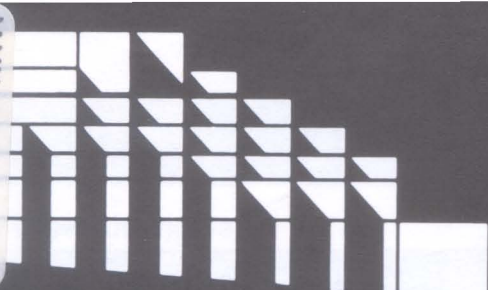


Z
732
T2053
V.5
no. 1
1989

MAIN PERIODICALS

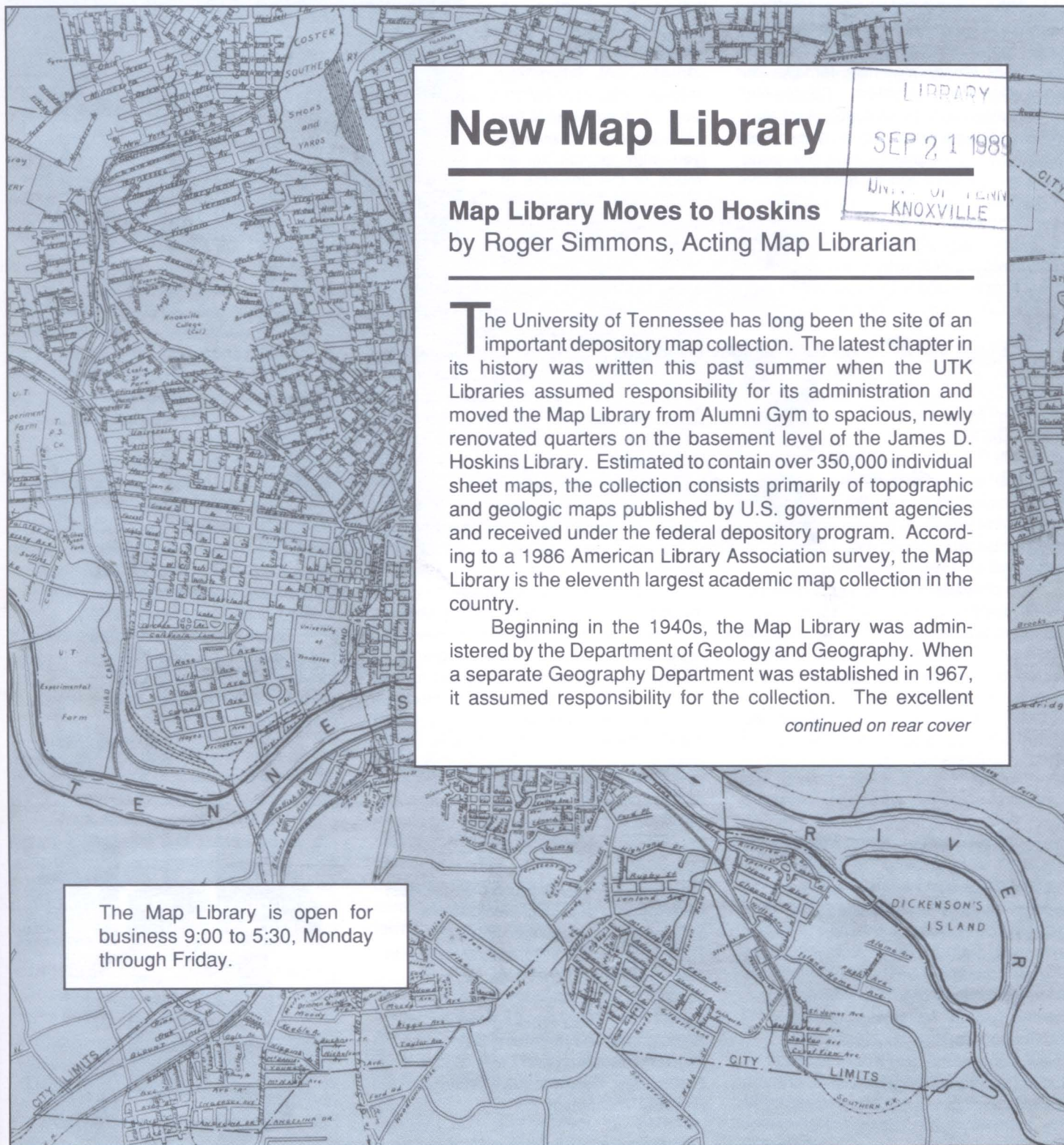


The UTK Librarian

Volume 5, Number 1

Newsletter of the University of Tennessee, Knoxville Libraries

Fall 1989



New Map Library

Map Library Moves to Hoskins

by Roger Simmons, Acting Map Librarian

The University of Tennessee has long been the site of an important depository map collection. The latest chapter in its history was written this past summer when the UTK Libraries assumed responsibility for its administration and moved the Map Library from Alumni Gym to spacious, newly renovated quarters on the basement level of the James D. Hoskins Library. Estimated to contain over 350,000 individual sheet maps, the collection consists primarily of topographic and geologic maps published by U.S. government agencies and received under the federal depository program. According to a 1986 American Library Association survey, the Map Library is the eleventh largest academic map collection in the country.

Beginning in the 1940s, the Map Library was administered by the Department of Geology and Geography. When a separate Geography Department was established in 1967, it assumed responsibility for the collection. The excellent

continued on rear cover

The Map Library is open for business 9:00 to 5:30, Monday through Friday.

Knoxville, circa 1960

A Message from the Dean of Libraries

The 1988/89 academic year was my first at UTK. It was an exciting and productive year, as well as a time of learning. As I look back at my time here, I'm pleased with the accomplishments the Library has made yet aware of how much more remains to be done.

Although we received a significant increase in our materials acquisitions funds for the current year, underfunding for books and other library materials remains our most significant problem. Double-digit periodicals price inflation continues to rage, and even though we have been able to ease the freeze on the purchase of new periodicals a bit, we are very far from being able to purchase even all the core titles you need. I have prepared a short paper about the causes and possible solutions to the periodicals problem which I will be sending to you shortly, along with an invitation to join us in a full discussion of this very critical issue.

It is clear that we cannot continue to rely solely on State and University funds to support our Library acquisitions program. Thus, in May 1989 we launched the Tennessee Imperative, a campaign to raise \$6 million in private funds to build endowments for materials purchases. We are already more than half-way to our goal. Our fund-raising efforts, however, will not stop when the target has been met. Library fund-raising will be a regular ongoing activity.

I'm pleased to report on the development of another long-term effort to stimulate interest in the Libraries. This summer, we organized a Library Friends group and have started the planning for several exciting events in the coming year. You will soon be receiving more information about the Library Friends, and I hope you will all become active supporters of the group.

Like all other universities in this country, we can no longer rely on the holdings of the library to provide all, or even most, of the materials needed for the instructional and research activities on campus. Universities and other research organizations are becoming increasingly interdependent. It is our goal at the UTK Libraries to provide you with access to as much of the universe of information as possible. To that end, we have concentrated much of our effort this year on improving old and forging new cooperative relationships. New arrangements with Vanderbilt and ORNL focus on close coordination of collection development and speedy delivery of materials. And, we are no longer charging out-of-pocket costs for most materials we borrow for you and your students through Interlibrary Loan. You will be hearing more in the coming months about new developments in this area.

Collections and access to materials we don't own are important. So is the array of services we offer you. This year we achieved some major improvements in OLIS, our online library information system, including speedier access and the ability to sort and print citations. We've also continued to develop new programs of bibliographic instruction, designed to help undergraduate and graduate students learn more about the nature and structure of information sources in specific subjects; to offer access to new forms and types of



databases, including those of other libraries, full texts, and on CD-ROM; to provide speedy delivery services among our libraries and to your offices (the latter for a small fee); and to work intensively with graduate students and faculty who are beginning or are in the midst of research projects.

As many of you know, I have been in the forefront of the struggle to protect the privacy of library users. You will find enclosed in this issue a form which will allow you to waive that privacy if you choose. But be assured that if you do not sign the form, the books you read and check out from the library will be your concern solely.

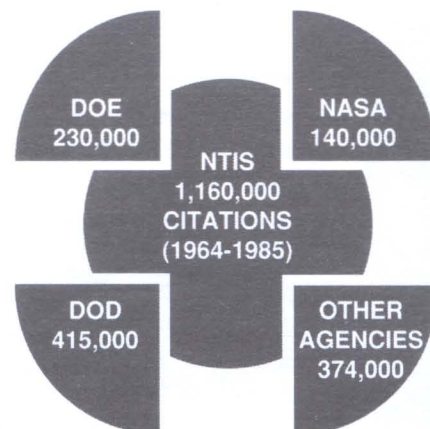
Thank you all for your support in what has been an exciting first year. I look forward to working with you in the months ahead. Please feel free to come by or call as you will.

Paula Kaufman
Dean of Libraries

Composition of the NTIS Bibliographic Database (see article, page 3)

Subject Coverage: Administration and Management; Aeronautics and Aerodynamics; Agriculture and Food; Astronomy and Astrophysics; Atmospheric Sciences; Behavior and Society; Biomedical Technology and Engineering; Building Industry Technology; Business and Economics; Electrotechnology; Energy; Environmental Pollution and Control; Health Planning; Industrial and Mechanical Engineering; Library and

Information Sciences; Materials Sciences; Mathematical Sciences; Medicine and Biology; Military Sciences; Missile Technology; Natural Resources and Earth Sciences; Navigation, Guidance, and Control; Nuclear Science and Technology; Ocean Technology and Engineering; Photography and Recording Devices; Physics; Propulsion and Fuels; Space Technology; Transportation; Urban and Regional Technology



Source: NTIS Bibliographic Database Guide

Resources

CRL—The Other Alternative

by Milton H. Figg, Collection Development Librarian

The Center for Research Libraries in Chicago was originally established in 1949 under the name Midwest Inter-Library Center. Original membership consisted of ten founding institutions. Today membership is one hundred thirty-seven. The major objective of this library cooperative is to provide infrequently used or rare titles to member libraries. CRL now holds approximately 3,600,000 volumes and 1,200,000 microforms.

Members are required to pay a membership fee for participation in CRL activities. The fee is based on library size and acquisitions expenditures. The University of Tennessee is a full voting member. As such, the University has the privilege of recommending new titles for possible purchase by the cooperative. All members vote on proposed acquisitions.

Access to holdings at CRL is provided to member libraries through various guides, bibliographies and a microfiche catalog. The current microfiche catalog supplement was updated this year. CRL's *Handbook* provides a subject break-

down of the major portions of the collection. A copy of the *Handbook* is available in Interlibrary Loan, which handles all requests for CRL materials.

The collection at CRL is meant to supplement and complement members' collections. Among the foreign materials are dissertations, newspapers, scientific and technical publications. The scientific and technical publications relate primarily to the Soviet Union, Japan and India. The serials and monographs from the Academy of Sciences of the U.S.S.R. comprise the

largest portion of the foreign materials and include backfiles to 1724. Other materials include area studies for Africa, East Asia, South Asia and Southeast Asia. Materials originating from foreign countries are an excellent example of how CRL augments members' holdings.

For domestic coverage the cooperative library includes U.S. ethnic newspapers, U.S. general circulation newspapers, general periodicals and U.S. state documents. The state documents collection dates back to 1952 with some pre-1952 backfiles. CRL can also provide U.S. census data.

In light of limited acquisition budgets, membership in CRL can be particularly advantageous. Overall benefits include free access to rare and infrequently used materials in a variety of formats. CRL also provides fairly rapid delivery service as well as unlimited loan periods. Telefacsimile delivery is now available.

For more information on the Center for Research Libraries contact Interlibrary Loan (974-4240).



Milton Figg chats with history professors Paul Pinckney and John Bohstedt, who are frequent users of CRL materials.

NTIS—Access to U.S. and Foreign Research

by David Gillikin, Reference Librarian

The National Technical Information Service, known as NTIS, is one of the leading producers of specialty information in the world. NTIS handles the public sale of research, development and engineering reports sponsored and supported by the United States government. NTIS also distributes studies prepared by national, state, and local government agencies, and foreign technical reports. Other functions of NTIS include licensing U.S. Government-owned patents and inventions, distributing government-funded translations, managing the Center for the Utilization of Federal Technology, and managing the Federal Software Exchange Center.

NTIS publishes full summaries of current U.S. and foreign research reports in a variety of newsletters, journals, and indexes. The full texts of the cited technical

reports are also available for purchase in paper and microform.

Citations and abstracts of these technical reports are available at the University of Tennessee Libraries through two sources. *Government Reports Announcements & Index*, a biweekly publication containing current citations of all materials received by NTIS, is available in paper format in Documents and Microforms, Hodges Library (call number Z7916.G68).

The *NTIS Bibliographic Database* provides online access to all of the information found in the *Government Reports Announcements & Index*, as well as several other print publications. The NTIS database comprises citations and abstracts of documents from the U.S. Department of Energy, U.S. Department of Defense, National Aeronautics and Space Adminis-

tration, other Federal, non-Federal, and foreign agencies and sources. The non-U.S. governmental material found in the database emphasizes information from Western Europe and Japan that is of potential industrial interest.

The *NTIS Bibliographic Database* covers a large variety of subjects in both the hard and soft sciences and provides a substantial amount of information not easily accessed with paper indexes. Database coverage is from 1964 to the present, with updates to the database being added on a biweekly basis.

Database Search Services in the Hodges Library can access the *NTIS Bibliographic Database* through a variety of commercial vendors. For information on searching this or any other database, call 974-4936.

Public Services

IRIS: The Users Speak Out

by Earl Bush, Head, Interlibrary Loan, and Linda Phillips, Head, Cooperative Information Services

"Outstanding!!" "Indispensable." "I was amazed to receive my item so quickly. Thus, I was able to start my experiment much earlier than I planned. The service saved me a lot of time." These and the quotes that follow come from users of IRIS, a federally-funded resource sharing project that demonstrates speedy access to materials held by UTK and Vanderbilt libraries. For the most rapid turnaround possible, interlibrary loan requests and journal articles are exchanged via telefacsimile (fax) transmission, and borrowed books are shipped first class or by commercial carrier.

Although IRIS emphasizes access to science and technology information, use of workstations in Hodges Reference and the AgVetMed Library, use of fax for journal articles, and ILL delivery are available to UTK users in all subject areas.

John Romeiser, Professor and Head of Romance Languages, reports less than one week turnaround on the several articles he has received from Vanderbilt. "It is generous. It is quick, too, considering the number of people and agencies involved."

Because fax and postage charges are subsidized by a one-year U.S. Depart-

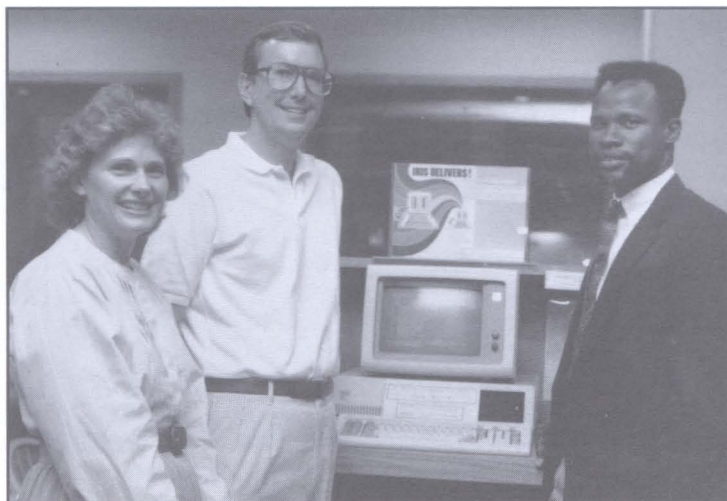
ment of Education Title IID grant, users have not had to pay for materials received through IRIS. "Last time a page from this journal cost \$5—this time, same journal—no charge." The grant also permits Interlibrary Loan (ILL) to experiment with the delivery of books and articles to campus departmental offices.

The major criticism of the fax service at both UTK and Vanderbilt is the quality of the fax copy. Although both libraries use plain paper state-of-the-art fax machines, static on the telephone lines frequently causes fuzzy results, particularly in photographs or other visuals.

Long term resource sharing between libraries ultimately depends upon collection planning. UTK and Vandy librarians are comparing sci-tech journal collections to establish lists of titles essential for retention on campus, and those eligible for resource sharing. "I hope that this does not serve to restrict journal subscriptions by the library." Rather than restrict, cooperative collection development increases the probability that the home library will have the most needed, core titles. With resource sharing commitments to ensure that at least one of the participating libraries will make lesser-used titles available, funds that once might have

been spent to acquire a smattering of titles in all subjects can now be spent to strengthen the core areas. Each library builds on its areas of strength.

"Wonderful! Absolutely wonderful! These articles were urgently needed and the speed with which they were received was appreciated. Can you keep the IRIS project four more years until I complete my Ph.D.?" "It is a great service. It takes much less time than standard interlibrary loan and is an asset to the library system. I hope you can keep this system after the year is over." We hope so, too.



Linda Phillips, John Romeiser (Head of the Department of Romance Languages), and Earl Bush at one of the IRIS terminals.



Opera buffs Pauline Bayne, Head of the Music Library, and John Meacham, Head of the Music Department, enjoy some of the videos available at the Music Library.

This is the age of video, isn't it? People of all ages are renting or buying videotapes of old and new movies, exercise routines, music of all kinds, and how-to instructional programs. However, besides entertainment value, video technology also offers an enhanced educational opportunity in many fields.

For students of opera—both singers and opera buffs—videotapes at the Music Library make it possible to study specific operas in their entirety—opera as drama, opera as music, opera encompassing stage and costume design and choreography.

Opera tapes range from the major works of Mozart, Puccini, Verdi, and Wagner to Gilbert and Sullivan's *Mikado* or *Love of Three Oranges* by Prokofiev. The productions of many opera companies are represented: the New York Metropolitan Opera, La Scala in Milan, Glyndebourne Festival Opera, Royal Opera in London, Bayreuth Festival, and others.

Other music subject areas on videotape include: master classes, where major musical artists demonstrate their teaching methods; historical tapes that show early musical instruments or discuss the secrets of Stradivari violin-making; and performance tapes of jazz and classical artists.

The High School Connection

by Angie LeClerc, Head, User Education

The University of Tennessee Libraries and the Knox County Materials Center began a cooperative program of bibliographic instruction and circulation privileges for Advanced Placement high school students in 1984.

The basic objective of the cooperative program is to work with English teachers and high school librarians to provide wider access to critical materials for their students.

The program provides for: (1) a free UTK Libraries card for any Knox County high school student enrolled in an Advanced Placement course; (2) a free library card for any Knox County high school teacher; (3) a program of orientation and bibliographic instruction.

The program has been a smashing success. From August to May of 1989, 276 students and 25 teachers checked out some 3,500 books. During that same period 16 groups came to the library for in-depth assistance and tutelage with their research needs.

At the request of a high school librarian and English teacher, a six-hour bibliographic session is provided for Advanced Placement classes. The aim is to cooperatively teach

students how to develop a subject search, how to use a periodical index, how to find a journal article, and then how to integrate those outside sources into their own thinking and writing. Students arrive with research assignments in hand and leave with six to ten photocopies of journal articles to document their theses.

The goal is to improve the information-seeking skills of college-bound students. Excellence in information skills leads to improved retention in college, as well as improved performance. Yet finding information is a key skill that our beginning students often lack. The program has produced a close working

relationship between UTK librarians and high school teachers and librarians.



Supporters of the high school program: Barbara Bell, User Education; Aubrey Mitchell, Associate Dean for Public Services; Lib Hotchkiss, Supervisor of Materials, Knox County Schools; Angie LeClerc.



Charles Johnson, History Department, with visiting World War II scholar Morton Sosna of Stanford University.

The World War II Collection

Since the original appeal for material documenting World War II appeared in *The Library Development Program Report/1983-84*, the World War II Collection has grown to include over 25,000 items (fifty linear feet) donated by more than two hundred separate individuals. History professor Charles W. Johnson, who initiated the project and who is primarily responsible for its growth, is now the Director of the Center for the Study of War and Society, with offices just down the hall from the Special Collections Library in Hoskins.

The Collection now comprises material in numerous formats—letters, diaries, photographs, taped interviews, pamphlets—and contains books on diverse military subjects, ranging from a *Basic Field Manual: Jungle Warfare* to *The Cook Book of the United States Navy*. Over two thousand items have been donated since our last description in 1985, including some powerful POW photographs of a camp in Germany donated by Arthur D. Lewis.

The Library continues to be interested in documenting the common soldier's contribution in World War II, as does Dr. Johnson. We are particularly interested in the following groups: persons who were living in Tennessee in the years 1939 to 1945 and who joined the military; persons from elsewhere who served in Tennessee; current residents of Tennessee who served in the military during the war.

We feel that it is important not to forget the largest military conflict in history, in which 407,316 Americans died and 607,846 were wounded. If you have appropriate material, please contact Charles W. Johnson (615-974-5421) or the Special Collections Librarian, James B. Lloyd (615-974-4480).

Technology Brings Changes

Painless Subject Searching on OLIS

by Lana Dixon, Reference Librarian

"Does the library have any books on ____?" is a question asked frequently at the reference desk. In many situations the user has already attempted to find the topic in the online catalog but has failed to find any citations.

One reason for lack of success is the user's employment of everyday vocabulary or natural language. Subject searching in the online catalog is governed by a controlled vocabulary called the *Library of Congress Subject Headings (LCSH)*. Subject headings in *LCSH* often conform to natural language, but not always.

LCSH reflects many years of revision, and it continues to change with our society. In past years when a subject heading changed, a cross reference card was added to the card catalog leading the user to both the old and new forms of a heading, or to related headings. The task is not so simple in a computerized catalog. Complicated programming is required to accomplish the intricate linking of variant forms of entries.

This linking is known as authority control. Presently, the online catalog does not have authority control, which means no signposts exist to guide the user to unexpected variations. Authority control is a highly desired feature, but future availability is dependent on the catalog vendor.



Lana Dixon and Pat Droppleman, College of Nursing, consult the Library of Congress Subject Headings.

Use of *LCSH* becomes more critical for subject searching in the absence of authority control. Searches are more effective and less frustrating when the exact forms of entry for relevant headings have been determined and related headings noted.

Interestingly, a recent online catalog use study found that most users surveyed experienced satisfaction with the citations found through natural language subject searching. The fact that natural language often worked points to the pervasive use of natural language in *LCSH* vocabulary.

The study did note, however, that users' failures in subject searching illustrated the need to use *LCSH*. For example,

works on the Battle of Nashville must be searched using the heading, NASHVILLE, BATTLE OF, 1864. To find books about killer bees, a check of *LCSH* reveals the subject heading, BRAZILIAN HONEYBEE.

One must keep in mind that *LCSH* is limited to current practice. No history of the usage of a term is provided. For example, the entry in *LCSH* for space shuttles indicates that REUSABLE SPACE VEHICLES is a broader term—a broader term, *now*. What is not indicated is the exclusive use of REUSABLE SPACE VEHICLES in the

past to describe works about space shuttles. Comprehensive retrieval of books on space shuttles in the online catalog requires use of both terms. Authority control will not alleviate this type of situation, but it will definitely solve the problem of headings which are being discontinued in favor of newer ones.

The lack of authority control affects, also, subject searching by corporate and personal names. Cataloging rules have changed significantly over the years. The catalog reflects both old and new ways of constructing forms of name. Authority control will make a substantial difference when searching for names which have variant forms.

For example, to look for works about Hilda Doolittle, or H.D., as she is also known, both forms of the name must be searched to find all of the materials in the catalog: DOOLITTLE, HILDA and H.D. (HILDA DOOLITTLE). *LCSH* does not include all corporate and personal names. Only a selected few are included as pattern headings to show possible subdivisions.

Overall, subject searching in the online catalog can be relatively painless and far more effective if *LCSH* is consulted. Multiple copies of the three-volume *Library of Congress Subject Headings* are located near the catalog terminals in most library locations. For assistance in using either *LCSH* or the online catalog, consult a reference librarian.

Dialing-In to the Online Catalog

Dial-up access to the OLIS catalog is provided through the campus DCA network. From a terminal connected to the network, enter LIBRARY at the Host Name> prompt. Microcomputers can dial-in to one of the following numbers:

974-4281, 974-6711, 974-6741	1200 baud
974-6811	2400 baud

Telecommunication software on a microcomputer should be set to 7 data bits, 1 stop bit, even parity. For both terminals and micros, the Caps Lock key should be on. At the end of a session, enter END to return to the DCA prompt.

For those of you who are attached to the Ethernet network via a DecServer 200 (if you can get to a Local> prompt, you're in this category), enter C LIBRARY at the Local> prompt. Again, have your Caps Lock on.

If you have problems or questions, please contact the Library Automation office at 974-4304.

An Up-To-Date, Reliable Database

by Agnes Grady, Head, Cataloging

When you search on OLIS you can be 98% confident that you will locate all 850,000 unique UTK titles.

In 1987 when the online catalog became available for searching by library users, there were several qualifications about the content of the database. Although all material acquired from 1975 to date and much of the older material was included in the database, there were some large pockets of older material for which the only access was the card catalog. Among these pockets were serial titles which had ceased publication, individual titles of many monographic series, and several thousand titles of books, audiovisual material, and microforms scattered throughout the entire collection.

During the last two years staff in both the Cataloging and Serials departments have been working diligently to complete these pockets by converting the existing cataloging records to machine-readable form for adding to the database. In fact, a



The Cataloging department—some of the many Library staff who maintain the OLIS database.

great deal of the work during the last year means that there is information in the database that is not in the card catalog.

In searching OLIS you should be aware of the fact that "see" references from older subject terms to newer subject terms are lacking. For example, we have many entries under the obsolete heading "Negroes" as well as under the current headings "Afro-Americans" and "Blacks." If

you don't find what you are searching for, remember to ask a reference librarian.

Database maintenance had to be put on hold during the last year and a half while the OLIS system was undergoing a major upgrade. Now that the system has been stabilized, several database maintenance activities will proceed. These activities include correction of information in existing records, adding bibliographic access points, and adding holdings information of existing copies in the Libraries not reflected in OLIS.

All of this reported activity demonstrates the dynamic nature of the OLIS online catalog. It is growing not only with currently received material but also with information about existing material; the information within records is changing daily to reflect not only the best access for retrieving UTK Libraries material but also the latest locations. The cataloging team is working to provide you with a reliable bibliographic database.



New Printing Options Available in Online Catalog

Major improvements to public printing from OLIS, the Online Library Information System, are now available. New printers have been added to OLIS terminals in the Hodges Library reference area, the Current Periodicals room, the Reserve room, and at the information stations on the third through sixth floors.

New OLIS software makes the printers more useful. In addition to printing a single record, users are now able to save selected search results for printing. Any citation of interest can be copied with the SAV command into an individual save file. At the end of the search session, but before printing, the user may choose to sort the saved citations by author, title, or subject heading. Saved citations may be printed in either long or short versions of the record.

Although every terminal does not have a printer, printing is possible from most OLIS terminals. The printing software allows users working at a terminal without a printer to send their saved file to a nearby printer. Detailed instructions on using these new features are posted at OLIS terminals.

Chris Elmore, system manager for the online catalog, and Tamara Miller, Head of Library Automation, try out the new printing options.

Map Library Moves to Hoskins, *continued from front cover*

condition and organization of the library can be credited to the two Geography faculty members who have directed its growth, Dr. Robert G. Long from 1967 to 1980, and Dr. Leonard W. Brinkman from 1980 to the present. Dr. Brinkman's activities, in particular, have had a significant impact on the quality of the library. These include unpacking, sorting and filing the large Army Map Service collection stored in boxes since the late 1940s, classifying thousands of miscellaneous maps, and building the collection through solicitation, exchanges and the occasional windfall.

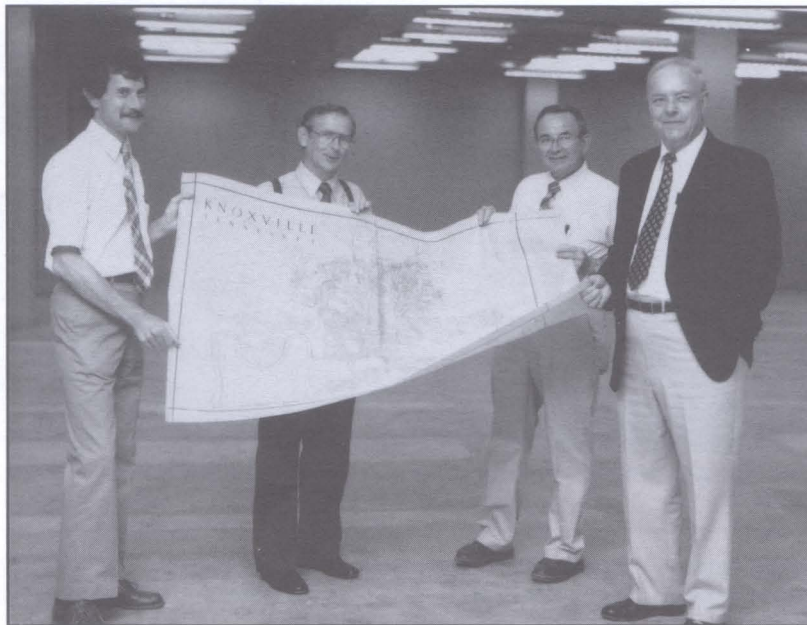
The largest part of the Map Library's collection is the topographic map series published by the U.S. Geological Survey. This series has been produced at various scales over many years, some as early as the late 1880s. Over 99% complete, including all periodic

revisions, the collection is a major resource for reference and archival use in Tennessee and the Southeast.

The library also contains a large and historically important collection of maps produced by the Army Map Service for use

in World War II. The University of Tennessee was one of a hundred sites that received surplus copies of these maps during the 1940s. They provide intermediate and large scale coverage of the combat theaters of operation around the world, which may be of special interest to scholars of that conflict. These maps also serve as the core collection for world topographic coverage.

Supplementing these depository series of base maps is a collection of miscellaneous subject maps of the United States and of the world. These contain information on a wide array of subjects: national parks, city plans, transportation, vegetation, road maps, port facilities, geology, hydrology, soils, national forests, and so on. Five thousand of the maps have been classified and can be accessed through a printed catalog.



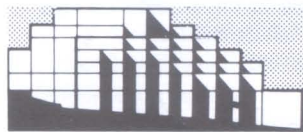
Roger Simmons and geographers James Carter, Leonard Brinkman, and Sidney Jumper at the soon-to-be-renovated site of the new Map Library.

The UTK Librarian is a publication for the faculty and staff of the University of Tennessee, Knoxville. It is published quarterly by the University of Tennessee Libraries, 1015 Volunteer Blvd., Knoxville, TN 37996-1000. Angie LeClerc is editor; Martha Rudolph is assistant editor. Photos are by Nick Myers, CEV&P. Questions or comments should be referred to the Library's User Education office, 974-4273.

The University of Tennessee, Knoxville does not discriminate on the basis of race, sex, color, religion, national origin, age, handicap, or veteran status in provision of educational opportunities or employment opportunities and benefits.

UTK does not discriminate on the basis of sex or handicap in education programs and activities which it operates, pursuant to requirements of Title IX of the Educational Amendments of 1972, Public Law 92-318; and Section 504 of the Rehabilitation Act of 1973, Public Law 93-112; respectively. This policy extends both to employment by and admissions to the University.

Inquiries concerning Title IX and Section 504 should be directed to the Office of the Affirmative Action Director; 403-C Andy Holt Tower; The University of Tennessee, Knoxville; Knoxville, Tennessee 37996-0144; (615)974-2498. Charges of violation of the above policy also should be directed to the Office of the Affirmative Action Director.

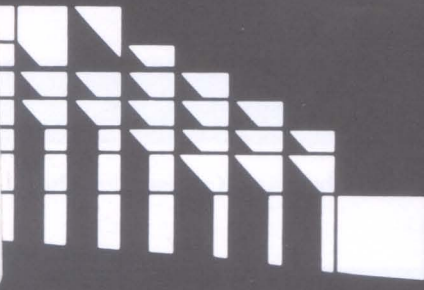


**UNIVERSITY
LIBRARIES**

The University of Tennessee/Knoxville
1015 Volunteer Blvd.
Knoxville, TN 37996-1000
EO1-6010-001-90

Z
732
.T2U53
v.5
no.2
1990
spring

MAIN PERIODICALS

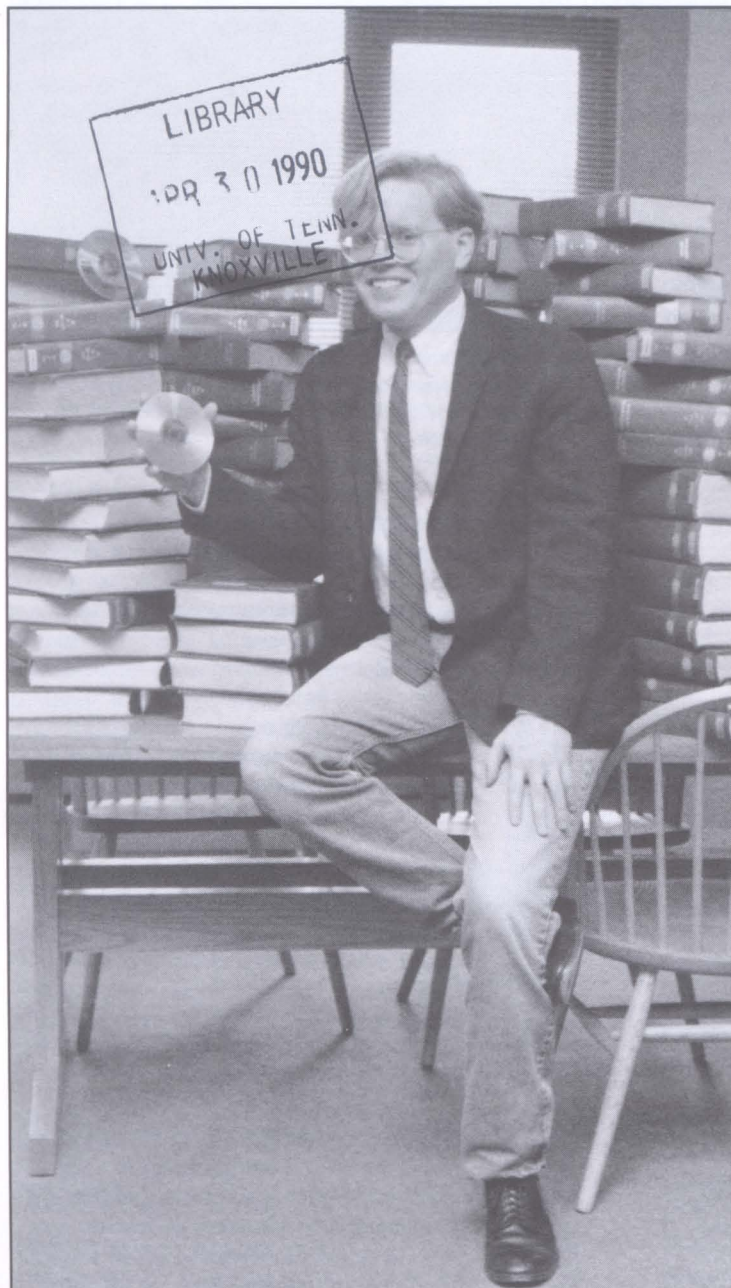


The UTK Librarian

Volume 5, Number 2

Newsletter of the University of Tennessee, Knoxville Libraries

Spring 1990



The equivalent of almost 100 volumes of Psychological Abstracts is available on two compact discs.

CD-ROM—The Library's New Format for Electronic Information

Compact Disc Read Only Memory (CD-ROM) has revolutionized the publishing of reference materials such as encyclopedias, indexes and abstracts, enabling the Libraries to offer free, self-service use of databases acquired in this format. CD-ROM uses digitally-coded compact discs, physically similar to sound recording discs, to distribute large databases for local searching. Researchers can find InfoTrac, ABI/Inform, ERIC, PsycLit, and the MLA Bibliography available for searching in Reference and Information Services, Hodges Library. The CAT/PAC, a Marcive index to government publications, is available in Documents and Microforms. At the AgVetMed Library compact discs are available for Medline and Cambridge Life Sciences Collection. Highlights of many of these databases are reviewed for you in the following pages.

(continued, page 2)

For Reference Room CD-ROM appointments, call: 974-4171

For information on AgVetMed's CD-ROMs: 974-7338

For information on Marcive: 974-6870

For Database Searching appointments call: 974-4936

CD-ROM

Contributions by Sandra Leach, Database Searching Coordinator, and Reference Librarians Karmen Crowther, Marie Garrett, Ann Viera, and Alan Wallace

(Continued from front cover)

The enormous capacity of a single compact disc allows access to very large databases at microcomputer workstations. For example, *Psychological Abstracts* from 1974 to the most recent quarterly update of 1990 is available on two compact discs. Compact disc databases are sold at flat rate subscription prices that are not sensitive to minutes spent searching or number of citations printed, as is traditional online searching. The Libraries can offer library users the power of database searching whenever the library is open, and at no cost to the user.

Compact discs are useful for searching when a researcher wishes to combine two or more subjects, to search on terms which do not appear as subject headings in the corresponding paper sources, or when desiring an extensive literature review. Appointments with librarians are available for in-depth consultation on difficult topics, and for searching the many other databases which we have not acquired in CD-ROM. CD-ROMs are updated less frequently than online sources, and some topics are too recent to appear there. ♦

ERIC on CD-ROM is the electronic equivalent of the printed indexes *Current Index to Journals in Education (CIJE)* and *Resources in Education (RIE)*. These sources cover literature on educational topics dating back to 1966. *CIJE* indexes and abstracts articles appearing in over 700 journals related to education, while *RIE* provides access to a variety of documents such as research reports, opinion papers, feasibility studies, resource guides and curriculum support materials. Most documents found in *RIE* are available on microfiche in the library's Documents and Microforms department. Combined, these indexes provide access to hundreds of thousands of articles and the database continues to grow at a rate of over 30,000 items a year.

Let's look at how we could search for information on government support of vocational education in Sweden. First, notice the



Reference librarian Alan Wallace and Pattie Wiley, professor of Foreign Language/ESL Education in the Department of Curriculum and Instruction, assist Dr. David Creasman with an ERIC search.

various concepts within this search. The concepts are: government support of education, vocational education, and Sweden.

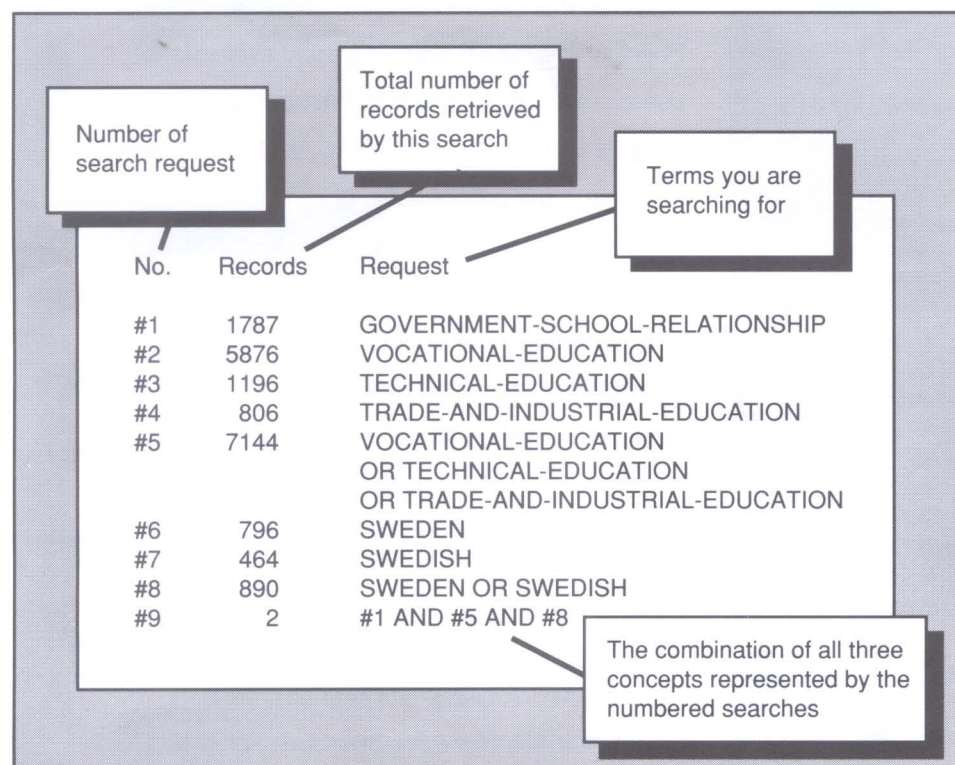
Individuals familiar with the printed indexes will also know about the *Thesaurus of ERIC Descriptors*. This volume aids a searcher in determining what subject terms and appropriate synonyms are used to locate information by subject within the ERIC system. A sample search for information on government support of vocational education in Sweden would yield the following descriptors from the thesaurus.

Concept I. Government support of education is best represented by the term *Government-School-Relationship*. Hyphens must be used to denote multi-term descriptors. If you don't use a hyphen, the computer defaults to searching for terms in the title and abstract fields, which may not provide as precise results.

Concept II. *Vocational-education*—the thesaurus uses this term. Related terms which might be appropriate to use are *Technical Education*, *Trade and Industrial Education*, and *Industrial Education*.

Concept III. *Sweden* is not found in the thesaurus. In this case we will look for the appearance of either *Sweden* or *Swedish* in titles and abstracts. Note that in this case we do not use any hyphens.

ERIC allows searchers to manipulate terms to search for precise information. The computer can look through thousands of documents and restrict your outcome to those that are most relevant. ♦



A sample search in ERIC.

ABI/INFORM now indexes and abstracts articles from the past five years of over 800 business and trade journals. It can answer questions about companies and products, business conditions and trends, corporate strategies and tactics, and management policies and techniques. It is the most widely used of our business databases, but average online search costs are high. With the compact disc version of ABI/Inform, this information is available at no cost to the user.

Like other compact disc indexes, ABI/Inform uses computer technology to enable a user to combine several concepts to find articles on a very specific topic.

Assume, for example, that you are interested in the recent brouhaha over oat bran, and that you wish to know the market share of two major breakfast cereal producers, Kelloggs and General Mills. You might begin by recalling all the articles that mention either Kelloggs or General Mills, then successively limit your search by each of the other key concepts in your query—*oat bran* and *market share*. In a matter of three

or four minutes you can determine the number of articles on the topic, review the relevant items, and print selected citations and abstracts.

Like other self-service computer based products, ABI/Inform is designed to be easy to use. Included on the disc is a brief tutorial which describes various features of searching the index, and a Help key is also available to provide online assistance for users as they move through a search. ♦



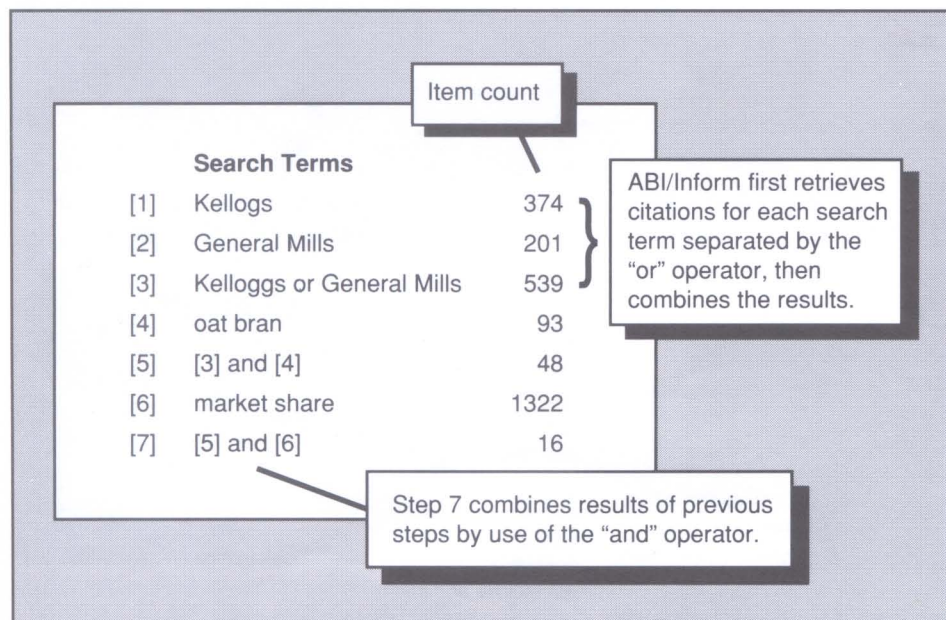
Sarah Gardial, Department of Marketing and Transportation, and reference librarian Karmen Crowther assist student Timothy Howell with an ABI/Inform search.

Medline, on compact disc at the AgVetMed Library, contains all the citations in the National Library of Medicine's *Index Medicus* from 1981 to the current quarterly update of 1990, plus citations from additional journals, bringing the number covered to 3,400. About 60% of the citations have summaries and 75% refer to English language articles. Medline provides access to all aspects of human biomedical literature, the allied health fields, biological and physical sciences, and the humanities and information science as they relate to medicine and health care.

New at AgVetMed is Medtutor, a computer-based tutorial that provides self-paced tutorial instruction on how to search Medline. ♦

MLA Soon to join our CD-ROM collection is *MLA International Bibliography*, a tool for literary research. Funds for the purchase of MLA were provided by the English Department. Published by the Modern Language Association of America, this bibliography provides access to materials on modern languages, world literatures, linguistics, and folklore in thousands of periodicals and books. The CD-ROM version of MLA includes records from 1981 to the present and is updated quarterly. The disc will not replace the printed bibliography, which began in 1921, but it will provide quicker access to the most current citations. For instance, a person needing articles about Edgar Allan Poe's short story, "The Pit and the Pendulum," will be able to find these references without searching through seven or eight printed volumes. The *MLA Bibliography* since 1964 is available online through a librarian-assisted search in Database Search Services.

Also of interest to literary scholars and to researchers in other disciplines is the OED (*Oxford English Dictionary*) on compact disc. Long considered to be the authoritative dictionary of the English language, the first twelve-volume edition of 1927 is now available on disc, providing access to various types of information within the individual entries in OED. Already on the reference shelves but not yet available in CD-ROM is the 1989 second edition of the dictionary, still the best source for tracing the meanings of a single word. ♦



A sample search in ABI/Inform.

Special Collections—Preserving the Past

Our Threatened Library Collections

by D.E. Perushek, Associate Dean for Collection Development and Management

The preservation of library materials is a two-sided issue that is keeping librarians marching at the double. The most pressing side of preservation is how to keep documents which are printed on the acid paper of the modern era from crumbling into dust as they sit on our shelves. The less pressing but even more costly side of preservation is saving the book as a physical artifact.



Diane Perushek displays a unique map. Mend? Microfilm?

Since the mid-nineteenth century paper has been mass produced using wood pulp rather than cellulose fiber obtained from cloth rags. Modern paper is sized with an alum rosin which introduces acid-producing materials into the paper. Those rosins cause the paper to turn yellow and brittle within about sixty years, or even more quickly when the paper is housed in an environment of high humidity and warm temperatures. For example, old newspapers we keep in our basements will turn brown and friable in a few years. This acidic decay has produced massive numbers of endangered books. On a national scale, it is estimated that about thirty million books in American libraries will, or already have, turned brittle.

This problem is being approached from several angles. First, various deacidification processes are being

developed. Time will tell which can be used economically and effectively. Second, publishers are beginning to print books on alkaline paper. Now that paper manufacturers have been made aware of the problem, they are responding to the eager market for non-acid paper. These efforts will ensure that the books of today will be readable tomorrow. Third, libraries are reproducing the intellectual content of documents on microfilm and microfiche. Since this requires a substantial outlay of money (\$300 million by one estimate for the entire U.S.), libraries are turning to such funding agents as the National Endowment for the Humanities, which may be committing over \$20 million to the effort by 1993. The New York Public Library spends about \$5 million annually to preserve its 7 million volume collection.

The contents of rare books and manuscripts may have been reprinted several times over, yet

time-consuming work requiring the skills of a craftsman who may apprentice for years. The cost of restoration materials, such as fine leather, gold for lettering and handmade endpapers is also beyond the means of most libraries.

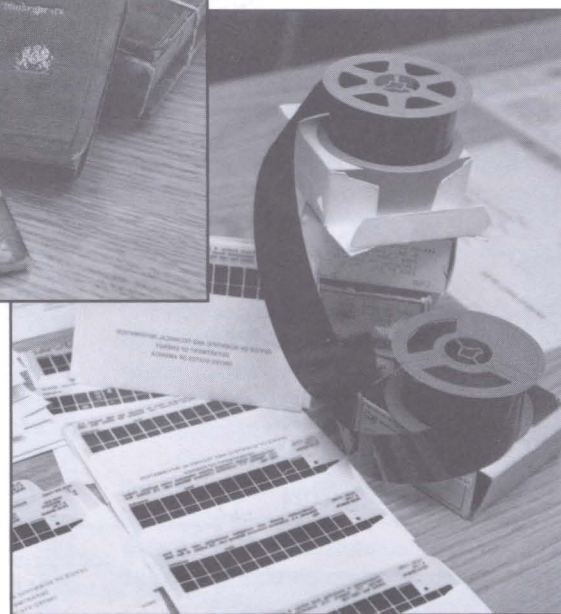
Of UT, Knoxville's 1.6 million volumes about 25%—the percentage of its collection the Library of Congress estimates to be brittle—are in need of preservation. It is time for UT to enter upon a planned program of preservation, first identifying at-risk, important literature, then preserving and making it available to faculty and students.

Our effort must be a collaborative one, where scholars advise librarians on which documents to preserve in what order, and librarians generate support for the inevitable conversion of books to microform. While we may not undertake the actual preservation ourselves, we can employ the services of established, large-scale preservation services such as the Northeast Documentation Center and the Mid-Atlantic Preservation Service. In this way we can preserve our threatened collections—"today's...link between the record of yesterday and the possibilities of tomorrow," in the words of the Librarian of Congress.



Worthy of preservation—recent gifts to the Libraries from Mr. and Mrs. Morton Rose.

we may still wish to restore or conserve these items themselves due to rarity, uniqueness or special illustrations. Conservation entails rebuilding a book—taking it apart, mending ripped pages, restitching and binding, replacing or cleaning endpapers and restoring or replicating the binding. This is exceptionally



Microfiche and microfilm are the two most common formats used to preserve research materials.

The John J. Duncan Papers Given to the UT, Knoxville Libraries

On February 1 the papers of the late Congressman John J. Duncan, Sr. (1919-1988) were transferred from local storage to their new home in Special Collections on the second floor of Hoskins Library. These papers, all 400 boxes of them, document Duncan's 24 year tenure as the representative of Tennessee's 2nd Congressional District and are the University's second largest manuscript collection, surpassed only by the Estes Kefauver papers.

A native of Scott County and the mayor of Knoxville from 1959 to 1964, Duncan ended his career as the ranking Republican on the powerful Ways and Means Committee, a position which should make this collection of more than passing interest to historians. Other subjects documented by the papers include tax code legislation, the Tellico Dam controversy, and material concerning the

Veterans and Social Security administrations. Such a large collection, however, will take time to process and will not be ready for public use for some time. The papers provide a nucleus for an expanding collection on Tennessee politics.



The family of the late Congressman John J. Duncan, Sr. join Dean of Libraries Paula Kaufman in Special Collections. Left to right, Mrs. John J. Duncan, Sr., Congressman Jimmy Duncan, Paula Kaufman, Rebecca Massey.

Mrs. Massey and Mrs. Duncan examine one of sixteen ranges holding the late Congressman's papers.



These Japanese illustrations, now on display in Special Collections, are printed on alkaline paper. Unlike the acidic paper used contemporaneously in the West, the illustrations will not require special preservation treatment in the foreseeable future.

The Archival Center for Radiation Studies

The expanding collections of the Archival Center for Radiation Studies have assumed great importance as increased interest focuses on the effects of radiation on people and the environment. The Center

has since 1970 collected the papers of eminent radiation scientists in all fields, and its collections amount to over 500 linear feet in 41 separate collections. In 1984 Clifford Honicker, who was working on his Master's



Determined scholars—Donald Clelland of the Department of Sociology, Special Collections Librarian Jim Lloyd, and Clifford Honicker. →

thesis under Dr. Donald Clelland, by chance discovered a 270-page dossier containing legal and medical evidence pertaining to Allan Kline. In 1946 Kline and others received over 100 rems of gamma and neutron radiation from a criticality accident at Los Alamos, New Mexico. Honicker used the materials found in the Center to document the Atomic Energy Commission's decades-long policy of preventing access to key documents on such accidents.

Information Issues

Federal Information in an Age of Electronic Communication: Access and Dissemination

by Angie LeClerc, Head, User Education

"[A] popular government without popular information or the means of acquiring it is but the prologue to a farce or a tragedy or perhaps both. Knowledge will forever govern ignorance and a people who mean to be their own governors must arm themselves with the power that knowledge gives."

James Madison

The Federalist Papers

The Traditional Role of the Depository Libraries

The United States government has for years disseminated information in print in a well-structured program. Through the Government Printing Office (GPO) the Superintendent of Documents distributes government documents to more than 1,400 depository libraries, many located in academic research libraries like the University of Tennessee, Knoxville Libraries. Those documents, like the *Congressional Record* and the *Federal Register*, are distributed free, and access to them by users is free. This system of distribution reflects a strong commitment on the part of Congress that the wealth of government produced information from the legislative, executive and judicial branches be available for public scrutiny and edification.

Until the 1980s, Federal information was disseminated predominantly in the form of paper documents and as microfiche. However, beginning in the 1980s, advances in technology have resulted in a rapid increase in the use of electronic formats for federal information dissemination. Federal agencies such as the National Library of Medicine, the USDA,

EPA—and many more—increasingly produce information in electronic format—computer databases available online, magnetic tape, CD-ROM, and floppy discs. Serious conflicts have arisen over how to maintain and strengthen public access to government information in those formats and how to balance the roles of the various federal agencies involved.

Paper formats will continue to decline.

The Increased Role of the Office of Management and Budget

In 1979, at President Carter's initiative, Congress passed the Paperwork Reduction Act giving the Office of Management and Budget (OMB) a major role in controlling the flow of agency information.

OMB has tried during the decade to develop an overall policy. OMB has made it clear in Circular No. A-130 that the executive agencies should have the freedom to develop individual relationships for dissemination of their electronic based information with private contractors. This policy has come to be termed *privatization*. Many in the academic world are concerned that as for-profit vendors assume a dominant role in distributing valuable, value-added, government produced information, public access will diminish and prices will escalate.

As recently as June of 1989, OMB stated its understanding of Chapter 19 of Title 44, which provides legislative authority to the GPO for the depository libraries: "...this statutory language supports OMB's exclusion of non-printed, electronic information from the definition of government publication. Therefore, OMB believes it is not clear that agencies at present have a legal obligation to make electronic information products available to depository libraries...." 54 FR 25558 (June 15, 1989).

The Problem of Privatization

An example, from the United States Department of Agriculture (USDA), reveals the range of access problems created when

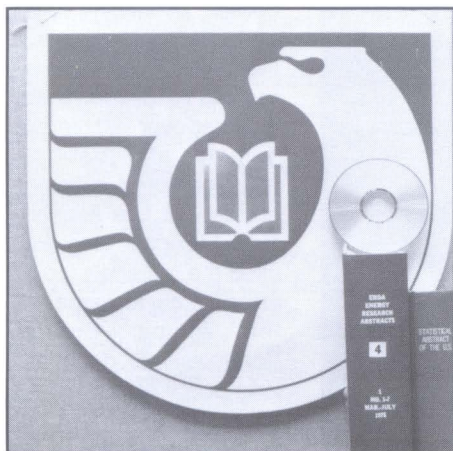
a government agency decides to give for-profit vendors an exclusive distribution contract. Recently, the USDA, which had released its important crop production reports through AG-NET, a not-for-profit group stationed at the University of Nebraska, gave Martin Marietta Data Systems (MMDS) an exclusive contract to distribute that same information. The contract with MMDS did not specify charges to public users; rather such charges are established by MMDS in separate contracts with each user. Generally, these charges are \$45 per hour plus a minimum use-subscription fee of \$150 per month. By contract MMDS is prohibited from charging more than time-sharing costs to information vendors, such as Dialog or BRS. But there are no controls over fees that information vendors may charge for public access to this information.

Prices for government products should not be market driven.

When government databases are provided directly by an agency to a vendor such as Dialog, the cost to an end user is on an average \$45 per connect hour. However, when the same database is provided to Dialog from an intermediary such as MMDS, the average cost to the end user is \$93 per connect hour. During the three years of service, the USDA's costs for accessing its own data from MMDS have soared. The costs to the end user have likewise skyrocketed.

The USDA has not developed policies to deal with students and the general public. MMDS is not in a position to offer general public access, or reduced rates. Information vendors such as Dialog will charge what the market will bear. The government could solve this problem of providing public access by making this electronic data available through the depository library network. Instead, USDA has used a secondary wholesaler, MMDS, adding one more link in the information chain, and thereby multiplying the cost to the end user.

Other examples of government agencies contracting with private vendors



Who owns this information?

include the Securities and Exchange Commission's EDGAR system, available through Bechtel, and the Patent and Trademark Office PTO system.

Who Owns Federal Information?

When a for-profit vendor takes taxpayer produced information and adds value to that data, the vendor can claim a copyright in this "new" packaged information. For-profit vendors can and are performing a valuable function in disseminating federal information. Value-added improvements to government produced databases may make those information sources more timely and frequently provide a greater variety of search algorithms for scholars. However, digitizing information at the source is not adding value, but simply putting data in a different format, increasingly, the format of

choice. It is what a vendor does with that data after digitization that may be worthy of a copyright, i.e., indexing, head notes, or new search algorithms.

Protecting the Interests of Scholars

A major concern for scholars is the continuation of subsidized browsing capacity in the electronic environment. The control of databases and networks by the

Information costs are a factor that erodes the quality of research.

for-profit sector has created a set of costs imposed directly on the information seeker. This constraint influences the path of intellectual inquiry and the choice of research topics, creating great variations in the level of potential productivity among the information haves and have-nots. Information costs have become a visible influence in determining the thoroughness of a literature search, a factor which erodes the overall quality of the research effort.

Equity of access for scholars has long been a goal of the University of Tennessee Libraries. Rapid improvement in price-performance in information technology—especially the development of CD-ROMs—has allowed our institution to afford some electronic information and make it available free to our users. New pricing structures have been made possible with the advent of CD-ROM products.

Only a year ago a student would pay about \$6 in the UT Libraries for an online literature search of Medline, the database created by the National Library of Medicine (NLM). This past year four different private vendors have contracted with NLM to distribute this valuable source and make it available for purchase to libraries on an annual CD-ROM subscription. Perhaps the non-exclusive nature of the NLM contracts has ensured that each vendor's price would vary, as they do: \$995 from BRS to \$1,600 from EBSCO. The UT Libraries now make Medline on CD-ROM available at no cost to all our students and faculty (see article, pages 2-3). However, that free access for scholars depends on our ability to afford the prices charged by private vendors.

Protecting Future Access to Federal Information

The Paperwork Reduction Act is in the process of being reauthorized. The academic community and the library world must work to ensure that changes in the Paperwork Reduction Act will not be detrimental to easy and affordable access to government-produced information.

Scholars can assist in this effort by insisting that any privatization of government produced information be tempered by the goals of equitable access made possible through the traditional Depository Library Network (DLN) and that prices for government products do not become "market driven" but are based only on the cost of dissemination and value-added access. The statutory authorization for the DLN must indicate clearly that electronic formats are included within its

CD-ROMs create new pricing alternatives.

ambit. Paper formats will continue to decline, while the number of electronic products will increase. If the DLN mandate is restricted to a paper only environment, it will become increasingly outmoded.

In the past year GPO has made significant strides by planning to distribute the 1990 census on CD-ROM through the DLN. There are also plans to distribute selected products of the United States Geological Service on CD-ROM as well as the 1988 *City and County Data Book*. The DLN has been a collaborative program to which libraries have contributed money and in-kind support, including staff, space and equipment. This collaboration should be fostered. There may also be new opportunities for collaboration between the GPO, the DLN and not-for-profit organizations. Those collaborative programs may provide one vehicle for affordable public access to government produced information. For-profit vendors who legitimately make a profit from a particular market niche should not, through exclusive agency contracts, be allowed to prevent dissemination of electronic data through the DLN.

Marcive—Government Publications on CD-ROM

Access to government documents has always presented users with a challenge—primarily because many government publications are not listed in the library's online catalog. The most comprehensive source for locating U.S. government publications is the *Monthly Catalog of United States Government Publications*. The Marcive CD-ROM which is now available in Documents and Microforms in the Hodges Library is an automated version of the *Monthly Catalog* designed for quicker and easier access to government publications. It includes government publications indexed in the *Monthly Catalog* from 1976 to the present. Updates are received bi-monthly. The Marcive CD-ROM covers federal agency publications such as pamphlets, technical reports, congressional hearings, statistical reports, maps, and other materials, but does not index individual articles in government publications.

Janette Prescod

Al Gore's "Information Superhighways"

On February 5, 1990, Senator Albert Gore, Jr. discussed access to government information with the editor, Angie LeClerc.

Q: *What should be the continuing role of the GPO and the depository library network in the dissemination of electronic information?*

A: It's not fair to reduce public access to tax-payer collected information solely because it is in electronic form instead of print. Vendors who add value to information resources should be entitled to compensation for the value they add. But they should not be allowed to charge the public for more than the value they add plus a reasonable profit. It's not fair to give them control over access to publicly collected information. The public should not have to pay for what they rightfully own. I'd like to see an electronic public library—a digital public library—providing free access to information like conventional libraries.

Q: *Could the GPO do that?*

A: I'm open to that idea. There are many issues where further study is required to balance the equities. Information collected at public expense ought to be made available to the public with maximum convenience and ease of access.

Q: *Some of us in the library world are concerned that OMB, with its interest in cutting budgets, will cut back on the dissemination of information and will require privatization. What oversight role can Congress provide?*

A: Congress must keep an oversight role—especially where OMB is concerned—because decisions made by OMB are frequently not subject to the procedural safeguards imposed on Cabinet-level departments and agencies.

Q: *What motivated you to propose government funding for a high speed computer network?*

A: I began this project nine years ago when I was chairman of the Congressional Clearinghouse on the Future. I became

convinced that the information revolution was real and would soon have a dramatic impact on our lives. I looked for ways to take advantage of these new developments. Computer technology advanced at a much faster rate than did the networks connecting computers in different parts of the country.

I remember as a child watching my father propose the interstate highway system. The number of automobiles after World War II had outpaced the quality of highways linking the country. I suppose my dad's interstate highway proposal influenced my thinking on communications technology. I came up with the idea of *information superhighways*. I asked computer experts to evaluate the concept. They liked it. I built support for my idea of *information superhighways*. Then I initiated legislation to require a government-wide study of the concept.

The Office of Science and Technology Policy in the White House set up a committee called the FCCSET, the Federal Coordinating Council

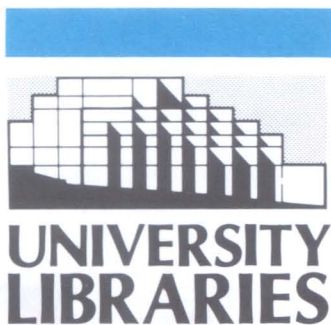
on Science, Engineering and Technology. After a multi-year study they endorsed the idea. But President Bush is not willing to fund it. The ultimate cost to the tax payers would be zero because a trust fund replenished by user fees—from large-scale users—would eventually repay the entire public investment. We know how to create this network. We need to proceed. It's overdue.

Q: *Would you envision academic libraries as nodes of this network?*

A: Yes, absolutely. Just as interstate highways created a new demand for access interchanges, there will be a new demand for information pipelines into the central network. We associate infrastructure with highways and bridges, water lines and sewer lines. But in the 21st century—and indeed in the 1990s—we must think of infrastructure in new ways. The most vital infrastructure in our nation's future may well be our *information superhighways*—our technology to access, process and move information.

The UTK Librarian is a publication for the faculty and staff of the University of Tennessee, Knoxville. It is published twice a year by the University of Tennessee, Knoxville Libraries, 1015 Volunteer Blvd., Knoxville, TN 37996-1000. Angie LeClerc is editor; Martha Rudolph is assistant editor. Photos are by Nick Myers, UT Photography Center. Questions or comments should be directed to the Libraries' User Education office, 974-4273.

The University of Tennessee, Knoxville does not discriminate on the basis of race, sex, color, religion, national origin, age, handicap, or veteran status in provision of educational opportunities or employment opportunities and benefits. UTK does not discriminate on the basis of sex or handicap in education programs and activities which it operates, pursuant to requirements of Title IX of the Educational Amendments of 1972, Public Law 92-318; and Section 504 of the Rehabilitation Act of 1973, Public Law 93-112; respectively. This policy extends both to employment by and admissions to the University. Inquiries concerning Title IX and Section 504 should be directed to the Office of the Affirmative Action Director; 403-C Andy Holt Tower; The University of Tennessee, Knoxville; Knoxville, Tennessee 37996-0144; (615)974-2498. Charges of violation of the above policy also should be directed to the Office of the Affirmative Action Director.



The University of Tennessee/Knoxville
1015 Volunteer Blvd.
Knoxville, TN 37996-1000
EO1-6010-001-90