Recent Publications

BOOK REVIEWS

Case Studies in Systems Analysis in a University Library. Ed. by Barton R. Burkhalter. Metuchen, N.J.: Scarecrow Press, 1968. 186p. $7.50 (67-12070).

This brief volume is a contribution to library administration. In their more sober moments most library administrators admit that their sophistication with the technical aspects of management probably does not approach that of the man of the house in the days of "cottage industry." To improve somewhat on this situation, the administration of the library at the University of Michigan has a program labelled "Operations Research," staffed by graduate engineers as supervisors on a part-time basis, using the part-time help of students in the university's engineering school.

The program deliberately employs the more conventional tools of industrial engineering, such as work measurement and sampling, methods improvement, and breakdown cost analysis. The desire is to profit from the results of the studies, and the proposed engineering applications, if accepted, are always implemented. Furthermore, they are considered successful only if specific problems are alleviated or, best of all, solved.

This has meant that the library department heads are fully involved in the application of the "improvements" suggested by engineering techniques, from the first steps of participating in data collection, on into creation, and then to implementation. Thus communication inadequacy is minimized and library staff involvement maximized.

Twelve case studies are given in detail ranging from a short five pages describing one project up to one case study totalling twenty-nine pages. Calculations in very elementary mathematics, charts, tables, and diagrams abound. The clarity of presentation which only comes when a number of writers and users have gone over a report again and again is everywhere evident and in most cases of marked value. No knowledge of advanced statistical techniques or linear programming is required to understand the results.

The contents relate significantly to circulation work in libraries—studies of book renewals, overdues, chargeout periods, standardized circulation arrangements in divisional (or departmental) libraries, book reshelving, exterior book return systems, exit controls. Case studies of these make up the specific content of five of the chapters. Accounting and cost analysis for periodical replacement, photocopying, and Xerox expense are detailed in four studies. Inventory, book re-labeling, and seating deployment problems are investigated in other chapters.

In the introduction the editor mentions one very costly library area which is not investigated: "This collection of case studies contains nothing in the area of technical services, a significant shortcoming, simply because no important studies had been concluded in technical services at the time of this writing" (Introduction, p. 8). Perhaps Mr. Burkhalter is telling us more than he says; perhaps technical processing's key cost, namely salaries, involves a type of intellectual work not easily investigated by standard industrial engineering techniques. However, even if this be the case, very substantial among processing functions is the physical transfer of books and cards from "here to there" and sometimes back again, unfortunately sometimes on the same path, too. Also, there is too frequent confusion of professional and clerical motion and time elements in processing troubling many acquisition supervisors and head catalogers. This is quite aside from the intellectual levels that should mark the professional from the clerical contributions. We hope Dr. Robert

Muller, Associate Director at Michigan, and Mr. Burkhalter may soon also reveal to us some costs of the physical side of processing. The statement above certainly indicates, albeit indirectly, that they have been contemplating this area.

In conclusion, this short volume could be the start of a management literature that will meet an unfilled and obvious need of library administrative staffs and library science professors and their students. It is also right now a useful book to show to those important laymen (presidents, trustees, foundation directors, government officials, legislators, etc.) who so often tell us they cannot understand why libraries cost so much. This volume shows in a convincing and somewhat frightening way where and how fast the library money goes.—*John H. Moriarty, Purdue University.*

Organization and Handling of Bibliographic Records by Computer. Ed. by Nigel S. M. Cox and Michael W. Grose. Hamden, Conn.: Archon Books, 1967. xvi, 192p. $12.00 (67-30792).

Because of scarce resources and their typical astuteness, the British are straightforwardly laying their own preconditions for successful computerization. This volume is a report of activities associated with a leading "center of excellence." It extends on a less abstract plane the instructive primer by Cox, Dews, and Dolby of 1966. It is also a summary of several U.K. advances since the plans announced at the Brasenose Conference at Oxford the same year. In contrast to our own relative abundance, the biggest danger to the British effort appears to be a waning of financial momentum. As Professor E. S. Page remarks in a keynote address, "it must be understood by those with the resources to sponsor research that full scale operation of a computer system on bibliographic problems is necessary for further advance and may demand their support however routine the operation may appear at a casual glance." In technical quality of design work, the British are at pains to avoid a major illness to which their American opposite numbers have frequently been subject: half-bakedness.

This collection of papers was presented at a seminar held at the University of Newcastle upon Tyne in July 1967. The proceedings comprise seven sections organized around four themes.

Half of the sixteen contributions deal with the Newcastle computer file handling system and a number of projects to which it is being applied. A remarkable thing about the Newcastle group is that they are both researchers and developers, compared to most similar U.S. activities. As Cox and Dews point out in the lead paper, they wished to create an experimental, flexible string manipulation and analysis system, comprised of generalized routines and applicable to a wide class of data forms, large files, and highly-structured non-numeric information handling problems. As have American workers, they found that manufacturer supplied software was inadequate, and so they undertook to write their own. The panoply of character-handling and list processing problems to which their system is addressed is a model summary of requirements for computer specialists new to the library application.

A second paper by Dews describes the computer editing and printing of a union list of periodicals which was the first tested use of the Newcastle package. Duncan discusses the upgrading of the output presentation capability of the computer in processing language data. He suggests that graphic arts quality intermediate output products will be the wave of the future, derived ultimately from wholly digital stores. Reviewing hardware capabilities and economics, he concludes that computer-produced book catalogs will be similar to newspaper production when volume justifies it.

In other applications, Hunt outlines one of the first uses this reviewer has seen of machine records for the preparation of catalogs of older books as a true "bibliographer's tool" complete with an augmented descriptive format. Russell presents results on a documentation and dissemination system for literature of interest to the staff of the Newcastle group itself. Of wider interest is the work reported by