Review Articles

Role of Classification

The Role of Classification in the Modern American Library. Papers Presented at an Institute Conducted by the University of Illinois Graduate School of Librrary Science, November 1-4, 1959. (Allerton Park Institute no. 6) Champaign, Ill., University of Illinois Graduate School of Library Science (Distributed by the Illini Union Bookstore) 1959. vii, 136p. $2.00.

During the past five years, there have been two major conferences on the topic of classification. The first, the International Study Conference on Classification for Information Retrieval, was held at Dorking, England, in May 1957. The second, reported in this slim volume, occurred in October 1959. The Dorking Conference was concerned primarily with developing better classification for the future, the Allerton Park Conference with surveying the present state of classification in American libraries. Persons approaching the subject for the first time would be well advised to read the proceedings of the two Conferences in reverse order.

Ten papers were given at the Allerton Park Conference, covering the major aspects of classification in American libraries. The first paper, by Robert B. Downs (University of Illinois) makes the significant point that in the dictionary catalog classification is mainly a convenient code for indicating shelf location. After noting its comparative success in this respect, he decries the tendency to reclassify merely to get a code that is more satisfactory intellectually, but not more efficient as a location device.

Following Downs' opening, Thelma Eaton (Illinois) contributes an excellent paper on the development of classification in the United States. She shows that American participation in theoretical classification was much greater during the 19th century than is generally realized. This feature of American theoretical work is an interesting contribution to American cultural history. A myriad of questions for the intelectual historian are raised by the dynamic situation in classification. Was the interest in theoretical classification in this period wholly indigenous or was it a reflection of similar interest in Europe? Since the quality of American college education was not high during most of the century, were American classificationists successful because they had less to UNlearn than their European contemporaries? Were American classification ideas supported because it could be seen that they were *useful,* thus fulfilling the old Puritan ideal which has become part of the American pragmatic outlook? Did the 19th century interest in theoretical classification continue into the first half of the 20th century? Or was Bliss the sole representative of an earlier movement? If so, why did the movement die? One hopes that Miss Eaton will continue her important study.

After a firm foundation in the American antecedents of modern library classification, there follows a penetrating commentary on some aspects of the philosophical basis of classification by Mortimer Taube (Documentation, Inc.). Taube begins with a general survey of the problems involved in using classification for bibliographical control. He reaches the conclusion that these problems are compounded because of the confusion in understanding what classification really is. Then he defines classification in terms of logistic (symbolic logic, mathematical logic). This view considers classification to be a rigorous, deductive system, logically akin to mathematical systems. If one accepts this interpretation, sooner or later one runs into Gödel's proof, which shows that it is "impossible to establish the logical consistency of any complex deductive system except by assuming principles of reasoning whose internal consistency is as open to question as that of the system itself.[1]" Thus, if one sticks to deductive logic, it should be impossible to make a completely consistent classification, just as it is impossible to make a completely consistent system in pure mathematics. Though he does not mention Gödel's proof, this is the problem, really a paradox, raised by Taube's definition. He describes major principles with Boolean algebra, yet he

[1] Ernest Nagel, and James R. Newman, "Gödel's Proof," *Scientific American,* CXCIV (1956), 71.

knows that classification is so complex that all of its intricacies can never be demonstrated by the laws of this algebra, or, in fact, by logistics in general.

In this Conference paper, Taube makes a mild attempt at resolving the conflict, but falls into the paradoxical situation of denying in one paragraph that there are "real classes" to be discovered in the world, while affirming in the next that it should be possible to construct a logical library classification "if the empirical facts [inherent in the actual organization of knowledge] can be demonstrated." One may escape the burden which Gödel's proof places on deductive methods by rejecting total reliance on deductive logic in favor of employing some features of inductive logic, building classification on the basis of philosophical methods which permit the use of inference from observation, and which do not *demand* rigid consistency, pure structure or formal demonstration of relationship patterns.

After the flight into theoretical classification, the next five papers deal with the practical. Herman H. Henkle (John Crerar) discusses the classified catalog as a research tool, stressing both its virtues and its faults. There are so very few classified catalogs in this country that it is difficult for those who have never worked with one to evaluate them, and Henkle's views are both timely and helpful.

Ruth Rutzen (Detroit Public Library) reports with her usual verve on the Reader Interest Classification, a system used at Detroit to overcome the physical and intellectual limitations imposed by standard classification. This system is one of the more imaginative efforts in current classification practice and deserves more appreciation, emulation, experimental application and development than it has so far received.

The two standard classification systems are covered by Heartsill H. Young (University of Texas) who discusses the endearing qualities of the Dewey Decimal system, and Irene M. Doyle (University of Wisconsin) who presents the Library of Congress system. Young gives the following qualities in favor of the Dewey classification: its firm basis in Baconian philosophy, its terminology, its index, three factors used in its notation: the decimal, Hindu-Arabic numerials and mnemonics, its intelligent editors, and the organizational genius of its originators. In one form or another, all of these qualities except the philosophical basis and the notational group may be claimed as assets for any other classification. The *enduring* factors in Dewey are that it is easy to read regardless of what language one speaks, easy to understand, easy to learn, and easy to use provided one limits usage to a code for shelf arrangement of books and not for the classification of knowledge.

Miss Doyle ably summarizes the strengths and weaknesses of the Library of Congress classification. It is a system which takes a long time to learn because of its multiple classification features. Since it is non-logical in arrangement, as a rule, and broad yet "close" with regard to detail, it is a classification which in daily usage relies on *precedent* rather than reason for location of material.

One fortunate feature of the Allerton Park Conference was the addition of a subject specialist. Robert G. Bartle (Illinois) looks upon the classification of mathematics, and finds it wanting. The classification of mathematics is probably the most difficult of all fields for the average cataloger. Bartle's suggestion of making a classification from the headings used by the editors of *Mathematical Reviews* is worth doing, but, if it is to be of any use to librarians, extensive scope notes must be added in the process.

It is a short step from classification for the specialist to that for a library devoted to a special subject. Isabel Howell (Tennessee State Library) clearly shows that most general libraries have aspects which make them special, such as departmental collections in limited subject areas, while most special libraries are, in part, general, so that it becomes difficult in all instances to draw a hard and fast line between the two. Classification *for books* in either type of library can be about the same. However the general library does not have the masses of report, reprint and other documentary literature which form a significant part of the special library's working collection. Miss Howell shows little sympathy for those librarians who must handle materials in dynamic subjects, such as the sciences, engineering and medicine, and also dynamic patrons, who insist that both books and documents be classified according to some system closelv approximating the current development of

their particular subjects and who do not hesitate to express these wants loudly, lengthily and sometimes lucidly.

The final paper in the Conference, by Jesse H. Shera (Western Reserve) assesses the future of classification and serves as a connecting link with the Dorking Conference. Shera stresses the idea that a classification is the fundamental evidence of the organization of knowledge, noting the place of inference in assigning a class identity to new data. Although he regards commonly-used classifications as "an address-book for the library stacks," he concludes that they are in no danger of being replaced as such. The evidence of several contributors to this meeting shows that with the dictionary catalog it is quite possible to ignore the shortcomings of whatever classification scheme is used since this is not the crux of the information retrieval system.

The collection of papers ends with an excellent summing-up by Donald E. Strout (Illinois). Only one or two omissions of any consequence may be noted in the composition of the Conference. Most of the experimentation in classification and in the subject analysis of knowledge for library purposes has taken place in special libraries. It is unfortunate that the Conference did not include a brief survey of these innovations. It would also have been interesting to have something on the Colon Classification, on the many good medical classifications produced in this country, and on the Bliss classification, which has some of the enduring qualities of both Dewey and Library of Congress, as well as schedules for mathematics that might please Bartle.

A general meeting such as this is a worthy undertaking and it is hoped that we shall see more of them in the future. The divergent views of the classifiers represent the varying necessities imposed upon different kinds of libraries by the nature of their collections and their clientele. It is entirely possible that the dream of one or two universal classification schemes suitable for all kinds of subjects in all kinds of libraries is now dead, and that we have entered a period to be dominated by specialized classification systems, each adapted to the subject, environment and purpose for which it is to be used. *—Phyllis A. Richmond, University of Rochester Library.*

Encyclopedia of the Book

An Encyclopedia of the Book . . . Cleveland and New York, The World Publishing Company (London, George Allen and Unwin, Ltd.), [1960]. By Geoffrey Ashall Glaister. 484p. $17.50.

This volume contains an alphabetical glossary of terms, explanations of practices and equipment, and brief identifications of personages related to "paper-making, printing, bookbinding and publishing, with notes on illuminated manuscripts, bibliophiles, private presses, and printing societies" (title-page). It leans heavily on the Swedish *Grafisk Uppslagbok* (1951), from which many of the entries have been translated, with or without amplification by the compiler; such entries are identified by the initials *G.U.* Certain items have been supplied by Dr. Muriel Lock and Mr. Lewis G. Kitcat, and these, also, are identified by the relevant initials. The compiler, Geoffrey Ashall Glaister, dates his introduction at Dacca, Pakistan, where he is British Council Librarian, and he has put eight years of exacting toil into this exhaustive *Encyclopedia.*

The work consists of six sections, of which the glossary is far and away the largest and most noteworthy, comprising 451 pages of text and illustration. Following this are five appendixes on, respectively, "Some Type Specimens," a highly selective series (p. 543-460); "Latin Place Names as Used in the Imprints of Early Printed Books" (p. 461-463); "The Contemporary Private Press" (p. 465-469); "Proof Correction Symbols" (p. 471-475); and "A Short Reading List" (p. 477-484). While these appendixes are moderately useful, the value of the glossary so far overshadows them that their inclusion in the volume comes as something of an anticlimax.

The main glossary, on the other hand, stands by itself in the English language. It fills a void in a manner and to a degree that no predecessor has ever attempted. This fact alone places the work in a preferred category; the further fact that the entires it contains are for the most part carefully, accurately, and amply compiled makes the volume deserving of the highest commendation. One hopes for two developments—first, that the publishers will keep the volume (or