PRODUCTION NOTE

University of Illinois at Urbana-Champaign Library
A Summary of the Literature on the Use Made by the Research Worker of the University Library Catalog

by Rolland E. Stevens
Acquisitions Librarian, Ohio State University Library, Columbus, Ohio

Studies on the uses made of the university library are not plentiful or even sufficient for guiding decisions in regard to cataloging practices. In an examination of library literature for the present purpose, a number of articles were found which purported to relate library policies to the needs of the users, but which actually based their recommendations on introspection rather than objective study. Of the material which does actually describe the user's approach to the library and his library needs, two kinds of articles may be differentiated: those written by non-librarians who use the library, describing their expectations, disappointments, and needs in the library; and those by librarians, reporting on interviews and questionnaires submitted by readers on their use of and needs in the library, and describing their observations of the uses made of the library. Since this paper is restricted to a consideration of the university library, only studies of the scientist, the scholar, the student, and the teacher are reported here. Besides these articles several other sources of information were employed, including interviews of librarians and non-librarians, personal observation and experience acquired in working in university libraries, and introspection on the author's own uses and demands on the catalog when approaching it as a student.

The data found in these various sources are synthesized and described below, first as to the observed use of the library by the scholar, then as to the needs manifested in such use. The implications of such use for the kind and type of catalog, and for the nature of the catalog, are then examined. It may be stated here that the conclusions reached in this paper are to be regarded as tentative, requiring verification or modification in the light of further objective data on the uses made of the library and on the library needs of the user. Although the importance of such studies to library administration are now being recognized, room remains for many more studies of this kind.

The ideal library from the point of view of the average research worker, that is, the collection of materials that he would select for his own needs - would comprise everything published in his own and immediately (logically) bordering fields, plus a sound selection of the best and most recent publications of other fields. Outside of a man's own field, his knowledge must be relatively superficial. It is not maintained that the scholar will make no excursions into fields other than his own, but that such excursions into these fields will require only comprehensive, secondary materials.

The research worker likes to do his own searching for material. He wants to have free access to the stacks and to have the total collection in one library.
His most important discoveries sometimes come to him while browsing in fields other than his own special study, and he is constantly reaching into these other fields (5). He welcomes the assistance of the librarian in finding and verifying obscure references, calling his attention to pertinent materials in other fields, and in short in performing "the bibliothecal dirty work upon which the scientist does not wish to spend his own time" (6). Above all, he does not want the "specialist"-librarian to abstract and interpret the literature, nor otherwise to assist in a subject-capacity, but only in a library-capacity (7).

When he uses the catalog, he uses it as a finding list, i.e., to find the location in the library of a work of which he already knows the author or title. Either he never uses the subject approach to the catalog, or he uses it only in fields with which he is not well acquainted. He knows well the literature of his own field, and supplements this knowledge by reference to subject bibliographies, subject indexes, abstract indexes, and other printed guides (8). Here the undergraduate differs most from the scholar in his use of the library. The former, particularly in his first and second years, works in varied fields more extensively but less intensively than does the scholar, and does not know the literature of any of these fields as thoroughly as does the scholar. Hence, the undergraduate does use the subject approach to the catalog more frequently than does the mature scientist (9). A further cause of such a difference in use is that the student is "new" at using the library catalog, and possibly hopeful of having his subject needs satisfied thereby, whereas the scholar has learned long before that the catalog does not satisfy his subject needs as well as do other tools.

The scholar, then, needs a centralized collection which is as complete as possible in the fields in which he is intimately concerned (10). A "complete" collection may in some cases signify the totality of published materials of a given period. The historian, for example, is more interested in the trivia (handbills, pamphlets, placards, etc.) than classics existing during a certain period (11). He will not be satisfied with a core collection (e.g., 50,000 volumes) supplemented with photographic or other devices however rapid. He needs a large collection at his fingertips (12), and it must be arranged in the stacks according to subject in order to be useful.

In addition to such a collection, the researcher needs a catalog that will serve as an accurate, speedy, and effective finding list to the collection. Since subject bibliographies and subject indexes are preferred by most scholars to the present dictionary catalog (13), a good collection of such bibliographic tools is needed, preferably where they may be consulted quickly and easily in conjunction with the catalog.

The scholar also wants speed and ease in his use of the library. He regards the library as only an adjunct to the laboratory, an evil but necessary step in conducting research (14). He would get along without it if he could. Since he must, however, depend on the library in conducting his research properly, he is particularly annoyed at any delay, circuitous methods, and other obstacles that may stand between him and the books or information he wants in the library (15).

Implications for Cataloging

Before attempting to describe the implications that these needs of library users have for the composition of the catalog, those factors should be considered which must be taken into consideration by the administrator in planning each cataloging (or other) policy. The principle ones are:
(1) The adequacy of the policy in satisfying the library needs of the user. Is the catalog improved for one type of user at the expense of other types?

(2) The economy of the policy. Does an improvement in the usefulness of the catalog justify the added expense? Library funds are never limitless, and an added expense in one direction implies that some other service cannot be offered.

(3) The effect of the policy on the library's participation in uniform practice. There are advantages of use and economy in certain uniform practices among libraries; the effects of a particular policy on the library's participation in such uniform practices must be considered.

The thesis of this paper is that the first of these factors must be the primary one affecting the formation of library policies, subject to certain practical considerations. Thus it is undesirable for a library to continue providing a catalog of a certain kind if it can be shown that a different kind of catalog would better serve the users of the library, unless the expense of this second type of catalog makes its provision impossible. It is obvious that this problem affects all policies of the library, not only those of cataloging. In this paper, however, an attempt will be made to abstract those problems that concern the catalog from the network of policies that serve to guide the whole library.

An attempt to discuss cataloging problems calls for a definition of the functions of the catalog. Many different reader's needs may be recognized. The catalog can be designed or modified to fulfill only those needs which fall within the area limited by its specified functions. The general function of the library catalog may be said to be, in simplest terms, "to connect the reader surely and promptly with the book that he wants to use"(16). The same view, which regards the catalog as simply the key to the library collection, is stated more fully by Patricia B. Knapp:

The purpose of the card catalog is to describe and organize the holdings of the library so that the library user may be made aware of its contents. The subject catalog undertakes to describe the subject content of library holdings in anticipation of the subject needs of the library users. The classified catalog, the dictionary catalog, and various combinations of the two have been devised to serve this primary purpose(17).

Specifically, how much detail is needed in order that the catalog may be adequate for this purpose? Most writers accept the catalog, either as part of the dictionary catalog or as a separate catalog, as a sine qua non of library service. Maurice F. Tauber has proposed, however, that in university libraries the catalog be reduced to a simple finding list and buying guide(18). To do away with the subject entries in the public catalog is certainly a radical proposal. Nevertheless, it may be argued for on two counts: (a) According to known faculty and student uses of the catalog, the subject catalog would not be missed if removed from the public catalog. Moreover, it would actually simplify use of the catalog which would then have only authors, editors, translators, and titles. (b) Unlike many desirable changes in the catalog, this would cost very little, involving only the removal of all subject cards and cross-reference subject cards. Moreover, it would amount to a great saving in cataloging. The simplification in the use of the author catalog would also be effected by vertical division of the catalog, but such division results in greater, rather than less expenditure in upkeep than does the dictionary catalog.
A second fundamental question concerning the catalog is that of the printed as contrasted with the book type. The book catalog, still considered as the principal public catalog by European librarians(19), has several advantages over a card catalog. It is easier to handle, is more compact, gives visibility of a number of items simultaneously, and can be produced in multiple copies at little additional cost. On the other hand, it has a shorter useful life than the card catalog, is difficult to revise and keep up-to-date, and is more expensive(20). The best form of catalog would, of course, be one combining the desirable features of both types: it would be compact, produced in multiple copies, easy to revise and bring up-to-date constantly, and give multiple visibility. The library public prefers to use the book catalog with its possibilities for optimum service when a complete copy is kept at each branch and departmental library(21). Kaiser maintains that all the advantages cannot be included in one catalog(22), and Rider points out that whatever the defects of the card catalog, no other device can provide "immediate and indefinite intercalation," which is the forte of the card catalog(23). Moreover, the card catalog in some form must be presupposed even if the catalog, as issued, is to be printed. The printed or book-form catalog seems to have every advantage over the card catalog, for practical purposes, if frequent (weekly) supplements can be issued and if the expense can be brought low enough. Rider proposes photo-offset and microfile catalogs as the best substitutes devised to date for the card catalog(24).

The question of whether the catalog should be divided or left in one dictionary form does not apply to the printed catalog, which would certainly be most advantageously divided. The dictionary catalog was introduced into library systems as a device to facilitate use of the catalog by not requiring the user to learn a class scheme (as is necessary in using a classed catalog), by arranging cards alphabetically (since every library user already knows the alphabet), and by having authors, titles, and subjects all in one file for ease of use(25). However, the dictionary catalog is criticized as being too complicated a form, showing inconsistencies inherited from printed catalogs(26), being a tool fit for the public library but not for the research library(27), and defeating its original purpose by making many alphabetic and non-alphabetic sub-arrangements within the large arrangement. Any scholar or competent research worker who has tried often to use the dictionary catalog in one of our large research libraries can attest to the fact that this type of catalog in a single alphabet has become unwieldy. The particular method of effecting the needed simplification is, however, the problem of the librarian.

One of the proposals that has been made for effecting this simplification and has found some measure of active support is that of dividing the catalog into two separate files, one containing subject entries and the other containing author, title, and added entries. Among the large libraries which have made this reform in the catalog are Amherst College Library, Grosvenor Library, Harvard University Business Library, University of California Library, and Duke University Library(28). The University of Chicago is the only instance known of a library not finding this division a satisfactory simplification(29). A continuation of the idea of simplification has led to the proposal that the subject catalog be constantly revised so as to contain subject entries only for those books that are up-to-date and significant contributions in their fields. The scholar who requires a key to the complete resources may then be referred to the shelf-list(30). Not only is the split catalog easier to use than the undivided dictionary catalog, say advocates of the former(31), but it is also easier to file in, and therefore less expensive to maintain. It would be interesting to see the results of tests showing the existence and amount of difference in speed of filing in the two kinds of catalog.
However, aside from this economy and the greater facility of use resulting from the divided catalog, there arise also from such a division many necessities of duplicating cards, and numbers of difficult cataloging decisions as to which file a certain entry belongs(32), and both of these results of the divided catalog increase its cost of maintenance. There is need for a detailed study by cost analysis to show the relative maintenance costs of these two types of catalog. The cost, however, is of secondary interest, unless there is a very great difference. On the other hand, even in ease of use, the divided catalog has not been shown to be greatly superior to the dictionary catalog. At the University of Chicago, separate author, title, and subject catalogs were combined into one catalog after years of futile explanation as to their use(33). At Grosvenor Library, great difficulty was encountered in instructing users as to the difference between the author-title catalog and the subject catalog. A follow-up study of the increase in ease of use of the divided catalog at the University of California failed to give conclusively favorable results, showing that 74% of the users favor the divided catalog, but that 45% hesitate as to which catalog to approach(34).

Lubetzky points out that division of the catalog cannot aid in relieving congestion at the catalog, nor in facilitating use of the catalog for the reader who confuses subject entries with title entries, but that division is important in untangling the maze of different filing patterns (titles, names, subjects) and does aid the reader who logically expects author, title, and subject entries to be filed separately(35). However, he points out further, division should be carried out one more logical step by providing a third separate file for title entries. This type of division, that separates the dictionary catalog into separate files of author, title, and subject entry, is called "vertical" division. "Horizontal" division, which results in separate, complete dictionary catalogs for different classes of books (juvenile, foreign language, departmental libraries, etc.) is also advocated as a means of simplifying the large dictionary catalog. Horizontal division may be by date of publication, making a separate dictionary file of those books in the library published during some recent period (e.g., 10 years) besides the complete dictionary catalog of the total resources. This, its advocates say, would greatly facilitate use of the catalog by the ordinary, unlearned user, who must now struggle with the catalog designed for the research technician(36).

Similar to vertical division is the proposal for (return to) the division of the catalog into an author-title finding list, and a classed subject file. This is one of the usual forms in European libraries(37), and is a precursor of the dictionary catalog in America. The chief argument against the class catalog at the time of its discontinuance in favor of the alphabetic subject catalog and the dictionary catalog, was that it necessitated the user's first learning the classification scheme on which it was based(38). While this may have been a cogent argument for discontinuing the classed catalog in public libraries and smaller school libraries, it loses much of its meaning in a large research library, where scholars work more easily with a logical, classed system of subjects than with an illogical alphabetic arrangement(39). Instead of having the subject entry appear on each card, it usually appears only on a guide card behind which are filed the various cards for books on that subject. Thus, besides its easier use by the research worker, the classed catalog has another advantage over the dictionary and alphabetical subject catalogs in making it easier to revise or modernize a subject heading. Therefore, too, minute subject subdivisions can be brought out in classed catalog, since no difficulty arises in revising subject terminology and there is no danger that the catalog will become crammed with out-of-date ludicrous headings(40).

Although the dictionary catalog achieved its popularity on the ground that it would be easier to use by the average person because of its arrangement in one
continuous alphabet, this very principle has been broken again and again in order
to make the catalog still more useful and logical in its arrangement. As a result,
the present dictionary catalog contains many non-alphabetic sub-arrangements(41):
parts of the Bible, periods of history, dash-subdivisions and inverted headings
(i.e., Law - Philosophy followed by Law, Anglo-Saxon), etc. These conventions in
filing are often confusing to the user who was provided with the dictionary catalo,
so that he would not have to learn a classification system in order to use the
catalog but need only follow the alphabetical order. Besides the difficulty in
using the catalog, there are similar complications in filing cards into it, result-
ing in an increase in the cost of filing. Therefore, simplification of filing has
been a source of concern to some librarians. When separate author, title, and
subject catalogs were filed together at the University of Chicago, filing was done
in one straight alphabet, unbroken by sub-arrangements(42). Several suggestions
have been made for simplifying filing by filing together all works with which a
man has had any connection, whether as author, joint author, editor, etc.; by
filing dash-subject headings and inverted subject headings together (in other words
to disregard punctuation); by filing together place names (whether author, subject,
or title, and without regard to punctuation)(43). Shufro showed by experiment
that corporate headings, when filed together, whether author or added entry, can
be found more easily than when separate arrangements are used(44). Further aid to
the reader in understanding the filing of the catalog may be afforded by notices
near the catalog and in catalog drawers(45). In a few libraries, alphabetic sub-
filing has been given up altogether, and cards are filed (in alphabetical subject,
and classified catalogs) inversely by date of publication(46).

In policies regarding the making of analytics and the cataloging of documents,
pamphlets, college catalogs, and other special materials only secondary considera-
tion is usually given to the needs of the user. It would seem that, from the
user's standpoint, the more analytics made and the more ephemeral material brought
out in the catalog (so that special indexes and files need not be consulted), the
better(47). For the sake of economy, however, analytics are usually not made for
material already analyzed in special bibliographies and indexes, and many libraries
give no cataloging or only short cataloging to much ephemeral material(48). Such
policies tend to simplify the catalog in reducing the number of cards in the cata-
log, but this is like praising a library for being easy to use as a result of its
having a small collection.

Problems of the choice of subject headings under which a reader is most likely
to look in his search for material have meaning only where the alphabetical arrange-
ment is used in a subject catalog. If, as has been suggested, the dictionary cata-
log is replaced by an alphabetical author-title catalog and a classified subject
catalog, there is no problem concerning choice of subject headings. In the classed
catalog, where the arrangement follows a logical scheme, there is only the problem
of fitting a book into its proper places in the scheme, but there is no problem of
terminology. If the alphabetical arrangement is kept, however, whether in a sepa-
rate subject catalog or in a dictionary catalog, the problem of selecting headings
under which a reader would normally look for material must be faced. The fact that
research workers do not use the subject approach to the catalog may indicate either
(a) that they do not approach a subject by a subject-name (i.e., by its place in
an alphabetical arrangement) but by its place in a logical scheme, or (b) that
scholars might make the subject approach in either way (and may even prefer the
alphabetic approach, although this is doubtful), but have long since learned, by
repeated failure, to avoid using the subject entries in the dictionary catalog(49).

Whether an alphabetical subject catalog can be made to fit the subject needs
of the scholar and the college student equally well is a question that depends on
further observation of "what approach faculty members and students make to subject heading cards and what uses they make of them"(50). Knapp maintains "that the principles of subject cataloging have been based on assumptions rather than on knowledge of the user," and that such knowledge is greatly needed(51). In general, librarians have sought to reduce the number of subject entries in the catalog(52), but this again is primarily in the interest of economy (not of simplification of the catalog), since the needs of the user demand more rather than less subject entries. The two opposite viewpoints held by catalogers on the question of selection of adequate subject headings may be seen in the articles by Black(53), who insists that headings be assigned and terminology chosen on the basis of the class of reader having an interest in and a need for this material, and by Prevost(54), who advocates, in the face of the impossibility of guessing the entry which every reader would inevitably look for, that that subject entry be selected which is suitable for the approach of the librarians, "the group which uses it [the catalog] most and which alone is in a position to help those who do not understand it."

A discussion of problems centered about the catalog could not be concluded without mention of the problem of the content of the catalog card itself. A study of the rules for descriptive cataloging was undertaken by the Processing Department of the Library of Congress in 1942, following the unfavorable reaction to the 1941 edition of the A.L.A. Catalog Rules, and a general demand for simplification in the face of increasing cataloging costs(55). This study resulted in the preparation and publication of Rules for Descriptive Cataloging in the Library of Congress (1949), based primarily on the needs of the Library of Congress but with regard as well to the needs of other libraries(56). In connection with the latter consideration, a number of conferences were held with catalogers of various libraries in an effort to sample their views on simplification of descriptive cataloging. In the published records of these conferences, although much opposition was encountered to many of the proposals made for diminished information to be given on the card, yet there is no reference, as reason for the opposition, to any objective study of the uses made of the items traditionally found on the catalog card. Such studies as have been made show tentatively that many items on the catalog card are consulted less than 10% of the time, e.g., author dates, editor, illustrator, place, publisher size, series note, and serial editor(57).

It may be argued that librarians themselves constitute a large enough proportion of the body of catalog users that their needs cannot be ignored. This is true, but if much of the detail on the catalog card has only this justification, then the cost of such cataloging must be recognized as fulfilling the needs of catalogers and only indirectly the needs of the non-librarian readers. However, such items should not be omitted from the catalog card merely on the basis of their being used by 10% or less of the patrons. Presently available data indicate only the number of uses made of catalog data, but not the value of these uses(57). Nevertheless, it may be re-emphasized that discussions about simplification of the card have not taken into account observed uses of the catalog.

In concluding this brief essay, a final distinction must be made. It was pointed out above that conclusions reached here must be regarded as tentative. They must also be recognized for what they are: not recommendations for practical application, but the logical implications drawn from a few (as yet) studies of the use that university personnel make of the library. It is one thing to point out that the logical implication of such studies is that the subject catalog can and possibly should be removed from the public catalog, or should be replaced by a classed subject catalog. If is another thing for the administrator to follow up this by removing the subject entries from his dictionary catalog, or by constructing a classed catalog. Such action, involving a large expenditure of funds and the
potential satisfaction of actual users of the library, should be taken only after careful study has revealed that the situation in which such a conclusion has been reached elsewhere does actually exist in the particular library, and that various other practical factors are not being overlooked in the zeal for reform.

---

FOOTNOTES


(4) Descriptions of the library needs of undergraduates are even less often to be found than those of other users. However, the uses made of the library by the undergraduate seem to be of the same nature as those made by the scholar, and to differ mainly in intensity. The problem of adapting the library required by the scholar to the needs of the undergraduate is one of simplification, whereas there is no possibility of compressing the needs of the scholar to be satisfied in a library required by the undergraduate. Either the needs of the undergraduate will have to be fulfilled within the framework set up in answer to the needs of the scholar, or separate libraries and catalogs will have to be set up. But that function which sets the needs of the scholar off as different from those of the undergraduate is a continuous one; in respect to this function the scholar and the Freshman are at opposite ends of a continuous scale. Herein lies the difficulty of providing separate facilities for the research worker and the undergraduate.

(6) Shaw, op. cit., p. 297.


(10) For an opposite point of view, see Gilman, op. cit., p. 331.


(12) Carlson, op. cit., p. 298.

(13) Shaw, op. cit., p. 299-300; for a contrary point of view, see Reed, ibid.

(14) Shaw, op. cit., p. 289-93.

(15) Carlson, op. cit., p. 298.


(17) "The Subject Catalog in the College Library: the Background of Subject Cataloging," Library Quarterly 14 (1944) 109.

(18) Maurice F. Tauber, "Subject Cataloging and Classification Approaching the Crossroads," College and Research Libraries 3 (March 1942) 155.


(22) Kaiser, op. cit., p. 247.


(24) Ibid.


(33) Ver Nooy, op. cit., p. 323.


(37) Kaiser, op. cit., p. 274.


(40) Ralph H. Phelps, "Subject Headings Again," Library Journal 66 (June 1, 1941) 471.

(41) Knapp, op. cit., p. 110.

(42) Ver Nooy, op. cit., p. 323.


(47) Yocom, op. cit., p. 35.

(48) Yocom, op. cit., p. 38; Evelyn Hensel, op. cit., p. 46-47.
(49) R. C. Swank, "The Organization of Library Materials for Research in English Literature," Library Quarterly 15 (1945) 49-74, has shown that in this field subject bibliographies are more effective than subject entries in the catalog or library classification in bringing together the library materials that are needed in research; see also Butler, op. cit., p. 282.

(50) Tauber, op. cit., p. 150.

(51) Knapp, op. cit., p. 118.


(57) Miller, op. cit., p. 634.

** **

Numbers in this series are issued at irregular intervals and no more often than monthly. Single copies of any issue are available free upon request; appropriate institutions wishing to receive a copy of all issues should so indicate in writing. The Occasional Papers will deal with some phase or other of librarianship and will consist of manuscripts which are too long or too detailed for publication in a library periodical, or are of specialized or temporary interest. The submission of manuscripts for inclusion in this series is invited. Material from these papers may be reprinted or digested without prior consent, but it is request that a copy of the reprint or digest be sent the editor. All communications should be addressed to Herbert Goldhor, Editor, Occasional Papers, University of Illinois Library School, Urbana, Illinois.