today. As their files and publics expand, as budgets grow, and as the demands for service increase, the solution of adding more people is only possible within certain operational and supervisory limits. There are such basic constraints as available floor and desk space, the supervisor's span of control, and even the budget itself. All library resources are finite. This places certain iron-clad limits on the amount of expansion libraries can expect to undertake in the future. But the existence of any such ceiling has so far proved unacceptable both to the library profession and to the various publics it serves. This leaves the profession with only one remaining solution -to bring data processing and computers into the library environment.-Robert W. Burns, Jr., Librarian for Research & Development, Colorado State University.

BOOKS RECEIVED

NOTE: The titles listed represent books received at the editorial office that may be of interest to academic librarians.

- Antill, James M. Civil Engineering Management. New York: American Elsevier Publishing Company, Inc., 1970. 339p. \$16.00. (72-129979). (ISBN 0-444-19643-9).
- Atkinson, Hugh C. Theodore Dreiser: A Checklist. Kent, Ohio: The Kent State University Press, 1971. 104p. \$4.50. (77-626231). (ISBN 0-87338-048-7).
- The Commonwealth Foundation, Occasional Paper Number VIII, Conference of Librarians from Commonwealth Universities in Africa. Sussex: Hove Shirley Press, Ltd., 1970. 70p.
- Doeringer, Suzannah; Mitten, David Gordon; and Steinberg, Arthur, eds. Art and Technology: A Symposium on Classical Bronzes. Cambridge, Mass. and London: The M.I.T. Press, 1970. 290p. (70-1113372). (ISBN 0-262-04030-1).
- Feuereisen, Fritz, comp. Die Presse in Europa: Ein Handbuch fur Wirtschaft und Werbung. Munich and New York: Verlag Dokimentation and R. R. Bow-

ker Company, 1971. 328p. \$12.50. (ISBN 3-7940-3299-3).

- Fisher, Gene H. Cost Considerations in Systems Analysis. New York, London, Amsterdam: American Elsevier Publishing Company, Inc., 1971. 334p. \$11.50. (76-133272). (ISBN 0-444-00087-9).
- Harmon, Robert B. The Art and Practice of Diplomacy: A Selected and Annotated Guide, Metuchen, N.J.: The Scarecrow Press, Inc., 1971. 355p. (75-142234). (ISBN 0-8108-0339-9).
- Herman, Molly, ed. Libraries in New York City. New York: School of Library Service, Columbia University in the City of New York, 1971. 241p. \$3.50.
- Hero, Alfred O., and Starr, Emil. The Reuther-Meany Foreign Policy Dispute. Dobbs Ferry, N.Y.: Oceana Publications, Inc., 1970. 228p. + tables and appendices. \$15.00. (73-102939). (ISBN 0-379-00367-8).
- Hosmon, Robert Stahr, ed. The Germ: A Pre-Raphaelite Little Magazine. Coral Gables, Fla.: University of Miami Press, 1970. 278p. \$7.95. (71-125106). (ISBN 0-87024-174-5).
- Mersky, Roy M., and Jacobstein, J. Myron, eds. Ten Year Index to Periodical Articles Related to Law. Dobbs Ferry, N.Y.: Glanville Publishing Company, 1970. 411p. \$30.00. (65-29677). (ISBN 0-87802-050-0).
- 1969/70 Annual Survey of American Law. Dobbs Ferry, N.Y.: Oceana Publications, Inc., 1970. 774p. (46-30523). (ISBN 379-1220-6).
- Olson, Edwin E. Interlibrary Cooperation. U.S. Department of Health, Education and Welfare, Bureau of Research, Final Report of Project No. 07-1084, Contract No. OEC-1-7-071084-5017. 139p.
- Radin, Max. Radin Law Dictionary. 2d ed. Dobbs Ferry, N.Y.: Oceana Publications, Inc., 1970. 402p. + Code of Professional Responsibility of American Bar Association. \$12.50. (74-123997). (ISBN 379-00465-8).
- Simon, John Y., ed. The Papers of Ulysses S. Grant: Volume 3: October 1, 1861– January 7, 1862. Carbondale: Southern Illinois University Press, 1971. 479p. \$15.00. (67-10725). (ISBN 8093-0471-6).

- Stephens, Richard H. Wealth and Power in Peru. Metuchen, N.J.: The Scarecrow Press, Inc., 1971. 219p. (78-142240). (ISBN 0-8108-0359-3).
- Tezla, Albert. Hungarian Authors: A Bibliographical Handbook. Cambridge, Mass.: The Belknap Press of Harvard University Press, 1970. 792p. \$25.00. (74-88813). (ISBN 674-42650-9).
- This Fabulous Century. New York: Time-Life Books, 1970. 8-Volume Set—\$63.60. Each Volume—\$7.95.
- Wolk, Allan. The Presidency and Black Civil Rights: Eisenhower to Nixon. Cranbury, N.J.: Fairleigh Dickinson University Press, 1971. 276p. \$10.00. (70-135029). (ISBN 0-8386-7805-X).

ABSTRACTS

The following abstracts are based on those prepared by the Clearinghouse for Library and Information Sciences of the Educational Resources Information Center (ERIC/CLIS), American Society for Information Science, 1140 Connecticut Ave., N.W., Suite 804, Washington, D.C. 20036.

Documents with an ED number may be ordered in either microfiche (MF) or hard copy (HC) from ERIC Document Reproduction Service, National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland 20014. Orders must include ED number and specification of format desired. A \$0.50 handling charge will be added to all orders. Payment must accompany orders totaling less than \$5.00. Orders from states with sales tax laws must include payment of the appropriate tax or include tax exemption certificates.

Documents available from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151 have CFSTI number and price following the citation.

Conference on Inter-Library Cooperation and Exchange, San Juan, Puerto Rico, April 30-May 2, 1969. Virgin Islands Department of Conservation and Cultural Affairs, St. Thomas: Division of Libraries and Museums, 1969. 251p. (ED 042 459, MF—\$1.00 HC—\$12.65).

The conference had as its main objective the assembling of library administrators and librarians to consider all aspects relating to the implementation of a library cooperative plan for the interchange of publications, photoduplication services, and bibliographic information. Papers that were presented were "Automation and Bibliographic Control" by Enid M. Baa and Joseph J. Breen; "The Role of Archives in Regional Cooperation" by M. J. Chandler; "Copyright Laws" by Abe Goldman; "Problems of Photocopying" by Paulita C. Maldonado de De la Torre; and "Centre d'Etudes Regionales Antilles-Guyane" by J. P. Jardel. A great portion of this report (147 pages) deals with library reports from each country. These reports cover such areas as copyright and depository laws; lists of serials published in the country; archival information (condition and availability of materials, organization, volume, etc.); problems the library faces in serving the community; and problems the library may face if it participates in a plan for interlibrary cooperation. The delegates of the Conference approved an elevenpage questionnaire which was sent to every public, research, and university library to gather additional information. A preliminary analysis of the questionnaire is included.

Planning and Urban Affairs Library Manual. Edited by Mary L. Knobbe and Janice W. Lessel. Monticello, Ill.: Council of Planning Librarians, 1970. 85p. (ED 041 602, \$0.50, also available from Council of Planning Librarians Exchange Bibliographies, P.O. Box 229, Monticello, Ill. 61856 \$10.00).

Written especially for persons without a library degree who are operating a small urban study or planning agency library on a part-time basis. Subjects covered are: library function and staff function, duties and training; physical layout and equipment of library; establishing and maintaining the library; library administration; classifying and cataloging books; budgets and finance; and reference procedures. Sample filing headings, sample pictorial catalog cards, Council of Planning Librarians, and exchange bibliographies are included as appendices.

Automatic Indexing: A State-of-the-Art Report. By Mary Elizabeth Stevens. National Bureau of Standards, 1970. 298p. (ED 041 610, \$1.25, also available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 GPO C13.44:91, \$2.25).

A survey of automatic indexing systems and experiments has been conducted by the Research Information Center and Advisory Service on Information Processing, Information Technology Division, Institute for Applied Technology, National Bureau of Standards. Consideration is first given to indexes compiled by or with the aid of machines, including citation indexes. Automatic derivative indexing is exemplified by key-word-in-context (KWIC) and other word-in-context techniques. Advantages, disadvantages, and possibilities for modification and improvement are discussed. Experiments in automatic assignment indexing are summarized. Related research efforts in such areas as automatic classification and categorization, computer use of thesauri, statistical association techniques, and linguistic data processing are described. A major question is that of evaluation, particularly in view of evidence of human interindexer inconsistency. It is concluded that indexes based on words extracted from text are practical for many purposes today, and that automatic assignment indexing and classification experiments show promise for future progress.

Planning the Undergraduate Library. By Warren B. Kuhn. San Diego, Calif.: California University Library, 1970. 35p. (ED 042 477, MF-\$0.25 HC-\$1.85).

Planning any undergraduate library represents an unusual, complex, and multiproblemmed process. This working paper, composed of selected quotes or comments from actual planners, attempts to offer an overview of the more pressing concerns. The appended "decision checklist" used on one campus outlines topics important to the thinking of any undergraduate library planner including location, collections, administrative organization, housing the collections, circulation, reserves for classes, reference service, provisions for study, special provision for faculty, staff areas, miscellaneous, and other aspects and/or overall comment. A bibliography is provided.

Library Executive Development Program;

Narrative Evaluation Report on the Institute for Advanced Study for Librarians Under the Higher Education Act, Title II-B, April 14 to April 25, 1969. By Irving Lieberman. Seattle, Wash.: Washington Univ., School of Librarianship, 1969. 70p. (ED 042 457, MF-\$0.50).

The activities of a two-week library executive development program held at the University of Washington are outlined. This program was organized to help executives of all types of libraries understand current issues and concepts in business and public administration so that they will be better able to meet the needs and demands on libraries as modern information centers. Some specific objectives of the Institute program are to provide for the participant: (1) knowledge of the functions and principles of modern upper-level management; (2) an experimental learning process that will emphasize the application of pertinent theory in such areas as work analysis and simplification, budgeting, organizing, decision-making or problem-solvhuman relations, and leadership; ing, (3) an opportunity to examine common problems with other library executives and to discuss them with members of the faculty; and (4) an environment in which he may broaden his own views and insights, develop friendships with other participants, and increase his confidence in himself.

Faculty Use of University Library Reference Facilities for Citation and Data Information. By Elaine C. Clever. Philadelphia, Pa.: Temple University, College of Education, 1970. 10p. (ED 041 613, MF-\$0.25 HC-\$0.60).

A user study to determine the ratio of citation-bound queries to data-bound queries originated by university faculty and processed through reference department personnel or by independent use of reference materials in the university library revealed that a majority (75 percent) of the queries are citation-bound. Important implications are suggested for the training of university reference librarians and the selection and development of reference tools. The skillful use of the newer tools of citation indexes, journal indexes, and other sources of bibliographic information is necessary for the provision of citation-bound services.

Survey of Scientific-Technical Tape Services. By Kenneth D. Carrol, ed. American Institute of Physics, New York; American Society for Information Science, Washington, D.C.: September 1970. 65p. (Available from CFSTI as ED 044 165, MF-\$0.50 HC-\$3.35).

The results of a survey of commercially available tape services which can provide libraries and information centers with data bases of scientific and technical literature are reported. During the past few years, there has been an increasing number of tape services entering the information resources market. Each of these services makes available to the information center, on a continuing basis, computer-readable data which can be utilized in as many diverse services as the programs and clientele of the center require. This preliminary survey provides a directory of current tape services, listing the general characteristics of the data base, the most frequently used access points, the frequency of the tape issues, and the number of

items reported on an average tape issue for each service. The data presented were obtained from the generators of the tapes unless otherwise noted. More complete information can be obtained from the source noted for any tape listed. An alphabetical index of the tape services is included.

Systems Analysis of a University Library; Final Report on a Research Project. By Michael K. Buckland and others. Lancaster University, The Library, England, 1970. 100p. University of Lancaster Library Occasional Paper 4. (Available from The Librarian, University of Lancaster Library, Bailrigg, Lancaster, England, ED 044 153, \$2.00).

The objectives of this study are to ensure that the resources at the disposal of the librarian are deployed in a manner which will effectively contribute to the purposes of the university. User behavior is explored in an attempt to solve the difficulties that arise in library planning and management, such as: (1) the relationship between length of loan period and "idle time," (2) the availability of popular books, and (3) the relationship between library usage and academic achievement. Fundamentally related to all this in a university library is the whole area of students' problem-solving behavior. It is clear that the serious study of policy-making and the allocation of resources in a university library must range widely over problems of human behavior and educational research. Seen in this wider context, it may be that the most useful contribution of this study is the way which, with further research, it may prove possible to quantitatively relate the day-to-day decisions of the librarian to the academic achievement of the university as a whole.

Design Study for Long Range Research Program. By Bernard M. Fry and others. Indiana University, Bloomington, Research Center for Library and Information Science, 1969. 117p. (Available from CFSTI as ED 044 122, MF-\$0.50 HC-\$5.95).

A plan is presented for a long-range research program, the objective of which will be to identify technical information

problems and policies relating to federal libraries and information services, to determine priorities among those issues requiring attention, and to develop research designs for each project recommended. The program is presented in the following three phases: (1) a study of the state-ofthe-art; (2) the identification of problems requiring research and distinguishing between those which should be in the province of the Department of Defense (DOD) from those which should have multiple sponsorship and those which should be sponsored outside DOD; and (3) an implementation plan consisting of a series of research designs for each project recommended which will state the objectives, the methodology to be employed, the scope of the investigation, the nature of the research, research staff required, the time schedule, and the estimated cost.

Educating the Library User; Proceedings of the Fourth Triennial Meeting of the International Association of Technological University Libraries, Loughborough, April 1-3, 1970. By C. M. Lincoln, ed. International Association of Technological University Libraries, Loughborough, England, 1970. 138p. (Available from The Library, Loughborough University of Technology, Loughborough, Leicestershire, England, ED 044 126, \$4.80).

The problem of user education is the central theme of the Fourth Triennial Meeting of the International Association of Technological University Libraries. The papers presented are supplemented with references and with a verbatim question and answer section. The eleven papers are: (1) "Information Services in Academic Libraries" by M. B. Line; (2) "Educating the Students as Library Users in Hungarian Technical Universities" by K. Heberger and J. Balazs; (3) "Use of Hamburg University Library Catalogues by Students" by G. Schoch; (4) "Some Effects of the 'Science of Science' on the Education of the Library User in the D.D.R." by D. Schmidmaier; (5) "Experience in Educating the User at the NLL" by A. G. Myatt; (6) "Cooperation Between Libraries in Organizing Discipline Oriented Instruction" by M. W. Hill; (7) "The Library as an Academic Department" by A. J. Evans; (8) "Survey of Non-Users of a Technological University Library" by J. Lubans; (9) "Evaluation of Student Response to a Library Instruction Trials Programme Using Audiovisual Aids" by H. A. Chesshyre and P. J. Hills, (10) "Production of Video-tapes for Library Instruction—an Account of Experience at Brunel University" by R. W. P. Wyatt; and (11) "The Future of Information Provision" by D. J. Hillman.

The Periodical Bank Through 1969 and the First Fiscal Year Annual Report. Revised Edition. By Julia A. Woods. Associated Colleges of the Midwest, Chicago, 1970. 55p. (Available from CFSTI as ED 044 127, MF-\$0.25 HC-\$2.85).

Twelve colleges incorporated under the Associated Colleges of the Midwest (ACM), began a library cooperative program to establish a Periodical Bank. The prime purpose of the Bank is to provide college students and faculty access to a larger number of periodicals than could be provided by their individual libraries. Under the proposed plan, each ACM library was to sell paper backfiles up to a total of \$50,000 which would be assigned to the Service Library and Periodical Bank. \$440,000 of the total \$500,000 would be used to purchase commercially available periodical backfiles in microforms. The libraries, on the average, have doubled their periodical holdings through the Bank, at a fraction of the cost each would usually incur for such acquisitions.

Directory of Special and Subject Collections in Indiana. By Donald E. Thompson and J. Michael Rothacker, comps. Indiana University, Bloomington, Graduate Library School, 1970. 101p., Indiana Library Studies 12. (Available from CFSTI as ED 044 141, MF—\$0.50 HC— \$5.15).

The directory includes the special collections and subject collections of 313 libraries in Indiana: 125 public libraries, 109 academic libraries, 44 special libraries, 11 libraries in Indiana State Departments and institutions, 20 libraries in historical societies, and 4 miscellaneous libraries. Subject headings, other than personal names, are mostly Library of Congress subject headings. Personal names for manuscript collections of several hundred pieces are included. Also included is information on counties. Subjects not included in this listing are: (1) several broad subject areas covered by large libraries, (2) information on cities and towns, and (3) information on colleges and universities. General regulations governing the use of the collections by persons not normally served by the libraries are listed by a coding system.

Cooperative and Centralized Cataloging and Processing: A Bibliography, 1850– 1967. By Lawrence E. Leonard. Illinois University, Urbana; Graduate School of Library Science, 1968. 92p., Occasional Paper 93. (Available from CFSTI as ED 044 152, MF-\$0.50 HC-\$4.70).

Nine hundred and fifty-four references to articles on cooperative and centralized acquisitions, cataloging, and processing, covering the period from 1850 to 1967, are included in this bibliography. Subject elements of the bibliography by the approximate date of appearance are: (1) cooperative cataloging-1850-; (2) centralized cataloging (Library of Congress card service-1900-, other centralized cataloging-1928-); (3) centralized purchasing-1919-; (4) centralized processing-1948-; and (5) cataloging-in-source-1958-1965. References to articles on "universal catalogs," "book catalogs," and "cooperative acquisitions programs" are not included here. An alphabetical author index is provided.

Case Study of the California Experience in Library Collection Building. By Melvin J. Voigt. University of California, San Diego: University Library, 1969. 31p.; paper prepared for the Institute on Acquisitions Procedures in Academic Libraries . . . , August 25–September 5, 1969. (Available from CFSTI as ED 043 345, MF—\$0.25 HC—\$1.65).

A variety of examples of collection development in a university system is pro-

vided by this case study. The University of California's nine campuses provide a wide variety of library acquisition experience. A retrospective view of their development reflects the changing pace and pattern of library collection building over the years. The University of California, San Diego (UCSD), development is interesting because the collection had immediate pressures of advanced graduate programs and UCSD had to use a variety of devices to meet specialized needs as they arose, while at the same time attempting to develop well-rounded basic collections for both undergraduate and graduate students. Development of each of the nine university libraries is traced using the following headings: (1) intro-duction, (2) the large campuses, (3) specialized institutional collections, (4)towards research-variations in patterns, (5) the problem of distribution and uniqueness, and (6) the UCSD experience.

Development of a Machine Form Union Catalog for the New England Library Information Network (NELINET). Final Report. By New England Board of Higher Education, Wellesley, Massachusetts, 1970. 220p. (Available from CFSTI as ED 043 367, MF-\$1.00 HC-\$11.10).

Based on a literature survey of union cataloging and New England libraries, it was determined that: (1) New England's collective union catalog needs and problems had not been specified, especially regarding the possibilities of machine application; (2) crucial data and analysis needed for such specification were unavailable; and (3) the absence of this data prevented evaluations of relative merits of differing union catalog approaches and of different kinds of machine form catalogs. Three general union cataloging configurations were examined: (1) the single regional union catalog; (2) the combination of six state union catalogs; and (3) the random combination of state and/or interinstitutional union catalogs. Part II of this project was devoted to the development of the essential capabilities for a machine form union catalog of books

and a printed union catalog of books for the New England Library Information Network (NELINET). This was accomplished by: (1) a study of machine form union catalog needs; (2) file design for present and projected needs; (3) development of techniques and programs for collecting, storing, and updating library holdings data; and (4) development of programs to produce a printed union catalog using the Library of Congress card number as the identifying element.

A Plan for a Wisconsin Library and Information Network: Knowledge Network of Wisconsin. By the Wisconsin State Department of Public Instruction, Madison, Wisconsin: Division for Library Services, 1970. 109p. (Available from CFSTI as ED 043 358, MF—\$0.50. HC—\$5.55).

A strong library and information network is important to Wisconsin because of the uneven geographical distribution of its population, the dispersion of its university resource centers, and the heavy concentration of book and other information resources in major cities. This report explores the potential for furthering interlibrary cooperation in Wisconsin by investigating various ways of linking into a network the state's library systems with other information centers. The plan has four main objectives: (1) to promote increased sharing of resources by libraries; (2) to use modern technology in an appropriate and economical manner to facilitate the distribution of information; (3) to equalize the availability of library materials; and (4) to create a comprehensive base of library and information materials with a minimum of duplication and processing. The network proposed is constructed of groups of libraries and information centers operating as a consortium without limitation on the nature of their local jurisdictions. The report is divided into three main sections: (1) network philosophy and concept, (2) the library environment in Wisconsin, and (3) development and program plan for a Wisconsin library and information network.

California State Library: Processing Center Design and Specifications, Vol. V: Cost Analysis. Supplemental Volume. By Thomas L. Hargrove and Keith H. Stirling. University of California, Berkeley: Institute of Library Research, 1970. 94p. (Available from CFSTI as ED 043 356, MF-\$0.50 HC-\$4.80).

Presentation of this cost analysis as a supplemental volume separate from the main report allows the major activities in implementing the processing Center Design to be correlated with costs as of a particular date and according to varying rates of production. In considering the total budget, three main areas are distinguished: (1) systems development, (2) conversion and maintenance, and (3) output services. Separate costs are stated for the different operational phases of monographs and serials, although both types of data are considered as sharing management and development costs. The analysis first covers the purpose, scope, allocation, and descriptive basis of the three main areas for a six-month preparatory period to establish the Center and three years' full production. Appendices include a reprint of the preliminary organizational design (with minor revisions) and supporting details for the three main areas. Volumes I-IV of this report are available as ED numbers 036 305 through 036 308.