sembled here in one volume. It is not an essential reference work.—Louis A. Kenney, Director of Library Services, San Diego State University.

Sherrod, John, ed. Information Systems and Networks. Eleventh Annual Symposium, March 27-29, 1974. Produced by Informatics, Inc., Westport, Conn.: Greenwood, 1975. 200p. \$11.00. (LC 74-11941) (ISBN 0-8371-7717-0)

If you like Irish stew this book is for you. Hidden behind a vague title is a symposium on on-line interactive data base services. The Data Base Industry, or more accurately the Data Base Complex, embraces activities ranging from creating data bases to providing data base services to end-users. It faces issues of design, economics, organization, and user requirements, and hardware-software-telecommunication arrangements.

The actors in the data base drama are: organizations that create and often publish data bases; organizations that produce machine-readable versions of data bases; organizations that provide software access to data bases; organizations that supply telecommunication connections; organizations that offer services directly to users or to intermediaries such as librarians, research organizations, and their funders; the administrators and staffs of these organizations; and the end-users themselves. Most of the actors are represented in the symposium.

The issues facing these actors include the optimal design of data bases, of hardware, of software, and of service interfaces. They include issues of financing development and operation, of subsidizing and recovering costs, and of marketing and pricing services. Issues relating to users include the characteristics of various user groups, their work requirements, and the system and service functions that best meet these requirements.

Most of these issues are covered in varying depth in the symposium. Some of the more substantive presentations are Roy Kidman's statement of the harsh constraints on academic libraries in offering on-line services; Thomas Martin's review of alternatives in designing interactive retrieval software; Donald King and Raymond Brown's economic model for decisions on using interactive services; Bennet Lientz's quantification of factors in deciding to secure computer services through a network; Kenneth Siler's description of criteria for evaluating data base management systems; and Paul Zurkowski's discussion of the role of the marketplace in providing access to information. In addition, there are lucid discussions of data bases and services in areas such as toxicology, medicine, aerospace, biology, and chemistry. Historical and summary papers offer background information for the nontechnical reader.

The virtue of this symposium is that the main actors and issues in the Data Base Complex are represented. Its defect is a lack of a unifying plot that highlights the parties at issue and the alternatives each face. The papers appear one after the other, covering an astonishingly wide range, more like a drama festival than an evening with Ibsen. The symposium advances our ability to reach an integrated understanding of what commercial, academic, professional, and governmental groups must do to make interactive services better and supportable. Librarians, systems personnel, administrators, and business people will each find several valuable papers in this symposium. The organizers deserve credit for making the proceedings available rapidly. -Douglas Ferguson, Stanford University Libraries, Stanford, California.

OTHER PUBLICATIONS OF INTEREST TO ACADEMIC LIBRARIANS

Alloman, Katherine A. A Reference Guide to Postsecondary Education Data Sources; A Directory to Data Sources Corresponding to Items in the NCHEMS Statewide Measures Inventory. Boulder, Colo.: National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, 1975. 1v. unpaged. \$12.00.

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