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## Review of Scholarly Communication and Bibliometrics

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Africanist review *Transition*. Appearing under the same rubric is a short column—"What Do Editors Really Want?"—in which acquisitions editors answer queries about the kinds of manuscripts they are seeking in specified fields. Anyone living under the illusion that authors—not editors—set the publishing agenda will be reminded otherwise by reading this column.

Academic librarians should be pleased to read—if not contribute to—the regular column "Research File: Documents in Search of Scholars." Here we find the treasures of our collections—at Michigan State University, the New York Public Library, the Library of Congress, Radcliffe College, the International Institute of Social History (Amsterdam), and the Franklin Furnace Archive (Manhattan)—begging for scholarly investigation. Enterprising graduate students would be well-advised to package "documents in search of scholars" with "what editors really want" for a sure-fire dissertation/monograph success.

Until the April issue, this little magazine devoted 20 to 30 percent of its pages to a regular line called "Jobtracks," tracing the migratory paths of junior faculty to their first positions or of seasoned faculty to senior positions. Academics will no doubt lovingly run their fingers down the long columns of names in search of that lost classmate, colleague, or mentor—now found—at last, promoted to tenure at Emory. In April, through a font and spacing change, "Jobtracks" was reduced to just over six pages in length.

With a circulation of 15,000, *Lingua franca* apparently followed Abbeville's advice and thought first of its audience. Its modest institutional price, \$35, suits its desk-top publishing quality and newsy content. Worthy of our support, yes, but also worthy of our vision. As *Lingua franca* matures—and let us hope it does—academic librarians should help to make their agenda an integral part of its mission. Right now, the magazine is walking a fine line between class clown and class act: its reputation hangs in the balance. A case in point is the

"Field Notes" insert in the April 1991 issue, "Rad Librarians Track the Zeitgeist," in which the travails of Hennepin County Library's cataloger Sanford Berman to establish new Library of Congress subject headings are listed. *Lingua franca* reprints a selection of sixteen new headings from among the 400 initiated by Berman. It lists another thirty—most of which, like "Cat furniture," are largely irrelevant to academics—from among the thousands of unique headings in use at Hennepin County Library alone. Excluded are more serious and surprising examples such as "Marxism" (use: "Communism" or "Socialism") or "Family planning" (use: "Birth control"). *Lingua franca* misleads its readers by prefacing the second list with: "Here are some of the cultural phenomena that the library caught up with during the past year. Look for them soon at your local library." Only if your local library happens to be Hennepin County Library, they might have added. More disturbing, however, is that *Lingua franca* went for the quick laugh and overlooked the more important—and academically relevant—questions: How are new subject headings introduced and adopted by the Library of Congress? How do they reflect cultural changes? *Lingua franca* might have investigated recent changes resulting from German unification, for example. And there would have been plenty of room for humor.

If it can avoid a decline into terminal cuteness, *Lingua franca* will be of interest to graduate students, faculty, academic librarians and publishers, and consumers and critics of higher education.—Martha L. Brogan, Yale University, New Haven, Connecticut.

#### *Scholarly Communication and Bibliometrics.*

Borgman, Christine L., ed. Newbury Park, Calif.: Sage, 1990. 393p. \$38 (ISBN 0-803903879-9). LC 90-8745.

Christine Borgman, who teaches in the library school and in the Communications Studies program at UCLA, has compiled eight articles from a special issue of *Communications Research* (October 1989) and eight new essays into a com-

prehensive examination of bibliometric methodology and theory.

The book is organized into four sections: theory and perspective, bibliometric research methods, empirical studies, and conclusions. The strength of the work is found in the three chapters that comprise the section on theory and perspective. Belver Griffith opens the volume by introducing Robert Merton's concepts of communication as a social process, Thomas Kuhn's ideas of science as a dialectic procedure, and Derek deSolla Price's pioneering work in measuring scholarly production.

Sydney Pierce follows with an interesting chapter on the issues associated with developing a "unified body of explanatory theory in bibliometrics." Pierce maintains that resistance to interdisciplinary communication prohibits theory building. While self-contained disciplines "may build stronger research traditions," he argues, interdisciplinary communication and the resulting dissemination of research results would provide the opportunity to synthesize information on similar topics from dispersed disciplines.

The third chapter, by Leah Lievrouw, discusses the differences between social structures and social processes and their relationship to the study of scholarly communication. Lievrouw contends that bibliometrics currently studies the structural products of scholarly communication in order to understand the processes. The "invisible college," for example, is "widely accepted as a model of scholarly communication," but is typically examined through measuring documents and professional memberships. Interviewing and other fieldwork methods are recommended for a better understanding of the communication processes that emerge as structural products.

Although these three chapters provide brief introductions to the important sociology of science issues surrounding scholarly communication, it would have been useful to include an essay from the broader perspective of sociology of knowledge. Specifically, a more detailed treatment of the influence of research

paradigms on scholarly communication and the consequences for bibliometric studies would enhance the work. In addition, greater discussion of the restrictions that paradigms place on interdisciplinary studies, an issue raised by Pierce, would be appropriate.

In the second section, methodologies of bibliometric studies are examined, applying the theoretical material introduced in the first section. The contents include a defense of co-citation analysis by Howard White and an intriguing essay on predictive research by Don Swanson, "identifying literatures that are logically but not yet bibliometrically related." Swanson claims that by recognizing literatures that are not presently linked through citations yet share logical arguments on related topics, information scientists can continue to manage the increasing growth of specialized, fragmented knowledge. He proposes that bibliometrics can be used to identify not only knowledge that has been linked through citations, but also that which has not, thus allowing the integration of implicitly related, previously unlinked information.

Empirical studies that have been conducted using bibliometric techniques are reported in the third section, demonstrating the application of bibliometric methodologies and illustrating how they serve to measure scholarly communication. These descriptions are varied and useful for anyone contemplating a bibliometric study.

In the concluding chapter, William Paisley succinctly presents the history of bibliometrics, then systematically compares bibliometrics to complementary research methods, including content analysis, social indicators research, sociometrics, and unobtrusive measures. Finally, Paisley builds upon Borgman's introduction by presenting "further elements of a model of bibliometric research." In this section, he outlines the possibility of introducing new types of variables and statistical analysis, and new research questions related to the demographics of scholarly communication (e.g., patterns of team research, number of active authors by discipline).

*Scholarly Communication and Bibliometrics* is a cohesive work which presents a thorough overview of bibliometric research. It is further unified by a single collective bibliography, a detailed subject index, and a combined author and cited works index. The primary value of this work is that it serves both as a general text on

bibliometric studies and as a treatise on the sociology of science as it relates to scholarly communication. This book makes an important contribution to an emerging body of knowledge and, as a text for researchers, should have a major impact.—*Jeffrey N. Gatten, Kent State University, Kent, Ohio.*



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