

wick's book an excellent source of information for comparative purposes, for there are many similarities in the British and American experience. In both countries Asian and African collections developed from rather modest beginnings. A period of very rapid growth came in the 1950s and the 1960s as a result of substantial financial support from government and private sources. The number of Asian and African library collections multiplied, extending the scope of their coverage far beyond their original concern with materials in the humanities. With this expansion came also a number of organizational, technical, and management problems, many of which still await satisfactory solutions. For example, the question of whether area collections should be maintained separately or integrated with the main library collection remains a source of disagreement between users and library administrators. The problem of bibliographical control is another challenge which has been only partially met. Dealing with countries with no developed book trade where many desired items can be had only by personal visits and through diligent cultivation of personal contacts is still a problem that defies the solutions of an efficiency expert. (Ms. Benewick offers an excellent account of such difficulties which can be read with profit by those who are accustomed to dealing with American and Western European dealers with computerized operations.)

Probably the most important question facing Asian and African libraries in our two countries today, when financial support for higher education can no longer be taken for granted, is how to consolidate the gains of the past two decades in better service to scholarship. Ms. Benewick pleads for more coordination and planning on the national level for Great Britain. The same plea can and should be entered for the United States. Lately in the United States, there has been much discussion of cooperative schemes in library development in area studies. Both the positive and the negative aspects of the British experience can serve as a useful guide to our deliberations.

Finally, this reviewer would recommend the inclusion of a few statistical tables giving more quantitative information on British Asian and African collections, when and if

Ms. Benewick updates her study.—*Eugene Wu, Librarian, Harvard-Yenching Library, Harvard University, Cambridge, Massachusetts.*

Woodburn, Henry M. *Using the Chemical Literature: A Practical Guide.* (Books in Library and Information Science, v. 11) New York: Marcel Dekker, 1974. 302p. \$14.50. (74-21883). (ISBN 0-8247-6260-6).

The literature of scientific bibliography has now become so immense with so many different information sources and data services offered to technician and librarian alike that new guides to such literature should prove very welcome indeed. If the guide, as this one does, attempts to be concise, accurate, and fairly well up to date, professional reference attention will focus upon it.

Woodburn, professor emeritus of chemistry at SUNY Buffalo, has summarized in a very modestly sized book his experience of more than fifty years in the use of chemical literature. The editorial effort has been to discuss a limited number of periodicals and reference works but to include in those works the major ones found in well-equipped American libraries today. This is not a vast listing or bibliography of all sources available in the field.

Instead the very readable text leads you into broad areas of discussion such as "collections of physical data," "abstracting services," "retrospective searching," and "microform publication." There are, of course, sections on the basic works such as *Chemical Abstracts*, *Beilstein*, and *Gmelin*. It is quite obvious that here is an author with a feel for library methodology: classification systems are outlined and compared and government publications and their unique problems summarized.

The double-spaced format of the entire text done in a typewriter face actually invites reading. It is an easy guide to use and manages to make several rather complicated chemical literature systems interesting and clear. This is no mean achievement.

Literature developments have been covered through 1973. There are references appended to each chapter which permit the reader to consult the original sources if he chooses.

Woodburn will inevitably be compared with Evan J. Crane's *Guide to the Literature of Chemistry* (1957); M. G. Mellon's *Chemical Publications: Their Nature and Use* (1965); and C. R. Burman's *How to Find Out in Chemistry* (1966). In several fields—collections of spectra, microform material, and computer-readable material—Woodburn is clearly more up to date, and the entire work is a valuable and most useful addition to the science reference shelf.—David Kuhner, *Librarian, Sprague Library, Harvey Mudd College, Claremont, California.*

**Computers and Early Books: Report of the LOC Project Investigating Means of Compiling a Machine-Readable Union Catalogue of pre-1801 Books in Oxford, Cambridge and the British Museum.** London: Mansell, 1974. 131p. \$12.00. (74-76872). (ISBN 0-7201-0444-0).

The LOC Project represents search for a practical method to produce a union list of the contents of all libraries of Oxford and Cambridge universities and to relate their resources to those of the British Museum. The calculations based on the results of the project indicate that about a half million unique titles of pre-1801 books alone are held in these libraries. Until now, the success in making the entire spectrum of this wealth systematically available to researchers has eluded the efforts of bibliographers. However, the emerging computer technology recently has opened up possibilities to attack this mammoth task without armies of skilled manpower. The LOC Project has aimed to devise, test, and evaluate techniques for the massive task of compiling a union catalog by exploiting the potential of the new emerging technology.

The LOC Project, which was funded by the Andrew W. Mellon Foundation in 1968 and was brought to completion in 1973, represents thoroughly planned and meticulously performed research in the fundamentals of creating machine-readable bibliographic records from books on shelves. It has assumed no available systematized bibliographic data in the sense of customary catalogs. It has researched the feasibility of creating adequately precise machine-readable records on the basis of rudimentary, easily recorded data from the books

themselves. Bearing in mind that the object union catalog had been restricted to books published before 1801, the task assumes an additional dimension of challenge if one remembers the character of the title pages of early books, ranging from the elusively descriptive to the poetic.

The method chosen for the project specified the compilation of the bibliographic records from the title pages of a sample consisting of all pre-1801 books in all Cambridge and Oxford libraries cataloged under the letter "O," except for three college libraries which were recorded in their entirety. To serve as a system of normalized base for comparison, a reference file was established also against which the records from all college, departmental, and faculty libraries could be matched. This file consisted of the "O" letter catalog records from the British Museum, the Bodleian, the Cambridge University Library, and the library of the Taylor Institution, Oxford; added were also "O" entries from Pollard and Redgrave's *Short Title Catalogue (revised)*, from Wing's *Short Title Catalogue*, and from H. M. Adam's *Catalogue of Books . . . in Cambridge Libraries*. The records produced by the project were matched by computer against each other and against the reference file, using three matching techniques: a computer generated search code, the "keyed title," and the "fingerprint" identification technique. The matched records from the entire sample were assimilated, and a specimen union list was produced.

Aside from its principal objective the project produced a wealth of statistical data about the distribution of materials by date, language, and numbers of copies of works in the various libraries; about the relative merits and costs of various methods in capturing bibliographic data for machine-readable transcription; about the problems involved in several methods and devices used in the transcription; and about the problems which arose in computer matching and printing of bibliographic records, ranging from identification of data structures to representation of characters in a large array of languages.

A particularly noteworthy achievement of the LOC Project is the successful ex-