

ally intervening in the middle of an English sentence. Some good copy editing is not too much to ask when the price of this volume is this steep for a paperback volume sans index. Libraries would be advised to bind this if more than a few uses are expected.

This reviewer recommends purchase for library or institutional collections, but not by individuals for personal use since most individuals are likely to find only a few papers to their interest for archival purposes. Interlibrary loan will be a justifiable way for individuals to examine this volume if their libraries would not have multiple-use demand for it.—Audrey N. Grosch, University of Minnesota, Minneapolis—St. Paul.

Garfield, Eugene. *Citation Indexing—Its Theory and Application in Science, Technology, and Humanities*. Information Science Series. New York: Wiley, 1979. 274p. \$15.95. LC 78-9713. ISBN 0-471-02559-3.

A clear, concise, well-organized introduction to citation indexing and its applications has long been needed. This book fills that need admirably. Its author is Eugene Garfield, the founder and president of the institute for Scientific Information (ISI), publisher of *Current Contents*, *Science Citation Index*, *Social Science Citation Index*, *Arts and Humanities Index*, and *Journal Citation Reports*. The work describes the nature and history of the development of citation indexing, the design and production of a citation index, and applications of citation indexing for bibliographic searching as well as for use as a research tool for the understanding of science, scientists, and scientific journals.

The author's enthusiasm for citation indexing leads him occasionally to overstate his case: "If an index is looked at as an attempt to represent as much detail of the real world as possible, a citation index would be to a conventional subject index what a full-color photograph would be to a black-and-white drawing" (page 9).

But this is not much of an exaggeration. Garfield carefully shows the advantages of the citation index over conventional subject indexes for indexing and for bibliographic searching; these include the lack of need for intellectual analysis in citation indexing, the

objectivity of citation indexing, the increase in potential productivity and efficiency in searching, the avoidance of semantic problems and the need for vocabulary standardization in citation indexes, the lack of need—at least at the indexing stage—to worry about the variety of human languages in which papers are published, the precision of the citation index over time, and the ability of the citation index to identify relevant papers across disciplines. To this list could be added the fact that citation indexing measures *quality*, if only very crudely, while traditional subject indexes do not. These are mighty advantages, leading this reader to become aware of his underuse of citation indexes for his personal literature searching needs.

Garfield thoroughly addresses the limitations of citation indexing as well. Among these limitations are the problem of self-citation, the negative citation, the overciting of methodological papers, and the fact that citation indexing cannot identify significant work that has not been recognized as significant by the scientific community nor take into account the relative prestige of journals.

Just as ISI's tools provide an interdisciplinary approach to indexing and retrieval, so does this work present a multifaceted view of the applications of citation indexing. Garfield demonstrates not only its value as a bibliographic search tool but also its application to the patent literature and its use as a tool for the study and management of science, for analyzing the structure of science, for measuring the utility of journals and relationships between journals and fields, and for measuring the performance of scientists. Detailed discussions of methodologies and results for these applications are presented in separate chapters, each with an extensive bibliography.

This review would not be complete without discussion of the indexes to the volume. There is not only a detailed subject index but also a cited-author index. References to the work of Eugene Garfield were omitted from the latter, but a quick check of a sample of chapter bibliographies reveals that approximately 30 percent of all chapter citations are in fact self-citations. This is as it should be. Eugene Garfield has written far

Index to International Public Opinion, 1978-1979

Prepared by Survey Research Consultants International, Inc.

The *Index to International Public Opinion, 1978-1979*, is a fascinating and important contribution to global understanding. This unique annual reference book presents public opinion data from every region of the world on virtually every social, political, and economic topic of importance to the human community today.

Place your standing order for this new annual publication with your subscription agent or Greenwood Press. By placing a standing order you will receive a twenty percent discount from the list price of the first and subsequent volumes.

PROVIDES BROAD COVERAGE

- Covers surveys conducted in nearly 50 countries
- Also includes domestic American public opinion polls on international subjects

AND OFFERS EASILY ACCESSIBLE DATA

- Arranged by 22 broad topics and 150 subtopics
- Includes a topical index of nearly 400 subjects as well as an index by countries in which surveys were conducted and an index by countries referred to in the surveys

FROM MANY AUTHORITATIVE SOURCES

- Separate section covers selected single-nation polls of the Gallup International Research Institutes
- More than 50 leading polling organizations are presented—including the Harris Survey, the Institut für Demoskopie Allensbach, and Public Opinion Research of Israel Ltd.—to ensure a variety of approaches and survey groups

"The importance of recording public opinion data gathered in all parts of the world can hardly be overestimated. *Index to International Public Opinion*, as an annual reference volume, serves as a unique source of information about prevailing opinion on social issues within individual nation-states worldwide."

—ADRI BAKKER, Chairman,
Nederlandse Stichting voor Statistiek,
The Hague, Netherlands

"For many years researchers throughout the world have sought an index to international public opinion and now, to my delight, Survey Research Consultants International is undertaking this mammoth task. SACI's work in coordinating and publishing research carried on around the world over the past several years has proved their capability and professionalism. . . ."

—ROBERT M. WORCESTER
Managing Director, Market & Opinion
Research International
(MORI), London, England

"We live in a time when attitudes in one nation toward the foreign policy making of another nation may be even more significant than attitudes in the original nation toward its own foreign policy. We also live in a time when analysis and interpretation of political attitudes in one nation by journalists and politicians in another may be incomplete and superficial. Hence the enormous value of this comprehensive index with its international approach to public opinion."

—JAMES MACGREGOR BURNS
Pulitzer Prize-winning Historian, and
Woodrow Wilson Professor of Government
at Williams College.

Index to International Public Opinion, 1978-1979. Edited by Survey Research Consultants International, Inc. (Westport, Conn. 1980). 386 pages. ISBN 0-313-22058-1. \$59.95 (An annual publication). (20% discount on standing orders).

more extensively on citation indexing and its applications than any other author.

The work is highly recommended for all librarians and information specialists as well as for sociologists and historians of science.—*Stephen P. Harter, University of South Florida, Tampa.*

Stone, Elizabeth; Sheahan, Eileen; and Harig, Katherine J. *Model Continuing Education Recognition System in Library and Information Science*. New York: K. G. Saur, 1979. 313p. \$29. LC 79-11538. ISBN 0-89664-145-7.

With the increasing concern and participation in continuing education by the library/information/media community, there has also been aroused an interest in developing some type of recognition system that would provide a visible means of accountability, contribute to improving the quality of the programs, and make it possible for those who do take continuing education courses to gain recognition for their efforts.

The present study, the result of a grant awarded to the Continuing Library Education Network and Exchange (CLENE) and Catholic University, addresses two aspects of continuing education: (1) the development of a model recognition system for library/information/media personnel engaged in nontraditional programs of study (i.e., home study projects) and (2) the design and demonstration of a home study course that would qualify for recognition in the inclusion of that model. However, although the study is limited to nontraditional programs of continuing education, the procedures and methodology used in collecting data for the project provide information relevant to questions and issues that may also arise regarding recognition for more traditional types of continuing education programs.

This report of the project on model recognition systems is divided into seven chapters, each of which lends itself to discrete assessment. Chapter 1, introduction and background, discusses the expressed need for the study. Chapter 2 deals with the procedures and methodology used in collecting data; these are painstakingly described by the authors. It includes procedures for developing and pretesting home study

modules, guidelines, processes for disseminating information about home study programs, and the use of continuing education units in the home study program.

Chapter 3 explores continuing education recognition units used by other professions that provide for nontraditional studies. The definition of home study and its advantages and disadvantages are included. Chapters 4 and 5 relate to the findings and conclusions of library/information/media personnel presently participating in continuing education relative to their perception of the objectives of such a system.

Chapter 6 contains the proposed model for a voluntary continuing education recognition system and suggestions for implementing it.

The results, conclusions, and recommendations of this extensive research project as described are impressive in scope, encyclopedic in treatment. The authors also anticipate problems and have recognized that one of the major barriers to the development of home study courses is the lack of adequately trained persons and the absence of educational institutions with training programs.

In collecting data on a model recognition system for nontraditional programs, the authors have also collected information dealing with concomitant questions that relate to recognition units for more traditional continuing education programs and answer some of the following questions: How is the quality of a continuing education program maintained? Are the objectives of the library/information/media programs compatible with those of other organizations? Who will maintain the records? Where will the records be maintained? Who will grant recognition? They also wrestle with problems of guidelines, standards, and criteria.

This publication becomes increasingly important as one realizes that the literature on the subject of nontraditional learning, especially in the specific area of home study, has not appeared in library journals. Thus this work becomes one of the first full-length, detailed studies on continuing education recognition units published in library literature. For those skeptics who may question whether the limited issue of recognition units for home study programs is a