BOOK REVIEWS

Social Science Data Archives: Applications and Potential - Special issue of American Behavioral Scientist. Volume 19 (March-April 1976). Edited by Richard I. Hofferbert and Jerome M. Clubb. Information about availability of issue may be obtained from: Davlin Publications, INC., 13521 Alondra Boulevard, Santa Fe Springs, California 90670. Inquiries from the U.K., Europe, the Middle East, and Africa should be sent to Sage Publications Ltd., St. George's House, 44 Hatton Garden, London ECIN8ER.

The contents include:

1. "Machine-readable Data Production by the Federal Government: Access to and Utility for social Research." Michael W. Traugott and Jerome M. Clubb.

2. "The Less Obvious Functions of Archiving Survey Research Data." Warren E. Miller.

3. "The Historian and Social Science Data Archives in the United States." Allan G. Bogue.

4. "Data Services in Western Europe: Reflections on Variations in the Conditions of Academic Institution-Building." Stein Rokkan.

5. "Instructional Applications of Data Archive Resources." Betty A. Nesvold.

6. "Social Science Archives and Confidentiality." Richard I. Hofferbert.

This special issue of the American Behaviroal Scientist is devoted to the developments, problems, and implications for research and instruction resulting from the growth and diversification of data archives since the late 1950s. The archives examined are multiple service organizations devoted basically to acquisition of data from diverse sources, organization and documentation of data for use by persons other than those responsible for original data collection, and dissemination of these data in machine-readable form to users not physically proximate to the archive itself, rather than local, single university-based services.

Michael W. Traugott and Jerome M. Clubb consider some of the major categories of federally produced data resources, means of access, difficulties confronted in tnier use, and developments that may eventually provide more effective access to the resources of the federal government by social scientists. In his analysis of the historian's relation to social science data, Allan G. Bogue complements Traugott and Clubb by outlining the development of academic archives as well as efforts by public agencies.

Stein Rokkan reviews the situation in the seventeen political systems of Western Europe keeping in mind the need to begin with an elementary analysis of the "institutional landscape" of each country. He perceives the data service as a response to the intellectual challenge of quantitative methods and statistical techniques in the social sciences and to the techno-

logical challenge of newly developed computer systems. Rokkan presents a schema that graphically depicts the developments of data archives as well as a portrayal of the Norwegian situation and elucidates the strategies necessary to systematize the storage of information.

While the three essays treated above delineate the state of the art of data archives and the mechanisms for access to them, the remaining three pieces in the ABS special issue present topics that run accross the boundaries of time and nation. Warren E. Miller's discussion of the "less obvious functions" of archiving survey data considers the effect of the data archive on the sociology of the social sciences. He views the "invisible college" of scholars as being replaced by a collectivity of scholars who are joined together by virtue of shared access to archived bodies of data central to their common intellectual endeavors.

Betty A. Nesvold's argument that social science instruction should include training in research methods and experiences with machine-readable data much in the same way as beginning chemistry students are trained in a laboratory is based on the supposition that modes of learning should be matched with modes of discovery. She surveys the few available packages for the teaching of statistical methods and offers examples of custom construction of data based instructional materials.

The final essay by Richard I. Hofferoert confronts the problem of confidentiality and data archives. Hofferbert states that the potential noncooperation that could result from public breaches of confidentiality could destroy social science credibility and cripple

research. Because of their centraility in providing machine-readable files of social science data, Hofferbert calls upon the major archives to assume a leadership role in implementing procedures to prevent problems involving the confidentiality of data.

This issue of the American Behavioral Scientist should stand as a major critical and evaluative statement on the role of social science data archives in the mid-seventies. It is unique in its contribution to the data archive literature because it is authored mainly by users of data archives rather than by archivists themselves. It, in tandem with the Drexel Library Quarterly special issue on data archives (reviewed in IASSIST Newsletter 1;4:37-38), provides a dual perspective on the role of data archives in the information system of the social scientist. Highly recommended as an important set of statements by active social scientists.

Luedke, James A., Jr.; Kovacs, Gabor J.; and Fried, John B. "Numeric Data Bases and Systems." In Annual Review of Information Science and Technology, volume 12, pp. 119-181. Edited by Martha E. Williams. White Plains, New York: Knowledge Industry Publications, Inc. (for the American Society for Information Science), 1977. ISSN: 0066-4200. ISBN: 0-914236-11-3. CODEN: ARISBc. LC Catalog Card Number:66-25090. Price: $35.00.

This first Annual Review of Information Science and Technology (ARIST) to include a chapter devoted to numeric data bases and systems ranges across data bases

for science, technology, the social sciences, economics, and business. The review addresses issues relevant to the development and use of computerized scientific, technical, social, economic, and finanacial numeric data bases and systems emphasizing on-going rather than historical activities.

Major topics surveyed include: Characteristics of Numeric Data; Numeric Data Base System Discussion; A Survey of Numeric Data Bases and Systems; Numeric Data Bases and System Development, Marketing, and Use; The Future; Acronyms and Initialisms; and Bibliography. While this survey intends to assess numeric data bases of all types, certain sections focus on data for the social sciences. Notably there is a section on available data bases which first discusses the nature of social science data and then cites available data bases by discipline: education-EDSTAT, HEGIS, ELSEGIS; demography-SITE II, ONSITE, DUALabs. Data archives are mentioned in one paragraph at the end of this section (pp. 134-136).

The international, efforts of IASSIST are noted as well as national user groups such as the Association of Public Data Users, the SIGSOC of ACM, and the American Library Association's Government Documents Roundtable (GODORT) (p. 149). Although this survey does not highlight the role of social science data archives, it does locate them in the broader context of numeric data and places the providers of social science statistical data in perspective for other information professionals.

Muller, Paul J., ed. Die Analyse prozeß-produzierter Daten (Enlgish trans.: The Analysis of Process-Produced Data).

Stuttgart: Klett-Cotta, 1977. ISBN: 3-12-911020-8. Price: DM29,--.

Paul Muller has edited a volume of critical essays devoted to the topic of process-produced data which emerged from the QUANTUM special session during the 1976 meetings of the German Sociological Association in Bielefeld. Muller has discussed process-produced data in an early issue of the IASSIST Newsletter (Volume 1, Number 2: 17-21) and defined the generic term as "all data that are/were not collected for statistical or scientific research (e.g., censuses or surveys), but are instead by-products or traces of the daily routines of private or public organizations or persons." The contents of this important volume include:

1. "Die wechselnde Daten basis der Soziologie- Zur Interaktion Zwischen Theorie und Empirie." (English trans.: "The Changing Data Base of Sociology: Interactions between Theory and Empiricisum,") by Erwin K. Scheuch which concentrates on the methodological reasons for expanding the data base beyond the "classicial" survey research and gives a broad theoretical overview of the developmental processes leading to an increased use of non-research elicted data within social research

2. "Die Buchfuhrung der Verwaltungen als sozialwissenschaftliche Datenbasis." (English trans.: "Administrative Bookkeeping as a Social Science Data Base,") by wolfgang Bick and Paul J. Muller.

Presented in a shortened form at the QUANTUM/SSHA-Conference, "Quantifica-tion and Methods in Social Science Research: Possibilities and Prob-lems with the Use of His-torical and Process-Pro-duced Data," University of Cologne, August 10-12, 1977. The essay focuses upon the need to study the representational nature of administrative bookkeeping, and to work out the kinds of approaches that seem most promising with the use of these kinds of data.

3. "Grenzen und Moglich-keiten der Verwendung von Strafakten als Grundlage Kriminologischer For-schung." (English trans.: "Possibilities and Problems with the Use of Punishment Records as a Data Base for Criminol-ogy,") by ul Wiebke Stef-fen. Examines the use-fulness of thse data not for the analysis of clients' behavior, but for propositions about the data generating organizations.

4. "Verknupfung und Gener-ierung von Mikrodaten." (Enblish trans.: "Link-age and Generating of Microdata,") by Klaus Kortmann and Hans-Jurgen Krupp. Reports on the record linkage procedures employed in linking up the various West German censuses.

5. "Prozeß-produzierte Daten in der Rechtssozologie." (English trans.: Pro-

cess-Produced Data within the Sociology of the Law,") by Volkmar Gess-ner, Barbara Rhode, Ger-hard Strate and Klaus A. Ziergert describes the project design for a mul-ti-level and multi-file analysis of the insol-vency situation of vari-ous business and concen-trates on the different "images" insolvency has in various record-keeping systems.

6. "Datenverarbeitung als Quellenkritik?" by Erd-mann Weyrauch reports on the use of sampling tech-niques for the analysis of medieval tax lists.

7. "Mobilitat und soziale der wurttembergischen Fabrikarbeiterschaft im 19. Jahrhundert," by Peter Borscheid and Heil-wig Schomerus discusses the analyses of various 19th century records, especially the potential-ities of records kept at the end or beginning of a marriage (Teilungen or Inventuren) to construct quantitative life histo-ries of earning, life style and consumption, oriented to the expecta-tion of income (a la M. Friedman's "permanent income hypotheses.")

This volume is a substantial contribution to an expanding com-prehension of what constitutes relevant material for research. Data archivists should obtain this item and pass it on to their clien-tele. Highly recommended.

White, Howard D. ed. Reader in Machine-Readable Social Data. Englewood, Colorado: Information Handling Services, 1977. (Address: Information Handling Services, Library and Education Division, Box 1154, Englewood, Colorado 80110). Library of Congress Catalog Card Number: 77-92432. ISBN: 0-910972-70-2. Price: $19.00

The treatment of social data as a topic for the Readers in Librarianship and Information Science series is formal recognition by the information community that the field of data archiving is a major component of the social science information system. Howard D. White, who edited the Drexel Library Quarterly issue on Machine-Readable Social Science Data (see IASSIST NEWSLETTER: 1;4:37-38) and who did his doctoral thesis on library/data archive relations (see IASSIST Newsletter 1;3:29-31), has compiled an anthology of major formative articles on the history, rationale, and structure of data archives.

The Reader is divided into five sections. The first, "Numerical Data in the Social Sciences," introduces key problems of social science data in machine-readable form. Articles focus on the potential of archives for research and archive under-utilization due to lack of users' knowledge about their holdings. The second section, "Major Data Suppliers," provides descriptions of major files such as the U.S. Census Data of machine-readable records in the U.S. National Archives; and centers such as the Inter-University Consortium for Political and Social Research, The Roper Public Opinion Center, the National Opinion Research Center, and the Project TALENT Data Bank.

"Archive-Library Relations," A critical issue for information professionals, is the third section which considers a spectrum of organizational structures to encompass the overlapping missions of these two institutions. Intellectually archives are a coherent component in the social science information model, but practically neither archives nor libraries have been able to integrate their services for maximum benefit to the user.

Bibliographic control is examined in section four, "Indexing and Cataloging Social Science Data." Various strategies of documentation as well as actual progress made in the cataloging of machine-readable records are treated by leading planners, librarians, and archivists.

The final section, "The World of the Data Specialist," examines the management of data archives as the frontier of librarianship. The special skills and wide range of technological and subject expertise needed to organize and run archives on a daily basis are articulated and discussed.

The Reader is a basic sourcebook for the practicing and beginning data archivist. The former will find codifaction of practice and some of the philosophical bases on which the field is built. The latter will obtain a preliminary survey of the range of skills and resources needed for effective data archiving.

White has pulled together writings by prominent data archivists and social scientists which provide a multifaceted approach to this emerging field. Working archivists will want the book as a reference and intellectual rationale for

their daily work; students of library and information science will turn to the Reader as the first collection of widely scattered materials to be made conveniently available; and social scientists will find the Reader a coherent introduction to the expanding array of resourcesand services to facilitate extended analysis. The Reader is highly recommended to all three groups.