

Grose and Jones on an acquisition system in the Newcastle University Library, although no mention is made of extension of the system to automated bibliographic checking other than of receipts not item-requested through the order subsystem. A paper by Coates and Nicholson on automation in the production of the *British Technology Index* is very germane, in particular the progress on an inversion algorithm for auto-generation of cross references to composite subject entries. Lastly, a report by Millar gives an example of use of the Newcastle system in statistical analysis of data collected in a maternity survey, with implications in terms of techniques for library management.

The second theme revolves around general issues of the library as an environment for computer innovation. Vickery stresses perspectives on economic realities vs. user satisfaction and the functions of machine records. Jolliffe, Line, and Robinson discuss standardization of library systems and bibliographic records, concluding that numerous constraints militate against exchange of library program packages above a limited subroutine level. They assert that "compatibility without rigidity" in records is necessary to a carefully planned library data interchange concept. Hawgood completes the section with a prospectus for a quantitative study intended to derive a "single benefit index" to guide allocation of hypothetical added funds for library resource development.

A section on the MARC idea in Great Britain yields what may be the best thinking yet in print on the nature of national and local catalog services based on centralized machine record distribution. Coward outlines the U.K. MARC Project status at the British National Bibliography, emphasizing requirements beyond those of detailed format of the machine record. Bregzis relates patterns of experience and future extensions of MARC data in perhaps the most advanced local pilot project among the sixteen North American libraries participating in the LC MARC experiment. The remarks by Brown in a further seminar session reveal some thoughtful

consideration of the organization and use of national machine-readable data banks of bibliographic information. The melding of developments in national union catalogs, shared cataloging, and automation recurring in these discussions give the impression of vastly more synergism occurring in this group than in comparable American technical meetings.

Two separate contributions by Barraclough on file structures for experimental MEDLARS tape searching and by Lannon on the IBM System/360 version of the Document Processing System developed for generalized textual searching at the U.S. Food and Drug Administration were included as a counterpoint to the more traditionally-oriented presentations. Both papers are food for thought for librarians who have been able to accept MARC but are skeptical about so-called information retrieval applications.

This is, in sum, a remarkable and level-headed survey of some current British work in library automation, well organized into a body of materials whose factual and pertinent observations are a valuable addition to the handful of titles on the "must" list. The publishers are to be commended for making it available on this side of the "Atlantic river."—*Jay L. Cunningham, University of California, Berkeley.*

**Telefacsimile in Libraries.** By William D. Schieber and Ralph M. Shoffner. Berkeley: Institute of Library Research, 1968. 137p.

Recent months have seen considerable pioneering in new media by libraries. Computer use and instantaneous transmission of library materials are at hand. Several experiments in facsimile transmission have taken place in various states. Among these have been projects by M.I.T., New York State Library, Houston Research Institute, University of Nevada, and University of California. The last one mentioned is the subject of this review.

The California experiment, carefully monitored, proposed: (1) to develop a set of procedures; (2) to analyze three elements,

a) performance of the system, b) nature of current and future demand for the system and c) the cost of the system; (3) extraction of general principles for, a) design of systems for cooperating libraries, b) comparison of telefacsimile with other delivery systems, c) recommendations of the direction future research should take in the area.

The machinery used was Xerox (LDX) Long Distance Xerography and the experiment of one month's duration, involved points from Davis to Berkeley, with transmission in one direction only.

A great deal of material was assembled during and as a result of the experiment, including procedures, control sheets, sources for verification, timing, flow charts for all aspects of the operation, from request of materials to final receipt by the requester. This material would doubtless be very valuable in any follow-up or additional experiment planned. However, certain conditions were lacking to make it an exhaustive study. The distance covered was short. Only two stations were involved. Transmission was in one direction only. Only one type of machinery was utilized and the experiment lasted only one month.

In contrast with this, the New York State experiment lasted five months and involved twenty-six request transmission sites, fifteen receiving stations, and seven sending stations. These New York State stations were widely separated at locations such as Buffalo, New York City, Albany, Ithaca, and Potsdam. An elaborate system of switching was developed which made it possible for Potsdam, with two receivers, to obtain facsimile copy simultaneously from two entirely different sending stations. Two types of machines were tested in portions of that experiment.

Several conclusions drawn by Schieber and Shoffner have also been made as the result of other projects. The cost is exceedingly high and the cost decreases as the volume of requests increases. The number of urgent requests was not great enough to assure sufficient volume to maintain a feasible cost per request. Machinery tends to break down, causing delays and

pile-up of unfilled requests. In this experiment 92.9 per cent of the LDX copy was acceptable. Although the interlibrary loan process was speeded up, the report states that the borrower often did not pick up the copy until several hours later. The work habits of the borrower evidently did not change much even with the high speed service.

Since to date no machinery has been perfected to scan the printed page and to transmit simultaneously, the facsimile process is very time consuming, requiring considerable personnel. If this roadblock is removed, the reporters feel that the implications for interlibrary loan will be much greater. Other factors also are involved which determine the success of any facsimile project. A few of these are:

1. Knowledge of location of materials, such as union lists, etc.
2. Availability of materials.
3. Support funds.
4. Adequate staff.
5. A set of procedures.
6. A fairly steady stream of requests with no unusual buildup which would bog down man power and machinery.

The report points out that the time variability of demand is an important inherent constraint on the performance of the system and that there is no way to prophesy this demand. The demand did vary from hour to hour, day to day, and week to week.

The alternatives to facsimile are fairly obvious:

1. Conventional interlibrary loan.
2. Delivery system by plane, train, auto, bus.
3. Purchase of the material.

The report indicates that certain time elements are involved in each of these and that facsimile is the only one which can provide service which is approximately equivalent in speed to direct on-site access to library resources.

Since, however, it has been concluded that facsimile is only justified for urgent requests and the cost declines as the vol-

ume of requests increases, it would be very difficult to justify the use of facsimile with the machinery currently available.—*Marion G. Hess, State University College, Potsdam, N.Y.*

**A Report on the Consumer Survey of New Serial Titles.** By A. Frederick Kuhlman, made for the Joint Committee on the Union List of Serials, Inc., and the Library of Congress under a grant from the Council on Library Resources, Inc., August 1, 1967. 84p.

*New Serial Titles*, in the words of one reference librarian, "is one of the most important bibliographical aids ever devised." The purpose of NST is three-fold: (1) to list promptly information about serials which began publication after 1949, as an aid to acquisition; (2) to supply locations of these serials in libraries in the United States and Canada, to expedite interlibrary loan; and (3) to provide data for cataloging. The publication itself has been designed to supplement continuously the *Union List of Serials* and to eliminate the need for another edition of this massive work.

After the publication of the third edition of the *Union List*, the Joint Committee on the Union List of Serials, Inc., initiated a study of *New Serial Titles* (NST) to determine the degree of "consumer" satisfaction and to elicit suggestions for its improvement. With financial support from the Council on Library Resources, A. Frederick Kuhlman, assisted by an advisory committee, conducted a comprehensive study based largely on questionnaires and interviews with librarians who subscribe to and/or contribute to NST.

The *Report* of the study cites an extremely high level of approval of the performance of NST. The scope was considered to be satisfactory by 93.7 per cent of those responding; 84.7 per cent felt that it is sufficiently representative of all fields of knowledge; 89.4 per cent indicated that the locations cited can meet interlibrary loan requests; 81.8 per cent reported that its record of bibliographical changes was adequate; and reactions to other aspects were also favorable. In spite of a general

satisfaction, the participants in the *Consumer Survey* offered suggestions and implicit criticism from which Dr. Kuhlman has extracted a number of constructive proposals for the improvement of NST.

Although consumer satisfaction with the scope of NST was almost unanimous, there was strong support for including more government publications. There is already wide coverage of this type of serial, but Dr. Kuhlman recommends that municipal publications should also be included. An increase in coverage for other types of government publications actually is a matter of more comprehensive reporting by libraries in categories already included. This same principle should, he recommends, be applied to other types and subject categories of serials for which reporting is presently inadequate. To accomplish this, he suggests that the number of subscribing and contributing libraries should be selectively increased. The Special Libraries Association, the American Theological Library Association, and the various divisions of ALA should, he feels, take the initiative in any such attempt at increasing the number of libraries which contribute to NST.

Other suggestions in the *Report* include the prompt reporting of all changes in policies for lending serials; the preparing of entries from the advance printer's copy of national bibliographies, resulting in faster bibliographical control of foreign serials; and the inclusion of LC classification and card numbers when available. Of particular interest to the user of NST are the recommendations that bibliographical changes should be included in the same alphabet with new titles, and that monthly issues should be cumulated. It is notable, however, that the expansion of the list to include pre-1950 titles is not recommended.

The *Report* is obviously of great value to all of those who are concerned with the policies governing NST. As Dr. Kuhlman remarks in his recommendations, NST should be considered to be "in its formative years," and changes in its scope and organization are a natural condition of its growth and of the changing needs of li-