



Problems of Bibliographical Control

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WHEN VIEWED from all directions, bibliographical control is a subject of monumental proportions. In its broadest sense, perfect bibliographical control would mean a complete record of the existence and location of every book and of all other materials of concern to libraries. It is doubtful that we shall ever reach such a utopia.

The problem of bibliographical control is as ancient as the beginning of writing. Catalogs of cuneiform tablets, for example, were found among the ancient Babylonians, and lists of papyri among the Egyptians. In the case of the Greeks, as Geoffrey Woledge¹ points out, Aristotle recognized the importance of knowing what had already been written on a subject. "He starts off his *Metaphysics* with a history of the philosophers who had gone before him—the first critical bibliography, we might call it." His pupils followed his lead in other fields of science.

As we proceed on down through the Middle Ages to the Renaissance, the number of bibliographical compilations grows. With the invention of typography in the fifteenth century, the troubles of bibliographers were vastly increased. Subsequent developments, such as high-speed printing presses and wood-pulp paper, have resulted in the situation getting rather thoroughly out of control.

Back in the seventeenth century, in the days of Francis Bacon and John Milton, scholars took all knowledge to be their province. It was generally taken for granted that a single human brain could comprehend and hold all existing knowledge. A scholar could be familiar with all literature of substantial importance. Even by the eighteenth century, however, the delusion of the encyclopedic man had begun to disappear, and today it has vanished completely, as knowledge has been broken down into more and more minute compartments and specialties. The burden of storing total human knowledge has been shifted to books—millions of books in great libraries. Only in that way can any degree of control be maintained over the rapidly-widening horizon of science and learning.

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The proliferation of literature has taken various forms. For over two centuries after Gutenberg's invention, publication was restricted almost entirely to the book, the monograph. Then, in 1665, with the inauguration of the Royal Society's *Philosophical Transactions*, the floodgates were opened to a vast and steadily expanding sea of periodical literature. Subsequently, the books and the journals were joined by the tremendous output of government publications, by great collections of historical sources and texts, and other varied types of records that pour into libraries.

In virtually every era, men have dreamed of universal bibliographies which will record all books in existence. "The first bibliographer of the modern world," Conrad Gesner of Zurich, in 1545, about a century after printing began, published his *Bibliotheca Universalis*, one of the monuments of early bibliography. His work fell far short of completeness, though, and, as Henry Bartlett Van Hoesen² commented, ". . . if Gesner's bibliography was 'partial' and incomplete at a time when there were probably not more than 40,000 or 50,000 books in print, we may well despair of universality now."

Other attempts at universal bibliography were made by Gottlieb Georgi about the middle of the eighteenth century, and by Jacques Brunet, a Frenchman, and Johann Grässe, a German, in the second half of the nineteenth century. Essentially, none of these went beyond western Europe. There have also been more specialized efforts, e.g., the Concilium Bibliographicum, established in Zurich in 1890, to cover the literature of the biological sciences and kindred areas from all countries; and the *International Catalogue of Scientific Literature*, started at the beginning of this century, with the object of covering all fields of science. Probably the most ambitious of all enterprises in general or international bibliography is the great Brussels union catalog, sponsored by the International Institute of Bibliography, also founded in 1895.

None of these undertakings was more than partially successful in reaching its goal. The *International Catalogue of Scientific Literature* struggled along for some seventeen years, getting more and more in arrears, and finally suspended publication. No cards have been issued by the Concilium Bibliographicum since 1940. The Brussels catalog accumulated a file of about 20,000,000 cards, representing locations in large European and American libraries, until financial, housing, and other difficulties brought its operations to a standstill, leaving it in a moribund condition.³

What is the magnitude of the problem confronting us when we consider universal bibliographical control? Statistics of world book production are incomplete and inadequate. We know that book publishing goes on at a steadily accelerating rate, and since 1900 as many books have come from the presses as in the preceding 450 years. Paralleling this growth is the expansion of library collections. Estimates of the number of book titles in existence vary from fifteen to twenty million,⁴ of which perhaps two-thirds are to be found in the United States. In the periodical field, the second edition of the *Union List of Serials in the United States and Canada* recorded approximately 120,000 titles, of which 43 per cent were still current, while the third edition of the *World List of Scientific Periodicals* includes no less than 50,000 titles in science alone. It has been estimated that a complete list of serial publications in American libraries would approximate half a million titles.

The swelling tide of printed materials of course creates many practical difficulties, and ways and means are constantly being sought to hold it in check. Methods of inventory to maintain a complete record of production are discussed. National, regional, and local union catalogs and union lists have been created to locate materials. Cooperative purchasing agreements have been arrived at, such as the Farmington Plan for the acquisition of books from abroad. Regional storage centers are set up for housing little-used books. Ambitious projects are being carried forward to microfilm and microprint large masses of material, to reduce their bulk for storage purposes. Programs are functioning for subject specialization among libraries, in order to reduce the scope of their collecting activities. These are some of the devices designed to bring order and system into a chaotic bibliographical world.

Viewing the question of bibliographical control in the perspective of history, there seems little doubt that effective national bibliographic organization must precede international or universal coverage. Starry-eyed bibliographers, who for generations have advocated a worldwide approach to bibliography, present an almost unbroken record of futility, frustration, and failure, except, perhaps, when they limit themselves to special aspects. If universal bibliography is ever to be achieved, it must be grounded upon the work of individual countries. That being the case, the remainder of this discussion will be confined to problems of bibliographical control in the United States, merely noting in passing that similar measures will be required wherever the printing press is, or has been, in operation.

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Interest in this country in problems of bibliographical control is long standing. The first meeting of the American Library Association, in 1876, was instrumental in bringing about the revival and continuation of *Poole's Index to Periodical Literature*, and *The American Catalogue of Books* was started the same year. We have been concerned with these matters ever since.

The field of bibliographical control divides itself logically into four phases:

1. Complete recording of all types of printed and other types of library materials, as produced.
2. The systematic acquisition of these materials in libraries and other depositories.
3. The location of materials through union catalogs, union lists, and like devices.
4. Provision of subject bibliography in all areas.

Considering these points in the order named, the first major step toward control is a national bibliography which will record the entirety of American output: trade books and pamphlets, privately printed and research publications outside the regular book trade, government-published books and pamphlets, and perhaps motion pictures, phonograph records, music, so-called "processed" publications, and other categories. Neither the United States nor any other country now has such full coverage, though all our current bibliographical publications together come close to achieving it. The principal tools we have available are the *Cumulative Book Index*, of the H. W. Wilson Company, the *Library of Congress Catalog*, and the Copyright Office's *Catalog of Copyright Entries*, all appearing periodically, and each with distinctive features. There is a certain degree of overlapping, though probably not serious, among the three publications. As an up-to-date, world-wide list of books published in the English language, Wilson's *Cumulative Book Index* is an invaluable aid for the book trade and library acquisition activities. It is not a substitute, however, for the record of library locations and cataloging data supplied by the *Library of Congress Catalog*. The latter also has the advantages of retrospective listing, and of covering titles in nearly all languages. As for the *Catalog of Copyright Entries*, here is a vast amount of material recorded in no other source, listing everything which passes through the Copyright Office, including books, pamphlets, periodicals, dramas, music, works of art, prints, and motion pictures. Clearly, each of these national bibliographies—the *CBI*, the *L.C.*

Catalog, and the *Catalog of Copyright Entries*—has carved out a distinctive domain for itself, and none could be spared without leaving a gap in the record of American publishing. Ideally, it might be desirable to have everything brought together in a single, comprehensive source. On the other hand, the heterogeneous nature of the materials to be listed is a point in favor of separate groupings.

Our most prolific publisher is the U.S. Government Printing Office. When we add to its output the production of state, municipal, and other governmental agencies, the total is staggering. Books, pamphlets, periodicals, and other documents come pouring from these presses in a never-ending stream. Bibliographically, our coverage of these publications is short of perfection, for such reasons as the noninclusion of confidential reports, and decentralization of publishing, especially near-print documents, among many agencies. The combination of the Superintendent of Documents' *Monthly Catalog*, the Library of Congress' *Monthly Checklist of State Publications*, and such specialized works as the U.S. Department of Agriculture Library's *Bibliography of Agriculture*, provide a reasonably complete record.

Turning to the second facet of the four-point program for thorough bibliographical control, i.e., the systematic acquisition of material in libraries, this subject is of such dimensions that only cursory attention can be paid to it here. It is a fair assumption that our multiple types of libraries, *in toto*, are covering the bulk of all domestic publishing. The foreign field, through the leadership of the Association of Research Libraries and the Library of Congress, presents a far more cheerful picture than it did ten years ago. During and following the second World War, the Cooperative Acquisitions Project, sponsored by the Library of Congress, and aided by the State and War Departments, procured over 800,000 books and periodical volumes from abroad for the war years, and distributed them on a subject basis to about 115 libraries in the United States. This enterprise provided valuable experience for the subsequent "Farmington Plan," sponsored by the Association of Research Libraries, for the acquisition by American libraries of all books of research value published abroad. Beginning with only three western European countries in 1948, the undertaking has expanded until now it is world-wide in scope. Fifty-three libraries in the United States are participating, to bring to this country at least one copy of every monographic publication of potential worth currently issued elsewhere in the world. Each cooperating library has assumed responsibility for one or more specific subject fields or geographical areas. By central listing in the National Union Catalog

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at the Library of Congress, a complete record of locations of individual titles is maintained for all Farmington Plan books.

Like all new, large, and ambitious programs, the Farmington Plan has critics. Some suggest that it is too inclusive, and is bringing into our libraries much material of little or no value. These critics would recommend a more highly selective policy. On the other side, there are equally vocal spokesmen for the point of view that practically everything published abroad should be made available somewhere in the United States. The middle course between the two extremes is now being steered by the Farmington Plan directors. In one respect, the Plan has a major hiatus. For simplicity of operation at the outset, only monographic works were included, omitting the vastly important areas of serial publications, newspapers, and government documents. While recognizing that the complexities of the serial field are considerably greater than those associated with monographic works, eventually the Farmington Plan must extend its coverage to all types of publications, to be of maximum service to American research and scholarship.

Historically speaking, libraries in the United States have been concerned almost exclusively with materials in the Latin alphabet, which in substantial effect means publications originating in the Western Hemisphere and in western Europe. Largely ignored were eastern Europe, Africa, and the immense reaches of Asia, geographically comprising nearly two-thirds of the earth's land area, and including about 75 per cent of the world's population. America's role as a great world power has forced us to expand our horizon. Now, through the Farmington Plan, and special agents of the Library of Congress and other large research libraries operating abroad, we are obtaining, for the first time, reasonably thorough coverage of the current literature of most countries of the world.

The third phase of a sound program of bibliographical control logically follows the first two, i.e., location. Listing the facts of publication and acquisition in libraries is not enough. We also need to know the whereabouts of materials. Here the master key is the National Union Catalog in the Library of Congress.⁵ This catalog, started about fifty years ago, at present contains approximately 13,000,000 cards, locating a much larger number of copies of books in some 2,400 different libraries. Admittedly, however, the record is far from complete. Millions of titles in libraries in the United States are not yet reported to Washington. Nevertheless, according to its latest report, the National Union Catalog is able to locate in some American

library at least one copy of 78.6 per cent of the titles for which it is asked to search. When one takes into account the fact that these are generally books which have been searched for elsewhere without success, the percentage of locations is high.

The National Union Catalog is growing steadily. For the past ten years, the Library of Congress has followed a policy of copying and incorporating cards from a number of regional union catalogs and catalogs of individual libraries. This policy has resulted in rapid expansion of the National Catalog. Future plans call for continuation of the copying program, with priority perhaps for libraries in the Far West, whose holdings are now sparsely represented. In addition, the catalogs of various university libraries, historical societies, and specialized reference and research libraries elsewhere should be copied for the National Union Catalog. Also inadequately covered are the many important research libraries belonging to the United States government, outside the Library of Congress. Altogether, these libraries contain about 5,000,000 volumes.

Aside from the problem of its future growth, there is also the question of how the National Union Catalog can be made of maximum value. At present, the Catalog exists only in the huge card file at Washington, plus a microfilm copy recently made for security purposes. From time to time, proposals have been offered for reproducing or publishing the Catalog, in order to make copies available to any research libraries wishing to purchase them. The Association of Research Libraries has a committee investigating ways and means for bringing about publication.

Supplementing the National Union Catalog are several dozen regional, state, and local union catalogs and bibliographical centers, the most active of which are those in Philadelphia, Cleveland, Denver, and Seattle.⁶ For the most part, such catalogs were begun in the depression period with W.P.A. and foundation grants, and have been continued under local sponsorship. An example is the Union Library Catalog of the Atlanta-Athens Area, at Emory University and the University of Georgia, established in 1940. Like the National Catalog, the primary concern of regional centers is the location of books, periodicals, and other materials, but they frequently perform a variety of added functions, e.g., taking the lead in regional cooperation projects, the development of specialization agreements and coordinated acquisitions among libraries of the area, aid to individual libraries in cataloging and classification, serving as clearinghouses for interlibrary loans, and the preparation of subject bibliographies.

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Regional union catalogs have strong opponents and proponents. Their critics claim they are uneconomical, and that their continuation would be unjustified if the National Union Catalog were properly completed. It is suggested further that the rapidity of modern means of communication—telephone, telegraph, teletype, air mail, and, perhaps soon, facsimile transmission—render unjustifiable the expense of maintaining a decentralized system of union catalogs, and point to the desirability of having one big catalog, as complete as possible, for the whole country. Apparently equally valid arguments are offered in support of the regional plan, among them that the regional centers are providing a wider range of services than the National Catalog, the National Catalog could not afford to take over all the bibliographical services which regional centers render locally, and the decentralized arrangement gives impetus to extensive cooperation among libraries in the regions where the centers are located, a stimulus that would not be felt from a remote national organization. The fact that libraries in the regions where bibliographical centers are located are willing to support them financially, as they are doing in Denver, Seattle, and Philadelphia, is a tribute to their effectiveness and value.

The author has been a student of union catalog problems for the past twenty years and is convinced that maximum development and expansion of the National Union Catalog should be the primary objective of any union catalog program for the country. The National Catalog should receive first priority for information concerning every unusual book in the United States, though it may be futile and unnecessary to duplicate entries there for thousands of titles useful in a local catalog. As for regional union catalogs, the need for them probably varies in direct ratio to the distance from Washington. Because of time and transportation factors, union catalogs for the Rocky Mountain area and the Pacific Coast are more vital than for those states in close proximity to the National Catalog.

Related to the subject of union catalogs are union lists, of which there are hundreds of examples, national, regional, and local, principally, though by no means, exclusively, concerned with locating files of serial publications. The largest, best-known, and most-used compilation of this kind is, of course, the *Union List of Serials in Libraries of the United States and Canada*, the second edition of which appeared ten years ago. Not counting the large expense to individual libraries for checking their holdings, the cost of compiling and publishing that huge work was about \$300,000, partly covered by a Rockefeller Foundation grant. Because of the expense involved and increased com-

plexities, it is doubtful that a third edition of the *Union List* will be, or can be, published in the same form as the first and second. A committee of the Association of Research Libraries, which has been concerned with the matter for several years, has proposed a national union catalog of serials on IBM punched cards in the Library of Congress. As libraries would be expected to report their holdings continuously, the record would always be nearly up to date, in contrast to the *Union List*, which is chronically several years in arrears. The union catalog of serials would be reproduced in book form from time to time, to be made generally available. This plan is understood to be acceptable to the Library of Congress, if financing can be arranged. The *Union List of Serials* has become so fundamental a research tool in libraries that means for its continuation must be found.

The fourth and last step in a thoroughgoing plan for national bibliographical control is provision for subject bibliography. Wilson's *Cumulative Book Index* and the *Library of Congress Catalog* include subject indexes to the books listed. Union catalogs ordinarily provide only an author approach, a distinct limitation on their usefulness. It is a fair statement that subject bibliography has always been, and continues to be, the weakest link in our chain of bibliographical control, and nowhere has a fully satisfactory solution for the dilemma been found. It is unquestionably the most difficult of all branches of bibliography, and satisfactory machinery for it has yet to be developed in most fields.

To round out this discussion of bibliographical controls, a reference should be made to the immense field of nonpublished or nonbook materials. This has become an area of considerable concern to research libraries. From the point of view of bibliographical control, manuscripts, maps, sound recordings, motion pictures, prints, and photographs are more complex than books and periodicals. Increasingly, libraries are developing extensive research collections in these categories, and their close relationship to printed resources is becoming generally recognized. Manuscripts and archives have been more extensively recorded than any other variety of nonprinted materials. There are, for example, the hundreds of volumes published by the Historical Records Survey, the American Historical Association, and by individual institutions. No union list or union catalog of manuscript collections, however, has been maintained. Recently, in response to appeals from various historical bodies, the Union Catalog Division in the Library of Congress has made plans for the development and maintenance of a National Register of Manuscript Collections, to

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cover all important collections of historical manuscripts in public and private possession in the United States.

In the field of maps, the Army Map Service in Washington is building up a union catalog of maps. The catalog is designed mainly to locate unusual maps not generally available, especially large-scale maps of recent date. Some fifty libraries have been reporting such items in their collections to the catalog. Another cooperative undertaking is a union list of United States atlases, published this year by the Library of Congress, listing over 7,000 atlases in 185 libraries.

These two areas—manuscripts and maps—are the only nonbook categories in which anything noteworthy has been done about bibliographical control.

By way of summary, the following conclusions might be drawn:

1. In the realm of current book and periodical publishing in the United States, an adequate though not complete bibliographical record is being maintained.

2. Devices for the systematic acquisition of published material, domestic and foreign, are being developed by American libraries.

3. Great progress has been made through the National Union Catalog, regional union catalogs, and union lists in providing access to library materials. Millions of titles, however, are still unlocated.

4. The thoroughness of bibliographical control from a subject standpoint varies with different fields, excellent in certain branches of science, for example, and inferior in other important disciplines, such as the social sciences. In general, subject bibliography is in a less satisfactory state than any other type of bibliographical service.

No one has summed up the aim of bibliographical control more admirably than did H. A. Lorentz, at a session of the League of Nations Committee on Intellectual Cooperation, nearly a generation ago: "The end to be attained is that no book or manuscript should be out of reach—that we should be able to know where any book is to be found, and how it may be made accessible as easily as possible. You may think that is a little thing, but in reality it is a great thing."

To end on an optimistic note, a statement by Geoffrey Woledge,¹ well-known British librarian is quoted: ". . . though it is still not so easy as it should be to find what has been written on a given point, it is incomparably easier than it was at the beginning of the century."

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