

LIBRARY RESOURCES & TECHNICAL SERVICES

Vol. 10, No. 1

Winter, 1966

CONTENTS

	<i>Page</i>
RTSD and the Big Wide World. <i>Eric Moon</i>	5
Library Technology and RTSD—Goals in Common. <i>Gladys T. Piez</i>	13
Acquisitions in an Age of Plenty. <i>Marietta Chicorel</i>	19
A Survey of OP Buying Practices. <i>Shirley G. Heppell</i>	28
The Selective Purchase of Out-of-Print Books: A Survey of Practices. <i>Sarah A. Cook</i>	31
Nominees for 1966/67.	38
Swiss Book Prices: 1947-1960.	39
An Ordering Procedure Utilizing the Xerox 914 Electrostatic Process. <i>Richard M. Dougherty and Samuel M. Boone</i>	43
The Pamphlet in the University Library. <i>Jack King</i>	51
The Economics of Book Catalog Production. <i>Robert M. Hayes, Ralph M. Shoffner, and David C. Weber</i>	57
The Bitter End. <i>Ashby J. Fristoe</i>	91
In the Mail.	96
RTSD President's Report, 1964/65. <i>Paul S. Dunkin</i>	97
RTSD Acquisitions Section Annual Report, 1964/65. <i>Alice D. Ball</i>	99
RTSD Cataloging and Classification Section Annual Report, 1964/65. <i>Jennette E. Hitchcock</i>	102
RTSD Serials Section Annual Report, 1964/65. <i>Carol H. Raney</i>	105
RTSD Copying Methods Section Annual Report, 1964/65. <i>David C. Weber</i>	107
Report of RTSD Executive Secretary, 1964/65. <i>Elizabeth Rodell</i>	108
RTSD Serials Section: Proposed Amendment to By-laws.	112
Reviews	113

EDITORIAL BOARD

Editor, and Chairman of the Editorial Board ESTHER J. PIERCY

Assistant Editors:

RICHARD M. DOUGHERTY for Acquisitions Section

PAUL S. DUNKIN

for Cataloging and Classification Section

WILLIAM H. HUFF for Serials Section

ALLEN B. VEANER for Copying Methods Section

Editorial Advisers:

Maurice F. Tauber (for Technical Services)

Doris Ransom (for Regional Groups)

Managing Editor: DORALYN J. HICKEY

Business Assistant:

David Turiel (for Advertising)

Circulation Manager: MRS. ELIZABETH RODELL

Library Resources & Technical Services, the quarterly official publication of the Resources and Technical Services Division of the American Library Association is published at 2901 Byrdhill Road, Richmond, Va. 23205. *Editorial Office:* Processing Division, Enoch Pratt Free Library, 400 Cathedral St., Baltimore, Md. 21201. *Circulation and Business Office:* 50 E. Huron St., Chicago, Ill. 60611. *Subscription Price:* to members of the ALA Resources and Technical Services Division paying ALA dues of \$6.00 or more, \$2.00 per year, included in the membership dues; to members paying less than \$6.00, and to nonmembers, \$5.00 per year, single copies \$1.25, orders of five or more copies (same issue or assorted), \$1.00 each.

"Second-class postage paid at Richmond, Va., and at additional mailing offices."

LRTS is indexed in *Library Literature* and in *Library Science Abstracts*. Its reviews are included in the *Book Review Digest* and *Book Review Index*.

Editors: Material published in *LRTS* is not copyrighted. When reprinting the courtesy of citation to the original publication is requested. Publication in *LRTS* does not imply official endorsement by the Resources and Technical Services Division nor by ALA, and the assumption of editorial responsibility is not to be construed necessarily as endorsement of the opinions expressed by individual contributors.

RTSD and the Big Wide World

ERIC MOON, *Editor*
Library Journal

THE TITLE, as any of you with a feel for style may already have detected, is a Dunkin' creation, not a Moon-shot. Mine tend to be gaudier, more blatant, without the impish Machiavellianism of *LRTS's* cataloging king. I have it from an unimpeachable source that one member of the RTSD Program Committee felt that the topic sounded like "a TV sunrise program for children."

Titles of scientific papers these days are rather like bikinis—they are designed to fit all the curves and connotations of the subject very tightly. Titles of conference papers, on the other hand, are designed more like kimonos—they are very loose and have only occasional contact with what lies beneath. Whenever I pick my own title, I tend to choose something rather waspish from Shaw or Wilde or John Cotton Dana, and then forget about it. But when I am handed a title, as in this case, then the editor in me rises to the surface and I must needs examine it, like a manuscript, for motivations and meanings.

After examining this one in its awful entirety for some time I was left with no gleeful feeling that it was laden with potential. The classic technique in such circumstances is to break down the whole into its separate clauses, in the hope that the pieces will reveal meanings that the whole conceals. I proceeded with bifurcation.

RTSD, I discovered—after assiduous research—was an acronym for Resources and Technical Services Division, an aggregation of librarians (plus perhaps a Philistine or two masquerading under the name of documentalist or information scientist) within the American Library Association. Like other groups which are brought together in presumed professional harmony within a division (a term which always reminds me of battalions or regiments), this one is supposed to share a unity of interest or purpose or function.

Since RTSD is what is known as a "type of work" division rather than the more mundane species called "type of library"—whose relevance becomes foggier if we are to believe all those high-level speeches about a nationwide system in which all the old barriers and boundaries between types of libraries will disappear—our principle suddenly becomes sunray clear. *Obviously*, those whose lives are spent in contemplating the philosophical niceties of cataloging and classification theory are professional blood brothers of those whose minds and hearts are made of microfilm and whose thoughts are reproduced by Xerox. *Clearly*, the man whose life

is devoted to acquiring, let's say materials (avoiding such an old-fashioned and loose word as books), will have more in common with the explorers of the library machine and the compilers of codens than he will have with the librarian who is a member of the Rare Books Section of ACRL.

My microscopic examination of the first part of Mr. Dunkin's title was, as you can see, leading me only toward that uncomfortable old arm-chair called doubt. I could not honestly persuade myself that a cataloger has less community of interest with a reference librarian (who occupies a more exclusive division), or an acquisitions librarian with a children's librarian, or the copying methods expert with a documents librarian, than do two green peas from two separate but nearly identical pods. What I was faced with, I decided, was one of those quite illogical anachronisms of professional organization. There seemed to be no demarcation or definition other than the same kind of fuzzy negative-positive shadow that separates book selection and censorship, or even eating and drinking. You see, in all of these activities something always crops up eventually like soup. It may be such a thin consomme that drinking is the only possible activity to connect with it; but it may be a vegetable soup so thick that drinking would be a ridiculous word to use for the process of consumption.

But all my probing of those four vowel-less letters did get me somewhere in the end. I did discover a sort of line. Divisions like ASD and RSD and CSD (I will not insult you by translating these into their full terminological glory) seem mostly concerned with the problems of service to the public. This is true of RTSD only by remote control. If indeed it is true that the RTSD man, in general, only makes contact with the reader (whose satisfaction is the end objective of all we do, whatever kind of librarian we call ourselves) *via* the public service type of librarian, isn't the greatest professional need for the RTSD type for contact with the RSD or CSD man (or preferably, girl), rather than with his fellow absorbed techno-theoreticians? At the end of my pondering, it seemed an open and valid question—and that's the way I like to leave questions.

The first half of the title being so unproductive, to save my time and your patience, I decided to switch rather than fight with it longer. The second part of the title was simpler and therefore more profitable. I could—and I will—start here with a categorical denial, unclouded by doubt, and enjoy the rare experience of proving Mr. Dunkin rhetorically wrong. There is, twentieth century friends, no "Big Wide World."

In a day when a man, should he have the urge and qualifications, can pass around the earth in less time than it takes some of us to get from bedroom to office; in a day when the President of the United States, at the drop of a ten-gallon hat, can, via communication satellite, take over the BBC and, if General de Gaulle would let him, the French TV network too; in a day when an atomic or natural tremor in deepest Siberia can be reported within minutes or hours (depending on the state of government security consciousness that day) by Chet Huntley to the Ameri-

can public from Miami to Ketchikan—in such a time we clearly no longer have “a big wide world.”

Nor is the world of librarianship any longer so wide or so big—not even the world of American librarianship (if that is not in itself a misnomer or another anachronism). I bumped into Ralph Shaw recently at a hurried midpoint in one of his frequent commuting trips, which take in administering a university library and a nascent library school in Hawaii, doing a little talking, teaching, or research at Rutgers, visiting his own pet Scarecrow, and sitting on two or three committees in Washington—all, as he says with a breezy *c'est la vie* acceptance, in a day's work. Well, perhaps allowing for Shavian exuberance, two days anyway. I had a drink with Louis Shores in New York the night before he took off on a recent trip which took him a distance equivalent to three journeys around the earth. With encyclopedic help, he took in libraries and librarians and library meetings on a global scale, and when I saw him on his return he seemed only to have been away for the weekend. Nor have the ladies been left, as of old, to watch the hearth and home. Witness those charming RTSD ladies, Sarah Vann and Pauline Seely who, modern missionaries, carried Melvil's message to the farthest parts of once-darkest Africa and Asia. Marco Polo himself was an old homebody compared to the more peripatetic of our librarians today.

Patently, it wouldn't be either desirable or practicable to have even a moderate proportion of our professional librarians continually wandering the globe in this manner. But our problem is not so much a lack of mobile bodies as it is a deficiency in mental mobility. Too many of our professional minds are stationary and local—parochial, if you will. Many of us still do think of the big wide world, and see it as a collection of remote places and events “out there somewhere” which have little relevance to “our own” condition. I tend to react to such old-fashioned souls very much as Mary Gaver does to those of her students who raise minute, “practical” objections like “where is the money coming from” when she is trying to get them to dream and plan and think big. I heard Mary charge one such student with being guilty of “depression thinking.” The condition I am talking about might better be described as “isolationist thinking.”

I had just written this when someone delivered into my hands an advance copy of the Presidential Address to the (British) Library Association of Sir Frank Francis, the Director and Principal Librarian of the British Museum. His speech appears in the June issue of the *Library Association Record*. In it he too talks of “the tendency we all have, to look at the library situation . . . [from] a parochial point of view. We each of us have our own drums to beat, and we are sometimes prone to beat them so hard that we can't hear the drums of our colleagues in the next group of libraries.”

Let us take, as an appropriate example of isolationist or too-small thinking, the world of bibliographical control or, to use a smaller-world term, of cataloging. I understand this to be a subject of some concern to

RTSD, although I cannot refrain from observing that the Association of Research Libraries seems to be backing *its* concern with more immediate and insistent action than does RTSD. If one is to judge by the wordage (I will not use the popular term, "the literature," because it seems singularly inappropriate to describe most library periodicals and monographs), the topics which have been at the top of the collective RTSD mind in recent years are centralized cataloging and processing centers, book catalogs, catalog code revision, and the potential (for good or ill) of automation.

Like everything else in our new, small, muddled world, these are not separate but inextricably related subjects. Automation and the new technology have taken us back to the once archaic book catalog which, with all its faults as well as its virtues, is now, because the production problems are easier to solve than they were fifty years ago, the apparent St. George which will save us from the space-devouring card catalog dragon. It has become as mandatory for a library to announce its progressiveness by declaring that it has converted to a book catalog as it is for an unknown starlet seeking publicity to appear in a *Playboy* centerfold or in a topless bathing suit in Cannes or Los Angeles.

In turn, the computer and the book catalog have given rise to doubts that the new code, when it finally emerges from its inhuman period of gestation, will really be a child of paradise. It will, in any case, be a very old child, of whatever variety. Mr. Dunkin asks, in the most recent of his sparkling annual reviews of the cataloging scene: "Will the new code be a dinosaur on the freeway?"

If book catalogs and computers are multiplying in the library field, the real rabbit of fertility is the centralized cataloging and processing center. Not alone among the reasons for the growth of this species, but certainly the prime motivating reason, has been the theory that these centers would help solve one of our most excruciating staff problems. They would help us get by with fewer catalogers. They would, to quote a favorite phrase, "free professional librarians for better things." But one observer noted, after studying processing centers for school libraries in New York State: "It is ironic that the problem of inadequate staffing—which caused many of the school systems in this study to adopt central processing—still remains, though now transferred to the center itself." We have, and have had for many years, to understate the obvious, a critical shortage of catalogers. The situation may be getting worse, if that is possible. A recruiter for one of the major research libraries told me that he recently visited 22 library schools and interviewed 263 potential candidates. He was most interested in finding catalogers, but only 5 or 6 of those he spoke to were interested in even discussing the possibility of a cataloging job.

The cataloging centers appear to me to be accentuating rather than relieving the situation. They are being set up by the dozen; all require some cataloging staff. Of course, if each center needed two professional librarians for cataloging, and served a group of libraries formerly em-

ploying a dozen catalogers between them; and if that group of libraries was thereby enabled to dispose of half its "local" catalogers (or direct them to other functions), we should certainly be ahead of the game. But the mathematics seem not to work this way. I have seen little evidence that libraries served by these centers have relinquished or discarded their own catalogers. They must, it seems, remain on the establishment in order to foster, maintain, and attend to those local peculiarities which have wreaked such havoc with what was once called, ironically, library economy, and which have been a potent force in undermining the potential of cooperation throughout the years.

Nor have those wonder boys of the world of automation done anything so far which promises much relief from the cataloger crisis. Indeed, they keep talking about the much greater depth of subject analysis that the computer will make possible. What they are saying, in simple terms, is that the card catalog's bulk and the flooding book output have brought libraries to the point where they make do with two or three subject headings per title. The computer will easily store 20 or 30 or 100, if necessary, and can produce them easily on demand (though not cheaply). But all this begs the crucial question. As the head of one of the nation's largest cataloging operations said to me recently, "It's not the hardware costs or problems that worry me; it's the software." The software he had in mind was people—catalogers. To produce ten times as much subject cataloging you may not need ten times as many catalogers, but you surely need a lot more than we have. While we talk so much about which machine is best for what purpose, or what kind of printout is desirable for any particular purpose, there is, it seems to me, a deliberate cloudiness, a smoke-screen over the whole major problem of input. Here, cost is a big problem, but it is as nothing compared to the problem of the availability of people able to prepare that input. Whatever we call them in the machine age, if we are dealing with bibliographical control, they are essentially catalogers, and their language capabilities, collectively, must now encompass the world.

If these sketchy comments appear to be running off wildly in all directions at once, they are. But in doing so, they are following closely in the tracks of most of our contemporary wayward searchers for solutions to our cataloging crisis. Now I'm not saying that none of these developments has been worth anything. All that I'm trying to suggest is that we might entertain the thought that our remedies thus far may all have been too piecemeal—and too small. Perhaps our problem has grown so large while we have fiddled that only the really revolutionary, big idea offers hope of any solutions.

Our theories, our philosophies, our goals are described in such colossal, magnificent phrases as "making all knowledge available to all men." Our major research libraries, in fact, are doing more than talk like this. They are now collecting, as never before, vast quantities of material in every language and from every country in the world—notably via the Farmington Plan and the P.L. 480 program, not to mention the auc-

tion rooms or the marauding expeditions of representatives of the University of Texas among others. Clearly, this kind of large-scale, universal collecting is accelerating the cataloging crisis, and I'm not sure that the \$5 million the ARL requested of Congress, to include a centralized cataloging program under the Higher Education Act of 1965, is anything like ambitious enough.

The first and most basic step toward a solution of our vast problem is, of course, a profession-wide realization that "rugged individualism" in cataloging practices is now only rugged stupidity. If we could ever afford it, the day when we could do so has long gone.

Beyond this pious hope, however, don't we perhaps need to look for a wider (perhaps a "big wide world") approach. I started contemplating this when I read recently the (British) Library Association's report, *Access to Information*, which very briefly sets out a national plan under which a national bibliographic center would be established. Among the many functions of this proposed national center would be the establishment and control of a *full* national bibliography, both current and retrospective. The *British National Bibliography*, one of the best in the world, is not enough for these newly ambitious bibliographic planners in Britain. The *BNB*, says the Library Association report, "covers only books and pamphlets since 1950, and music since 1957. It needs to expand to cover fully government and other official publications, maps, charts, and other sorts of published material. The only serious approach to a retrospective national bibliography for the eighteenth and nineteenth centuries is the *British Museum Catalogue*. The provision of a full apparatus of indexes to periodical and report literature is also an essential part of a national bibliography."

I ask you now to dream along with me for a while and suppose that we could really make international cooperation work in the library field. Suppose that each of the major publishing and/or library countries (at least) could set up a national bibliographic council such as the one the British report suggests. Suppose further that these national bodies could form an agency in each country—staffed internationally to cope with language and other problems—to provide full bibliographic coverage for the total publishing output of that country. Where this leads is to the formulation of, in effect, say 120 centralized cataloging operations to cover the world. All publications emanating from France, for example, would then be cataloged once, and once only, for dissemination in whatever form required to any library in any country in the world. They would not need to be done again, countless times, in the US, the USSR, Great Britain, Pakistan, Australia, Tanzania, Greece, you name it. I don't have any idea how many catalogers such an operation would require, but it certainly would be fewer than we are now using in libraries around the globe, all reworking the same material endlessly. Cost? Well, the relatively few members of the Association of Research Libraries are already spending \$18 million a year on cataloging. I shudder to think what the full national figure might be.

The predictable reaction to this kind of proposal would be hysterical laughter or horror. Think of the problems. Think of the endless squabbles about cataloging rules or form of entry. Think of the endless varieties of physical forms in which libraries would want the catalog copy to be delivered. Florida Atlantic University, obviously, would want computer tape or punched cards or something edible by its machines. The school library down the road would want cards or nothing. The state library would surely demand the book catalog that its new-found, federally-aided prestige demands.

Perhaps we should consider physical form for a moment. Let's entertain the dastardly thought that none of these libraries needs a catalog at all. Walter Brahm, Connecticut State Librarian, who is keeping *Lj's* "Grindstone" sharp this year, dared to do just that in his June 1 column. Why, he asks, if we can cope, without card catalogs, with the many thousands of publications per year which are issued in periodical, pamphlet, or report form, should we give "special treatment to a paltry 40,000 book titles?" Why not, he said, compile and print "an author, title, and subject index" with cumulations every quarter, annually, and every three, five, and ten years? "We are," said Brahm, "slaves to the form in which material is issued rather than to its content, which is the same in any form."

Why, indeed, do we need any longer to accept the albatross of a catalog for every library, or every system of libraries? At the very least, we might try to reduce this absurd exercise in duplication to the point where we have one catalog per state. Fifty catalogs would certainly be preferable to 50,000.

We have made an idol of information and its retrieval. We know that the researcher—at all levels, from high school or below to the most esoteric laboratory—needs a much broader range of material than he did ten years ago. We can comfortably predict that the range will go on expanding. If we believe that the reader should, if he wants it, have at hand a key to the whole of his particular subject universe, we have to accept that the individual library catalog, whose boundaries are determined by the budget and the book selection capabilities and prejudices of that library, will not do the job. To be sure, the catalog will be reinforced by a motley collection of subject bibliographies and other libraries' catalogs, courtesy of G. K. Hall and others. But bibliography, we all know, has had a fragmentary history, and we know that, however bulging the bibliographical shelves, we shall be offering any reader a very imperfect universe of information—and a not very accessible one at that.

If we are prepared also to accept that the new technology and vastly improved communications systems will make it possible for any material, wherever it is housed, to be consulted where it is needed, this takes us further toward the desirability of comprehensive bibliographic planning and further away from the efficacy of the local library catalog—whether it be Harvard's or Podunk's.

Given some sort of sophisticated bibliographical apparatus, what real

purpose would the individual library catalog then serve? It would, I think, be reduced to its proper role—that of a finding or inventory list for a particular institution or system of institutions. Relatively few seem to be much more than that now. If we could emphasize that simple function sufficiently, we might perhaps finally be able to persuade more librarians that full cataloging at this level and for this purpose is grossly wasteful. The full description and indexing should appear in national bibliographies, quickly, currently, and efficiently produced and distributed.

The cost and complexity of a solution to our bibliographic dilemma are frightening, but I don't believe they are insurmountable if only we will get our social priorities in some decent sequence. Education in this country, really for the first time in history, is beginning to be dealt the kind of financial cards that formerly were only passed across the table for roads, industrial development, power projects, and the like. The space program is a very prominent current example of what we can achieve when we put enough of our resolution and resources behind what we set out to do. Perhaps, at this point, it is appropriate to quote the opening paragraph of a recent *Times Literary Supplement* editorial entitled "How Much Jam?" (March 11, 1965):

Recently we have had a minor debate in the motoring press about whether a man's wife or his car should matter most to him. Put the car against such lesser things as knowledge, culture, ideas, and it is only too clear which lies closer to the modern British heart. [You may read American for British there.] It is not just that cars rank higher as individual status symbols and objects of Sunday morning devotion; traffic in cars has come (quite rightly) to be seen as a problem for urgent study by experts, while our traffic in ideas and knowledge has not. Yet the two types of traffic are in a similarly confused state, and in both cases the confusion seems like a useless and perpetually irritating brake on our progress. Intellectual traffic with the help of a somewhat primitive system of libraries and information centres gets along somehow, as does road traffic; in time everyone gets near enough to his destination to shrug his shoulders yet once again ("We can walk the last bit").

That could, I think, as easily have been written here. But all of this, you will be saying by now, is very far out on some philosophical and terribly impractical plane. Indeed it is, but I believe we are in such deep trouble, with a vastly increased publishing output all over the world, with greatly increased library funds for books, and with vastly increased acquisitions by libraries of all types of material, allied with a static or declining intake of cataloging personnel, that only far-out proposals are likely to get within reach of a remedy.

In any case, if you had wanted a good, hard, practical paper, I guess you would have invited a good, hard, practical cataloger, an information retrieval expert, or a solid representative of some other canyon of RTSD respectability. If you ask a generalist and a dreamer, you get generalities and dreams. I only hope they don't give you nightmares.

Library Technology and RTSD—Goals in Common

GLADYS T. PIEZ
General Editor

*Library Technology Project
American Library Association*

RESOURCES AND TECHNICAL SERVICES DIVISION and Library Technology Project are names which indicate a similar purpose. A run-down of LTP's project list—which includes such titles as binding performance specifications, book copying equipment, and book labeling program—shows how closely the interests of RTSD and LTP are allied. Both the Division and the Project are working toward many of the same goals, or toward goals which supplement or complement each other, but with different resources at their disposal and with different functions to perform.

Is it possible to separate the functions of the Division and the Project precisely and to define their respective spheres with exactness? In a field which is developing as rapidly as library technology, the answer may be a partial no. But it is possible to state some guides for LTP and RTSD to consider.

Shortage of time and money is the only restriction on the contributions of RTSD sections and committees to activities for which the Division is responsible. The Library Technology Project is concerned with finding ways by which technology and the principles of scientific management can be used to streamline all library operations and improve services. It was established primarily to do those things which individual libraries and librarians cannot do for themselves. Examples to be cited throughout the article may help to make clearer the distinction between the membership responsibility and the LTP function.

Because the Library Technology Project receives grants from the Council on Library Resources to support its programs and has a full-time staff to carry them out, it can of course do many things for which a membership division has neither the time nor the money. It should also be able to do things faster than can a committee, and this is a distinct advantage in technology.

A membership unit such as RTSD serves as a valuable aid to LTP. It is an ideal group to identify a program and propose it to an organization such as LTP to carry out, to provide knowledgeable members to advise on projects or to serve on advisory committees for projects, and to promote the results of projects after they are completed.

Acquisition and Preparation for Use

LTP is *not* concerned with the evaluation and selection of library materials for acquisition. Its interest lies in finding solutions to the physical problems of acquiring library materials and preparing them for use. Under this category in LTP's long-range program is a systems study of the complete book processing operation which would examine all aspects of the acquisition process, classification and cataloging procedures, and the physical preparation of the material for use, and then evaluate present practices, suggest simplification, and consider the effect on public service departments. Such a systems study would undoubtedly suggest more detailed evaluations, and development of new equipment, supplies, or systems—for instance, the feasibility of certain applications of data processing equipment to book processing, a study of the economics of using centralized processing centers vs. traditional processing procedures, and development of improved "hand" methods for ordering books, maintaining serials records, etc. The cost of these projected studies is estimated at over \$200,000.

LTP has sponsored several projects designed to improve the process of readying books for circulation. Its first major project was the development of a book labeling system to use in situations in which a permanent legible label on the book itself is wanted, and where the number of copies of the same book does not exceed ten. The system, called the SE-LIN, which was developed by Battelle Memorial Institute and manufactured by its subsidiary, Scientific Advances, Inc., took from December, 1959, to May, 1964, to reach the market at a cost of slightly over \$67,000. This project is a very good illustration of the time and money needed to develop what in the early stages had seemed like a comparatively simple piece of equipment. It also illustrates why manufacturers are so reluctant to develop equipment for a market as limited as the one for library equipment. The SE-LIN consists of a platen to which an imprinter-laminator unit is fastened. The unit can be used on nearly all late model typewriters and can be easily substituted for the typewriter's regular platen. It produces a typed label which is laminated for protection and which is adhered to the book itself by a strong bond. For those smaller libraries that will continue to use hand methods of labeling, LTP identified an adhesive that will adhere typed or handwritten small cloth labels to a wide variety of bookbinding materials. The Project is continuing its efforts to identify equipment which can be used to prepare labels in situations where many copies of the same label are required for direct application to binding material; it has identified equipment which can be used to prepare multiple labels suitable for application to the dust jackets of books.

LTP is working with a typewriter manufacturer and an RTSD committee on typewriter keyboards in an effort to come up with a standardized keyboard which will meet the needs of as many catalogers as possible and be of interest to many typewriter manufacturers as well.

As part of an evaluation of the use of office-type quick laminating equipment in libraries, the LTP staff conducted a feasibility and cost study on the lamination of the original dust jackets of books. The results showed that laminated dust jackets, using Mylar for both sides of the laminate sandwich, are more expensive than ready-made covers. Dust jackets using Mylar on one side and Kraft paper on the other, were comparable in cost to ready-made jacket covers but were difficult to handle and not attractive in appearance. Recent releases of the manufacturer have led LTP to consider updating this study, however.

Some \$8,600 was spent to develop a universal card-holding device which could be attached to any typewriter to simplify the typing of catalog cards. The device produced by the research group hired for the project was judged to be no better than other similar ones on the market, and the project was abandoned.

LTP has financed the testing of some half dozen electric erasers that might be suitable for such library work as correcting catalog cards and call numbers on books, and has published the results of the testing in *Library Technology Reports*.

Cataloging and Classification

The Library Technology Project is *not* concerned with the establishment or refinement of codes for cataloging, classification, or filing of library materials. What it might legitimately be concerned with here are such things as the mechanics of preparing book catalogs, their cost, their practicality, etc., and information about where they are being used, in order to answer inquiries from other librarians who may be considering their adoption.

Another legitimate interest is the reproduction or purchase of catalog cards. In March, 1965, LTP published *Catalog Card Reproduction*, a report of a major study of 13 methods of reproducing or obtaining catalog cards. The study, by a management company, cost slightly over \$50,000 to make. Members of the advisory committee for the project are people well known in technical processing. An expenditure of approximately \$8,000 provided librarians for the first time with objective criteria with which to determine the durability and permanence of catalog cards. At the same time, these data provided the foundation for development of new standards based upon the actual performance of card stocks. Although it has not yet been possible to achieve an American standard, the data have provided tentative specifications which can be used as purchasing guides.

Manufacturers and suppliers have continued to submit samples of catalog card stock for laboratory testing as to their durability and permanence.

Copying Methods

Much of LTP's work in the past and that proposed is of direct interest to the Copying Methods Section of RTSD. The Project has spent approximately \$100,000 in a continuing evaluation of photocopiers and microfilm and microfiche readers and printers, and on one development project involving microfilm. Nearly \$67,000 has been appropriated to finance a two-year project to produce a manual on methods of reproducing research materials. The manual will cover processes, methods, equipment, and applications in photocopying, microfiche, and microfilm, as well as evaluations of equipment for producing microforms such as cameras and processors.

William R. Hawken, LTP's consultant on reproduction processes, has been instrumental in getting agreement by four government agencies (all large producers of microfiche) to standardize sheet microfilm on one of the International Standard sizes, i.e., 105 by 148 mm. (4 by 6 inches). This should be good news for librarians everywhere.

LTP undertook a testing program of all of the coatings then known to it which are designed to protect motion picture film and microfilm. Foster D. Snell, Inc., a firm of consulting chemists and engineers in New York, did the testing and evaluating at a cost of \$16,000. The laboratory concluded that none of the coatings tested was capable of producing any real improvement in over-all performance and therefore none is an effective means of preventing damage to library microfilm by abrasion in use.

Bookbinding

A major project, under way since August, 1960, has for its purpose the development of performance standards for library binding. As of June 30, 1965, it had cost something over \$100,000. Three members of RTSD's Bookbinding Committee are members of the advisory committee for the project.

A testing device for evaluating the durability of book bindings has been developed, and the writing of performance standards for book bindings used in libraries is in process, based on actual use-testing in libraries and on simulated use-testing in the laboratory. The scheduled completion date is January 31, 1966.

The Council on Library Resources recently approved a grant of \$24,000 to finance the design and construction of an improved sewing machine for binding books. Indications are that books bound with this improved sewing will hold up as well as those bound with Class A binding and will open easier and lie flatter. The sewing also allows for wider inner margins.

As one way to fill the information gap on the use of data processing equipment in libraries, LTP financed the preparation of a series of articles on the subject by Joseph Becker which appeared during 1964 and 1965 in the *ALA Bulletin*. They covered the following subjects: "The MEDLARS Project," "Automating the Serial Record," "Automatic Preparation of Book Catalogs," "Demonstrating Remote Retrieval by Computer at Library/USA," "Circulation and the Computer," "System Analysis—Prelude to Library Data Processing," and "Using Computers in a New University Library." LTP has also maintained a clearinghouse of information on plans for the use of computers and other data processing equipment in libraries, but has not yet planned to offer widespread information in this field because other agencies have facilities to do more.

In Days to Come

On September 1, 1965, LTP became the nucleus of ALA's new Office for Research and Development. Undoubtedly many areas of research having to do with technical services will be identified and acted on. LTP will continue to maintain its own identity within the new office. It has set down a long-range program which it hopes to carry out if sufficient funds can be found.

This has been a brief review of LTP programs which may have special meaning to RTSD members. Much work remains to be done. LTP would like to have RTSD committees, when planning programs or projects, consider what contribution LTP might make, keeping in mind the fact that LTP would undertake a project only if it could obtain the money to finance it and the staff to monitor it. In turn, the professional competence of RTSD committee members could contribute greatly to the success of LTP programs as appropriate. Suggestions from individual members of RTSD for projects they think LTP might conduct with profit to their work will also be very welcome. All indications are that a long period lies ahead in which mutual assistance between RTSD and LTP can be very productive for both organizations.

WHO'S WHO IN LIBRARY SERVICE

A new edition of *Who's Who in Library Service* (the 4th) has been announced for Fall 1966 publication.

The book is being prepared under the sponsorship of the Council of Library Associations and other organizations, with an Advisory Committee of Gertrude L. Annan, Pauline Atherton, Harry Bitner, Robert H. Blackburn, David H. Clift, Jack Dalton, Elizabeth Ferguson, John A. Humphrey, and Bill Woods. Lee Ash will serve as Editor, Martha Sullivan as Assistant Editor. It will be published by the Shoe String Press of Hamden, Conn., under the general editorial supervision of John H. Ottemiller.

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

(Act of October 23, 1962; Section 4369, Title 39, United States Code)

1. DATE OF FILING
September 29, 1965
2. TITLE OF PUBLICATION
Library Resources and Technical Services
3. FREQUENCY OF ISSUE
Quarterly
4. LOCATION OF KNOWN OFFICE OF PUBLICATION *(Street, city, county, state, zip code)*
2901 Byrdhill Road, Richmond, Virginia 23205
5. LOCATION OF THE HEADQUARTERS OR GENERAL BUSINESS OFFICES OF THE PUBLISHERS *(Not printers)*
50 East Huron St., Chicago, Illinois 60611
6. NAMES AND ADDRESSES OF PUBLISHER, EDITOR, AND MANAGING EDITOR
PUBLISHER *(Name and address)*
American Library Association, 50 East Huron St., Chicago, Illinois 60611
EDITOR *(Name and address)*
Miss Esther J. Piercy, Enoch Pratt Free Library, 400 Cathedral St., Baltimore, Maryland 21201
MANAGING EDITOR *(Name and address)*
Miss Doralyn J. Hickey, School of Library Science, Univ. of North Carolina, Chapel Hill, N. C. 27515
7. OWNER *(If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual must be given.)*

NAME American Library Association <i>(No stockholders—non-profit organization)</i>	ADDRESS 50 East Huron St., Chicago, Illinois 60611
--	---

8. KNOWN BONDHOLDERS, MORTGAGEES, AND OTHER SECURITY HOLDERS OWNING OR HOLDING 1 PERCENT OR MORE OF TOTAL AMOUNT OF BONDS, MORTGAGES OR OTHER SECURITIES *(If there are none, so state)*

NAME None	ADDRESS
--------------	---------

10. THIS ITEM MUST BE COMPLETED FOR ALL PUBLICATIONS EXCEPT THOSE WHICH DO NOT CARRY ADVERTISING OTHER THAN THE PUBLISHER'S OWN AND WHICH ARE NAMED IN SECTIONS 132.231, 132.232, AND 132.233, POSTAL MANUAL *(Sections 4355a, 4355b, and 4356 of Title 39, United States Code)*

	Average No. Copies Each Issue During Preceding 12 Months	Single Issue Nearest To Filing Date
A. TOTAL NO. COPIES PRINTED <i>(Net Press Run)</i>	8,995	9,505
B. PAID CIRCULATION		
1. SALES THROUGH DEALERS AND CARRIERS, STREET VENDORS AND COUNTER SALES	none	none
2. MAIL SUBSCRIPTIONS	3,272	818
C. TOTAL PAID CIRCULATION	8,234	8,377
D. FREE DISTRIBUTION <i>(including samples)</i> BY MAIL, CARRIER OR OTHER MEANS	55	62
E. TOTAL DISTRIBUTION <i>(Sum of C and D)</i>	8,289	9,439
F. OFFICE USE, LEFT-OVER, UNACCOUNTED, SPOILED AFTER PRINTING	706	66
G. TOTAL <i>(Sum of E and F—should equal net press run shown in A)</i>	8,995	9,505

I certify that the Statements made by me above are correct and complete.

(Signature of editor, publisher, business manager, or owner)

*(Signed) LeRoy J. Gaertner,
Comptroller*

Acquisitions in an Age of Plenty*

MARIETTA CHICOREL, *Editor*
Ulrich's International Periodicals Directory

AT THE 1965 ALA CONVENTION in Detroit, several individuals, eminently concerned with acquisitions, discussed with the author some of the exciting developments in the field. As we sat in the Cafeteria of the Cobo Convention Hall, overlooking the enormous flow of the Detroit River between us and Windsor, Canada, we made conversational leaps equal to the distance between the two countries. What is that distance, you may rightly ask. It is $3\frac{1}{2}$ miles across the river by bridge or by tunnel. The tunnel is easily crossed by bus for 10¢. But the separation is greater than the distance in miles, and I think it is also less than that.

There is a similar parallel to be observed between Acquisitions and Cataloging Departments. Most of them observe the principle of being equal but separate. At best they have friendly, neighborly relations; at worst they are not on speaking terms. Those of us who pay lip-service to integration of the cataloging and acquisition functions are quick to point out in self-defense, that in the last analysis, integration of technical services must result from an administrative decision.

If this sounds like passing the buck, it is. There is always the little bit of ego involvement, of letting our own needs set the pace instead of the needs of the organization. We may do this in the name of the profession, or of the user, or of some other high ideal. But if we examine the diversity of decisions which we make in the name of efficiency, we find as much diversity in their directions as we find diversity among personalities. If our own needs are for more or for less responsibility, our decisions will reflect them by representing positions anywhere on the scale which ranges from empire building to anarchy. Somewhere in between lies the area in which responsible people ask responsible questions and work together in achieving their solution, compatible with the overall goals of the institution.

But how are administrative decisions made? Administrative decision-making is a vital process, involving free flow of information from and to, by both staff and line officers of the organization. Many decisions are made after the fact; that is, the organic structure of a vital library system tends to develop its own ways of doing things. When these affect a larger pattern, they must be coordinated, which then involves administrative decisions. But these decisions are made on all levels and tend to work

* Speech given to the joint meeting of technical services divisions of the PNLA and MPLA at the Denver Convention, September 3, 1965.

their way up and down the line. It is not by top level administrative fiat that trends in technical services develop, but through the interaction of a given situation, and the response of librarians to the situation.

What is the situation in which we as technical services librarians find ourselves today? I would be belaboring the subject were I to recount the elements of the population explosion and of the knowledge explosion to you again. We all feel their effects. How is the problem being met?

One tends to point with pride towards developments on the large scale. National centers for the collection and dissemination of information are in various stages of being operational; regional library systems are being enlarged where they exist, and are being studied where they do not. Libraries are finding commonality of interest according to lines of definition other than the traditional ones. And as our body of knowledge grows larger, we tend to give more and more attention to specialized aspects. For instance, we have recently become aware that the proposed Medical Library Assistance Act of 1965 will enable us to draw on all the information at the National Library of Medicine through a hook-up with the MEDLARS system. Soon the National Agricultural Library and possibly some others will become truly national in that sense. The Library Services and Construction Act, and the Higher Education Act of 1965, Title II, add concreteness to the recognition of library needs. Edwin Castagna's request for a survey of national library needs culminated in the staggering estimate of billions of dollars, even though this sum represents only the amounts needed to meet minimum standards and omits some facets altogether.

It has been estimated that for every dollar spent on library materials in institutions of over 500,000 volumes, 55¢-87¢ is spent for technical services staff salaries.¹ The exact ratio varies according to size of holdings. The larger the collection, the larger the expense of adding library materials. The dollar gap compilation for two and four-year institutions of higher education cited by the *National Inventory of Library Needs*, 1965, (p. 53) was figured on a basis of list price less 20%, plus 50% processing cost, or 130% of list price. According to this estimate, we would need to spend \$210 million (\$209,970,399) on technical services processing in order to acquire \$497 million worth of library materials. These amounts are needed to bring all U.S. two and four-year institutions of higher education up to present minimum standards. The costs do not include universities with holdings over 300,000 volumes. Put another way, to correct present volume deficiency of U.S. two-year institutions of higher learning we have to spend over \$41 million for books at a processing cost of \$30 million. To add the required number of volumes to bring U.S. four-year institutions of higher learning up to minimum standard will take more than \$246 million at a processing cost of about \$180 million. This statement assumes that library material is considered acquired when it is ready for use.

Acquiring library material in a constantly-increasing market is not so much a problem of choice by exclusion, but rather a problem of keep-

ing up with the knowledge explosion. We must set our sights differently today to keep up with the current situation and to prepare for tomorrow. The battles which we as librarians fought in the past are not the battles of today. The watermark of a good librarian engaged in acquisition work or book selection used to be his ability to choose a few titles out of some selected fields, and to make them stand as representative of the thought of the day. Stringent budget limitations due to nearsightedly-inappropriate appropriations precluded wider goals. The results of this narrow selection are evident today in the scramble for the out-of-print market, although that is not the only reason. The battle for more realistic library support has been partially won today. We are re-focusing our sights. Today a major challenge in the selection and acquisition of library material is the bringing into the library system of greater numbers of publications from all areas, in all languages, and in many forms, including forms which look like ephemera but are not. I am referring to technical reports which carry high priority information in low grade printed format, foreign government publications which may be only available in mimeographed form, if at all, pamphlet-size pre-prints which are never reprinted, as well as the traditional books and microtexts.

One of the attendant problems is the necessity for awareness of publications which appear with startling rapidity, all over the world. In some cases of foreign publications—European, African, Asian—the announcements are slow to reach us, and short-run editions are out of print by the time we hear about them.

Various combinations of methods are used to combat this situation. Selection assigned to subject specialists, the current vogue for blanket orders, approval plans, exchange agreements of the barter type are designed to maintain reliable and timely selection and an even flow of information material. The obvious correlative to bringing into the library system large quantities of material is that of bibliographic control to communicate its presence to the potential user.

A measure of the efficiency of a library is the extent of its ability to provide access to needed sources of information. At this point the reader may wonder how much longer I can avoid referring to automation of technical processes as the panacea. But this is not the intention of my talk. Automation of repetitive processes is clearly indicated wherever it is financially feasible. Where it is not, access to information provided to a local center by regional and national systems may soon become a reality, not only for the smallest library but even for individual specialized users. But as we know from our experience with automation, any chain is only as strong as its weakest link. Let it not be technical services.

While some of us are automating, others are waiting for the results or for further developments. Still others may take the position that by postponing their decisions they will be able to bypass this phase of library development and be the first to greet the repentant crusaders when they return to traditional methods. We cannot afford to wait out the storm. It is over-simplification to assume that if we cannot afford to

automate, we will continue as we are. Nor must we let ourselves be stampeded into premature action or be paralyzed by panic. As mature people, we do not easily become overawed by costs, overwhelmed by problems, or bewildered by possibilities. The answer lies in planning. And good planning rests on a clear statement of the problem, including the segments by which a general state can be described. While the specific aspects of the environment of our various institutions differ, the general environment which we have in common must be taken into account in any discussion on planning. In the case of Federal government support, the optative is becoming the present.

William T. Knox in his noteworthy address to ACRL at ALA in Detroit asked for the establishment of a dialog between the two information orientations—the traditional document-oriented library which relies to a large degree on accumulated records of knowledge on which the disciplines in the humanities are based, and the information-oriented systems which rely most heavily on immediate access to current information of a very specific nature.

Mr. Knox, who is Chairman of the President's Committee on Scientific and Technical Information, appealed to librarians of traditional information centers to reappraise their services in terms of the user's need. He asked us to consider: "[if] a system designed to permit browsing [performs] its other functions as efficiently as it could in the absence of browsing, . . . might not a better system, more flexible and responsive to the user, eliminate browsing?"² Whatever the answer, provocative questions like this need to be asked. We should have the flexibility of attitude to ask them of our own procedures on the ground level. The reasons must be clear to all of us, but they were illuminated in spectacular fashion by Mr. Knox. A national network of information systems is visualized at present, to be made up of two parts: the traditional libraries and the information-retrieval systems. The traditional library systems are subdivided by levels of responsibility according to national, regional, state, and local levels, and within each level according to activity—cataloging and acquisitions, and public services.

In the outline of expected areas of coverage, local library systems occupy the lowest stratum. Local library systems may include school, public, college, or university libraries. It is expected that they will "draw on the regional as well as on the national library systems and services and collections, and yet at the same time have adequate working collections to meet their own high-frequency demands."³ This, of course, puts the problem right back into our laps. It is the recognition that even with the forces working toward supporting scientific and technical information needs and technological changes in libraries, we are still faced with improving our traditional methods of service, which prompts our seeking for traditional solutions.

We in the technical services operations have responded in various ways to the accelerated demands in the past. On the strength of the evidence at hand, we have more than just wished for solutions. It is time

that we integrated our operations so that we can achieve more than friendly relations between acquisitions and cataloging units, as well as with other library departments. To this end a new approach in library management is proposed. Libraries have become big business; library management can look to other large organizations with profit, I believe. And while we are on the mid-management level in library administration, we are managers.

Management theory in libraries still relies on the function-oriented approach instead of the task-oriented process of management. Historically, the function-oriented approach derives from the 19th century scientific management concept based on time and motion study, first formulated by Taylor. The function-oriented approach results in a division of work by departments and jobs. Its limitations are the limitations of authoritarian government. That is, each unit strives to perform its assigned activity at the optimum level—the optimum being measured by unit performance. Consideration of possible effects on other units is minimal in this situation, resulting in inefficiency because one unit does not know what the other is doing.

What I am proposing is that we would increase our efficiency of operation, increase the intellectual content of our work, and minimize the waste of manpower by applying the task-oriented process of management to libraries instead of the present function-oriented approach. Because these terms have a specific meaning in management theory, let me explain briefly. Function refers to a strictly-delimited part of the work, such as on an assembly line, where the worker's function is to turn the screws in a piece of metal as it comes to him. Or it is the function of his section to bolt together two sides of automobile doors. The task is to build automobiles, and the task of a section may be to build the body. Given a particular technology, such as conveyor-belt equipment, the worker might include further functions to tie in with the needed results.

Libraries are usually administered by the function-oriented approach. This means that they are divided by departments, divisions, and jobs according to the function each is expected to perform. Each supervisor of a group is responsible to another supervisor whose span of control is larger than the foregoing, and all in this way are responsible to the director. For the purposes of this discussion the line stops there. Each division performs its assigned function in line with directives from above. As we go down the line, or down the pyramid of authority if you will, each person knows his assigned function and performs within its limits. The acquisitions department obtains the material. This is its mandate. The acquisitions librarian takes measures and makes decisions which will further this end. The catalog department organizes the material. The catalog librarian makes decisions which will expedite this process. There may be further divisions, depending on the institution, such as serials acquisitions or serials cataloging. Each person knows his job and performs it to the limits of his understanding, down to the last employee. The order typist or the catalog typist knows the form in which he is to

prepare the required cards. Does he know what effect an error has, and on whom? If he doesn't, he has no need but also no opportunity to exercise his judgment. In terms of the larger unit, to what degree do the decisions permissible within departmental limits affect other departments? Should this be our concern? We all have heard dissatisfaction expressed by one department for another, or at conventions, by one type of activity group for another. Are catalogers unhappy with acquisitions librarians? Do reference or other public service librarians feel that they or their mission is misunderstood by catalog librarians?

Decision-making by function also results in duplication of work, or sometimes in unnecessary work, the reason for which lies somewhere in the past but which is being attributed to current demands by an administratively-remote unit. The functional approach to management grew out of the scientific management concept of which Gilbreth was the best known proponent and founder. This concept was based on time-and-motion-study techniques first formulated by Taylor at the end of the 19th century and utilized so successfully by Ford in his assembly lines. Today, while there is no unified management theory, the trend is toward management by objectives through the task-oriented approach. The most important features of this theory are the preparation of a major plan, the establishing of objectives, and the determination of policies and procedures by which these objectives are to be realized. It is the approach used in major companies today,⁴ and is inherent in the systems approach. The functions of smaller units and the functions of people in these units are included in the plan; but their description is part of the plan, not its objective. Planning for the objectives of a library would include a determination of needs to be met, in terms of its clientele, available budget, anticipated funds or grants, and the community served. Any changes in any of these would call for a revision of the plan. "The planning phase establishes broad guides to assist those responsible for preparing plans to accomplish the stated objectives within determined policies and procedures. Planning in a pure sense goes across all functions—organizing, controlling, coordinating, staffing and directing."⁵ The functional approach does not give this emphasis because of its over-concentration on each unit as a separate function. Surely the value is apparent in the close working together of those responsible for the smaller units, such as cataloging and acquisitions functions, in implementing the larger plan. Communication and cooperation are stressed, and greater reliance is placed on the individual all the way down the line. The exercise of individual judgment is a human need, but it is only possible by the informed person. If the catalog typist or the order typist is informed about the work flow of which he is a part, his judgment will come into play, not only in his increased ability to recognize mistakes, but also in his ability to determine what to do about them. It will not be necessary for him to approach his supervisor with each question; thus he attains increased job satisfaction and releases the supervisor from petty concerns. The success of management by specialization,

as it is also called, lies in its recognition of human relations as a significant factor in increasing efficiency.

Once objectives are determined, the structure of the organization can be planned. Purpose of organization planning is to divide the total task to be performed into manageable and efficient units and to provide for their proper integration.

Organizational structure must not work at cross purposes with the total task to be performed. It is interdependent with the technology used, which is one aspect of organizational planning.

The labor market is [another] factor to be considered in organizational planning and may give rise to reorganization.⁶

Methods designed to put the workload of some of cataloging outside the individual library are attempts to alleviate the shortage of librarians in this area and to reduce costs. Cataloging-in-source was a worthwhile attempt at cooperation by the publishing industry and the Library of Congress. The Greenaway Plan is an approval plan designed to lighten the acquisition operation in public libraries. Perhaps a new attempt at combining cataloging-in-source with the Greenaway Plan should be implemented now. One such program is now underway, with Stacey's (Scientific and Professional Book Center of the West, Palo Alto) Cards-with-Books plan. A similar pilot project is being tried on the West Coast, through an approval arrangement by which research libraries automatically receive books from 350 U. S. and foreign publishers with catalog cards included on Flexowriter tape in each book. It is a program being attempted by Dick Abel (Portland, Oregon), a book dealer. The ARL cataloging rider which provides at least \$5 million for acquisitions and cataloging by the Library of Congress is included in the Higher Education Act. While each of these methods has merit, there is not going to be a solution to all our problems through the use of one or two or even a combination of several of these.

There is no hard and fast line as to where acquisition functions begin and where they end. The aspects of the acquisition of library materials are manifold and, as a task, may be divided among the various work forces in the library. Work reorganization and realignment of duties in relation to the general task to be performed results in greater efficiency of operation, and greater job satisfaction due to increased intellectual content. The administrative climate in which this rethinking is possible allows each staff member to have a part in defining methods to achieve stated and agreed-upon goals. It enables him to make decisions which involve exceptions and change.

When I first thought about a suitable topic for this group, I considered what I would like to *hear* about from the point of view of an acquisitions librarian. The wide range of span of control in acquisitions departments seems to call for consideration of administrative and fiscal responsibilities. Sound management policy can and should be applied not only to what is being done by acquisitions departments but also to

the kind of control by which they are limited. Variations are possible over a large range—from the department which orders books and periodicals, office supplies and office equipment, performs binding preparation, mending and mail routines, handles all service requisitions from repairs to travel—to the department which is simply a book order department with no control over selection or no control over expenditures. At the extreme of this last situation is the library which orders all books on approval by the trustees. If it is sometimes difficult for us to give up some control over an operation by delegating authority to act to someone else, it is deplored by us when we see it in others. There is still a tendency among us to look with disapproval or scorn on the small public library whose director or whose board of trustees shy away from relinquishing their autonomy to a regional system. But how many among us, catalogers and acquisitions librarians alike, are at this moment not only willing but really eager to loosen our grip on any part of our operation? How ready are we to re-examine our work flow in order to set up a single, one-time routine whose result will be accepted by all concerned?

How ready we are can be measured by how willing we are to share responsibility. Are we willing to realign duties in order to concentrate a whole series of steps in one routine, even though part of that series may *add* steps to a segment of the operation? For instance, brief bibliographic handling in acquisitions will increase the cataloging burden. On the other hand, full bibliographic verification attached to acquisitions is economically justified if it is not repeated in cataloging. Either approach is workable if both acquisitions and cataloging functions agreed to accept each others' results.

I would go one step further and add that to improve our operations we must not only accept responsibility for our own decisions, but be willing to share our goals and delegate tasks related to them to those in subordinate positions. When we delegate our powers, we do not abrogate our responsibilities; delegation implies trust in the abilities of subordinates, which acts as a motivating factor. We may find that we need fewer librarians than we thought to cope successfully with our confrontation with the 20th century.

In the eyes of Eastern librarians, we in the West have a tradition of the "Brave New World" to uphold. It was PNLA (Pacific Northwest Library Association) which first started the service that was then taken over and continued by ALA as the *Subscription Books Bulletin*. And it was PNLA which initiated the first self-study and analysis of library needs on a regional basis that extended to all types of libraries in the region.⁷ The Pacific Northwest Bibliographic Center, and a little later the one located here in Denver, pioneered the thinking in that field.

If you think that the word "tradition" is a contradiction in terms when applied to the concept of the "Brave New World," I would remind you that freedom of choice is a tradition, not only a reputation, which we enjoy. And that freedom of choice implies the responsibility of decision making. Leon Carnovsky wrote in a recent article⁸ that the pro-

fessional aspects of the catalog librarian do not rest on the cataloging codes but on two factors: (a) the construction of the catalog codes in the first place, and (b) the judgment as to when codes and rules are to be disregarded, that is, the decisions not to use them. The tradition of welcoming change, of flexibility and adaptability which characterizes the librarian in the "Brave New World," is one founded on the exercise of mature judgment and intellect.

REFERENCES

1. Unofficial and unpublished report on cost of technical services: ALA, RTSD Technical Services Cost Ratio Committee, Helen Welch, Chairman.
2. Knox, William T. "The Changing Role of Libraries." Talk at Cobo Hall, Detroit, Michigan, during meeting of the Association of College and Research Libraries, 84th Annual Conference of the American Library Association.
3. *Ibid.*
4. For further study, see: Newell, William T. *Long-Range Planning Policies and Practices*. Austin, Tex., Bureau of Business Research of the University of Texas, 1963. Steiner, George, ed. *Managerial Long-Range Planning*. New York, McGraw-Hill, 1963.
5. Le Breton, Preston P. and Henning, Dale A. *Planning Theory*. Englewood Cliffs, N. J., Prentice-Hall, 1961. pp. 4-5.
6. French, Wendell. *The Personnel Management Process: Human Resources Administration*. Boston, Houghton Mifflin Company, 1964. pp. 76, 77, 81.
7. Pacific Northwest Library Association. *Library Development Project Reports*, ed. by Morton Kroll. Seattle, University of Washington Press, 1960-61.
8. Carnovsky, Leon. "Role of the Public Library: Implications for Library Education." *Library Quarterly*, 34:317. October 1964.

ADDITIONAL BIBLIOGRAPHY

1. Kemper, Robert E. "Needed Research in Personnel Management in the Field of Librarianship." Unpublished research paper, 1965.
2. Koontz, Harold, ed. *Toward a Unified Theory of Management*. New York, McGraw-Hill, 1964.
3. Sutermeister, Robert A. *People and Productivity*. New York, McGraw-Hill, 1963.

AGRICULTURE CATALOG

The complete Public Card Catalog of the U. S. National Agricultural Library is to be published in book form, entitled the *Dictionary Catalog of the National Agricultural Library*, 1862-1965.

It will cover some 1,500,000 cards with author, title, and subject cards in a single alphabet, listing the published information available in the subject fields of agricultural chemistry, agricultural economics, agricultural engineering, agricultural products and their industrial uses, agricultural societies and organizations, agricultural statistics, agriculture in general, animal science, forestry, home economics (except cook books), pesticides and pest control, plant science, rural sociology and rural life, soils and soil conservation.

The book catalog will run to about 68 bound volumes with some 768 pages per volume. Publication will be late 1966 or early 1967 and price about \$952. For purchase information write the publishers, Rowman and Littlefield, Inc., 84 Fifth Avenue, New York, N. Y. 10011.

A Survey of OP Buying Practices

SHIRLEY G. HEPELL
Chief, Technical Services
State University of New York
College at Cortland

WITH THE RAPIDLY EXPANDING COLLEGE POPULATION, libraries have been faced with a host of concomitant problems. Among them is the need for materials to reinforce new undergraduate, honors, and graduate courses, and larger course enrollments. More students necessitate purchase of additional copies of standard works. Many titles published before 1930 are unusable because of brittle paper, if they have not already worn out. Others, perhaps long out of print, have never been in the library, but are needed now.

Some of these problems have been solved by the advent of the mass-produced paperback, microprint, xerography, offset, and other modern printing and reproducing techniques. But, despite the efforts of these media to fill the demand for out-of-print materials, libraries find that a startling number of titles must still be sought in the OP market, and that the millennium when every title is available at reasonable cost still is distant.

How are libraries with limited funds meeting expansion requirements? Because of a dearth of literature on out-of-print materials, State University College at Cortland (N.Y.) library decided to survey college libraries serving a clientele of similar size, with the hope of sharing our observations for mutual benefit. A questionnaire was sent to 151 college libraries in the U.S. where the enrollment was between 2000 and 3500.¹ Ninety-two questionnaires (60 percent) were returned.

The questionnaires revealed that nearly 75 percent of the desiderata titles were in the social sciences and literature.² In these areas much critical and interpretative scholarship has not been superseded, and it is needed as new titles or duplicates under the rapidly-expanding programs in higher education. The sciences and fine arts were listed as the next most crucial areas for wanted titles. Because of the proportionately larger amount of new knowledge in the sciences, out-of-print materials

¹ As listed in U. S. Office of Education, *Educational Directory*, 1962/63, pt. 3.

² Despite the apparent need in this area, the Foreign Desiderata Publications Committee in cooperation with ALA and R. R. Bowker Company was discontinued after one year, because the number of libraries using its services were too few to permit economics. Cf. *American Library Annual*, 1962, p. 160.

are needed principally for historical reasons; hence they constitute a relatively minor portion of desiderata requirements.

Although most librarians said that purchase of second-hand materials constituted only 1-24 percent of the total number of books bought during the year, over half the libraries reported that these were out-of-print titles as opposed to used copies of in-print books.

Of six possible sources for obtaining these out-of-print titles, second-hand catalogs were the most frequently used and provided the largest number of wanted books. Following in order of use and popularity were direct contact with dealer specialists, search services, advertising, and microform and xerography. A few librarians commented that xerographic titles were too expensive and were used only when less-costly methods fail.

Percentages of desiderata titles found by catalogs, dealer specialists, search services, and advertising varied considerably. Only slightly more than half of the respondents obtained more than 50 percent of the desired OP titles regardless of the number of sources used. Although there appears to be no clear-cut correlation between success in obtaining desired titles and the number of sources used, two or three, according to our respondents, yield the best results, and three sources seem to be preferred.

Comparing the percentage of success with sources used, again no valid correlation is possible because those libraries claiming 75-100 percent success in getting their desiderata, and those claiming 1-24 percent success both list search services as first choice of sources. Curiously, the results of this question are contradictory with the one in which we asked which sources provide the largest number of desired OP titles. In the latter, dealer specialists scored higher in the result listing than the commercial search service.

The final question concerned the use of a competitive bid system. Our respondents revealed considerable ignorance or negligence in sending out desiderata lists to several dealers with request for itemized quotations. Forty-nine libraries answered the question; forty-three omitted it. Three-fourths of the replies indicated failure to use the system; of these who did some commented that prices varied from 50-100 percent.

Of the libraries appending remarks to the questionnaire, one reported that it did no OP buying now, but intended to begin in the near future; five others said their OP business was very small—almost too small to report. Two other respondents said they went into the OP market only when specifically requested to do so by faculty members.

Conclusion

Despite the apparent need for increased out-of-print buying, at least half the libraries surveyed appear deliberately to have assigned it a relatively low priority. Whether direct or implied, most librarians—perhaps restrained by budgetary limitations—follow the school of thought that

emphasizes purchase of new publications whenever a choice between new and old has to be made. Thus, because of increased demand, certain important titles, even reprints, will soon be unavailable.

Many librarians showed vagueness about the nature and extent of their OP purchasing and a lack of knowledge about common practices which could enrich their holdings. Where certain techniques for getting OP titles were used, they continued to be used regardless of results.

In short, out-of-print buying remains a catch-as-catch-can business, the success of which varies with experience and efforts of librarians in relation to demands of the college served.

INTERNATIONAL CONGRESS ON ARCHIVES

The Council on Library Resources, Inc., has made a grant of \$35,500 to the National Archives and Records Service (National Archives Trust Fund Board), General Services Administration, to assist in making possible the convening of an Extraordinary Congress of the International Council on Archives.

With the National Archives as host, in cooperation with the Society of American Archivists, the Congress will meet in Washington, D. C., from May 10 to 13, 1966. Its overall theme will be "Archives for Scholarship: Encouraging Greater Ease of Access."

Established in June 1948, the International Council on Archives functions under the auspices of UNESCO. Its membership of national and other archival agencies and institutions, professional associations, and individual archivists was originally drawn primarily from the Atlantic Community but has since been expanded to include most of the nations of Eastern Europe, all of Latin America, and many of the countries of Asia and Africa.

ICA's purposes include the strengthening of relations among "archivists of all lands," protection of the world's archival heritage, advancement of professional techniques, facilitation of the use and study of archival sources, and promotion of desirable international activities in the archival field.

COMPUTER SEMINAR FOR LIBRARIES

A Seminar on Computer Based Systems for Libraries will be co-sponsored for the third consecutive year by the Division of University Extension and the Graduate School of Library Science of the University of Illinois. The three-week, non-credit Seminar will be held from Monday, May 30, to Friday, June 18, 1966, at the Illini Union on the Urbana campus of the University.

Under the direction of Kern W. Dickman, Assistant Director of the Statistical Service Unit of the University of Illinois, and Hillis L. Griffin, Information Systems Librarian of the Argonne National Laboratory, Argonne, Ill., the Seminar is designed to acquaint professional librarians with the concepts of computer programming in relation to library applications. As one assignment, participants will be encouraged to write a computer program for an operation applicable to their own libraries.

It is recommended that applicants have completed a minimum of two years of professional library service. No previous experience with data processing is expected, nor any knowledge of mathematics. Further information and registration forms are available from the Seminar Supervisor, 116b Illini Hall, Champaign, Ill. The tuition fee for the Seminar will be \$125. Housing will be available near the Campus.

The Selective Purchase of Out-of-Print Books: A Survey of Practices

SARAH A. COOK
Assistant Order Librarian
Purdue University Libraries
Lafayette, Indiana

THE ORDER DEPARTMENT of Purdue University Libraries has in the past few years been requested to purchase more and more books which fall in the general out-of-print category. It seems that as the University expands its curriculum, our desiderata file grows in corresponding proportions. We have tried with varying results almost all of the commonly-known methods of securing desired OP material.

It was therefore thought advisable to question other libraries concerning these methods of selecting and acquiring out-of-print books and perhaps ascertaining some idea of the success of each; and it was decided that a questionnaire would be the best method of obtaining this information. A good deal of time and effort went into forming a questionnaire that would be short and yet yield a satisfactory amount of information. Unfortunately, even with all of the readings and revisings, there were several errors in its composition which were brought out by the answered questionnaires. However, they were thought not serious enough to spoil the usefulness of the results.

The questionnaire (see below) was divided into four sections. Section A was designed to give some indication of the usefulness of desiderata files to the libraries that maintain them. From Section B we hoped to learn what libraries did with dealer catalogs within their own library system. And Section C was included to give some idea of the frequency of use of other methods of obtaining OP material. In Section D we were seeking some evaluation of the effectiveness of the various methods cited.

In order to make a random sampling of institutions which would receive the questionnaire, we used the 1962/63 *Library Statistics of Colleges and Universities* and divided the libraries, according to the number of volumes held, into the following groups: libraries with holdings above 500,000 volumes were designated Group A; libraries with holdings of 100,000 to 500,000 volumes were designated Group B; and libraries with 50,000 to 100,000 volumes became Group C. No libraries with holdings of less than 50,000 were queried, as our budget was limited and we felt these libraries would not be involved heavily enough in OP buying to justify the added expense of more questionnaires.

Of the libraries in Groups B and C listed in the *1962/63 Library Statistics*, every second institution received a questionnaire. This totaled 272 institutions. From these two groups we received 251 replies or 92.0%. Since Purdue's holdings now stand above 500,000 volumes, we felt we would be justified in sending the questionnaire to all of the institutions in Group A. These totaled 75 libraries, and from them we received 68 replies or 90.6%. To summarize, a total of 347 questionnaires were sent, and we received 319 replies or 91.9%. From this total, we were able to use 307 or 88.7%.

The questionnaires were mailed at the end of June, and two weeks later one follow-up was sent to those who had not yet responded. Considering the time of year and its overlapping the ALA Conference, we felt that the response was good, since we had anticipated a return of perhaps only 40 percent.

As the answers were received, we key punched the data, along with other information obtained from the *1962/63 Library Statistics*, into IBM cards. Thus, we gathered much more data than we really needed or is reported here. Most of the variables from the *Library Statistics* had significance only as an exercise in manipulating data and in learning from actual practice the astonishing capabilities of the modern data processing equipment.

Since Sections A, C, and D seemed to yield the more salient data, this brief summary is concerned primarily with these sections. Only the figures from the combined totals, regardless of size of library, are used in the two tables. However, charts broken down by size are available to anyone interested. Variations indicated by size are pointed out in the following paragraphs. It should also be noted at this point that the data from Sections A and C are combined in both tables.

Section D is perhaps the most important part of the questionnaire and at the same time the most difficult to summarize. The evaluation of the numerical ranking in this section was done two ways. One involved sorting the respondents as to how they answered the corresponding "use" question and computing the overall ranking of the 10 items listed on this basis (for example, how did those answering "yes, frequently," or "no, never" to question 5 in Section A concerning TAAB, rank TAAB as a method of purchasing OP books, etc.). The results here were interesting but did not bring out any remarkable variations in the percentages computed by the second method. This was simply a compiling of all the rankings regardless of how the corresponding questions were answered. The reason for little or no variation in the results of the two compilations can be accounted for by the fact that where a library did not use, or used infrequently, a means of purchase or selection, it usually did not give that item a ranking. Thus, the least used methods also received the most "no" answers.

The two tables included here depict the overall use (Table I) and the overall ranking (Table II) of the various methods of acquisitions.

From a brief glance at Table I, it can be seen that checking lists against incoming dealer catalogs and the circulation of desiderata lists to OP dealers are the most heavily used methods of buying and selecting OP material. However, here our breakdown by size shows an important variation. More Type A libraries indicated a definite preference for sending lists to dealers and more of them also ranked it first, whereas more Type B and C institutions preferred checking their lists against incoming dealer catalogs and more of them also ranked it first.

Use of University Microfilms Xeroxed books also showed a marked variation when broken down by size. Here again, as might be expected, the Type A library reported much heavier use. A little over 43% of these libraries reported frequent use, whereas 16% of the Type B library and only 9% of the Type C library report frequent use. There were quite a few comments on the expense of this method. Nevertheless, a total of 91% of all libraries responding to the questionnaire reported some use of these books.

In regard to TAAB the same type of pattern developed. Here more Type A libraries (49%) reported frequent use while only 19% of Type B and 11% of the Type C checked frequent use. Only 48% of all libraries responding reported some form of use of TAAB.

The survey has probably confirmed what most librarians concerned with OP buying assumed—that circulating and checking dealer catalogs for desired items is, at least for the present, the most frequently used and perhaps the best method. The survey also shows that use of all methods increases proportionately with the size of the library.

When answering question number 1 in Section A, several libraries included explanations of how they organized or maintained their desiderata files. A few stated that they have only small general OP files in the main acquisition department but that large files are kept by various subject specialists on the library staff. One library reported it kept two lists, one of domestic titles and one of foreign titles. One or two stated that they advertise OP books one or more times and then if no results, they purchase Xerox copies. One library wrote that the faculty member responsible for the particular department or subject book fund was also responsible for maintaining desiderata files, and some said their desiderata file was included in their Outstanding Order File.

Recently I received from one library a detailed account of how it organizes its desiderata files. This kind of information is not to be found in any of the current books on acquisition work, and it seems with the growing difficulty of managing this area of library work, a compilation of this information would be a useful addition to library literature. From the number of comments and letters that were included with the questionnaire, there is undoubtedly a great deal of interest in this field and a need for much greater study. It is hoped that the brief report given here may inspire more comment and criticism, and that better and more efficient methods of OP purchasing will result.

THE SELECTION/PURCHASE OF OUT-OF-PRINT (OP) BOOKS:
A SURVEY OF PRACTICES.

A. DESIDERATA LISTS AND THEIR
USE.

1. In your library, is desiderata list maintained?
 YES
 NO
2. Is the desiderata list checked against incoming catalogs?
 YES
 NO
3. If answer to No. 2 is yes, please estimate the time that elapses between receipt of catalog and sending of a related order.
I estimate that about _____ days elapse.
4. Is the desiderata list circulated to OP book dealers?
 YES
 NO

5. Is the desiderata list submitted to TAAB (The Library Bookseller)?
 YES, frequently
 YES, occasionally
 YES, but only rarely
 NO, never
6. Is the desiderata list submitted to the ANTIQUARIAN BOOKMAN?
 YES, frequently
 YES, occasionally
 YES, but only rarely
 NO, never

B. SELECTION OF BOOKS FROM
BOOK CATALOGS

7. Do you circulate book catalogs to instructional departments so that OP selections may be made there?
 YES
 NO
8. Do you circulate book catalogs to persons within the library organization who are responsible for OP selection?
 YES
 NO
9. If your answer to question 8 was "YES," what is (are) the title(s) of the responsible person(s)?
a. _____
b. _____
c. _____

10. When catalogs are circulated to persons outside the library organization, what is the time that elapses between your original receipt of catalog and sending of a related order?
I estimate that _____ days elapse.
11. When you order OP books from catalogs, do you request dealer to hold items until firm order is placed?
 YES
 NO
12. When ordering from catalogs, do you place firm order before checking item's availability?
 YES
 NO

C. OTHER METHODS IN OP BOOK PURCHASE

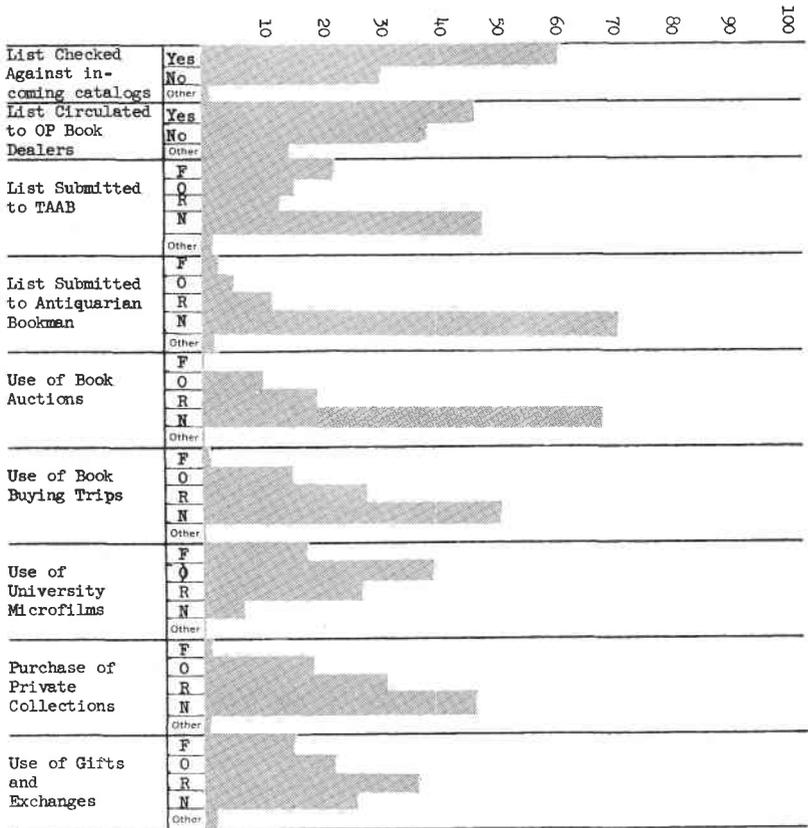
- 13. Does your library buy OP books through book auctions?
 YES, frequently
 YES, occasionally
 YES, but only rarely
 NO, never
- 14. Does your library buy OP books through special book buying trips?
 YES, frequently
 YES, occasionally
 YES, but only rarely
 NO, never
- 15. Do you purchase OP books reproduced by xerography from University Microfilms?
 YES, frequently
 YES, occasionally
 YES, but only rarely
 NO, never
- 16. Does your library secure OP books through the purchase of private collections?
 YES, frequently
 YES, occasionally
 YES, but only rarely
 NO, never
- 17. Does your library rely on gifts and exchange as a means of obtaining OP books?
 YES, frequently
 YES, occasionally
 YES, but only rarely
 NO, never
- 18. When placing orders for OP books does your library resort to the telegraph/telephone?
 YES, frequently
 YES, occasionally
 YES, but only rarely
 NO, never
- 19. For 1962/63 estimate amounts of monies expended for purchase of OP books.

D. YOUR JUDGMENTS OF THE VALUE OF VARIOUS METHODS IN OP SELECTION/PURCHASE

Please rank the methods listed below in the order of their judged value. In other words, for the method which you consider most valuable (i.e., most effective as a means of obtaining OP book), assign a rank of "one." Assign a rank of "two" to the next most valuable, and rank of "ten" to the method which you judge to be least valuable.

RANK	METHOD	RANK	METHOD
_____	The checking of desiderata list against incoming catalogs.	_____	The circulation of incoming catalogs to responsible library personnel.
_____	The circulation of desiderata list to OP book dealers.	_____	Purchase through book auctions.
_____	The submission of desiderata list to TAAB.	_____	Purchase through book buying trips.
_____	The submission of desiderata list to ANTIQUARIAN BOOKMAN.	_____	Gifts and Exchange.
_____	The circulation of incoming catalogs to instructional departments.	_____	University Microfilm Xerography books.

TABLE I THE PERCENT OF THE USE OF ALL METHODS OF OP BUYING



F - Frequently
 O - Occasionally
 R - Rarely
 N - Never

TABLE II
RESULTS OF THE NUMERICAL RANKING IN SECTION D

Buying and Selection Method	First		Second		Third		Fourth		Fifth		Sixth		Seventh		Eighth		Ninth		Tenth		No Answer	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Checking against incoming catalogs	81	26.4	49	16.0	34	11.1	20	6.5	17	5.5	12	3.9	13	4.2	10	3.3	3	.98	10	3.5	58	18.9
Circulating list to OP Book Dealers	63	20.5	49	16.0	36	11.7	34	11.1	19	6.2	9	2.9	12	3.9	7	2.3	0	—	5	1.6	73	23.8
Submission of list to TAAAB	57	18.6	30	9.8	28	9.1	24	7.8	15	4.9	17	5.5	16	34.5	8	2.6	10	3.3	6	2.0	96	31.3
Submission of list to Antiquarian Bookman	10	3.3	14	4.6	11	5.6	22	7.2	23	7.5	18	5.9	22	7.2	9	2.9	12	3.9	20	6.5	146	47.6
Purchase through Book Auctions	0	—	2	.7	0	—	4	1.3	9	2.9	7	2.3	14	4.6	34	11.1	43	14.0	54	17.6	140	45.6
Purchase through Book Buying Trip	4	1.3	9	2.9	9	2.9	14	4.6	21	6.8	23	7.5	19	6.2	21	6.8	39	12.7	26	8.5	122	39.7
Exchange University	0	—	18	5.9	24	7.8	19	6.2	25	8.1	22	7.2	19	6.2	33	10.7	22	7.2	34	11.1	91	29.6
Microfilms	17	5.5	33	10.7	36	11.7	28	9.1	38	12.4	29	9.4	26	8.5	15	4.9	6	2.0	6	2.0	73	23.8
<i>Circulation of Catalogs</i>																						
To Instructional Departments	22	7.2	42	13.7	35	11.4	34	11.1	21	6.8	21	6.8	16	5.2	11	3.6	10	3.3	14	4.6	81	26.4
To Library Personnel	39	12.7	46	15.0	41	13.4	26	8.5	24	7.8	19	6.2	14	4.6	7	2.3	4	1.3	1	3.0	86	28.0

NOMINEES FOR 1966/67

Resources and Technical Services Division

For Vice-president (President-elect):

David C. Weber, Stanford University Libraries, Stanford, Calif.
Edwin E. Williams, Harvard University Library, Cambridge, Mass.

For Chairman, Council of Regional Groups—three-year term:

Paul D. Berrisford, University of Minnesota Library, Minneapolis,
Minn.
Louis A. Schultheiss, University of Illinois Library, Chicago Circle,
Chicago, Ill.

Acquisitions Section

For Vice-chairman (Chairman-elect):

Gerard B. McCabe, University of South Florida Library, Tampa, Fla.
Felix Reichmann, Cornell University Libraries, Ithaca, N. Y.

For Member-at-large—three-year term:

Richard Harwell, Bowdoin College Library, Brunswick, Me.
Robert C. Sullivan, Library of Congress, Washington, D. C.

Cataloging and Classification Section

For Vice-chairman (Chairman-elect):

Pauline A. Atherton, Documentation Research, American Institute
of Physics, New York, N. Y.
Dorothy P. Ladd, Boston University Library, Boston, Mass.

For Member-at-large—three-year term:

Victor A. Schaefer, University of Notre Dame Library, Notre Dame,
Ind.
Kenneth W. Soderland, University of Chicago Library, Chicago, Ill.

For Member-at-large—three-year term:

Ruth C. Eisenhart, Union Theological Seminary Library, New York,
N. Y.
Mildred C. O'Connor, Boston Public Library, Boston, Mass.

Copying Methods Section

For Vice-chairman (Chairman-elect)

William S. Budington, John Crerar Library, Chicago, Ill.

Bernard Kreissman, The City College Library of

The City University of New York, New York, N. Y.

Serials Section

For Vice-Chairman (Chairman-elect):

William H. Huff, University of Illinois Library, Urbana, Ill.

Thomas E. Sullivan, H. W. Wilson Co., New York, N. Y.

For Member-at-large—three-year term:

Laura Cummings, Columbia University Library, New York, N. Y.

Elisabeth H. Nebehay, United Nations Library, New York, N. Y.

Swiss Book Prices: 1947-1960

The accompanying tables are based on a thesis prepared by Emil Frey entitled: "A Comparison of Trends in Book Costs and Book Production in Switzerland and the United States from 1947 to 1960" (M. S. in L.S., University of North Carolina at Chapel Hill, 1963). Even though the data are computed on a 1947-49 base and are now somewhat dated, the trends revealed by the study clearly show the now all too familiar pattern of steady book price increases.

TABLE I
Cost of Living and Book Price Indexes for Switzerland

Year	Book Price Index		Consumer Price Index		Differences in Index	
	SF	\$	SF	\$	SF	\$
1947-49	100	100	100	100	—	—
1953	128.64	115.00	105.44	114.40	23.60	-.60
1956	134.64	128.40	108.79	116.20	25.85	12.20
1958	139.58	142.60	112.96	123.50	26.62	19.10
1960	154.69	146.00	114.03	125.70	40.66	20.30

TABLE II
Swiss Book Prices and Book Price Indexes: Selected Years 1947-49 to 1960*

Category	1947-1949			1953			1956			1958			1960		
	Annual Average Number Books	Average Price	Index	Total Number Books	Average Price	Index	Total Number Books	Average Price	Index	Total Number Books	Average Price	Index	Total Number Books	Average Price	Index
All Categories	4,426	\$1.92	100	3,474	\$2.47	128.64	3,665	\$2.58	134.38	4,285	\$2.68	139.58	4,487	\$2.97	154.69
1. Biography	164	1.71	100	259	1.20	70.18	295	1.82	88.89	351	1.06	61.99	272	1.53	89.47
2. Theology (Religion)	320	1.42	100	402	1.45	102.11	388	1.82	128.17	435	1.79	126.06	498	2.25	158.45
3. Philosophy	195	2.17	100	190	2.34	107.83	181	2.65	122.12	150	2.88	132.72	155	3.52	162.21
4. Law	180	2.12	100	149	2.87	135.38	163	2.74	129.25	179	3.08	145.28	178	6.00	283.02
5. Economics	154	1.55	100	137	2.06	132.90	182	1.80	116.13	195	2.18	140.65	245	2.49	160.65
6. Political Science	128	1.12	100	68	2.72	242.86	46	1.47	131.25	61	1.45	129.46	48	1.74	155.36
7. Languages (Science of)	571	2.15	100	128	3.43	159.53	104	3.97	184.65	134	3.83	178.14	146	3.18	147.91
8. Literature	541	2.17	100	569	2.09	103.69	563	2.08	95.68	644	2.15	99.08	642	2.86	104.15
9. Literature for Young People	240	1.08	100	287	.90	83.34	186	1.01	93.52	283	1.28	118.52	332	1.34	124.07
10. Education	201	1.03	100	77	2.06	200.00	66	2.21	214.56	88	2.01	148.76	105	2.06	200.00
11. School and Textbooks	—	—	—	101	.98	100.00	113	1.19	121.43	109	1.16	118.37	113	1.08	110.20
12. Art	185	6.36	100	139	3.26	51.26	157	6.44	101.26	292	4.06	63.84	235	6.25	98.27
13. Music	245	1.09	100	343	1.27	116.51	100	2.73	259.46	106	3.41	312.84	74	3.89	356.88
14. History	177	2.68	100	263	2.84	105.97	257	3.09	115.30	250	3.24	120.90	281	3.32	123.88
15. Geography	143	1.88	100	141	2.93	155.85	146	3.85	204.79	178	3.63	193.09	256	2.11	112.23
16. Cartography (Maps)	—	—	—	74	1.26	100.00	80	1.33	105.55	79	1.53	121.43	56	8.26	655.55
17. Medicine	135	4.22	100	170	3.49	82.71	145	5.39	127.72	198	6.29	149.05	225	4.64	109.95
18. Natural Sciences	286	3.23	100	125	3.14	102.79	136	3.75	116.10	204	4.50	139.32	153	3.87	119.81
19. Mathematics	—	—	—	15	7.15	100.00	15	7.22	100.98	17	3.93	54.97	10	2.93	40.98
20. Technology	120	2.25	100	139	2.87	127.56	102	3.07	136.44	115	3.15	140.00	246	3.56	160.89
21. Commerce	125	1.87	100	96	2.51	134.22	97	2.28	121.93	105	2.34	125.13	115	2.22	118.72
22. Agriculture	213	1.70	100	73	1.65	102.94	68	1.44	84.71	58	2.04	120.02	54	2.32	136.47
23. Sports	103	2.38	100	42	2.63	110.50	75	2.05	84.14	54	3.68	154.62	48	3.08	129.41

* Calculated from data reported in semi-monthly issues of *Das Schweizer-Buch*, 1950-1960. (Zürich: Schweizerischer Buchhändler- und Verlegerverein).

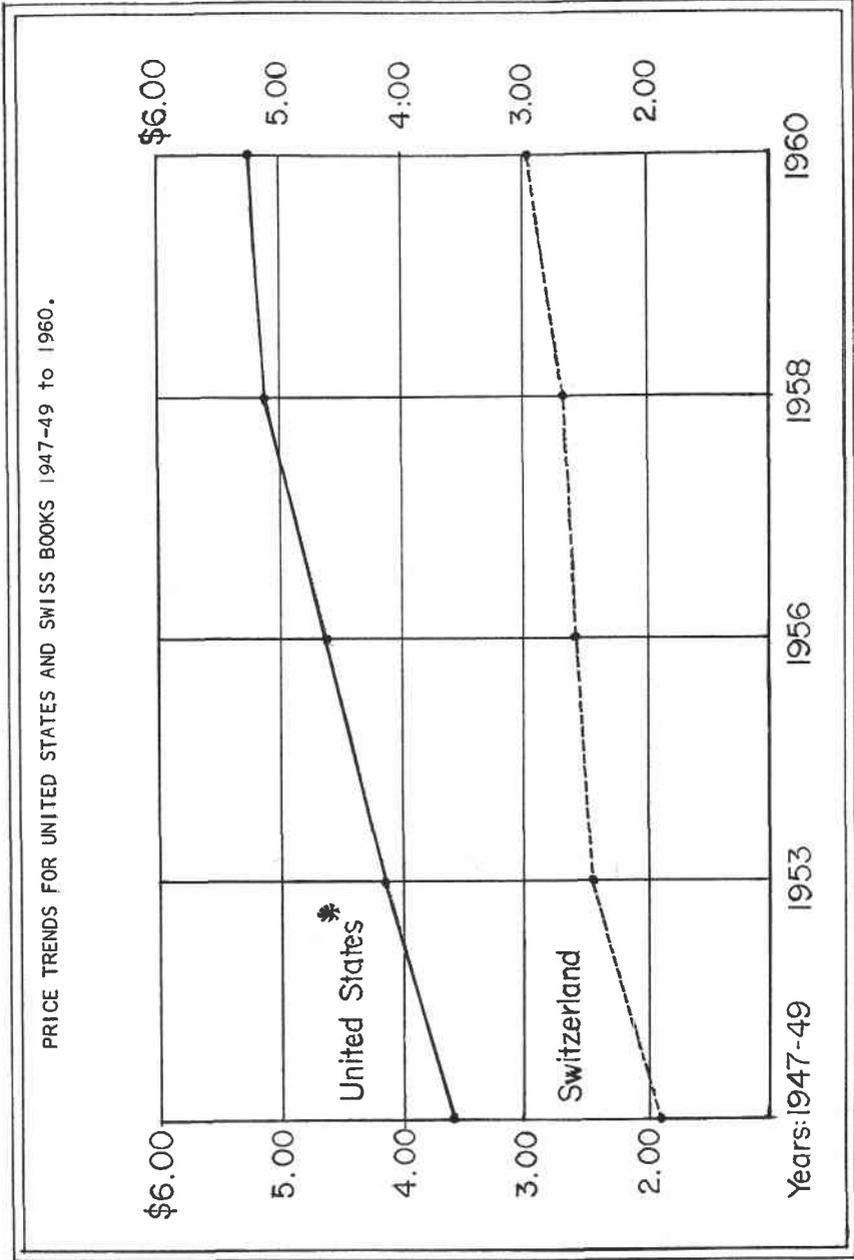
TABLE III

Index of Book Prices in the United States by Category, Selected Years 1947-49 to 1960*

Category	1947-49			1953			1956			1958			1960		
	Total Number Books	Average Price	Index	Total Number Books	Average Price	Index	Total Number Books	Average Price	Index	Total Number Books	Average Price	Index	Total Number Books	Average Price	Index
Total	22,269	\$3.59	100.0	8,495	\$ 4.13	115.0	8,470	\$4.61	128.4	9,341	\$ 5.12	142.6	9,457	\$ 5.24	146.0
Agriculture	270	3.23	100.0	54	5.60	173.4	41	5.09	157.6	48	6.95	215.2	—	—	—
Art	482	7.06	100.0	130	10.39	147.2	169	9.97	141.2	240	11.35	160.8	254	12.61	178.6
Biography	1,487	3.89	100.0	655	4.31	110.8	656	4.74	121.9	659	5.20	133.7	694	4.98	128.0
Business	498	4.72	100.0	101	6.17	130.7	176	6.30	133.5	190	7.98	169.1	159	6.83	145.3
Childrens' Books	1,718	2.11	100.0	897	2.26	107.1	1,033	2.50	118.4	1,097	2.73	129.4	1,211	2.74	129.8
Economics	375	4.03	100.0	116	5.01	124.3	121	5.97	148.1	100	6.16	152.9	198	6.19	153.6
Education	402	3.39	100.0	173	4.23	124.8	197	4.47	131.9	209	4.75	140.1	262	4.97	146.6
History	1,200	4.76	100.0	459	5.66	118.9	468	5.88	123.5	639	6.46	135.7	727	5.91	124.2
Law	988	4.84	100.0	351	5.66	116.9	305	7.17	148.1	245	8.12	167.8	209	8.01	165.5
Literature, General	4,471	2.63	100.0	1,639	3.01	114.4	1,499	3.24	123.2	1,540	3.54	134.6	1,536	3.59	136.5
Literature, Fiction	3,334	2.66	100.0	1,295	3.06	115.0	1,212	3.28	123.3	1,226	3.52	132.3	1,225	3.59	135.0
Literature, Poetry	915	2.42	100.0	293	2.82	116.5	227	2.95	121.9	239	3.49	144.2	236	3.31	136.8
Literature, Drama	1,489	6.36	100.0	51	2.99	96.8	60	3.60	116.5	75	4.03	130.4	75	4.48	145.0
Music	294	4.06	100.0	76	6.82	107.2	649	7.73	121.5	759	7.97	125.3	674	8.41	132.2
Religion	1,864	2.84	100.0	745	3.25	114.4	799	3.74	131.5	925	3.69	129.9	847	5.56	136.9
Science	692	5.52	100.0	204	7.28	131.9	241	8.46	153.3	270	9.16	165.9	517	10.21	185.0
Sports	373	3.91	100.0	148	3.94	100.8	117	4.57	116.9	147	4.68	119.7	164	4.80	122.8
Technology	1,105	4.86	100.0	439	6.38	131.3	411	7.52	154.7	551	8.09	166.5	365	8.89	182.9

* Frank L. Schick and William H. Kurth, *The Cost of Library Materials; Price Trends of Health, Education and Welfare, Office of Education, Library Services Branch, Office of Education Publication OE-15029A* (Washington: U. S. Government Printing Office, 1961), p. 11.

TABLE IV



^a Data calculated from Frank L. Schick and William H. Kurth, *The Cost of Library Materials: Price Trends of Publications*. U. S. Department of Health, Education and Welfare, Office of Education, Library Services Branch.

An Ordering Procedure Utilizing The Xerox 914 Electrostatic Process

RICHARD M. DOUGHERTY
*Head, Acquisitions Department
and*

SAMUEL M. BOONE
*Chief, Photographic Services
Louis Round Wilson Library
University of North Carolina at Chapel Hill*

Introduction

THE ESSENTIAL ELEMENTS of any book ordering procedure are selection, bibliographic searching, and the mechanical preparation of orders for distribution to jobbers and dealers. The overall efficiency of the system is dependent on each and every one of the forenamed operations. At the University of North Carolina library the mechanical operations, namely typing, proofing, and preparation of orders for mailing, have created a bottleneck in the ordering process. To help break the log jam of orders during the past year, we were forced to add an additional full-time typist and one student assistant to our order section. This brought the total typing staff to two and two-thirds.

What our library really requires is an ordering system that is both fast and flexible. One week we might want to place as many as 1,500 orders but possibly as few as 500 orders the following week; and since we are frequently competing with other research libraries in the antiquarian market, speed is likewise important. The solution finally developed was designed in view of prevailing local conditions to meet our specific needs. But in spite of this provincial approach, the needs of our library closely resemble those of other large research libraries; and assuming that the necessary equipment is available, the system, if desired, could be adopted for use by other libraries.

General Description of the New Ordering Procedure

Success of the xerography procedure hinged on two assumptions: first, that almost all order cards received in the Acquisitions Department are legible and would not have to be recopied; and, second, that some rapid method of reproduction could be adapted to our needs, specifically the Xerox 914. The idea of employing the xerographic process was by no means unique. The National Library of Medicine and the University of California at Los Angeles have been using the Xerox Copyflo process for ordering for a considerable period of time, and Duke University has been using the Xerox 914 in at least one phase of its ordering process. The basic procedures are also being used by many libraries in reproducing catalog cards.

The function of selecting books at the University of North Carolina is performed jointly by library staff and faculty specialists. But even with this extremely decentralized group, almost all order request cards as received in acquisitions are legible (though many are inaccurate and/or incomplete bibliographically). Ninety per cent of the cards are either typed or are cards with pasted entries, e.g., cut from *American Book Publishing Record* and pasted or taped on order cards. (See Figure 1, Card A) In fact, we originally believed it would be necessary to retype about fifteen per cent of the cards because of illegibility; but this need has not materialized. As long as printing or handwriting is legible, the card in its original form is used.

Upon receipt in the Acquisitions Department, the cards are first processed by the bibliographic searching staff. Bibliographic additions, corrections, or deletions are made directly on the original order card. (See Figure 1, Card D) The corrected card is then prepared for the 914 direct reproduction process. Without question, our cards will never win any contests for aesthetics, but very few cards ever have to be retyped. Experience has shown that less than one tenth of one per cent of the corrected cards have to be redone.

Before the new process could be installed, the order card itself had to be redesigned, since we intended to use a direct reproduction technique. Some provision for including Library of Congress card order information had to be included so that we could continue using one copy of the multiform for ordering LC catalog cards. The form was also redesigned to encourage, or at least suggest, typing rather than handwriting. The finished product has proven workable, but far from ideal; it is too cluttered, and some space allocations have proven either unrealistic or unnecessary. The card is now being revised.

The most challenging aspect of the project was to design a workable reproduction system. The Xerox 914 was not designed to accommodate precollated, inter-leaved colored sheets of paper. Inconsistent paper feeding has been the most irksome problem, and even now it has not been entirely solved. For example, the machine will not reliably feed paper less than 20 pound weight, which forced us to use a heavier paper than had been planned. Although the problem has been partially solved, as will be described later, the only sure safeguard against a mechanical malfunction is an observant machine operator.

Description of the Original and the Revised Ordering Procedures

Typing Procedure

1. Typing—Book and serial orders are typed on five-part, multi-colored, multiforms. (Three copies are used for internal record keeping, one copy is sent to the vender, and one copy is used for ordering Library of Congress cards.)

2. Proofreading—Orders are proofread to detect substantive errors. (A substantive error is defined as any error that might cause a dealer to

send us the incorrect book; will result in a misfiled, unretrievable order; or will cause the Library of Congress to send us an incorrect card. These criteria require the reviser to check only a minimum of items, e.g., first filing word of the main entry, the catalog number and item number for items ordered from dealers' catalogs, the edition statement if applicable, and the LC card number. All other typos are left uncorrected.)

3. Numbering—Order numbers are placed on the order request card. (The library does not use pre-numbered multiforms, instead a combination date and order number is employed, e.g., 64/F14/33 translates into the thirty-third item ordered on February 14, 1964. The numbering operation is performed as the multiforms are proofed. Upon completion of proofing, the cards are batched and dated.)

4. Separating—Disposable, interleaved carbons are separated from multiform slips and discarded. The slips are then placed in three piles: 1) vender's copy, 2) order number-date file copy, and 3) three copies for the outstanding order file.

5. Stapling and Arranging by Fund—Three order file slips are stapled along with the original order request card. (This pack of four slips has been dubbed the "order pack.") As the order packs are stapled, they are arranged alphabetically by fund for subsequent encumbering.

6. Stamping Billing Instructions—Special billing instructions are stamped on all orders to be paid with trust funds.

7. Addressing and Mailing—Orders are arranged by vender, stuffed into window envelopes along with a pre-prepared address label. After stuffing, the envelopes are batched and sealed. (Address labels for infrequently used dealers are typed as required.)

Xerography Procedure

1. Stamping the Order-Date Number—Order request cards are imprinted with an order-date number, e.g. 188 Dec 1164, the one hundred eighty-eighth order placed on December 11, 1964.

2. Mounting—Order request cards are mounted six-up on plastic plates. The cards are arranged according to order-date number. (Masking tape is used as the adhesive. See Figure 2. Experience has shown that the masking tape must be replaced once every two weeks.)

3. Xerox Machine Operation—The copy indicator is set at 5 and the paper is fed through the 914. One of the major problems in the machine operation has been the tendency of the machine to feed two sheets at once. This has been especially true of the white and blue colors. Other colors have been tried in an effort to overcome this, but without success. The only solution, so far, has been for the operator to be constantly attentive to the paper tray and observe any misfeeds. It is necessary to choose colors that will reflect properly from the "miss-detector" light of the 914 in order to prevent serious damage to the machine. As indicated above, the colored paper used in this process is purchased uncollated. Collation is done on a machine, and the paper is jogged to stack it as evenly as possible. To smooth off the edges, the paper is then cut to pre-

cisely 9 × 10 inches and placed in the Xerox tray so that the sequence of colors is white, blue, pink, canary, and green.

4. Cutting—The 9 × 10 sheets are gang-cut into 3 × 5 slips on a power cutter (Challenge, Model H-193). The six resulting piles of slips are kept separate in order to facilitate collating.

5. Dismantling from Plates—Cards are removed from plates; cards are retained in order by order-date number.

6. Collating, Stamping Billing Instructions, and Stapling—Venders' copies are set aside, and if applicable, billing instructions are stamped on each slip. The order-date file copy is placed in a second pile, and the remaining slips are stapled together with the order request card to form the order pack as described previously. (In the original method, the cards were batched and each step was performed separately. In the revised procedure, it was found more efficient if the operations were performed in sequence, one order at a time.)

7. Mailing and Addressing—Same as the original procedure.

Time Data

The diary method of collecting data was used; therefore, all figures presented below should be viewed with caution. Although each worker was thoroughly instructed on how to record times, and each successfully underwent a week's trial period, the type of errors normally associated with this method of collecting data apply to this experiment. Table I summarizes the findings of the time study.

TABLE I
Summary of Times for the Two Ordering Procedures

<i>Operation Description</i>	<i>Sample Size</i>	<i>Average Time/order (In Min.)</i>	<i>Average Time/100 orders (In Min.)</i>
<i>Original Procedure</i>			
Typing	1168	2.12	212
Proofing & Numbering	1619	.36	36
Separation & Date Stamping	1488	.27	27
Stapling & Arranging by Fund	1371	.23	23
Stamping Special Billing Instructions	1422	.11	11
Mailing & Addressing	1999	.27	27
Total Time		3.36	336
<i>Revised Procedure</i>			
Stamping Cards & Mounting on Plates	511	.12	12
Photographing & Cutting	1465	.31	31
Dismantling from Plates	540	.03	3
Stapling & Stamping Billing Instructions	865	.23	23
Sorting Orders by Fund	639	.09	9
Stuffing, Addressing & Sealing Mail	1999	.27	27
Total Time		1.05	105

Cost Data

Calculating meaningful cost figures produced some unexpected problems. Experience has shown that either procedure can be successfully performed by full-time clerk-typists or student assistants and, whenever possible, student help is utilized. Our biggest problem in utilizing students has been one of accessibility, that is, having the students on the job when we need them. The cost figures assigned represent the hourly pay rates of the job classification level most likely to perform the operation e.g., typing and proofing were usually done by a clerk-typist, while addressing and stuffing were done by a student assistant. Three base hourly pay rates were used: 1) \$.95 for a student assistant, 2) \$1.10 for a machine operator, and 3) \$1.80 for a clerk-typist. Table II summarizes the comparative labor, equipment, and material costs for processing 100 orders.

TABLE II
Summary of Costs for Preparing One Hundred Book Orders

	Old Procedure		New Procedure	
	% work performed	Cost	% work performed	Cost
Labor:				
Clerk-typist	74	7.47	36	1.33
Student assistant	26	1.31	33	.52
Machine Operator	—	—	31	.69
Sub-total		8.78		2.54
Material:				
		Cost/100 Orders		
Envelopes & address labels		.18 ^a	.18	
Five part multiforms		2.60	—	
Order request cards		.50	.50	
Cost of paper		—	.43	
Misc. (ink pads, rubber stamps, masking tape, plastic plates, staples, etc.)		.01	.02	
Sub-total		3.29	1.13	
Equipment:				
Typewriter (deprec. over 10 years)		.20	—	
Machine cost (914) (.045/ exposure)		—	3.78 ^b	
Cost of having paper collated		—	.16	
Bates dater (deprec. over 5 years)		—	.15	
Sub-total		.20	4.09	
Total		12.27	7.76	

^a Average of 6 orders/envelope.

^b Six orders are produced every five exposures, thus less than one hundred exposures are required per 100 orders. This accounts for the difference between \$.045 and \$3.78.

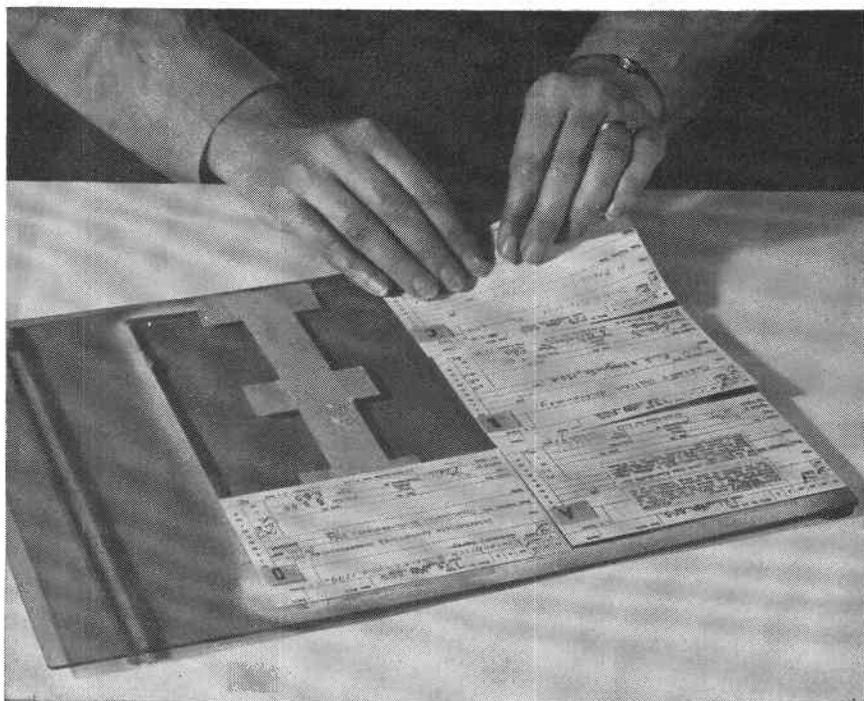


FIGURE 2

Results of the Study

The study clearly demonstrated the superiority of the xerographic ordering procedure over the typing procedure, both in terms of time and cost. The unit time for preparing 100 orders has been reduced over 200 per cent, and unit cost per 100 orders has been reduced from \$12.27 to \$7.76, a reduction of 33%. The new system has given us the speed and the operational flexibility we wanted. We are now able to handle peak work periods without any undue strain on the system. (As of this writing, 430 orders are the most placed on any one day.)

The new system has enabled us to reassign one full-time typist to a new job in another part of the department; both student assistants have also been reassigned. The remaining clerk-typist has been assigned new duties in addition to processing orders. (She is now responsible for opening and distributing the mail and performing almost all secretarial duties for the department.)

Other aspects of our bibliographic operations were also affected by the new procedure. Originally, we were concerned with processing orders only. It did not occur to us that the new procedure could also be adapted to searching and processing of gifts, standing orders, and blanket order receipts. Instead of typing multiforms, an order card, previously filled out

in abbreviated form (See Figure 1, Card C) by a searcher, is now reproduced by xerography; two copies are made instead of five—one for an LC card order if required and one for the in-process file (which is interfiled with the outstanding order file). Since the cataloger has the book in hand and has already been informed by the searcher whether or not catalog copy is available, the only purpose of filing a slip in the in-process file is to prevent duplication, thus the abbreviated format. (See Figure 1, Card C)

The next step logically seems to be to eliminate, in certain instances, any card at all in the process file when the book is in hand. The sole justification for preparing a card for this file is to prevent subsequent duplication. We have found that the probability of duplicating the type of material we usually receive on our blanket orders and as gifts, if the book is cataloged within four to six weeks, is very low. Only when a work's processing is temporarily deferred is there any need for placing a temporary slip in the file. Otherwise, all information collected, regardless of who collects it or when it is collected, should be recorded on some type of processing form and the work expedited through the processing department.

Having all information on the recto of the order card has also proven useful. No one has to make a decision as to what information should be transcribed onto the multiform slips. Dealers are occasionally supplied with the address of an obscure publisher or book distributor where, in the past, they had to fend for themselves. And we have found that jobbers do not normally qualify as bibliographical sleuths.

Training requirements have been reduced significantly. As very few orders are typed on multiforms, it is not necessary to have on hand an instruction manual. All the typist has to do is to reproduce the information contained in certain boxes; everything else is ignored.

Can the system be adopted by other libraries? We would answer yes in libraries where decentralized selection is requisite, as long as the library has access to a Xerox 914, a paper collator (if color coding is used), and a power cutter, and if the library is willing to discard a few traditionally-held views on the condition of order copy.

STUDY ON CENTRALIZATION

Florida State University's Library School is making a study of the feasibility of centralized records systems in Florida's junior college libraries.

Gerald Jahoda, Library School Professor, said the study will deal with the practicality of preparing all or some of the junior college records on a centralized basis with the aid of data processing equipment.

The study will involve 19 of the colleges in the state. In the first step of the study, now completed, information about the form, frequency of issue, information content, and cost of existing records was collected. In the second stage, cost estimates will be prepared for the development and operation of a center for the preparation of acquisition and catalog records.

The Pamphlet in the University Library

JACK KING, *Serials Cataloger*
University of Minnesota, Minneapolis
formerly *Assistant in the Special Collections Department*
University of Iowa, Iowa City

THERE WILL BE little argument among university librarians over their libraries being overtaxed. Increasing student enrollments, the steady growth of graduate schools, and a phenomenal increase in publications necessary for research have all combined to face them with demands they cannot always fill. At the same time, scholarly research for decades to come will depend upon the solutions they find for their pressing problems.

One of these problems is the perennial one of how to handle pamphlets which come into the library. These pamphlets cover a bewildering number of subjects; they may be beautiful examples of the printing art or scarcely legible products of cheap, offset printing. Their authors may be distinguished literary figures or barely literate obscurities.

The initial reaction of many librarians to pamphlets is that they are "trash." However, university librarians discover that their idea of "trash" is a faculty member's idea of research material. Librarians too frequently judge pamphlets according to standards of literary art; a faculty member may or may not use such standards. A political science professor visiting the University of Iowa libraries was delighted to discover that the library had retained a series of pamphlets whose contents consisted of totally unrelated sentences brimming with an almost incoherent hate.

Once the librarian is convinced that pamphlets are actually of value to his patrons, a major hurdle has been crossed. The potential sponsor of a pamphlet collection will do well to remember that most librarians are booklovers in the narrowest sense of the term. He may well find his colleagues as dubious of starting a collection of pamphlets as they would be of beginning a collection of worn-out light bulbs. There is little advice which can be given about overcoming this prejudice; only an active campaign of re-education, perhaps with faculty help, can erase it.

After the decision has been made to preserve pamphlets, an intelligent acquisitions program must be drawn up. At the present time, such policies for pamphlets are usually most unsystematic. The following procedures for a "pamphlet collection" may be only too typical: Specific pamphlet titles are purchased when requested by the faculty. Unordered pamphlets are examined by the acquisitions librarian; unaided by any library policy, he decides if a pamphlet is valuable. Most are rejected for permanent addition to the collection, but some are sent to the limbo

of vertical files in the reference department. The few which do meet the subjective standards of the acquisitions librarian are forwarded to the catalog department. There the cataloger decides if they are worth cataloging. Because pamphlets frequently lack important title page information and are very narrow in subject content, they are frequently difficult to catalog. Bearing all of this in mind, the cataloger rejects a few more. The survivors are then given abbreviated cataloging: no classification, limited subject cataloging, few if any descriptive notes. Each is bound into a large volume of inconvenient size with numerous other pamphlets on assorted subjects. The result is an addition of little research significance. The undergraduate, using the subject approach, will seldom locate the piece; the researcher, unaware that the library might possibly have the piece because of the miscellaneous character of the collection, never checks the catalog. Even if the researcher did check the catalog, the library could not provide the depth which his investigations require. Such a policy is a poor compromise. Money is wasted on a weak collection which cannot satisfy the needs of the patron.

However, solutions can be found to the problems of building effective pamphlet collections. For no library is there the possibility of collecting all pamphlet titles published in the United States; the wealthiest could not afford to acquire and process them. Obviously, then, library policies must be adopted which limit the pamphlets desired in the collection.

An almost endless number of plans could be adopted to bring the costs of pamphlet collecting within the limits of the library budget. Since the late nineteen thirties, one such plan has been in operation at the University of Iowa, and it has operated with considerable success in limiting both the acquisitions and cataloging of pamphlets.

Surprisingly, perhaps, the establishment of a workable acquisitions program has been Iowa's most difficult problem in creating a pamphlet collection. The collection was originally designed to acquire all pamphlets distributed in the United States by foreign governments for propaganda purposes during World War II. Records no longer exist to indicate how active a collecting program was maintained; however, the collection was begun, and it was expanded to include the pamphlets issued by various domestic groups interested in helping to shape American foreign policy. The attack on Pearl Harbor drastically reduced the amount of material received, but the collection still contains the publications of various special-interest groups concerned with the problems of drawing postwar political boundaries.

At the end of World War II the collection continued to reflect the problems in American society. A major such problem was the revulsion against Communism, and this was shortly the major theme in the acquisitions policy. However, other matters of concern are reflected in the pamphlets of this period. Some returning veterans, imbued with a crusading spirit, turned to pamphleteering as a way of attacking shoddy products, housing shortages, and high living costs. Some Americans, horrified by Nazi racial and religious policies, used pamphlets to broadcast the hor-

rors to their fellow citizens. A few pamphlets, their authors literally shocked to disbelief by postwar revelations, built logical arguments to "prove" that the mass murders had never happened. Most pitiful of all are those which were lovingly published to honor the memory of relatives killed in combat. Sometimes these pamphlets included poems or stories written by the dead soldiers; sometimes they were simple tributes written by sad parents.

By 1950 the collection was facing a crisis: the number of pamphlets being published for American consumption was increasing tremendously. The problems facing the nation in foreign affairs were complicated by rising doubts about internal security and an uneasy awareness that the Communists in Russia were skillful politicians. The pamphlets received indicated the confusion among Americans as they realized the dangers of the postwar world. At Iowa it became obvious that a new political force was coming into being. Pamphlets began to challenge the views of the established political organizations in two broad areas: internal security and foreign policy.

The mounting numbers forced the library to reconsider its acquisitions policy for pamphlets. Prior to this time, the collection had been thought of as propaganda material. This idea stemmed from the original collection of the propaganda materials deluging the nation prior to Pearl Harbor, and this theme had been expanded after the war to include propaganda from any group, foreign or domestic. By 1950 the library could no longer afford so broad a practice.

About this time a new policy began to take form, which was apparently more of an evolutionary matter than a definite decision. Gradually the material published by foreign governments for popular consumption ceased to be collected. Decisions were also made to stop seeking materials published by the business community for propaganda purposes. Emphasis was slowly made to center on the publications primarily devoted to political matters, usually at the Federal level. These issues included the role of government in business, the conduct of foreign affairs in the cold war, internal security, public health, social morality, and others. An examination of the collection indicated that the major portion of it consisted of pamphlets published by organizations outside of the "mainstream" of American politics. The policy thus began evolving in the direction of a pamphlet collection composed of material published by political groups other than the two major parties. By 1964 the policy limited the collection, with one major exception, to non-socialist, political organizations which were not related to either the Republican or Democratic parties or any other major national organization. The exception was the continuation of the policy aimed at bringing in pamphlets published by religious organizations outside the major American denominations.

It is probably obvious that the acquisitions policy for the Iowa collection has been one difficult to define adequately. For example, what is a "major, national organization"? What is a "major, American denomi-

nation"? A serious effort was made to solve these problems. However, scholarship in political science has not produced a standard terminology to describe all ranges of political activity. Scholars use vague terms like "fringe groups, radical right, or conservative." Yet, if a consistent acquisitions policy were to be followed, the Iowa collection could not be adequately described by such vague terms, subject to individual interpretation.

Two different methods were used to define the collection more specifically. The first attempt was to develop a standard set of terms for the acquisitions policy. This attempt soon foundered on the simple fact that the library staff did not have the time to fill a major gap in American scholarship. The second method took the pragmatic approach of stating what material Iowa did not collect. Socialist and Communist material was not desired, because it was available at other libraries within a three hundred-mile radius. Publications of the Republican and Democratic organizations were not desired since they, too, seemed readily available. Material, even though political, published by groups whose basic reason for existence was not political, was also excluded. If the material seemed to be border-line, it was included on the theory that it was safer to include questionable material than risk any possibility of eliminating what would later be found to be of significance.

The technical procedures used in the acquisitions program were relatively simple. No adequate bibliographies of pamphlets exist, but desiderata lists were compiled from three major sources. First was the use of the few lists available giving the names of the small political groups; these lists probably include one third to one half of the existing organizations in the country. Those listed were contacted and asked to donate publications for which they were responsible.

The second major source was the discovery of new organizations through distributing agencies. It is a common practice for the smaller political organizations to distribute, not only their own publications, but also those of other groups whose publications represent similar views. One political organization might lead to the discovery of one or two others, and gradually the list of contributing organizations could be built up. The third major source was the lists prepared by bookstores specializing in the sale of current political literature. These lists often revealed new organizations, and their publications were then sought.

Most of the material received was donated by the publishing organization. Letters were written to each explaining the importance of the Iowa collection and requesting its help through the donation of its publications. Form letters were never widely used, because it was felt that individually-written letters achieved better results. An absolute neutrality was maintained concerning political affairs. Organizations were asked to help a program designed to further scholarly research, and the results were satisfactory.

Material was purchased only when it was felt to be of unusual significance to the collection and was unavailable through gift. Such purchases

were relatively rare and were handled through the regular channels of the Acquisitions Department. A constant check was kept to assure the library's remaining on the mailing lists of the donating organizations. Claims were made when necessary, always through individually written letters. It was felt that the use of forms, even for such routine matters as claims, would make donors less willing to cooperate with the program.

Once the acquisitions program was operating, the problem arose of making the material easily accessible to the patrons without the cost of complete cataloging. During the World War II period the collection was apparently so small that no catalog was needed. After the War, it began to expand rapidly, and the first problems of organization and cataloging arose.

The initial solution was to organize the material through filing under the name of the publishing organization; in cases where this was unknown, the pamphlet was filed under Library of Congress subject headings. This system proved to be unworkable. The first difficulty was that the filing by the name of the publishing organization did not provide for finding the material through the names of individual authors. A second difficulty was that the organizations frequently changed names; the changes might be due to a merger but were also often brought about by a change in political viewpoint. The third difficulty arose over the pamphlets filed under subject headings. A pamphlet, once filed under a specific subject heading, was unavailable under any other subject approach. Since the contents of pamphlets are usually much more specific in subject than a book, Library of Congress subject headings were too general to describe the pamphlets. Thus the patron, at best, would have to guess under which, of several subject headings, the pamphlet he desired was filed.

During the Korean War a card file was started of organizations whose published material would fit the collection. This card file was later expanded to include "see" references to carry the patron through successive organizational name changes. A few authors' names were also entered, although no systematic policy was followed. This card file, when combined with the services of an experienced curator, served the patron quite well. However, illness and transfers resulted in a turnover of curators rapid enough to impair service to the patron. It takes one or two years for a curator to become familiar enough with the collection to wring the most service possible out of it. By 1962 the method of subject filing had completely broken down, and the actual filing of material consumed an extraordinary amount of staff time.

The first step in improving service was to file as much material as possible under some form of author entry; if possible, under the name of the organization whose views it represented. If the piece seemed to represent no particular organization, it was filed under the name of the author. If no author could be found, the piece was filed by title. Less than five per cent of the material had to be filed by title.

The second step was to provide some kind of cataloging for the ma-

terial. The patrons consisted of two distinct groups. Undergraduates used the collection for term papers and required only a few representative pamphlets on some subject. This meant a subject approach of some kind was necessary. The second group of patrons were specialists, and nearly all of their requests were for the works of some particular organization.

The problem of a subject approach was considered in two basic ways. One idea was to provide a classified list of the material; this was expected to be more quickly accomplished than standard subject cataloging. The other idea was to provide the usual subject cataloging with Library of Congress subject headings. A trial run was made with both systems, and no significant difference in work time was discovered. The classified list idea was then dropped as being too rigid.

It is debatable whether Library of Congress subject headings or a special subject list should have been used. The LC headings were decided upon, even though they frequently proved to be too general or outdated, for two reasons. It was hoped that the subject cataloging could be used when the time came to catalog the collection fully. Also the University of Iowa libraries make an effort to educate their patrons in the use of LC subject headings, which are used with practically no variation in the public catalog. It was felt that an undergraduate, skilled in the use of the public catalog, should be able to apply his training to using the pamphlet subject catalog.

For the researchers an author catalog was constructed. Most of the main entries consisted of corporate authors, since the majority of pamphlets did not list individual writers. The standard cataloging practices were followed for "see" references and added entries.

The cataloging shortcuts consisted of minimizing the number of subject headings, eliminating notes, eliminating classification, and making no searches beyond the piece being cataloged.

This system of cataloging allowed for speed, one cataloger preparing 146 titles a day. One reason for this speed was that a pamphlet cover often carries a great deal more information than does a book title-page. Sixty-one per cent of the pamphlets at Iowa could be cataloged by examining the covers with only a cursory inspection of the contents. The cataloging has one major deficiency: nothing appears in the main catalog of the library to guide the patron to the collection. For the researcher this is probably not of any particular importance, but the collection could conceivably completely escape the notice of an undergraduate patron.

The pamphlet collection at Iowa is by no means ideal. However, if all university libraries set up relatively inexpensive collections on different subjects, together they would provide a cooperative effort of tremendous importance to scholarly research. Until they do, a valuable source of information about modern society is going out with the trash, and the librarian is doing a disservice to scholarship.

The Economics of Book Catalog Production

ROBERT M. HAYES
School of Library Service
University of California at Los Angeles

RALPH M. SHOFFNER
Informatics, Inc.
and

DAVID C. WEBER
Stanford University Libraries

A STUDY WAS RECENTLY UNDERTAKEN for the Stanford University Libraries to evaluate the economics of various major methods of producing book catalogs. So as to make it possible for the results to be developed in a form suitable for wider application, the Council on Library Resources provided part of the funding. This article summarizes the results of that study. It presents the historical background and discusses the specific approach, including the use of equations for each alternative step in production, the information that the user of this method must supply, and the relationship to typographical quality. It discusses the particular needs of Stanford University and presents the results of the application of these equations to the Stanford Undergraduate Library. It comments on the areas of intellectual judgment involved in designing a catalog.

A. The Rationale for a Book Form of Catalog

The development of the library catalog has paralleled the growth of libraries. As libraries have increased in size and complexity, the difficulties in finding books easily and quickly—by author or title or subject or form—have similarly increased, and have forced librarians to a continuing exploration of more efficient cataloging forms and formats.¹ The recent problems of libraries, resulting from the increased volume of publication and the widened interest in world literature on the part of scholarly communities, are not really new. But the need to solve them is urgent, as library systems expand rapidly and as collections increasingly are counted in hundreds of thousands or millions of volumes. Just as size, economics, and demands for better service are forcing libraries into branch systems, so they are forcing library catalogs into various combinations of card and book listings and away from the ideal of a single master file. The reasons are clear:

1. *The need to have catalogs at affiliated libraries:* the growth of the "multi-versity," as well as public and county library systems, has led to

the provision of duplicate catalogs—such as have been used for the several campuses of the University of California or for the Los Angeles County system—and the production of duplicate catalogs is most feasible in book form.

2. *The size and complexity of any single library catalog itself:* the larger libraries are literally outgrowing their space for card files, and catalogs are getting too large to be used easily and effectively. This has led libraries to turn toward the book form to ease the physical pressure—and the book form of catalog seems particularly suited to materials selected for secondary access or auxiliary collections.

3. *The heavy turnover of book titles within one collection:* with the large effort required to interfile new cards and withdraw older records, libraries dealing largely with current publications (increasingly since 1951) have been prompted to turn to the mechanically-produced catalog, and again the book form is most convenient for automated output.

4. *The need for consolidated catalogs of holdings, even on a single campus:* since inter-disciplinary growth complicates the formerly rather clear division among major departmental libraries, union lists of currently-received journals and joint catalogs of science holdings are increasingly useful when there is a dispersion of resources—and these lists and catalogs are most practicable in book form.

5. *The need for multiple copies of the catalog for distribution over a single campus because of the very heavy and wide use:* again, the easy reproduction of the book-form catalog makes it attractive.

At the same time, a radically different machine technology is available to meet these requirements. Thus, despite the greatly-increased magnitude of the problems, there may well be less of a gap between them and the ability to meet them than has existed for well over a hundred years. This fact gives administrators a greater possibility than ever before to meet their service requirements. The question which must be answered is this: How should the available technology best be used?

B. *Methods for Producing a Book Form of Catalog*

To answer this question requires careful, detailed, comparative analysis of the various methods for producing a book catalog. The approach presented in this paper is an analytical one (as contrasted with that of a case study.) It therefore starts by defining those quantitative variables which are significant in evaluating the cost of producing a book form of library catalog and the quality of the resulting product. It analyzes each method into its component productive operations and develops equations which relate their costs to the significant variables.

Specifically, the cost of producing a book form of library catalog and the quality of the resulting product are functions of three classes of variables or constraints that must be related to each other: (1) the characteristics of the collection to be cataloged, (2) the characteristics of the published catalog, and (3) the characteristics of the production

method. The important variables in each of these classes have been defined and are listed in Tables 2 and 3. Where possible, normal or typical values are presented for each, but only for the sake of illustration and particular application in the Stanford Library example presented in Sections E and F.

Regardless of the particular method chosen, the production of the book catalog requires the following component steps:

1. Provision of the bibliographical-entry citation.
2. Input of the citation and duplication for the required number of catalog entries.
3. Editing of the input to correct errors.
4. Sequencing or sorting of the new entries so as to put them into the appropriate order with respect to the existing catalog information.
5. Merging the new material with the existing catalog information.
6. Creation of the new page masters from which the catalogs will be produced.
7. Reproduction, collating, and binding to produce the requisite number of catalogs.

Table 1 is a block flow diagram illustrating the sequence of these operations with respect to the various catalog production methods. (The numbers in the boxes key the relevant sections of Tables 4-10 in which the related equations are found). It can be seen from this figure that there are a large number of alternative procedures which can be utilized in producing a book catalog within most of the major methods. For example, virtually any card catalog can be utilized to produce a book catalog through the use of the first four methods for page-master creation: typing pages, photographing of a shingled layout, photographing of a side-by-side layout, and photographing by use of a sequential camera. Although special arrangements are needed to use the other methods for page-master creation, there are a similar number of choices that can be made.

For each of the processing stages, a number of functional equations have been developed expressing the time and cost in terms of the characteristics of the collection and the catalog to be produced. These are presented in Tables 4 through 9. The costs of offset reproduction have been expressed in tabular form in Table 10, rather than as an equation, to reflect the many variables involved: weight of paper, type of reproducing master, number of pages printed per run, nature of binding, etc.

C. *The Allocation of Costs*

In these equations, the cost per unit time for personnel is based on a normal wage per hour for people performing that category of job. For equipment, the "per hour cost" is derived from its purchase and operat-

ing costs over the life of the equipment. *Indirect, or overhead, costs are for purposes of this study not considered in either case.* Particular care, therefore, must be taken in this area. First, the use of "per hour costs" assumes full-time use of the people and equipment, either in direct production or in alternate useful work. Second, overhead costs have been deliberately excluded because methods of allocating burden vary so widely. As a result, the *relative* costs of the various production methods may be different, depending upon whether overhead is considered.

Though these restrictions in the methods of estimation may seem arbitrary, they should not create a great problem for the individual using them. Even in their present form, these equations will at least provide "order of magnitude" estimates which will help people decide whether they are interested at all. If there is interest, a small number of rates may need to be specially determined to obtain more accurate estimates.

The operations listed above as required to produce a book catalog can be grouped into three categories: maintenance of the information file to be made into the catalog; creation of the catalog page masters; and reproduction of copies of the book catalog. The maintenance activities include introducing and duplicating new citations, merging them into the master file, changing records to correct errors, and deleting records for obsolete citations.

The requirements for maintaining the catalog information file are virtually the same regardless of the final form of the catalog—card or book. The costs of the operations in this category will be incurred simply to have available the information about the collection and, therefore, one may question whether they should be considered as a cost of book-catalog production. They are included to ensure a uniform treatment of all sources of cost. However, in establishing a true picture of the cost of the book catalog, particularly in arriving at a selling price for it, these catalog maintenance costs should probably be handled separately.

Furthermore, certain costs, such as those involved in key-punching, may become absorbed by other major functions. For example, an automated acquisition process within an integrated system would also take advantage of the key-punching and could therefore be assigned some proportion of those costs.

Creation of the catalog page master is, of course, a function whose costs are wholly assignable to the production of a book catalog. These costs are dependent upon the number of pages created and, thus, upon the total size of the collection and upon the catalog-page layout chosen. Similarly, the reproduction operations are concerned solely with the production of a book catalog. Reproduction costs consist of a fixed setup charge plus a "per-page copied" charge and, thus, are a function of the number of pages in the catalog and the total number of copies produced.

Because these variable costs are directly attributable to the publication of the catalog and are almost solely a function of the number of copies, it would probably be advisable to print only that number of

copies for which there is a guaranteed market. This obviously includes those used in the library itself; it may also include those distributed to other departments. Those which are anticipated for sale to students and outside the library should be estimated very conservatively—the additional spread of fixed costs over a large printing just does not compensate for the gamble with large variable costs.

Due to the large number of equations available for each stage in the production process, no attempt has been made to discuss each possible alternative set of procedures for the production of a book catalog. Instead, a limited number of selected methods have been applied to the Stanford University Undergraduate Library as an example.

As shown in Tables 15, 16, and 17, the analysis of the Stanford University Undergraduate Library demonstrates that, if only the actual utilization of the computer installation is allocated against library usage, the computer is a very efficient approach to standard library technical operations. It must be recognized, though, that the actual amount of usage of the computer is very low and certainly not sufficient to justify a computer installation by itself.

The computer approach is of additional value if consideration is given to the possibilities of special bibliographies, easy catalog revision, integration with acquisitions, and similar fringe benefits. However, costs should not be allocated to these "intangible" benefits unless they are actually included in the design from the beginning. In other words, a system must be completely justified on the basis of all economic considerations involved in its own operation and *not* on some larger system considerations, "possible" extensions, intangible benefits, and similar arguments. On the other hand, if a system is judged as economically competitive on its own merits, then the fringe benefits are of great significance. The results of this study indicate that the use of a computer for production of a book catalog is competitive, and therefore the extended possibilities which it provides should be given consideration.

D. *Quality of Typography*

Before discussing the Stanford example in detail, some summary discussion of the over-all characteristics of catalog production should be presented. With respect to methods of reproduction, it was found that offset is the only useful one to be considered as a result of the relatively-small printing volume. Offset reproduction can provide a quality of result which for most applications is competitive with that of hot-type printing. The only applications in which hot type would be preferable are those in which a high degree of pictorial quality is required or in which the volume of reproduction is on the order of 20,000 or more copies. Because the cost of a copy of the book catalog is nearly linear with respect to the number of pages it contains, it is a direct function of the density of entries per page. This entry density in turn is a direct function

of the number of characters or lines per entry and the character size (or reduction ratio) utilized.

Because it is desirable to get the maximum number of entries on a page, set-up for the page master by "shingling" is, in general, superior to the "side-by-side" approach. The only application in which this would not be the case would be the one in which the information was located on the card in a manner such that no reduction of white space could be obtained by shingling.

The quality of the typography and the number of fonts available for use in the production of the book catalog have an effect upon the cost.² In general, the greater the typographical quality required, the more expensive the creation of the page master. At the same time, the better the typography, the higher the entry density that can be provided on the page, thereby reducing the total number of page masters required and the cost per copy of the book catalog produced. However, though the higher quality typography does allow a more dense catalog, the effect is not great enough to overcome the higher costs involved in producing the page masters. The major justification for the higher-quality typography, therefore, must be greater user satisfaction or utilization. Table 11 shows the relation between the production method and the typography available.

Tables 12, 13, and 14 provide, in approximate order of quality, sample pages of book catalogs produced by various methods. Table 12 is a sample page by Fotolist prepared by the Econolist Company. Virtually the same final results can be obtained from a sequential camera or from "shingling"; in either case, the page quality depends on the typing equipment used to enter the information on the cards—Justewriter, Varityper, etc.

Table 13 is a page produced by IBM using the 1403 printer with the upper and lower case print chain. Table 14 is a tabulator printout. (In all typing applications, but especially with machine printing, for a good quality page it is important to have clean type and use a new ribbon.) In Tables 13 and 14, subject headings in a different font have been stripped in. This improves the appearance of the page and is relatively inexpensive.

E. *The Needs at Stanford University*

In looking forward to the opening of a new Undergraduate Library in the fall of 1966, the librarians of Stanford University began discussion in 1962 of the format and desirable features of the catalog for this library which will serve most undergraduate needs. There was general feeling that, because of the decentralized nature of undergraduate instruction, housing, and library services, no conventional card catalog would be quite as useful as a portable printed book catalog. The ideal was to be able to issue to every incoming student a catalog of the holdings of this core collection at the same time he received his catalog of courses of in-

struction. Although slight educational advantage might be gained from having the *author* and *title* part of the undergraduate catalog in book form, the *subject* part of the catalog would on the other hand certainly be a most useful book when issued in many copies. "Such a tool in the hands of each college student would become the first bibliographical reference work with which the aspiring scholar would be expected to become thoroughly familiar. From this *bibliography of one library* the junior and senior would move up to the use of more specialized bibliographies in the area in which he is working."³

In a library building with some 1600 seats on three large floors, each divided into four major areas, the collection is widely scattered. To encourage the general education which is a major goal at Stanford, it was decided to inter-shelve the required reading with the general collection, marking the assigned books of limited circulation with some visible sign to indicate their limited duration of circulation. (Required reading where the library has too few copies to serve all students from public shelves would, however, be serviced from a control desk.) This inter-shelving will make it essential for the student to work from classified shelves, being directed there by the catalog. Thus a student will use the catalog heavily, and catalogs in each major part of each floor of the building would seem to be required in one form or another. Although subject directories can be of some use, the index to the entire library should be in each portion of the building, because a student in his undergraduate years is of necessity crossing major disciplines. He will do at least some sampling of the literature in all fields; an index or catalog restricted to one major subject field would stultify the student's education.

There is not only the need for several catalogs in the building. Catalogs would also be useful in the offices of departments of instruction, in several administrative offices, at a number of service points in libraries, and, of course, the chimeric image still persists of issuing each student his catalog of the core collection.

The extra costs of a book catalog over the traditional card catalog are justified if the service of the library to the student body is markedly improved. When there is simplicity of organization of and access to the library collections, the library is a more efficient instrument of teaching.

F. Applications to Stanford University Undergraduate Library

The initial holdings of the Stanford Undergraduate Library are planned to comprise some 40,000 titles (60,000 volumes). Additional titles are anticipated the first few years at the net rate of 10,000 per year, with 100,000 titles in the ultimate collection.

This represents, therefore, an ideal example on which to illustrate the application of the general approach presented in Section B. To do so requires the specification of the quantitative characteristics of this particular library. These are listed below. Other parameters, such as equip-

ment speeds, personnel rates, error rates, etc., are taken at the estimated normal values listed in Tables 2 & 3.

The organization and physical characteristics of the book catalog have been decided, insofar as possible, on the basis of criteria external to the intellectual content. In particular, individual subsection volumes should be of a size to be carried in a typical 3-hole notebook, should cover related subject fields—referencing a shelf area in the library—so as to be useful as a study volume, and should be reasonable enough in cost to be sold to the individual student.

First Year:

V_{tf}	= 40,000 (40K citations to start with)
V_{mf}	= 0 (all new entries in the system)
V_c	= 180 (average citation length, 180 characters)
$V_a = V_s = V_t$	= 1 (1 subject code, 1 author, and 1 title per citation)
V_{cop}	= 500 (20 volumes, 1300 pages, 500 copies)
V_{pl}	= 110 (catalog 110 lines per page)
V_{pc}	= 2 (catalog columns per page)
V_{lem}	= 60 (catalog column-line length 60 characters)

Second Year:

V_{tf}	= 10,000
V_{mf}	= 40,000

Succeeding Years:

V_{tf}	= 10,000
V_{mf}	increased by 10,000 each year

Calculations were carried out using equations in the Tables for the following methods: shingle layout of Library of Congress cards; sequential camera; tabulating record equipment; and computer utilizing upper case only, upper and lower case, and photo-composition. The particular equations represent the preferred approach within each method, based upon considerations of cost and of simplicity of operation. Within each method the appropriate values from above and from Tables 2 and 3 were substituted, and the equations solved for the time and costs required for each operation.

Tables 15-17 summarize the costs calculated for the first, second, and fifth years. It must again be emphasized that because of the choice made for costs of personnel and equipment, these figures represent direct costs before the allocation of non-productive time or of overhead. The equations will, of course, permit the use of burdened rates instead.

The results of this calculation were encouraging. The next step was a cost comparison conducted at Stanford of the card catalog and the book catalog in the particular setting of Stanford's library. For the test to be fair, it was decided to compare three complete card catalogs (one on each floor of the building) with fifty copies of the book catalog (distribution is suggested in Table 18). It should be added that the size and configuration of the building seemed to urge complete card catalogs on each floor; and, in addition, it could hardly have been a fair comparison

to place the costs of a single card catalog against the substantial advantages of having fifty book catalogs in strategic locations. The results of this detailed comparison are summarized in Table 19.

The book catalog, it may be noted, would be printed once each year, in August. During the following ten months, cumulated monthly lists would be prepared, in a few copies, recording the new books added to the collection and including notices of books being purchased but which are not yet formally added to the collection.

Consideration of these figures showed that if the cost of the special computer printing chain is eliminated, which was thought reasonable, a book catalog would initially be \$13,000 less expensive than a card catalog. When the collection is mature, as in the theoretical year 7, the book catalog would cost annually approximately \$9,000 more than the card catalog.

The cost differential could be reduced by printing the complete catalog only every second or third year. This seems feasible, with monthly cumulated supplements between full editions, after the large initial build-up—say after the fifth or sixth year. And it might be desirable periodically to publish a larger edition of the whole catalog, or subject parts, with consequent economies to be realized through the larger edition. Finally, it was acknowledged that, while machines have their hidden costs, personnel recruiting, training, benefits, and so forth also constitute very substantial hidden costs. While salaries for manual tasks will continue to rise, it may be hoped that improvements in computer technology and printing techniques will hold these expenses to more modest increases.

In a meeting held December 9th, 1964, Stanford University administrators regarded the costs of the book catalog as reasonable in relation to its value, and it was decided to proceed with the book catalog for the Undergraduate Library.

G. Judgments in Designing a Library Catalog

In selecting the form of a library catalog there are various judgments to be made. First and foremost, the intellectual values must be studied. It seems clear that there have been, up to now, far too few of these studies seriously undertaken. There have been some studies of catalog use, particularly the 1958 Jackson and Mostecky study,⁴ the studies of the use of the catalog at the University of California in Berkeley,⁵ and a careful review by Robert D. Stevens.⁶ But these studies still fall short of the total requirement.

An even greater lack exists: there has been exceedingly little effort to understand fully the human elements in the use of library catalogs. For example, almost nothing exists on the "human engineering" of the catalog as a gross instrument for assisting an intellectual effort. This needed type of study is exemplified by "Report on a Study of Behavioral Factors in Information Systems," conducted by John A. Postley and Gary Carlson

of the Advanced Information Systems Department of Hughes Dynamics in 1963; and R. W. Trueswell, "User Behavioral Patterns and Requirements and Their Effect on the Possible Applications of Data Processing and Computer Techniques in a University Library" (Ph.D. dissertation, Northwestern University, 1964.)

The human engineering of the book catalog divides into three major aspects, each of which deserves further study. One is the design of the bibliographical entry, treatment of cross references, formatting of the secondary entries, and syndetic relationship to supplements and indexes. The second is the formatting for ease of scanning, including matters of type face, column length, size of page, bold face use, proportion of white space in leading and margins, and running heads and other devices which help the rapid narrowing of the search range (as is accomplished by the tray labels and guide cards in the card catalog). The third aspect is the packaging for ease in handling, the first approach to this being Section C of the "Preferred Practices in the Publication of Book Catalogs" issued by the American Library Association in 1962.⁷

Once the intellectual values of the content and the format design of a catalog can be determined, there is a further question of the number of copies required—the advantages of multiple location. The need and value of this duplication can only be determined through a local study of the means of communication in a campus geography, as in any community as an ecological environment. It requires weighing of ease of access and time-access factors with costs.⁸

Finally, the content and format of the catalog having been chosen and its multiple locations determined, the next step is to select the method by which to produce the instrument. For this procedural decision, the recent study summarized by this article provides a methodology applicable to any library system or other document retrieval agency.

REFERENCES

1. The historical development is indicated in: Weber, D. C. "The Changing Character of the Catalog in America." *Library Quarterly*, 34:20-33. January 1964.
2. Cornog, D. Y., et al. *Legibility of Alphanumeric Characters and Other Symbols, I. A. Permuted Title Index and Bibliography*. United States Department of Commerce, December 15, 1964.
3. Freitag, W. M. "Planning for Student Interaction with the Library Through Bibliographical Analysis and Physical Organization." *California Librarian*, 26:95. April, 1965.
4. Jackson, S. L. *Catalog Use Study*, ed. by Vaclav Mostecky. American Library Association, 1958.
5. Amy W. Nyholm in *College and Research Libraries*, 9:195-201, July 1948; and Anne Ethelyn Markley, in *Journal of Cataloging and Classification*, 6:88-95, Fall 1950.
6. Stevens, R. D. "Bibliographic and Cataloging Standards for Book Catalogs." In Kingery, Robert E., et al., eds. *Book Catalogs*. Scarecrow Press, 1963. p. 129-43.
7. *ALA Bulletin*, 56:836-37. October 1962.
8. Cf. Piternick, George. "Duplicate Catalogs in University Libraries." *Library Quarterly*, 34:68-76. January 1964.

Table 1

FLOW CHART SUMMARY OF BOOK CATALOG PRODUCTION METHODS

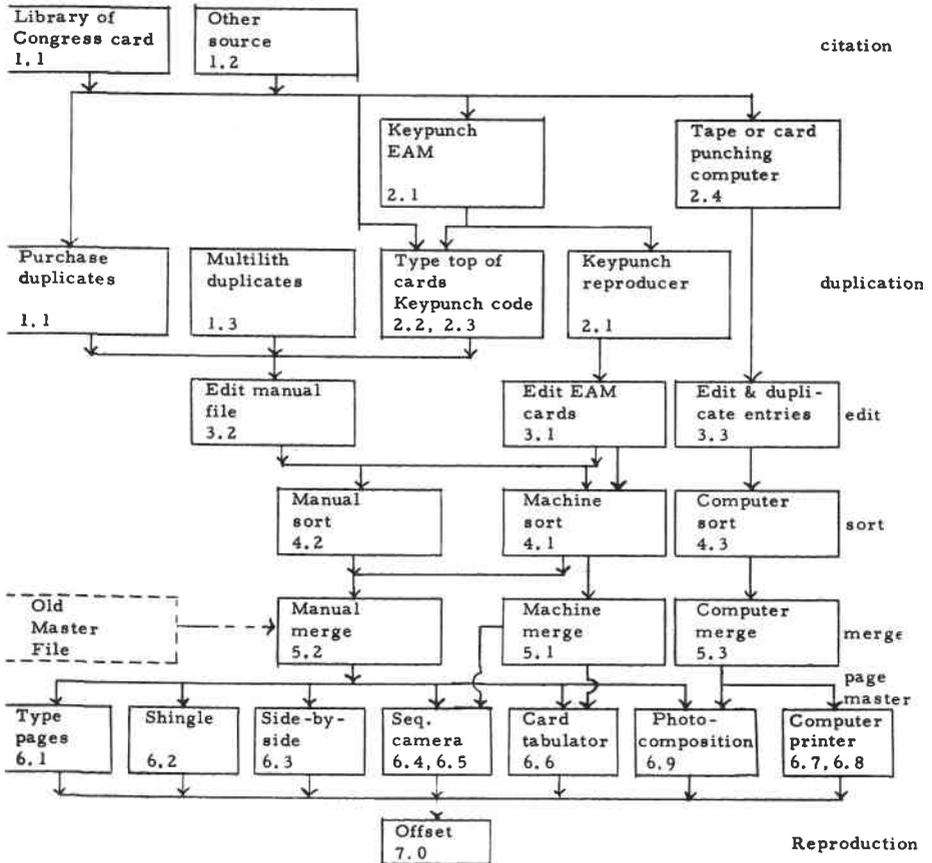


Table 2
QUANTITATIVE PARAMETERS

Variable Quantities -- Characteristics of Catalog Produced	<u>Estimated normal values</u>
V_{tf} = size of transaction file, number of new citations	
V_{mf} = size of total collection (master file), number of citations	
V_c = average number of characters per citation	180
V_{cop} = number of catalog copies	
V_{error} = error rate; percent of citation errors	3
V_a = average number of authors per citation	1
V_s = average number of subjects per citation	1
V_t = average number of titles per citation	1
V_{asf} = number of characters per author sort field	15
V_{ssf} = number of characters per subject sort field	20
V_{tsf} = number of characters per title sort field	15
V_{ah} = number of author headings per author entry	0
V_{sh} = number of subject headings per subject entry	.06
V_{th} = number of title headings per title entry	0
V_{ahl} = number of characters per author heading	
V_{shl} = number of characters per subject heading	30
V_{thl} = number of characters per title heading	
V_{cfs1} = cards per frame for shingle layout	30
V_{cfs1} = cards per frame for side-by-side layout	21
V_{linofa} = number of fonts per author entry	2

Table 2. Quantitative Parameters (Cont'd)

	<u>Estimated normal values</u>
V_{linoft} = number of fonts per title entry	2
V_{linofs} = number of fonts per subject entry	2
$V_{\text{tab b}}$ = blank lines per entry (tabulator)	1
V_{lcm} = column line length, number of characters per line column	60
V_{cms} = column line spacing, number of blank column lines per column line	.25
V_{pl} = page spacing, number of lines per page	110
V_{cp} = number of columns per page	2
V_{cmcl} = number of computer core locations	8000
V_{ppcl} = number of core locations used by print program	2000
V_{tab} = number of columns for tabular method -- sequencing within citation and gang punching (sort and control)	20
V_{page} = number of pages per sheet side	2
V_{pass} = number of passes per copy sheet side	1
V_{td} = number of characters per magnetic tape designator	$\log_{10}(10V_{\text{tf}})$

Machine Speeds (K = 1000)

S_{sort} = card sort speed in senses per hour	60K
S_{col} = card collator in cards per hour	14K
S_{rep} = card reproducer in cards per hour	6K
S_{int} = card interpreter in cards per hour (will not be needed unless different procedure)	
S_{tab} = card tabulator in cards per hour	6K
S_{tt} = speed of tape typewriter in characters per hour	29K
S_{kd} = keypunch duplication speed in characters per hour	65K

Table 2, Quantitative Parameters (Cont'd)

	<u>Estimated normal values</u>
S _{phot} = photon speed in characters per hour	29K
S _{lino} = linofilm speed in characters per hour	18K
S _{list} = listomatic speed in cards per hour	14K
S _{cmp} = computer printer speed in lines per hour (1403) upper and lower case upper case	14K 36K
S _{cs} = card switch time for keypunch, hour per card	.003
S _{cmc} = computer card read time in cards per hour	48K
S _{cmt} = computer paper tape read time in characters per hour	1800K
S _{cpt} = computer paper tape punch time, characters per hour	540K
S _{linofc} = time per font change (linofilm), hour per change	.0003
S _{recon} = read speed of linofilm tape converter computer, characters per hour	420K
S _{wricon} = punch speed of linofilm tape converter, lino characters per hour	140K
<u>Machine Constants</u>	
C _{sort} = senses per column sort	1.7
C _{lino} = computer codes per linofilm code	3
<u>Manual Rates</u>	
M _t = manual typing rate in characters per hour	7K
M _k = manual keypunching rate in characters per hour	7K
M _f = fixed sort, collate time, hour per entry	.0025
M _v = variable sort, collate time, hour per card	.0008
M _{cs} = card switch time, hour per card	.0015

Table 2, Quantitative Parameters (Cont'd)

		<u>Estimated normal values</u>
M_{sl}	= side-by-side layout time and shingle layout time, hour per card	.0017
M_{pl}	= photo layout time, hour per frame	.004
M_{check}	= check characters per hour	18K
<u>Prices</u>		
P_{LC1}	= price for first Library of Congress library card	\$.07
P_{LCe}	= price for each extra Library of Congress library card	\$.05
P_{md}	= price per citation source material multilith duplication	\$.17
P_{cc}	= price per card catalog card	\$.0045
P_{pc}	= EAM price per card	\$.001
P_s	= strip in cost	\$.20
P_{fo}	= fixed price per offset master	} See Table 10
P_{fm}	= fixed price per multilith master	
P_{paper}	= paper price per copy sheet side	
P_{run}	= run price per pass	
P_{ocp}	= offset price per copy page	
P_{mcp}	= multilith price per copy page	
P_g	= gathering price per sheet side	
P_{gcp}	= gathering price per copy page	
P_{fold}	= folding price per sheet side per fold	
P_{fcp}	= folding price per copy page per fold	
P_c	= cutting price per sheet side per cut	
P_{ccp}	= cutting price per copy page per cut	

Table 3
EQUIPMENT COSTS

<u>Equipment</u>	<u>Rate</u>	<u>Cost</u>	<u>Inferred Cost/Hour</u>
IBM Card Punch #26		\$ 60/month	\$.35
IBM Sorter #83	1000 senses/min	110/month	.70
IBM Reproducer #514	100 cards/min	110/month	.70
IBM Collator #85	240 cards/min	125/month	.75
IBM Tabulator 407 (96 col.)	100 cards/min	400/month	2.40
Tape Typewriters			
DBM Dura Machine 10	15 char/sec	3,300	.40
Friden Flexowriter	8 char/sec	2,400	.30
Friden Justowriter			
Punch unit		3,160	.35
Print unit	8 char/sec	2,910	.35
Invac TMP-200	15 char/sec	4,300	.50
Smith Corona Typetronic	30 char/sec	4,295	.50
Fairchild			
Line Composer (Vari-typer)	manual	3,165	.35
Photon Keyboard	manual	18,500	2.20
Linofilm Keyboard	manual	18,500	2.20
Photon Photo Unit	8 char/sec	40,000	4.75
Linofilm Photo Unit	5 char/sec	44,950	5.35
Linofilm magnetic to paper tape converter	40 Linofilm char/sec	60,000	7.15
Sequential Cameras			
Foto-List (Vari-typer)	120 cards/min	18,500	2.20
Listomatic (Kodak)	230 cards/min	20,500	2.45
Compos-o-Line (Lithoid)	120 cards/min	13,700	1.65
IBM 1401 Computer	11 milliseconds access time ⁽¹⁾	-----	100.00

(1) Rates are dependent upon function performed

Table 4

SOURCE MATERIAL ACQUISITION EQUATIONS

1.1

$$\begin{aligned} \$_{LCi} &= \text{cost of Library of Congress input} \\ &= V_{tf} P_{LCi} \end{aligned}$$

$$\begin{aligned} \$_{LCd} &= \text{cost of Library of Congress duplicates} \\ &= V_{tf} P_{LCe} (V_a + V_s + V_t - 1) \end{aligned}$$

1.2

$$\begin{aligned} T_{ti} &= \text{time for typing input} \\ &= V_{tf} (M_{cs} + V_c / M_t) \end{aligned}$$

1.3

$$\begin{aligned} \$_{md} &= \text{cost of multilithing duplicates} \\ &= V_{tf} P_{md} \end{aligned}$$

Table 5
CITATION DUPLICATION EQUATIONS

2.1

D_{ie} = average number of type cards per type entry

$$V_c / (80 - V_{tab}) + V_{ih} + V_{tab} b$$

D_{ic} = number of type cards per citation

$$= D_{ie} \times V_i$$

T_{kc} = keypunch time for tabulator cards in hours

$$= V_{tf} \left[\left(V_c + \sum_{i=a,s,t} V_i (V_{tab}) \right) / M_k + \left(\sum_{i=a,s,t} V_i V_c \right) - V_c / S_{kd} \right. \\ \left. + \sum_{i=a,s,t} D_{ic} S_{cs} + V_{ihl} V_{ih} V_i / M_k \right]$$

T_{repro} = time for reproducing sort fields

$$= V_{tf} \sum_{i=a,s,t} D_{ic} / S_{rep}$$

$\$_{ctab}$ = card stock cost for tabulator approach

$$= V_{tf} P_{pc} \sum_{i=a,s,t} D_{ic}$$

2.2

T_{tc} = type card time

$$= V_{tf} \sum_{i=a,s,t} \left[(V_c + V_{ih} V_{ihl}) / M_t + M_{cs} \right] V_i$$

$\$_{cseq}$ = card stock cost for sequential camera approach

$$= V_{tf} P_{pc} (V_a + V_s + V_t) V_c / 3 V_{lcm}$$

Table 5. Citation Duplication Equations (Cont'd)

2.3

T_{ktc} = keypunch time for typed cards

$$= V_{tf} \sum_{i=a, s, t} (V_{isf}/M_k + S_{cs}) V_i$$

2.4

T_{kcc} = keypunching time for cards to computer

$$= V_{tf} \left[V_c + \sum_{i=a, s, t} V_i (V_{isf} + V_{ihl} V_{ih}) \right] \left[1/M_k + S_{cs}/80 \right]$$

$\$_{ccmptr}$ = card stock cost for computer approach

$$= V_{tf} P_{pc} (V_a + V_s + V_t) \left[1 + \text{intpart}((V_c + \sum_{i=a, s, t} V_{isf})/80) \right]$$

T_{ttc} = tape typewriter input time to computer

$$= V_{tf} \left[V_c + \sum_{i=a, s, t} (V_{isf} + V_{ihl} V_{ih}) V_i \right] 1/M_t$$

Table 6
EDITING EQUATIONS

3.1

T_{etab} = time to tabulate card deck

$$= \left[\sum_{i=a, s, t} (D_{ie} + V_{ih}) V_i \right] V_{tf} / S_{tab}$$

T_{eck} = error edit times for keypunch cards to tabulator

$$= V_{tf} (V_c + \sum_{i=a, s, t} (V_{ih} V_{ihl} + V_{isf}) V_i) / M_{check}$$

T_{tcor} = time for tab corrections

$$= T_{kc} V_{error}$$

3.2

T_{ect} = time for editing for typed cards

$$= \left[\sum_{i=a, s, t} (V_c + V_{ih} V_{ihl}) V_i \right] V_{tf} / M_{check}$$

T_{ttc} = time for typing correction

$$= T_{tc} V_{error}$$

T_{ectp} = editing time for typed and punched cards

$$= \left[V_{tf} \sum_{i=a, s, t} (V_c + V_{ih} V_{ihl} + V_{isf}) V_i \right] 1 / M_{check}$$

T_{tectp} = time for typing and punching corrections

$$= (T_{tc} + T_{ktp}) V_{error}$$

Table 6, Editing Equations (Cont'd)

3.3

T_{rc} = read card time

$$= \left[V_c + \sum_{i=a,s,t} (V_{isf} + V_{ihl} V_{ih}) V_i \right] V_{tf} / 80 S_{cmc}$$

T_{rpt} = read paper tape time

$$= \left[V_c + \sum_{i=a,s,t} (V_{isf} + V_{ihl} V_{ih}) V_i \right] V_{tf} / S_{cmt}$$

T_{plt} = print listing time

$$= \left[V_c + \sum_{i=a,s,t} (V_{isf} + V_{ihl} V_{ih}) V_i \right] V_{tf} / V_{lcm} V_{cp} S_{cmp}$$

T_{wt} = write magnetic tape time (citation only once)

$$= \left[\left[V_c + \sum_{i=a,s,t} V_i (V_{isf} + V_{ihl} V_{ih}) \right] \cdot 0.25 + 7.3 \right] V_{tf} / 3,600,000$$

T_{lc} = listing check time

$$= \left[V_c + \sum_{i=a,s,t} (V_{isf} + V_{ihl} V_{ih}) V_i \right] V_{tf} / M_{check}$$

T_{rec} = read error cards

$$= V_{error} T_{rc}$$

T_{corcmp} = keypunch corrections

$$= V_{error} T_{kcc}$$

T_{rept} = read error paper tape

$$= V_{error} T_{rpt}$$

$\$_{ccmcor}$ = correction cards

$$= V_{error} \$_{ccmptr}$$

T_{ecm} = error corrections to magnetic tape, matching time

$$= (V_{tf} + V_{error} V_{td}) V_{td} / 150 \times 10^6$$

T_{rwtd} = read and write magnetic tape time (with duplications of citation information)

$$= \left[\sum_{i=a,s,t} V_i (7.3 + 0.05(V_c + V_{isf} + V_{ihl} V_{ih})) \right] V_{tf} / 3,600,000$$

Table 7

SEQUENTIAL EQUATIONS

4.1

 T_{sst} = machine sort time of tabulator cards

$$= V_{tf}/S_{sort} \sum_{i=a,s,t} D_{ic} V_{isf} C_{sort}$$

 T_{ssp} = machine sort time of sequential camera cards

$$= \left[\sum_{i=a,s,t} V_i V_{isf} \right] C_{sort} V_{tf} V_c / 3V_{lcm} S_{sort}$$

4.2

 T_{mst} = manual sort time of tabular cards

$$= V_{tf} \sum_{i=a,s,t} (M_f + D_{ie} M_v) V_i$$

 T_{msp} = manual sort time, multiple lines per card

$$= V_{tf} \sum_{i=a,s,t} (M_f + M_v) V_i$$

4.3

 D_{ir} = number of type records

$$= V_{tf} V_i$$

 D_{ir1} = type record length

$$= (V_c + V_{ih} V_{ih1} + V_{isf})$$

 D_{ip} = number of passes

$$\geq \log_2(D_{ir1} D_{ir} / 1500)$$

 D_{ipt} = tape pass time per type record pass (in microseconds)

$$= .05 D_{ir1}$$

Table 7, Sequential Equations (Cont'd)

4.3 (Cont'd)

D_{irs} = record sort time per type record (in microseconds)

$$= 10.0 + .01 D_{ir1}$$

D_{irm} = record merge time per type record pass (in microseconds)

$$= 2.9 + .028 D_{ir1}$$

T_{cs} = computer sort time

$$= \sum_{i=a,s,t} D_{ir} \left[D_{irs} + D_{ipt} + (D_{irm} + D_{ipt}) D_{ip} \right] / 3,600,000$$

Table 8

MERGING EQUATIONS

5.1

T_{sm} = collator merge

$$= (V_{mf} + V_{tf}) / S_{col} \sum_{i=a,s,t} (D_{ic} + V_{ih}) V_i$$

5.2

T_{mmt} = manual merge of one line per card

$$= V_{tf} \sum_{i=a,s,t} (M_f + D_{ie} M_v) V_i$$

T_{mmp} = manual merge, multiple lines per card

$$= V_{tf} \sum_{i=a,s,t} (M_f + M_v) V_i$$

5.3

T_{cm} = computer merge

$$= \left[\sum_{i=a,s,t} (V_{tf} + V_{mf}) V_i (D_{ipt} + D_{irm}) \right] / 3,600,000$$

Table 9
MASTER PAGE CREATION EQUATIONS

6.1

$$T_{tp} = \text{type pages time}$$

$$= (V_{mf} + V_{tf}) \left[\sum_{i=a, s, t} (V_c + V_{ih} V_{ihl}) V_i \right] / M_t$$

6.2

$$T_{sslp} = \text{time for side-by-side layout and photo}$$

$$= (V_{mf} + V_{tf}) \sum_{i=a, s, t} V_i (M_{sl} + M_{pl} / V_{cfs1})$$

6.3

$$T_{slp} = \text{time for shingle layout and photo}$$

$$= (V_{mf} + V_{tf}) \sum_{i=a, s, t} V_i (M_{sl} + M_{pl} / V_{cfs1})$$

6.4

$$T_{sct} = \text{time for sequential camera (3 lines per card)}$$

$$= \left[\sum_{i=a, s, t} V_i \right] V_c (V_{mf} + V_{tf}) / 3 V_{lcm} S_{list}$$

6.5

$$T_{scp} = \text{time for sequential camera (1 line punched cards)}$$

$$= \left[\sum_{i=a, s, t} V_i D_{ie} \right] (V_{mf} + V_{tf}) / S_{list}$$

6.6

$$T_{cp} = \text{time for card printer}$$

$$= (V_{mf} + V_{tf}) / S_{tab} \sum_{i=a, s, t} D_{ie} V_i$$

Table 9, Master Page Creation Equations (Cont'd)

6.7

$$T_{\text{cmp}} = \text{computer printout time}$$

$$= (V_{\text{mf}} + V_{\text{tf}}) / S_{\text{cmp}} \sum_{i=a,s,t} (V_c / V_{\text{lcm}} + V_{\text{ih}}) (1 + V_{\text{cms}}) V_i / V_{\text{cp}}$$

6.8

$$\$_{\text{strip}} = \text{cost of stripping headings on page master}$$

$$= P_s \sum_{i=a,s,t} V_i V_{\text{ih}} (V_{\text{tf}} + V_{\text{mf}})$$

6.9

$$T_{\text{vert}} = \text{time to convert to linofilm paper tape}$$

$$= (C_{\text{lino}} / S_{\text{recon}} + 1 / S_{\text{wricon}}) \sum_{i=a,s,t} V_i (V_c + V_{\text{ih}} V_{\text{ihl}}) (V_{\text{tf}} + V_{\text{mf}})$$

T_{lino} = time for linofilm run

$$= (V_{\text{mf}} + V_{\text{tf}}) \sum_{i=a,s,t} \left[((V_c + V_{\text{ihl}} V_{\text{ih}}) / S_{\text{lino}} + 2 V_{\text{linofi}} S_{\text{linofc}}) V_i \right]$$

T_{phot} = time for photon run

$$= (V_{\text{mf}} + V_{\text{tf}}) / S_{\text{phot}} \sum_{i=a,s,t} (V_c + V_{\text{ihl}} V_{\text{ih}}) V_i$$

T_{pvert} = time to punch tape for Photon input

$$= (V_{\text{mf}} + V_{\text{tf}}) \sum_{i=a,s,t} V_i (V_c + V_{\text{ih}} V_{\text{ihl}}) / S_{\text{cpt}}$$

Table 10
COSTS OF OFFSET PRINTING

7.0

<u>Paper Size</u>	<u>V_{copies}</u>	<u>P_{paper}</u>	<u>P_{run}</u>	<u>V_{pass}</u>	<u>V_{page}</u>	<u>P_{fm}</u>	<u>P_{fo}</u>	<u>P_{mcp}</u>	<u>P_{ocp}</u>
8 1/2"x11"	100	\$.001	\$.003	1	1	\$2.00	\$5.50	\$.024	\$.059
8 1/2"x11"	500	.001	.003	1	1	2.00	5.50	.008	.015
8 1/2"x11"	1000	.001	.003	1	1	2.00	5.50	.006	.010
11" x 17"	100	.0025	.005	1	2	----	8.00	----	.044
11" x 17"	500	.0025	.005	1	2	----	8.00	----	.012
11" x 17"	1000	.0025	.005	1	2	----	8.00	----	.008

<u>Paper Size</u>	<u>V_{page}</u>	<u>P_g</u>	<u>P_{fold}</u>	<u>P_c</u>	<u>P_{gcp}</u>	<u>P_{fcg}</u>	<u>P_{ccg}</u>
8 1/2"x11"	1	.001	.0005	.0002	.001	.0005	.0002
11" x 17"	2	.0015	.0005	.0002	.0008	.0003	.0001

The prices shown are for black ink on 20 or 16# white bond.

Table 11
 TYPOGRAPHY AVAILABLE

Output Method	output form				
	upper case		upper and lower case		
	1 font 1 type size	1 or 2 fonts 1 or 2 type sizes	1 font 1 type size	1 or 2 fonts 1 or 2 type sizes	multiple fonts & type sizes
hot type	1	1	1	1	1
photo-composition	1	1	1	1	1
type pages	1	3	1	3	3
shingle layout	1	3	1	3	3
side-by-side layout	1	3	1	3	3
sequential camera	1	3	1	3	3
tab card printer	1	2	5	5	5
computer printer	1	2	4	4 & 2	5

Key:

1. No restrictions
2. Must strip in sections with extra font or type size⁽¹⁾
3. Possible, but preparation costs increased
4. Must use special print chain
5. Not possible

(1) The assumption is made that the extra font and/or type size would be used mainly in headings. If a different type size and/or font were desired for each citation, the 2 in the table should be replaced by a 3.

- BUSINESS - DICTIONARIES (Cont'd)**
 R016.65 Special Libraries Association. *Business and trade dictionaries.* Compiled by Special committee, 1934. A. C. Mitchell, chairman.
 Classified guide to the sources of business terminology and definitions.
- BUSINESS - DIRECTORIES**
 R650.5 *Celebrity Information and Research Service, Inc.* Contact book.
 R016.65 Davis, Jarjorie Veith. *Guide to American business directories.* Public Affairs Pr., 1948. 242 p.
 Earlier edition has title "American business directories".
 G317.3 Deubel, Stefan. *Deutsch-Amerikaner von heute; deutsch-amerikanisches Adressbuch fuer die USA und Westdeutschland; der massgebende Fuehrer durch die bedeutendsten Wirtschaftlichen Unternehmungen fuer Import und Export; eine einzigartige Stuetze fuer deutsch-amerikanische Vereine und Organisationen.* Wachter un Anzeiger. 464 p. Illus., ports.
 History of Americans of German descent in the United States; their contributions to American civilization, culture, and enterprise. Includes a directory of German-American societies in the United States and a directory of German-speaking businessmen in the United States.
- R382 *Directory of American firms operating in foreign countries.* World Trade Academy Pr. *Oversize.* Library has 1955/56, 1961/62.
- R016.65 *Guide to American directories; a guide to the major business directories of the United States covering all industrial, professional and mercantile categories. A section on selected foreign directories is included.* 4th ed. Klein, 1960. 424 p. *Oversize.*
- R650.58 *International yellow pages. Las paginas amarillas internacionales. Die internationalen gelben Seiten.* International Yellow Pages, Inc. *Annual.* Consolidated yellow pages of telephone directories from 125 countries.
- R650.58 *Los Angeles business directory. Chamber of Commerce.*
- BUSINESS - HANDBOOKS, MANUALS, ETC.**
 R650.3 Braddy, Nella. *New Business encyclopedia*, edited by H. Marshall, pseud. Rev., up-to-date ed. Doubleday, 1963. 526 p. Illus., maps, tables. First published in 1930 under title "The business encyclopedia".
 Practical information for businessmen, housewives and students.
 658 *Financial handbook.* 3d ed. Ronald, 1948. Illus.
 658 Lasser, Jacob Kay. *Business executive's guide.* McGraw, 1945. 252 p.
 A check list on problems of organization, finance, taxes, and management.
- BUSINESS - INFORMATION SERVICES**
 O10 *Institute of Petroleum, London. Information and its dissemination. Report of the summer meeting of the Institute held at Harrogate, 7-10 June 1961.* Ed. by M. J. Wells. 1961. 109 p.
 Six papers by leaders in British industrial management intended to aid those who wish to establish technical information centers.
- R016.65 Newark, N. J. *Free public library. Business information and its sources.* Compiled by M. C. Manley. 1931. 32 p. With 1939 supplement. 37 p.
- R016.65 *Special Libraries Association. Guides to business facts and figures; comp. with the cooperation of the staff of the Business Branch of the Newark Public Library, Branch Librarian, M. C. Manley.* 1937.
 Indexed and descriptive list emphasizing the less known business reference sources. For other editions, see Author Catalog.
- O26.6 *Special Libraries Association. Public Business Librarians Group. Business and the public library; steps in successful cooperation*, ed. by M. C. Manley. 1940.
- R016.65 *Winner, Marian Catherine Manley. Business information Harper, 1955. 265 p.*
 How to find and use it. A bibliography covering business periodicals, books, pamphlets, and directories. Cross reference index.

TABLE 13

BUSINESS - DICTIONARIES (Cont'd)	
R016.65	Special Libraries Association. Business and trade dictionaries. Compiled by Special committee, 1934. A. C. Mitchell, chairman. Classified guide to the sources of business terminology and definitions.
BUSINESS - DIRECTORIES	
R650.5	Celebrity Information and Research Service, inc. Contact book.
R016.65	Davis, Jarjorie Veith. Guide to American business directories. Public Affairs Pr., 1948. 242 p. Earlier edition has title "American business directories".
G317.3	Deubel, Stefan. Deutsch-Amerikaner von heute; deutsch-amerikanisches Adressbuch fuer die USA und Westdeutschland; der massgebende Fuehrer durch die bedeutendsten Wirtschaftlichen Unternehmungen fuer Import und Export; eine einzigartige Stuetze fuer deutsch-amerikanische Vereine und Organisationen. Wachter un Anzeiger. 464 p. Illus., ports. History of Americans of German descent in the United States; their contributions to American civilization, culture, and enterprise. Includes a directory of German-American societies in the United States and a directory of German-speaking businessmen in the United States.
R382	Directory of American firms operating in foreign countries. World Trade Academy Pr. Oversize. Library has 1955/56, 1961/62.
R016.65	Guide to American directories; a guide to the major business directories of the United States covering all industrial, professional and mercantile categories. A section on selected foreign directories is included. 4th ed. Klein, 1960. 424 p. Oversize.
R650.58	Internacional yellow pages. Las paginas amarillas internacionales. Die internationalen gelben
658.01	Rose, Thomas Gerald. Higher management control. McGraw, 1957. 290 p. Illus. "This book was developed from three books-- 'Higher control in management', 'The internal finance of industrial undertakings', and 'Business charts'."
BUSINESS - HANDBOOKS, MANUALS, ETC.	
R650.3	Braddy, Nella. New Business encyclopedia, edited by H. Marshall, pseud. Rev., up-to-date ed. Doubleday, 1963. 526 p. Illus., maps, tables. First published in 1930 under title "The business encyclopedia". Practical information for businessmen, housewives and students.
658	Financial handbook. 3d ed. Ronald, 1948. Illus.
658	Lasser, Jacob Kay. Business executive's guide. McGraw, 1945. 252 p. A check list on problems of organization, finance, taxes, and management.
BUSINESS - INFORMATION SERVICES	
010	Institute of Petroleum, London. Information and its dissemination. Report of the summer meeting of the institute held at Harrogate, 7-10 June 1961. Ed. by M. J. Wells. 1961. 109 p. Six papers by leaders in British industrial management intended to aid those who wish to establish technical information centers.
R016.65	Newark, N. J. Free public library. Business information and its sources. Compiled by M. C. Manley. 1931. 32 p. With 1939 supplement. 37 p. Special Libraries Association. Guides to business facts and figures: comp. with the cooperation of the staff of the Business Branch of the Newark Public Library, Branch Librarian, M. C. Manley. 1937. Indexed and descriptive list emphasizing the less known business reference sources. For other editions, see Author Catalog.
R016.65	Special Libraries Association. Guides to business facts and figures: comp. with the cooperation of the staff of the Business Branch of the Newark Public Library, Branch Librarian, M. C. Manley. 1937. Indexed and descriptive list emphasizing the less known business reference sources. For other editions, see Author Catalog.
026.6	Special Libraries Association. Public Business Librarians Group. Business and the public library; steps in successful cooperation, ed. by M.

- BUSINESS--DICTIONARIES (Cont'd)**
- R016.65 SPECIAL LIBRARIES ASSOCIATION. BUSINESS AND TRADE DICTIONARIES. COMPILED BY SPECIAL COMMITTEE, 1934. A. C. MITCHELL, CHAIRMAN. CLASSIFIED GUIDE TO THE SOURCES OF BUSINESS TERMINOLOGY AND DEFINITIONS.
- BUSINESS--DIRECTORIES**
- R650.15 CELEBRITY INFORMATION AND RESEARCH SERVICE, INC. CONTACT BOOK.
- R016.65 DAVIS, JARJORIE VEITH. GUIDE TO AMERICAN BUSINESS DIRECTORIES. PUBLIC AFFAIRS PR., 1948. 242 P.
- G317.3 EARLIER EDITION HAS TITLE "AMERICAN BUSINESS DIRECTORIES".
- G317.3 DEUBEL, STEFAN. DEUTSCH-AMERIKANER VON HEUTE. DEUTSCH-AMERIKANISCHES ADRESSBUCH FUER DIE USA UND WESTDEUTSCHLAND. DER MASSGEBENDE FUHRER DURCH-DIE BEDEUTENDSTEN WIRTSCHAFT-LICHEN UNTERNEHMUNGEN FUER IMPORT UND EXPORT--EINE EINZIGARTIGE STUETZE FUER DEUTSCH-AMERIKANISCHE VEREINE UND ORGANISATIONEN. WACHTER UN ANZEIGER. 468 P. ILLUS., PORTS. HISTORY OF AMERICANS OF GERMAN DESCENT IN THE UNITED STATES. THEIR CONTRIBUTIONS TO AMERICAN CIVILIZATION, CULTURE, AND ENTERPRISE. INCLUDES A DIRECTORY OF GERMAN-AMERICAN SOCIETIES IN THE UNITED STATES AND A DIRECTORY OF GERMAN-SPEAKING BUSINESSMEN IN THE UNITED STATES.
- R107 DIRECTORY OF AMERICAN FIRMS OPERATING IN FOREIGN COUNTRIES. WORLD TRADE ACADEMY PR. OVERSIZE. LIBRARY HAS 1955/56, 1961/62.
- R016.65 GUIDE TO AMERICAN DIRECTORIES, A GUIDE TO THE MAJOR BUSINESS DIRECTORIES OF THE UNITED STATES COVERING ALL INDUSTRIAL, PROFESSIONAL AND MERCANTILE CATEGORIES. A SECTION ON SELECTED FOREIGN DIRECTORIES IS INCLUDED. 4TH ED. KLEIN, 1960. 424 P. OVERSIZE.
- R650.50 INTERNATIONAL YELLOW PAGES. LAS PAGINAS AMARILLAS INTERNACIONALES. DIE INTERNATIONALEN GELBEN SEITEN. INTERNATIONAL YELLOW PAGES, INC. ANNUAL. CONSOLIDATED YELLOW PAGES OF TELEPHONE DIRECTORIES FROM 125 COUNTRIES.
- R650.50 LOS ANGELES BUSINESS DIRECTORY. CHAMBER OF COMMERCE. OVERSIZE.
- BUSINESS--HANDBOOKS, MANUALS, ETC.**
- R650.3 BRADY, NELLA. NEW BUSINESS ENCYCLOPEDIA, EDITED BY H. MARSHALL, PSEUD. REV., UP-TO-DATE ED. DOUBLEDAY, 1963. 526 P. ILLUS., MAPS, TABLES. FIRST PUBLISHED IN 1930 UNDER TITLE "THE BUSINESS ENCYCLOPEDIA". PRACTICAL INFORMATION FOR BUSINESSMEN, HOUSEWIVES AND STUDENTS. RONALD, 1948.
- 658 FINANCIAL HANDBOOK. 3D ED. RONALD, 1948. ILLUS.
- 658 LASSER, JACOB KAY. BUSINESS EXECUTIVE'S GUIDE. MCGRAW, 1949. 252 P. A CHECK LIST ON PROBLEMS OF ORGANIZATION, FINANCE, TAXES, AND MANAGEMENT.
- BUSINESS--INFORMATION SERVICES**
- 010 INSTITUTE OF PETROLEUM, LONDON. INFORMATION AND ITS DISSEMINATION. REPORT OF THE SUMMER MEETING OF THE INSTITUTE HELD AT HARROGATE, 7-10 JUNE 1961. ED. BY M. J. WELLS. 1961. 109 P.
- R016.65 SIX PAPERS BY LEADERS IN BRITISH INDUSTRIAL MANAGEMENT INTENDED TO AID THOSE WHO WISH TO ESTABLISH TECHNICAL INFORMATION CENTERS.
- R016.65 NEWARK, N. J. FREE PUBLIC LIBRARY. BUSINESS INFORMATION AND ITS SOURCES. COMPILED BY M. C. MANLEY, 1931. 32 P. WITH 1939 SUPPLEMENT. 37 P.
- R016.65 SPECIAL LIBRARIES ASSOCIATION. GUIDES TO BUSINESS FACTS AND FIGURES. COMP. WITH THE COOPERATION OF THE STAFF OF THE BUSINESS BRANCH OF THE NEWARK PUBLIC LIBRARY, BRANCH LIBRARIAN, M. C. MANLEY. 1937. INDEXED AND DESCRIPTIVE LIST EMPHASIZING THE LESS KNOWN BUSINESS REFERENCE SOURCES. FOR OTHER EDITIONS, SEE AUTHOR CATALOG.
- 026.6 SPECIAL LIBRARIES ASSOCIATION. PUBLIC RELATIONS LIBRARIANS GROUP. BUSINESS AND THE PUBLIC LIBRARY. STEPS IN SUCCESSFUL COOPERATION. ED. BY M. C. MANLEY. 1940.
- R016.65 WINNER, MARIAN CATHERINE MANLEY. BUSINESS INFORMATION. HARPER, 1955. 265 P. HOW TO FIND AND USE IT. A BIBLIOGRAPHY COVERING BUSINESS PERIODICALS, BOOKS, PAMPHLETS, AND DIRECTORIES. CROSS REFERENCE INDEX.

Table 15

SUMMARY OF FIRST YEAR COSTS ESTIMATES
FOR STANFORD UNDERGRADUATE LIBRARY ⁽¹⁾

Operation	Method					
	Manual	Sequential Camera	Unit Record	Upper Case	Upper & Lower Case	Photo- composition
1. Citation	\$ 2,800	\$ 2,800	\$ 2,800	\$ 2,800	\$ 2,800	\$ 2,800
2. Duplication	6,800	8,240	6,005	4,440	4,440	4,440
3. Editing	4,300	4,480	2,390	2,195	2,370	2,370
4. Sorting	1,000	1,000	735	430	430	430
5. Merging	-	-	-	-	-	-
SUBTOTAL	<u>\$14,900</u>	<u>\$16,520</u>	<u>\$11,930</u>	<u>\$ 9,865</u>	<u>\$10,040</u>	<u>\$10,040</u>
6. Page Creation	525	255	880 ⁽³⁾	805 ⁽³⁾	1,315 ⁽³⁾	9,480
7. Reproduction	26,200 ⁽²⁾	14,700	14,700	14,700	14,700	14,700
SUBTOTAL	<u>\$26,725</u>	<u>\$14,955</u>	<u>\$15,580</u>	<u>\$15,505</u>	<u>\$16,015</u>	<u>\$24,180</u>
TOTAL	\$41,625	\$31,475	\$27,510	\$25,370	\$26,045	\$34,220

- (1) These figures represent direct costs before the allocation of nonproductive time or of overhead.
- (2) Reproduction costs are higher than for other methods due to lower entry density on the page.
- (3) Cost includes \$480 for stripping in 3,000 subject headings in a special font, such as bold face.

Table 16

SUMMARY OF SECOND YEAR COSTS ESTIMATED
FOR STANFORD UNDERGRADUATE LIBRARY

<u>Operation</u>	<u>Method</u>					
	<u>Manual</u>	<u>Sequential Camera</u>	<u>Unit Record</u>	<u>Upper Case</u>	<u>Computer Upper & Lower Case</u>	<u>Photo- composition</u>
1. Citation	\$ 700	\$ 700	\$ 700	\$ 700	\$ 700	\$ 700
2. Duplication	1,700	2,060	1,500	1,110	1,110	1,110
3. Editing	1,075	1,120	595	550	590	590
4. Sorting	250	250	185	110	110	110
5. Merging	1,000	1,000	428	40	40	40
SUBTOTAL	<u>\$ 4,095</u>	<u>\$ 5,130</u>	<u>\$ 3,405</u>	<u>\$ 2,510</u>	<u>\$ 2,550</u>	<u>\$ 2,550</u>
6. Page Creation	655	315	1,100	1,005	1,645	11,850
7. Reproduction	32,750	18,300	18,300	18,300	18,300	18,300
SUBTOTAL	<u>\$33,405</u>	<u>\$18,615</u>	<u>\$19,400</u>	<u>\$19,305</u>	<u>\$19,945</u>	<u>\$30,150</u>
TOTAL	\$37,500	\$23,745	\$22,805	\$21,815	\$22,495	\$32,700

Table 17

SUMMARY OF FIFTH YEAR COSTS ESTIMATED FOR STANFORD
UNDERGRADUATE LIBRARY

Operation	Method					
	Shing- ling	Sequen- tial Camera	Tabu- lating	Computer		
				Upper Case	Upper & Lower Case	Photo- compo- sition
1. Citation	\$ 700	\$ 700	\$ 700	\$ 700	\$ 700	\$ 700
2. Duplication	1,700	2,060	1,500	1,100	1,100	1,100
3. Editing	1,075	1,120	595	550	590	590
4. Sorting	250	250	185	110	110	110
5. Merging	1,000	1,000	425	70	70	70
SUBTOTAL	\$ 4,095	\$ 5,130	\$ 3,405	\$ 2,540	\$ 2,580	\$ 2,580
6. Page Creation	1,050	510	1,760	1,610	2,630	18,960
7. Reproduction	52,400	29,400	29,400	29,400	29,400	29,400
SUBTOTAL	\$53,450	\$29,910	\$31,160	\$31,010	\$32,030	\$48,360
TOTAL	\$57,545	\$35,040	\$34,565	\$33,550	\$34,610	\$50,940

Table 18

TENTATIVE DISTRIBUTION LIST OF BOOK CATALOGS
Stanford University Undergraduate Library

- 4—Second floor pavilions in Undergraduate Library
 - 2—Second floor lobby, in front of staff service center
 - 4—Third floor pavilions
 - 2—Fourth floor central area, north and south of light well
 - 1—Reference desk
 - 2—Reference and Librarian's offices
 - 1—Audio Library service desk
-
- 16—Total in Undergraduate Library
 - 2—Main Library union catalog (on north and south counters)
 - 3—Main Library service desk (Circulation, Reference, and Government Documents)
 - 9—Departmental libraries (Engineering, Education, Music, Art, Physics, Mathematics, Biology, Earth Sciences, and Chemistry)
 - 2—Catalog Division and Gift Department
 - 3—Administrative offices (Dean of Undergraduate Instruction, Humanities and Sciences, and Western Civilization Office)
 - 2—Library offices (Director and Chief of Acquisition Division)
 - 13—Unassigned (to Overseas Campuses or campus residences?)

Table 19

COMPARATIVE COSTS: 3 CARD CATALOGS AND 50 BOOK CATALOGS

	Year 1: Basic Collection, 40,000 Titles		Year 2: 50,000 Titles		Year 3: 80,000 Titles		Year 7: 100,000 Titles	
	Card Cat.	Book Cat.	Card Cat.	Book Cat.	Card Cat.	Book Cat.	Card Cat.	Book Cat.
A. Preparation of entries:								
1. Card Cat.: Typing of masters; adding headings to cards.	\$11,200	\$11,060	\$2,800	\$ 2,765	\$2,800	\$ 2,765	\$2,800	\$ 2,765
2. Book cat.: Key punching.								
B. Sorting:								
1. Card: Filing cards.								
2. Book: Machine sorting; page creation; cumulative monthly list of new books.	4,800	3,050	2,400	3,312	2,400	4,272	2,400	4,939
C. Reproduction:								
1. Card: Offset reproduction of cards.	10,800	4,324	2,700	5,405	2,700	8,649	2,700	10,811
2. Books: Offset reproduction of pages.								
D. Equipment:								
1. Card: Catalog cases	7,200	3,750	1,800	938	1,800	938	1,800	938
2. Book: Binders								
E. Services:								
Book: Programming	—	3,000	—	—	—	—	—	—
F. Special charges:								
Book: Attachment to computer for upper and lower case typeface.	\$34,000	\$25,184	\$9,700	\$12,420	\$9,700	\$16,624	\$9,700	\$19,453
TOTALS	—	6,080	—	2,880	—	2,880	—	2,880
TOTALS	\$34,000	\$31,264	\$9,700	\$15,300	\$9,700	\$19,504	\$9,700	\$22,333

The Bitter End

ASHBY J. FRISTOE
Serials Section
University of North Carolina Library
Chapel Hill

AS THE FLOOD OF NEW BOOKS increases, so too does the effort required to process the books. In a large university library a not inconsiderable part of this processing is taken up by searching. In searching, a skilled, well-trained clerk takes an order card for a title, frequently not in correct bibliographic form, and attempts to locate the exact title in LC form in a standard bibliographic tool. Having located it, he then corrects the title on the order card so that he can determine whether the library already owns the book or has it on order. Rigorous attention to detail not only prevents duplication, it ensures that the dealer can identify and supply the specific book ordered.

The searching process, as described above, appears fairly simple. Unfortunately, this is not always true. Regardless of the number of the tools the library might have, it is most unlikely that all titles will be located in every search. Furthermore, searching in all the bibliographic tools available in a large research library would be very costly.

Searching to the bitter end is costly or may be unnecessary, and it would appear that there must be an optimum number of tools to be searched. In addition, the sequence in which bibliographic tools are searched has considerable bearing on the results of the search.* Without belaboring the point, it is fruitless to search for titles that have not yet been published, in bibliographic tools which list only titles already published. Also, if a library receives and files Library of Congress proof slips and if they arrive before the monthly issues of the *National Union Catalog*, it is a waste of time to search the monthly issues of the *NUC*.

Also bearing on the question of searching sequence is the fact that it is best to search in the most productive place first, ending sequentially with the least productive place. If, for instance, 60 of 100 titles were found in the monthly issues of *NUC* and only 20 of the same titles in the LC proof-slip file, it would be wrong to search the full 100 titles in the LC proof-slip file first. The former sequence adds up to 140 searches, while the latter demands 180 searches for the same yield.

The question of the depth of searching also has relevance because all searches, even if unsuccessful, must end somewhere. The problem is to determine where the search should end. If there were 100 bibliographic

* Editor's note: For comparative purposes, see Lazorick, Gerald J. and Minder, Thomas L. "A Least Cost Searching Sequence." *College and Research Libraries*, 25: 126-28. March 1964.

tools to be searched and if experience had demonstrated that one could expect to find 79 titles in one tool, 19 in another, and the remaining 2 buried somewhere in the other 98 tools, then it seems reasonable to limit the search to the first two productive tools.

Another element of the searching problem that looms large in the minds of many librarians is the verification of entry. Much extended searching is done in the name of "verification of entry"; much of it is pointless, through undoubtedly strangely satisfying. It is really not likely that a dealer's desire to sell will be seriously affected by an order not in the correct LC form. It is almost certain that he will send the correct book whether it is written:

Nabokov, Vladimir Vladimirovich, 1899-
Lolita. New York, Putnam, 1958.

or

Nabokov, Vladimir V.
Lolita. New York, Putnam, 1958.

or

Nabokov, V. V.
Lolita. New York, Putnam, 1958.

or even

Nabokov, V. Vladimirovich
Lolita. New York, Putnam, 1958.

Furthermore, when the card catalog shows a 1958 Putnam edition on hand, any good searcher would mark this as a duplicate.

The many "Smith"-type entries and confusing corporate author entries are potential problems, but many of these can be screened out from the routine searching process. It is true that, without a standardized form of author entry, some scattering of orders in the order file may occur for the same title, and some duplication could occur. This is not always crucial. What is important is the determination of a proper balance between effort and product. The searching process should be designed for the large bulk of uncomplicated entries; simple entries should not be pressured into a complicated process designed to take care of the exceptional and complex.

To find answers to the problems of depth and sequence of searching, it was decided to take one group of 100 order cards, picked at random from current (1965) American imprints, search them in standard bibliographic tools, record the information as to where located, and from this information determine the optimum searching sequence and depth. American imprints were chosen because they represent one of the largest single categories of material ordered for the library in which this study was made, and because older imprints are much more frequently located in the cumulated *NUC* volumes, and therefore pose less of a problem.

Each title was searched in each bibliographic tool and the results kept in tabular form. Many of the titles were found in each of several tools. All 25 titles found in *NUC* were included in the 40 titles found in

the LC proof-slip file. The bibliographic tools searched and the number of titles found in each tool are as follows:

<i>CBI</i> (<i>Cumulative Book Index</i>) (March and April 1965)	37
LC proof-slip file	40
<i>NUC</i> (Jan. and Feb. 1965)	25
<i>BPR</i> (<i>American Book Publishing Record</i>) (Oct., Nov., Dec. 1964 and Jan., and Feb. 1965)	14
<i>PW</i> (<i>Publishers' Weekly</i>) (1, 8, 15, 22, 29 Mar. 1965)	13
<i>PWA</i> (<i>Publishers' Weekly Announcements</i>) (Mar. through July 1965 Interim Index to Forthcoming Books)	33

One difference between *NUC* and the LC proof-slip file which might have some bearing on the results of searching is the fact that, whereas the cooperative copy prepared by a large number of American libraries appears in *NUC*, it is not included in the LC proof slips. This would, of course, tip the scales in favor of searching first in *NUC*. Interestingly, of the 100 titles searched in this study, not one of the 25 found in *NUC* was cooperative copy.

When the 100 titles were searched through all six tools in a random sequence, the results shown in Sequence A were obtained.

SEQUENCE A

<i>Sequence</i>	<i># Searched</i>	<i># Found</i>	<i># of Units per Tool</i>	<i>Total # of Searches Made</i>
1st—LC PS	100	40	1	100
2nd— <i>NUC</i>	60	0	2	120
3rd— <i>BPR</i>	60	1	5	300
4th— <i>PW</i>	59	0	5	295
5th— <i>PWA</i>	59	26	1	59
6th— <i>CBI</i>	33	4	2	66
		71		940

The figures in the right hand column are the result of multiplying the number of issues of each bibliographic tool in which the search was conducted by the number of titles searched. For instance, in the third step, when 60 cards remain to be searched in *BPR*, there are 5 issues of *BPR*, Oct. 1964 through Feb. 1965, in which the 60 cards must be searched. This represents a total of 300 separate searches to be made just in step 3.

This "Bitter End" search located 71 titles after 940 searches, but a detailed examination of the results revealed that, with one exception, every title found in *NUC*, *BPR*, and *PW* was also found in the LC proof-slip file. (The one exception was found in *CBI*). It was obvious that these three tools should be eliminated. This was done, and searching in the remaining tools by varied sequences yielded the results shown in Sequences B-G.

SEQUENCE B

<i>Sequence</i>	<i># Searched</i>	<i># Found</i>	<i># of Units per Tool</i>	<i>Total # of Searches Made</i>
1st—LC PS	100	40	1	100
2nd—PWA	60	26	1	60
3rd—CBI	34	5	2	68
		—		—
		71		228

SEQUENCE C

<i>Sequence</i>	<i># Searched</i>	<i># Found</i>	<i># of Units per Tool</i>	<i>Total # of Searches Made</i>
1st—LC PS	100	40	1	100
2nd—CBI	60	9	2	120
3rd—PWA	51	22	1	51
		—		—
		71		271

SEQUENCE D

<i>Sequence</i>	<i># Searched</i>	<i># Found</i>	<i># of Units per Tool</i>	<i>Total # of Searches Made</i>
1st—PWA	100	33	1	100
2nd—LC PS	67	33	1	67
3rd—CBI	34	5	2	68
		—		—
		71		235

SEQUENCE E

<i>Sequence</i>	<i># Searched</i>	<i># Found</i>	<i># of Units per Tool</i>	<i>Total # of Searches Made</i>
1st—PWA	100	33	1	100
2nd—CBI	67	27	2	134
3rd—LC PS	40	11	1	40
		—		—
		71		274

SEQUENCE F

<i>Sequence</i>	<i># Searched</i>	<i># Found</i>	<i># of Units per Tool</i>	<i>Total # of Searches Made</i>
1st—CBI	100	37	2	200
2nd—PWA	63	24	1	63
3rd—LC PS	39	10	1	39
		—		—
		71		302

SEQUENCE G

<i>Sequence</i>	<i># Searched</i>	<i># Found</i>	<i># of Units per Tool</i>	<i>Total # of Searches Made</i>
1st—CBI	100	37	2	200
2nd—LC PS	63	12	1	63
3rd—PWA	51	22	1	51
		—		—
		71		314

An examination of Sequences B through G reveals that Sequence B produced the 71 titles for the least effort. Sequence D is almost as good as Sequence B, but the fact that only 26 of the titles found in *PWA* had not yet been cataloged by the Library of Congress favors B over D.

Sequence B is an improvement over Sequence A by a factor of four. Using an estimate of 30 seconds per search and a wage scale of \$1.90 per hour for a searcher, it costs \$3.60, or 5¢ per title, to find the 71 titles using Sequence B. In contrast, it costs \$14.75, or 20¢ per title, to find them using Sequence A.

If the library ordered 10,000 current American titles per year, and if the search were made to the "bitter end," the searching would cost about \$2,000 per year as opposed to \$500 for Sequence B.

Some unpublished imprints may be ordered under this system without absolute verification, but these imprints might be ordered in any case even if they could not be located in the "bitter end" search. As a matter of fact, many unverified imprints are ordered without duplication occurring. As for titles found in *PWA* and ordered without verification, by the time they arrive from the dealer, the proof slips will, in many instances, already have arrived for use by the cataloger. Also, it is relatively easy for a trained searcher to put in correct LC form a title which cannot be found during the searching process. It is certainly far less expensive than a search to the "bitter end" justified either on the basis of ensuring the title is in correct LC form, or just because many different bibliographic tools are available in the library.

The above study suggests that for current American imprints ordered for a large university library the optimum searching depth is three bibliographic tools arranged in the sequence, LC proof-slip file, *Publishers' Weekly Announcements*, and *Cumulative Book Index*.

COSATI TASK FORCE ON NATIONAL SYSTEMS

William Knox, Office of Science and Technology, has designated Foster E. Mohrhardt, Director of the National Agricultural Library and a member of the Committee on Scientific and Technical Information of the President's Office of Science and Technology, as the library liaison representative for the COSATI Task Force on National Systems. Mr. Knox has asked Mr. Mohrhardt to serve as the channel for supplying information to the entire library field, and in addition to serve as a focal point for gathering information from librarians.

IN THE MAIL

A CHANGE IN THE RULE FOR ENTERING MIDRASHIC LITERATURE

When Lucile Morsch of the Library of Congress mentioned to me in March of 1965 that the Library of Congress was reconsidering rule #35A(6) concerning midrashic literature, I was most disturbed. Thereafter we received *Bulletin* #70 of the Cataloging Service dated June 1965 which informed us that we indeed were to "delete the entire rule." From now on midrashic literature will be entered "under its own uniform title." In fact that means that Midrash. Sifre. will now be entered under Sifre. etc.

When I was at the Hebrew University in Jerusalem this August I had a chance to discuss it with a number of their librarians including especially Shlomo Shunami, author of the *Mafteah hamaftehot*. We felt that although midrashic literature is not the same as Bible it should be entered under the generic title: Midrash.

I also spoke with a number of specialists and librarians in this country such as Norman Bronznick of Rutgers University at New Brunswick, Charles Berlin of Harvard College Library, and Jacob I. Dienstag of Yeshiva University Libraries. The common consensus was that it would be confusing to the reader to enter under "uniform title."

I should also point out that both major reference works, the *Jewish Encyclopedia*, 1960 ed., and the *Encyclopedia Judaica*, Berlin ed. include all of the midrashim under Midrash and Aggadisches Literatur respectively.—*Sheldon R. Brunswick, Semitics Librarian & Lecturer, Department of Near Eastern Studies, Brandeis University Library, Waltham, Mass.*

RUTGERS SEMINAR

Dr. Hans Selye will discuss his Symbolic Shorthand System in the sixth of the Rutgers seminar series on March 7 and 8, 1966. The Symbolic Shorthand System was originally developed for coding and filing literature on stress and endocrinology, but it has general applicability to other fields of medicine and physiology.

The Rutgers Seminars on Systems for the Intellectual Organization of Information are held under a grant from the National Science Foundation. The investigation is intended to examine various information retrieval methods individually and to provide a series of descriptions which will be useful in the selection of systems for particular purposes.

For further information on the seminars write to: Dr. Susan Artandi, Assistant Professor, Graduate School of Library Service, Rutgers—The State University, New Brunswick, N. J. 08903.

THIRD EDITION OF UNION LIST OF SERIALS

Announcement has just been made that the third edition of the *Union List of Serials in Libraries of the United States and Canada* is available as of February 1 from the H. W. Wilson Company, 950 University Avenue, Bronx, New York 10452. It is "sturdily bound" in five large folio volumes and is priced at \$120. (A limited number of copies in unbound, folded sheets, are available—at the same price—until May 1, 1966, or until the supply is exhausted.)

RTSD President's Report, 1964 / 65

PAUL S. DUNKIN, *President*

A President of RTSD writes his Annual Report in sackcloth and ashes. For he must now confess openly what he has known privately for a long time: The Division's work—especially the dirty work—has been done by a lot of other people while the President has sat on a high hill and watched.

First among these other people is the Division's Executive Secretary. She keeps the President in the path he should go. Letters and carbon copies of letters stream from her office. She knows how it was done last year and the year before and the year before that, and she has ideas about how it should be done this year. And back of the letters and the ideas—even the ideas the President does not like—there is a person, a warm, friendly person with a vision of what RTSD could become. All hail to Elizabeth Rodell.

Then there is the Division's Vice President. She, like the President, is new to this rather intricate business. She is going through the initiation he went through last year. They share their problems, and she indulges him in his little notes written "in haste" about what he did last year. Meanwhile she is making her committee appointments; perhaps this is the most important thing a President or Vice President ever does. For she will be President only one year; there will be little she can do in that time to change the course of events. But her committee people will be there for several years; who is to say when her influence will end? At Midwinter the President fails to show; the Vice President must carry on the Division's business for him. She does nobly. Just a few weeks before Detroit she learned that a sudden, serious illness will keep her from serving as President. I was shocked and dismayed; Jane Ganfield is wonderful.

The Board of Directors is our Congress. There are no filibusters. Indeed, I sometimes wonder if the Board members are unruly enough. Perhaps the reason is that four of them, the Section Chairmen, serve for only one year—hardly long enough to become familiar with the Board's problems. In any event, I am grateful for their cooperation.

And now to the RTSD Committees. Because I am no great admirer of classification, I present them alphabetically. Of their accomplishments I record only what appeals to me. No doubt some other person would list other things. Some of these people have been mighty busy.

RTSD COMMITTEES: Book Catalogs (Ian Thom, Chairman) Sponsored a program at St. Louis; later published in *LRTS*. Studied the Hayes-Shoffner report *Economics of Book Catalog Production* and pre-

pared an abstract-article to be submitted to *LRTS*. Started work on a list of on-going book catalogs started since World War II.

Bookbinding (Stephen Ford, Chairman) The Committee's idea of developing performance standards is now an LTP project with three Committee members on the Project's Advisory Committee. Field testing of both class A and publishers' bindings will end this summer, and final report may be ready by January 1966. Other chores have included study of standardizing library binding routine slips, improving quality of paperbound books, etc.

History of Technical Services Librarianship (Andrew Osborn, Chairman) Recommended that key libraries be encouraged to sponsor histories of their technical services, and that short biographies of individuals such as Charles Martel and Margaret Mann be written for publication in *LRTS* or elsewhere.

Organization Committee (James Skipper, Chairman) Approved statements of function for committees on (1) Bibliography of Bibliographies of Serials; (2) Serials Holdings Information Survey; (3) Duplicates Exchange Union; (4) Book Disposal; (5) Acquisitions Policy; (6) Training for Acquisitions Librarians; (7) Technical Services Costs; (8) Regional Processing.

Public Documents (Thomas Shaw, Chairman) RTSD representatives on this joint committee with RSD participated in the year's work, which included the preparation of a directory of documents librarians and of a list of Non-GPO Imprints to demonstrate the value of many of these publications to depository libraries. They sponsored a meeting at Detroit; papers to be published in *LRTS*.

Planning Committee (Felix Reichmann, Chairman) Drew up a plan for a national library system from the standpoint of technical services. Considered other projects.

Regional Planning (Peter Hiatt, Chairman) Preparing a leaflet or article on "General Guidelines for Establishing a Regional Processing Center." Sponsoring an article on cost analysis as applied to such centers.

Resources Committee (Gordon Williams, Chairman) This Committee continued to operate through its two subcommittees. The *Subcommittee on the National Union Catalog* has been considering the problem of publishing the NUC of Pre-1956 imprints, which are complex because of the size of the project, the necessity to edit the cards, and the relation of such publication to the possible automation of the NUC. This Spring the Committee unanimously decided to publish the *Pre-1956 Imprints Catalog* in book form as quickly as possible, while leaving the door open for later conversion to machine readable form.

Subcommittee on Micropublishing (David Kaser, Chairman) Much discussion of the evaluation of microform publishing projects and decision to solicit an article to enumerate major principles by which such projects should be judged. An index was prepared for the *Microfilm Clearing House Bulletin*.

School Library Technical Services Committee (Milbrey Jones, Chair-

man) Cooperated with American Association of School Librarians to produce a bibliography on "School Libraries Streamlining for Service." Assumed responsibility for maintaining a list of school systems having some form of central processing services for school libraries.

Technical Services Coordinating Routines Survey (Richard Dougherty, Chairman) Developed a questionnaire and pre-tested it by sending it to a few selected libraries.

Technical Services Cost Ratio Committee (Helen Welch, Chairman) Continued tests of the idea of a Technical Services Cost Ratio. Recommended a new standing Committee on Technical Services Costs, which was approved.

Several people serve RTSD as representatives to other committees and groups: Joseph H. Treyz (*ALA Membership*): a mighty busy man; his zeal and his good works do us proud.

John Fall (*ASD Publishers Liaison*): attended two meetings with subjects ranging from censorship to paperbacks to book discussion broadcasts to the Detroit Conference—and beyond.

Carlyle J. Frarey (*American Standards Association, Z39*): another two-meeting group with deliberations on documentation, information retrieval, origin, evolution and future of Z39, and reports of various important sub-committees.

Benjamin A. Custer (*US Book Exchange*): distribution to paying libraries has more than doubled, and total distribution is 84 percent of total distribution in 1963 when two thirds of the total went to non-paying libraries supported by FID. Margaret Brown and David Weber represented RTSD on the Program Committees for LAD's Preconference Institute on Library Buildings.

RTSD Acquisitions Section Annual Report, 1964 / 65

ALICE D. BALL, *Chairman*

The Annual Report of the Chairman of the Acquisitions Section for 1964/65 consists almost entirely of an account of the varied and energetic work of the very active committees of the Section. Although the Chairman was able to help to a small extent in the activities of some of these bodies, the effective results of the year's work were almost entirely due to their own dedicated services on behalf of the Section and its interests.

Policy and Research Committee

Under the Chairmanship of David Kaser, the Policy and Research Committee discussed, at the annual and midwinter meetings, numerous suggestions which had been offered to them for projects to be considered

for action by subcommittees of the Section. Some of these were also discussed through correspondence during the year. Three projects were chosen and recommended for committee action. As approved by the Organization Committee of RTSD, these three are indicated in the function statements of the committees to be appointed.

Book Disposal Committee, ad hoc, three members: To draft for publication a brochure to be used by the public in making decisions concerning the disposition of their books.

Acquisitions Policy Committee, ad hoc, five members: To collect written acquisitions policies from all types of libraries for deposit with the Division Executive Secretary, and to prepare for publication a bibliography of the collection.

Training for Acquisitions Librarians Committee, ad hoc, five members: To prepare for publication an analysis of desirable formal training requirements for acquisitions librarians for comparison with the curricula of accredited library schools.

Bookdealer-Library Relations Committee

The dramatic climax of this committee's work for the year came with the attendance of Carl Jackson, its Chairman, at the trial of James Rizek and Richard Caverly in Scranton, Pennsylvania, April 20-May 6, 1965. Evidence prepared by the Committee and numerous cooperating librarians was responsible in large part for a new indictment of these two persons in 1965, after a previous attempt had fallen through, on the charges that they bilked libraries through a scheme which was supposed to provide microfilm of periodical files in exchange for bound volumes contributed by the libraries. The two accused persons were convicted on one count each, with a new trial to consider five other charges.

The Committee, in a second major undertaking, revised a proposal for a grant application to conduct a study of book buying methods for libraries in systems with central purchasing agents. The revised proposal, which was approved for foundation approach by the ALA Executive Board in the Spring, covers a matter which the Committee has found to be of pressing interest to many libraries.

Cost of Library Materials Index Committee

This Committee was unfortunate enough to lose an energetic Chairman, Hyman Kritzer, in midyear, because of the pressure of his other duties. It was fortunate in gaining Marietta Chicorel as Chairman for the second half of the year. The Acquisitions Section and librarians in general are fortunate that the result of this change in leadership has been not a diminution of activity but rather a double portion of accomplishments.

During the first part of the year it was possible with the help of many contributing librarians to compile book price indexes in all categories for the U. S. Consumer Price Index base years of 1957-59, so that all figures

published in 1965 were revised to these years. With the cooperation of the Bowker Company, the various articles and tables on cost indexes were published in the *Bowker Annual* and *Publishers' Weekly* as well as in other journals.

Under the Chairmanship of Miss Chicorel, an article reviewing cost indexes for library materials is being published in the June *Wilson Library Bulletin*. The Committee is now working, through its members and volunteers, on price indexes for recordings, paperbacks, Japanese books, and Canadian library materials. The regular indexes for 1965 are being prepared for publication in the July *Library Journal*, with the value of this yearly compilation attested to, not only by its many library users but by the fact that they now serve regularly as evidence in Congressional hearings.

The Committee is now planning to apply to PEBCO for funds to cover a Use Study of Library Materials Price Indexes, and a test of the questionnaire prepared for this study is being made at the Annual Meeting of RTSD this week.

Reprinting Committee

In another dramatic and far-reaching action, the Reprinting Committee under John Fall's Chairmanship negotiated with Oceana Publications in New York and the Boards of ALA and RTSD to effect a turnover of the Reprint Expediting Service *Bulletin* to the commercial publisher.

The reason behind this action was the increasingly complex and useful work being done in the *Bulletin* by the Committee, the Editor, Sam Williams, and the contributors. Oceana made an offer to publish the *Bulletin*, keeping the standards maintained by the Committee's administration, and the offer came at a time when it was becoming increasingly evident that the volunteer or half-time work of those handling the publication could not continue without great difficulty. The turnover therefore attests to the professional quality of the publication in that it now must of necessity become professional in the publishing as well as the editorial aspects. Fortunately, Sam Williams has been retained as editor.

During this Conference meeting the Committee will explore what its future should be, and will recommend its findings to the Chairman of the Acquisitions Section for necessary action and possible consideration by the RTSD Organization Committee.

Committee to Revise the List of International Subscription Agents

As a joint committee, this Committee reports to both the Serials and Acquisitions sections. Elizabeth Norton, 1964/65 Chairman, reported that as evidence of the value of its work in the past, 1500 copies of *International Subscription Agents* have been sold by the ALA Publishing Department. The Committee is now discussing the advisability of bringing the directory up to date in a revised edition.

Committee on U. S. Congress and Conferences Without Fixed Headquarters

Mary Kahler as Chairman of this second joint committee reported that the principal area of need for bibliographic control lies in the non-scientific fields in the area of congresses and conferences without fixed headquarters, and the discussions and correspondence of the committee members has been aimed at this area of need.

Conclusion

The Chairman wishes to reiterate her admiration for the accomplishment of these manifold and vital activities of the Section during the year. She is pleased that her one major activity as Chairman has been to secure the services of William W. Bennett, Librarian of the Middle East Technical University in Ankara, Turkey, as speaker for the program meeting of the Section.

RTSD Cataloging and Classification Section Annual Report, 1964 / 65

JENNETTE E. HITCHCOCK, *Chairman*

The Cataloging and Classification Section in its sixty-fifth year of corporate existence is progressively strong in membership, now half of 65 times as many as the 125 persons gathered at the founding meeting during the 1900 ALA Conference. It grows with the continuity of committee work and cooperation with allied committees and organizations, and with the impetus of new movements and ideas.

The Classification Committee this year has designated two of its members to cooperate informally with the Music Library Association on the development of a classification scheme for phonorecords. This is action subsequent to 1964 correspondence between MLA and the Executive Committee on the possibility of a joint committee. Some years ago the Classification Committee worked with the Special Libraries Association in spurring the collection of special classification schemes, and this year again is in correspondence with them for a renewal of their endeavors.

Publication of the Committee's "Types of Classification Available to New Academic Libraries," prepared at the suggestion of the Cataloging Policy and Research Committee, has stimulated letters with comments complimentary and critical, which have contained additional information useful to the Committee. On the agenda in the talking stage are: (1)

possibilities of sponsoring an Institute on the LC Classification, (2) potentialities for adapting existing classification schemes to mechanization systems, and (3) once again, the feasibility of revising Merrill's *Code for Classifiers*.

The Descriptive Cataloging Committee at the St. Louis Conference held the last of its series of intensive full-day meetings on revisions of the *Rules for Descriptive Cataloging in the Library of Congress*. This program of intensive work on changes being presented by the Library of Congress began in early 1963. The scope of the program was broadened with the decisions made at CCS meetings during the 1964 Midwinter Conference to include rules for non-book materials in the revised code. The program was amplified also when the British Descriptive Cataloging Rules Subcommittee gained momentum in its code revision work and began studying the RDC Rules and participating in the American review. The revision work has been most commendably executed and there has been established a tradition of high caliber for the future when, after publication of the revised code, this Committee becomes responsible for acting on all recommendations, entry and description, for additions and changes in the new Code.

In addition to RDC revision work continuing throughout the year by correspondence and some minor questions, the Committee has approved a transliteration scheme for Church Slavic submitted by the Library of Congress. At present it is seeking opinions on tables for the transliteration of non-Slavic languages written in the Russian alphabet.

The Subject Headings Committee has directed primary attention to the need for a list of juvenile subject headings based on current school usage. The extent to which libraries feel it is necessary to adapt present standard headings when cataloging for children's collections, in both school and public libraries, had been brought to the attention of ALA Headquarters in May by an outside agency. Similar dissatisfaction from another agency had been expressed to the Subject Headings Committee. The situation was discussed by the Executive Committee at its June 29 and June 30 meetings in St. Louis and during this year the Subject Headings Committee has been actively pursuing the matter. Invaluable cooperation and help have been received from the Newark Public Library which has done extensive work for its own use. The RTSD School Libraries Technical Services Committee has been consulted. Recommendations for further action should now be forthcoming.

A sub-committee has been formed to compile a bibliography of subject heading theory. The full Committee—and all colleagues—continue to be concerned at the delays in publication of the seventh edition of the LC subject headings list and in finding an effective way of issuing additions and changes.

The Herculean Catalog Code Revision Committee has been moving mountains this year, as will become evident with the 1966 publication of the new Code. There was a British delegation of five in attendance at meetings held during ALA Midwinter Conference, and it was felt that

the substantial agreement on rules of entry would make it possible to publish the Code as the "Anglo-American Catalog(u)ing Rules."

The Cataloging Policy and Research Committee met in October at the University of Chicago and in May at the Library of Congress as well as during ALA Conferences. They have been concentrating on the promotion of a national system of centralized cataloging and on automation in libraries. They have been studying and discussing the latest published reports in these areas, and they have had participating at their meetings several specialists active in this work.

The Executive Committee at ALA Midwinter Conference, with recommendation and approval from the Cataloging Policy and Research Committee, endorsed the plan outlined in "A National Program for Library Support of Research and Scholarship," drawn up by the Association of Research Libraries. A resolution to this effect was sent to the ALA Legislation Committee.

The Bylaws Committee, upon request of the Executive Committee in a prior year, has formulated an amendment which will provide the mechanism for the formation and operation of discussion groups. This amendment was duly announced in the Fall issue of *LRTS* and will be acted upon at the Detroit business meeting.

We are indeed a corporate body in its sixty-fifth year, with a structure of long-established and hard-working committees. But we also are 4,100 individuals from whom the vitality and inspiration of the profession gains its strength.

The annual award of the Margaret Mann Citation pays tribute to individuals, the life blood of the profession. The Award of the Margaret Mann Citation Committee this year is honoring an individual who carries alive the highest qualities of the personages of the founding group in 1900, who has been actively associated with the corporate structure of the Section, and who yet has demonstrated on more than one occasion what a single individual can do by his own thought and hard work. We end our report with a salute to Laura C. Colvin, CCS personified.

SUCCESSOR TO INTERNATIONAL INDEX

The *International Index* as of June 1965 became the *Social Sciences and Humanities Index*. The new index, according to its publishers, The H. W. Wilson Company, will index 209 periodicals in the fields of anthropology, archaeology, classical studies, area studies, economics, folklore, geography, history, language and literature, music, philosophy, political science, religion and theology, sociology, theater arts, plus periodicals of general scholarly interest.

The new index will be published quarterly, in June, September, December, and March, with permanent annual cumulations. It is sold by annual subscription on a service basis.

RTSD Serials Section Annual Report, 1964 / 65

CAROL H. RANEY, *Chairman*

At the recommendation of the Serials Policy and Research Committee, two new *ad hoc* committees were appointed during the year. Roberta Stevenson is Chairman of the Bibliography of Bibliographies of Serials Committee. Other members of the Committee are Beverly Pfeifer and Elisabeth Nebehay. They have worked out an acceptable and unambiguous definition of the terms and are exploring existing publications and works in progress. They have also given some thought to the coverage, organization, maintenance, and ways of preparing such a bibliography but are not ready to present recommendations to the Section at this time.

The Serials Holdings Information Survey Committee, consisting of Emilie Wiggins, Gerard Grygotis, and Rosamond Danielson (Chairman) has circulated a questionnaire to 74 ARL libraries. Of the 63 libraries which have responded so far, the majority furnish holdings information through a combination of available records and consultation with staff. The staff consulted tends to be the reference staff of the various subject departments, divisional libraries, or college libraries rather than being some centralized department. Twelve of the 63 libraries reported some degree of automation of serial records. At least 20 libraries were planning further automation. The Committee hopes to complete its work within a year and publish the results in *LRTS*.

The Serials Policy and Research Committee has discussed a number of possible projects during the year. As to the proposed Oral History Project, they expressed interest but await further elaboration from Paul Dunkin. They deferred action on a proposal to study the unit output of serial checkers pending possible transfer to the RTSD Technical Services Cost Ratio Committee. The proposal to update Schley and Davies' *Serial Notes Compiled from Library of Congress Cards Issued 1947-April 1951* has been tabled until after the new code is in effect. The need for a publication which would list the reprints of serials is being considered. Another problem being explored is the listing of newly-processed pre-1950 serials. Standard location of periodical identification has been on the SPRC agendas for several years. There is interest in updating of *American Newspapers 1821-1936*, *International Congresses and Conferences 1840-1937*, and *List of Serial Publications of Foreign Governments, 1815-1937*. Another problem under discussion is a definition of "desirable serial information." Dissatisfaction with the paucity of information given on automated serial lists gave rise to this interest. The Committee is also

considering the problem of periodical indexing services and variant editions of periodicals, the elimination of series entries from *CBI* and whether Duplicates Exchange Union participants realize the true cost of the exchanges.

In January Jeanne Holmes resigned from the Policy and Research Committee, and David A. Smith of the Library of Congress was appointed to her unexpired term.

The Nominating Committee, consisting of James Barry, Chairman, Doris Anne Bradley, and Mary Kahler presented the following slate: Robert Desmond and Thomas Gillies for Vice-Chairman, Chairman-elect, and Jacqueline Felter and Mrs. E. Austin Kurtz for Member-at-large.

Mrs. Kahler reported for the Committee on U.S. Congresses and Conferences without Fixed Headquarters that the science and technical fields are fairly well covered and that the Committee hopes that the proposed new Bowker publication, *International Directory of Irregular Serials, Annuals, and Yearbooks* will help fill the gap in the listing of materials in the humanities and social sciences.

The Joint Committee on the *Union List of Serials* reported that the filming of copy for the third edition was completed in January, and publication is expected in the Fall. The probable cost of purchase will be between \$150 and \$200. The Committee is considering its status after the publication of the third edition.

The Joint Committee to Revise a List of International Subscription Agents, under the chairmanship of Elizabeth Norton, reports that 1,500 copies of the list have been sold. As yet they have made no specific plans for revision.

The Section Chairman has had some correspondence with Bowker about their new bibliography mentioned above and also with the American Standards Association, Z39 Committee about standardization of periodical format. Other inquiries were answered regarding an index of the usual month of publication of continuations and regarding the sellers of back-issue magazines. V. J. Peterson asked the help of various ALA groups, including the Serials Section, with his project to "develop a compendium of all serials published in this country."

The Program Committee was able to obtain Charles LaHood to speak at the Detroit program meeting on "Serial Microfilming Projects at the Library of Congress."

The Chairman wishes at this time to express her thanks to all of the hard-working Serials Section committees and the Executive Committee for their unflagging interest and cooperation. Special thanks go to Mrs. Rodell for her gentle proddings and ever-present helping hand.

RTSD Copying Methods Section Annual Report, 1964 / 65

DAVID C. WEBER, *Chairman*

Of particular note is the Program Survey and Evaluation Meeting which was held in Washington on January 23 of this year. Background data had been mailed out with a detailed agenda to a group of seventeen participants. The group reviewed the past history of the Copying Methods Section, since this aspect of library work was first recognized by the ALA Executive Board in 1936. A substantial amount of time was given to discussion of major needs and problems within the purview of the Copying Methods Section. This latter discussion concerned itself with the production of copies and related questions of laboratories, standards, speed, cost, and remote transmission; with the acquisition of copies and such matters as the sources and methods for payment; with the technical processing of copies, including cataloging rules, end processes, etc.; and with the storage and use of copies through such factors as technical scrutiny, housing, reading equipment, reading rooms, and reference services.

The meeting resulted in a list of a number of activities and needs which the Section should consider pursuing, and in the recommendation that the name of the Section and its statement of function and scope be reconsidered. This recommendation stemmed from a general feeling that there were some inhibitions in the activities of this Section and its support by membership due to its name, which seems to imply sole attention to equipment and techniques. It was brought out clearly that the activities of the Section have, in the past, ranged far and wide in developing all type of library activities with respect to all manner of graphic copies and especially the microtext forms.

Following this meeting an *ad hoc* committee was established of five able librarians in the Midwest, who met April 29 at the University of Illinois Library in Chicago. At this first meeting, the Committee on Program reviewed the range of activities, desired scope of activity, statement of function, and the relationship of these factors to the name for the section. Further discussion was held at the annual conference in Detroit with the result that the question of name was postponed and priority was given to the following submission to the RTSD Board of Directors:

The Copying Methods Section Executive Committee recommends that the RTSD Board of Directors recognize the urgent need to provide within ALA an organization of at least section status responsible for the area of library automa-

tion. The Copying Methods Section Executive Committee would be receptive if it were felt desirable to add responsibility for library automation to the present function of the Copying Methods Section.

Of other committees which have been active, the following deserve at least brief mention: the Library Standards for Microfilm Committee under the chairmanship of Peter Scott of MIT has completed the text of *Microfilm Norms; Recommended Specifications for Libraries*. The ALA Publishing Department has this text in hand for editorial and production work. The Photoreproduction Leaflet Committee under the chairmanship of Gordon R. Williams of the Center for Research Libraries completed its work, and copies of this succinct document, *Photocopying of Library Materials for Students and Scholars; A Guide to Selection of Methods*, are available from the RTSD office at ALA Headquarters. The Simplified Payments Committee chaired by Samuel M. Boone of the University of North Carolina has done considerable work on methods for expediting payment for copies; this is a complex issue and yet one which the Committee shows promise of improving markedly. A third issue of Cosby Brinkley's *Directory of Institutional Photoduplication Services in the United States and Canada* will be compiled and issued next year.

On this thirtieth anniversary of ALA action in this field, we take an especially broad view of library needs in the service of our constituents. Clearly there is more to be tackled than has been accomplished in the past. We therefore encourage every member of ALA to write to the Executive Committee to make suggestions and to criticize the Section's work. The Section, with your backing and participation, will make every effort to advance the service of graphic reproductions.

Report of RTSD Executive Secretary, 1964 / 65

ELIZABETH RODELL, *Executive Secretary*

These are reflections from the desk of the Executive Secretary, written after the Detroit Conference.

This was the year we rocked the boat. A series of disasters, great and small, tested our seaworthiness; as Vice-President, Jane Ganfield seized the oars when our President had to miss Midwinter, and when Jane herself had to resign because of illness, President Paul Dunkin guided the craft to Detroit, where Wesley Simonton came aboard for a two-year captaincy.

If, as John W. Gardner says, the greatest problem an organization has is that of refreshing and renewing itself, RTSD made an effort to attack that problem this year. To Paul Dunkin, dullness is not a necessary concomitant of profundity; his committee appointments tended to be young and enthusiastic; his correspondence went wittily to the point; he invited our most outspoken critic to be our main convention speaker; and he made an historic sally against that bore, the business meeting. The last was not a complete success: the physical arrangements were awkward; and, worst of all, shyness or the free liquor being offered by Bro-Dart across the hall drew off from our social hour all but the most loyal of the Old Guard. But we will try again. Surely the members of our Division would like to meet and talk to their officers and committeemen.

It was, as one might have predicted, a year of bravura in the presidency.

Our membership is still growing. By the end of August, 1965, we had 7,358 members, as compared with 6,178 for the next-largest type-of-activity division of ALA. We feel that we command the respect of librarians; *LRTS* spreads our influence over the world. In *LRTS* too this year we had a crisis when Ray Hummel reluctantly decided that he could no longer devote sufficient time to serve as Managing Editor; we were fortunate to secure a splendidly-capable successor for him.

It was the year of the National Plan. Until Kennedy, no president had seemed really to understand the basic nature of the library's role in society; President Johnson is willing, indeed expects us, to play a leading part. Although it was ARL (led by our own past president, James Skipper) and the officers of ALA, assisted by our fellow-divisions ACRL and AASL, who testified before congressional committees and were photographed at the White House, the influence of RTSD was strongly felt, especially in that part of the Higher Education Act, sure to pass, which will double the rate of acquisition and cataloging at the Library of Congress.

As Paul Dunkin has told you, a year ago our Planning Committee was given the assignment of drawing up a national library plan from the standpoint of the technical services. We think that we played a part in rallying ALA and other library associations around a library-sponsored plan for a national system.

Closely related to this is automation. David Weber has told you how as a result of a survey of the scope, actual and potential, of our Copying Methods Section, we found ourselves thinking hard about library automation. Is ALA discharging its responsibility to the membership in this field? How much of this responsibility belongs to RTSD? Is automation one of the technical services? In Detroit, our Board resolved to ask the ALA Committee on Organization to provide within ALA an organization of at least section status responsible for the area of library automation.

Meanwhile we continue to be plagued by the shortage of catalogers and acquisitions personnel. We still need cost studies in all aspects

of the technical services, though apparently more are being made and of greater sophistication. Some definitions arrived at by the Statistics Committee for Technical Services will help. A first-rate new standing committee on Technical Services Costs has been created "to make, update, collect, coordinate, and publicize information on technical services costs." They will meet for the first time at Midwinter. Our strongest hopes are with them.

Comparative cost figures would help answer some of our most perplexing questions. With commercial services multiplying, with the momentum towards regional processing growing ever stronger, and with the Library of Congress moving in the direction of complete coverage (I am told that most of their sales are to school libraries!) the inexperienced cataloger is often sadly confused. This confusion is compounded by rival systems of subject headings, of classification, and, even, with the reappearance of the book catalog, of kinds of catalogs.

At this point, I should like to remark that letters from smaller public and school libraries will be much easier to answer this year since the publication of Esther Piercy's *Commonsense Cataloging*. This book, and the volume *Local Public Library Administration*, which contains her chapter on "Organization and Control of Materials," are the most-used works on our office reference shelf.

In my opinion, we still need to give some attention to the physical layout of technical services departments. This year, as Mr. Dunkin told you, we made our first attack: we participated in the LAD Library Buildings Institute, several sessions of which were devoted to the "work" areas. (What do they do in the rest of the building?) Now we hope to see more articles written on layouts and work-flow charts for the technical services. Should we not expect every librarian to be able to make a cost study and a work-flow chart?

A major development at ALA this year has been the beginning, under the aegis of the Library Technology Project, of the office of Research and Development. Judith Krug, the first member of this Office, talked to our Board in Detroit. She hopes to be able to furnish information about research projects which are under way, and her help is available for drawing up proposals and seeking grants for them.

Increasingly it appears that projects undertaken by the Library Technology Project come within the province of RTSD. A forthcoming article in *LRTS* will help to clarify our relationship and afford a basis for discussion.*

We have continued to do the office work for the Duplicates Exchange Union and the American Standards Association PH 5 Committee, and to work with other bodies within and outside of ALA. A rough count of the year's correspondence, as compared with last year's, shows 221 "consultant" letters to librarians, compared to 201; 541 on RTSD organizational affairs, compared to 583 (a decrease there); 55 to organizations,

* Editor's note: The article appears in this issue of *LRTS*.

including regional groups, outside of ALA, as compared with 32 the year before; and about the same number of communications within ALA and for *LRTS*. Although the newly-revised sheets for the "Manual of Procedures" were mailed out after Detroit, they were part of the year's work. We hope to complete the revision this year.

Again in 1964/65, no request for participation in a regional group meeting was refused except when there was a conflict. Next to the pleasure of working with our officers and committees is that of meeting and visiting librarians in the field. In August, 1964, I worked with our Planning Committee at Cornell; in September, I spoke to the Technical Services Section of the Wisconsin Library Association; in October, to the College and University Section of the Nebraska Library Association, and later, to the joint meeting of the Chicago and the Illinois Resources and Technical Services groups. In November, I conducted a panel on cataloging costs for the Technical Processes Round Table of the California Library Association. In January, I spoke on careers in technical services to the Graduate Library School of the University of Illinois; in March, attended a meeting of the New York Technical Services Librarians; in May, conducted a day-long program of the Northern California Technical Processes Group.

Since taking office in 1961, I have taken part in meetings of sixteen of our thirty regional groups. Everywhere there have been catalogers, acquisitions librarians, documents and serials librarians, and administrators, working hard at their jobs, sobered by the immense tasks before them, trying to keep up with the truly revolutionary changes taking place in the profession. Some persons feel that the regional groups lack the intensity of those of the old DCC; however, the expanded groups are more inclined to examine subjects from a broader point of view.

It has been a good year. It has been a joy to work with our Board of Directors, with Paul Dunkin, Jane Ganfield, and with Alice Ball, Jennette Hitchcock, Carol Raney, and David Weber as section chairmen. To each of them, and to Wesley Simonton, incoming President, and, as always, to my Secretary, Erlyenne Meuer, is due the gratitude of our members and of your Executive Secretary.

LAW PERIODICALS INDEX

The first six volumes (1959-1964) of the *Index to Periodical Articles Related to Law* (not included in *The Index to Legal Periodicals*) have been cumulated and bound in one issue. This includes an author index, a subject index, and a list of all periodicals indexed.

The price is \$15.00 to subscribers, \$25.00 to non-subscribers or subscribers beginning with volume 8 (1966), and it may be acquired from Stanford University Law Library, Index to Periodical Articles Related to Law, Stanford, California 94305.

DECIMAL CLASSIFICATION EDITORIAL POLICY COMMITTEE

Annual Report, 1964/65

At its meeting in September 1964 the Committee gave final approval to various editorial changes being introduced in the 17th edition, and also considered criteria for the 9th Abridged edition. Major changes have been made in the presentation of standard subdivisions, and particularly in the creation of a new geographical area table which will render unnecessary the many former "divide like" references to the 900's. The Committee considered but made no decision on a special edition for juvenile literature.

The year has been important in the appearance of the 17th edition during June and the 9th Abridged in August. Work is already beginning looking forward to edition 18.

The survey of foreign use of the Decimal Classification was completed during the year with a second trip by Sarah Vann, this time to South Asia, during the autumn of 1964. Miss Vann and Pauline Seely reported the first results of their findings in time for some points to be reflected in the 17th edition, but their final report was made to the Steering Committee in June. The findings cover many specific points which will be considered by the Editorial Policy Committee and the Editor as work progresses on edition 18. The wealth of information which the two surveyors brought back will deeply influence future editions, and the generosity of the Asia Foundation, the Council on Library Resources, and the Forest Press which made this survey possible is most gratefully acknowledged.

The members of the Committee during the past year have been Edwin B. Colburn, Godfrey Dewey, Virginia Drewry, Carlyle J. Frarey, Esther J. Piercy, Joseph W. Rogers, Pauline A. Seely, Marietta Daniels Shepard, and Wyllis E. Wright.—*Wyllis E. Wright, Chairman*

RESOURCES AND TECHNICAL SERVICES DIVISION—SERIALS SECTION

PROPOSED AMENDMENT TO BY-LAWS

Article IX. Other Committees.

Section I. Standing and annual committees.

(c) Terms of office.

Present wording:

Unless otherwise provided for by these bylaws or by action of the Section, members of standing committees shall be appointed for terms of two years, and may be appointed for a second and third term, but in no case shall a person serve on a committee for more than six consecutive years. . . .

Proposed change:

Insert a new sentence at the end of this paragraph:

Members of the Serials Policy and Research Committee shall be appointed for terms of five years and shall not serve consecutive terms.

REVIEWS

(Editor's note: Reviews published in this magazine have a deliberately-chosen viewpoint. That is, reviewers are asked to consider publications primarily on the basis of their meaning and contribution to the areas of our interest: the building of library collections and the absorption, care, and control of the materials comprising the collections.)

National Science Foundation. *Summary of Study Conference on Evaluation of Document Searching Systems and Procedures*, 1965. (Available upon request from the Research and Studies Program, Office of Science Information Service, National Science Foundation, Washington, D. C. 20550; or from Clearinghouse for Federal Scientific and Technical Information, U. S. Dept. of Commerce, Springfield, Va. 22151 under PB 166905 at \$2.00 for Xerox copies or \$.50 for microfiche.)

This report is the minutes of a small conference of 37 of the familiar experts, including Bernier, Bourne, Cleverdon, Fairthorne, Mooers, Swanson, and Taube, in the field of evaluation of document searching systems that was held in Washington under National Science Foundation sponsorship in October 1964. "NSF hoped to obtain from the conference discussions and the views expressed by the participants (1) an assessment of the accomplishments thus far in work on the criteria of evaluation and test methods and on actual attempts to evaluate document searching procedures, and (2) suggestions concerning promising directions for future work." (p. 1)

The first goal was admittedly not accomplished, and it was probably unduly optimistic to think that it could have been by the conference method even with such notable participants. The conference was not asked to develop recommendations concerning future work, but the participants were urged to offer their individual sugges-

tions. This report is, then, for the most part, a rather technical discussion, with almost no definite conclusions, of the problems in this area. As a summary of the current thinking it is a vitally important document that deserves study and consideration.

The most important result of the conference was in the area of terminology. Cleverdon agreed that his use of the term "relevance ratio" was perhaps confusing, and he and the others have agreed to substitute the term "precision." There were some other general agreements reached that are important and should be summarized: (1) that measures of performance and criteria of evaluation need to be developed; (2) that the experimental design of tests is a critical need; (3) that reporting standards are desirable; (4) that the notion of precision is fundamentally valid and important; (5) that attention should be given to non-individual senses of search specifications based on written versions; (6) that concentration should be placed on testing selected features rather than total systems; and (7) that more tests of features of operating systems should be established with tests designed to determine the merits and shortcomings of the tests themselves. While these are obviously commonsense agreements with which nobody could quarrel, it is useful to have them stated for the guidance that such a statement will furnish to those contemplating research in this area.

As I have said, however, in a previous review in *Library Resources & Technical Services*, it is difficult to

foresee a rational solution to the problems of documentation when the people working in the area tend to be so irrational. This publication, for example, is issued as a loosely-stapled mimeographed report without even a proper title page. Its appearance, therefore, is such that most libraries, if they become aware of its existence and acquire it, will probably not catalog it but will, at best, put it in a vertical file or documents report collection. A substantial part of the literature in this field is now being produced in this form and receives only limited distribution so that the results are not widely available. How can people who are dealing with the problem of the retrieval of documents overlook the simple fact that the form of publication can be an important factor in the retrievability of a document? What NSF has produced here is from this standpoint certainly one of the least retrievable documents conceivable.

A bibliography, with abstracts, of the pertinent publications in this field is being prepared as an outgrowth of the conference. One can only hope that it will be produced in a better format than this report and that it will be useful. One of the real needs in this area for some time has been adequate bibliographic evaluation. In the long run such evaluation should prove more useful than the conference approach. Most of the bibliographies produced to date in this area, however, have shown very little bibliographic judgment or skill and have included even such things as papers done by undergraduates that exist only in single typescript copies. One also hopes that NSF is prepared to support a continuing program of bibliographic reporting and evaluation of work on evaluation of document searching systems and procedures.

This report emphasizes the need for investigation of selected features of a system rather than the total system. This is undoubtedly the most feasible

and logical approach, but there are certain questions that ought to be raised about it. This approach seems to assume that eventually definite conclusions concerning total systems can be arrived at by putting together what has been learned from the investigation of selected features. Isn't, however, the sum really greater than the individual parts? In evaluation which has been done to date, the tendency has been to consider the user as approaching a problem by using only one system to identify the material relevant to his needs. Yet in actual fact most sophisticated users utilize several different systems in their approach to a problem. What perhaps should be evaluated is their skill in approaching a problem by selecting the system or systems to be used and the extent to which the total of the systems produces the relevant material. The user who comes into a large research library for material on a given subject and uses only the card catalog is likely to miss a great deal of material that is pertinent. The problem can be looked at in terms of whether or not this single approach identifies all of the relevant material which is within its scope; but these systems are not mutually exclusive. Even if a system does not produce a relevant document that is in its file, it may well produce another item that will identify that relevant document. Thus, for example, if the user fails to select the right subject heading in the card catalog, he may not locate a relevant book; he may, however, under another heading identify a bibliography which subsequently leads him to that book he missed. Has the card catalog failed or succeeded?

On the other hand, most investigations assume that there are intact files, or that the user is satisfied merely with identifying the relevant items. This approach overlooks one of the most important aspects of the problem. Surely the location of the material is equally important. As Dr. Wagman, Director

of Libraries at the University of Michigan, commented recently in response to a questionnaire, "At Michigan we are now circulating for home use more than one third of all the volumes in our collection that are allowed to circulate. When you consider that a considerable percentage of the books in a large research collection are pretty dormant it is obvious that the use of a part of the collection is enormous and the chances of finding a fairly recent book on the shelf when you want it are not as good as they should be." Perhaps we need to consider the desirability of an availability ratio in addition to recall and precision ratios.

It is also interesting to note in how many respects the documentalists are beginning to retreat back towards librarianship. Once more in this report we find, for example, the statement "There may be too much emphasis placed upon the 'user.'" (p. 20) Yet one of the distinctions between librarianship and documentation has supposedly been the increased emphasis that the latter has placed upon the user. More and more the documentalists are also deemphasizing the location and identification of the information itself which again once was one of their distinguishing marks. As this report puts it, "The scope of the conference was limited to systems and procedures for searching for documents that satisfy particular search specifications. . . . The scope of the conference did not include systems and procedures for organizing or searching for information items themselves." (p. 1) What now is the difference between a librarian and a documentalist? "The creatures outside looked from pig to man, and from man to pig, and from pig to man again; but already it was impossible to say which was which."

Obviously there is a great deal to be done in this field. The participants in this conference have all, individually if not in this conference, made important contributions. A far wider involvement

of both documentalists and librarians, both in the public and technical services, is needed. New approaches to an old problem are being developed, and eventually these approaches should be extremely useful. Despite the widespread use of technical studies with their resultant jargon, this is not a field that should be left in the hands of a few experts. There does seem to exist a real need for better coordination and evaluation of the work that is done, and there certainly needs to be a better method of publishing the results.—Norman D. Stevens, *Associate Librarian for Public Services, Rutgers—The State University, New Brunswick, N. J.*

Stevens, Mary Elizabeth. *Automatic Indexing: a State-of-the Art Report*. Washington, G.P.O., 1965. (National Bureau of Standards Monograph 91) 220 p. \$1.50.

Automatic indexing Miss Stevens defines as "the use of machines to extract or assign index terms without human intervention once programs or procedural rules have been established." The catch here, of course, is those "programs or procedural rules"; the intellectual effort which has already gone into attempts to establish them removes automatic indexing from the area of scientific recreations. Miss Stevens' "List of References Cited and Selected Bibliography" comprises 662 items published between 1941 and February 1964. Very few of the authors are librarians.

Naturally enough, the bulk of this monograph is descriptive. The principal headings cover indexes compiled by machine, including citation indexes; automatic derivative indexing (e.g. KWIC indexes); automatic assignment indexing, which is closest to assigning subject headings; and automatic classification. Discussion of potentially-related research includes thesaurus construction, natural language text searching, statistical association techniques,

and an example of a proposed indexing system (the joint American Bar Association-IBM research program based on 5000 legal case reports) which utilizes several of these related techniques.

In her admirably logical presentation Miss Stevens does not stop with description of what is being done. She considers five controversial questions, of which two are especially pertinent for processing people. "Is whatever can be done by machine good enough, acceptable, as good as, or better than the product of human operations?" "How can we evaluate acceptability or comparability for any indexing process whatsoever, whether carried out by man or by machine or by machine-aided manual operations?" As Miss Stevens says, the heat of controversy is inversely related to the availability of objective evidence.

Subject indexing puts heavy demands on human perception, comprehension, and judgment; it even expects crystal-ball prophecies of future needs. We like to think our intellectual output is highly efficient and irreplaceable; but studies by Lilley, Tritschler, Painter, Jacoby, Slamecka, and others indicate that indexing consistency between humans runs only between 50% and 70%. On the basis of small, highly-specialized (and hence deceptive) samples, automatic index-term assignment is in the area of 45-75% agreement with prior human indexing. This suggests that "an indexing quality generally comparable to that achievable by run-of-the-mill manual operations, at comparable costs and with increased timeliness, can be achieved by machine."

On the question of evaluation of any indexing scheme, whether man, machine, or man-machine, there are five core problems, all of them far from solution. The five are as follows: (1) How can one person be sure that another person correctly understands what is intended? How do we know that language represents a real transaction? (2) Natural language is full of

ambiguities. People must be smarter than computers, because they know how to resolve these most of the time, and computers don't. So somehow we shall have to tell the computers how to make distinctions; this is scarcely begun. (3) What are the proper selection criteria of *condensed* representations of document contents? The inevitable information loss is, as Swanson says, "not only unknown but has never been defined in measurable terms." (4) Is the benefit to users worth the cost? Some studies suggest that "subject indexes are not the most important source, nor even a major source" in literature searches. Indexing cost studies are notable chiefly for their lack of objective validation. (5) If we define "relevancy" as the value judgment of a particular user at a particular moment, it is not surprising that the problems of how to measure it "remain largely unresolved."

Despite the difficulties of evaluation, Miss Stevens believes that automatic indexing *is* possible, is now being done in some areas competitively with human indexing, and will with further advances excel human indexing in quality as well as in speed. Will subject cataloging be replaced by automatic indexing? Probably; in part; some day. When? Not soon. Experiment has outrun technology.

The changeover will probably await the "advent of versatile character readers and inexpensive, very large capacity, rapid direct access memories." Meanwhile there will be further systematic exploration of linguistic data processing, and "further attacks on the problems of language and meaning themselves."

Says Miss Stevens, quoting Maron: "Automatic indexing represents the opening wedge in a general attack at not only the problems of identification search and retrieval, but also the problem of automatically transforming information on the basis of its contents." In her state-of-the-art report Miss Stev-

ens has performed a valuable service in providing us with a well ordered review of the past, a perceptive look at the present, and a rational vision of the future.—Roger P. Bristol, *Engineering Librarian, University of Virginia, Charlottesville.*

Catalog Card Reproduction. Report Based on a Study Conducted by George Fry and Associates, Inc. Chicago, Library Technology Project of the American Library Association [1965] (LTP Publications no. 9). xi, 81 p. \$8.50. cloth.

At the time that I received *Catalog Card Reproduction*, I was involved in a review of the pertinent library literature on the subject. My first shock as I unpacked the book was to note the price given in the news release. Although I am not at a loss to express my feelings about this point, I would like to quote Sol M. Malkin, in the *Antiquarian Bookman* (May 10, 1965, p. 2009). He summed up perfectly my reaction to this aspect of the book: ". . . The heart of this monograph is a cost comparison worksheet which anyone can xerograph for 25 cents. We state flatly that \$8.50 for this 81 page, offset, subsidized, oversized, hard-bound booklet is a helluva price for a theoretically non-profit division of a theoretically non-profit organization to charge those whom it is theoretically supposed to serve . . ."

The book is divided into three parts. The first reviews the general problem of obtaining catalog copy or cards and includes recommendations on the most practical and economical systems for card requirements which would fit the needs of two extremely opposite libraries: the low-volume library, and the high-volume library. The second part of the book displays the thirteen processes tested for obtaining catalog cards through self-production. These processes range from purchasing printed cards from some outside source to the more complex and sophisticated

systems involving electrostatic or other photographic systems of copying.

The third part of the study consists of a number of charts showing comparative costs of obtaining catalog cards using the various methods described in part two. The data here supplied gives the purchase price of the equipment, any service charges, cost of materials, supplies, and amount of manpower needed to carry out all of the unrelated operations. The method used by Fry to arrive at these conclusions is given so that the individual library can make a systematic cost comparison of its own process or on other types which it may have been considering.

The first section of the book, and probably the best part, does sum up quite well the many problems of making catalog cards. This section of the book *does* overlook one important aspect of the problem: the advantages of card production are slighted in dwelling on the sheer necessity of it. There is little treatment in Section 1 of the problems derived from the existence of many foreign language titles to be cataloged, the extent of space to be left for bibliographic notes, and the frequent occurrences of non-alphabetical characters and signs, mathematical and chemical symbols, music, etc. Except for a single mention in this chapter, the word-count on a catalog card is not fully dealt with even though it can be a major problem in choosing a reproduction or duplication system.

The second section of the book deals with the distinctive major processes for producing catalog cards. Some rather modern techniques are here presented along with the general cost of equipment, but because of the long span of time between the beginning and end of this project, some of the systems presented do not show the most modern equipment available. There are at least two techniques in current use today in the production of catalog cards which are not treated in this section

of the book. The first, and an increasingly-popular one, is the generation of catalog copy and/or cards from electric accounting machine equipment or computers. The second technique which is lost in this area is the use of an automatic sequential card camera (such as the Listomatic, Compos-o-line, or Fotolist). With both of these latter techniques it is possible to produce catalog cards alone or book catalogs. Some experimenting has been done in the rather unorthodox use of such equipment, in that book catalog copy may well be prepared first, and catalog card copy as a by-product, when necessary.

The third and last section is more susceptible to serious criticism. A good many time and motion studies can be shot full of holes by objective analysis, particularly when the following conditions prevail: the study is conducted by non-librarians who are familiar with cost analysis but not library procedures or by librarians who may be rather unscientific and personal about their production estimates. By way of illustration, one of the systems men employed by Fry Associates at the beginning of this project asked me, "What's the LC Catalog?" At the same time librarians are apt to personalize their studies with wanton disrespect for facts. Even the most conscientious library systems engineers will fail to take into account important aspects of cost analysis. A. Graham McKenzie, writing in the *Journal of Documentation* for June, 1965,¹ gives a hearty cheer for the efficiency of the Flexowriter (automatic typewriter) as compared with the use of multilith and stencil equipment. Mr. McKenzie, for instance, recognizes the fact that free time derived from certain types of machine-based systems allow the cutting

of cost estimates by employing the operator in more than one job; he says in his article that the typist "operates a 914 copier."

Another important element missing from the final section of the book is the consideration of a library willing to choose a more expensive system of duplication or reproduction simply because the end result is esthetically or otherwise more important to it. The logic of this conclusion was demonstrated in the Berkowitz study,² which showed that processing of books with printed cards, and the processing of the same types of books with self-produced cards, added up to practically the same amount of money. The self-production of cards does offer the library the opportunity of preferring to differ from "standard practice" in such matters as entry, conventional titles, choice of subject headings, and a choice of ultimate area of Library of Congress or Dewey classification not chosen by the original cataloger and classifier. Here we are faced with a good illustration of the old adage "you pays yer money and takes your choice."

Further study of this last section giving cost data and comparisons gives the reader occasion to have some doubts about the accuracy of the cost comparison information. Here are some points which either are not treated at all or are only superficially treated, and which very seriously affect the choice of equipment and methods:

1. The varying skill of available operators from one kind of institution to another and from one part of the country to another.

2. The considerable difference in salary overhead in different types of institutions (e.g., colleges vs. special libraries).

¹ McKenzie, A. Graham. "Note on the Economics of Catalogue Card Reproduction." *Journal of Documentation*, 21:128-130. June 1965.

² Berkowitz, A. M. "A Study of the Costs of Cataloging Books with Library of Congress Cards and by 'Original' Cataloging Methods." Thesis (M.S. in L.S.), Catholic University of America, 1961.

3. The certainty that the system being investigated and analyzed is actually the optimum sample of the system for the task involved.

4. The cost of supervision to maintain a high degree of quality control. For instance, the illustration of a card produced on an automatic tape typewriter is of such poor quality that it would not be accepted in my own library.

5. The number of cards needed per set on the average (which might actually range anywhere from 6 to 160) is not figured as an overhead variable.

6. The assumption is made that in photographic processes the Duplicating Department will receive from the Cataloging Section either typed copy or LC proof sheets, both of which the *Study* maintains are ready for immediate photo copy. One element which I failed to find treated in relation to this statement is the cost of receiving, sorting, cutting, and filing proof sheets so that they will be available for duplicating purposes. Also the proofsheets card cannot be used directly if any serious modifications are made to the copy. Finally, the average "large" library will find that copy cannot be obtained from the Library of Congress for some highly specialized publications, or that the copy becomes available but only after a considerable lapse of time after publication of the item. The cost of maintaining the proofsheets file for photographic copy can be rather staggering. On page 46 of this *Study* assumption is made for cost comparison purposes of "a standard medium length (that is a card with an average amount of copy on it) and the arbitrary number of four cards per title and in multiples of four." The arbitrary number of four cards might be a very misleading coordinate in different kinds of libraries. Some types of public libraries may produce several hundred cards for their branches and bookmobiles, and others may produce even

less than the four average. Logically, a long run production of cards lends itself better to the use of a printing system, while a short run type is more adaptable to some type of photographic system.

7. It is not clear from the text whether the production of the catalog cards is limited entirely to the unit card information that will appear on all cards produced, or whether the cost of adding the subject headings and other added entries to the cards on a unique basis has been considered. It does not take much imagination to realize that cards produced in some type of continuous form can be handled more quickly and efficiently for applying headings than unit cards inserted one after another into a typewriter.

I cannot find anywhere in *Catalog Card Reproduction* any information on the relationship of the book catalog to the conventional card catalog. In addition to this comment there is no reference whatever in the manual for the varying ways of producing card and/or book catalogs by computer techniques. I believe these deficiencies might be traced directly to the fact that a long period of time elapsed between the beginning of the project and the final printing of the results of that project. I think that the book has much information to offer to the librarian as an aid to making decisions in this area of catalog card production, but the cost comparisons and data regarding production systems must be carefully considered in the light of the flaws which have been mentioned. In view of the very high price of the book as balanced against its actual value, I would suggest that an attempt be made to borrow the book from another library rather than to purchase it.—*Joseph T. Popecki, Acting Director of Libraries, Catholic University of America, Washington, D. C.*

Nelson, Carl E. *Microfilm Technology: Engineering and Related Fields*. New York, McGraw-Hill, 1965. 397 p. + 48 p. of bibliography on accompanying microfiche. \$16.00

The scope of Carl Nelson's *Microfilm Technology* is very carefully defined in the preface: "The content of the book . . . concerns itself only with the application of unitized microfilm to engineering data." Yet because so much of the technology of microreproduction is independent of the application, this book should nevertheless be in every library having even one microfilm camera used for book filming. Heretofore there has been no modern, scientific work to which a library microreproduction laboratory could refer for accurate, up-to-date, informed judgments on the entire spectrum of microreproduction technology. In addition to filling this lack, Nelson's book performs another important service: it dispels once and for all the vast mythology that has grown up about the capabilities of microfilm, lenses, and cameras, as well as the characteristics of the subjects to be copied. It frees the reader from the murky phrases of promotional literature and salesmen's pitches; this alone is worth double its price.

There are extensive and detailed chapters dealing with cameras, lenses, storage of film, developing and processing, film inspection, readers and viewers, reader/printers, and other print-producing equipment. The long and excellent chapter on standards reflects the author's many years of experience and professional interest in standards. Nearly eighty ASA standards and twenty-one military and federal standards of interest to microfilming are cited. The chapter on inspection and quality control not only outlines the mechanics of testing film, but also contains much more of the necessary interpretive matter and guidance for the user than is available anywhere else.

Typical of the practical aspect of the book is the little-publicized warning that with chemically activated reader/printers, positive film will exhaust the chemicals many, many times faster than negative film, increasing both costs and the risk of inferior service in library operations. Thus Mr. Nelson's text is more applied technology than theoretical photography. Relatively free of mathematical formulas, it is readable by anyone already slightly familiar with the technical aspects of microfilming. Superb illustrations and a good index have been provided. The book includes a list of about 400 technical terms based upon the National Microfilm Association's *Glossary of Terms*. Several chapters are devoted to the administration of microreproductions, but this facet is oriented almost exclusively to the engineering drawing field. For library microreproduction centers, therefore, the book's chief value will lie in its accurate technical information.

This reviewer finds only one fault with the book; that is the absence of the 48-page bibliography from the printed text. The McGraw-Hill publicity release states that "an extensive bibliography, chiefly from periodicals and National Microfilm Association publications, is provided," but it neglects to mention that the bibliography appears only in the form of a 4" x 6" microfiche inserted in a pocket in the back of the book. Only at the end of the table of contents and on the book jacket is the existence of this microfiche bibliography mentioned. Once the jacket and the fiche are gone, only the plain, unprinted pocket in the back cover remains to bewilder some user or librarian over why a book pocket was put into this book sideways. Should the fiche become lost, the user is left with a text that is only partially documented. That so rich a text might suffer such a loss is unfortunate. The fiche itself is no model of good bibliographic practice; while the

title is given, the fiche lacks such other vital data as the author's name and the McGraw-Hill imprint; it does carry a University Microfilms "imprint" at the bottom, but this can only lead to confusion, since that firm has no connection with the book, except for its manufacture of the fiche. An introductory paragraph in the fiche states that the bibliography refers only to engineering drawing applications and not to "related fields," a limitation that is brought out nowhere else.

The decision to use a fiche bibliography was probably motivated by an understandable desire to promote the active use of microforms, but the present example seems like a shotgun wedding to this reviewer, for, of all literary forms, bibliographies are least suited to consultation in microform. This combination of hard copy and microfiche may also be based upon a gratuitous assumption that those active in the production of microtexts are those most eager to use their own products, but in fact the opposite is often true. Should this excellent book go into a second edition, it is to be hoped that the publisher will incorporate the bibliography directly into the text. The latest full-length book in English on the technology of microfilm deserves the best possible editorial treatment; this is particularly desirable now when universal attention is being focused on the recently-discovered spot defects.

As an engineer with Bell Telephone Laboratories, Xerox, and IBM, and as a past president of the National Microfilm Association, Carl Nelson has had over twenty-five years' experience in microreproduction, optics, and associated disciplines. Since there is only a handful of persons in this country with the breadth of experience necessary for the writing of a book such as *Microfilm Technology*, it is indeed fortunate that Carl Nelson has accomplished the task. He has masterfully cleared the hurdle of writing an

engineering text in English that is free of the clumsy, inept expressions that mar some technical books. Both the author and the publisher are to be congratulated on the achievement of a felicitous literary style combined with authoritative technical information.—*Allen B. Veaner, Chief Librarian, Acquisition Division, Stanford University Libraries, Stanford, California*

ARE YOU FAMILIAR WITH THESE 18 TITLES?

- "The ALA and You"
- "Thirteen Divisions"
- "Information for Institutional Members"
- "Special Members"
- "Key to Success"
- "Meet the Challenge"
- "You and Your Library"
- "Choose ACRL"
- "Keep in Touch"
- "Exchange Ideas"
- "Grow with AHIL"
- "Refer Now"
- "Check Your Strategy"
- "It's Your Move"
- "State Your Case"
- "Act Now"
- "Improve Library Education"
- "Resources for You"

For free copies, write:
Membership Promotion
American Library Association
50 E. Huron St., Chicago, Ill. 60611

COMPUTER (TYPOGRAPHIC) COMPOSITION OF LIBRARY CATALOG CARDS

The Council on Library Resources has made a grant of \$25,000 to the National Bureau of Standards for study and experimentation in computer (typographic) composition of catalog cards and other library materials. The project will be conducted by a team in the Bureau of Standards' Center for Computer Sciences and Technology.

The computer composition research team is currently experimenting with a versatile Mergenthaler-Linofilm-Autaset computer program. As the Bureau of Standards participates in the development of a system for automatically generating subformats, it will be possible to apply experimentally the Autaset Linofilm programs—which are continually being made more versatile—to important kinds of library publications. It is expected that additional study and experimental use of these programs will produce useful information for evaluating library requirements and should facilitate the transition of important library publications onto computer-based high speed photocomposer production systems.

The team will:

1. Design and conduct test runs on small samples of subject headings, catalog cards, announcement items, and alternate indices.
 2. Study the Linotron master typography program and ascertain the means by which this program can be made to process the above four kinds of library materials.
 3. Define a practical configuration of commercially-available devices for computer-photocomposing the above kinds of library materials.
 4. Identify computer program development requirements or changes needed to achieve production programs for each of the above library materials, and estimate the amount of programming effort and the level of programming experience and skill required to accomplish this critical work.
 5. Summarize the economic feasibility, estimating for each kind of library material the production time and cost per thousand information characters.
- The project is expected to be completed June 30, 1966.

MICROFICHE SERVICE CENTER OPENED

The Microcard Corporation has announced the establishment of a Microfiche Service Center in Washington, D. C. It is planned to provide quick service duplication of fiche with one-site equipment, and will have facilities for unitized microfiche filming, microfiche duplication, and automated hard copy reproduction from microfiche. It will also serve as a sales office for reading equipment and systems equipment used in the production of microfiche, and will encourage large-scale printing work for the Corporation's plant at West Salem, Wisconsin.

BROADEN YOUR REFERENCE COLLECTION WITH THESE NEW BOOKS AND USEFUL REPRINTS

STATISTICS SOURCES,

Second Edition
 Edited by Paul Wasserman, Eleanor
 Len, and Charlotte Georgi

Revised and enlarged, *Statistics Sources* now covers over 8,000 subjects, and gives precise, full references including addresses where required) to both published and unpublished statistical data. It contains these three important new features: (1) Statistical sources on international activities; (2) Identification of the principal statistical compilations for every country in the world; and (3) An annotated bibliography of works containing primary statistical information.

Typical of topics covered are these: Delinquency, Juvenile; Confectionery, Manufacture; Construction Industry Contracts; Obstetrical Services, Charges and Personal Expenditures for; Oranges—Retail Prices; Mules, Numbers of; and Mica—U. S. and World Production. Subjects are drawn from industrial, business, social, educational, financial, and other activities in the United States and abroad.

Types of sources cited include periodicals, annuals and yearbooks, directories, books and pamphlets, special reports and studies, as well as associations and societies, government agencies, and foreign sources.

200 pages \$20.00
 12,000 source citations 8,000 subject headings

NATIONAL DIRECTORY OF NEWSLETTERS & REPORTING SERVICES

This new directory brings together in a single subject-indexed volume, 1,500 periodical publications issued by U. S. commercial publishers, research organizations, associations, professional societies, educational institutions, government agencies, and others, with selected foreign English-language newsletters also being covered.

Newsletters such as *The Insider's Newsletter*, *The Kiplinger Washington Letter*, and the *Whaley-Eaton American Letter* are included; however, one of its most important features is the inclusion of less-well-known publications dealing with highly specialized subjects.

Entries contain the title of the newsletter or service; name and address of publisher; name of editor; frequency of issue; year founded; subscription rate; subjects covered; and description of scope and content. They are grouped into twelve categories, including Business, Industry, and Economics; Education; Investment Advisory Services; and Public Affairs and Social Services.

252 pages \$20.00
 Subject, title, and publisher indexes

Volume 2 Published . . .

BOOKMAN'S PRICE INDEX

Edited by Daniel F. McGrath, Curator
 Rare Books, Duke University

With the highly-acclaimed Volume 1 and the newly-published Volume 2, *Bookman's Price Index* carries more than 125,000 citations of prices and other information abstracted from the 1963 and 1964 catalogs of 85 leading antiquarian and specialist dealers in the United States, England, and Western Europe.

Volume 1 includes listings of 32,000 books and 28,000 sets and runs of periodicals, while Vol-

ume 2 provides listings in a single alphabet for 66,000 books. Book entries in both volumes are arranged by author's name.

Entries cover all essential details provided by the dealer himself, including author, title, condition, and price set by the dealer, plus the dealer's name, catalog number, and number of the cited item in the specific catalog.

Not only is *Bookman's Price Index* a pricing guide for book buyers and sellers, but it also has the unique extra feature of being the only available master index to the valuable bibliographical data included in the individual dealers' catalogs.

Each Volume, \$32.50

AUTHOR BIOGRAPHY SERIES

Under the over-all title of *Author Biography Series*, Gale is reissuing a number of first-rate reference works which have long been out of print. These first four published titles (eight volumes) in the series cover over 10,000 authors active from 500 A.D. to the early 1900's:

Critical Dictionary of English Literature and British and American Authors (To 1871)—Allibone. Three volumes—46,000 entries—3,140 pages—500 A.D. to 1871 \$84.00

Supplement to Allibone's Critical Dictionary of English Literature and British and American Authors (1891)—Kirk. Two volumes—37,000 entries—1,562 pages—1850-1888 \$43.00

Biographical Dictionary and Synopsis of Books Ancient and Modern. Volume 1. *Biographical Dictionary of Authors* (1902)—Warner. 7,000 entries—619 pages—1600 to the twentieth century \$17.00

Encyclopedia of American Literature (Revised edition of 1875, incorporating the original edition of 1856 and the Supplement of 1866)—Duyckinck and Duyckinck. Two volumes—over 900 entries—2,044 pages—To 1875. \$43.00

These three series titles are in production:

Bibliophile Library of Literature, Art, and Rare Manuscripts. Volumes 29 and 30 of *The Bibliophile Dictionary* (1904)—The International Bibliophile Society. Two volumes in one—3,000 entries—767 pages—To the twentieth century \$22.00

Biographical Dictionary of the Living Authors of Great Britain and Ireland; Comprising Literary Memoirs and Anecdotes of Their Lives (1816). 6,300 entries—449 pages \$17.00

Author Biography Master Index. In a single alphabet, Gale is compiling about 100,000 references to individual authors in all the volumes above, plus 50,000 references to standard works such as *Contemporary Authors*, *Twentieth Century Authors*, and *Who Was Who*. \$28.00

Entire Series of 11 Volumes—Over 9,000 Pages—\$254.00

Order Entire Series or Single Titles—Examine 30 Days Free With Full Return Privilege.

GALE RESEARCH COMPANY

1400 Book Tower, Detroit, Michigan 48226

CUSHING-MALLOY, INC.

1350 North Main Street
ANN ARBOR, MICHIGAN

LITHOPRINTERS

known for

**QUALITY—ECONOMY—
SERVICE**

Let us quote on your next
printing

Expert Service on
MAGAZINE SUBSCRIPTIONS
for
ALL LIBRARIES

☆
Faxon's Librarians Guide

Available on request

☆
For the very best library sub-
scription service—ask about
our Till Forbidden Auto-
matic Renewal plan.

☆
F. W. FAXON CO., INC.

515-525 Hyde Park Ave.
Boston, Mass. 02131

☆
**Continuous Service to Libraries
Since 1886**

The USED BOOK PRICE GUIDE

An ALPHABETICAL
REFERENCE FOR
PRICING & BUYING

*Rare, Scarce, Old and
Used Books*

Mildred S. Mandeville, compiler

1966 Edition

Part 1—(updated & enlarged)

**Actual Retail Prices From over
250 Dealers' Catalogs Received
Between June 1964 & Sept. 1965
(inclusive)**

- Impartial presentation of used book prices (from U. S. & Canadian catalogs only).
- Wide range of titles—emphasis on county histories & genealogies.
- Contains no duplicates of our other Parts.
- Maximum of information with each listing. Flip-thru size.
- Conditions of books described.
- Supplement (for buying) identifies each listing with specific dealer-catalog—giving address and pertinent terms of business. (Use with UBPG).
- Each listing *personally* selected, entered, and checked by the compiler.
- Authentic count—The same edition of a book offered by 2 or more dealers is counted only as one.
- 30 day approval for libraries.

EACH PART COMPLETE IN ITSELF

Part 3—from Spring 1963
to June 1964 catalogs.

Part 2—from Spring 1962
to Spring 1963 catalogs.

Price: Parts 1 (updated), 2 or 3
cloth . . . \$8.00 paper . . . \$6.00
Supplements (necessary for
buying) . . . \$2.00 each Part

Total listings in 3 Parts: 42,000
from over 600 catalogs.

PRICE GUIDE PUBLISHERS

**Kenmore Station
Kenmore, Washington 98028**

IMPORTANT NEW PERIODICALS

POWDER TECHNOLOGY. Amsterdam. (Bi-monthly) Vol. I No. 1—early 1966. Price per volume (six issues) \$17.50 **Articles in English, French or German.**

DESALINATION. Amsterdam. (Quarterly) Vol. I No. 1—early 1966. Price per volume \$25.00

EARTH SCIENCE REVIEW. Amsterdam. (Quarterly) Vol. I No. 1—early 1966. Price per year, plus postage \$12.50

CHEMICAL GEOLOGY. Amsterdam. (Quarterly) Vol. I No. 1—early 1966. Price per volume \$15.70

BRAIN RESEARCH. Amsterdam. (Monthly) Vols. I & II. 1966. \$16.00 per volume. **Articles in English, French or German.**

DIABETOLOGIA, organ of the European Association For The Study of Diabetes. Berlin. (Quarterly) Vol. I. 1965. \$16.00 per volume. **Articles in English, French or German.**

EXPERIMENTAL BRAIN RESEARCH. Berlin. (Irregularly) Vol. I. No. 1 late 1965. One or two volumes per year at approx. \$18.00 each. **Articles in English, French or German, with résumés in English.**

MATERIALS SCIENCE AND ENGINEERING. Amsterdam. (Irregularly) Vol. I 1966. \$17.50 per year. **Articles in English, French or German.**

STECHERT - HAFNER, INC.

The World's Leading International Booksellers
31 East 10th Street, New York City, N. Y.
10003

FOR LIBRARIES:

**ONE SOURCE FOR
ALL
PAPERBOUND BOOKS**

Now in our sixteenth year of distributing paperbound books—both mass market and quality lines. Now you can combine your orders for such publishers as Bantam, Pocket Books, Ace, Avon, Pyramid, Signet, Mentor, with your orders for Scribner, Anchor, Dover, Apollo, Ann Arbor, etc. Virtually all books listed in PAPERBOUND BOOKS IN PRINT may be ordered from us.

Ask for our circular:

"One Source for Paperbacks", (Lists publishers whose books we stock, time to allow for delivery, etc.)

**PAPERBOUND
BOOK
DISTRIBUTORS**

(A division of Book Mail Service)

82-27 164th Street ■ Jamaica 32, New York ■ Phone: OL 7-4799

Science Citation Index
1966
coverage
will be

UP TO **1465**
(estimated)

1965
coverage
is

UP TO **1115**
(as of September,
more by year's end)

1964
coverage
went

UP TO **700**

1961
coverage
was

UP TO **613**

SCI Journal Coverage is UP ... UP ... UP ... UP

In 1961 we published the first Science Citation Index, indexing 613 key journals. The initial list of core journals selected emphasized multi-disciplinary journals and basic engineering and science . . . physics, biology, chemistry and medicine. □ Ever since, we've been improving, upgrading, adding journals practically every day. □ In 1964 we added 87 journals and a source index with titles. □ In 1965 we added over 400 new journals. □ In 1966 our coverage will more than double our 1961 journal coverage, reflecting the suggestions and preferences expressed by our SCI audience . . . and we will continue to follow the same policy. □ In response to your requests, the 1966 SCI will include expanded coverage especially in the areas of oceanography, botany, agriculture, psychology, mathematics, radiation, metallurgy, nuclear science, paper research and information science. □ Here is a partial list of information science journals to be covered in 1966:

American Documentation, Aslib Proceedings, Bibliotheca Phonetica, Bulletin of the Medical Library Association, Communications of the ACM, Computer Journal, IBM Journal of Research and Development, IEEE Transactions on Information Theory, Information and Control, Information Storage and Retrieval, Journal of the Association for Computing Machinery, Journal of Chemical Documentation, Journal of Documentation, Journal of Verbal Learning and Verbal Behavior, Kybernetik, Library Resources and Technical Services, Mechanical Translation, Methods of Information in Medicine, Nachrichten für Dokumentation, Operational Research Quarterly, Operations Research, Phonetica, and Revue Internationale de la Documentation.

Every journal is indexed comprehensively. All items (except advertisements) in each journal are processed—all articles, editorials, letters, book reviews, corrections, meetings, etc.

Since 1895
The Annual Record
of Auction Prices
of Books, Mss., Etc.



EDITED BY EDWARD LAZARE

AMERICAN BOOK-PRICES CURRENT

509 Fifth Avenue, New York 17, N. Y.

THE 1964 ANNUAL

(VOL. 70)

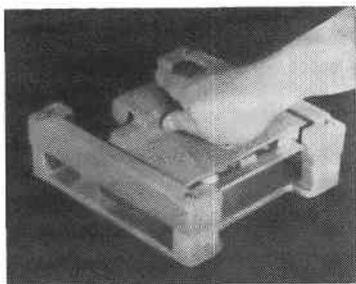
Now being Printed

This volume reports over 23,000 price records, \$5 upward, of Books and Serials, Autographs and Mss, Broadsides and Maps sold at Auction in the UNITED STATES and LONDON, ENGLAND from September 1963 through August 1964.

THE EDITION IS LIMITED

ORDER NOW

Publication price \$22.50 net



Catalogue Card Duplicator, to print library catalog card (3 × 5), \$54.00.

Card Duplicator, to print library catalog card (3 × 5), post card (3½ × 5½) and 4 × 6 card, \$64.50.

Living Stamp, to print call number, address, label, etc., \$24.50.

All patented. Performance guaranteed.

With a new ink to dry in 10 minutes.
Orders "On Approval" invited.

Please order direct from inventor:

Chiang Small Duplicators

53100 Juniper Rd.
South Bend, Indiana, U.S.A. 46637



Standard's PERMALIFE®

The complete paper for the complete program

YOU CAN HAVE A WELL ROUNDED PRINTING, STORAGE and FILING PROGRAM when you use PERMALIFE, a Thorographic paper by Standard of Richmond. PERMALIFE is acid-free and absolutely dependable. A life of several hundred to a thousand and more years is assured.* Use PERMALIFE with confidence for

Library Catalog Card Stock

Envelopes for storage of documents and manuscripts

File folders for storage of maps and large documents

Letterheads

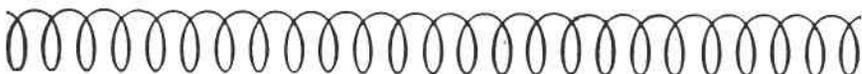
Reprints

PERMALIFE is beautiful in look and feel, and will give true copies by photo offset. PERMALIFE TEXT and PERMALIFE BOND are water-marked for your protection. For permanency use PERMALIFE and be sure.

*According to tests made of PERMALIFE by the W. J. Barrow Research Laboratory. Details upon request.



STANDARD PAPER MANUFACTURING CO.
RICHMOND, VIRGINIA



***For Libraries That Want Quality
Bookbinding***

GLICK BOOKBINDING CORP.



***Specialists in the Binding and Rebinding
of Books and Periodicals***

***Serving Institutional, Public
And Research Libraries
Since 1905***

**32-15 37th Avenue
Long Island City 1, New York
STillwell 4-5300**

**In Nassau and Suffolk
IVanhoe 3-9534**

**In New Jersey
Mitchell 2-5374**