North Carolina Libraries
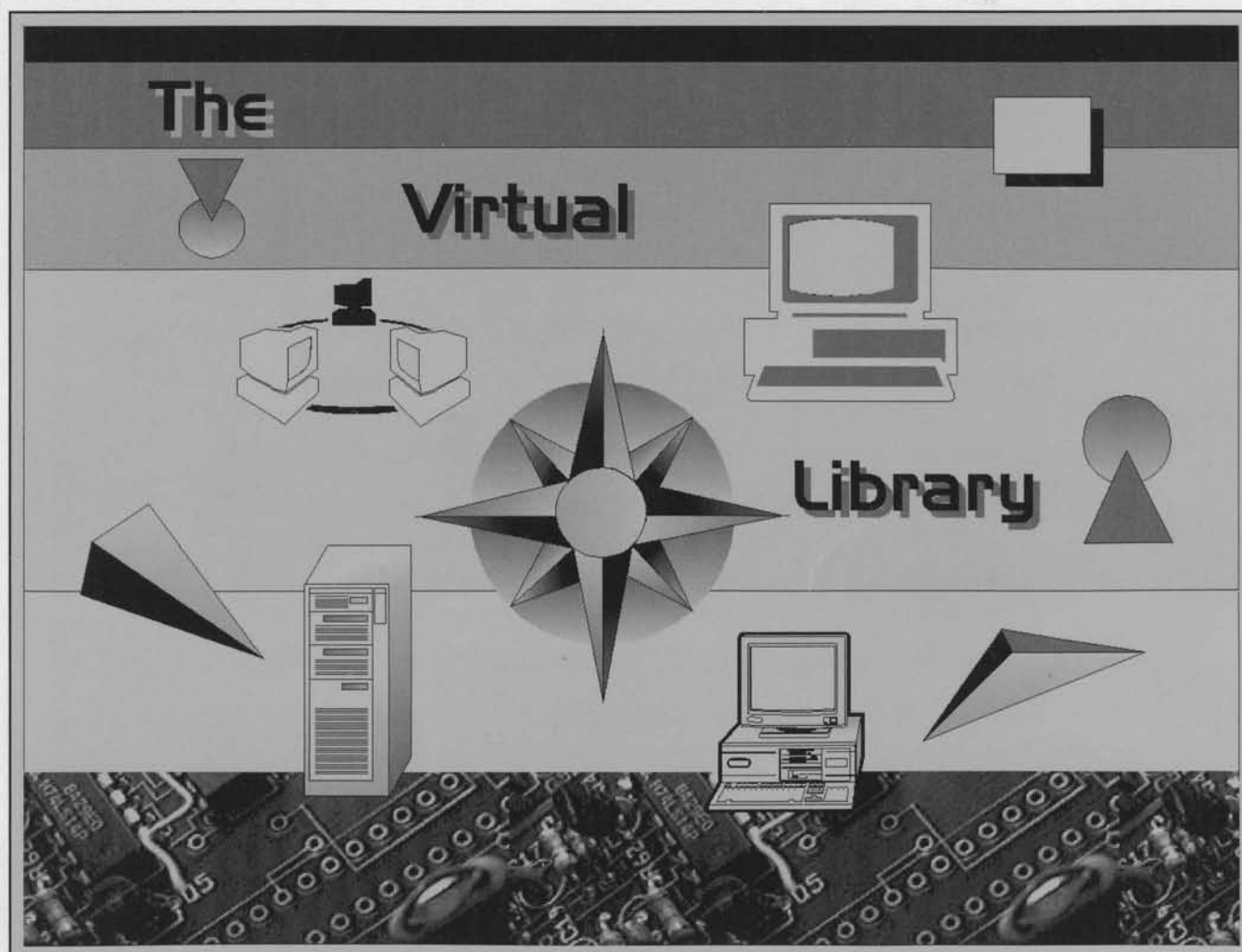
The Virtual Library

The virtual library can be defined as a collection of books, documents, images, recordings, etc., that is stored in binary (machine-readable) format and which can be accessed through electronic means. The concept implies that one can have access to the contents of materials without having the physical materials themselves. — Gary Harden, Page 99

NCL

NORTH CAROLINA LIBRARIES

NORTH CAROLINA LIBRARIES

August 2, 1994

To: *North Carolina Libraries* Editorial Board
From: Frances Bryant Bradburn, editor
Topic: Schedule Changes

After a great deal of conversation with others and soul-searching myself, I have decided that the best way to handle the financial problems of both *North Carolina Libraries* and the Association is to publish only one more issue this biennium. This would allow *NCL* to come close to breaking even for the biennium and start the new biennium with a budgeted $8,000 per issue. While this action is not necessarily without risk (the Association *could* ask *NCL* to cease publishing any issue to make up for a temporary shortfall of funds), I feel that the potential goodwill far outweighs that possibility. First, as one of the major financial players in the Association, we are modeling fiscal responsibility. Second, we will have the opportunity to begin afresh with the Spring 1995 issue, and not have to try to make up $8000 somewhere in the next biennium. Finally, we are sending a message to the Association membership that money is tight across the organization, especially in an area that must rely on the public (US Postal Service) and private sectors (printing, paper, etc.); consequently some priorities must begin to be considered. Frankly, I see the journal in a win/win situation here, especially since we have made this decision ourselves rather than forcing the Executive Board or Finance Committee to ask this of us.

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Above is the letter that determined the fate of this issue of *North Carolina Libraries*. You have before you a double issue — the first ever in the history of the North Carolina Library Association. In order to remain fiscally responsible, the journal will have only seven issues this biennium; we will return to our quarterly format with the Spring 1995 issue. While we are delighted with our additional funding for the 1995-97 biennium, we apologize for the inconvenience that this double issue will cause — as fellow professionals, we are aware of the angst this will create for the serials librarians among us. We can only assume that the ends will justify the means of this decision.

More importantly, however, this double issue is a reminder of how tenuous the perks of membership in the North Carolina library community may be. Without the commitment of ALL of us to the financial well-being of our association, whether it be "our" conference year or not, we run the risk of losing the major source of our statewide professional development opportunities and our personal job-related support groups. Let us vow that this double issue of *North Carolina Libraries* will set only the precedent of increased financial commitment to the North Carolina Library Association, not the precedent of budget cutting at the expense of our national reputation and professional knowledge-base.

From the President

Gwen Jackson, President

Congratulations to the Technology and Trends (TNT) Round Table — NCLA's newest kid on the block. Technology and Trends, however is no newcomer to the Executive Board. It has been a vital committee of NCLA since 1988 when the Media and Technology Committee was renamed. The purpose of this committee as stated in the July 29, 1988, minutes of the Association was "to act as a clearing house of information on technology applications in North Carolina libraries and to promote technology in North Carolina libraries of all types." The objectives of TNT Round Table as stated in its Bylaws are "to unite in this group, North Carolina Library Association members interested in the advances and uses of technology, to provide an opportunity for discussion and activity, and to seek to fulfill the purposes of the North Carolina Library Association." In six short years the emphasis of this unit has changed from being an information clearinghouse to being an "indispensable" information tool.

It is most appropriate that the Technology and Trends Round Table is welcomed officially in this issue of *North Carolina Libraries* which focuses on virtual libraries. Guest editor Gary Harden notes that "librarians must educate themselves in the use and application of new technologies and become involved in the design of information delivery systems in cooperation with computing and networking professionals." The leadership of TNT has established several goals that endorse the need stated by Harden, including electronic distribution of our newsletter and the NCLA listserv.

It has been most gratifying to note the variety of professional development opportunities that have been sponsored by our sections and round tables during the fall. Many of these activities have had a technological emphasis and have ranged from Collection Management in the Electronic Environment (College and University Section); Managing Self, Managing Others (Library Administration and Management); the Information Highway from the User's Point of View (Reference and Adult Services); the Internet (New Members); and Understanding Yourself and Others (Status of Women). In addition to these offerings, the Association of School Librarians' biennial conference has provided programming on a variety of technology-, curriculum-, and literature-related topics. Several NCLA sections and round tables co-sponsored programs during the Southeastern Library Association conference in Charlotte.

Yes, the North Carolina Library Association is indeed alive and well! Because of you, we are strong in our:

- count (2,122 members)
- commitment to provide services from the 'cradle to the grave'
- collaboration between all types of libraries.

In his introductory article, Harden challenges us to "devise new and innovative services" in our libraries to take full advantage of the virtual library. He further reminds us that "we have the opportunity to establish the direction of a major transition in librarianship and library service. The choice is ours." How are you accepting the *challenge* proposed by Harden to make our profession the front runner in this information age?

Take time to "smell the roses" and practice some of the suggestions, observations, and reminders on how to live a happy and rewarding life that H. Jackson Brown, Jr., gives in his *Life's Little Instruction Book*. A few of my favorites are:

- Be forgiving of yourself and others.
- Make new friends but cherish the old ones.
- Don't postpone joy.
- Never give up on anybody. Miracles happen every day.
- Vote.
- Live so that when your children (colleagues) think of fairness, caring, and integrity, they think of you.
- In business and in family relationships, remember that the most important thing is trust.
- Think big thoughts, but relish small pleasures.
- Strive for excellence, not perfection.
- Wear audacious underwear under the most solemn business attire.
- Become the most positive and enthusiastic person you know.
- Remember that winners do what losers don't want to do.

Above all, have a joyous holiday season. *Celebrate* life and libraries!

Networking Glossary

compiled by Gary Harden

(**Note:** *Many of these terms appear in articles in this issue; other general interest networking terms have been included as well.*)

ARCHIE ☞ a utility program which locates files available through anonymous FTP.

ARPANET ☞ Advanced Research Projects Network

CYBERSPACE ☞ the virtual environment one occupies when using a computer connected to the Internet.

CWIS ☞ Campus Wide Information System

DARPA ☞ Defense Advanced Research Projects Agency

DNS ☞ Domain Name System; distributed name and address system used on the Internet.

FTP ☞ File Transfer Protocol; a TCP/IP protocol that lets a user on one computer system transfer files to and from another computer system over a network.

GOPHER ☞ a distributed information delivery system developed at the University of Minnesota.

HTTP ☞ Hypertext Transfer Protocol; the protocol used to deliver information in the World Wide Web.

IRC ☞ Internet Relay Chat; a protocol which allows real time conversations between computers on the Internet.

LISTSERV ☞ an automated electronic mailing list distribution system.

MOSAIC ☞ a World Wide Web browser (client) program developed by the National Center for Supercomputing Applications at the University of Illinois, Champaign.

MUD ☞ Multi-User Dungeon or Multi-User Domain; a virtual environment in which computer users can interact in real time.

NIC ☞ Network Information Center; provides information and assistance to network users.

NII ☞ National Information Infrastructure

NNTP ☞ Network News Transfer Protocol; a protocol for the distribution and retrieval of news articles.

NREN ☞ National Research and Education Network

NSFNET ☞ National Science Foundation Network

PPP ☞ Point to Point Protocol; protocol for transmitting data packets over telephone lines.

SLIP ☞ Serial Line Internet Protocol; protocol for transmitting data packets over telephone lines.

SMTP ☞ Simple Mail Transfer Protocol; protocol used for transferring electronic mail over the Internet.

TCP/IP ☞ Transmission Control Protocol/Internet Protocol; transmission and application protocols used on the Internet.

TELNET ☞ virtual terminal protocol; lets users access remote computer systems and use applications and services.

UNIX ☞ a multi-user computer operating system developed at Bell Laboratories.

USENET ☞ the news distribution system which operates over the Internet.

UUCP ☞ Unix to Unix Copy Program; lets one Unix system send files to another Unix system over telephone lines.

VERONICA ☞ a utility which provides for keyword searching of gopher server menus.

VR ☞ Virtual reality

WAIS ☞ Wide Area Information Server; a distributed information retrieval system developed by Thinking Machines Corporation.

WWW ☞ World Wide Web; a distributed hypermedia information system developed at CERN, the European Laboratory for Particle Physics.

The Virtual Library:
What Is It and Where Are We Headed?

by Gary Harden, Guest Editor

Much has been written recently about the "virtual library." Some say that the virtual library will make librarians obsolete. Others say that the library profession is on the verge of a major transition and stands to gain in professional stature from the development of virtual library services. So, what is the virtual library and what are the potential effects on library service and librarianship?

To understand how the virtual library concept has developed, a bit of historical background is in order. The foundation upon which the concept is based is the development of high-speed computing and networking technology. Although the development of computing machinery had its beginnings with Charles Babbage's difference engine and Herman Hollerith's tabulating machine in the 1800s,[1] the modern era of digital computing began in the 1930s. In 1936 Howard Aiken, a Harvard professor of mathematics, approached Thomas Watson, Sr., of IBM with a proposal to build a large scale computing machine. Watson was impressed by the design and provided $1 million in funding for the project. The resulting Harvard Mark I was unveiled in 1944.[2] Around the same time Dr. John Atanasoff, a professor of physics at Iowa State University, designed the first true electronic digital computer. As the United States entered World War II, the military became interested in machines that could be used in the war effort. Dr. John Mauchly of the University of Pennsylvania and his student assistant, J. Presper Eckert, began work on a computer for the military that could calculate artillery and missle trajectories. Their design was a refinement of Atanasoff's digital computer. The ENIAC

(Electronic Numerical Integrator and Calculator) was completed in February 1946, too late to be used in the war effort.[3] The ENIAC was cumbersome to use because its programming was "hard-wired." Each time that a new program was to be run, the machine physically had to be rewired. Dr. John Von Neumann, a mathematician and team member of the Manhattan Project, proposed a new design which would use the stored program concept. The EDVAC, or Electronic Discrete Variable Automatic Computer, would store all program instructions in computer memory. Switching from one program to another could now be accomplished quickly and easily. This set the stage for the beginning of the Information Age.[4]

In the relatively short span of forty years, computing technology has developed to an astonishing degree. The ENIAC occupied fifteen hundred square feet of space and weighed thirty tons. The microcomputer of today fits on a desktop and is many times more powerful than the original ENIAC. This reduction in size and increase in power is one factor leading to the development of virtual library services. The other major factor in this development is the maturation of networking technology. Effective information delivery depends upon the ability to interconnect disparate computing platforms into a cohesive network that utilizes a standard communications protocol. A network which could provide this functionality began to take shape in 1969. The ARPANET was established by the Department of Defense Advanced Research Projects Agency (which became known as DARPA) as an experimental network linking researchers at academic institutions and government laboratories. Over time other networks were interconnected with ARPANET using the commu-

nications protocols (TCP/IP) developed by DARPA. By the early 1980s, the ARPANET had split into two interconnected networks and the "Internet" was born. The single most important factor contributing to the explosive growth of networking was the establishment of the National Science Foundation Network (NSFNET) in 1986. From this point forward, the Internet has expanded to become an open global network interconnecting thousands of local and regional networks.[5]

Research and development during the last half-century have given us the means to implement the "virtual library," but what exactly is it? The virtual library can be defined as a collection of books, documents, images, recordings, etc., that is stored in binary (machine-readable) format and which can be accessed through electronic means. The concept implies that one can have access to the contents of materials without having the physical materials themselves. Dr. Vannevar Bush, Director of the Office of Scientific Research and Development during World War II, hinted at the virtual library concept in a landmark article published in *The Atlantic Monthly* in 1945. Bush recognized the overwhelming growth in humankind's vast store of knowledge and the difficulties inherent in accessing specific information: "The summation of human experience is being expanded at a prodigious rate, and the means we use for threading through the consequent maze to the momentarily important item is the same as was used in the days of square-rigged ships."[6] The visionary Bush foresaw the development of sophisticated computing devices that would facilitate the organization and distribution of information: "The advanced arithmetical machines of the future will be electrical in nature, and

they will perform at 100 times present speeds, or more. Moreover, they will be far more versatile than present commercial machines, so that they may readily be adapted for a wide variety of operations."[7] Bush believed that specific data became increasingly difficult to locate as the volume of stored information grew. He felt that the hierarchical systems of indexing in use at the time were artificial and did not reflect the natural processes of the human mind: "The human mind ... operates by association. With one item in its grasp, it snaps instantly to the next that is suggested by the association of thoughts ... Selection by association, rather than by indexing, may yet be mechanized."[8] Bush visualized a device for personal use which could function as a mechanical file and library. He called this device a "memex." The memex would store books, records, communications, etc. and would enable this stored information to be searched quickly and in a flexible manner. He wrote, "It affords an immediate step, however, to associative indexing, the basic idea of which is a provision whereby any item may be caused at will to select immediately and automatically another. This is the essential feature of the memex. The process of tying two items together is the important thing."[9]

The desktop microcomputer, with communications links to the global Internet, can be viewed as the logical extension of the memex conceived by Vannevar Bush. Microcomputers have developed to such a degree that they can be used to retrieve, store, and manipulate prodigious amounts of data in every conceivable format: text, graphical images, video files, audio files, binary files, etc. Through the use of graphical client software (such as Mosaic) to access servers running HTTP (Hypertext Transfer Protocol), the concept of "associative indexing" moves closer to becoming a reality. HTTP provides the means to create "linked" documents across many different computer systems. The researcher can follow a specific information "thread" across the Internet by choosing associated links in HTTP documents. These links can point to related documents in different formats. For example, one could connect to a server offering a biographical text file on Doc Watson, choose a link in the document which would connect to a document containing photographs of Watson and his family, and then choose a link which would connect to audio files of an actual performance by the famous musician. Different types of information in different formats brought together through association — the essence of the memex.

A number of electronic library projects have developed over the past decade. Notable among these projects are the Mann Library Gateway at Cornell University, Project JANUS at the Columbia University Law School, and the Library of Congress' American Memory Project.

The Albert R. Mann Library at Cornell University implemented an electronic library service in 1991. The service, known as the Mann Library Gateway, includes numeric data files, computerized journal indexes, corporate profiles, library catalogs, and the full text of journal articles and reference works.[10] This electronic library project was developed by the Public Services, Collection Development, and Technical Services divisions in cooperation with the Information Technology Section. The Mann Library received the first ALA / Meckler Library of the Future award in 1993 for their work on the Mann Library Gateway.[11] Access to the electronic library is currently restricted to the Cornell University community due to database restrictions, but a "public" version of the Gateway will eventually be available to anyone on the Internet.

In 1990, the Columbia University Law School Library was charged with developing an alternative mode of library access which would preclude the expansion of existing space. The law librarian, James Hoover, and the director of Computer Systems and Research, Willem Scholten, developed a virtual library concept based on the use of a supercomputer. Project JANUS took shape in November 1992, when a CM-2 supercomputer from Thinking Machines Corporation was installed in the Law Library. This is the first library on record to utilize a supercomputer for virtual library services.[12] "Project JANUS is a prototype digital library which utilizes the power of a massively parallel supercomputer to provide users with access to texts, images, sound, and video from remote and local workstations. As the JANUS project is developed, users will be able to have access to tens of thousands of books, both archival and current copyrighted editions. In addition, JANUS is a means of preservation and enhanced access to archival collections such as the Perlin Papers (the Rosenberg/Sobell FBI Surveillance Archive) and the Nuremburg Trial Papers."[13]

The American Memory Project began development in 1990 as a means to provide electronic access to the Library of Congress' collections of archival materials. A variety of multimedia materials are available, including films, audio recordings, broadsides, and photographs. As initially conceived, American Memory was provided on videodisc to forty-four libraries.[14] Recently the Library of Congress implemented an HTTP (World Wide Web) server which provides Internet access to the American Memory collections. (**http://marvel.loc.gov/homepage/lchp.htnl**) These valuable historical collections are now accessible to any library having an Internet connection.

The virtual library is no longer just a concept. As the cited examples demonstrate, it exists now in various forms at numerous institutions around the globe. Although still in its developmental stages, the virtual library of today portends the future library of tomorrow, but technological developments in any field are not without consequences. Are physical libraries and librarians becoming obsolete? Are books in danger of disappearing? These questions currently are being debated among library professionals. Michael Gorman writes, "Libraries are under attack as never before, and none more so than academic libraries. The enemies of academic libraries fall into three classes. The *bureaucrats* know little or nothing of education or libraries. They know only that they cost a lot of money; money that could be saved if libraries were to be dismantled behind a smokescreen of technology. The *technocrats*, or at least some of them, believe that technology can be used to provide something equal to, or better than, 'traditional' library services. The *technovandals* want to use technology to break up the culture of learning and, in a weird mixture of nineties cybervision and sixties radicalism, to replace that world with a howling wilderness of unstructured, unrelated gobbets of 'information' and random images in which the hapless individual wanders without direction or sense of value."[15]

Mr. Gorman argues (rightly, I think) that the book and libraries must be saved from destruction. On the other hand, he assumes that the book can take only one form, that of ink on paper. John Kountz observes that "In the next five years or so, the market for — and the availability of — information printed on paper can be anticipated to shrink by 50 percent. By the turn of the century, paper will satisfy less than 5 percent of the total commerce in information."[16] It is inevitable that, as technology becomes more sophisticated, products and services are replaced by new designs and processes. The printed book is a carrier of information just as the early 78 r.p.m. analog sound recordings were carriers of information. Throughout recorded history, the media that are used to carry information have changed as technology has developed more efficient, cost-effective means to store that information. The book is also destined to change in form: "The dollar relationship between

various methods of delivery for intellectual matter — be it information, education, or entertainment — must be recognized by the library profession. In terms of cold, hard cash, it is simply less expensive to distribute information electronically than by paper ONCE THE COMMUNITY IS EQUIPPED ELECTRONICALLY."[17]

The Sony Corporation recently introduced what might be considered the first "virtual book" in the form of the Bookman, a small, personal CD-ROM reader. Virtual books will take other forms as well. Raymond Kurzweil writes, "Virtual books will undoubtedly take many forms, but we can envision the basic model as a thin light slab with sizes ranging from pocket-sized to the full surface of one's desk. Resolution, color, contrast ratio, and lack of flicker will all match high-quality paper documents. These truly personal computers will be able to send and receive virtual books instantly through wireless communication."[18]

Books and libraries are in transition. The library profession must now face the inevitable — the library of the twenty-first century will be very different from the library of today. Those who complain that the traditional library is dying are correct. If those same people do not embrace the new technologies and take an active role in determining their application in the library, they will surely be left behind. The development of electronic library services should not be left to the technocrats. Librarians must educate themselves in the use and application of new technologies and design information delivery systems in cooperation with computing and networking professionals. Consequently, graduate library programs need to revise their curricula to provide effective training in the the use of sophisticated technologies as well as the design of integrated information delivery systems.

The electronic library concept offers almost unlimited opportunities to devise new and innovative services. If we accept the challenge, the profession stands to gain immeasurably from the development of the virtual library. We have the opportunity to establish the direction of a major transition in librarianship and library service. The choice is ours.

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The Internet Connection:
An Interview with
Gopher Guru Eric Lease Morgan

by Paul B. Baker

How are libraries in North Carolina providing access to the Internet? Should you be providing this service? How can you make Internet information available in your reference department? This article examines the ways librarians are connecting to the Internet now, and looks toward the future of Internet access. Many libraries currently are using gopher as a porthole to the Internet.

Gopher is an Internet browser that offers an easy menu to the end user. When I first saw gopher, I realized that this was the breakthrough that would make the Internet user friendly. I thought at the time, "This is really significant. This is Internet for the people!"

Gopher is a wonderful way to browse the Internet. With gopher, you can poke around for hours on end and get a very good feel for what is out there. You can access databases throughout the world by making logical menu choices. One menu leads to another and another and finally to the desired information.

In order to understand how gopher works, it is important to understand the client/server concept. The bigger computers that hold a lot of information have installed gopher "server" software so that people can access their information. These big computers are the gopher "servers," and they usually belong to large universities or corporations. Most of us who just want to use the information become "clients" of those big "servers." Thus we use gopher "client" software to connect. Gopher client software lets us move smoothly from one gopher to another by choosing something like "other gophers" from the menu.

All of the gopher servers have put different resources in their menus. If the gopher you are viewing doesn't have what you want, you can move easily to one that does. You can literally get to "all the gophers in the world" by making menu selections. Gopher software makes the connections invisibly in the background.

Gopher was developed at the University of Minnesota, and that is where the original Master Gopher resides. You can get to the University of Minnesota's Gopher if you telnet to "**sunsite.unc.edu**," login as "gopher," and put in your terminal type as "vt100." (You can also dial in with a modem to UNC at 919-962-9911, choose SUNSITE services from the menu, login as "gopher," and put in your terminal type as "vt100.") Next, choose "Surf the Net! — Archie, Libraries, Gophers, FTP Sites" from the main menu, and then choose "Master Gopher at UMN." Here you will find information about the original gopher and about gopher in general. This is a good place to look for information about starting to provide gopher service. (It is important to mention here that gopher administrators frequently rearrange, or otherwise change their menus. Therefore, if something I suggest doesn't work, experiment a bit by making logical menu selections to get what you want.)

To find out what is going on with library gophers in North Carolina, I talked with Eric Lease Morgan, Systems Librarian of North Carolina State University in Raleigh. He was the first librarian to set up a gopher in this state. He is recognized throughout the world, not because he was the first librarian who got a gopher up and running in North Carolina, but because he organized his gopher menu from the per-

spective of a librarian. His "study carrel" arrangement by broad general subject headings was the first of its kind. He made it easier to access information in a given discipline by providing a simple menu choice such as "Music" or "Sociology." He recently has added World Wide Web to his Internet services at North Carolina State University, and is using Mosaic as the client which provides an interface to World Wide Web information. (I'll explain these new developments later in the article.)

Because of Eric's pioneering accomplishments and the recognition he has received, I arranged an interview with him to find answers to the questions I had about providing Internet service. When I arrived at his office, I found him to be an animated, dynamic young man. His office has a large window overlooking the NCSU campus. He is surrounded by pictures of his family, and an impressive looking Macintosh computer system. During the two-hour dialogue, which seemed like twenty minutes, there was nary a dull moment! Eric is a terrific teacher with an extraordinary ability to make difficult concepts absolutely clear. Here is my edited version of our conversation:

Paul: What factors caused you to decide to implement gopher?

Eric: I was a member of a group studying problems, including the "serials crisis." Journal prices were going through the roof. What could we as librarians do about this? At the same time I heard about many electronic journals. I also heard about WAIS and gopher. I thought maybe I could apply these technologies to systematically collecting electronic journals. Libraries could collect electronic journals, and archive

them, and index them with WAIS in order to search them. This would be an alternative to paying the high prices for paper journals. We could eliminate the publisher. I decided to set up a gopher because I was enraged. I was mad! I wanted to come up with a better solution — to collect *electronic* journals.

Paul: After you made the decision to use gopher, what were the steps you took to get it set up and running?

Eric: I read a USENET newsgroup called **comp.infosystem.gopher**. I read it religiously every day. I used it as my support group. I FTP'd the necessary software from Minnesota, put it on my UNIX computer, uncompressed it, read the instructions, compiled the baby, and did it. It worked. When it didn't work, I consulted the newsgroup for help. I got the first version up in two weeks. The single most helpful thing was the newsgroup and communicating with them using e-mail.

Paul: Can anyone set up a gopher? Should they? What is needed to do so?

Eric: Yes, you have to have the appropriate hardware, software, and time. You can set it up on almost any kind of machine — Macintosh, UNIX, DOS, etc. Whether a library should set one up depends on who they are serving. If you mainly serve children who can't yet read, a gopher server may not be useful. But if you are in an academic library and you realize there is a lot of information on the Internet that you can't get in printed form, then a gopher is a great way to collect and organize this information and make it available to your clients. Here the answer would be "Yes, you should create a gopher server if possible." Many would want to set it up on a large computer, but if your population is small, then a lesser computer would work.

If you want to provide service outside your library, then you really need an Internet connection. Once only education and government had simple access to the Internet. Now more and more commercial providers are offering a way to hook on. If you don't have an Internet connection, you can connect to an existing gopher using a modem. The problem with this is that you are relying on them to provide the sort of information that you need. It is feasible to connect to our services, and once you get to our gopher, you can get to any other. The problem is that you won't have control over how all this information is organized. It is sort of like having a library without books and depending entirely on interlibrary loan. It is certainly better than nothing, which would be having no access to books.

Paul: What were the biggest problems or obstacles that you encountered?

Eric: At first, it was the learning curve to get it going. I knew very little UNIX. I did not know how to program in C, and the thing is written in C. I did not know how to compile and that sort of stuff. That was a challenge. But I just read the instructions.

The next challenge was to organize the material. I had to come up with an organizational scheme to classify the things I found out there. I had to come up with a model that would make the most sense to the people I am serving here at NCSU. If people in other places want to use my service, that's fine, but when I set it up, I was thinking about the people here outside my window.

The next part was maintaining it. This is ongoing. I put things that I liked from other places in my server, and then these other places sometimes reorganize and change the links that I used to connect to them. I have to then go in and "fix" these broken links. This is like library work, weeding the collection, shifting shelves, mending books. It's the same idea. This is ongoing.

I decided to set up a gopher because I was enraged.

Another obstacle was teaching other librarians how to use it. You can't telnet directly to our gopher address and use it. You have to install gopher client software to go this route. I feel comfortable with computers. They are dumb boxes, but I can make them hop. I am very comfortable with them. Trying to teach other people a little bit about UNIX so they can maintain a gopher server is difficult because there is not a lot of enthusiasm. Some people consider it a chore. I don't really know a lot about my computer, but I can make it go. I'm like the race car driver. I don't know how to fix it, but I can drive real fast!

Paul: Who uses your gopher? What are the ways they can access it? (For example, the library gopher at UNC-Chapel Hill has been added to the online catalog menu. It can be accessed from any terminal in the library. Of course, many students have modems at home and can access it through dial-in to the university computer.)

Eric: Who uses it? Everybody. There were

872,000 connections last year. (For these statistics, each menu selection counts as a "connection." Therefore obtaining one piece of information might count as four or five connections, if the user moved through four or five menu choices to get to the information.) About 12 percent of users are here on campus, and 95 percent of that 12 percent campus use comes from the library terminals. OhioLink, a consortium of libraries in Ohio, is second at 10 percent. They have us on their top menu. They are our single heaviest user. Next is Delphi, a commercial service which sells connections to the Internet, at 5 percent. The Library of Congress is next at 4 percent. About 70 percent of users are others who connect less than 1 percent of the time, but this can still be a lot when you consider more than 872,000 connections. Last year, the average was one connection every 37 seconds. In June 1994, there was one connection every 14 seconds. Overall, more than half of the use is by educational institutions. About 10 percent are commercial institutions. Less than 10 per cent are network institutions. About 25 percent are "other," and many of these are from outside the country.

To access our gopher, once you have a real connection to the Internet, you need to retrieve a gopher client. What client you finally select depends on the computer system you are using. Examples are *Turbogopher, HGOPHER, UNIX Cursus client*; there are bunches of them. Pick one of these pieces of software, put it on your computer, and somewhere in the configuration, it will ask you where you want to go. Then you can point your gopher to **dewey.lib.ncsu. edu** on port 70. That is the best way to get here. Alternatively, if you do not have a gopher client, you can telnet to the NCSU library's information system (**library.ncsu.edu**) and you can navigate the menus and in there somewhere is our gopher. If you dial in to someone else's gopher, you probably will be using the VT-100 client, and there is usually available (but not always) the "O" command. You can press O and it says "What other gopher do you want to go to?" You put in "**dewey.lib.ncsu. edu**" and you are here. Or if that doesn't work, you can find us in "Other Gophers" in someone else's menu. (You only need the client software if you have a true Internet connection. If you are dialing in or using telnet, you are using someone else's client software which is already in place on the other machine.)

Paul: Some gopher menus offer clear choices that lead easily to desired information. Others are confusing. They may provide cryptic choices, making it hard to

search for information. How would you describe the menu for your particular gopher server?

Eric: When I first started looking around, I noticed the organizational schemes in use at the time were not interesting to me as a librarian. They were more of a general campus interest, like class schedules. I was into collecting academic information. Existing menus had choices like "neat stuff" or "cool things" or "general" or "other." These can waste a lot of time. I wanted to create a "Library Without Walls." I decided not to use something like Dewey Decimal or Library of Congress classification schemes, because they can put people off with somewhat negative images about libraries. No one really understands those systems besides librarians.

So what would people understand? I thought of used bookstores and how they put materials under broad general subject categories, like "Music." I decided to use categories like that. At the same time, I was playing with this thing called a "MUD," meaning Multi-User Dungeon. It's kind of like a game but not really. There is a MUD at MCNC and you could telnet to it. It was like a virtual reality. You could go left, go right, go up, go down and look around and see things. They had this idea they called a "study carrel." You had to pick a study carrel based on the first letter of your last name, so I went down to the M's. You could create your own virtual space. I created a space with only a table, a chair, and a flower. The flower wilts as you approach it, and as you go away the flower comes back to life. Then I added a computer in the space. As you walk up to the computer, it asks you questions about your information needs. You answer the questions. It gives you the answers and you go away satisfied.

Based on the fact that I wanted to organize things by subject, rather than "cool things" or "other," and based on my playing around with this MUD, I got this idea of study carrels. I made up what I call the "used bookstore model." I created broad categories to name my study carrels as I found resources. I would say, "Here is an Internet resource. I think it has some useful information for me and my clients, so I'm going to create a link to it. I'll put it in the Sociology study carrel because it relates to sociology." I more or less cataloged. It was not a straightforward process. I was influenced by bunches of stuff I encountered along the way. You take this good part from over here and that good part from over there and mold it into something new. That's what learning and scholarly activity is all about, taking parts

of other people's ideas and making a new idea. The study carrel structure is an open architecture, and I can add more study carrels if I need them as new things come along. You have to be careful though; you can't just add them randomly. It is a frustrating thing for users if they open a study carrel called "Western History" and they say, "Oh, that's exactly what I want!" Then they open it and it has only one thing there. That is really frustrating to people. There must be enough resources in there. That was my collection management policy. I had to wait until there was what I call a critical mass of items — four.

Paul: What distinguishes your gopher from others?

Eric: Our gopher is popular. It has a library

> *Our gopher is popular. It has a library feel to it. It's structured like a library .... There's a "reference desk" ... "study carrels" ... "stacks" ....*

feel to it. It's structured like a library, as opposed to a campus department or a campus-wide information system. There's a "reference desk," just like in libraries. There are "study carrels" like there are in libraries. There's the "stacks" like there are in libraries. Even though I call it the used bookstore model, it ends up looking like a library anyway.

Paul: What special resources have you added to your gopher menu?

Eric: I have very few unique items in my server. Very few. Most of the things that we have point to other people's. I have just created this big bibliography. It's like I don't really have this "book"; it's over there in another library someplace. Most of the things I have are really somewhere else, except when it comes to things like guides to our library. These are lists of our NCSU library resources. You can see what sociology reference books you may want to use if you come here. Those lists are text files that are unique to our server.

Another thing that is unique to us goes back to the reason I did this in the first place: collecting electronic serials. That was my whole point. This other stuff about collecting Internet resources came along as I was putting it all together. I was teaching Internet classes. Every time I went to

class, I was carrying all these big books with me, like *Hitchhiker's Guide to the Internet* and *Internet Resource Guide*. Huge things! People would say to me, "Do you know a good resource for um-um-um-um?" I'd say, "I've heard of that; let me look in my guide." I'd pull it out and hunt and say, "Here's the number." I literally had a big black book of Internet addresses — like a little black book of telephone numbers. And then I thought "Wait a minute. Whoa, I'm not going to be able to remember all these numbers after a while. I'm going to write them down and put them in my gopher server."

The only unique thing so far is my collection of electronic journals. This was the whole point of my starting the gopher in the first place.

I created a gopher server that worked. And then I created a WAIS server. WAIS is a program that indexes data. It works on the client/server model just the same way gopher does. You have one program, the server, that holds the data. You've got another program, the client, that queries the server. WAIS indexes data. Indexes are what librarians are all about. Our card catalog is an index. You have, for example, *Library Literature*, which is an index to library-related magazines–journals.

WAIS creates indexes to whatever you want. I collect electronic journals which are text files. If you have a big pile of these journals, how do you find a particular article on a particular subject in that great big pile? You need an index. You need a way to search the thing. You can browse. You can look at one article and then another, but this could take forever. You need a way to search. WAIS allows you to do this. I collected these electronic journals and put them in a "pile." So here's a whole bunch of text files. Now I indexed them using WAIS. The index is based on the whole text of the journals, not just abstracts. You use the WAIS software on your computer to find all the articles that contain the word *NREN*. The WAIS server looks at its index and says, "Look, these five things have the word *NREN*." You say, "O.K. I would like to look at number four." The WAIS server then goes and gets number four and gives it back to you.

WAIS counts the number of times the word or words you requested appears in each document it retrieves. If you look for the word *DOG*, it will search its index and come back with a list of all the things that have the word *DOG* in them. The articles at the top contain the word *DOG* more times than the ones at the bottom. They assume that the ones that contain the

word more often are going to be more relevant to you. This is called relevance searching. Early WAIS software did not do Boolean searching, but the relevance searching provided valuable information. The newer WAIS software can do full Boolean searching, and it still ranks the results so that the documents with the highest number of hits still appear at the top. You can now form sophisticated Boolean searches such as *CAT and DOG not MICE*. You can use truncation. You can search for phrases such as *TEDDY BEAR*. The point here is that relevance searching has a lot of value, and we as librarians are not paying attention to that because we have been stuck on Boolean searching since the early seventies. That's when we really got into using DIALOG. We librarians need to explore this new way of searching — relevance searching.

But back to the question of what distinguishes our gopher and what special resources we have. My whole point was to collect electronic journals. I decided to be very specific. I only collected library and information science related titles. Right now, there are about twelve of these. Only three or so are scholarly. The rest are like newsletters. I started making these accessible through our gopher server, and just recently I started putting the current issues on our new World Wide Web server.

Author's Commentary
Here I need briefly to introduce "World Wide Web. " World Wide Web (also called WWW) is another way to provide access to Internet information. Eric Morgan predicts that World Wide Web will replace gopher in two or three years.

World Wide Web is similar in many ways to gopher. It does even more and provides a better looking interface for the user. Using World Wide Web, you can look at a formatted document, select (or "click on") a highlighted word or phrase, and then the software connects you to a link somewhere else on the Internet. That link provides more information about the word you just selected, a footnote if you will. The additional information may be in the form of text, a picture, a sound file, or a movie.

Once you view this link, you can easily move back to the original document. World Wide Web can connect to the other World Wide Web servers and all the gopher servers too. World Wide Web adds a new way to make Hypertext documents accessible. Multimedia links provide new and more exciting ways to view information. World Wide Web is already being implemented in many academic institutions. Even though it is a different protocol, it provides a path to existing gophers.

Mosaic has become the most popular client software for using World Wide Web. Mosaic is a browser interface for World Wide Web. When people talk about Mosaic, they are really talking about World Wide Web. (Mosaic is to World Wide Web as Turbogopher or HGopher are to gopher servers.)

Lynx is yet another WWW browser program that permits using WWW in situations where the user is not equipped to receive all the picture and multimedia options (for example, when dialing in with a modem). Lynx makes the textual material available and provides the Hypertext linking feature of World Wide Web.

Eric: I had a gopher server and I also had a WAIS server. I indexed my electronic journals with WAIS and I provided access to them through my gopher. I also have a list you can browse and get the latest issue, or you can look for an article in any issue. But, if you want to search the entire collection of *PACS Review* for the word *NREN*, you can do that as well. WAIS would present a list of articles containing NREN. This is really the only unique thing about our server. I have collected electronic serials that deal with libraries. But there was an unexpected surprise. I have indexed each of the serials, so you can search each one individually. And then I thought, "I've got the whole collection, so why don't I index the whole thing?" So I indexed the whole pile and created a new index. Now you can search the whole pile for articles that contain the word *NREN*, and it finds them all! It's just exactly like *Library Literature*.

What we should now do as libraries, in my opinion, is collect electronic journals in other disciplines, for example zoology and medicine. We won't get rid of the standard library indexes and abstracts, but we won't have to rely on them for indexing purposes. We can create information instead of just buying it from other people. Now that I have collected library titles and demonstrated that I can do this effectively, I am branching out and collecting other electronic titles. I invented this guy named "Mr. Serials" who lives on my UNIX computer. He subscribes to these things and when he gets new mail, he files it away. Everything gets reindexed automatically every day at 2:30 in the morning. In May of this year, I decided to add current issues of the serials only to our World Wide Web server. With the advent of Mosaic and Lynx, I started maintaining a World Wide Web interface to this collection and stopped maintaining the gopher interface. Compared to gopher, Mosaic provides superior presentation capabilities. The earlier journals are still there on gopher, but the recent ones are only available through our newer World Wide Web service.

Paul: Please share your views on the future of Internet access using gopher at NCSU. What changes do you think you will implement in the future?

Eric: Gopher is going to die. It's becoming old hat. It's sort of embarrassing to say that, because it's been so cool for a couple of years. The next wave is going to be World Wide Web. World Wide Web is older than gopher. It started out in Switzerland. It can do everything gopher can and more. With Gopher, everything is a menu and everything looks pretty much the same. With World Wide Web, you can

format your page — what the person sees on the screen. You can indent things and have bullets and numbered items. The real idea behind World Wide Web is this. Scholarly papers have footnotes. I read along and come to a footnote. I select or click on that footnote and it goes off somewhere else and gets and displays the footnote. When I'm done reading the footnote, I come back. It's a Hypertext sort of idea. With a World Wide Web browser (probably Mosaic, since it is by far the most popular), you can access all the gopher servers and all the other World Wide Web servers. You can telnet around and do all sorts of other Internet things. World Wide Web is much more capable than gopher, and it's a lot easier to maintain, too.

As history progresses, we change more quickly. Look how quickly styles of music, for example, come and go now. The same thing is going to happen in computer land. We once had ways of doing things and they lasted a long time. Technology is changing rapidly. We're changing so much faster than we used to. FTP came along and we used that for a long time. Then Gopher came along and it improved FTP and telnet. That was great. Gopher was a big flash in the pan for a couple of years, and it will probably continue for a while.

And now the big flash in the pan is World Wide Web because it can do gopher and it can do telnet and FTP. It can do everything we could do before — and more. I predict that fewer gopher servers will be created and more World Wide Web servers will be created. Gopher is going to fade away in about two to three years, as far as new installations go. However, I think that gopher servers will be around coexisting with World Wide Web for a long time, maybe ten years.

We still will use the strengths of gopher, which include simple lists. When we have an Internet resource that is a simple list, then we will use gopher. If we have something that is more textual and descriptive, we'll use World Wide Web. The way I see it, for the short term we'll have World Wide Web as our front end. There will be items behind there that will include things like gopher or telnet or FTP or OPACs. These will hang out in the background, behind World Wide Web, but will be readily available.

Paul: What should libraries in North Carolina be doing to provide Internet access to their clients? Are we doing as much as we should, or do we need to do more?

Eric: I believe other libraries should take a more aggressive approach to using com-

puters to provide library service. I am a systems librarian and therefore biased. What do libraries do? What are we about? Libraries are about information. We're not about books, magazines, videotapes and microfiche. We're about information. For a long time, libraries were associated with those things because information was contained in a book or one of the other formats.

Libraries collect information — that's collection management. Then we organize it — that's cataloging. Then we store it. Then we disseminate it, give it away, through channels which include circulation and interlibrary loan and reference.

If we as libraries demonstrate that we can use our computers to provide the same services a publisher provides, then we can eliminate the publishers.

We also evaluate information. We might say we don't, but we do — all the time.

Computers are great tools for doing all these things. You can archive information on your hard disk. You can subdivide your hard disk into directories. You have just organized your information. You can turn your computer on and let other people come in and get your information. That's dissemination. You also have programs such as spreadsheets and database managers and querying programs. That's evaluating information.

Computers are great tools for doing the same things that libraries do. Therefore I believe that next to a librarian's mind and a librarian's peers, the computer is a librarian's primary tool. Librarians should be aggressively exploring ways to use computers to provide library services. These might include things like gopher and World Wide Web servers. We librarians have already started doing this in some ways, such as with our OPACs.

Recent literature says the journal crisis is not going to go away. We still are basically up the 'crick.' Some people believe if we can eliminate the publishers, we can fix the problem. Some believe if we can improve the scholarly communications process, we can fix the problem. If we as libraries demonstrate that we can use our computers to provide the same services a publisher provides, then we can eliminate the publishers. I hope that other

libraries explore these things as well.

As librarians, we don't pursue new things. For example, we have not explored relevance feedback. We think Boolean is the only way, but that's not true. We are stuck thinking that libraries are about books. They are not about books or videotapes or computer files either. They are about information. This has been true forever. If we internalize this, then we will have a different view of what we are supposed to be doing, and as a result, we will provide different service.

If librarians have access to a true Internet connection, they should create a menu for their users. On the menu will be a list of books they own, library hours, guides to the library, and an Internet porthole. That porthole might be a gopher client or a World Wide Web client such as Mosaic. They probably won't need to make a server. They can probably get client software and put that on the main menu for their institution. If possible, go with World Wide Web from the beginning. While gopher provides tremendous powers for collecting, organizing, and disseminating information, it pales when compared to the Hypertext Transfer Protocol of World Wide Web. We started a World Wide Web server here at NCSU at the beginning of 1994.

Yes, librarians who are planning to offer Internet services should start right out with World Wide Web, using Mosaic for the client software. This, of course, is contingent on whether they have a true connection to the Internet and can obtain adequate equipment. Right now, for some librarians, this is not the case. If not, they should start providing access with gopher, but it would be helpful to learn about World Wide Web, which is rapidly becoming the system of choice.

Conclusion:
Eric Morgan says libraries should be providing a way to get out to the Internet. Librarians who are not currently providing service should get connected. If resources are limited, it is simple and inexpensive to connect with a modem. When a library uses a modem, it is easy to connect to someone else's gopher. From there, the library can get to all of the 1,800 or so gophers that currently are available.

Eric is unconditionally enthusiastic about the Information Highway. He affirms a conviction that librarians should give it full support. The role of libraries is to furnish information. *Information* is the meaningful element — not the format.

Electronic Journals: Are We There Yet?

by Robert Burgin

Print journals play a central role in the scholarly process. Faculty members are paid to generate knowledge and then are encouraged by their employing colleges and universities (through a "publish or perish" tenure process) to publish that knowledge in print journals. Faculty members also use print journals to obtain feedback from colleagues on the viability of their ideas. Articles in print journals may include the methodological details that lay behind the published discoveries and thereby support the mechanism of replication in the scientific process.

Unfortunately, there are problems associated with print journals that make them less than effective in meeting some of the goals of the scholarly process. For example, the process of getting an idea or a discovery in print is often painfully slow. John Budd's survey of seventy-two humanities journals found that the average time from submission of a manuscript to the publication of the article was thirteen months, just over a year.[1] This lack of speed in turnaround is hardly conducive to providing timely feedback or to providing an interactive environment in which ideas can be shared and discussed. As an electronic journal guru, Stevan Harnad, puts it, "It usually takes several years, ... before the literature responds to an author's contribution (if it responds at all) and by that time the author, more likely than not, is thinking about something else. So a potentially vital spiral of peer interactions, had it taken place in 'real' cognitive time, never materializes, and countless ideas are instead doomed to remain stillborn."[2]

Print journals also are expensive and are becoming even more so. Librarians in general and serials librarians in particular are well aware of the problem of serials costs. Between 1976 and 1988, for example, the average price of serials rose 350 percent, and the average percentage of the materials budget devoted to serials rose from 40.4 percent to 56.2 percent among ARL member libraries.[3] Recent annual increases in print journal prices have exceeded the Consumer Price Index by 100 to 400 percent in some cases.[4] The growing burden of these price increases is especially infuriating given the nature of the scholarly process whereby universities are "generating knowledge, giving it away to the commercial publishers, and then buying it back for our scholars at increasingly prohibitive prices."[5]

Electronic Journals and the Scholarly Process

One attempt to solve some of the problems associated with print journals is the electronic journal. Such publications offer a number of advantages over print journals, including the advantage of speed. Julene Butler of Rutgers University, sees significant time savings for electronic journals both by speeding up the production phase (where print journals report time lags of up to eighteen months from submission to the printer to actual distribution of the journal) and by making the article the unit of distribution. With electronic journals, an individual article can be distributed as soon as it has been reviewed and approved; by contrast, an article submitted to a print journal must wait for the traditional issue containing five to eight articles.[6]

More importantly, some argue, electronic journals can provide more timely feedback from fellow scholars on ideas and findings. One electronic journal, *Psycoloquy*, is explicitly devoted to this kind of interaction, what its editor terms "scholarly skywriting, the radically new form of communication made possible by the Net, in which authors post to *Psycoloquy* a brief report of current ideas and findings on which they wish to elicit feedback from fellow specialists as well as experts from related disciplines the world over."[7]

Future developments should enhance even further the capabilities of electronic journals. Improved retrieval software should allow quick, easy full-text searching and thereby enhance access to the intellectual content of journals. As an editor of an electronic journal Jean-Claude Guedon suggests, "In a few years (three to five at most), people will routinely ask: give me all documents dealing with, e.g., Boyle and Hobbes; or find me anything that has to do with the year 1492."[8] Likewise, electronic journals will soon match print journals by incorporating graphics and photographs and then surpass print journals by including sound and animation.

Electronic Journals and Libraries

Libraries — academic libraries in particular — support the scholarly process by providing access to the print journals in which scholarly research is published. To the extent that electronic journals benefit the scholarly process in the ways outlined above, they also benefit libraries and their users. From the point of view of libraries, however, there is an additional advantage to electronic journals — reduced costs. Because "up to half the overall costs of publishing a journal are paper-bound,"[9]

electronic journals are potentially cheaper than their print counterparts. (The editor of *Psycoloquy*, Stevan Harnad estimates that the annual costs to produce that electronic journal are about fifty cents per reader/subscriber.[10]) In fact, the majority of electronic journals available over the Internet today are free. Even if electronic journals did charge for subscriptions, they might be willing to develop "pay-as-you-go" systems whereby libraries could acquire individual articles of interest, rather than having to pay for entire issues.[11]

Making Electronic Journals Work

Electronic journals hold great promise for libraries and for others involved in the scholarly process. Unfortunately, that promise has yet to be realized, and electronic journals are still largely tangential to the scholarly process that college and university libraries, in particular, support. There are far fewer electronic journals than there are print journals: only 240 electronic journal titles are listed in the latest ARL *Directory of Electronic Journals and Newsletters*. Fewer than a dozen are refereed, and it is unlikely that faculty will publish widely in electronic journals until they are refereed. Even fewer two or three at most — are indexed in standard indexing services such as MLA or ERIC, and it is difficult for faculty members to know that articles of interest to them have been published in electronic journals.

Julene Butler has suggested that two important goals must be achieved if electronic journals are to fulfill their promise: electronic journals must reach a large portion of the scholarly community; and such journals must achieve a level of respectability within that community.[12] Unless both goals are achieved, publications in electronic journals will not be taken seriously by tenure committees and faculty members will not be interested in submitting manuscripts to them.

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In order to reach a large share of the academic market, ... users of electronic journals must be ensured both access to, and retrievability of, those journals.

In order to reach a large share of the academic market, Butler argues, users of electronic journals must be ensured both access to, and retrievability of, those journals. Access to electronic journals will be accomplished by having those journals indexed in the standard indexing and abstracting services used by members of the academic community, by having scholars cite articles from electronic journals in their own publications, and by making members of the academic community aware of individual electronic journals. Retrievability of electronic journals relies on individuals having access to the hardware and software necessary to connect to the Internet and also having the skills needed to access electronic journals via the Internet. Retrievability may also be achieved through libraries collecting and making electronic journals available to individuals who may not otherwise have access.

In order for electronic journals to be seen as respectable vehicles for scholarly publication, Butler notes, there must be a rigorous peer review of all submissions; in fact, she argues that the reviewing standards for electronic journals may need to be even more rigorous than those for print journals in order for electronic journals to prove themselves. Electronic journals must also disseminate research results and commentary on such results in a timely fashion and they must enable further dialogue to take place between authors and journal readers. Finally, she argues, electronic journals must have well-known and respected editorial board members and must be able to stand the test of time.

How Librarians Can Help

It is clear that libraries can support the goal of making electronic journals available to a larger portion of the academic market and that libraries are therefore critical to the success of electronic journals. As Butler argues, "Libraries must collect and make available e-journals so that individuals (who do not otherwise have access) are guaranteed retrievability. Implied here is the need for libraries to publicize the availability of e-journals and train users in their access."[13]

Butler is not the only proponent of electronic journals to see librarians as instrumental in bringing about their success. An electronic journal editor, Lon Savage, claims that the "future success of electronic scholarly journals can be materially affected by concerted efforts of libraries" and that "All involved in scholarly communication will be the beneficiaries of [electronic journals], but none will benefit more than the libraries."[14] Stevan Harnad calls libraries "allies in hastening" the coming of electronic journals and argues for a "strategic pro-revolutionary alliance" among libraries, learned societies, and the scholarly community.[15] Linda Langschied of Rutgers University library claims that "if the potential of the electronic journal is to be realized, it will require librarians' collaborating with the authors, editors, and scholarly societies who are currently acting as champions of this new form of scholarly communication."[16]

The most obvious role to be filled by libraries, then, is the traditional one of providing access to information; in this case, access to information in a different, electronic format. Access may also include providing downloading and printing capabilities to patrons, as Jean-Claude Guedon has suggested:

> Libraries must have the electronic links to the databases where these e-publications originate. They may choose to mirror them, but systems such as a gopher bookmark avoids [sic] actual local storage. Downloading capability and possibilities of printing the result (as most people will prefer to work with a paper version if they need to do "deep reading" of a paper) are what libraries should be thinking about.[17]

Librarians also need to be aware of the difficulties — as well as the promises — of providing access to electronic journals. There are a number of thorny questions associated with electronic journals, and librarians should be defining those problems and seeking solutions to them. For example, what kinds of access should librarians provide to electronic journals? Should print copies of electronic journals be produced as a matter of course, should print copies be made by patron request only, or should the library merely provide printers for patrons to make print copies?

Should libraries provide downloading capabilities to patrons or send electronic journals to patrons via electronic mail? Should libraries provide access to electronic journals via their OPACs? If print copies of electronic journals are produced, should they be bound and shelved? Should electronic journals be fully cataloged and classified? Should libraries provide value-added capabilities like keyword or string searching for electronic journals? Should access be limited to free electronic journals or should the library pay to acquire fee-based electronic journals? Who will select or recommend electronic journals for the library to acquire? Which library departments will have the responsibility for subscribing to, checking in, and distributing electronic journals? Good introductions to these and other issues are provided by reports of the library task forces at Virginia Tech and MIT in recent issues of *Serials Review*.[18]

North Carolina's Academic Libraries

It is clear that electronic journals offer a promising alternative to print journals. It is also clear that the success of electronic journals depends on the support of libraries and, in particular, on the support of college and university libraries. To what extent, then, are North Carolina's academic libraries engaged in activities that support the viability of electronic journals?

To investigate the situation, the author sent a four-page survey to fifty-four college and university libraries in North Carolina. All North Carolina libraries listed as college and university libraries in DIALOG's American Library Directory database were included, along with all medical and law libraries associated with North Carolina universities. The survey instrument was based largely on an Internet survey conducted by Sam A. Khosh-khui, the Serials Cataloging Librarian at Southwest Texas State University.[19] Twenty-nine (54 percent) of the surveys were returned.

Nineteen of the respondents (66 percent) provide no patron access to electronic journals whatsoever. Of the remaining ten respondents, five subscribe to at least one electronic journal title; the other five do not subscribe to electronic journals, but provide patron access in other ways, usually by providing some kind of Internet access. In fact, six of the ten respondents who provide some kind of access to electronic journals do so by means of Internet access outside the library OPAC, and two provide gopher access as menu options on their OPACs. Four of the ten respondents who provide some kind of access to electronic journals allow downloading to floppy diskette. Three run printouts of the journal text for patrons by request only, and three provide printers for patrons to print the journal text themselves.

Of the five respondents who subscribe to electronic journals, three reported subscribing to only one title; one subscribes to two titles; and the remaining respondent subscribes to fifty-one titles. Only two libraries subscribe to journals with a paid subscription. Only one respondent fully catalogs and classifies its electronic journals; one briefly catalogs them but does not classify them; and one respondent noted that complete cataloging and classification was "imminent."

Of the five respondents who subscribe to electronic journals, selection responsibility rests with librarians in four cases and with faculty in two. The responsibility for subscribing to and setting up check-in records is assigned to acquisitions at one library, serials at another, and automation at a third (although this last respondent noted that the responsibility might be transferred to acquisitions in the near future). The responsibility for distributing electronic journals is assigned to reference at two libraries, to serials at another, and to automation at another.

Unfortunately, the most obvious finding of the survey is the lack of participation in the new medium. Nearly two-thirds of the academic libraries that responded to the survey do not provide patron access to electronic journals. Furthermore, North Carolina's academic libraries are not atypical in their failure to provide access to electronic journals. A January 1992 survey of ARL libraries found that just half of the responding libraries (49 percent) subscribed to electronic journals or intended to subscribe to them.[20] Khosh-khui himself only received twenty-five responses to his survey, which was distributed nationwide via an Internet discussion group devoted to serials in libraries. In spite of the promises that electronic journals offer to academic libraries, few appear to be providing access to this medium.

Conclusion

Libraries and those served by libraries have much to gain from the success of electronic journals. Electronic journals promise to provide a more rapid and more effective means of sharing scholarly ideas and discoveries with other members of the academic community and to do so at much less cost to libraries than do current print journals.

However, the promise of electronic journals cannot be realized without the help of librarians. Librarians should make their users aware of electronic journals, provide access to such journals (especially for individuals who do not otherwise have access), and provide downloading and printing support. Librarians should be aware of the wide range of options for providing access to electronic journals, storing such journals, and cataloging such journals. Librarians should be involved in the publication of their own electronic journals and should subscribe to those that focus on topics related to electronic journals (such as *Ejournal*). In short, librarians should become active players in making electronic journals a successful medium for scholarly communication.

Librarians have much to gain from participating in the effort to make electronic journals work, because it is early enough in the

development of this alternative medium for librarians to make a meaningful difference. As members of the Electronic Journals Task Force at the MIT Libraries have pointed out:

> We can wait and then attempt to accommodate ourselves to new systems after the fact, or we can move to shape what our future will look like.[21]

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Electronic Journals of Interest

For a recent edition of the ARL *Directory of Electronic Journals and Newsletters* (available as two ASCII files), send the following commands as an e-mail message to **LISTSERV@ACADVM1.UOTTAWA.CA:**
   GET EJOURNL1 DIRECTRY
   GET EJOURNL2 DIRECTRY

Ejournal. Discusses the implications of electronic journals and other forms of electronic text. To subscribe, send the following electronic mail message to **LISTSERV@ALBANY.EDU: SUBSCRIBE EJRNL**

Interpersonal Computing and Technology Journal. Addresses concerns about the use of electronic journals for scholarly publication. To subscribe, send the following electronic mail message to **LISTSERV@GUVM.GEORGETOWN.EDU: SUBSCRIBE IPCT-L**

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Virtual Public Libraries:
Issues and Challenges

by Frank Clover

With less than a third of the public libraries in the United States connected to the Internet, its potential to supplement or replace traditional public library information sources by providing immediate access to electronic information located elsewhere on the network is still unclear. In 1992, Laverna M. Saunders defined this type of virtual library as "a system by which a user may connect transparently to remote libraries and databases by using the local library's online catalog or a university or network computer as a gateway."[1] Currently 12.8 percent of the public libraries in the United States that are connected to the Internet are following the lead of academic libraries by offering some level of Internet access to remote information sources through their online public access catalog systems.[2] The Seattle Public Library and the Enoch Pratt Free Library in Baltimore have gone so far as to announce that they plan to sell Internet access accounts to patrons.[3] While it is still too soon to determine the success of these virtual public library services, making the Internet available to public library patrons (at least in its current state) as an information retrieval system will create more problems than it will solve.

Virtual libraries in academic and corporate settings typically restrict access to specialized collections of electronic resources to a limited patron base of faculty, graduate students, or employees, all of whom generally have access to the same equipment needed to use remote databases. Public libraries are expected to provide an equal level of service to a wider and more undefined patron base, not all of whom have the same level of technological expertise. Public libraries do not bear the same exclusive relationship to their patrons in providing access to virtual information resources as do academic libraries and campus computing centers or management information systems (MIS) departments. In the two years since Saunders's article appeared, public libraries have discovered the Internet at the same time as their patrons, while the number of points of access to it have increased dramatically. Online services such as *America Online* and *Delphi* are adding selected features of the Internet to their menu of services. Many users of local dial-up bulletin boards have increasing access to Internet e-mail and newsgroups through UUCP (Unix to Unix Copy Program). The *Cleveland Freenet* and other non-profit community networks provide limited network accounts in at least twenty-five North American cities. Most importantly, new companies have sprung up specifically to provide full Internet accounts, in some cases over coaxial television cable.[4] Public libraries are thus not the only means of access to the Internet for the general public.

The increasing availability of affordable Internet access has the potential to change permanently public libraries' role as their communities' primary information provider. Public libraries have been nodes in a print-based national information network for decades, a "paper-net" comprised of book and magazine publishers and distributors, the postal system, interlibrary loan consortia, fax machines, and, in the words of William Graves, other "artifacts of industrial age infrastructure,"[5] and traditionally have been their communities' only source for specialized print- or microform-based information. The information available without charge on the Internet, however, is accessible from any point on the network, regardless of physical location, threatening "to collapse the costs of distribution and remove the middlemen," including public libraries.[6] Libraries have responded to this potential loss of bureaucratic control over the flow of information by raising the possibility that society will be divided by access to technology into the information-privileged and -underprivileged.[7]

Integrating the Internet into the existing physical structure of the public library in the form of Internet rooms or as an added feature to an OPAC to ensure equal access to information still will maintain the division between information "haves" and "have-nots" and displays a misunderstanding of the fundamental nature of the Internet. A disparity still will exist between those patrons with a personal computer and modem who can access the Internet from home through dialing into a library OPAC, a private account vendor, or a community network, and those patrons without the necessary hardware who will be able to use virtual reference sources

... making the Internet available to public library patrons (at least in its current state) as an information retrieval system will create more problems than it will solve.

only during the operating hours of the nearest available library, where they will have to share terminals and search time with other patrons. Although this may help to guarantee a continuing high visitor count, an unequal level of access will still exist.

Furthermore, the purposes for which public librarians expect their patrons to use the Internet have already proven not to be those for which patrons themselves necessarily want to use it. The Internet was never originally designed to be a collection of databases, but a means by which DARPA (Defense Advanced Research Project Agency) researchers could communicate directly and exchange data with each other; and, despite the development of search tools such as gopher and WAIS, the network is still used primarily to communicate with other people. The top four network services that accounted for the most packet traffic on the NSFNET backbone in March 1994 were file transfer, telnet (which includes traffic devoted to playing Multi-User Dungeons), USENET news, and electronic mail.[8] Using these services requires an Internet address, disk space to store files, and sufficient time and privacy to read and send messages, a level of service that the average public library will not be able to afford to offer immediately, if ever.[9]

This is illustrated by the account of Australian librarian Craig Anderson, who, while visiting the Seattle Public Library (one of the first public library systems in the country to offer public access to the Internet from its OPAC menu), observed a group of teenagers (who had managed to reach a bulletin board in Iowa by way of a gopher server in California that gave them Internet Relay chat privileges), clustered around a terminal as well as a local academic who wanted to use the system's Internet connection to continue playing his virtual game of cards with colleagues across the country. Initially, at least, the expectations of patrons who see the Internet as a means of interacting with individuals are bound to conflict with public libraries' concept of the Internet as an electronic extension of their reference collections.

Competing with commercial vendors in providing access to the Internet and the network which will evolve from or replace it will not make access more affordable or equitable to public library patrons — ask anyone who has waited three months to borrow the single library copy of a feature film available for a few dollars at a video rental store. Any attempt to do so by all but the largest library systems inevitably would involve eliminating existing services, several of which will be essential if public libraries are to survive as an institution of any relevance.

The number of monographs, public documents, and journal articles currently available on the Internet in full-text is infinitesimal in comparison to the amount of information in the form of library OPACs or electronic journal article summaries such as *Edupage*. Public libraries are the only institutions that provide equal access through interlibrary loan and document delivery to the vast majority of information that will never be available in machine-readable form. The participants in Project GAIN, a project sponsored by NYSERNET that provided computers and Internet accounts to five rural public libraries in New York State, all reported a sharp increase in interlibrary loan requests once their patrons discovered how to use remote public access catalogs: "In one case, the librarian was convinced that interlibrary loan requests doubled as a result of access to the Internet. One librarian commented that 'I had to have my custodial person start doing interlibrary loan requests!' She also pointed out that her workload increased significantly."[10]

Public librarians having conducted market research for years in the form of answering reference questions are in a better position to know the real information needs of their patrons and are more receptive to them than either the telecommunications industry or the designers of the Internet. Public librarians who have tried to use the motley collection of reference sources on the Internet to answer more than the occasional question are aware of the disparity between what is currently available online and the questions most frequently asked by their patrons. For example, community information, such as contacts for local government offices and non-profit agencies or local employment openings, was rated by library users in two recent surveys as higher in importance than reference services or popular materials.[11] With the exception of cities served by community Freenets, this type of information still is available only in print.

There are few free online versions of the print or CD-ROM reference tools used most in public libraries, such as investment information, magazine indexes, or used car price guides. The full-text information sources that are available on the Internet without charge are primarily government documents or older works in the public domain that are easily obtainable in print. As the commercialization of the Internet increases, reference book publishers and database vendors still will rely on public libraries for much of their income while patrons will not expect to pay online for what they have used hitherto for "free" in print.

Using the Internet can be so seductive that it is easy to confuse its potential as a means of disseminating information with the reality of its current limitations. The experimental information retrieval tools and tentative attempts at electronic publishing and distribution that are available so far should not obscure the fact that an affordable, ubiquitous information infrastructure does not yet exist. Public libraries can afford to wait for the inevitable disillusionment that comes after the intitial "gee-whiz" phase, when patrons use the network enough to realize that much of the information they want is not instantly retrievable as a text file, costs money, or simply isn't available online. The most challenging task facing public libraries is convincing trustees and taxpayers that the information age is not arriving as quickly as expected.

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Virtual Reality and the School Library/ Information Skills Curriculum

by Veronica S. Pantelidis

Virtual reality (VR) is a computer-generated simulation of a real or imaginary environment with which the user can interact and manipulate. Virtual reality, with the potential to change the way students learn in the school setting, can play an important role in the school library/media skills curriculum. The purpose of this paper is to describe some of the ways VR can be used in this curriculum.

Three applications for VR in the learning process have been identified by Ferrington and Loge.[1] Visualization, the manipulation and rearrangement of information spatially and temporally so it can be easily understood, is of primary importance to the information skills instructor. Simulation of the real world or imaginary or constructed phenomena is a second application. Third is the development of participatory environments and activities that can exist only as computer-generated worlds. All three applications can be used in the media skills curriculum.

Currently, VR can be divided into two broad types, text-based and graphics-based. Graphics-based VR uses 3D visualization software to create a virtual environment or world with which the user can interact. This world can be a faithful rendering or a simulation of the real world or of an imaginary one. Text-based or network-based VR uses virtual environments that are created by participants in multi-user domains, or MUDs, accessed through networks such as the Internet. Creative writing skills are honed as users create a simulated environment or world. Participants in the MUD may be from around the globe or in a single classroom. While both types of VR can be used in the media skills curriculum, graphics-based VR is the type discussed in the remainder of this paper.

Reasons to Use VR

There are numerous reasons to use graphics-based VR in teaching. First, VR provides motivation in a way that no other medium can. VR can illustrate some features and processes more accurately than other means. VR allows both extreme closeup examination of an object and observation from a great distance. It allows the disabled to participate in an experiment or learning environment when they cannot do so otherwise. It gives the opportunity for insights based on new perspectives. It allows the learner to proceed through an experience at his or her own pace. It allows the learner to proceed through an experience during a broad time period not fixed by a regular class schedule. It provides experience with new technologies through actual use. Since VR requires interaction, active participation rather than passivity is encouraged.

VR can be used wherever a simulation would be used. For example, when teaching or training using the real thing is dangerous (injury to learner and/or instructor is possible), impossible (necessary environment cannot be experienced in the real world), or inconvenient, VR can be a viable teaching alternative.

VR also can be used when mistakes made by the learner or trainee using the real thing could be devastating and/or demoralizing to the learner, harmful to the environment, capable of causing unintended property damage, capable of causing damage to equipment, or costly.

Other reasons for using VR in teaching and training include situations in which

- A model of an environment teaches or trains as effectively as the real thing;
- Interacting with a model is as motivating or more motivating than interacting with the real thing, e.g., using a game format;
- Travel, cost, and logistics of gathering a class for training make an alternative attractive;
- Shared experiences of a group in a shared environment are important;
- The experience of creating a simulated environment or model is important to the

Three applications for VR in the learning process have been identified ... visualization ... simulation ... development of participatory environments and activities that can exist only as computer-generated worlds.

learning objective;

- Information visualization is needed (manipulating and rearranging information, using graphic symbols), so it can be more easily understood;
  - A training situation needs to be made "real," e.g., practical experience under realistic conditions;
- The imperceptible needs to be made perceptible, e.g., using and moving solid shapes to illustrate clashes of ideas in group processes;
- Participatory environments and activities that can only exist as computer-generated worlds are needed;
- Tasks involving manual dexterity or physical movement must be taught;
- Learning must be made more interesting and fun; e.g., working with boring material or with students who have attention problems.

Uses of VR in the North Carolina Competency-Based Curriculum

One of the projects of the Virtual Reality and Education Laboratory (VREL) in the School of Education at East Carolina University involves a study of the North Carolina Competency-Based Curriculum objectives to identify those that can use virtual reality as a measure or means to attainment.[2] To this end, objectives are scrutinized and compared with the capabilities of various VR software programs, primarily at the less expensive end of the cost spectrum. At the same time, research on educational uses of VR and reported educational and training uses are studied as they are identified in publications, at conferences, and in the VR discussion groups (listservs) on the Internet. Many additional uses have been identified as a result of personal communications received from the electronic distribution of VREL's bibliography, *Virtual Reality and Education: Information Resources;*[3] from readers of the author's publications, *Robotics in Education*[4] (which includes information on telepresence) and "Virtual Reality in the Classroom,"[5] and from suggestions of students in Computers in Education and Virtual Reality classes taught at East Carolina University.

In the *North Carolina Standard Course of Study*, the *Teacher Handbook: Information Skills/Computer Skills K-12* states that the Information Skills Curriculum "emphasizes critical and creative thinking, problem solving, decision making, collaborative learning, and the importance of integrating information skills into all other curriculum areas."[6] The *Teacher Handbook* is organized around competency goals, with subsidiary objectives, focus areas and

Specific Examples of the Use of Virtual Reality with the North Carolina Information Skills Curriculum

Competency Goal 1: The learner will experience a wide variety of reading, listening, and viewing resources to interact with ideas in an information-intensive environment.

Objective 1.1: The learner will explore reading, listening, viewing sources and formats.

Implications for Learning (Grades 3-5): Introduce computer software and other technologies that encourage and motivate students to read, listen, and view.

Providing the student with different VR software opportunities will allow him or her to explore a computer software format that is hightly motivating.

Objective 1.4: The learner will relate ideas and information to life experiences.
Focus: Collect information about diverse cultures, environments, and people. Relate similarities and differences to personal life experiences.

Implications for Learning (Grades K-2): Students read a book about children around the world going to school. One of the activities is to list similarities and differences observed while reading the book.

Using VR, students could draw and furnish the school buildings and interiors described in the book, and walk around outside and inside each one. They can gain an impression of how it might feel to go to school there, compared to going to their own school. New insights about differences and similarities, unattainable through reading, can be gleaned.

Implications for Learning (Grades 6-8):
- Learning about Ourselves in the World Community
  — Develop a questionnaire and collect curlural information about the entire class, such as church affiliation (Methodist, Baptist, Jewish, etc); family configuration (mother, father, # of brothers, etc.); housing (house, apartment, condominium, mobile home, etc.); customs, holidays traditions.
  — Produce a video that captures the class culture and exchange with another class.

A VR environment illustrating aspects of the class culture, such as housing or holidays, could be drawn and exchanged with another with another class. Using two computers or video players side by side, students could compare class cultures, screen by screen or frame by frame.

Objective 1.5: The learner will communicate reading, listening, and viewing experiences.
Focus: Produce media in various formats based on reading, listening, viewing experiences.

Implications for Learning (Grades 3-5, 6-8, 9-12): "Following various reading, listening, viewing activities, communicate what you have experienced by producing one or more of the following: [a wide variety of media is listed with which to 'design/construct, create/compare, perform/present, or write/compute']."

Using VR software, the student can design a virtual environment illustrating an experience with which others can take a prerecorded walk to reenact the experience, or which others can modify to see how alternative interpretations change the experience.

Competency Goal 2: The learner will identify and apply strategies to access, evaluate, use, and communicate information for learning, decision-making, and problem-solving.

Objective 2.1: The learner will explore research processes that meet information needs.
Implications for Learning (Grades 9-12):
- Locate, interpret, and present statistical information.
  — Deveop tables, charts, graphs (bar, picture, circle) or games from statistical information.
  — Present the information using computers, posters, overhead transparencies, or other visual resources.

Using VR, the student can draw three dimensional objects to scale according to the size of the statistical information. Different colors, shapes, and locations can be used to differentiate between types of data. The user can then walk among the data objects to get a feel for size differences. Visualizing statistical data is already a feature of some VR systems used in stock market data analysis.[9]

Objective 2.2: The learner will engage in a research process to meet information needs.
Implications for Learning (Grades K-2):
- Media Coordinator/teacher coordinate(s) the development of a product by students.
  — Support students in presentation of information, as they:
    - Draw a picture
    - Write a story
    - Make a model
    - Create a dramatic presentation

Students can use VR software to make a model of an object that they have researched to communicate to others how that object looks, its color, the environment in which it is found, and other attributes.

implications for learning. The two competency goals for the Information Skills Curriculum are

> Competency Goal 1: "The learner will experience a wide variety of reading, listening, and viewing resources to interact with ideas in an information-intensive environment."[7] (Includes five objectives.)
>
> Competency Goal 2: "The learner will identify and apply strategies to access, evaluate, use, and communicate information for learning, decision-making, and problem solving."[8] (Includes two objectives.)

VR can be used either as a means of attainment or as a measure for a number of the objectives detailed under the two competency goals. Wherever students can illustrate information with pictures or graphically, wherever a comparison of pictures based on information gathered is required, or wherever a simulation can be used, VR will prove useful. (See sidebar.)

Examples of VR Software Currently Available

Desktop VR software, e.g., software that requires no special equipment other than a microcomputer, is available at affordable prices. One of the most useful pieces of VR software for the school media center is Virtus WalkThrough.[10] This desktop VR allows the user to build anything that has volume and then walk through what has been built. The screen of Virtus WalkThrough is divided into a 2D drawing side and a 3D rendering of what is drawn. Since everything drawn has volume, even the leg of a chair can be entered. A large number of already drawn objects, as well as some VR models, come with the program. Others are available via FTP (file transfer protocol) from sources on the Internet. This VR software can be used to draw rooms, homes, boats, buildings, and even molecules, and can also be used to draw models for visualization of statistical data.

Virtus WalkThrough was originally developed for architects, but has found wide acceptance in many fields, such as urban planning, theater production, and retail merchandising. There are several versions, including ones for both the Macintosh and PC-compatibles using Windows, Virtus WalkThrough Pro, and Virtus VR. Reviews have appeared in *PC/Computing*[11] and *Macworld*[12] as well as other magazines.

Another useful desktop VR program is Virtual Reality Studio 2.0.[13] The user draws the VR environment and walks through in the same screen area. This VR software can be used to build 3D animated objects with which the user can interact. It also supports sound cards for interactive sound. A library of clip-art objects comes with the program. Like Virtus WalkThrough, Virtual Reality Studio 2.0 is available in a version selling for less than $100.

A third VR software program that can be used for teaching media skills is VREAM.[14] VREAM ("virtual dream") is somewhat more expensive but supports all manner of VR equipment such as gloves (that allow the wearer to "reach into" the virtual world to manipulate objects), head-trackers (devices that track the position of the head), and head-mounted displays (helmet- or goggles-based devices that include a tiny video monitor mounted in front of each eye to create a 3D image). Elaborate VR environments with which the student can interact can be built.

No computer programming skills are required to use any of these VR programs, making them ideal for school use. Students can use the models and objects that come with a program, modify objects and models, and draw their own. All of these VR programs provide endless opportunities for creativity, exploration, understanding, communication, and learning.

The Future

There will be many uses for VR in teaching information/media skills in the future. Four possible uses include: students building an entire library/media center, with animated students and media personnel, that allows them to interact and role play in the environment without risk of social or psychological harm; students building a model of an existing media center to try out, by moving furniture and fixtures around, suggesting changes to the physical facilities that might enhance its use; students trying out various types of interaction with media personnel and reference sources to discover which most effectively gives them the information they are seeking; and computers automatically matching any learning objective with an appropriate VR environment for the instructor's use.

Information can be visualized routinely using different shapes, colors, sizes, and movements, for clarification and better conceptualization. Using VR to immerse the student in the information will be a new service level for reference and research. Information thus symbolized, manipulated, and experienced might uncover new relationships, and perhaps even lead to new knowledge.

Reading and interpreting a story or play will be augmented with virtual real-ity. Dan Barron[15] suggests that, using VR, instead of viewing the flatland film, students studying Shakespeare could actually go to the Globe Theatre or to New York and see full-sized images of professionals presenting the plays.

VR will become an integral part of the school library/media skills curriculum in the future. Using VR programs already available, we can begin enhancing media skills now.

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The Virtual Library:
A Selective Bibliography for Exploration

by Elaine J. Christian and Marilyn Hastings

What are we talking about here? What is a virtual library? No single consensual definition exists; rather, various definitions abound, all of which include the concepts of remote electronic access to your library's resources and electronic access to resources that are not physically available in your library. See the **Visions** *section below for more elaborate definitions which venture far beyond questions of access. Clearly, the concept of a virtual library gives us much to think and dream about.*

Librarians are pushed and pulled to think about virtual libraries. They are pushed by problems: overwhelming quantities of information, inadequate funding, increasing expectations. They are pulled by opportunities: computing power grows more affordable; networks become more accessible, easier to use, and offer constantly expanding information. Meanwhile, questions that libraries had previously resolved appear once again as a result of technological changes: intellectual property rights need to be protected in order to promote the production of new information resources; competition arises from other information sources (as networks proceed to dissolve distance); cataloging rules need to be stretched to include online information that may change without clear notice. See the **Issues** *sections below for consideration of these questions as well as a consideration of* **Special Issues by Library Type** *(school, public, academic, and special).*

Powerful organizations are now interested in the potential of information via networks. Librarians need to become politically active if libraries are not to be trampled in this "dance of the elephants" as more powerful groups join the struggle to define information policy and grab what they want. See the **Policy and Politics** *section for consideration of these questions.*

Finally, to monitor issues and trends regarding the virtual library, see the **For More Information** *section. We hope that exploring the virtual library intrigues and excites you as it does us.*

Visions

Browning, John. "What Is the Role of Libraries in the Information Economy?" *Wired* 1 (1) (1993). Also available electronically (via e-mail): Send the following text (in the body of the message): **get 1.1/features/libraries**, via e-mail to: **info-rama@wired.com** (Internet address).

> Browning provocatively considers the implications of technological change for information use and compares how several great national libraries are responding.

Hawkins, Brian L. "Planning for the National Electronic Library." *Educom Review* 29 (May/June 1994): 19-29.

> To meet the economic problems facing libraries, as well as the challenges of the information explosion, Hawkins proposes a model for the creation of a shared electronic library.

King, Hannah. "Walls Around the Electronic Library." *The Electronic Library* 11 (June 1993): 165-74.

> Should the vision of the electronic library drive library budgets and strategic planning? King takes a critical look at popular conceptions of the electronic library in light of social and economic realities limiting user access to information. She suggests the need for new roles for librarians, presents models to guide the management of information resources and services, and proposes an action agenda.

Lynch, Clifford A. "Visions of Electronic Libraries." In *The Bowker Annual: Library and Book Trade Almanac*, compiled and edited by Filomena Simora, 75-82. New Providence, NJ: R. R. Bowker, 1991.

> Lynch presents more exciting visions of electronic libraries, including the collaborative concept where access to information, research tools, and colleagues is combined in a single information environment.

Malinconico, S. Michael. "Information's Brave New World." *Library Journal* 117 (May 1, 1992): 36-40.

> According to Malinconico, new electronic technologies will either displace librarians or magnify their importance. Librarians are familiar with the tools that users need to make sense of the vast array of resources available. It is up to librarians to make users aware of their skills in information management.

Penniman, W. David. "The Library of Tomorrow: A Universal Window Serving Independent Problem Solvers." *Library Hi Tech* 10 (4) (1992): 23-26.

> Penniman argues that the library of the future requires a revised mission: to help citizens become independent problem solvers who can use information from the library to address their challenges. He considers barriers to this vision and what the Council on Library Resources is doing to promote progress toward it.

Saunders, Laverna M. "The Virtual Library Revisited." *Computers in Libraries* 12 (November 1992): 51-54.

> Saunders discusses implications of the virtual library for users.

Issues

Brugger, Judith M. "Cataloging the Internet." *MC Journal: The Journal of Academic Media Librarianship* 1 (1993). Available electronically (via e-mail): Send the following text (in the body of the message): **get brugger mcj01006**, via e-mail to: **listserv@ubvm.cc.buffalo.edu** (Internet address).

> Brugger outlines problems inherent in cataloging the variety of information sources found on the Internet.

Graham, Peter S. "Intellectual Preservation in the Electronic Environment." In *After the Electronic Revolution, Will You Be the First to Go?*, edited by Arnold Hirshon, 18-38. Proceedings of the 1992 Association for Library Collections & Technical Services President's Program. Chicago: American Library Association, 1993.

> How can information be preserved when technology allows interaction with it? This question and others are addressed here and some strategies are outlined.

Hoffert, Barbara. "Books into Bytes." *Library Journal* 117 (September 1, 1992): 130-35.

> Hoffert explains the move by publishers into electronic publishing and how this development will affect libraries.

Kurzweil, Raymond. "The Future of Libraries, Part 3: The Virtual Library." *Library Journal* 117 (March 15, 1992): 63-64.

> In the earlier parts of this series, Kurzweil recognizes the common life-cycle pattern of several technologies and predicts the obsolescence of books. Here he considers what this obsolescence means for libraries.

Lowry, Anita. "Landlords and Tenants: Who Owns Information, Who Pays for It, and How?" *Serials Librarian* 23 (3) (1993): 61-71.

> Lowry considers current restrictions on ownership and use of information in electronic form compared to traditional library ownership of information in print form and questions the constraints these developments put on library missions.

Lynch, Clifford A. "Networked Information: A Revolution in Progress." In *Networks, Open Access and Virtual Libraries: Implications for the Research Library*, edited by Brett Sutton and Charles H. Davis, 12-39. Urbana-Champaign, IL: Graduate School of Library and Information Science, 1992.

Lynch argues that the information revolution is a true revolution, in the sense that power will shift. He considers developments that are the source of this revolution and the implications for different library types. Although pessimistic about the future of libraries, Lynch is optimistic for the next avatar of librarians: information specialists.

McClure, Charles R., Mary McKenna, William E. Moen, and Joe Ryan. "Toward a Virtual Library: Internet and the National Research and Education Network." In *The Bowker Annual: Library and Book Trade Almanac*, edited by Catherine Barr, 25-45. New Providence, NJ: R. R. Bowker, 1993.

McClure, McKenna, Moen, and Ryan present a good introduction to the impact that the Internet is having on different types of libraries: academic, special, public, school.

Veron, Ilyse J. "Nation's Library Maps Route to the Electronic Age." *Congressional Quarterly Weekly Report* 51 (March 15, 1993): 1201-4.

Veron considers the electronic dreams and wonders of the Library of Congress (LC) and the problems LC is having with opposition from interest groups as well as with securing funding for innovations.

von Wahlde, Barbara, and Nancy Schiller. "Creating the Virtual Library: Strategic Issues." In *The Virtual Library: Visions and Realities*, edited by Laverna M. Saunders, 15-46. Westport, CT: Meckler, 1993.

The creation of an electronic library is seen as an evolutionary process requiring changes in our thinking about the nature of information, intellectual property, copyright, publishing, libraries, and librarians. Many issues that library administrators must deal with are considered. Although all examples are from academic libraries, von Wahlde and Schiller contend that other types of libraries will have similar concerns.

Special Issues by Library Type

School

Butterworth, Margaret. "The Concept of the Virtual School Library." *Australian Library Journal* 41 (November 1992): 247-56.

Butterworth explores the possibilities of the virtual library concept in a school setting and describes Campus 2000 in Britain and NEXUS in Australia, two school-oriented online information services. She discusses examples of classroom activities using commercial online databases and e-mail. She also comments on the role of the librarian in the virtual school library.

Kilian, Crawford. "2005: A Virtual Classroom Odyssey." *Educom Review* 29 (May/June 1994): 17-18.

Kilian forecasts the impact of technology on education. Students in the electronic classroom of the near future will still require guidance, advice, and encouragement in the use of instructional resources.

Mancall, Jacqueline C. "The Changing Library Landscape: Impact on Student Instruction and Use." In *School Library Media Annual*, edited by Carol Collier Kuhlthau, 66-75. Englewood, CO: Libraries Unlimited, Inc., 1993.

Mancall considers how media specialists can help students become information literate.

Public

LaRue, James. "The Library Tomorrow: A Virtual Certainty." *Computers in Libraries* 13 (February 1993): 14-16.

> LaRue makes the case that books and public libraries will remain vital parts of the community in spite of the enormous steps toward the virtual library. He manages to overcome his declared "technolust" to acknowledge this reality.

McClure, Charles R., Joe Ryan, and William E. Moen. "The Role of Public Libraries in the Use of Internet/NREN Information Services." *Library and Information Science Research* 15 (Winter 1993): 7-34.

> McClure and his colleagues present findings from a national study of key issues affecting public library use of the Internet. They encourage libraries to be active participants in electronic communities so that their users have access to the information riches of the networks. North Carolina's experience in launching the North Carolina Information Network (NCIN) is cited.
>
> The complete report is: McClure, Charles R., et al. *Public Libraries and the Internet/ NREN: New Challenges, New Opportunities.* Syracuse, NY: Syracuse University, School of Information Studies, 1992.

Academic

Peters, Paul Evan. "Is the Library a 'Place' in the Age of Networks?" *Educom Review* 29 (January/February 1994): 62-63.

> Peters considers the opportunities and threats presented to higher education by networking.

Rooks, Dana. "The Virtual Library: Pitfalls, Promises, and Potential." *The Public-Access Computer Systems Review* 4 (5) (1993): 22-29. Also available electronically (via e-mail): Send the following text (in the body of the message): **get rooks prv4n5**, via e-mail to: **listserv@uhupvm1.hu.edu** (Internet address).

> Rooks envisions the virtual library as another tool to assist users, discusses some of the problems involved in full implementation, and presents a brief overview of selected virtual library projects.

Special

Bauwens, Michel. "What Is Cyberspace?" *Computers in Libraries* 14 (April 1994): 42-48.

> Bauwens categorizes cyberspace into levels, from the conceptual space one occupies when using basic computer connections, to the promise of multisensorial virtual environments that will engage all of our senses. Progress toward the virtual special library and speculations on future developments, including possible roles for "cybrarians," are discussed.

Piggott, Sylvia E. A. "The Virtual Library: Almost There . . ." *Special Libraries* 84 (Fall 1993): 206-12.

> Piggott describes prototypes of virtual library service at the Bank of Montreal and the effects on staff and users. This article appears in a special issue devoted to the virtual library.

Policy and Politics

Billings, Harold. "Supping with the Devil: New Library Alliances in the Information Age." *Wilson Library Bulletin* 68 (October 1993): 33-37.

> Billings proposes that libraries supplement existing relationships with new alliances with information organizations in the academic community and the private sector to help meet the challenges of rising costs and new technologies. He cites examples of some of these partnerships and describes their current projects.

Mitchell, Maurice, and Laverna Saunders. "The National Information Infra-Structure: Implications for Libraries." *Computers in Libraries* 13 (November/December 1993): 53-56.

> Mitchell and Saunders give background on the National Information Infra-Structure (NII). Librarians are urged to take an active political role in defining national information policy.

For More Information

Drabenstott, Karen M. *Analytical Review of the Library of the Future*. Washington, DC: Council on Library Resources, 1994. Also available electronically (via FTP): Connect via FTP to: **sils.umich.edu** (Internet address), log in as an anonymous user, and retrieve the appropriate file(s) from the directory: **/pub/papers/CLR**
> Drabenstott's analytical review of the literature of the last decade on the digital library includes an extensive annotated bibliography (almost 400 entries).

King, Lisabeth A., and Diana Kovacs, comps. *Directory of Electronic Journals, Newsletters and Academic Discussion Lists*. 4th ed. Washington, DC: Association of Research Libraries, Office of Scientific and Academic Publishing, 1994.
> This directory contains entries for nearly 1,800 discussion lists and over 400 electronic journals and newsletters with instructions for electronic access to each publication.

Rheingold, Howard. *The Virtual Community: Homesteading on the Electronic Frontier*. Reading, MA: Addison-Wesley, 1993.
> Rheingold presents interesting illustrations of communities that flourish in electronic space and examines the implications of the information revolution for the larger society—much more than libraries are involved.

Rinne, Teri Andrews, ed. *Current Cites*. Available electronically via e-mail, as a subscription to an e-journal: To begin a subscription to this e-journal, send the following text (in the body of the message): **sub cites <your name>**, via e-mail to: **listserv@library.berkeley.edu** (Internet address).
> *Current Cites* is a monthly, classified, online, and annotated bibliography of current articles about electronic information technology and libraries which includes both print and online articles.

Saunders, Laverna M. "Exploring Library Resources on the Internet." *Internet World* 4 (November/December 1993): 44-49.
> Saunders explains how to locate library-related information using the Internet.

Scott, Ralph Lee. "Wired to the World." *North Carolina Libraries*.
> Since its inception in 1993, Scott's regular column in *North Carolina Libraries* informs and instructs on different Internet topics.

Tuss, Joan. "Roadmaps to the Internet: Finding the Best Guidebook for Your Needs." *Online* 18 (January 1994): 14-16, 18-22, 25-26.
> Tuss's review compares and recommends Internet books available as of January 1994. [See the next entry for guides available online.]

————. "Easy Online Access to Helpful Internet Guides." *Online* 17 (September 1993): 60, 62, 64.
> Tuss presents a comparative review of guides to the Internet available online, with explicit instructions on how to get them via FTP. [See previous entry for guides available in print.]

Editor's Note: NORTH CAROLINA LIBRARIES *presents this feature in recognition of the increase in excellent unsolicited manuscripts that merit publication, but are not necessarily related to each issue's specific theme.*

Leisure Reading Collections in Academic Libraries: A Survey

by Linda A. Morrissett

Many articles exist in the professional literature about encouraging students to read books that interest them, from kindergarten through high school and in summer reading programs. There is even a respectable amount of material concerning adult readers as targeted reading audiences. Reading habits of college students, however, are infrequently addressed.

Academic librarians are concerned primarily with the information needs of our students and faculty, which are, of course, centered around the curriculum. We also assume that our students have healthy reading interests and habits, long instilled in them by the aforementioned K-12 reading programs. Many academic libraries affirm these reading interests by providing leisure or browsing collections of popular materials for their patrons' pleasure and convenience.

A Leisure Collection Experience

In the summer of 1987, Western Kentucky University Libraries initiated a small collection targeting the recreational reading needs of the university community. The primary reason behind this project was to encourage students to develop regular reading habits which they might continue beyond their formal education experience.

A separate leisure collection makes it easy for patrons who come to the library just to find a book to read. Attractive displays of popular books entice students to grab one to read as they pass time in the library between classes or to check one out on impulse. Popular reading material is available to Western students at the campus bookstore, area bookstores, and the Bowling Green Public Library, but these sources require more effort, time, and money than many students can spare. Although the local public library is located within walking distance of campus, and many Western students are eligible to obtain borrowing privileges, its collection and services are strained to serve the growing needs of local residents.

Western's Leisure Reading collection began with a core of 220 books obtained through Brodart's McNaughton hardback subscription plan. Bestsellers and other popular books not normally acquired for the regular collection are selected by a committee of librarians and paraprofessionals. Orders are placed monthly using an annotated checklist of titles supplied by the

vendor, and the books arrive pre-processed. In-print books which are recommended by students and staff but do not appear on the vendor's list also are ordered on the leasing plan. The most staff time involved with the collection is spent adding and deleting brief cataloging records in the database and in a quarterly weeding project. Library staff enjoy the diversion of working with these popular books, and they often take advantage of being first to check them out.

The Leisure Reading collection is shelved in an alcove near the circulation desk and main library entrance. Comfortable upholstered chairs are arranged in this alcove, with a few of the leisure books scattered on end tables to catch potential readers' interest. A title list of books in the collection also is left on a table for those who wish to scan it.

Most titles selected from the subscription plan are fiction. Popular best-selling authors such as Danielle Steel, Dominick Dunne, Tom Clancy, and John Grisham, and mystery writers such as Sue Grafton, Dick Francis, and Lilian Jackson Braun are the most heavily represented. Contemporary mainstream fiction is always available: works by John Barth, Alice Walker, Walker Percy, Toni Morrison, Joyce Carol Oates, Chaim Potok, James Dickey, and Margaret Atwood are often selected. Biographies of political figures (Kennedys, Clintons, Reagan, Carter, Truman), other significant personalities (Thurgood Marshall, Leonard Bernstein, Norman Schwarzkopf, Rush Limbaugh, Arthur Ashe), and the British royal family are popular selections. The humor of authors such as Dave Barry, Lewis Grizzard, and Andy Rooney is available, as are science fiction (Ben Bova, Arthur Clarke) and fantasy (Anne McCaffrey, Piers Anthony). Books about health, education, business, the environment and other contemporary issues are included as well.

Reaction to the Leisure Reading collection has been quite positive among students, staff, and faculty, and circulation has steadily grown. The size of the collection was increased to three hundred titles in 1989, and to five hundred titles in 1992. A popular magazine collection was initiated in the fall of 1992 to further encourage recreational reading. Current issues of about fifteen popular titles, such as *Car and Driver, Music City News, Vanity Fair, Sports Afield, Advocate, Down Beat, Details, Country Living* and *McCalls* are displayed in a study lounge area where food and beverages are permitted. As with the leisure books

collection, patrons' recommendations for additions to the collection are encouraged and usually incorporated.

The success of this thriving Leisure Reading collection leads to several questions. What is the nature and source of leisure reading collections in academic libraries and how widespread are they? How are they treated bibliographically? Are they more likely to be found in smaller colleges than large universities? The best way to answer these questions is to survey academic libraries. This paper provides the results of a survey of academic libraries in southeastern states conducted by the author in 1993.

Survey Methodology

A brief survey instrument (Appendix A) was designed to find out about leisure or browsing collections of books, magazines, and videos in academic libraries. It sought information about the size and nature of the collections, their bibliographic access, their overall use, and the popularity of subjects. Finally, it requested the size of the student body and whether the school is private or publicly-supported.

The survey was sent to 120 academic libraries in twelve southeastern states (Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Kentucky, Arkansas and Louisiana) during October 1993. These libraries serve student bodies ranging from 600 to 28,000, but the majority are in the 2,000 to 8,000 student range. Both private and state-supported colleges and universities were included in the survey.

Results were tallied to determine the prevalence of leisure or browsing collections and to attempt to draw a general profile of such collections. Librarians' comments were recorded separately with the intent to supplement the statistical data given.

Response

Eighty-five of the 120 academic libraries surveyed returned the survey, a return rate of about 75 percent. Thirty-eight (45 percent) of the libraries surveyed indicated they do have a browsing or leisure reading collection. Forty-seven of the 85 academic libraries (55 percent) responding to the survey indicated they have no leisure collection, or at least none specifically designated as such.

Leisure Collections

Several of the libraries surveyed have more than one type of material in their leisure collection. Any combination of book rentals, paperback books, hardback books, gift books, videos, and magazines may be maintained; each "mini-collection" may be cataloged and circulated differently. The 38 libraries described a total of 61 such collections they maintain. (This explains the apparent discrepancy in the data tabulated below).

Most of these 61 collections are books, but a few also include magazines (7 libraries) and videos (9 libraries). Sixteen libraries participate in a rental plan from either Baker & Taylor or McNaughton. Other collections include donations from staff and Friends organizations, or even items selected from the regular collection. Fifteen libraries maintain paperback leisure collections.

The size of institution does not appear to be a factor in whether the library has a leisure collection. (See Table I) In each size-range category, a fairly even distribution can be seen. The top and bottom range, over 20,000 and under 1,000 enrollment respectively, are more likely not to have leisure collections. However, the sample size is not large enough to assume a correlation.

Private schools are somewhat more likely to have leisure collections: 44 percent of private colleges responding to the

The following tables show responses from the 38 libraries which have leisure collections. Percentages shown are of all positive respondents, not the total sample. (Note: The total will not be 38 in these tables since several libraries have more than one type of leisure collection, and there was an occasional "no response".)

1. Responses by Size of Institution

Number of Students	Leisure/Browsing Collection	No Leisure Collection
600-1,000	2	4
1,001-3,000	11	9
3,001-6,000	9	10
6,001-10,000	4	5
10,001-15,000	5	5
15,001-20,000	2	2
20,001-	3	5
Size not given	2	3

II. Private vs. Publicly Supported Institutions

	Leisure Collection	No Leisure Collection
Private	12	15
Public	19	30

III. Types of Collections

Leased books	16	(42%)
Baker & Taylor	4	(11%)
McNaughton	11	(29%)
Library's books	14	(37%)
Paperbacks	15	(40%)
Magazines	7	(18%)
Videos	9	(24%)

IV. Bibliographic Access

Full bibliographic record	21	(55%)
Brief bibliographic record	13	(34%)
Separate list or file only	5	(13%)
No bibliographic access	7	(18%)

V. Circulation Procedures

Circ records integrated with "regular" collection	30	(79%)
automated circ system	22	(58%)
manual circ system	8	(21%)
Circ records kept separately	3	(8%)
No circ records kept	2	(5%)
Length of Loan as Compared to "regular" collection		
Same	21	(55%)
Shorter	11	(29%)

VI. Most Popular Genres

Mystery	22	(58%)
Historical Romance	12	(32%)
Fiction	11	(29%)
Science Fiction	10	(26%)
Biography	9	(24%)
Horror	4	(11%)

survey have leisure collections, compared with 39 percent of the state-supported institutions which report having such collections. (Table II)

Bibliographic Access

Overall, patrons have good bibliographic access to leisure collections. Twenty-one collections described by survey respondents are fully cataloged, while 13 have brief records in their catalog. Five collections have only a separate file or list for patron access: 3 rental collections, 1 video collection. Three collections are accessible by a separate list in addition to the catalog.

Seven collections have no bibliographic access; 6 of these are paperback browsing collections kept in display areas for patrons to take and read at will. One uncataloged collection is from a rental plan.

Bibliographic control is a significant investment in the collection, and the strong showing of bibliographic access to leisure materials indicates an acknowledgement of the importance of the collections. Paperbacks have a short shelf-life, and are understandably less likely to be cataloged.

Circulation

Thirty-two of the 38 respondents said they use the same circulation system for leisure materials as for the regular collection. Twenty-one of these libraries use the same loan period as for similar materials from the regular collection. Eleven use a shorter loan period. Three stated they allow no renewals for leisure books.

Three libraries circulate leisure materials using a method other than the regular circulation system. Two libraries do not keep circulation records for leisure books. One gave no response.

Overall, most leisure collections are circulated like regular collections, although several have shorter loan periods. Again, this shows general interest in treating all library materials alike. The fewer the exceptions, the easier it is to handle circulation records.

Most respondents did not provide circulation statistics. Often these statistics are not broken out from other circulation records in automated systems. Many librarians noted there is a high interest in and heavy circulation rate of leisure materials: "High circ. collection" — Public institution of 16,000 students; "The students, faculty and staff love the browsing collection" — public institution of 12,000 students with browsing collection circulation of over 9,600.

Popular Genres

One open-ended question on the survey was "What genres appear to be most popular with your patrons?" This is, of course, quite a subjective question based on observation of what is circulated and reshelved and what is requested. The popularity of genres is also dependent on what genres are available on the shelves.

It is interesting, although not surprising, that the most popular genres identified were mystery, historical romance, fiction, science fiction, and biography. (See Table VI) Also mentioned as popular with readers were horror, adventure/thriller, spy novels, current events, sports, humor, Westerns, travel, true crime, and popular psychology.

> *Bibliographic control is a significant investment in the collection, and the strong showing of bibliographic access to leisure materials indicates an acknowledgement of the importance of the collections.*

No Leisure Collection

Of the 47 libraries stating they have no leisure collection, two were in the beginning stages of providing a book exchange at the time of the survey. The book exchange area contains materials left by students, faculty, and staff for other patrons to read in return for similar donations. "It seems to be catching on," one librarian noted on the survey.

Several respondents commented that leisure or light reading is specifically provided for and funded in the development of the collection as a whole, and is not treated as a separate collection. One of these libraries also serves as a local public library and spends $1,500 to $2,000 a year to purchase popular fiction and bestsellers; they also have a "light reading" magazine collection and a video collection of classic films.

In their comments, a few respondents indicated that they include fiction and other light reading as an integral part of the collection. However, two librarians commented that as academic libraries their function is to support the curriculum, not provide light reading.

Only one of these librarians made a distinctly negative comment about leisure collections: "We did away with the "leisure" collection about eight years ago ... Certainly simplified everybody's life and no one seems to miss it or expect it." This statement may refer indirectly to the fact that extra maintenance is needed to keep a separate leisure collection. No other respondents remarked on this fact, so one may assume that patrons' high interest in and use of these collections override the problems and inconvenience of providing this service.

Summary and Conclusion

This survey shows a significant interest and investment in leisure reading collections among academic libraries in the Southeast. These collections vary in composition, from paperback swap racks to rented material to popular titles rotated from the regular collection. Magazines and videos also may be part of these popular collections. Leisure materials may be bought with Friends money, a portion of the regular materials budget, or be dependent upon donations. With a few exceptions (usually paperback books), leisure materials tend to have bibliographic access and circulation control comparable to materials in the regular collection.

Academic librarians do have an interest in promoting recreational reading. Often, we expect our students will find light reading in the regular collection of books and periodicals. Providing a separate collection of popular material allows the patron to identify and access titles quickly. A separate leisure reading area spotlights and promotes extracurricular reading, which may often be overlooked in an academic environment.

Appendix A:
Survey of Academic Libraries'
Leisure Collections

Does your library maintain a *separate* collection(s) for patrons' leisure or recreation?

_____ No (If no, please skip to the last question to describe your institution)

_____ Yes

If you do maintain such collections, please characterize them by checking all the following which apply.
Also state *approximate* size of the collection and fiscal year 1992/93 circulation statistics, if available.

_____ Collection of leased books

      McNaughton _____ Baker & Taylor _____ Other (specify) _____

      Number of titles (approx.) _____ Circulation, FY 1992/93 _____

_____ Paperback books

      Number of titles (approx.) _____ Circulation, FY 1992/93 _____

_____ Magazines (separate from periodicals collection)

      Number of titles _____

_____ Videos

      Number of titles (approx.) _____ Circulation, FY 1992/93 _____

      Rental plan? Yes _____ No _____

What genres appear to be the most popular with your patrons? (e.g. biography, science fiction, how-tos, mystery, etc.)

_____

What type of *bibliographic access* do your patrons have to leisure materials?

_____ Full record in public catalog

_____ Brief record in public catalog

_____ Separate list or card file

_____ No bibliographic access — browsing only

Please check all the following that apply about *circulation* of leisure materials.

_____ Circulation records maintained in the *same system* as other library materials' records

      Online system _____ Manual system _____

_____ Circulation records maintained in a *separate system* from other library materials' records

      Online system _____ Manual system _____

_____ Circulation period for leisure materials is:

      Same _____ Longer _____ Shorter _____ compared to similar library materials in "regular" collection.

Please describe your institution:

_____ Public _____ Private

_____ Approximate number of students _____

Comments or other information you would like to add: _____

_____

➤ POINT

Say Goodbye to the Book ... the Future is Virtual

by Harry Tuchmayer, Column Editor

Although I feel like some sort of evil person gloating over the death of a hapless victim, I can't help thinking that the growth of the virtual library and the death of the book as we know it is really a good thing. I love books! In fact, I like them so much that at first it pained me to think about their demise. But after agonizing over the issue, I've come to the realization that maybe it's time for the book, as we have come to know it, to face facts and finally give up the endless struggle with changing technologies and just expire gracefully.

This is not the first assault on books. Since the invention of the printing press (a rather disastrous invention if you happened to be a scribe facing unemployment), books have come under attack from changing technology. And each time they've rebounded, slightly redesigned, slightly less attractive, and slightly less artistic than the version before. But today they face a more dangerous threat, because this time the assault is not on the form of the book but on its very substance. And, I have to tell you, it's about time!

Books as information just don't cut it anymore! By the time a book is published, it's just not current enough. Now I know that the industry is trying to produce the instant book. Those cheap paperback accounts of the Gulf War and the rape of Kuwait that are littering the shelves of most libraries immediately come to mind. But, come on now, have you ever read one of those things? As far as I'm concerned, they are about as dull and unappealing as most of the junk we find on the Internet. With few exceptions, the information is only minutes old, and you can discard the stuff before it messes up the collection.

I know what you're thinking: sure, it's easy to attack books if all you're concerned about is quick information. But what about books as literature, creative pieces that push one's mind and imagination to the limit? What about those titles, fiction and non-fiction, that explore the furthest reaches of our universe? Nothing one can find on the Internet can ever match that kind of "reading."

I don't know about you, but those titles are becoming increasingly more difficult for me to find. For years now, it seems that publishers are more concerned about profits than quality. Just about every bestselling author seems to have decided that his books are off limits to editors, as if every word written is worth preserving. And publishers seem to feel that the extra 250 pages of "genre babble" justifies the higher price tag. Well, as far as I'm concerned, nobody's going to curl up with a three-pound wad of cheaply-bound and poorly-glued paper full of run-on thoughts and sentences.

But all is not lost. The current debate over the death of the book reminds me of a scene in my favorite movie when Miracle Max explains the difference between "mostly dead and all dead." When someone is all dead, he reasons, there is nothing one can do but "go through his pockets and look for loose change." Ah, but mostly dead is not all dead! Life is still a possibility if there is something truly noble to live for. We will all be a lot better off if those bits and pieces of "required reading" that we have all had to struggle with die a quick and painless death as a result of the virtual library. But the preservation of good books is a truly noble cause. As a bit of a romantic myself, I know that the preservation of those books, like the true love of Wesley and the Princess Bride, shall live happily ever after!

> *... maybe it's time for the book, as we have come to know it, to face facts and finally give up the endless struggle ....*
>
> — *Tuchmayer*

> *Computer nerds are scaring those of us who find computers a tool but aren't ready to sleep with them every night.*
>
> — *Moore*

COUNTER POINT

Sleeping with the Enemy?

by Tom Moore

I think that all this talk about virtual libraries is poppycock!! Computer nerds are scaring those of us who find computers a tool but aren't ready to sleep with them every night. Computers and the information to which they provide access are important tools for the present and the future. They only threaten libraries when librarians become their slaves.

A computer is only a tool to access information stored in an electronic format. Storing and transferring information electronically is a cost-effective method of making a lot of information available to a large audience. Because so much information can be stored electronically, it is also a very cost-effective method of providing very esoteric information to a very small audience.

Almost all of this transfer occurs on an individual basis. One person sitting at a computer directly accesses the information needed. There might be another thousand or so who are accessing the same information simultaneously. All of those people do not live in the same community. They live all over the country. They could not be so served by a single library. The publishers of electronic information recognize this. They market most of their services directly to individuals. Those that do market directly to libraries do so because they package their information on compact discs — fine storage devices, but inefficient retrieval devices. Libraries buy them because of the amount of information they can hold, but recognize that they are used just like books: for the most part, they serve one person at a time. Like books, they are updated regularly. Libraries must purchase these new editions as they are published.

The question is, will the so-called virtual library replace or destroy today's public library? The answer is, maybe. This will happen only if we (librarians) allow it to happen.

This is how I see libraries being replaced by the nebulous virtual library. If librarians forget that computers are mere tools for our use and begin to think of them as ends in themselves, we are well on the way to extinction. As a group we seem to be enamored with technology of any kind. Look at how we embraced film, audio, and video technologies. If we had really had our way, these technological items would have filled our libraries. The latest technological advances for the first time pose a serious threat to our existence. We are not really thinking of filling our libraries with computers so much as we are thinking of emptying them of books. The reasoning is simple and direct. If I can access any information online that I might need for my customers, I will not need to purchase the books that currently contain this information. Besides, these books are usually out of date by the time that they are published. Therefore, I no longer will have to select the best book on a subject, because I will be able to find online all the information there is on that subject.

If we empty our libraries of out-of-date books so that we can get on the Information Highway to get only the most current information, we are writing our own death certificates. All books are out of date as soon as they are published. Our customers still prefer the book or journal article for information purposes. Our customers need to be able to take information away from the library in a format that they can access directly. When it becomes necessary for our customers to own a computer in order to use the information which we store, we will no longer be a vital part of their everyday lives.

The virtual library will end public libraries if we allow ourselves to become so attached to computers and online systems that we forget what the majority of our customers want. When computer technology begins to reduce the amount of money that we spend on books and like materials, the real library will begin to be replaced by the virtual library.

As everyone knows, virtual reality is intriguing and close to the real thing. In virtual reality we can do many different things, like flying an airplane or driving a tank. Of course, being like the real thing and really doing something are as different as night and day. You don't walk away from a real airplane crash. You won't be able to walk away from the virtual library with a real book either. Too bad, I really like books.

Wired to the World

— by Ralph Lee Scott

When this article comes out, summer vacations will be a fond memory for most of us. To honor these vacations, I would like to suggest that we go on a "busman's holiday" and visit a few library catalogs via the Internet. We will visit the online catalog of Cambridge and Oxford universities in the United Kingdom via telnet and the University of Minnesota home gopher. A number of libraries in North Carolina are using the University of Minnesota home gopher as their gopher pointer. This means that when you use a North Carolina gopher server, you will actually be pointed to the University of Minnesota as the root gopher for your searches. Other systems to access library catalogs besides gopher are front end bulletin boards such as laUNCpad, hypertext browsers such as the National Center for Supercomputer Applications MOSAIC program, the hypertext program CELLO, and library Internet systems such as CARL.

After you have logged on to a gopher, you are faced with a number of selection choices, each of which will take you to another computer screen of more choices (called a menu). Selecting "Libraries" or "Library catalog," on the University of Minnesota gopher menu screen will display another menu listing the University of Minnesota Libraries catalog, the Library of Congress, Library Systems in the Twin Cities, Library Catalogs via Z39.50, and Library Catalogs via Telnet. It is the "Library Catalogs via Telnet" selection that we will be using. (The "via Z39.50" selection is a new interface that libraries are just starting to implement. We will cover Z39.50 searches in a later article.) Selecting "Library Catalogs via Telnet" will display another screen of menu choices. These are Catalogs by Location,

Catalogs Search by Keyword, Instructions for different catalog types, Library Bulletin Boards, Manuscript and Archive Repositories — at Johns Hopkins, and Paper List Barron's Accessing Online Bib Dbase. Selecting "Catalogs by Location" displays a menu choice of continents. Choosing "Europe and the Middle-East" displays a menu of European and Middle Eastern countries. The selection of "United Kingdom" provides a menu choice of England, London, Northern Ireland, Scotland, and Wales. If you select "England," you will receive a menu of choices of online library catalogs and text documents that explain access procedures. If you select a telnet session to Cambridge University, the gopher server in Minnesota connects you to the catalog through a relay satellite to the European Internet (called Janet). Some instructions are provided in the text documents and on the opening Janet screens. At this point you are now using computers in England to retrieve your information.

When Janet asks you where you want to go (login:), enter **uk.ac.cam.ul** (the Internet four-part address for the Cambridge University library catalog). Most library catalogs at this point want to know what type terminal you are using (called terminal emulation by techies). Most libraries support VT100 emulation. Usually, sending a "?" or "Help" will provide a list of terminals supported by the library online catalog. In the case of the Cambridge University Library catalog, the screen reads "If your terminal is DEC VT100 ..., type Y and press Return, or just press Return if it is not or if you do not know." I like that kind of clear language. Some catalogs just say "term=", and leave you to figure out if it is Spring or Fall semester. In any case, if you have a VT100 terminal, just type a "Y".

Next, you will see the opening screen of the "Cambridge University Online Catalogues System." The opening screen gives Internet addresses for humans to whom you can send messages reporting any problem you experience. Then follows a list of the major catalogues that comprise the Cambridge Online Catalogues system. They are: University Library post-1977 imprints (820,000 records); University Library pre-1978 borrowable books (570,00 records); Union Catalogue of Departmental and College Libraries (1,164,000 records); the Cambridge Union List of Serials (115,000 records); and the Cambridge Libraries Directory (including abbreviations). My favorite is the Cambridge Union List of Serials, and that is where we will go next.

Pressing the number 4 and the return key will connect you to the Union List of Serials portion of the Cambridge University online catalog. The next screen gives you a brief description of the Union List and four choices. The choices are: "Title keyword search," "Fingerprint search on title," "the Cambridge Libraries Directory" (which identifies the abbreviations of the collections), and "Change to other catalogue or Finish searching." I like the title key word search because you can enter any portion of the title (even fragments that the patron has given you), and get a quick search of the Cambridge Union List of Serials. I figure that if Cambridge does not own it, it's going to be very hard to find. For instance, I did a search on "North Carolina" and got forty-nine periodical hits. Included were such items as the *John Donne Journal* (published at North Carolina State University) and *Carolina Comments* (published by the North Carolina Division of Archives and History). For each title, the entry gives a

brief holdings record and the location. (I always like the location codes such as "latest issues: p/hole T.658.")

I like to try the Cambridge and Oxford University Libraries online catalogs for some of the real "toughies" that I get on the public service desk. I am often quickly rewarded for my efforts. I also have taught a number of patrons to access these two systems and am amazed at the material that they locate. There are many possibilities for remote bibliographic verification here. These catalogs are a reference librarian's dream (or nightmare, depending on your point of view). The other Cambridge University Library catalogs are accessed through the opening menu by typing numbers 1, 2, or 3 and pressing the return key. The University has a number of specialized departmental and college collections that are very useful for subject searching. They also are fun to look at if you are a subject bibliographer or if you do collection development.

To get to the University of Oxford online library catalog from the Janet host name prompt, type **uk.ac.ox.pacx** and press return. When prompted for which service, enter LIBRARY and press return. Again, if appropriate, enter VT100 as your terminal type when requested. You should then connect to the Oxford University Libraries online catalog (OLIS). A menu lists the catalogs of such famous collections as All Souls College, Balliol College, the Bodleian, Jesus College, Lady Margaret Hall, Magdalen College, Maison Francaise, the Oriental Institute, Queen's College, St. Edmund Hall, Trinity College, the University Museum, and the Wellcome Unit for the History of Medicine. Sixty-seven different library catalogs can be searched individually on the OLIS system. Searching the catalog is similar to searching the one at Cambridge and it is basically menu driven.

If you have direct access to the Internet through a direct telnet session, you might try the two IPs for these libraries:

> 131.111.12.21 (Cambridge)
> and 129.67.1.46 (Oxford).

The University of Minnesota gopher can provide librarians with access to many other library catalogs. We will investigate other sites in future "Wired to the World" columns.

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NORTH CAROLINA
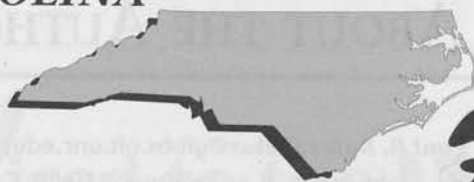
Books

Dorothy Hodder, Compiler

Residents who have lived in Winston-Salem a number of years and think they possess a fair amount of local historical knowledge may find their knowledge expanded after reading Tursi's book. He provides a wealth of uncommon information about the vibrant history of Forsyth County and Winston-Salem. Although little is known of the Indians that inhabited this region in the 1700s, the early settlers, especially the Moravians, carefully documented their everyday life. The author has used these resources to provide the reader with unique insights. The pictures are plentiful and depict a way of life we may not have seen before.
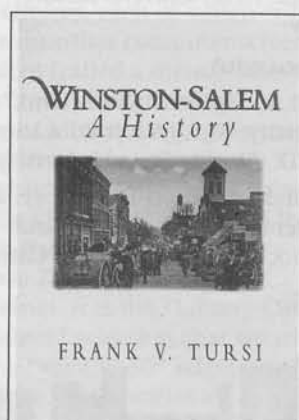
From the first page, Tursi introduces a pictorial display of early Salem and Winston-Salem that encourages any reader to investigate what lies behind the town's facade. He paints a compelling portrait of the Moravians, a hard-working people who were determined to make a permanent place for themselves in the wilderness. Their primary wish, as stated by Bishop Spangenberg, was to "live together as brethren, without interfering with others and without being disturbed by them." This philosophy allowed them to conquer many obstacles, stay neutral in war times, and build a flourishing community. They eventually sold acreage one mile north of Salem which ultimately became Winston-Salem, hastening Salem's demise as Winston-Salem flourished with a new crop called tobacco.

Although it was initially the Moravians who introduced tobacco to the region, R. J. Reynolds was the visionary who processed and marketed "King Tobacco," which allowed Winston-Salem to prosper for many years. Reynolds joined forces with Hanes, Grey, and Fries, other industrialists representing textiles and banking, and beginning in the 1880s, this group influenced all aspects of life in Winston-Salem for nearly one hundred years. While today their influence still is felt because of past contributions of land, buildings, and trusts, Winston-Salem is a city seeking to become more diverse and attract different types of industry to the community.

The author supplies summaries at the end of each section of the book, with dates to remember and people to know. The book provides a quality bibliography and an adequate index. This publication would be a worthy addition to any collection, but especially to academic or public libraries interested in or possessing a local history collection.

Frank V. Tursi.

Winston-Salem: A History.

Winston-Salem, N.C.: John F. Blair, Publisher, 1994. xviii, 310 pp. $34.95. ISBN 0-89587-115-7.

WINSTON-SALEM
A History

FRANK V. TURSI

— Dan Swartout
Wayne County Public Library

From the first words of the introduction to this little book of mountain folklore, "There is something that loves the night," the reader is caught up in the imagery of ghosts, beginning with the Cherokee belief that creatures came out at night to bring home lost children and protect their people from their enemies, like the horned snake with a flashing crystal in its head. Ambrose Bierce's quote, "Ghost: the outward and visible sign of an inward fear," invokes the idea that man's darkest and most secret yearnings are manifested in the spirits of the night.

Some of the short tales here are of the foreboding and eerie type, while others are full of eccentricity and fun. Some are stories brought down through family histories or found in old newspaper accounts. The authors were allowed access to the historical files of Western Carolina University and had the support of the North Carolina Arts Council. They say they also found out how many people still love to tell a good tale!

At first look, this volume seems to give short shrift to the thirty-seven vignettes packed into its pages. Upon reading, however, the imagination takes over and rich portraits emerge, somehow larger than life, of everyday people overtaken by life's unexpected dramas. Entertaining for all age groups, this volume could easily be adapted for television, enlarging upon the irony, curiosity, and life force so abundant in each story.

Gary Carden and Nina Anderson.
Belled Buzzards, Hucksters & Grieving Specters.

Asheboro, N.C.: Down Home Press, 1994. 208 pp. Paper, $13.95. ISBN 1-878086-28-6.

— Judy Stoddard
Sampson County Public Library

David S. Cecelski, historian and research fellow at the Institute for Southern Studies in Durham, North Carolina, happened upon the opportunity to research and write a book when he attended a homecoming for a high school alumni association in Hyde County, North Carolina in 1983. His book, *Along Freedom Road: Hyde County, North Carolina and the Fate of Black Schools in the South*, details the events and circumstances surrounding the boycott of Hyde County schools in 1968 and 1969. The black citizens of Hyde County refused to send their children to school for an entire year to protest the Board of Education's decision to close two historically black schools in order to comply with a Health, Education and Welfare (HEW) desegregation plan that failed to incorporate the concerns of the black community. The closing of the black schools meant a loss of educational heritage as well as a loss of community control. With the support of several prominent civil rights leaders and organizations, they marched on Raleigh, staged sit-ins and demonstrations, and persevered in spite of extreme odds. Throughout the year, the black citizens and their children remained focused, though there was obvious retaliation by the local school board, local white merchants, law enforcement officers, and the Ku Klux Klan.

David S. Cecelski.
Along Freedom Road: Hyde County, North Carolina, and the Fate of Black Schools in the South.

Chapel Hill, N.C.: University of North Carolina Press, 1994. xii, 235 pp. Cloth, $32.50. ISBN 0-8078-2126-8. Paper, $14.95. ISBN 0-8078-4437-3.

Cecelski credits his book with being one of the few that explores the far-reaching consequences of the closing of black schools in the South in an effort to achieve desegregation. He also refers to his book as the chronicle of an important untold moment in civil rights history and recognizes that many similar stories are waiting and unrecorded. Statistical data relative to the impact of school desegregation on black educational leadership are provided.

The book, which includes notes and a bibliography, is well documented and indexed. It should prove valuable to coastal North Carolina history and to African American historical collections in academic and public libraries.

— Waltrene M. Canada
Bluford Library, North Carolina A & T State University

*7*his book is a collection of six "fictions" set at various times in the last forty years with references to places in North Carolina, mostly in the coastal plain where the author grew up. Parker's strength as a writer is clearly his use of language, which is both precise and admirable--and at times very funny. His characters are lovingly drawn, even those who are not particularly lovable. Many, such as the teenagers Walker and Bev in "Cursive," are ripe for (re)institutionalization; most are in some way struggling with the effects of long-ago inflicted wounds and circumstances.

Michael Parker.

The Geographical Cure: Novellas and Stories.

New York: Charles Scribner's Sons, 1994. 287 pp. $20.00. ISBN 0-684-19682-4.

The best offering in the collection is the novella, "Golden Hour." Here Parker combines serious issues with the highly amusing observations of three major characters, each describing the events surrounding the breakdown of a funk band bus in front of an isolated technical "college" somewhere between Wilmington and Raleigh. The formal, latinate vocabulary and bearing of Nancy McFadden, Ph.D., co-administrator of the night program with native son Mitchell Register, Ed.D., contrasts markedly with the laid-back Register's frequent reliance on the local vernacular. This difference in temperament and personality reflects a long-standing rivalry, which finally and hilariously explodes when the breakdown delivers to them one Franklin "Cisco" Reed, incorrigible but inconsistent Marxist guitarist miffed at the band's lead singer. Both "Fancy" and Register are ultimately redeemed by the experience.

Michael Parker's first book was *Hello Down There*, a 1993 *New York Times* Notable Book. *The Geographical Cure* would be a good addition to the North Carolina collections of public and academic libraries.

— Rose Simon
Gramley Library, Salem College

*J*anette Greenwood's book focuses on the social currents that buffeted the South after the Civil War through the lens of Charlotte's "better classes." Efforts such as Rufus Barringer's organizing of North Carolina's only Civil War peace protest and Louis McAden's founding of NationsBank shaped Charlotte down to the present. The political exploits of Richard Schenck and social observations of J. W. Smith offer two examples of the black "better class" fitting into Charlotte society.

Janette Thomas Greenwood.

Bittersweet Legacy: The Black and White "Better Classes" in Charlotte, 1850-1910.

Chapel Hill, N.C.: University of North Carolina Press, 1994. xiv, 318 pp. $45.00. ISBN 0-8078-2133-0.

But blacks fit into the community with diminishing success. Despite their emancipation, they were not allowed to invest in post-Civil War industrialization. Black political power under the Republican umbrella disintegrated from fractionalization caused by populism and fusion politics. After a period of cooperation on prohibition and social welfare, racial antagonism increased. Social Darwinism and white supremacy inflamed the enmity. Prominent whites such as Charles Tompkins and Heriot Clarkson cemented Jim Crow and the laws of disenfranchisement firmly in place.

The black response proved ineffectual. The "status" of the black "better class" derived from identification with their white counterparts. This resulted in a lack of support from lower class blacks during the onslaught to black civil rights. The outcome from both black classes became identical: social and political abandonment.

Greenwood's tapestry of social forces and individual anecdotes provides convincing history and compelling story telling. Her epilogue of both races working together during the 1960s' civil rights movement underscores the bitter legacy of a people twice having to regain what should have been theirs all along.

— William Fietzer
University of North Carolina at Charlotte

7he Christ-Haunted Landscape: Faith and Doubt in Southern Fiction is a book about Southern writers, their work, and religion. It delves into the powerful relationship between religion and creativity in Southern fiction.

Author Susan Ketchin is a writer, editor, and musician. She has served as associate editor at Algonquin Books and is fiction editor at *Southern Exposure* magazine. In her introduction, she quotes Flannery O'Connor as saying, "people in the South still conceive of humanity in theological terms. While the South is hardly Christ-centered, it is certainly Christ-haunted." This observation serves as the cornerstone for Ketchin's book.

Ketchin introduces the book by writing about the religious and cultural influences on the writings of twelve contemporary Southern writers. The book is a collection of commentaries, interviews, and selections of fiction from these authors. North Carolina writers include Lee Smith, Reynolds Price, Doris Betts, Clyde Edgerton, Randall Kenan, Harry Crews, and Allan Gurganus. Writers from other Southern states include Larry Brown of Mississippi, Sheila Bosworth of Louisiana, Sandra Hollin Flowers of Georgia, Will Campbell of Tennessee, and Mary Ward Brown of Alabama.

Susan Ketchin, ed.

The Christ-Haunted Landscape: Faith and Doubt in Southern Fiction.

Jackson: University Press of Mississippi, 1994.
408 pp. Cloth, $40.00. ISBN 0-87805-669-6.
Paper, $16.95. ISBN 0-87805-670-X.

Each short story or excerpt from a novel is followed by an interview with the writer about his or her writing. The interviews were conducted in a variety of informal settings allowing for a relaxed, conversational tone. In several cases, the interviews include glimpses into the writer's life and early religious experiences. Collectively, the interviews mirror a combination of religious faith and doubt.

The Christ-Haunted Landscape is a book that can be read on many levels and in different ways. Each selection or interview can be read alone or in combination with other sections. Taken as a whole, Ketchin captures a rare view into the contemporary world of a current generation of notable Southern writers. Selected references are included for further reading.

Ketchin has succeeded in drawing a profound and fascinating portrait of the relationship of fiction and religion in the modern South through its writers and their words. This book will be of great interest to anyone who is interested in the South and Southern writers. Recommended for academic, public, special, and high school libraries.

— Joan Sherif
Northwestern Regional Library

The "good ol' days," when education was of prime importance and students worked very hard to achieve academic success and win that all-important championship, when teachers and the community taught civic pride and important lessons that carried through life, is the world recreated in *Unfinished Heaven*. Betsy Holloway fondly recalls the thriving and bustling activity of a growing Durham, North Carolina, from the beginning of the century through 1954. This book traces the histories of Carr Junior High and Durham High School and the teachers, students, and events that made them famous. Most of the emphasis is on Durham High, which was considered the finest high school in the state. *Unfinished Heaven* is illustrated with numerous vintage postcards, pictures, and excerpts from the school's nationally recognized newspaper.

Betsy Holloway.
Unfinished Heaven: Durham, North Carolina, A Story of Two Schools

Orlando, Florida: Persimmon Press, 1994. x, 324 pp. $23.95. ISBN 0-9616500-1-X.

Betsy Holloway is a native of Durham, North Carolina, and is currently living in Orlando, Florida. She attended school in Durham and graduated from Duke University with a major in English. Her first book taking readers on a stroll through history was *Heaven For Beginners*, published in 1986. *Unfinished Heaven* is recommended for those interested in the history of Durham.

— Lana Taylor
Randall Library, UNCW

In the chronicles of the War Between the States, irony and contradiction make frequent appearances. Military men who had learned their craft together and swore oaths of loyalty and friendship found themselves staring at one another over the muzzles of cannon.

John Newland Maffitt was one such man. From 1842 to 1885 he worked for the U.S. Coast Survey, mapping, plotting, and taking soundings in the coastal waters from Maine to Florida, intimately gaining the exact knowledge he would soon need to outwit the superior numbers of the Union blockade. A slave owner himself, he spent his final tour of duty with the U.S. Navy in supression of the slave trade. As Southern states began to secede, rather than deserting to the Confederate cause, he sailed his ship north to New York, having refit at his own expense. His loyalty was repaid by a Federal bureaucracy that refused to reimburse him. He then resigned his commission and embarked on a legendary career with the Confederate navy.

Royce Shingleton.
High Seas Confederate: The Life and Times of John Newland Maffitt.

Columbia, S.C.: University of South Carolina Press, 1994. xii, 160 pp. $27.95. ISBN 0-87249-986-3.

Drawing on the John Newland Maffitt papers in the Southern Historical Collection at the University of North Carolina at Chapel Hill, Royce Shingleton traces Maffitt's life and career from his beginnings near Fayetteville, North Carolina, through his U.S. Naval service, his heroic and danger-laden exploits as one of the most successful Confederate commerce raiders while commanding the *C.S.S. Florida*, and later as a dedicated blockade runner, to his postwar retirement near Wilmington, North Carolina.

The author, professor of history at Darton College in Albany, Georgia, has previously written several books of regional interest, including *Rural Life in the Old South* (1971), *John Taylor Wood: Sea Ghost of the Confederacy* (1979), and *Richard Peters: Champion of the New South* (1985).

This is a welcome addition to the naval literature of the Civil War. An appendix details the captures by Maffitt during the *C.S.S. Florida's* first cruise. Also included are a bibliographic note, forty-three pages of chapter-by-chapter notes, eleven pages of halftone illustrations, and an endpaper map. While aimed at an academic audience, it should find a home in the many public libraries where interest in Civil War history is at an all-time high.

— Jeffrey Cannell
Wayne County Public Library

Paul Green (1894-1981) lived an extraordinarily busy and productive life. Fortunately for the scholar interested in his literary accomplishments, the historian studying the social and political movements of his day, or the general reader simply wanting to know more about the creator of *The Lost Colony* drama, Green was also a letter writer. At his death, his files contained copies of nearly ten thousand letters to friends, family members, fellow writers, public officials, literary agents, and business associates.

Such a rich epistolary lode surely gave long pause to editor Laurence G. Avery, chairman of the Department of English at the University of North Carolina at Chapel Hill and the editor responsible for selecting the 329 letters published in *A Southern Life*.

Paul Green.

A Southern Life: Letters of Paul Green, 1916-1981.

Edited by Laurence G. Avery. Chapel Hill, N.C.: University of North Carolina Press, 1994. xlix, 735 pp. $49.95. ISBN 0-8078-2105-5.

The earliest letters show a bright young Harnett County, North Carolina, farmboy whose education at the nearby state university at Chapel Hill was interrupted by World War I military service. The horrors of warfront France left a lifelong impression on Green, but in his letters home he valiantly sought not to alarm those left behind. Such a strong sense of responsibility for family and friends is a constant theme in his correspondence.

Many letters, of course, pertain to Green's remarkable literary career, one marked by the Pulitzer Prize for drama in 1937; fifteen outdoor historic "symphonic" dramas; production of his plays on Broadway; and Hollywood screenwriting. Others document Green's passionate devotion to social and political causes, including civil rights for black Americans, abolition of capital punishment, and world peace.

Supplementing the letters with concise, informative footnotes, editor Avery offers in *A Southern Life* an intimate look at a remarkable man who through both his literary endeavors and personal life sought to inspire his fellow citizens to better the human condition.

— Robert G. Anthony, Jr.
University of North Carolina at Chapel Hill

Mr. Taft is in the White House, aeroplanes are in the news, the local doctor has bought himself an automobile, and there is talk of giving women the vote. For Medford Henry McGee, the young narrator of Donald Davis's first novel, the way of life that his family has known for generations is fast disappearing, and "the real modern world is just about here now." Written as the Sunday afternoon journal entries of the youngest member of the McGee family, the book depicts life in an Appalachian community from January, 1910, until mid-1913. Medford is only ten years old when his father sets him the task of "riting out my life." At first Med fills his journal with the everyday of farm life, the antics of his older siblings, stories from the newspaper, and things that happen in school. Eventually, when tragedy strikes, that also is detailed within the context of Med's growing awareness. The McGee family, headed by a father who values education and is interested in politics and a mother who recognizes that "you just have to keep on living" even when the sadness of life is overwhelming, is frequently seen in contrast with the Mayfields, a family with an abusive father and troubled children.

Donald Davis.

Thirteen Miles from Suncrest.

Little Rock, Ark.: August House, 1994. 256 pp. $19.95. ISBN 0-87483-379-5.

Readers familiar with Davis's collections of original and traditional stories, *Listening for the Crack of Dawn* and *Barking at a Fox-Fur Coat*, will recognize the author's wry humor and perfect timing. In *Thirteen Miles from Suncrest*, Davis provides a convincing picture of the hardships and joys of rural life in the early 1900s that is both moving and unsentimental. This book is appropriate for any library serving general readers.

— Ann B. Sullivan
Greenville, N.C.

7here's an old country saying that "every time an old man and his memories die, it's like a tree falling in the forest." In this book Kemp Battle Nye has kept the memories alive — memories of the days when Teddy Roosevelt was in Washington; when in the mountains, up where North Carolina touches Virginia, a writer named Taddick came looking for what the city couldn't supply.

This is a novel that is so full of truth that it's almost not a novel at all but a history. Nye's central character of Old Doc is based on the famous mountain doctor Burgess Cox Waddell, and Taddick is really Sherwood Anderson, who came to the mountains and found a friend in Doc Waddell when Nye was a boy of twelve.

The characters worm their way into the reader's affections in this nonstereotyped view of mountain life. The underlying theme is the harsh exploitation of mountain folk by the logging interests, echoing the exploitation of the Scottish Land Clearances which a century or more before had brought many of these mountain people's ancestors to North Carolina in the first place. Incident follows incident, and tension builds until it comes to a horrific climax at Ripshin Creek.

This is a powerful book which draws the reader into the whirlpool of the characters' lives. Nye has written the book Sherwood Anderson wanted to write about the mountains.

Kemp Battle Nye.
Ripshin.

Carrboro, N.C.: Signal Books, 1994. 239 pp.
Paper, $12.00. ISBN 0-930095-30-8.

— Grace Ellen McCrann
NCCU SLIS student

Other Publications of Interest

All libraries with fiction collections surely will already have purchased two fine novels released earlier this year: Doris Betts's **Souls Raised From the Dead**, a novel about a family living through the death of a child; and Margaret Maron's **Shooting at Loons**, the third adventure of Judge Deborah Knott, in which she investigates competing coastal interests leading to murder on Harkers Island. Another to be aware of is **Inagehi**, Jack Cady's hypnotically told story of a young part-Cherokee woman searching for the reason for her father's mysterious death on a mountain near Cherokee, North Carolina. (1994; Broken Moon Press, PO Box 24585, Seattle, WA, 98124-0585; 258 pp.; paper, $13.95; ISBN 0-913089-50-8.) Deborah Smith's **Silk and Stone** is a romantic saga set in the wealthy mountain resort of Pandora, North Carolina. (1994; Bantam Books, 1540 Broadway, New York, NY 10036; 518 pp.; paper, $5.99; ISBN 0-553-29689-2.)

Poetry collections will want Fred Chappell's **Plow Naked: Selected Writings on Poetry**, with essays on a wide variety of poetical issues and poets, including Randall Jarrell and Octavio Paz. (1993; The University of Michigan Press, PO Box 1104, Ann Arbor, MI 48106-1104; 147 pp.; paper, $13.95; ISBN 0-472-06542-4.) All North Carolina literature collections should include **The Language They Speak is Things to Eat: Poems by Fifteen Contemporary North Carolina Poets**, edited by Michael McFee (1994: University of North Carolina Press, PO Box 2288; Chapel Hill, NC 27515-2288; 268 pp.; cloth, $24.95; ISBN 0-8078-2172-1; paper, $12.95; ISBN 0-8078-4483-7), and Reynolds Price's account of his ordeal with cancer, **A Whole New Life: An Illness and a Healing**. (1994; Atheneum, 866 Third Ave, New York, NY 10022; 213 pp.; $20.00; ISBN 0-689-12197-0.)

Students of Confederate Naval history will be interested in Robert G. Elliot's well-researched story **Ironclad of the Roanoke: Gilbert Elliott's Albemarle**. Included is the building of the Confederate vessel, as well as her service during the war. Forty-two photographs, maps, and line drawings enhance the text. Recommended for Eastern North Carolina and Civil War collections. (1994; White Mane Publishing Company, 63 West Burd St., PO Box 152, Shippensburg, PA 17257; 388 pp.; $29.95; ISBN 0-942597-63-X.)

A profusely illustrated history of attempts to save the lives of victims shipwrecked off the coast of North Carolina, the Graveyard of the Atlantic, is Joe A. Mobley's **Ship Ashore! The U.S. Lifesavers of Coastal North Carolina**. (1994; Historical Publications Section, Division of Archives and History, 109 E. Jones St., Raleigh, NC 27601-2807; xii, 185 pp.; paper, $10.00, plus $2.00 postage and handling; ISBN 0-86526-260-8.)

Libraries serving the sportsman will be happy to see **Freshwater Fishes of the Carolinas, Virginia, Maryland, and Delaware**, by Fred C. Rohde, Rudolf G. Arndt, David G. Lindquist, and James F. Parnell. The book identifies some 260 species, with information on catching and maintaining them in captivity. It includes range maps and 200 color photographs. (1994: University of North Carolina Press, PO Box 2288; Chapel Hill, NC 27515-2288; 222 pp.; $29.95; ISBN 0-8078-2130-6.) Also for those fishermen interested in finding and catching the most popular salt water game fish, there is Bob Newman's **Inshore Fishing the Carolinas' Coasts**. (1994; Down Home Press, PO Box 4126, Asheboro, NC 27204; 151 pp.; paper, $13.95; ISBN 1-878086-27-8.) G. Forest writes about rock climbing, motorcycling, kayaking, rafting, fly-fishing, hiking, hot-air ballooning, caving, hang gliding, bungee jumping, cross-country skiing, horseback riding, ORVing, and so on, with advice about how and where the reader may enjoy the same, in **Great Adventures in the Southern Appalachians.** (1994; John F. Blair, 1406 Plaza Drive, Winston-Salem, NC 27103; 235 pp.; paper $12.95; ISBN 0-89587-113-0.) And Lori Finley continues her informative series on mountain biking the Appalachians with **Mountain Biking the Appalachians: Northwest North Carolina/Southwest Virginia.** (1994; John F. Blair, 1406 Plaza Drive, Winston-Salem, NC 27103; 191 pp.; paper $9.95; ISBN 0-89587-114-9.)

Several favorites newly released in paperback: **Raised in Clay: The Southern Pottery Tradition**, by Nancy Sweezy, first published in 1984, is available in paperback with a new afterword by the author, commenting on recent changes in the potting scene. (1994; University of North Carolina Press, PO Box 2288; Chapel Hill, NC 27515-2288; 284 pp.; paper, $24.95; ISBN 0-8078-4481-0.)

Finally, a source of book reviews and news, and an opportunity for would-be book reviewers and columnists, is **Southern Book Trade**, a monthly publication for book professionals in the Carolinas, Georgia, and Virginia. It began publication in September 1994, and is distributed free of charge to libraries and bookstores. Write to Jack Fryar, **Southern Book Trade**, 4137 Princess Place Drive, Wilmington, NC 28405, to contribute or request a subscription.

The North Carolina Periodicals Index

by David L. Burke and Maurice C. York

The North Carolina Periodicals Index seeks to provide access to periodical literature pertaining to North Carolina and its people. It is available through the gopher server maintained by East Carolina University's Joyner Library. Easy to use and broad in scope, the index reflects the content of hundreds of articles in over forty magazines, journals, and newsletters published in North Carolina. The index has proved to be not only a valuable source of bibliographic information, but also a meaningful learning experience for the staff members and student assistants involved in its development.

The index grew out of a desire to help undergraduate students at East Carolina University find current information about the state. The scope and content of the index reflect these needs. Thus, the periodicals chosen for inclusion — most of which are not indexed in standard reference tools — regularly contain useful articles pertaining to the arts, social sciences, and sciences. Topics include artists and art exhibitions, folk music, education, social conditions, history, travel and tourism, politics and government, and the environment. Owing to staffing limitations, however, no attempt is made to index each title exhaustively or to include reviews of any kind. Although indexing began in January 1992, some retrospective work has been accomplished since that time. The product has been surprisingly useful in locating articles of interest to the library's patrons.

Graduate students employed by the library have been vital to the success of the project. As new issues of periodicals arrive in the North Carolina Collection, a graduate assistant selects articles thought to be substantive enough to merit inclusion in the index. After reading an article, the student completes a data entry sheet. These sheets contain fields for complete bibliographic information, up to four Library of Congress subject headings, and an abstract. The sheets are given to the North Carolina Librarian, who edits them and checks for consistency and appropriateness of subject headings chosen by the student. The student then enters the information for each article in a database. Because they realize that the index is being used by many people, the students have found the work to be very rewarding.

Using Microsoft Excel, the Systems Librarian designed a data entry box for entering the data sheet contents into an electronic database format. A macro program prompts the student to add data to various fields and utilizes dropdown list boxes to insure standardized entry of periodical titles, abbreviations, notes, and dates. In an attempt to maintain authority control, the data entry system was programmed to bring up another dialog box for subject entry. Subject headings that have been used in previous entries can be cut and pasted to the entry at hand, and new headings are added to a thesaurus.

To enable patrons to search the index through the library's gopher server, the periodicals database, after steps in which it is converted to ASCII textfile format, is indexed with the IUBio WAIS program developed by Indiana University. WAIS enables the patron to employ a variety of search techniques. These are explained in a scope and content note available on the gopher.

Upon selecting the North Carolina Periodicals Index item on the library gopher's main menu, the patron can double-click on one of two icons. The first one describes the database and lists the periodicals indexed. After clicking on the second of these, "Search the North Carolina Periodicals Index," the patron is prompted to type a search string. Here the patron can search by keyword using Boolean commands (*and*, *not*), employ truncation, or enter literal phrases. A few examples follow:

Boolean
To find articles dealing with water pollution, which have been given the subject heading **Water—Pollution**, one can use the search string **water *and* pollution**. The search string **water pollution** will retrieve extraneous articles because the system defaults to **or** in the absence of a Boolean operator, thus locating articles dealing with many aspects of water or pollution. To limit a search by date, the patron must incorporate a year into the string: **Air *and* Cargo *and* 1993**. The *not* command can be used to restrict the scope of a search: **crime *and* prevention *not* juvenile**.

Truncation

The asterisk (*) applied at the end of a partial word will match all documents with words that begin with that partial word. The query **educat*** results in all records containing such words as educate, educators, and education.

Literal Phrases

If quotation marks (") surround a phrase, then the result will match that phrase exactly: **"University of North Carolina"**.

When the search engine locates the search string anywhere in the database, a list of article titles that match the search will appear on the screen. When the patron double-clicks on a title, the full record appears. This information can then be printed or downloaded to a disk.

The Joyner Library gopher server can be reached through any gopher client. While these clients vary in how a specific gopher server is accessed, the Internet address of the library's gopher server is **fringe.lib.ecu.edu**. The gopher is registered with the Home Gopher Server at the University of Minnesota and can be found under the listing of North Carolina gophers as "East Carolina University."

The library plans to update the index at intervals of two months, thus achieving the goal of making current information about North Carolina available to its patrons — and, as lagniappe, to anyone connected to the Internet.

Figure 1: *North Carolina Periodicals Index listing on Gopher Main Menu (Windows).*
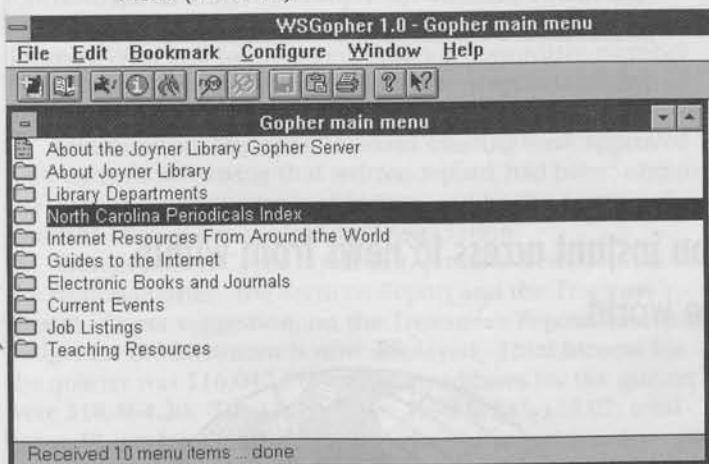
Figure 2: *Periodicals Index search prompt.*
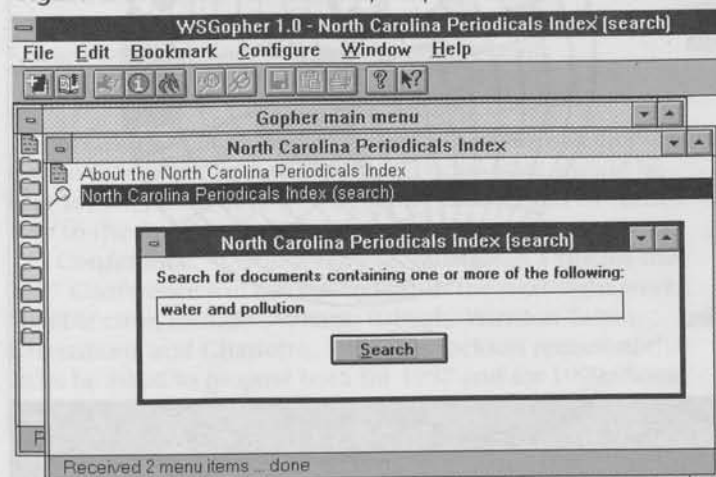
Figure 3: *List of record titles that match the search.*
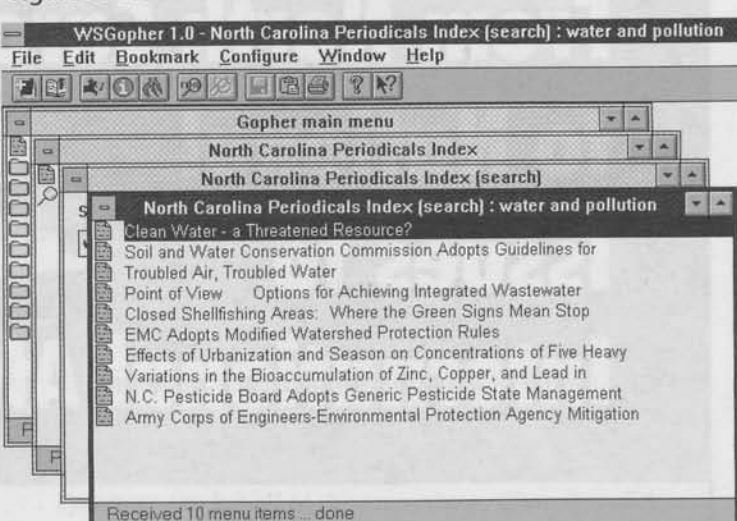
Figure 4: *Part of a sample record.*
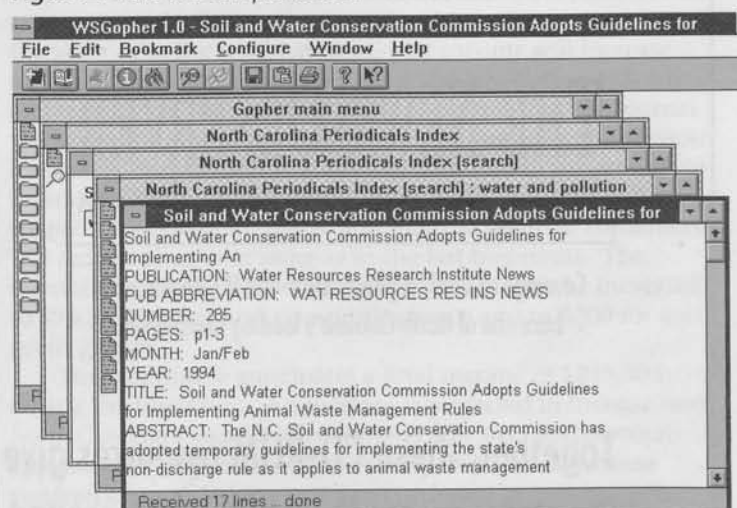
Figure 5: *Complete bibliographic record as it appears on the Macintosh gopher client.*

NORTH CAROLINA LIBRARY ASSOCIATION
Minutes of the Executive Board

July 15, 1994

The Executive Board of the North Carolina Library Association held its quarterly meeting on July 15, 1994, at Appalachian State University. President Gwen Jackson called the meeting to order at 9:30 a.m. Catherine Wilkinson introduced Mary Reichel, University Librarian, who brought greetings to the group. The following Executive Board members and Committee Chairs were present: Shelia Bailey, Augie Beasley, Margaret Blanchard, Joan Carothers, Wanda Brown Cason, Eleanor Cook, Michael Cotter, Martha E. Davis, Anne Marie Elkins, Kem Ellis, David Fergusson, Martha Fonville, Janet L. Freeman, Dale Gaddis, Edna Gambling, Beverley Gass, Gwen G. Jackson, Plummer Alston Jones,Jr., Gene D. Lanier, Judy LeCroy, Cheryl McLean, Maria Miller, Sandra Neerman, Sharon Snow, Steven L. Sumerford, John E. Via, Catherine Wilkinson, Cristina Yu. Others in attendance were Vice Chairs Phyllis Johnson, Karen Perry, Sylvia Sprinkle-Hamlin, and Sheila Core; *North Carolina Libraries* Editorial Board members Suzanne Wise and Joline Ezzell; Finance Committee member Teresa McManus; Past Chair of Reference and Adult Services, Allen Antone; and State Librarian, Sandy Cooper.

Minutes from the April 15 board meeting were approved with corrections stating that written reports had been submitted by the Children's Services Section and by the North Carolina Library Paraprofessional Association.

Wanda Brown Cason, Treasurer, presented two reports for the second quarter: the Sections Report and the Treasurer's Report. As per suggestion, on the Treasurer's Report the entire budget for the biennium is now displayed. Total income for the quarter was $16,047.91; total expenditures for the quarter were $18,464.20. Total income for 1994 is $45,113.02; total expenditures for 1994 are $43,357.29. The report was accepted as presented.

Martha Fonville, Administrative Assistant, presented a Membership Report showing that the organization presently has 2,043 members. She also reported that the NCLA office in Raleigh has been equipped to respond to e-mail.

Committee Reports

Archives: Cheryl McLean asked that Board members be sure to save files. Immediate predecessors' work should be kept for reference, but all files prior to that should be turned over to the Archives Committee.

Conference: David Fergusson stated that a site for the 1997 Conference will be chosen within the next eight weeks. Possible cities include Durham, Raleigh, Winston-Salem, Greensboro, and Charlotte. President Jackson requested that cities be asked to propose both for 1997 and for 1999. Some discussion ensued concerning dates for the Conference, beginning and ending times, and time for keynote address. The Committee will make its proposal at the October Executive Board meeting.

Constitution, Codes, and Handbook Revision: Kem Ellis distributed several pages for revision of the handbook.

Conference Handbook: Janet Freeman stated that this committee will report in October.

Finance: On behalf of the committee, Chair Beverley Gass presented the NCLA Proposed Budget for 1995-96. A written report submitted by Gass stated that the committee met on June 6 and June 20, 1994, to develop the budget. As they formulated the budget, committee members made certain assumptions, including that membership will remain about the same as in the last biennium, that income will increase with annual collection of dues, that the Association will rely increasingly on the Administrative Assistant, that the journal will continue at the same frequency and size as in the previous biennium, that the Association will continue to use savings to balance the budget, that the work of the Association will be shaped by work group plans, and that the biennial conference will remain about the same as in the last biennium. The committee recommended that the price of labels be increased to $75 for libraries and non-profit groups and to $200 for for-profit groups.

The committee anticipates a total income of $215,395 during the biennium. An increase is projected in income from *North Carolina Libraries* subscriptions and ads. Budget totals appear to have increased significantly, but that is because conference monies have not been included in past budgets. The interest reported as income reflects two CDs owned by the Association.

Expenses reflected in the budget include raising the Administrative Assistant's hours from twenty-five to thirty per week with a 4% salary increase for each year of the biennium. The budget reflects a slight increase in the Treasurer's travel allotment as well as additional money allocated for audits since there will be full audits at the end of the biennium with reviews on odd years. $8,000 per issue is needed for *North Carolina Libraries* in order to retain the size and quality of the journal.

Steven Sumerford expressed concern about the carry-over of grant funds from outside sources. Several proposals were suggested to protect those funds for use by the group who had secured the grants rather than having them roll over into the general fund.

It was proposed that the Association assume the cost of publishing the newsletter which is produced after each Executive Board meeting. Heretofore gifts have financed the newsletter.

Annie Marie Elkins inquired as to whether there would be money for special projects grants prior to October, 1995. She noted that the Handbook sets forth dates for requesting such funds. Several Sections and Round Tables had plans to request funds for the fall of 1994. President Jackson stated

that special project funds are tied to the conference biennium with the conference year being the first year of the biennium. An Executive Board decision was made in 1992 that all available funds would be spent on the 1993 conference; therefore, no funds remain for 1994 special projects. To help address such situations in the future, there is now a Special Projects Committee in place which will study and make recommendations regarding special projects funds. The Special Projects Committee will decide whether to spend profits from the 1993 Conference ($26,000) on the 1995 Conference or to retain some for special projects during the fiscal biennium January 1995 - December 1996. Several Board members noted that an annual budget structure might help to alleviate some of these problems since dues will now be collected annually. Parliamentarian Kem Ellis noted that there is nothing in the Constitution and By-Laws to prohibit the changeover to an annual budget. A straw vote was taken and all who voted approved the suggestion to study the possibility of an annual versus a biennial budget. Both John Via and Janet Freeman suggested that the Board not change the structure without careful study of annual revenues under the revised dues structure.

Concern was expressed as to how the current budget will be balanced. Wanda Brown Cason stated that the NCASL Conference will likely bring additional memberships which will boost the budget. Also, the *North Carolina Libraries* Editorial Board has suggested that three issues be published in 1994 rather than the four that had been planned. The vote on the 1995-96 Budget proposed by the Finance Committee will be on October 5, 1994. Any ideas for revision must be submitted to Martha Fonville by September 1.

Governmental Relations: Carol Southerland submitted a written report recounting the committee's work for Legislative Day in Washington, D.C, April 18-19. Twelve North Carolina Senators and Representative or their designees attended either the continental breakfast for the North Carolina Congressional delegation or the ALA reception held on April 19. NCLA focused on three areas of emphasis: 1) retaining the school library resources clause in ESEA reauthorization, 2) funding the construction component of LSCA, and 3) funding the Higher Education Act, Ch. II, College Libraries.

Intellectual Freedom: Gene Lanier informed the Board that trends toward censorship have changed somewhat in that challenges are now from groups both on the left and on the right and their agendas are based on local issues. He urged Board members to become participants in local politics. He submitted the report which he had given at ALA in Miami in June. The committee will meet at the NCASL Conference, and one preconference at NCASL will deal with intellectual freedom issues.

Literacy: Steve Sumerford reported that this committee is stronger than ever because of a greater number of participants and a stronger relationship with the State Library. His written report outlined the committee's involvement with Smart Start Programs, spoke of networking with other literacy organizations, told of the committee's consideration of sponsoring a statewide literacy workshop next year, and mentioned the possibility of sponsoring a library card sign-up campaign targeting all students in the Basic Skills programs in the community colleges. September 8 is International Literacy Day and the committee will issue a press release across the state to show the importance of libraries in the campaign to eradicate illiteracy from North Carolina.

Marketing: Chair Sandy Neerman submitted a written report. The committee met in May and early July to plan

strategies: the committee will help in choosing a slogan/theme for the 1995 Conference; the idea of a clearinghouse of public relations ideas and materials will be explored; and a publications workshop will be planned for Fall 1994.

Membership: Co-Chair John Via reported that the committee will meet July 31 at Guilford College.

Publications: Eleanor Cook introduced a guest, Joline Ezzell, who is involved with many publication efforts in the state. She expressed gratitude that the Board has proposed to begin funding the newsletter through the regular budget and said she has talked with Sandy Cooper about cooperative ventures with the State Library. The committee will meet on July 22.

Other Reports

North Carolina Libraries: Al Jones reported for Frances Bradburn who was unable to be present. He expressed satisfaction with the proposed budget for 1995-96 which would allow $8,000 per issue for the journal. Four members of the *North Carolina Libraries* Editorial Board were present and recognized: Suzanne Wise, Michael Cotter, Joline Ezzell, and Al Jones. A written report was submitted which told of the emergency meeting held in June to discuss NCLA's budget shortfall. In response to this situation, the fall and winter issues for 1994 will be combined and all other planned issues will be moved backward one issue. Since the Conference Issue is always the most expensive, the Editorial Board may request that conference profits help pay for this issue. This will be discussed at the October Board meeting.

ALA 1994 Annual Conference Report: ALA Councilor Martha Davis submitted a written report of proceedings in Miami Beach, June 23-30, 1994. Hot topics at the conference included the self-study report which suggested controversial changes in the organizational structure of ALA, funding of LSCA, and severing relationship with the Boy Scouts of America.

SELA: David Fergusson, SELA Representative, reminded Board members of the SELA Conference to be held in Charlotte, October 25-29. He proposed that there be a table at the conference showcasing publications and other work of NCLA. President Jackson suggested that he work with the Marketing Committee on this project and encouraged all to attend the October Conference.

Section and Round Table Reports

Children's Services Section: Edna Gambling reported that committee members had met jointly with the Children's Book Award Committee to select nineteen picture books for the next North Carolina Book Award. The committee is considering a fiction award for grades three through five to be instituted in September 1995.

College & University Section: Al Jones informed the Board of a planned seminar for Friday, September 30, 1994, at UNC-Charlotte on issues of collection management in the electronic environment.

Documents: Michael Cotter submitted a written report which told of a Spring 1994, workshop hosted by the Section on *Geographic Information Systems.*

Library Administration and Management Section: Dale Gaddis told the Board of a workshop to be held December 1-2, 1994, on *Managing Self; Managing Others*. A membership booth will be manned at NCASL and the Section is interested in co-sponsoring activities with other groups. The Section proposes to take responsibility for leadership training for the Association beginning in 1996.

NCASL: Augie Beasley submitted a written report listing Philip Ray Ferrel, who is a school principal in Harnett County, as recipient of the Administrator of the Year award. The biennial NCASL Conference will be held in Winston-Salem, October 6-7, 1994.

Public Library Section: Margaret Blanchard presented a written report which told of some of the activities of the ten committees within the Section. The Section's next Planning Council meeting will be September 16.

Reference & Adult Services Section: Allen Antone submitted a written report prepared by Bryna Coonin. The Fall 1994 RASS program will be held November 4 at UNC-Charlotte and will focus on the Information Super Highway from the user's point of view.

Resources & Technical Services Section: Catherine Wilkinson submitted a written report which told of the Section's plans to sponsor a program during the SELA Conference in October. The program title is *North Carolina Information Highway: A Prototype for the Region.*

New Members Round Table: Maria Miller related that members had already sponsored one workshop on the Internet and plan another in the fall.

NC Paraprofessional Association: Joan Carothers stated that an official directory for each officer and chair has been prepared and is at the printer.

Round Table for Ethnic Minority Concerns: Phyllis Johnson distributed the REMCO Newsletter for Spring 1994. The Round Table is interested in recruiting members. Their next meeting will be August 18 in Forsyth County.

Round Table on Special Collections: Sharon Snow reported that the Round Table is planning a joint meeting with the Society of North Carolina Archivists for May 1995.

Round Table on the Status of Women: Anne Marie Elkins submitted a written report which told of a workshop planned for September 9 in Winston-Salem. The topic of the workshop is *Understanding Yourself and Others: Communicating on an Optimum Level,* and the primary presenter will be Laura McLamb.

Technology & Trends Round Table: Cristina Yu presented a proposed Constitution and By-Laws for this new group.

Old Business
There was no old business to be addressed.

New Business
Dale Gaddis, Chair of the Library Administration & Management Section, proposed that the Section begin in this biennium to plan a leadership institute for the Association. Board members responded enthusiastically to this proposal.

News from the State Library
Sandy Cooper told the Board that there has been good will for libraries indicated in the present session of the General Assembly.

North Carolina is one of twenty-one states that have applied to the U.S. Department of Education for grants to fund state initiatives that will complement the emerging National Information Infrastructure. NCLA President Jackson, on direction of the Executive Board, wrote a letter to Richard Riley, Secretary of Education, supporting North Carolina's proposal—*Connecting People to the Information Highway: Migrating and Expanding the North Carolina Information Network.* Several orientation events about the N.C. Information Highway are planned including a July 28 teleconference to be

hosted at four sites. 408 library directors have been invited to attend this teleconference.

With the advent of library service in Warren County, there is now county-wide library service in all 100 counties of North Carolina.

A legislative workshop is planned for August 5.

Internal evaluation of the North Carolina Information Network is currently underway.

As a result of 2% budget cuts, two programs are being considered for cuts—the AV film service and the large print collection.

President's Report
Dates for Executive Board meetings in 1995 were determined:

Jan. 19-20 (Thurs. night and Fri.) ...... A site east of Raleigh

April 28 .... East Mecklenburg High School, Charlotte

July 21 .... Vance Chavis Lifelong Learning Center, Greensboro

October 3 .... Biennial Conference, Greensboro

President Jackson reported that she is appointing a task force to study the present structure of the Executive Board. This group will 1) study the present structure in light of equitable representation of the five library types (academic, community college, public, school, and special) representing NCLA, and 2) report to the President any findings of study with recommendations. The task force will report to the President by April 1.

Following the President's Report, the meeting was ad-

journed with directives for work groups to meet during lunch and present a short report to the entire group following their meetings. Herewith is a summary of those reports:
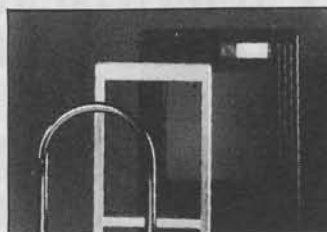
Communications Issues Work Group: Sandy Neerman reported plans for a September workshop on communication skills. This committee will continue to work on upcoming conferences.

Intellectual Freedom Work Group: Gene Lanier said that the next issue of *North Carolina Libraries* will contain information about how this group can be contacted for help with censorship issues. A preconference on the topic is planned in conjunction with the NCASL Conference. The work group will attempt to provide help for parents who are concerned about the use of information obtained through the Internet.

Organizational Issues Work Group: Janet Freeman asked that each Section and Round Table submit to Martha Fonville by September 1 a statement concerning how the group is addressing the vision outlined at the January retreat. Vice chairs are now being invited to attend Executive Board meetings, and Freeman requested that President Jackson send, by August 30, a personal reminder of this invitation. The group is preparing a list of local and regional associations and plans to form a council of affiliates for the purpose of sharing information about NCLA with these associations. The group has requested the Membership Committee to prepare a second type of promotional brochure for NCLA on the topic "Why should I join NCLA?"

Personnel Work Group: Martha Davis reported that the group met on July 7. Members have gathered North Carolina statistics on librarians by gender and ethnic background with

the vision to have a work force that represents the diversity of the population as well as exhibiting competence. A proposed plan for mentoring internship programs has been postponed with emphasis to be placed instead on efforts to recruit and retain minorities. To this end, the group will attempt to get the program which Hardy Franklin presented at ALA into North Carolina. It was proposed that *North Carolina Libraries* might devote an issue to personnel concerns.

Technology Work Group: John Via reported that a Technology & Trends Round Table has been established. Funding for this Round Table is of concern. A table will be set up at the NCASL Conference to help in recruiting school librarians to membership in the new group. Sandy Cooper shared information about the State Library's efforts toward implementing the Information Highway. A budget request in this regard from the Library will be prepared very soon, and NCLA will have input into a position paper of support. Cooper suggested a grassroots legislative effort to garner support for libraries' involvement with the Information Highway.

— Respectfully submitted,
Judy LeCroy, Secretary

Instructions for the Preparation of Manuscripts for *North Carolina Libraries*

1. **North Carolina Libraries** seeks to publish articles, materials reviews, and bibliographies of professional interest to librarians in North Carolina. Articles need not be of a scholarly nature, but they should address professional concerns of the library community in the state.

2. Manuscripts should be directed to Frances B. Bradburn, Editor, **North Carolina Libraries**, Media and Technology, State Dept. of Public Instruction, 301 N. Wilmington St., Raleigh, NC 27601-2825.

3. Manuscripts should be submitted in triplicate on plain white paper measuring 8 1/2" x 11" <u>and</u> on computer disk.

4. Manuscripts must be double-spaced (text, references, and footnotes). Macintosh computer is the computer used by **North Carolina Libraries**. Computer disks formatted for other computers must contain a file of the document in original format and a file in ASCII. Please consult editor for further information.

5. The name, position, and professional address of the author should appear in the bottom left-hand corner of a separate title page. The author's name should not appear anywhere else on the document.

6. Each page should be numbered consecutively at the top right-hand corner and carry the title (abbreviated if necessary) at the upper left-hand corner.

7. Footnotes should appear at the end of the manuscript. The editors will refer to <u>The Chicago Manual of Style</u>, 14th edition. The basic forms for books and journals are as follows:

   Keyes Metcalf, <u>Planning Academic and Research Library Buildings</u> (New York: McGraw, 1965), 416.

   Susan K. Martin, "The Care and Feeding of the MARC Format," <u>American Libraries</u> 10 (September 1970): 498.

8. Photographs will be accepted for consideration but cannot be returned.

9. Upon receipt, a manuscript will be acknowledged by the editor. Following review of the manuscript by the editor and at least two jurors, a decision will be communicated to the writer. A definite publication date cannot be given since any incoming manuscript will be added to a manuscript bank from which articles are selected for each issue.

10. **North Carolina Libraries** holds the copyright for all accepted manuscripts. The journal is available both in print and electronically over the North Carolina Information Network.

11. Issue deadlines are February 10, May 10, August 10, and November 10. Manuscripts for a particular issue must be submitted at least 2 months before the issue deadline.

Sara Aull Student Paper Award Competition

The North Carolina Chapter of the Special Libraries Association announces its annual Sara Aull Student Paper Award Competition of 1994-95. The Competition provides an award of $200.00 for the best student paper of publishable quality relating to special libraries.

This award was initiated in 1981 to honor Sara Aull who served as editor of the *NC/SLA Bulletin* from 1975-1981. She has been an active member of the Special Libraries Association since 1952. In 1983, she was honored by being inducted into the SLA Hall of Fame.

GUIDELINES

- Eligible papers include term papers, research papers and essays of 5,000 words or less written for classes or for this competition.
- The paper should not have been previously published nor should it be currently under consideration for publication.
- An independent panel of judges will evaluate each paper on its originality, professional significance, clarity of expression, and its relation to the field of special librarianship.
- Entrants must either be currently enrolled in a Master of Library Science degree program within the state of North Carolina or have graduated from such a program or any ALA-accredited program within 12 months prior to the submission deadline.

The deadline for submission of papers is February 1, 1995.

The award will be presented at the North Carolina Chapter's annual business meeting in Spring, 1995. The paper or a summary may be published in the *NC/SLA Bulletin* after which the author may submit the paper to other publications.

Students and recent graduates are encouraged to enter this competition that rewards an individual for excellence in writing while contributing to the literature of special librarianship.

Further information may be obtained from the representatives listed below:

Dr. Robert M. Ballard, School of Library and Information Science, North Carolina Central University, Durham 27707

Dr. Larry Auld, Department of Library and Information Studies, East Carolina University, Greenville 27834

Dr. Beatrice Kovacs, Department of Library and Information Studies, University of North Carolina at Greensboro, Greensboro 27412

Dr. Evelyn Daniel, School of Information and Library Science, University of North Carolina at Chapel Hill, Chapel Hill 27599-3360

or

— **Ginny Hauswald, Sara Aull Student Competition Chair,** *Winston-Salem Journal,* **News Library, PO Box 3159, Winston-Salem, NC 27102-3159**; voice: 910/727-7274; fax: 910/727-4071

NCLA North Carolina Library Association

Use the application below to enroll as a member of the North Carolina Library Asssociation or to renew your membership. All memberships are for one calendar year. THE MEMBERSHIP YEAR IS JANUARY 1 THROUGH DECEMBER 31. If you join during the last quarter of the year, membership covers the next year.

Dues (see below) entitle you to membership in the Association and to one section or round table. For each <u>additional</u> section or round table, add $5.00. Return this form with your check or money order, payable to North Carolina Library Association.

NCLA DUES
(Membership and One Section or Round Table)

- **FULL-TIME LIBRARY SCHOOL STUDENTS** (two years only) ... $10

- **RETIRED LIBRARIANS** $15

- **NON-LIBRARY PERSONNEL:** (Trustee, Non-salaried, or Friends of Libraries member) $15

- **INSTITUTIONAL** (Libraries & Library/Education-related Businesses) $50

- **LIBRARY PERSONNEL**
  Earning up to $15,000 .... $15
  Earning $15,001 to $25,000 .... $25
  Earning $25,001 to $35,000 .... $30
  Earning $35,001 to $45,000 .... $35
  Earning $45,001 and above $40

- **CONTRIBUTING** (Individuals, Associations, and Firms interested in the work of NCLA) $100

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NORTH CAROLINA LIBRARY ASSOCIATION

please print or type

_____ New membership   _____ Renewal

Membership Number if Renewal _____

Name _____
      Last   First   Middle

Title _____

Library _____

Business Address _____

_____
          City   State   Zip

Daytime Telephone Number _____
                    Area Code

Mailing Address (if different from above) _____

_____

TYPE OF LIBRARY I WORK IN:
____ Academic
____ Public
____ School
____ Special
____ Other _____

CHECK SECTIONS AND ROUND TABLES
ONE INCLUDED IN BASIC DUES. Add $5.00 for each <u>additional</u> section or round table.

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____ Community & Junior College Libraries Section
____ Documents Section
____ Library Administration & Management
____ NC Association of School Librarians
____ NC Public Library Trustees Association
____ Public Library Section
____ Reference & Adult Services Section
____ Resources and Technical Services Section
____ New Members Round Table
____ NC Library Paraprofessional Association
____ Round Table for Ethnic Minority Concerns
____ Round Table on Special Collections
____ Round Table on the Status of Women in Librarianship
____ Technology & Trends Round Table

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$ _____ Membership and one section/round table

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c/o State Library of North Carolina
109 East Jones Street
Raleigh, NC 27601-1023

NCLA

THANK YOU FOR YOUR SUPPORT, NCLA Office Hours: Mon.-Fri. 9-1 Telephone (Voice & FAX) 919/839-NCLA

New Books for Fall 1994

THE LANGUAGE THEY SPEAK IS THINGS TO EAT

Poems by Fifteen Contemporary North Carolina Poets
Edited by Michael McFee

North Carolina is well known for its fiction writers, but the state is also home to a number of the nation's best poets. A companion to the contemporary North Carolina fiction anthology *The Rough Road Home* (1992), this book provides a substantial sampling of their recent bounty. Michael McFee has chosen from eight to twenty poems by each of fifteen poets. Contributors include A. R. Ammons, Maya Angelou, James Applewhite, Fred Chappell, Heather Ross Miller, and Reynolds Price.
-2172-1, Nov., $24.95 Tr cloth
-4483-7, Nov., $12.95 Tr paper

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Also available
THE ROUGH ROAD HOME

Stories by North Carolina Writers
Edited by Robert Gingher
-2064-4, 1992, $24.95 Tr cloth
-4397-0, 1992, $14.95 Tr paper

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THE LOST BOY

A Novella
by Thomas Wolfe
Edited and with an Introduction by James W. Clark, Jr.
Illustrations by Ed Lindlof

Thomas Wolfe's *The Lost Boy* is a captivating and poignant retelling of an episode from Wolfe's childhood. It is the story of Wolfe's brother Grover and his trip to the 1904 St. Louis World's Fair. *The Lost Boy* captures beautifully the experiences of growing up at the turn of the century and the exhilaration and loss of childhood. "[A] moving valediction and a sure-footed example of Wolfe's stylistic power."—*Publishers Weekly*
-2063-6, Aug., $19.95 Tr cloth
-4486-1, Aug., $9.95 Tr paper
A Chapel Hill Book
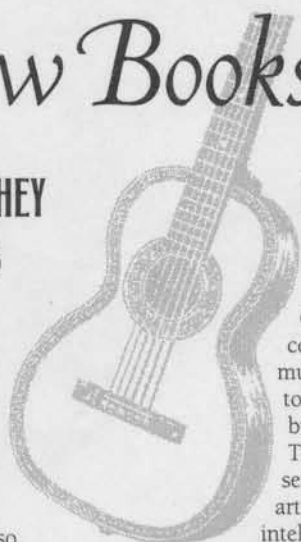
HIGH LONESOME

The American Culture of Country Music
by Cecelia Tichi

Cecelia Tichi shows that country music is a national music form, one that belongs to all Americans. "A daring but successful book. . . . Tichi takes country music seriously, and she gives the art form the kind of serious intellectual treatment that it has always needed and deserved."—Bill C. Malone, author of *Country Music, U.S.A.*
-2134-9, Sept., $39.95 Tr cloth
7 x 10, 138 illus., music CD with 23 tracks

New in paperback
RAISED IN CLAY

The Southern Pottery Tradition
by Nancy Sweezy
New Afterword by the Author

Focusing on more than thirty southern potters, Nancy Sweezy tells how families preserve and practice the traditional art of pottery making today. "A book with enough heart and soul to be worthy of the people [Sweezy] writes about." —Charles Counts, *American Craft*
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8½ x 11, 316 illus.
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LOVE LYRICS OF ANCIENT EGYPT

Translated by Barbara Hughes Fowler

These vibrant love poems are remarkable for their innocent sensuousness and their ability to preserve the charm of a long-lost civilization. Combining her notable skills as a translator and a
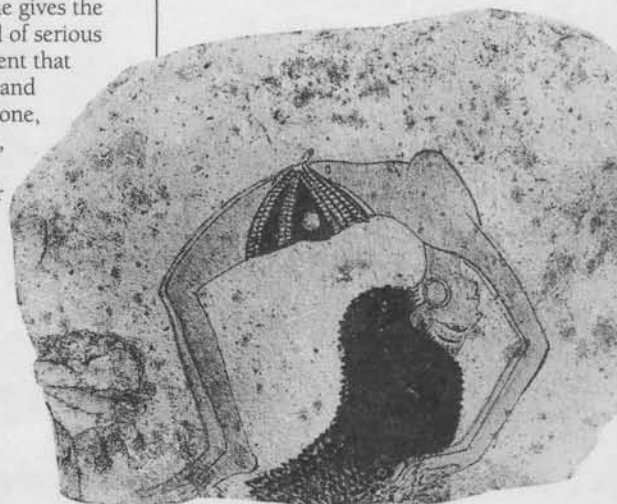
Illustration courtesy of the Museum of Turin

poet, Barbara Fowler provides the first accurate translation of these love lyrics into modern English-language poetry with renderings which are both elegant and correct.
-2159-4, Sept., $19.95 Tr cloth
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ONE HOUR

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New Introduction by Margaret Rose Gladney

Southern novelist and activist Lillian Smith (1897–1966) considered *One Hour* her best work of fiction. The novel, originally published in 1959 and long out of print, brilliantly depicts the destructive effects of mass hysteria on the people of a small southern town. "[Smith] has fused much local color and much universal thought. . . . Modernity and the South have met head on, and this extraordinary woman has had the courage and the intellect to record their tragic collision."—*New York Times Book Review*
-2178-0, Sept., $32.50 cloth
-4489-6, Sept., $15.95 Tr paper
A Chapel Hill Book

Upcoming Issues ━━━

Spring 1995   Money Changing in the Library
             Harry Tuchmayer, Guest Editor

Summer 1995   Sex and the Library
             Dr. Pauletta Bracy, Guest Editor

Fall 1995   Resource Sharing
             Barbara Miller, Guest Editor

Winter 1995   Conference Issue

Spring 1996   School Libraries
             Diane Kessler, Guest Editor