falls short. Olson and Swanson present more than 700 examples of title pages and bibliographic records, many of them MARC records, for 16 types of materials.

Most handbooks and manuals typically present sample title pages and verso information to illustrate typical problems, and provide bibliographic records prepared according to AACR2 to show how the rules can be applied. Maxwell's (1989) handbooks are the most authoritative for descriptive cataloging and Leong's handbook on serials cataloging (1989) is invaluable. Readers interested in teaching themselves about cataloging should begin with the these books, and if they are interested in the cataloging of other materials, Frost's guide (1989) offers helpful advice for nonbook cataloging. For readers who do not have MARC manuals, Crawford's (1989) book covers the MARC format for all media.

REFERENCES

Crawford, W. (1989). *MARC for library use: Understanding integrated USMARC.* 2nd edition. Boston: G.K. Hall.

Frost, C.O. (1989). *Media access and organization: A cataloging and reference sources guide for nonbook materials.* Englewood, CO: Libraries Unlimited.

Hunter, E.J. (1989). *An introduction to AACR2: A programmed guide to the second edition of the Anglo-American Cataloguing Rules, 1988 Revision.* Rev. edition. London: Bingley.

Leong, C.L.H. (1989). *Serials cataloging handbook: An illustrative guide to the use of AACR2 and LC rule interpretations.* Chicago: American Library Association.

Maxwell, M.F. (1989). *Handbook for AACR2 1988 revision: Explaining and illustrating the Anglo-American Cataloging Rules.* Chicago: American Library Association.

Olson, N.B., & Swanson, E. (1988). *The complete cataloging reference set.* DeKalb, IL: Minnesota Scholarly Press.

Studwell, W.E., & Loertscher, D.V. (1989). *Cataloging books: A workbook of examples.* Englewood, CO: Libraries Unlimited.

School of Library & Information Science   INGRID HSIEH-YEE
Catholic University of America
Washington, DC 20064

Basic Research Methods for Librarians, 2nd Edition. R. POWELL. (Information Management, Policy and Services Series). Ablex Publishing, Norwood, NJ (1991). x + 213 pp., $39.50. ISBN 0-89391-688-9.

George Sarton, the great historian of science, laid down two rules for book reviewing: (a) criticize according to whether the author achieved his intent, and (b) criticize for errors of comission rather than omission.

The intent of this book is really rather modest. It is "addressed to the practicing librarian who needs to conduct research and publish," and is "intended for any librarian who must be able to read and evaluate research reports critically and assist others with their research." The author, like all of us who teach research, is acutely aware of deficiencies in research expertise in the library profession and has, valiantly, attempted to address that need. So, if the intent is merely to address the need, one cannot argue with the accomplishment.

The book should not be criticized for this optimistic intent. Whether a librarian without prior research skills will acquire those skills after reading it is a different question. This reviewer, having read much library research, agrees with the author that the "research record for librarianship is uneven," a generous understatement. One book will not overcome a profession-wide deficiency. About that the author has no illusions.

The book's "primary purpose is to help teach the skills necessary for a librarian to conduct rigorous, basic research." The author would have library research be as scientific as any science. Who would disagree? But is the book really about *basic research*?

The author carefully distinguishes between *basic research* (pure, theoretical, or scientific) and *applied or action research*, the "solving of specific problems in real situations." He states that this book "almost exclusively considers basic research methods, as opposed to applied research methods." Concepts of theory are indeed discussed in what is potentially one of the more important sections of the book, "The Role of Theory in the Design of Research." These concepts—levels of theory, propositions, hypotheses, relationships among variables, testability, generalizability, predictability, explanation, and so on—are little understood by students. Disappointingly, only one example of a "theory" is given—on the effect of library instruction on library use, and one could argue whether this is really basic. Otherwise, one finds no examples of underlying theories or laws or principles about librarianship that have or could be formulated or expressed apart from practical and real library situations. In the sections on surveys and analysis of data, the examples seem to be more about applied, action,

specific, real, and practical situations, such as user studies, adequate hours, multiple copies, parking, and photocopying, than about basic research. A substantial section is later devoted to applied research, and the author even says that "There is no good reason to assume that basic and applied research are mutually exclusive," and applied research "can validate theory and lead to the revision of theory." (p. 45) With that we agree.

One could quibble about the word "Methods" in the title. "Methods," to this reviewer, include empirical procedures used to describe data or test relationships between variables. Some of the major procedures are mentioned — t-test, analysis of variance, chi-square — but one does not learn how to use them in this book. This is not criticism for leaving them out. "The text is not . . . a cookbook. . . ." Rather it is a reproach for expecting them to be included. The book is really an expository checklist of topics (not "issues," the author's term) to be considered by the researcher — and a good checklist it is. Some helpful sections in the chapter "Developing the Research Study" include Formulating Hypotheses, Validity and Reliability, and Selecting the Research Method. "Other Types of Research," including Qualitative, Operations, Systems Analysis, Modeling, and Bibliometrics, are also mentioned. Chapters on Survey Research and Sampling, Data Collection Techniques, Experimental Research, Historical Research, Analysis of Data, Writing the Research Proposal, and Writing the Research Report contain fairly standard material. More apt titles might have been *Introduction to Empirical Research in Librarianship*, or *An Expository Checklist for Conducting Empirical Research in Libraries*.

The author grants that anyone seriously interested in doing rigorous statistical research should go elsewhere, and mentions several statistical texts.

To criticize this book for its omissions would be to reproduce all the books and all the journals ever written on how to do and how not to do research. George Sarton is long gone. Without his prudent counsel, where does one begin?

Deficiencies in library research go deeper than the books we write or the student we attract. How do we overcome the fear of mathematics, the widespread notion that statistics is a tool of liars — that you can "prove anything with statistics," and the inability to distinguish between science and technology? How do we counter the common practice of making inferences from descriptive studies without using inferential methods? One could go on. These deficiencies are society-wide. Rigorous research ultimately has nothing to do with methods. The best research comes from the need to know, from the excitement of discovery, from fundamental skepticism, from ruthless objectivity, from disinterest in results and from the need to understand. No book can teach that. Still, we need books on basic research methods, however modest.

School of Information and Library Studies   WILLIAM E. MCGRATH
University at Buffalo
Buffalo, NY 14260

The Design of Bibliographies; Observations, References and Examples. E. BERGER. (Bibliographies and Indexes in Library and Information Science, Number 6). Greenwood Press, Westport, CT (1992). x + 198 pp., $85, ISBN 0-313-28425-3.

The idea behind this book is an ingenious and useful one, that is, to join together principles of type design with those relating to the construction of bibliographies in order to develop an aesthetic framework for the physical design of bibliographies. Bridging as it does several fields of endeavor — type design, organization of information, history of books and bookmaking — the work is bold in its ambition to synthesize these only loosely related specializations.

The work, which should more accurately be entitled *The* Physical *Design of Bibliographies*, begins with a 48-page essay attempting to cover book design, the shape and content of bibliographies, and computers and desktop publishing. Following is a 274-item annotated bibliography, and an appendix consisting of "facsimile examples" of published bibliographies accompanied by author's observations. With index, this compilation amounts to a 198-page treatment of the topic at $85 a copy.

Admiring the bravery of the attempt to cover so many fields at once, and noting the earnestness of the author in the almost autobiographical remarks and annotations, one wants to like this book. Its serious shortcomings make that hard to do.

Given the engaging style of the preface, one is surprised that the essay is more compilation than exposition. Quotes abound, but they are only awkwardly and artificially worked into prose that is in format more encyclopedic than narrative. One easily imagines the categorized note cards from which the author worked. But style is not of the essence here. What of content?