shelving (by Frazer Poole) and an automated retrieval system (compact storage a la carte by Harold Roth); (4) regional cooperation (the Research Libraries Group, which then included Harvard); (5) new buildings, additions, and renovations (Metcalf on renovation, going underground at the University of British Columbia, and abandoning the tower at Texas).

The volume ends with a view from the outside given by Robert Propst of Herman Miller Research Corporation and Doug Englebart, director of the Augmentation Research Center. The latter's presentation is particularly noteworthy as he deals with 'similitude" and concludes that, "The steady increase in scale of total quantity, rate of production and access requests for our recorded knowledge is bound to hit limits where the current form of our libraries simply cannot function." The library as a document warehouse is doomed. The future library will be less a repository and more a service agency providing access to information. The implications for space problems are obvious.

These proceedings, published in 1978, record a conference held in June 1975. One wonders why the three-year gap before publication. A number of developments related to some of the discussions of specific facility planning in this volume are noted here to serve as an update: (1) The partially under-the-Yard Pusey Library at Harvard has been occupied. (2) Mr. Skipper's thoughtful presentation of the Research Libraries Group goals and strategy must be tempered by the recent pulling back of Harvard as the biggest of the Big Four from this regional cooperative, as well as by potential further division as a result of adopting BALLOTS. Regional cooperation has many problems and is not seen as a significant alternative to running out of space. (3) The third largest academic library building in the United States, the University of Texas at Austin Perry-Castañeda Library has opened with a capacity for more than three million volumes and 3,200 user stations in its over 500,000 gross square feet. (4) Harold Roth's truly automated retrieval system (ARS) at the Nassau County Research Library never made it past the planning stage. ARS, the new building it was to be housed in, and finally the research library itself have fallen victim to withdrawal of funds. It does cost hard-to-find money to save space, to cooperate, and to build new buildings.

Some startling and important facts regarding the academic library space problem come to light in this volume. For instance, each of the four libraries of the Research Libraries Group must find two to three linear miles of shelving to accommodate each year's acquisitions. Also, the heavy expense of a volume-by-volume selection process for a "lesser used" storage collection, followed by the modification of catalog records, may exceed the value of the space saved.

The conference covered a number of alternatives and was limited primarily to the problems of book space rather than user, staff, or other library space. Metcalf points out that even Harvard, with its 10,000,000 volumes, uses more space for readers and services and nonassignable purposes than it does for books.

These proceedings could have been enhanced by floor layouts, sketches, and pictures of specific buildings described. Visuals are usually part of such conferences.

Although there is no index or bibliography, this paperbound \$14 volume has some helpful and a little new material for those facing book space problems. One must conclude, however, that it would have been more interesting to hear these papers and discussions in person at the conference than to read them now in the published proceedings.—Selby U. Gration, State University of New York, College at Cortland.

Woodward, A. M. Factors Affecting the Renewal of Periodical Subscriptions. A Study of Decision-Making in Libraries with Special Reference to Economics and Inter-Library Lending. London: Aslib, 1978. 114p. \$25.20 North America; \$21 to Aslib members. £8.40 UK; £7 to Aslib members.

The reasons why librarians decided to purchase, to cut some, or to cancel particular periodicals provide the material for this independent study conducted by Woodward at the Aslib Research and Development Department. The British Library Lending Division and the Scientific, Technical, and Medical Group of Publishers had requested the report to learn the effects of interlibrary lending and the attendant supply of photocopies on these decisions. In 1977 250 academic, research, and industrial libraries in the United Kingdom answered a 16-page questionnaire.

The results showed stronger correlations between financial indicators and changes in subscriptions than between interlibrary lending and changes in subscriptions. Of the libraries responding, 57 percent did not receive enough money to purchase all the required journals. Financial pressure forced 85 percent to trim redundant items from their acquisitions lists. Librarians then used interlibrary loans to offset any loss of information to the user because of dropped subscriptions as well as to supply back issues, material not handled by a particular library, and a range of new journals. The British Library Lending Division had enabled 80 percent of the librarians to expand their services to users and made 74 percent of the libraries more flexible in meeting the needs of users.

From lists of possible factors related to purchasing new subscriptions, dropping some, and cancelling particular journals, user-oriented responses ranked highest in each case. Financial matters held second place whenever a subscription was not renewed. In a section on management investigating the practical aspects of decision making, librarians also rated the value of the journal to users as a major determinant.

A small separate study attempted to discover the percentage of loans for journals that had been cancelled. Of 1,680 cases where definite information on acquisitions was available, only 2.74 percent of the loans were positively identifiable as replacements for dropped subscriptions.

Clear bar graphs, numerous tables, and detailed explanations in an easy-to-read format add to the intelligibility of this study. Woodward makes a few comparisons with the situation in the United States. Appendixes include both the original questionnaire and the loan tracking study.

Librarians here are making decisions to purchase or to cancel journals daily. Therefore, this carefully analyzed statistical study will be valuable for periodicals publishers and librarians in the United States as well as in the United Kingdom, especially to those planning and awaiting our National Periodicals Center.—Sister Alma Marie Walls, Immaculata College, Immaculata, Pennsulvania.

Nicholas, David, and Ritchie, Maureen. Literature and Bibliometrics. London: Clive Bingley; Hamden, Conn.: Linnet Books, 1978. 183p. \$12. LC 77-20135. ISBN 0-85157-228-6 Bingley; 0-208-01541-8 Linnet.

This tantalizingly brief British book makes it clear that bibliometrics embraces much more than footnote counting but that citation analysis is still the backbone of the statistical study of written communication. Following a 1969 definition by Prichart, it limits the field to written communication, excluding the application of the same method to auditory, pictorial, or electronic transmittal of information via television, radio, or motion picture.

Although not always clearly written, this is an important and needed handbook if for no other reason than that it represents the first comprehensive treatment of statistical methodology applied to the literatures of science, social science, and the humanities since Hulme's work published in 1923. It is also important in giving insight into the methods used by, and some of the significant findings of, the massive Design of Information in the Social Sciences (DISISS) project at the University of Bath in England. Most, but not all, of the examples of bibliometric methods and applications given in the book are from the DISISS project. Thus the emphasis is on the social sciences from an English point of view, supplemented by examples from science-e.g., from D. J. De Sola Price and (to a lesser extent than one might expect) Eugene Garfield. Bibliometric analysis of the literature of librarianship is represented by the work of Zhignesse and Osgood.

Although the authors clearly advocate the application of bibliometrics to the humanities, the only examples discussed involve the citation of historical, literary, or artistic literature by social scientists or scientists. Due consideration is given to the