pects of library planning, including library objectives, financial matters (must reading not only for the librarian but also for the college or university administrator who wants to understand something of the many variables that influence library building costs), the concept of modular design (certainly the most comprehensive treatment of this subject in print), ceiling heights, traffic patterns (a broad-scope chapter devoted to all aspects of the problem from the location of stairways and elevators to the spatial relationships of each element of the building), lightning, mechanical problems, and furniture and equipment. The treatment of each of these topics is painstakingly thorough as Dr. Metcalf brings every possible point of view to bear on the discussion. Each chapter warrants the most careful study, although the material on furniture and equipment (because the author was relying on publication of a manual on library furniture, in preparation by the Library Technology Project of the American Library Association but not yet available) is the least satisfactory.

Library design has few stock answers and in some instances there may be three, four, or more, possible solutions to a given problem. Dr. Metcalf's detailed analysis of such building problems not only reveals their complexities, but very often requires that the reader make his own value judgments based on the factors inherent in his own situation. In some cases the author provides no answer but is content simply to ask the basic questions that must be answered before a solution can be identified. Since many of these discussions are fairly technical, the first section of the book is probably more useful to the library planner with some prior experience and knowledge-be he architect, consultant, or librarian. At the same time, these chapters will repay careful study by the inexperienced librarian who is planning a new building, and especially by the architect who has not previously designed a library.

The six chapters that comprise Part Two cover such topics as planning preliminaries, assignable space requirements, initial planning steps, and the construction period and final stages of building, up to and including dedication ceremonies. Five appendices, including a selective bibliography, a glossary, and an index, complete the volume. The illustrations are generally excellent.

Much of the material in the book is applicable to libraries of any size, but where size is a consideration, the author is quick to point out its possible effects on planning. Strangely, however, to this reviewer at least, the illustrations are, save for those of the Lamont library, exclusively of large research libraries, and one wishes that plans of at least a few of the excellent small college libraries constructed in recent years might have been included.

Audio-visual facilities, which form an important feature of many recent college and university library buildings, as well as those now in the planning stage, receive only brief treatment. Design criteria for individual and group listening facilities, acoustical problems, the layout of control center equipment, and related problems are not touched upon. Nor does Dr. Metcalf discuss the design or potential use of the electronic or environmental carrel, although there seems little doubt that this will be a feature of many academic libraries in the future. But these omissions are minor and undoubtedly reflect the severe lack of information in these areas.

This book should be read by every academic librarian involved in a new building. Hopefully, it will also be widely known and read by library architects. As a reference work and as a contribution to the literature of the profession, it belongs on the shelves of every library of any significance—public as well as academic.—Frazer G. Poole, University of Illinois, Chicago Circle.

Alphabetical Subject Indication of Information. By John Metcalfe. Graduate School of Library Service, Rutgers, The State University (Rutgers Series on Systems for the Intellectual Organization of Information, Susan Artandi, Ed.) New Brunswick, N.J., 1965. 148p.

The Coming Age of Information Technology. Ed. by Vladimir Slamecka. Documentation Incorporated (Studies in Coordinate Indexing, v.6). 1965. ix, 166p. \$5.—

The Coming Age of Information Technology comprises a dozen papers published between 1961 and 1964 dealing mainly with problems of terminology control in indexing; it continues the series of *Studies in Co-ordinate Indexing*. At least one half of the papers included in this volume are by active or past members of Documentation Incorporated. The selection thus reflects an orientation of specific corporate provenance rather than typical coverage of the chosen field.

Although in the lead article it is stated that librarianship is a particular application of information technology (p.5) and further it is admitted that libraries are storehouses of recorded information (p.17) the volume is not devoted to problems of application of information technology on a general scale as the title of this book suggests. Most of the papers included in this volume are devoted to the techniques of terminology control in specific and narrow fields of application. The universality of the principles and techniques of information control claimed to be now available for those who care to employ them (p.4) is not at all explored in this volume with reference to collections of information records of general scope and large size. The techniques examined are only those applied to specialized documentation centers, and they do not appear to be readily transferable to more general situations of the conventional library. In this sense the title of the book is rather optimistic.

Notwithstanding these qualifications the volume constitutes a valuable contribution to the reading shelf of the librarian. Most of the papers reprinted in this volume would otherwise likely escape the attention of the librarian who too often allows himself to be overwhelmed by the current problems of the existing situation with too little time left for analyzing the causes of his imminent predicament.

The most significant contribution to the existing practical problem of library automation is found in the paper entitled "Machine Compilation and Editing of Printed Alphabetical Subject Indexes," by Vladimir Slamecka (originally published in American Documentation, v. XV, no. 2, April 1964. pp.132-35). In his analysis of subject heading structure the author puts the finger on the problem of machine control of subject terminology. The isolation of "formal"

or predictable (*i.e.* generic and invariable) relationships between terms as distinct from variable relationships (unpredictable semantic relationships between terms) may be considered to constitute a restatement of the obvious. However, the practical disregard of this fundamental distinction, which has been also almost systematically overlooked by theoreticians of the library profession, has turned most of the recent mechanized systems of bibliographic control into rather ineffective imitations of the conventional subject catalog.

Two other papers merit particular interest. "Automatic Subject Indexing from Textual Condensations," by Vladimir Slamecka and Pranas Zunde indicates a potentially effective alternative to subject terminology control by subject headings. "Documentation, Information Retrieval and other New Techniques," by the late Mortimer Taube, originally written for the Library Quarterly in 1961, deals among other problems with the failure of our library schools to respond to the changes brought about by the new developments in information technology. Still valid is Taube's argument that instead of concentrating on specific techniques and skills, applicable to libraries or documentation centers, the library schools should equip their students with the underlying theory that would permit them to devise techniques appropriate to the objectives of any particular situation. Little has changed since 1961, and today's library school graduates are hardly better equipped to deal with problems of information at its various levels of specificity than were their colleagues a decade ago, even if today some are taking courses in computer programing, electronic data processing techniques, or "information retrieval."

The complex relationships between general information structures (describing books) and more specific structures (representing smaller information units than books) constitute a fundamental problem of the practical application of information technology to the library and the documentation center. The problem is the same for both. In terms of theory there is no distinction; in terms of practical techniques the distinction between the library and the documentation center is one of degree only,

and it is indeed unfortunate that the library profession is reluctant to pay more than token interest to a fundamental review of library school curricula, most of which do not yet reflect any appreciable degree of change from techniques and skills to theory and principles.

Metcalfe's work is a spontaneous commentary on conventional subject headings. Although a systematic account of the subject heading systems used in library catalogs is long overdue, Mr. Metcalfe's contribution nevertheless is a most needed one. Much appreciated are his comments on a great number of problems that arise from the practical use of subject headings, particularly those of the Library of Congress. These comments appear to have originated from a thorough familiarity with the conventional card catalog system, although some of the terminology used and examples analyzed indicate an attempt to exceed the card catalog orientation.

About one half of the work, entitled "Historical Background," is devoted to a review of theories and practice of subject headings in the English-speaking world since C. A. Cutter. One would like to know more about some of the systems sketched here rather briefly (e.g., Kaiser's Concrete-process). A comparative review of other terminology systems, e.g., German, would have helped the analysis. The principal part of the work is covered in the chapter entitled "Input to the System." A section on cross references is of particular usefulness since in recent library literature there are virtually no systematic expositions describing the various functions of referral hidden under the uniform "see also" formula.

The remaining chapters are devoted to filing of subjects headings (entitled "The Store To Be Searched") and "Searching Methods and Output."

In his criticism of the subject heading practice of the Library of Congress (p.116) and the British National Bibliography (p.75) the author comments on the inefficiency of the BNB system and the inconsistency of the LC system. Some of these comments are of far reaching importance if mechanization of subject heading systems is considered. Automated applications to subject terminology control,

however, are hardly considered in this volume. Three pages (p.131-33) and scattered comments are devoted to this aspect without indicating the implications of mechanized control of subject terminology as distinct from the use of mechanically compiled alphabetical lists of such terms.

To the reviewer automation of subject terminology appears greatly more complex than "a coin operated mechanism in which there is selection by means of an alphabetical list" (p.122). Problems of subject terminology organization and referencing methods in an automated environment become principally different from the structure of an alphabetical list and a conventional catalog. Also, the latest experience with computer-generated catalogs indicates that mechanically compiled catalogs do not appear to bear out the author's hope that such catalogs in "page form" (p.130) will solve the "takeout" (p.129) problem. Even more crucial for automation is the problem of the structure of subject terminology. Nothing less than a true system and a theory is required. In this sense the latest exposition, as the author notes (p.18), still is that by C. A. Cutter, in 1904.-Ritvars Bregzis, University of Toronto.

The Community College Library: A Plan for Action. By Helen R. Wheeler. Hamden, Conn.: Shoe String Press, 1965. 170p. \$5. (65-16220).

This study is based on a questionnaire sent out in 1964 to 198 community college libraries. After a chapter on the ten criteria for an effective community college library program, there is a chapter summing up current practice reported in the 103 responses to the questionnaire. Current practice is far from meeting these criteria. The author asserts that "administrators, library directors and other faculty lack a systematically prepared description of the ways in which their libraries can support the unique functions and needs of their institutions." She reports that librarians, however, are convinced that given proper budgets and proper recognition of their importance, they could do much to support post-high school education whether it be junior college, technical, or adult, which is the role of the community college.