of digital materials. Many other states considered bills dealing with online content and in some cases the bills are still pending.

Library professionals and advocates should pay attention to information policies as they develop at the state and local level. If libraries are to reflect and transmit American culture in the digital age, they must ensure that their holdings and services can reflect a diverse set of views, images, and experience.

*Intellectual Property and Copyright*

In the future, according to some, libraries will do more than make information available—they will even create new forms of information. How do these increased capabilities affect our traditional understanding of copyright and fair use?

In the digital age, sharing or lending documents, as well as linking, excerpting, or otherwise creating novel combinations of works may raise difficult issues that threaten the distinctions under which copyright law has traditionally operated. The library tradition of "no fee" access is called into question by current efforts to create electronic payment mechanisms to compensate rights holders and the proposal to assert that the transmission and storage of a digital work, even if it is not viewed, is a distribution that can be controlled by the copyright holder.

As a recent review and analysis of the Report of the Working Group on Intellectual Property Rights, Intellectual Property and the National

Information Infrastructure, by Arnold Lutzker, notes: "To the extent that the commercial owners control transmissions of works as a public distribution, copy or display, and are encouraged to develop and employ technological envelopes to restrict . . . non-compensated access to works, public access to copyrighted material may be limited." Such an outcome would substantially restrict the ability of libraries to fulfill the purposes outlined in their vision statements.

*Funding or Support Mechanisms*

How libraries are funded through federal, state, and local efforts will affect what services are offered and the boundaries on who or what community a library can or is expected to serve.

At the federal level, one key component has been the transition of the Library Services and Construction Act into the Library Services and Technology Act (LSTA). According to its proponents, LSTA was designed to help libraries "ensure that access is equitable, content is useful and usable, and expert help is available." In the course of congressional consideration, this measure was folded into the omnibus appropriations bill for fiscal year 1997 and financed at $136.4 million a year.

Nevertheless, recissions in the federal budget have not spared libraries, and state and local funding has been cut in many instances as well. In a notable countercurrent, however, a number of bond issues and other special library support measures, when put directly to voters, have won support, suggesting a mixed outlook for public support of libraries, despite a general withdrawal of support for public institutions. But despite such support, many libraries—from the Library of Congress to branches of local public libraries—have had to cut back staff and reduce the hours they are open to meet budgetary constraints.

Some concerns have also been expressed about the long-term consequences for funding library services when service areas are potentially vastly expanded, while the tax base that supports the provision of those services remains unchanged. If networked libraries draw on resources they do not pay for directly, or provide service to patrons who are not also part of the tax base supporting the provision of that service, pressure may mount to support libraries in new ways or to limit access to those who have paid for them. The second possibility creates an implicit fee-for-service structure that may have negative consequences for low-income communities.

The broader context for support must also take account of financial pressures on related institutions such as public schools, which are facing analogous demands, especially in lower-income communities, to repair crumbling physical infrastructure, acquire basic teaching materials, and get connected to computer networks. To the degree that competition exists among local institutions, the successful resolution of these demands

in schools (or elsewhere) may limit the resources available to do the same in libraries, especially as other, for-profit institutions offer access, facilities, customer support, and related services in the private market.

## THE PROSPECTS FOR A COORDINATED, COLLABORATIVE EFFORT

C harged with identifying a vision, message, and future direction for the library field, the Kellogg grantees met in Washington DC in spring 1996 to grapple with the tough issues raised by their own vision statements and interviews—and by the public opinion research that revealed the public to be generally supportive of libraries but uncertain of their place in the digital age. The conference consisted of two days of panel presentations, break-out sessions, group discussions, and consensus building. The sessions were filled with intense debate over the future direction of libraries in the digital world. Participants—led by Benton Foundation staff, media consultants, and pollsters—sought to find language and ways of framing their vision that would advance their own ideas about the future of libraries and still respond to what the public said it wanted from the field.

This was no easy task. It was not difficult for participants to absorb the positive findings about libraries: they have strong support among children and families, people value them for their collections of books, librarians are trusted information navigators. But it was sobering for participants to absorb some of the less optimistic findings from the survey and the focus group: college-age Americans are soft in their support for libraries, nonusers don't want to pay taxes to support various library services, and libraries are "behind the curve" of the new wave of technology, as one focus group participant put it.

What emerged was a proposal to propagate "new life forms," in which libraries team with other public service information providers to form community education and information networks open and available to all. With some communities already experimenting with collaborations and cyberspace creating myriad cyber-communities for information exchange of all kinds, libraries should create broad-based, real-time networks with public service partners that can facilitate this exchange of information. Grantees also felt their efforts in reaching this goal would be enhanced by a coordinated communications campaign and message strategy.

Tom Reis, Director of Marketing and Dissemination for the Kellogg Foundation, set the tone for the conference sessions by issuing a call to the grantees to "build consensus around current and emerging roles in libraries; to develop a message that we can all support, and to figure out how we can collaborate to get the message heard."

Pollsters Celinda Lake (Lake Research) and Brian Tringali (The Tarrance Group) summarized the survey and focus group findings. While

underscoring that Americans are enthusiastic about their libraries, Lake cautioned conference participants that Americans are ready to turn librarians into volunteers and libraries into charitable institutions to which Americans would make voluntary donations. Lake also cautioned that Americans historically are unwilling to pay more in taxes for public services because they think those services will benefit others. Tringali issued a word of caution, arising out of the polling and focus group findings: "Signaling the death knell for libraries is . . . the public perception that libraries are museums of old information." Tringali added that libraries must create a vision for the future or risk losing financial support, especially because the public generally holds all public institutions in low esteem.

Pointing toward a new strategy for libraries, Joey Rodger of the Urban Libraries Council asserted that the focus group "described an institution that is behind the curve in a lot of ways. The context for our discussion should be that the world does not understand us and does not love us, so what do we do in that context?" Further pointing toward a strategy of collaboration and renewal, two participants noted the potential coming together of two like-minded entities to create a forward looking cooperative in tune with the digital age. "It seems like libraries are trying to become community networks," observed Patrick J. Finn of La Plaza Telecommunity Foundation. "It seems like community networks are trying to become like libraries," responded Daniel E. Atkins of the University of Michigan. "Why can't they merge?" he asked.

The grantees worked to build a bridge from the language and concepts of their library visions to the general public's ambivalent attitude toward libraries' identity and role. Messages and strategies were tested in small group discussions. A vision that emerged was: access for all built around a unified and integrated resource hub. This would become the "new life form," with other public information providers as partners, and would tackle the community's information needs and problems.

The attributes of this new collaborative would be: community-based; publicly funded through taxes, fee-for-service and other contributions; a seamless web of community information, which all partners would participate in creating and disseminating. The opportunity to create models of community learning collaboratives or new forms of public service media, in which libraries play a key role, is to actively define the public interest in the digital age, participants said.

Attendees engaged in a discussion about creating a joint multifaceted, multimedia, umbrella communications and outreach campaign, based on a model developed by the Benton Foundation for the Coalition for America's Children. This campaign would begin to lay the groundwork for new perceptions of the role of libraries and other public service media in fostering healthy communities. This campaign could consist of

two parts.  The first part would develop a communications strategy and related products, based on the research conducted to date and on additional focus group testing.  The second part would create communications campaign products to support local coalition-building and alliances, some of which could be directed to specific audiences developed through existing networks.  These products would be based on the opinion research but adaptable to local use.

The conference participants also articulated the need for an ongoing policy assessment and analysis of the impact of the recently passed Telecommunications Act of 1996.  The Act creates a new federal framework in which libraries and their partners must work if they are to effectively articulate their voice as key points of public access, public learning, and community service.

*In Sum . . .*

With the role and impact of personal computers still fluid in this emerging digital world, now is the time for libraries to seize the opportunity and define their role with an aggressive public education campaign. Libraries clearly have an enormous reservoir of goodwill to draw on. The public trusts them—and holds them in high esteem at a time of broad national anxiety.  Perhaps librarians can become that "friend you know" —to help adults and children understand, navigate, and benefit from the explosion of digital information that Americans are just starting to grapple with.

Because the media drive the public agenda, which in turn drives the political agenda, library leaders may want to take steps toward taking responsibility for defining their image in the public mind—rather than sitting back passively and waiting for their role to be defined for them.  Just as they are navigators of information, so they must chart a role for themselves, giving meaning and message to their future institutions and their profession.  This is particularly important as commercial undertakings make significant inroads in information provision, and as the youngest Americans turn to their home computers to find information.

Library leaders do not shy away from the need to come up with new community-based alliances for libraries—strategic partnerships that can weave a network of community public service information providers to enhance each other's value and their combined value to the communities they serve.  One key model for building this new network is a further testing of public sentiment toward libraries and other information providers, especially as the impact of the 1996 Telecommunications Act becomes clearer.  Also on the possible agenda is crafting effective messages for a comprehensive, community-based public education and communications campaign.

As the demographic clouds on the horizon portend, libraries could begin to weaken in public support. And they could find themselves relegated to the status of dusty archives—little more than museums, cataloging the resources of the past. To secure their future with a younger, more private, more acquisitive generation, libraries will need to think creatively. The future is open to invention, and libraries must give meaning to their public role in this critical transition. As this report makes clear, the public loves libraries. But the libraries they love are sometimes at odds with the library leaders' visions of libraries' future roles. If libraries want to secure an identity as a community meeting place, for example, they had best chart a course to create this identity, one that now registers low on the public agenda.

What will determine the course of libraries in the digital future? The way that library leaders and visionaries respond to public opinion and the public policy context—as well as their own visions. The library world thus has its work cut out.

## Appendix

*Public Opinion Survey on the Future of Libraries in the Digital Age*
Prepared by Lake Research and the Tarrance Group

(1) Do you have access to a computer for personal use at home, at work, or at school?

| | |
|---|---|
| home | 42 |
| work | 35 |
| school | 10 |
| no access | 40 |
| (don't know) | 0 |

(2) As you may know, many people now use computers to find information—through the Internet and through computer online services. If you wanted to learn more about using computers to find information in this way, where would you go?

[first mention, read, and rotate]

| | |
|---|---|
| take a class | 17 |
| go to a library | 10 |
| buy a book or manual | 7 |
| go to a computer store | 6 |
| read a magazine | 2 |
| use an online computer service | 7 |
| ask somebody you know | 41 |
| (other) | 3 |
| (don't know) | 6 |

[second mention, read, and rotate]

| | |
|---|---|
| take a class | 17 |
| go to a library | 20 |
| buy a book or manual | 16 |
| go to a computer store | 19 |
| read a magazine | 14 |
| use an online computer service | 10 |

| | |
|---|---|
| ask somebody you know | 23 |
| (other) | 4 |
| (don't know) | 14 |

(3) Now, imagine that you have a personal computer at home. Which would you prefer:
- Spending $20 a year to buy disks or information to install on your computer.
- Spending $20 a year in taxes that enables your public library to have an information service that you could access from your home computer.

| | |
|---|---|
| buy disks | 33 |
| use library | 52 |
| both [ask: But which one would you prefer?] | 2 |
| neither [ask: But which one would you prefer?] | 6 |
| (don't know) | 7 |

(4) During the past year, how many times have you gone to a book store to browse or purchase books? Would you say—

| | |
|---|---|
| not at all | 22 |
| 1 to 5 times | 35 |
| 6 to 10 times | 1 |
| 11 to 20 times | 10 |
| 21 times or more | 15 |
| (don't know) | 1 |

(5) How many times did you, yourself, go to a public library in the past year? Would you say—

| | |
|---|---|
| not at all | 32 |
| 1 to 5 times | 29 |
| 6 to 10 times | 12 |
| 11 to 20 times | 10 |
| 21 times or more | 16 |
| (don't know) | 0 |

(6) The library serves as a neighborhood or community activity center, a place where organizations or clubs could hold meetings or present concerts or lectures. How important would you say this service is to your community?

| | |
|---|---|
| very important | 56 |
| moderately important | 26 |
| slightly important | 10 |
| not important | 6 |
| (don't know) | 2 |

(7) I am going to list some places in your neighborhood. Which of these places most often serves as a community activity center, a place where organizations or clubs could hold meetings or present concerts or lectures?
[first mention, read, and rotate]

| | |
|---|---|
| a school | 32 |
| a community recreation center | 28 |
| a public library | 16 |
| a bookstore | 3 |
| a service club, such as a veteran's hall or Elk's lodge | 10 |
| (none) | 5 |

|  |  |
|---|---|
| (don't know) | 6 |

[second mention, read, and rotate]

|  |  |
|---|---|
| a school | 24 |
| a community recreation center | 22 |
| a public library | 21 |
| a bookstore | 5 |
| a service club, such as a veteran's hall or Elk's lodge | 15 |
| (none) | 18 |
| (don't know) | 10 |

(8) As more and more information becomes available through computers, some people say that public libraries will change. Thinking about the future, as the use of computers continues to grow, do you think public libraries will become more important than they are now, less important, or that their importance will not change much?

|  |  |
|---|---|
| more important | 40 |
| less important | 19 |
| no change | 38 |
| (don't know) | 3 |

(9) As you think about the future, as the use of computers continues to grow, which of the following do you think will be most important for public libraries? [rotate]

|  |  |
|---|---|
| to be a place where people can read and borrow books | 35 |
| to be a place where people can use computers to find information and to use online computer services | 37 |
| to be a place that provides community information and a community gathering place | 10 |
| all [ask: But which of these will be most important?] | 15 |
| none [ask: But which of these will be most important?] | 1 |
| (don't know) | 2 |

*Split Sample A*
Many public libraries are facing difficult budget decisions. I am going to read you some ways that public libraries spend money, and I would like you to tell me how important each one is to you personally—very important, moderately important, slightly important, or not important. [rotate]

|  | Very | Moderately | Slightly | Not | Don't know |
|---|---|---|---|---|---|
| (10) Purchasing new books and otherprinted materials. | 72 | 19 | 5 | 3 | 1 |
| (11) Purchasing computers and providing access to information and online services through computers. | 42 | 34 | 12 | 9 | 3 |
| (12) Providing computers and online services to children and adults |  |  |  |  |  |

| | | | | |
|---|---|---|---|---|
| who don't have their own computers. | 60 | 25 | 8 | 6 | 1 |
| (13) Providing a place where librarianshelp people find information through computers and online services. | 58 | 28 | 9 | 5 | 1 |
| (14) Maintaining, repairing, and building public library buildings. | 65 | 25 | 5 | 5 | 1 |
| (15) Providing reading hours and other programs for children. | 83 | 12 | 2 | 3 | 1 |
| (16) Making it possible for people to access library information through their home computers. | 46 | 32 | 10 | 8 | 3 |
| (17) Setting up computers in public places such as shopping malls and community centers so that people can access library information from these places. | 19 | 28 | 22 | 29 | 2 |
| (18) Providing meeting rooms and auditoriums for the use of community groups and for public activities. | 34 | 36 | 17 | 12 | 1 |

*Split Sample B*
Many public libraries are facing difficult budget decisions. I am going to read you some ways that public libraries spend money, and I would like you to tell me how important each one should be for the public library in your community— very important, moderately important, slightly important, or not important. [rotate]

| | Very | Moderately | Slightly | Not | Don't know |
|---|---|---|---|---|---|
| (19) Purchasing new books and other printed materials. | 68 | 23 | 4 | 4 | 1 |
| (20) Purchasing computers and providing access to information and online services through computers. | 47 | 34 | 11 | 6 | 2 |
| (21) Providing computers and online services to children and adults who don't have their own computers. | 60 | 22 | 11 | 6 | 1 |
| (22) Providing a place where librarians help people find information through computers and online services. | 59 | 31 | 6 | 3 | 1 |

| | | | | | |
|---|---|---|---|---|---|
| (23) Maintaining, repairing, and building public library buildings. | 62 | 26 | 8 | 3 | 1 |
| (24) Providing reading hours and other programs for children. | 84 | 12 | 3 | 1 | 0 |
| (25) Making it possible for people to access library information through their home computers. | 47 | 33 | 14 | 5 | 2 |
| (26) Setting up computers in public places such as shopping malls and community centers so that people can access library information from these places. | 19 | 26 | 26 | 28 | 1 |
| (27) Providing meeting rooms and auditoriums for the use of community groups and for public activities. | 33 | 38 | 16 | 12 | 2 |

*All Respondents*

(28) Let us suppose that your local library needs additional funds to continue operation. Please tell me which of the following you would favor as a possible solution. [rotate]

| | |
|---|---|
| increasing taxes to cover the necessary cost | 43 |
| the library charging the people who use the library | 39 |
| reducing the services the library offers to the public | 9 |
| all [ask: Well, which one do you favor most?] | 3 |
| none [ask: Well, which one do you favor most?] | 4 |
| (don't know) | 3 |

(29) Some libraries are starting to charge fees for certain kinds of services. In addition to any taxes you already pay to support your local library, how much would you be willing to pay for the use of personal computers and online services at the library—$10 a year, $25 dollars a year, $50 dollars a year, or isn't this something you would be willing to pay for?

| | |
|---|---|
| $10/year | 27 |
| $25/year | 27 |
| $50/year | 6 |
| nothing | 35 |
| (don't know) | 5 |

COMMENTS ON BUILDINGS, BOOKS, AND BYTES

Date: Tues, 3 Dec 1996 To: lauraw@benton.org From: Tlcohio@aol.com Subject: Benton/Kellogg Library/Digital Future

To: Laura Weiss, Senior Program Associate

As a trustee and former Board President with the Columbus Metropolitan Library (in Ohio, nation's sixth largest in circulation), I was very interested in glancing through your report on "Buildings, books, and bytes".

Later in the week, I will read it fully.

I would very much like to see the more detailed questionnaire that was used with all of the full lead-in wording and all of the resulting demographics on the sample for your April 1996 survey.

In Central Ohio in 1989 we started doing focus groups and then a county-wide, comprehensive public opinion survey with a sample of 600 persons each. We have done this type of research in 1989, 1991, 1993 and 1996. In recent years we have added more and more questions on technology and other related "information superhighway" issues.

As a board member on the Ohio Library Council, we did the first comprehensive state-wide public opinion survey of 800 persons throughout Ohio. There were a total of 63 questions counting the demographics. On the Central Ohio and state-wide research we had many similar questions as you have used, plus many others that related to libraries and connectivity.

Your research is a great first step in waking up the library community to the fast changing world out there! There is a danger that many libraries run the risk of just being "Museums of Old Books" in the future.

But what are you going to do next to reach national library leaders? How can I be involved? Are you interested in a copy of our Central Ohio and state-wide 1996 research?

I look forward to hearing about your next steps from here?

Terry L. Casey 614/261-6825 FAX: 614/261-6888 249 Overbrook Drive, Columbus, Ohio 43214

Date: Mon, 18 Nov 1996 From: Gardner Hanks Subject: Buildings, books, and bytes

I wanted to thank the Foundation for the research report on the study of the attitudes of library leaders and the public about the future of libraries. I think that the report was extremely well written and the research seemed to me to be very solid.

Today I sent a message out to the Idaho library listserv, the state library listserv, and the state library continuing education listserv about the report and how to get it off your website. I told the recipients that this was must reading for people who are interested in the future of libraries.

You have done a real service to libraries and the library profession.

Thank you.

Gardner Hanks Continuing Education Consultant Idaho State Library 325 W. State Boise, ID 83702-6072 ghanks@isl.state.id.us (208) 334-2153 FAX (208) 334-4016

Date: Thu, 12 Dec 1996 To: lauraw@benton.org From: guest@sailor.lib.md.us (guest login) Subject: http://www.benton.org/

I am a public librarian in the suburban Washington, DC area, in a jurisdiction that just rebuffed efforts by public officials to raise taxes to cover declining revenue for public services. In spite of high regard for public libraries, library circulation is declining following several years of insufficient funding—fewer books, magazines, business services, and increased reliance on electronic sources. What got to me more than anything about "Buildings boo I wondered what additional data you had on this subject. Is our professional standing due to poor service, or does the public perceive that what we do for them is not based on special training but just our "love of books" our general learning, or we are lucky enough to have a comfy place to work and spend our time reading. I have never been sure what made a good reference librarian- wide general knowledge, a good memory and ability to organize information, or to specific things I learned in library school on cataloging and classification, knowledge of the principles of indexing and arrange- ment of books and knowledge.

Date: Sat, 14 Dec 1996 From: Ginnie Cooper Subject: for what it is worth...

I wanted to let you know that the BENTON FOUNDATION LIBRARY STUDY (so is how I hear it referred to...) has made a real impact. I've been in conversations about in with PLA leadership in Chicago last week, with public library director here in Oregon, and with our library's executive team... you and those you work with should take pride in making a fine contribution to our understanding of how people view libraries...

# About the Contributors

BRYCE ALLEN teaches Reference Collection Development and Research Methods at the University of Missouri. His research focuses on cognitive aspects of information seeking and use. This interest is represented by his recent book, *Information Tasks* (Academic, 1996).

JOHN CARLO BERTOT is Assistant Professor at the Department of Information Systems, University of Maryland Baltimore County, Baltimore, Maryland, where he teaches courses in federal and state government information management and policies, telecommunications policy, and management information systems. He has written extensively on topics related to information policy and information resources management, most recently contributing chapters on these topics with Charles R. McClure in *Federal Information Policies in the 1990s* (Ablex, 1996). Mr. Bertot was Co-Principal Investigator with Charles R. McClure of the national surveys, *Public Libraries and the Internet* funded by the National Commission on Libraries and Information Science (1994, 1996).

WILLIAM F. BIRDSALL is University Librarian, Dalhousie University, Halifax, Nova Scotia. He has held positions at Iowa State University, the University of Wisconsin–LaCrosse, and the University of Manitoba. Mr. Birdsall has published articles on archivists, the politics of librarianship, library administration, professionalism, public libraries and, most recently, the book *The Myth of the Electronic Library: Librarianship and Social Change in America* (Westport, CT: Greenwood, 1994).

LEIGH S. ESTABROOK is Dean of the Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign. Among her publications are: "LEEP3 at the University of Illinois" (*Journal of Education for Library and Information Science 38*[2], Spring 1997, pp. 157-160); Editor, *Leadership as Legacy: Transformation at the Turn of the Millenium* (Pro-

ceedings of the Twelfth Scientific Meeting of the A.K. Rice Institute, Washington, DC, May 10-13, 1995. Jupiter, FL: AKRI, 1997); and "Sacred Trust or Competitive Opportunity: Using Patron Records" (*Library Journal*, February 1, 1996, pp. 48-49).

HERBERT GOLDHOR is an Emeritus Faculty member in the Graduate School of Library and Information Science at the University of Illinois.

MICHAEL GORMAN is Dean of Library Services, California State University, Fresno.  He has written several books, the most recent being *Future Libraries: Dreams, Madness, and Reality* (with Walt Crawford) (Chicago, IL: ALA, 1995).  In addition, he has written numerous articles.  These include: "Ownership and Access: A New Idea of Collection" (*C&RL News*, July/August 1997); "Cataloguing (& Preserving) the Net?" (*California Libraries*, May 1997); and "A Clash of Values" (*California Libraries*, October 1996).  He has also presented papers at the University of Illinois ("Concentric Circles" 100th Anniversary of Altgeld Hall, June 1997); at Texas Woman's University (1997 Bradshaw Lecture "Cataloguing, Chaos, and Cataloguing the Chaos" Denton, Texas, April 1997); and at the Nippon Association for Librarianship in Kobe, Japan ("Libraries and Librarianship in the 21st Century" 50th Annual Conference of the Association, November 1996) to name a few.  In addition, he has done a teleconference at the College of DuPage in Glen Ellyn, Illinois ("Dancing with...Change: Electronic Library Resources Issues and Opportunities," February/April 1997) and taught a Bradshaw Doctoral Seminar at Texas Woman's University in Denton, Texas (July 1997).

GLEN E. HOLT was appointed executive director and City Librarian at the St. Louis Public Library in 1987.  Under his direction, the Library has won two tax elections; increased its income from $6.3 million to nearly $18 million; increased its materials budget from less than $1 million to $3 million; increased visitation from 800,000 to 1.75 million annually, with another 500,000 persons contacted through adult and children outreach programs; and increased circulation from under 1 million to over 2.4 million. These increases have come about while staff numbers have risen by only 30 percent. Dr. Holt is the author, co-author, editor and co-editor of eighty reports, articles, and books.  His most recent publications include several papers on the future of libraries, especially public libraries, rural libraries, and library technical services.  He also is a regular columnist on financial subjects for the library journal, *The Bottom Line*. His most recent research, undertaken jointly with the chair of the Economics Department at Southern Illinois University, is devising methods to estimate the monetary benefits from public library services. This research is funded by a grant from the Public Library Association.

MAURICE B. LINE is a consultant in the library and information sector, specializing in staff development and the management of change. He retired in 1988 as Director General Science Technology and Industry in the British Library, which he served for 15 years. Before that he worked in five university libraries. He is a Professor Associate at Sheffield University, edits two library journals, and is on the Board of Directors of Engineering Information, Inc. He has honorary doctorates from Heriot-Watt (DLitt) and Southampton Universities (DSc), and a Fellowship from Birmingham Polytechnic (now University of Central England). He is a Companion of the Institute of Management. He was President of the Library Association in 1990 and was awarded the medal of the International Federation of Library Associations and Institutions in the same year for his work on the Universal Availability of Publications program. He is responsible for ten books, 330 articles and papers, and fifty reports on a wide variety of topics, from bibliometrics to library management; translations have appeared in twenty languages. He has visited over forty countries on professional business.

CHARLES R. McCLURE is Distinguished Professor of Information Studies at the School of Information Studies, Center for Science and Technology, Syracuse University, Syracuse, New York. He has received a number of honors for his research and has been the recipient of numerous research grants. He currently is completing, with John Carlo Bertot, an assessment of the Online PA Project—a project providing public access Internet connections in rural Pennsylvania libraries. Also with John Carlo Bertot he co-authored a two-volume report that assessed the Maryland State-wide Network, SAILOR. His most recent books are *Assessing the Academic Networked Environment* (Coalition for Networked Information, 1996) and his co-edited *Federal Information Policies in the 1990s* (Ablex, 1996).

KATHLEEN DE LA PEÑA McCOOK is a librarian and is also Professor and Director of the School of Library and Information Science at the University of South Florida since 1993. She was previously Professor and Dean of the School of Library and Information Science and Dean of the Graduate School at Louisiana State University as well as a member of the faculty of the Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign. Among her most recent publications are: *Planning for a Diverse Workforce in Library and Information Science Professions* (with Kate Lippincott) (University of South Florida, School of Library and Information Science, Research Group, January 1997, ED IR 056 249); "Library Service to Hispanics in South Florida" (with Paula Geist), *Public Libraries* (January 1995); and *Toward a Just and Productive Society* (Washington, DC: National Commission on Libraries and Information Science, 1994). Currently she serves as Chair of the American

Library Association's Office for Literacy and Outreach Services Advisory Committee, Treasurer of the Florida Library Association, and Co-Chair of the Tampa Bay Library Consortium Committee on Library Service to Migrant Farm Workers.

ANDREW ODLYZKO is Head of the Mathematics and Cryptography Research Department at AT&T Labs (one of the research and development centers resulting from the breakup of AT&T Bell Labs), and also Adjunct Professor in the Faculty of Mathematics at the University of Waterloo. His professional interests include computational complexity, cryptography, number theory, combinatorics, coding theory, analysis, and probability theory. In recent years, Mr. Odlyzko has also been working on electronic publishing and electronic commerce. He is the author of the frequently quoted and reprinted "Tragic Loss or Good Riddance? The Impending Demise of Traditional Scholarly Journals". (*International Journal of Human-Computer Studies*, 1995, *42*[1], 71-122).

RICHARD T. SWEENEY is currently University Librarian at New Jersey Institute of Technology and was previously Dean of Libraries at Polytechnic University, Brooklyn, New York, and Director of three public libraries in Columbus, Ohio; Flint, Michigan; and Atlantic City, New Jersey. He is the author of numerous articles, a frequent speaker and consultant on scenario planning for the library of the future, and a past chair of the ALA & Information Today Library of the Future Award.

HERBERT S. WHITE, the author of nine books and over 200 articles and reports, for twenty-five years managed in the corporate and government sectors in such posts as IBM Program Manager, Executive Director of the NASA Scientific and Technical Information Facility, and Senior Vice President of the Institute for Scientific Information (ISI). Mr. White followed this with twenty years at the Indiana University School of Library and Information Science including ten years as Dean. Retired in 1995 as a Distinguished Professor, he now resides in Arizona where he continues to teach, lecture, consult, and write, including the regular column "White Papers" for *Library Journal.* He is past president of both the Special Libraries Association and the American Society for Information Science and a former board member of the International Federation for Documentation (FID), the American Federation of Information Processing Societies (AFIPS), and the Society for Scholarly Publishing. A former member of the ALA Council and columnist in *American Libraries*, Mr. White is the recipient of the Melvil Dewey Medal.

DOUGLAS L. ZWEIZIG is Professor in the School of Library and Information Studies, University of Wisconsin—Madison where he teaches courses in research methods, management, and library evaluation. He is the co-author of *Output Measures for Public Libraries* (American Library Association,

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(Summer 1997) Edited by Herbert Goldhor

**The Role of Professional Associations**
(Fall 1997) Edited by Joy Thomas

**Professional, Paraprofessional, and Nonprofessional Roles, Part I**
(Winter 1998) Edited by Sue Easun

**Professional, Paraprofessional, and Nonprofessional Roles, Part II**
(Spring 1998) Edited by Sue Easun

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