

Review Articles

Bibliographic Classification

A Bibliographic Classification, Extended by Systematic Auxiliary Schedules for Composite Specification and Notation. 2d ed. By Henry Evelyn Bliss. New York, H. W. Wilson, 1952-53. 4v. in 3 (v. 1-2 in 1, \$15.00, v. 3-4, \$15.00 each).

It is difficult to review in unfavorable terms a monumental work representing a lifetime of application and exhibiting enormous erudition. Further, since the general position of the reviewer with respect to classification systems is well known, it might be supposed that the review will lack objectivity and balance. Hence, I have looked to others for a general comment on bibliographic classification to set the tone of this review.

Dr. Jesse H. Shera, dean of the School of Library Science at Western Reserve University, is probably today's most outstanding exponent of bibliographic classification, and it is from two of his papers that we have taken the following statements:

Today, under the impact of a rapidly growing volume of graphic records, and the appearance of new forms of publication, traditional library classifications are becoming hopelessly inadequate. No amount of basic revision or tampering with their organic structure can save them from this failure. As guides to the subject content of the library they are essentially meaningless. Even librarians, who are best qualified to interpret them and to exploit their virtues, use the notation only as a guide to location, and largely ignore the interdisciplinary relationships that they were designed to reveal. Yet, as their efficiency has declined, the cost of their maintenance has increased until at least one major research library has abandoned subject classification of its book stocks and has turned to other and more promising forms of bibliographic organization.¹

The history of library classification, then, has been the narrative of a pursuit of impossible goals, and its pages are strewn with the wreckage of those who either were blissfully unaware of the dangers by which their paths were beset, or who hoped to circumvent them through mere

¹"Classification As the Basis of Bibliographic Organization," in *Bibliographic Organization; Papers Presented before the Fifteenth Annual Conference of the Graduate Library School, July 24-29, 1950*. Ed. by Jesse H. Shera and Margaret E. Egan. Chicago, The University of Chicago Press, 1951, p.72.

modification of previous schematisms or simple tinkering with notation. Today the essential failure of traditional library classifications is no more real than it was three-quarters of a century ago, but it has become more apparent because of the increasing bulk and complexity of the materials that libraries are being called upon to service, and the growing specialization of the demands that librarians are being asked to meet.²

If we were to review this work by comparing it with other classification systems, we could comment on the excellence and simplicity of its notation and the fact that being the latest system in a long series of similar attempts, it is more up-to-date and represents, more adequately, current fashions in the grouping of ideas and the arrangement and subordination of various subjects. But in spite of these internal excellencies, and many others which could be mentioned, the basic question remains concerning the value of the enterprise as a whole. Public libraries and small college libraries with open shelves will undoubtedly continue for many years to classify their materials for the shelves in order to give some assistance to the reader who wishes to examine a range of materials in any particular subject. But the idea that a universal bibliographic classification can, in any sense, represent a scientific or a logical arrangement and collocation of subjects is fundamentally false, and there is no point in compromising with this falsity.

It is the great boast of classifiers that a classification system arranges material in a logical order of hierarchical classes, as contrasted with an alphabetical index which groups things on the basis of the fortuitous fact of the alphabetization of various names. The fact is that no one has ever succeeded in making a detailed classification which was not largely verbal in essence. In our studies of classification systems we have distinguished three different ways in which the subordination of classes is achieved in any particular system:

²"Classification: Current Functions and Applications to the Subject Analysis of Library Materials," in *The Subject Analysis of Library Materials*, Ed. by Maurice F. Tauber, New York, School of Library Service, Columbia University, 1953, p.32.

1. *Semantic*

As the name indicates, semantic subordination is purely verbal in character and differs from alphabetical indexing only in being arranged differently on a page. Consider, for example, the following sets of terms and phrases which might be found in any alphabetical index:

- Functions, Types of
- Functions, Continuous
- Functions, Discontinuous
- Functions, Differentiable
- Functions, Integrable
- Functions, Symmetric
- Functions, Additive, of aggregates
- or,
- Science
- Science, History of
- Science, Philosophy of
- Science, Principles and methods of
- or,
- Valves
- Valves, Seated
- Valves, Check
- Valves, Gate
- Valves, Reducing

If we arrange these sets of terms to look like parts of a classification system by utilizing indention on a page, as Mr. Bliss has done, we get the following:

- Types of functions
 - Continuous functions
 - Discontinuous functions
 - Differentiable functions
 - Integrable functions
 - Symmetric functions
 - Aggregates of additive functions
- or,
- Science
 - History of science
 - Philosophy of science
 - Principles and methods of science
- or,
- Valves
 - Seated valves
 - Check valves
 - Gate valves
 - Reducing valves

Since the beginning of modern librarianship, exponents of classification have been able to convince a great many people that the indented arrangement is more logical than the inverted, whereas these two lists differ only in aesthetic or physical arrangement. Mr. Bliss shares

with all other classifiers a failure to recognize that his classification, to the extent that it achieves subordination by semantic means (e.g., subordinates "check valves" to "valves," or "discontinuous functions" to "functions") depends upon words and not upon any logic of ideas which underlies the words. That is to say, the boast which classifiers make of having achieved logical order as opposed to verbal or alphabetical order is empty and meaningless.

2. *Topical*

The second way classifiers achieve subordination is through "Topical Subdivision." This method is called "cross classification" by Mr. Bliss in his introduction, and he illustrates it by means of the following tables:³

	Plants	Insects	Birds	Mammals
Aquatic				
Terrestrial				
Amphibious				
Xeric				

	Aquatic	Land	Amphibious	Xeric
Insects				
Birds				
Plants				
Mammals				

It should be apparent that there is no real difference between these two tables and that it is no more logical or scientific to subdivide forms of life by habitat than to subdivide habitat by forms of life. Mr. Bliss realizes this; hence, his use of the term "cross classification" and his statement that: "Classes, or sub-classes, of the same grade, or order, of division are termed *coordinate*, and the principle of placing them in such order is *coordination*. Subordination and coordination are thus relative to division and gradation. The coordinate sub-classes of several coordinate classes may be *coordinated*." However, he does not take the final and necessary step

³ *A Bibliographic Classification* by Henry E. Bliss, Vol. I-II, p. 9. H. W. Wilson Company, N.Y.

which is the recognition that the subordination of one topic to another is arbitrary and parochial and has no claim to logical or universal significance.

These two forms of relationship, the topical and semantic, make up the overwhelming proportion of most classification systems, and all classification systems which are based on semantic relationships or the arbitrary subordination of one topic to another, serve only to demonstrate that universal classification is no more significant than a pattern of printing on a page, and has no logic other than the logic of general discourse.

3. *Taxonomic*

There remains one other method of subordination which we call the Taxonomic. In certain fields, namely, systematic Botany and Zoology, and parts of Chemistry, there are highly developed classifications or taxonomies. In such fields we get true one place classification and subordination because the class, subclass or species of an entity is determined before it is named and independently of its name. It is, perhaps, the success of such taxonomies in limited fields which has led to what Dr. Shera has called "the pursuit of impossible goals," the attempt to compress all knowledge into a systematic taxonomy. The great age of library classification, the 19th Century, an age of which Mr. Bliss is the last exemplar, was fundamentally an age of Biology as contrasted with the 17th Century, which was the great age of Physics and Mathematics. The hierarchies of bibliographical classification are hierarchies based on biological analogs and have no other warrant in fact or logic.

Perhaps the various attempts to create taxonomies of knowledge could be justified so long as the only alternative seemed the chaos of the alphabet and its permutations so alarmingly described by Bradford;⁴ but modern symbolic or "relational" logic has shown us that there is an alternative to classification which possesses all the order and flexibility required for the organization of information. In the sense of Gilbert's famous lines:

That every boy and every gal
That's born into this world alive
Is either a little liberal
Or else a little conservative

⁴ Bradford, S. C. *Documentation*. London, Crosby Lockwood & Son, 1948. p.19.

librarians for the past 50 years have been either classifiers or alphabetizers. But we cannot accept this narrow path between completely unsatisfactory alternatives as the final word. In view of the great triumph of mathematical reasoning in modern science, librarians, if they will free themselves from this outworn and narrow "either/or," can find in mathematics and logic new and viable bases for bibliographical order and organization.—*Mortimer Taube, Documentation, Inc., Washington, D.C.*

Book Collecting

ABC for Book-Collectors. By John Carter. New York, Alfred A. Knopf, 1952. 191p. \$3.00.

Although it is now some months since its publication and it can no longer be pointed out as a new—or, indeed, even a very recent—offering, John Carter's latest book, *ABC for Book-Collectors*, surely deserves to be given notice in these columns and before this audience.

"This," writes the author, "is not an encyclopædia or even a glossary. It is an ABC, which is something much humbler. And it is not an ABC of bibliography, or of printing or binding or book-production terms, though many of these come into it. It is an ABC of book-collecting, for novices, would-be collectors and that section of the literate public which takes an interest in our pursuit without necessarily wishing to share it."

The objective has been "to set down, and to define, and sometimes to comment upon, such words and phrases, commonly used in book-collecting, as would be likely to puzzle an educated reader faced for the first time by a bookseller's or an auctioneer's catalogue."

Mr. Carter's *ABC* is something of a cross between a dictionary and a primer, for many of its entries are not merely definitions of terms or phrases, but form astute and valuable little essays on the subjects treated. "Advertisements," for example, is covered by a scholarly three-page treatise, while under "Auctions" the reader is given a five-page exposition of that domain, sub-divided to include separate sections on catalogues, bidding, prices, and terminology.

Another of the longer entries—and one which seems particularly significant from this