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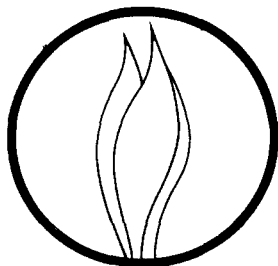
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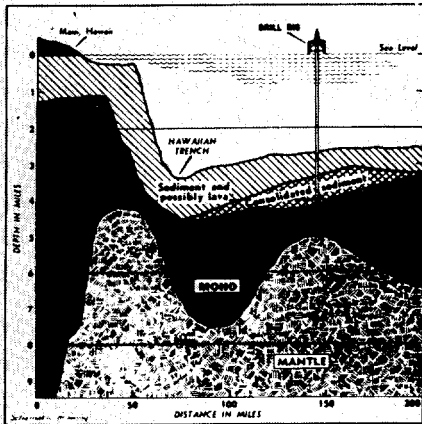
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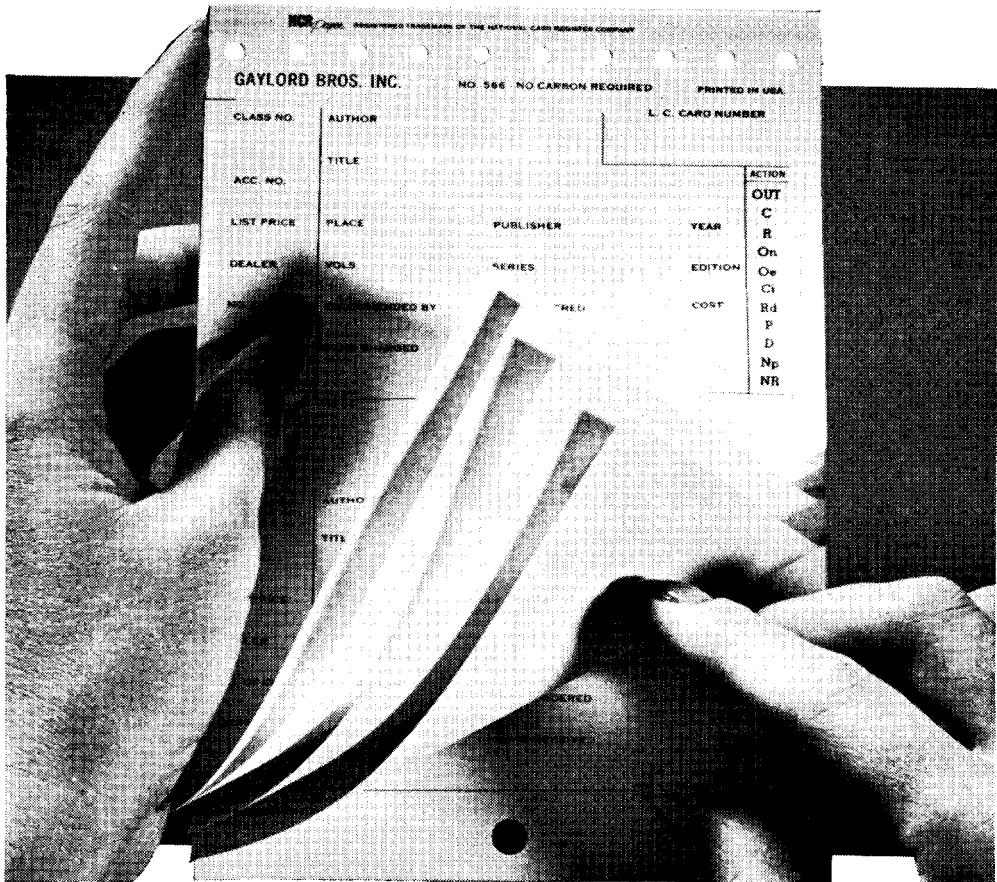
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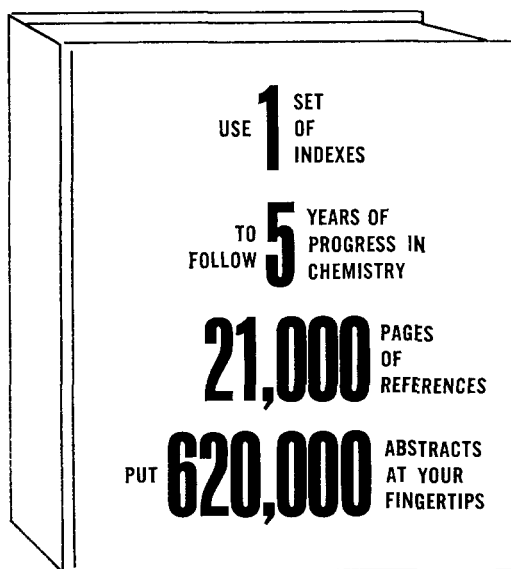
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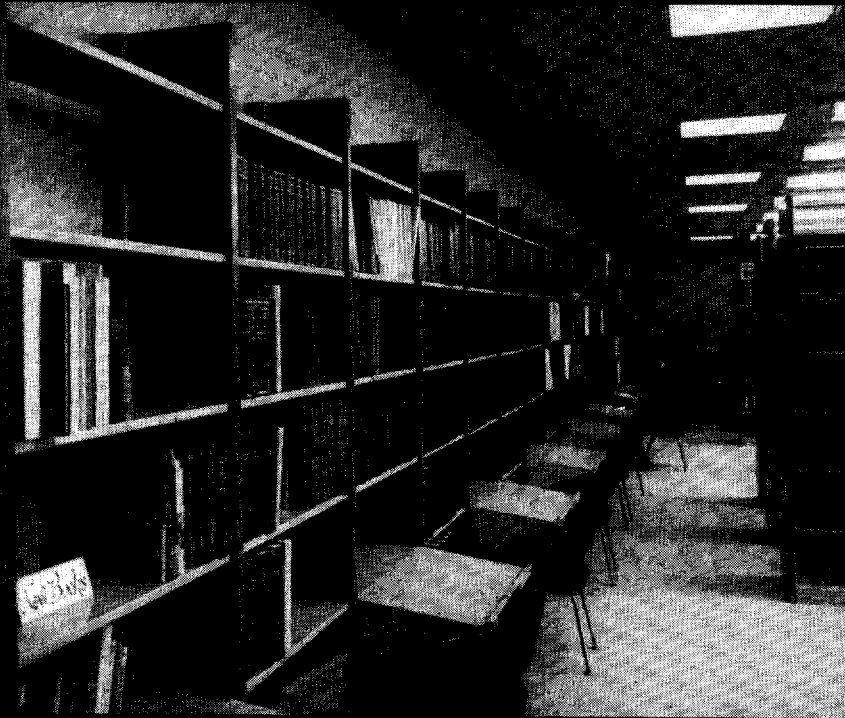


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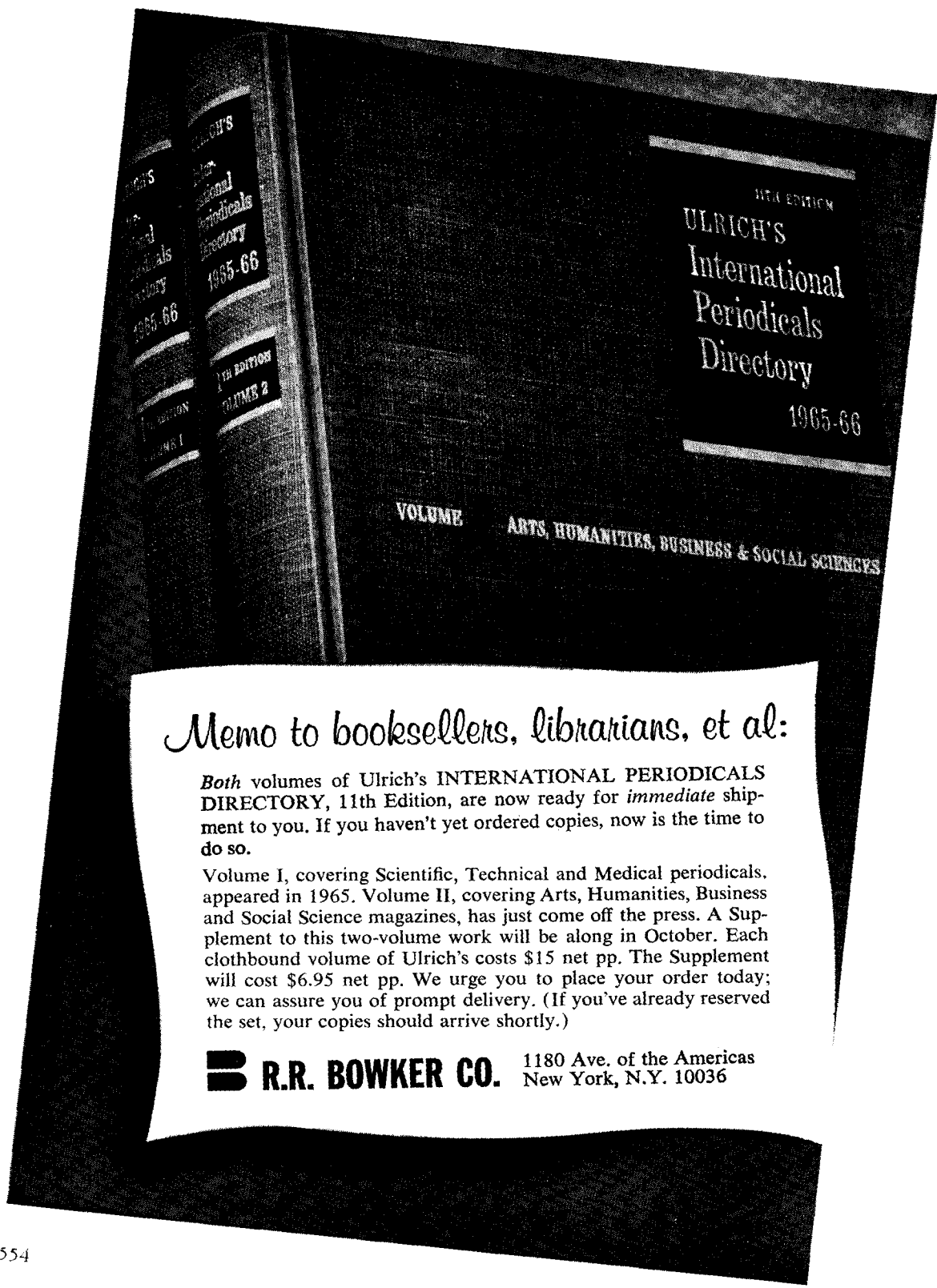
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<p>4. What organization has the world's largest bank of computer tape files of published scientific information?</p> <p>a. NLM (National Library of Medicine) b. VINITI (Vsesoyuznyi Institut Nauchnoi i Tekhnicheskoi Informatsii) c. ISI (Institute for Scientific Information) d. NASA (National Aeronautics and Space Administration) e. CFSTI (Clearinghouse for Federal Scientific and Technical Information)</p>	<p>5. The number of scientific papers is doubling every</p> <p>a. 3 years b. 10 years c. 25 years d. 35 years</p>	<p>6. The average paper is cited</p> <p>a. 1.5 times a year b. 3 times a year c. 5 times a year d. 11.5 times a year</p>
<p>7. The average paper by a Nobel Prize winner is cited</p> <p>a. 3 times a year b. 10 times a year c. 22 times a year d. 160 times a year</p>	<p>8. What is the largest single multidisciplinary scientific index published today?</p> <p>a. Index Medicus b. Chemical Abstracts c. Referativnye Zhurnaly d. Science Citation Index e. Biological Abstracts f. Engineering Abstracts g. U.S. Government R&D Reports</p>	<p>9. What is the average number of references cited in a scientific paper?</p> <p>a. 3 b. 9 c. 17 d. 28</p>

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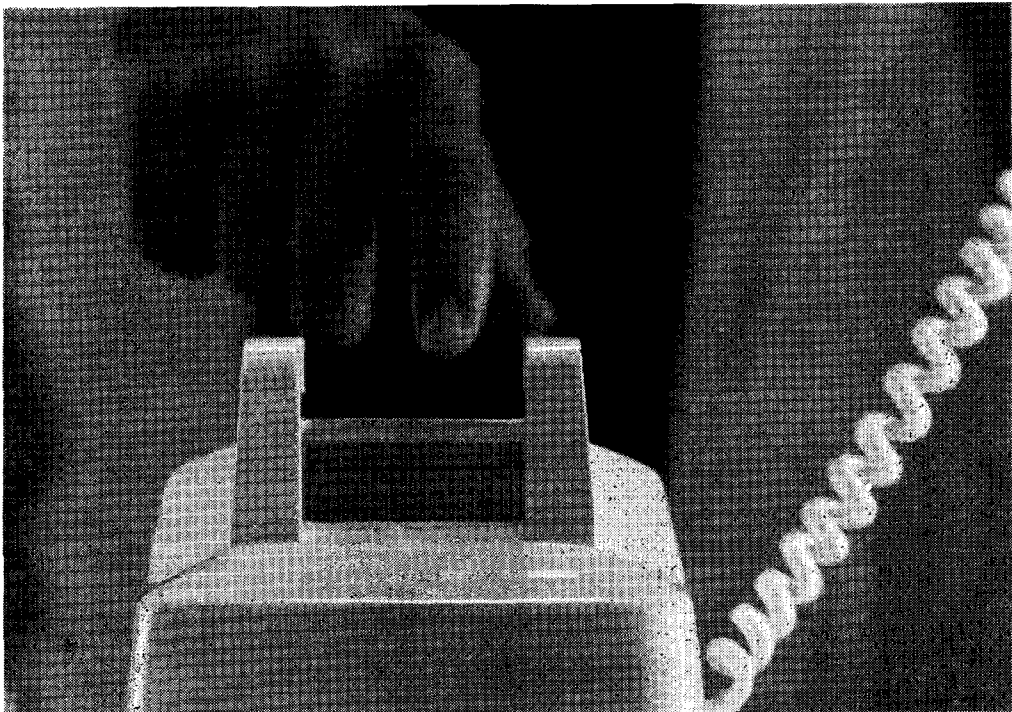
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special libraries

Describes the telephone answering recorder and reproduction service developed at the Hughes Aircraft Company Culver City Library to achieve more rapid and efficient use of important periodical literature. Data collected from user surveys validate the program's usefulness. Greater effort should be expended by special libraries to expand and refine programs to maximize use of the open periodical literature.

Library-User Communications On Periodical Literature

H. E. WILCOX and M. BLOOMFIELD

AS A LIBRARIAN scans a new issue of the *Acoustical Society of America Journal*, he notices an article on xenon flash lamps. He recalls that Mr. Morse was in the library the other day inquiring about this subject. An office copier quickly produces a reprint of the article and within an hour the information is on Mr. Morse's desk. He finds a bit of data heretofore lacking in his contract proposal, completes his research effort, submits it to the government contracting agency, and wins a substantial contract for his company.

There are too many engineers, reports, and periodicals and too few skilled librarians for this sort of event to happen with any frequency or regularity. Although librarians may be overlooking important basic information produced much earlier, the demand still is for most recent information—quickly and efficiently. Many schemes have been devised to meet this demand, and gradually the efforts of man and machine are being com-

bined to approach the ideal of instant access to newly published scientific and technical information.

At Hughes Aircraft Company, the Culver City Library attempts to satisfy the appetites and whims of the technical staff for vital information available in the "open literature." Selective Dissemination of Information (SDI) has been practiced for nearly a decade, but it is used almost exclusively for current awareness of the report literature. We believe, with Luhn, that "scientific communication can be accelerated and be made more effective only by extending the obligations of the provider of new information in disseminating it more selectively and by lessening the user's effort in becoming aware of it."¹

Our program of services includes a manual SDI for current awareness of the important unclassified periodical literature. Most of our scientists and engineers who need to utilize library services occupy offices in the

The authors were librarians in the Culver City Library of the Hughes Aircraft Company in Culver City, California, at the time of writing. Mr. Wilcox is now Supervisor of Library Services for United Technology Center, Sunnyvale, California.

same building as the library or in two buildings nearby. This proximity serves as a basis for the library's policy of subscribing to one or two copies of each journal and supplying reprints, rather than ordering multiple subscriptions and routing copies of each journal. An attempt has been made to identify the periodicals most in demand so that the library may purchase duplicate subscriptions. About 30 of these publications are used in the production of our *Contents of Selected Periodicals* (CSP), a publication that reproduces the tables of contents of the selected journals and is routed to about 750 technical personnel twice a month as a section of the *Library Information Bulletin*.

To provide reprints of articles, one copy of the CSP journals is retained by the reproduction clerk. The same clerk operates the Electronic Secretary, an automatic link between the patron reading CSP and the library reprint service.² By dialing the correct telephone number, the requester may dictate the bibliographical information from CSP and his Hughes identification into the telephone. The Electronic Secretary automatically answers the telephone, plays a set of recorded instructions to the patron, and records the patron's message. Once a day the messages that have been received are played back so that the information may be transcribed onto reproduction request forms. Only reproduction requests are routed through the Electronic Secretary; all other requests are handled by either the circulation or reference desks.

Once the requests have been transcribed, the magazine or bound volume is found, the article is checked, and the item is sent to the reproduction area for copying. Reprints are reproduced on vellum so that additional copies can be made more economically by the diazo blueline process. The reprints are sent through the company mail, along with a copy of the request as transcribed by the reproduction clerk.

About 30 per cent of all requests for reproduction service come to the library via the Electronic Secretary. If a patron prefers, he may order reprints with a CSP form, which is attached to each copy of the CSP section in the *Library Information Bulletin*. Since Hughes personnel are in the habit of coming to the library to do research work, the ma-

majority of reproduction requests are still made in person.

One xerographic copier is used exclusively for reproducing library materials. The library processes well over 1,000 requests every four weeks and copies approximately 20,000 pages per month. Although we feel we are operating near peak capacity, the fact remains that the service provided is minimal. Only about 30 journals from a subscription list of 650 are included in the CSP, and the routing list is about 750 names from a total technical staff numbering nearly 3,000. How many of the staff are still unaware of the reprint service? How many important articles remain undiscovered during the weeks and months before announcement by indexing and abstracting services? How many go undiscovered after that? Clearly, the time lag between publication and indexing-abstracting is one of the great obstacles to efficient use of periodical literature. Our beginning effort has received enthusiastic endorsement from the technical staff it intends to serve. Most of the technical staff still come to the library to consult current publications and request reprints, but a gradual increase in reproduction statistics attests to the increasingly widespread use of the Electronic Secretary.

Two user surveys, one of the effectiveness of the *Library Information Bulletin*, the other of the periodical reprint service, provided some interesting information. User response to the programs initiated by the library has been favorable. A notable lack of criticism directed at the services may mean either that they are of such high quality as to preclude criticism or that the technical staff hasn't time to complain! The library does not consider the services now offered to be the ultimate, however. They are effective but need expansion and refinement. Given the necessary storage space and personnel and more sophisticated man-machine combinations, we should expect to effect considerable improvement.

Footnotes

1. LUHN, H. P. Selective Dissemination of New Scientific Information with the Aid of Electronic Data Processing Equipment. *American Documentation*, vol. 12, 1961, p. 131-8.
2. BLOOMFIELD, M. Telephone Answering Recorder and Reproduction Service. *Special Libraries*, vol. 55, November 1964, p. 632.

People ask one another, "Am I communicating?" The question should be, "What do you think I am communicating?" The answer would be surprising. Librarians are in the communications business. Theories of nonverbal communication and role can be adapted to a library situation. Applied, they would provide a basis for improving librarian-library user communication. Awareness of feedback is the key to this improvement. Preliminary investigations underway at the University of Southern California indicate the reference encounter provides an investigative approach in which this key can be utilized to enhance communication.

Freud, Frug, and Feedback

NORMA J. SHOSID

"AM I COMMUNICATING" is a catchphrase of the 1960's. Everybody today worries about communicating—businessmen with customers, government with the public, teenagers with parents. Librarians, too, are in the communications business. They talk, write, and create programs in an often futile attempt to communicate something to somebody. Special librarians in particular have the problem of providing information to people who may have little experience with, or interest in, libraries.

Usually when librarians talk about communicating with library users, they mean the transmittal of written or oral information. The nonverbal content of the transmittal process is often overlooked. No doubt they have been communicating, but what are they communicating? How can some of the difficulties that occur be cured?

There is the good old problem of finding out what the person to whom one is talking really wants to know. The machine, we are told, will help us out. It will persuade the library user that he wants, not what he said he wanted, but something else entirely. This will, indeed, be a great advance. The user may feel much freer to kick a machine than to kick a librarian—especially if the machine has been programmed to yell "ouch!"

Miss Shosid is Head of the Graduate School of Business Administration Library at the University of Southern California in Los Angeles. She was assisted in the research and literature searching for this paper by Deborah S. Kellett who is now a Graduate Fellow in the Department of Social Relations at Harvard University. A condensed version of the article was presented at the "Communicating with Patrons" panel at the Special Libraries Association's 57th Convention in Minneapolis, May 31, 1966.

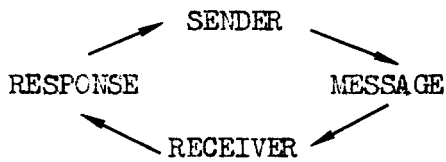


Figure 1

While awaiting the revolution, there are some problems librarians can tackle—human problems, involving nonverbal communication and roles. They can pick up cues every day from others, and they can feed cues back. No one need be a Freudian or a participant in the group psychotherapy that masquerades under the name sensitivity-training to recognize this aspect of human relations. Yet in library school one rarely has a chance to talk about people as people.

A simplified communications model is shown in Figure 1. As in all good communication, human or machine, the feedback loops run to and from the original receiver and original sender. Message and response may be nonverbal or verbal. Ruesch and Kees see nonverbal communication as taking three forms: sign, action (body movement), and object (material objects displayed). Additional factors mentioned by Hall are distance (between communicants) and time (on-time,



Garfield

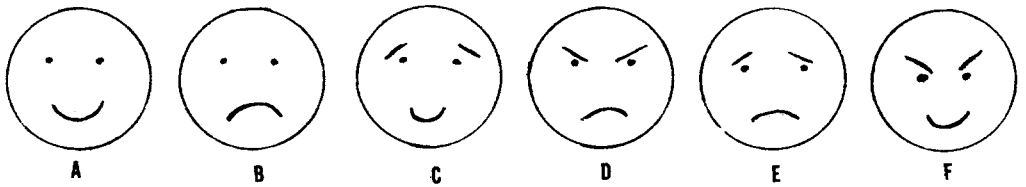


Figure 2

lateness). Verbal communication may include both the actual language used and non-language modifiers such as intonation and accent. Some in the communications field, however, place the latter in the nonverbal category.

Researchers have attempted to map nonverbal communication. Birdwhistell, through kinesics, has discovered, among other movements, 23 significant eyebrow positions and a way to note each one. Harrison uses picts and pictomorphs as a form of description; examples appear in Figure 2. Imagine the faces sketched below looking at you across a desk. You have just given them some information. What they say is, "That's great"; but if you are looking, each face conveys a different message.

An important aspect of nonverbal communication is defined by Stone as appearance, which sets the stage. It establishes identification of the participants in an encounter. Included in appearance are gestures, grooming, clothing, and location. **Where** it is said may be as meaningful as what is said.

If nonverbal communication can include intonation and choice of words, as some say it does, even more affective cues are obtained. Yet librarians are often unaware of, and are rarely taught, the effect a particular phrase may have. The feedback is there, but the result may look more like D than A of Figure 2. Librarians must become sensitive to this continuous nonverbal communication and harness it into their total communications strategy.

Roles and Role Playing

All communication, verbal and nonverbal, takes place in a larger framework. The librarian and the library user have dozens, if not hundreds, of preconceived expectations before they start talking. A library encounter falls into the category of social interaction and follows the pattern of all interpersonal

communication. Kuhn considers that each social act or encounter has three parts: 1) anticipation—advance role conceptions, 2) action—organized and directed according to role, and 3) consensual termination.

They key word is role. As defined by Goffman, it is "the typical response of individuals in a particular position." He contrasts this to role performance, the actual behavior of a person in his official duties. He compares the role-playing concept with everyday games. Within a game, participants have specific roles, and they must act these roles within the rules of the game. Similarly, social interaction has rules and roles.

When and why does the game break down? It may be that there is a lack of communication because the participants are playing two different games. The librarian may be dealing blackjack, while the library user shoots dice. Just what are the respective roles during, for example, the reference interview? Are they the same for the user and librarian?

Finally, what is the role of the librarian? Very few people have asked this question, despite all the talk of image. Researchers go around asking librarians what they think of librarians, which, according to Thornton, is not much. They ask the public what it thinks of librarians, and, it turns out, they are nice things to have around. Librarians presumably bring to their work some self-image that modifies their behavior. The question restated would be, "Is the self-role congruent with the role seen by the relevant other, in this case, the library user?"

Firming role concepts would not only help the librarian; it might also help that mystical creature about whom they talk so much, the library user. Some of the librarians' communication troubles arise from the fact that many of the people with whom they are dealing do not know what to expect from them. People are not sure how to behave in differing library situations.

Establishing role clusters would give librarians an opportunity to put the discussion of professionalism into a concrete context. Given a definite role concept, one can, by utilizing role distance, break role without destroying it.

Goffman calls the face-to-face encounter an ideal field for nonverbal (sign) conveyance of role information. During this encounter there is the opportunity for "control," an explanation that the role message being sent is not true or accurate, e.g., a verbal or nonverbal "Well, yes, I am checking out books, but I am really a librarian and do other things."

Investigation of Reference Encounter

In an attempt to see if the reference encounter provides a form of face-to-face social interaction in which nonverbal content could be investigated, a series of exploratory experiments have been conducted at the University of Southern California. In preliminary work, a questionnaire was administered to students and reference librarians as a check on results obtained by other investigators. Results showed that while librarians consider librarianship a rewarding and intellectually demanding field, graduate students do not. Furthermore, librarians tend to have a favorable view of their own personality, while undergraduates are more negative.

The principal experiment has been an observation of encounters at the reference desk between librarians and library users. Attempts were made to see: 1) if nonverbal communication in such a situation could be observed and 2) if any patterns emerged during the meetings. Although results to date are primarily of methodological significance, it has been found that: 1) there is observable nonverbal communication going on and 2) the librarians are not always aware of what the user is trying to communicate and vice versa.

Graphing the matching halves of each encounter produces a pattern resembling a stylized dance. Observed cues included facial expressions, gestures, posture, and so forth. Roughly, the effect of a "less friendly" librarian or user on his opposite would be: 1) if the opposite were neutral, to pull him over to unfriendly and 2) if the opposite were friendly, to pull him to neutral or even un-

friendly. The reverse reactions occur if one starts on the friendly side. The important point is that not only can these reactions be observed but that they frequently have little or no relation to the information content.

During one phase of the experiment, a Southern accent was used by a female librarian in some encounters and not used in others. The nonverbal reactions indicated an interesting sex difference in response to the accent. It turns out that what may be needed are Scarlet O'Hara's to deal with male library users.

Quite often it was observed that a user approached the reference desk hesitantly, as if not sure what to expect. If the librarian sufficiently utilizes nonverbal cues, the user may begin his next reference encounter with surer role expectations. This is not recommending a big hello and smile approach.

Until the computer eliminates librarians entirely, they will have to cope with the problems of interpersonal relations, including nonverbal communication. What seem to be meaningless movements acquire significance when viewed as communication. One way to see this would be to visit the nearest discotheque. Watch the dancers. They are telling something—about the world, or ourselves, or themselves. One may not like what the dancers say, but try listening to the message. You may find yourself doing the frug.

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Emphasizes the importance of seeing the library and its contributions from management's view and understanding the problems management has in justifying a company library.

The View from Management's Bridge

MARGARET N. SLOANE

I BELIEVE that the measure of librarians' success in communicating with management is in direct proportion to the clarity with which they see the view from management's bridge and to their ability to maintain that sustained view in the face of all obstacles. It is true that management *should* see the librarians' problems and *should* understand the value of their information programs, but in the last analysis—regardless of all the fine philosophies advanced about management's obligations to their libraries—the burden of proof rests with the librarians and only the librarians.

In *Sci-Tech News*, Spring 1964, there appeared a "Questionnaire on Management-Library Relations." The very first question was, "Would you consider your library administrator to be 'company oriented'?" This is the view I am recommending—a company-oriented view that places the library administrator smack in the middle of corporate problems, a position from which that view is clear and unobstructed.

What are the basic problems of communicating with management? What elements enter into and form the problems? What specific things can librarians do to ensure good communication? These questions must be uppermost in librarians' minds at all times.

The Library Committee has been presented as an excellent channel of communication. Other ways of communicating are library bulletins, accession lists, letters of apprecia-

tion from satisfied users (which are routed to management), notices concerning unusual library activities, annual reports, and many more specific things. I know of one librarian in a large research corporation who had the courage to prepare a user questionnaire and route it to the entire research staff. It is an excellent questionnaire, and the librarian reports that the information gleaned from the 300 some replies received has been invaluable in improving her communication with management, as well as improving services in areas where the existence of problems had never been suspected.

In addition to these specific elements that afford communication, I should like to list some facts and considerations that contribute to obscuring the view from management's bridge—problems of which librarians must be aware.

First, management is obliged to justify monies expended for such services as a library provides. But how can management justify in qualitative terms the value of an information program of a library?

What is the worth of a library? This is the biggest problem in communication. How can librarians communicate the *qualitative* value of the level of their service? How can they show this graphically? Certainly they can show statistics—materials ordered, received, cataloged, circulated—but these are quantitative, not qualitative. Volume does not necessarily equate directly to the quality nor to the level of service.

Here are a few typical questions asked by non-library-oriented management. They point painfully to the need for communicating.

- How do you know what books to buy?
- What do you need a book cataloger for, can't you buy LC cards?
- What are these engineers and scientists doing in the library? Goofing off? Why aren't they in their offices manipulating their slide rules and plotting guidance equations?



J. Edmund Watson
Los Angeles/Whittier

Mrs. Sloane, who is Manager of the Technical Information Center of TRW Systems, Redondo Beach, California, presented this paper on the "Communicating with Management" panel at the 57th Special Libraries Association Convention in Minneapolis, May 31, 1966.

—What value does the company get out of a complete run of *Chem Abstracts*?

—Why on earth do you need a reference librarian or a literature research specialist? Can't the engineers find this information themselves?

Of all the support functions in any organization, the librarians and their libraries are at the top of the list of unknown quantities. Yet I say librarians are the only ones who *can* improve communication. Management can't. Communication is difficult because the message is difficult to generate.

Librarians must continually consider—what management sees—what they themselves must see—and how they should interpret this view. Librarians must continually search for clues as to how to help management see their view. They must understand that they and management are both looking in the same direction, and each must continually work toward seeing the other's view as well as his own.

Let's do everything we can to ensure that the view management sees of librarians is dynamic!

Effective communication with management is essential for special library administrators who share with other service department heads the responsibility to relate departmental goals to corporate aims and to see that their function is understood by the parent organization. Business mergers and changes in corporate structure may have effects both traumatic and beneficial on industrial libraries. Supervisory orientation, a library charter, a library committee, and an adequate schedule of publications with specific aims can reduce the impact of corporate change, improve management communication, and lead to greater understanding of the library function.

Communicating with Management

ELIZABETH M. WALKEY

MOST SPECIAL libraries exist within organizations having non-library objectives. This "business-within-a-business" aspect can result in misconceptions of the library function by the parent organization and makes it incumbent upon the librarian to relate the operation of his smaller organization to over-all corporate goals. To some extent, a similar situation is faced by any central service group operating within a larger framework—computer services, photolabs, model shops, engineering or stationary stockrooms, and so on. Perhaps accounting and financial services are less likely to be encum-

bered with management misunderstanding. After all, who can deny the significance of the profit and loss statement?

Libraries and librarians are known to most people in atmospheres outside the frenetic environment of business. If special libraries still are considered by some corporate managements as impractical luxuries on the business scene, the librarian, rather than management, *may* be at fault. The profession realizes that special libraries are "primarily devoted to a special subject (or a subject network) and offer special services to special clientele," but should one expect a new vice-president—with library contacts limited to school and public libraries—to understand the value of industrial libraries without orientation, indoctrination, and businesslike reporting of what the library has done, and can do, for scientific, engineering, marketing, management, and support personnel in his organization?

It is time to dispel the shibboleth that "a special library's best public relations is a job well done." This is not to dispute the value

Miss Walkey is Manager of Library Services at the Bell & Howell Research Center in Pasadena, California. This is a shortened version of the paper she presented at the "Circles of Communications"



session at the 57th Special Libraries Association Convention in Minneapolis, May 31, 1966.

of good professional performance. Too often the well done job is known and valued only by the man at the operating level for whom it was performed and who has little, if any, control over the corporate pocketbook. Without effective management communication, no library in industry can exist. The library's *raison d'être* needs to be understood and financially supported by management, as corporate goals must be understood by the librarian. A library's resources and services need to be creatively used by its clientele and effectively directed by a librarian. These intricately related factors are what put a library in business—and keep it there.

In an age of frequent business mergers, re-alignment of management, industrial cost reduction, and re-examination and re-evaluation of all corporate activities and services, the wise special librarian accelerates his normal continuing analysis of library operations. Whether by the event-activity network of a PERT diagram or simplified flow charting, special librarians should constantly study the efficiency and effectiveness of all aspects of their procedures, technical processing, and services. These analytic techniques are useful in management communication and lead to cost improvement and better library service as well.

The uncertainties of mergers affect many libraries in industry today. The writer's own library has experienced, and profited by, a chain of circumstances induced by merger. Also, within recent years and inside a one-block radius, three other company libraries, not to mention many outside the immediate neighborhood, have survived corporate mergers.

In view of this trend, let us examine some of the management communication problems that may materialize following integration with another type of business. In the inevitable re-alignment of responsibilities and functions, a fresh, vigorous cost-reduction program usually is instituted. This may mean an internal or outside audit of library and other operations, with possible cuts in budget, staff, and the like.

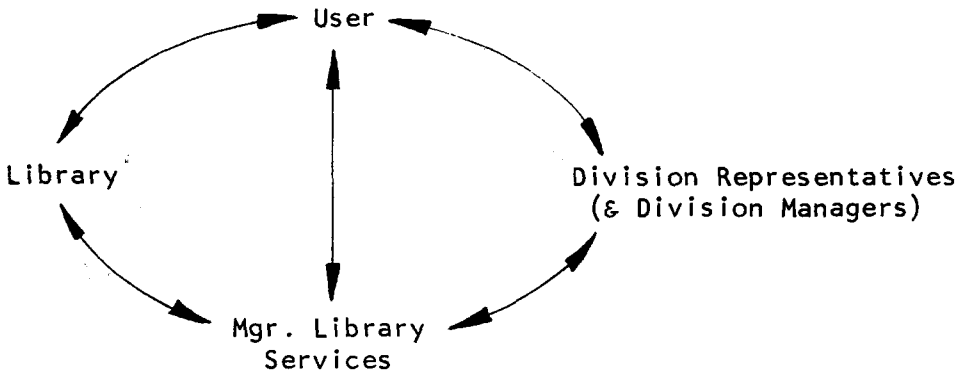
Historically, what is now Bell & Howell Research Center library had been surveyed repeatedly, with a record of many satisfied users. At the time of merger, however, due to changing management, compound misunder-

standings and misconceptions between management, library, and outside auditors, the library suffered a financial setback and personnel loss. Meanwhile, stimulated by many new technical interests resulting from integrating diverse product lines, operating level and middle management were making more demands than ever on the library. Something had to give!

The librarian began by giving attention to orienting and indoctrinating her new supervisor in special library methods and philosophy. At the same time she was exposed to her supervisor's graduate school of business techniques (many of which would be useful in graduate library schools), and a period of mutual brain-picking ensued, from which both parties probably emerged the better. The supervisor and librarian melded into a strong team. In addition, the supervisor came to depend upon the library as evidenced by the fact that he developed into an extremely active library user. The librarian found she could depend upon the supervisor, when continually advised of library progress, to back her up fully, if necessary, to top management. Moreover, in this continuing educational process, the librarian came into considerably more direct contact with management. She attended staff meetings of senior scientists, frequently was invited to pre-proposal conferences that alerted her to new interests, often was asked for assistance and advice by management, and was requested by management to evaluate outside proposals in her areas of technical competence, now more widely known within the company. Thus, she became a *de facto* member of the technical management staff.

The supervisory orientation included: selected reading on techniques and administration of special libraries (including published comparative special library surveys), attendance at several SLA and ADI local Chapter meetings as well as an out-of-town SLA symposium on analysis of library systems, and visits to other local special libraries that were selected by the supervisor from the local SLA Chapter directory as being representative of libraries in similar corporate structures.

Library charters, especially, were investigated. It was discovered that in actual practice, many large and well-developed libraries



were operating only by tacit agreement, with no expressed charter. The joint effort by supervisor and librarian indicated that, in this particular case, a library committee probably would encourage two-way communication between the library and corporate management, and they selected a committee composed of top technical representatives from each local division using the library. Some committee members already were enthusiastic library users, others were not (in a few months, all were). The group was approved by the Corporate Management Committee, and the way was paved for better communication.

At the same time, the librarian initiated a biweekly one-page bulletin for management. This newsletter of business news, graphic library statistics, and related news was intended to orient readers to special libraries in general, and this one in particular. Through the bulletin management became more aware of the library's existence and its capabilities.

In still another approach, a single library memo was directed to secretaries. The brief bulletin was attached to a reprint of an article written by a secretary and published in a national magazine, on how secretaries could increase their worth to employers by learning how to use the company library. The article, which indicated considerable research, was well conceived and equally well received. Many executive secretaries now use the library. The writer was asked to speak at a meeting of company secretaries on how they can become more valuable to their bosses by using this specific library.

A revised, more-comprehensive-than-usual library users' handbook was prepared by the librarian, reviewed by the Library Committee, issued to all current users, and given to

new employees when they visited the library the first time. In the manual the librarian set forth an eight-point charter, which she first submitted for approval to the Library Committee and top management. It intimately relates library aims to corporate goals and explains library facilities, resources, services, and how to use them in greater detail than is attempted by most libraries. The fine detail was considered necessary in the over-all administration of change.

The manual also explains the advisory function of the Library Committee and depicts graphically the library's own "circle of communication" (see illustration) and its general communications program, which includes the following publications: library accession bulletin, newsletter to Library Committee, library memos (irregularly issued bulletins on changes in library policy and procedures, library news, etc.) annual subscription list, research reports on developments in the information-handling field, monthly progress reports, and annual report to management.

Although the Library Committee meets only two to four times a year, members are in frequent contact with the library through publications and consultation with the librarian. The Committee is consulted formally only in the matters of budget, re-locating library, and other major issues so that members are not annoyed by too frequent meetings on "nit picking" topics of temporal interest. The Committee effectively fills its role as stimulator-expediter of communication and communication feedback between management, users, and library staff. Library acquisitions, policy, procedures, and techniques are the responsibility of the librarian who enjoys the full confidence of the Library Committee

and top management that she can administer her department as well as any other technical manager in the company.

An added benefit from the supervisory indoctrination was the illustration of the value of active participation in professional library association activities. The supervisor saw firsthand some of the benefits inherent in association activity: easier interlibrary loans, knowledge of local area subject expertise, and direct consultation between librarians whenever necessary on countless details of library operation such as vendor satisfaction, library budgeting, planning and control, and exchange of experience in library-computer applications. A minimum level of professional participation soon was expected from the librarian.

Lest it be thought the writer is naively optimistic in the views expressed, let it be said that this library still has occasional problems—in management communications and otherwise. But the challenge of creative problem solving is part of what attracts this librarian to the profession. Other enticements are the opportunities to be of service—to exercise and expand technical skills and knowledge—to be where the action is—to grow in self-knowledge and in human understanding and awareness of how co-workers, customers, and management feel and think. Is this kind of career involvement unique to special libraries? Is it not common to most enlightened, responsive, dynamic business executives—including those who happen to be special librarians?

Cost-Research Differential

“. . . It does not always pay to make an exhaustive search of existing knowledge, especially when the object is to get results quickly. . . . It often takes less time to do it all over again than to find out how someone else did it earlier. This is, in fact, common practice in industrial research, ordinarily conducted for internal application. Unfortunately, the result is that often very original findings lie buried in company files for years, simply because no one wants to bother with the documentation required to meet the punctilios of formal publication.”

From a letter to the editor by
Macon Fry in *Science*, vol. 152,
no. 3730, June 24, 1966, p. 1694.

SPOTTED

● *Los Angeles is in the grips of another revolt—the city library vs. the computer. The July 11, 1966 issue of Electronics carried the story of an IBM 360 Cobol-programmed computer that failed to do its job of automating all technical library services. Experts, who were called in, found that when part of the program was run, the 360 was adequate, but it could not take the entire program. Not only is the amount of magnetic core storage for Cobol insufficient, Cobol isn't fast enough.* ● *The computer has also made a maverick of the South Puget Sound Regional Library, which wants to withdraw from further participation in a five-county library automation demonstration. The culprit is the computer, and SPSRL's head librarian maintains that almost all aspects of the State Library's centralized ordering, cataloging, classifying, and processing of books, which were automated, fell to a standard lower than before the demonstration.* ● *The following is a true story, but there is only a human being's word for it. When an air force employee requested a print-out bibliography of abstracts on "Properties of Massive Objects," the computer's answer was, "The bigger they are, the harder they fall." The employee was hurriedly reassured that this was Abstract TAB 65-14 and not evidence of the computer's sense of humor.* ● *Computer software has been given critical second thoughts by a Department of Defense survey. Indications were that there is no real need for new scientific and technical information systems. Other survey results indicate that research performance standards can be raised using the current systems, users really prefer their information orally, getting the human touch through telephone or across the desk, and information gathering operations vary very little for all personnel levels.* ● *A healthy sign of atavism in today's growing automated world is people-advertising, not product-advertising. Halliburton Company salutes its librarian, Mrs. Otis Dillon, and Delores Maximina, General Motors reference librarian, is also featured in advertising text and photo in Harper's and the Saturday Review.* ● *A book frozen for 50 years in Antarctica showed that it fared as well as an unfrozen similar edition. A library of the future will probably offer mittens to browsers: signs will caution: thaw before opening.*

The functions of indexes as communications links between information sources and users are defined. Principal problems of making and using indexes are outlined in four categories: index scope, depth of indexing, index structure, and terminology. Some general suggestions are made for improving both the making and the use of indexes.

Communicating with Indexes

DR. JOHN ROTHMAN

IN A WAY an index is like a translator at a press conference who hears the answers but cannot hear the questions or see the questioners and is not even sure of what language the questioners are speaking.

By formal definition, an index is a guide to items in a collection or to information stated or concepts implied in these items. An index must represent these items in such a way that a user searching for a particular one can identify and locate it through this representation. An index has to represent these items in such a way that a user seeking a sequence of items will be led from one index entry to all the others that represent parts of the sequence. An index has to represent these items in such a way that a user who is vague and uncertain about what he wants will be led to all the material in the collection that will be of interest to him and will be helped to skip all the material that he would find irrelevant. This is a tall order, but it is not all.

An index has to do this job in such a way that it will serve not only contemporary users but also the users of next year, the next generation, the next century. To do this job, the index-maker has to guess who the users will be, what they are likely to seek, and how they are likely to carry out their search. He has to anticipate their vocabulary, to assess their expertise in the subject matter and their expertise in literature searches, and to gauge

Dr. Rothman, who is Editor of the "New York Times Index," led the "Communicating with Indexes" panel with this paper at the 57th Convention of Special Libraries Association in Minneapolis, May 31, 1966.



New York Times Studio

their special interests and even their prejudices and idiosyncrasies. This is a very tall order indeed, but it is still not all.

Indexes must be completed quickly, for instant availability—but they must also be thorough and painstakingly accurate. Indexes have to be consistent—but they also have to be flexible. Indexes should be comprehensive—but they should not be over-abundant. (This means they should contain everything *you* want, but omit whatever only *they* want.) And, of course, they should be cheap—cheap to produce and cheap to use.

The problems of index-making that cause problems in index-using fall into four major categories (there are many lesser ones):

1. The first is selectivity or scope of coverage in the index, i.e., should everything in the collection be indexed? There are very few collections that would demand an unqualified "yes" answer. (People are often shocked when they discover that not everything published in *The New York Times* is covered in *The Times Index*. But how could it be? If absolutely everything were to be indexed—including the financial tables, which alone would add some 20,000 entries a week—the semimonthly issues couldn't be lifted off the shelf.
2. The second is depth, the extent to which items selected for indexing are analyzed for representation through index entries. This is a matter of determining the number of tags to be assigned to each item and their levels of specificity. Suppose the item is a story about a jewel robbery. We use as index tags "robbery" and its synonyms, "jewelry," and the victim's name. Should we also use the names of the police investigators, the insurance company, a dozen tags denoting specific gems, and specific items of jewelry such as rings, necklaces, bracelets?

3. The third is the structure of the index, the pattern in which entries are arranged. Is an article on schools in Canada indexed under Canada—Schools or under Schools—Canada? Coordinate indexes have gone a long way toward solving this problem, but in most printed indexes such a choice must be made.

4. The fourth is terminology, i.e., how to handle synonyms and near-synonyms, technical versus popular terms, brand names versus generic names, current terms versus their now obsolete predecessors. Today a country in central Africa is known as Zambia, and that is the term used in today's index; but how does one inform the user making a retrospective search that two years ago the same index carried information on the same country under "Northern Rhodesia"—or under "Rhodesia, Northern"?

These, I think, are the main areas where pitfalls in communicating with indexes occur. Improvement in our information systems demands something from all concerned.

People who direct publishing houses and media and information services must recognize that indexing is a complex and complicated job that requires highly skilled personnel who must be given adequate training to learn their jobs and adequate time to do their jobs well.

Authors should strive for a vocabulary that is lucid and consistent and free of ambiguities and personal quirks.

Indexers should be thoroughly familiar with the subject matter they handle. They should know not only their own special indexing jobs but should learn more about the principles and techniques of indexing and retrieval generally. They should adapt and devise more safeguards against error—vocabulary controls, standard subject heading lists, cross-reference files, and the like. They should learn more about their users—who they are, what they look for, and how adept they are at searching. Then they should supply more help to users—clear instructions for use of the index, more scope notes and cross references, and more explicit entries.

Users should make sure, first of all, that they are approaching the correct source of information and that their inquiry is precise. They should not plunge headlong into the middle of an index but should first familiar-

ize themselves with its structure, read the instructions, check the thesaurus (if there is one), and look at the scope notes and cross references. They must realize that indexes are not simple lists, like telephone books, that provide ready answers at the flip of a page.

Indexing is an altogether pragmatic business. An index is as good as its users think it is. Its quality is determined by the number of inquiries it answers satisfactorily—nothing else. I am skeptical of projects that seek to assess the quality of an index by comparing the method by which it was prepared with other methods or by measuring its success in terms of absolutes, such as relevance ratios and recall ratios. I would like to see more user surveys, such as questionnaires at inquiry desks that ask each user what he was looking for, whether he found it and how quickly and how easily, and whether he has any suggestions for improvement.

I am also skeptical of projects to automate indexing. Machines are for mechanical functions; they do not think. They can be used to produce indexes more efficiently, more accurately, more quickly, perhaps more cheaply, and they can be used to search information systems. But indexing itself is an intellectual process that requires reflection, judgment, and discrimination, and I cannot envision that this will ever be done satisfactorily by machine. Sometimes, when I read the professional journals, I wonder whether some of us haven't become too much concerned with theory at the expense of practice, and whether the machine hasn't in some instances become a goal to be achieved rather than a tool to be used.

Indexes are a service industry, like the telephone company, and, like the telephone company, they must furnish a quick and clear connection and smooth communication between callers and the objects of their calls.

I've asked the commission to appraise the role and adequacy of our libraries, now and in the future, as sources for scholarly research, as centers for the distribution of knowledge, and as links in our nation's evolving communications networks.

PRESIDENT LYNDON B. JOHNSON announcing the creation of an Advisory Commission to Study Ways of Improving the National Libraries, September 2, 1966.

The procedure of searching is examined primarily as a communication problem with the special librarian as the intermediary between the inquirer and the retrieval system. It is suggested that regardless of what type of file is searched—a printed index, a file of catalog cards, a deck of punched cards, or reels of magnetic tape—thorough understanding of system parameters will make this communication more effective. System characteristics that influence the formulation and implementation of search strategies are discussed.

The Searchers—Links between Inquirers and Indexes

DR. SUSAN ARTANDI

BIBLIOGRAPHIC searching is a service of major importance that is performed in special libraries and information centers. In hundreds of libraries a great variety of subjects are searched in dozens of different tools. In all cases the vital components are the same: a collection of documents, a user's inquiry, and a searcher. The interaction of all three may well determine the success of a research project, a lecture, a paper, or anything else for which information is needed and sought. The searcher is the vital link between the question and the system.

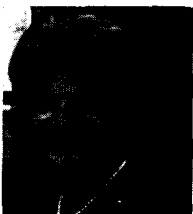
Preliminary Considerations

The searcher's role and the objective of his work is to identify those documents in the collection that are relevant to an information request. He must match the contents of the documents to the requested information. His success will depend to some extent on *a priori* conditions, since the nature of the file he will work with was determined when the collection was organized. In other words, the possible search strategies that he can use will be limited to some extent by features built into the system through design and implementation. Nevertheless, differences in skills

among individual searchers are well known, and skills needed for searching are frequently discussed. Part of the skill of a good searcher is knowing the nature of the file and figuring out strategies under which he can apply the organization of the file as it was created to the problem he is working on—that is, to formulate the necessary approaches to pull out of the file what he needs.

In types of searches where it is more or less known what is being sought, the searcher's role is that of an intermediary between the inquirer and the retrieval system. He must try to satisfy the user, who is very likely to present his inquiry in terms of his own particular point of view. Another user will ask for the same information in a different way. Even the information needs of the same user may vary from one occasion to another. It is very likely that the question will not be stated clearly immediately and that discussion and clarification will be necessary.¹ Clarification here implies more than clarification of subject matter. Such things as the level at which the information is sought and its point of view must be considered, e.g., whether it is preferable to retrieve the maximum number of relevant documents in the collection at the cost of retrieving at the same time some irrelevant ones, or whether it is desirable to reduce the number of irrelevant documents retrieved and to take the calculated risk of not retrieving certain relevant ones. The former situation may be preferable in a patent search, for example; the latter when only a few representative documents are sought. Putting this in the terminology of the Cranfield Project,² the searcher

Dr. Artandi is a Professor at the Graduate School of Library Service at Rutgers University, New Brunswick, New Jersey. She presented this paper at the "Circles of Communications" session at the 57th Special Libraries Association Convention in Minneapolis, May 31, 1966.



must decide whether his search should result in high recall ratio or high precision ratio.*

Once the subject is clarified and the answers to these and to similar questions have been found, a search instruction can be formulated, i.e., the question can be translated into the formal language of the system.

System Characteristics that Influence Formulation of Search Strategies

The objective of searching is to find in a collection a limited number of documents, or a class of documents, that are relevant to a question. To be able to do this one must have some indication, some kind of clue, to the content of all the documents in the collection. These clues or indications of document contents are created at the time of indexing. Theoretically one should be able to find what he wants by examining the entire collection, but this would become impractical once the collection has grown beyond a small number of items. Instead the amount of material to be examined is reduced by organizing the collection through the "recognition of useful similarities between documents and the establishment of useful groups based on these similarities."³

Indexing is based on the assumption that it is possible to describe adequately the contents of documents by assigning subject tags to them. It is also assumed that searching a file of these tags plus document references can serve as a satisfactory substitute for scanning the entire collection and that the tags will indicate the existence and location or the absence of items relevant to an information request. This process of tagging items to indicate what they are about is called "marking and parking" by Fairthorne.⁴

The particular way in which "marking and parking" is achieved will vary according to the particular indexing system used. The total number of approved subject tags used in "marking" constitutes the index language of the system.†

* By recall ratio is meant the ratio of relevant documents actually retrieved to the known relevant documents in the collection. Precision (relevance) ratio means the ratio of relevant documents retrieved to the total number retrieved.

† Classification numbers and other codes used in indexing are the same as natural language terms. They all serve the same purpose—to indicate what a document is about.

Once index tags have been substituted for documents and have been accepted to stand for the documents in a file, communication with the system is achieved through these index tags. Their nature, their number, and their relationship to each other will determine the characteristics of this communication in that its pattern will vary according to the manner in which index language features are used to help achieve the objectives of the search. Some factors that influence communication with a system are the specificity and the size of the index language, the network of relationships that exist between terms, exhaustivity of indexing, and the arrangement and the physical characteristics of the file.

Specificity relates to the generic level of the index terms used. Cleverdon defines specificity as the degree to which the exact species rather than the containing genus is recognized.⁵ The degree of specificity of the index language will determine, for example, whether a question concerning ethyl alcohol will be searched under ETHYL ALCOHOL or under ALCOHOLS. The network of relationships between terms may include a number of different relationships that can exist among terms; terms may be synonymous, they may be near-synonyms, they may be hierarchically related, or a coordinate relationship may exist between them.

Feedback from a system provides some indication of what there is in the collection on a subject. Depending on what is found during a search, the scope of a search can be broadened or narrowed to produce the desired results. Feedback may indicate that an entirely different approach ought to be tried, attacking the problem from a different point of view.

The scope of a search can be broadened by expanding the original search instruction through the addition of terms that are in some kind of hierarchical relationship with the original search term. A generic hierarchical relation could be explored, for example, if the term ALCOHOL were added to the search term ETHYL ALCOHOL. A non-generic hierarchical relation could be used, for example, when in a search on the SYNTHESIS OF ETHYL ALCOHOL, the term ETHYL ALCOHOL was accepted as another search term.

The scope of a search can also be broadened by treating synonyms, near-synonyms, or

word forms as equivalents. Cleverdon calls these recall devices because their use results in the increase of the recall ratio.⁶ In retrieval systems with controlled vocabularies, the control of synonyms and word forms is displayed in the index language. The former are controlled by the designation of one particular synonym to be used as the accepted index term and by the use of *see* references to refer back from other synonyms to the accepted one. Word forms are also usually combined to be represented by a single preferred form. The most common example of the latter is the control of the plural and the singular forms of the same term, such as HYDROCARBON and HYDROCARBONS. Near-synonyms and related subjects may be indicated in a file through *see also* references, or they may be left to the searcher to figure out and explore.

The scope of the search can be narrowed and its precision increased through coordination, that is, through the combination of terms a narrower class is created, as, for example, when SCHOOL and LIBRARIES are combined to make SCHOOL LIBRARIES. A search can be narrowed by exploiting hierarchical relationships in reverse to the methods described above and through the consideration of roles, links, and weights.[‡] Ignoring these will result in a broadening of the search.

Implementing Search Strategies with Uncontrolled and Controlled Vocabulary Systems

In the foregoing, some system characteristics that influence the formulation and implementation of search strategies were discussed. The examples that follow are intended to show how these characteristics can apply in practice.

A KWIC (Key-Word-In-Context) index usually has no vocabulary control. The only definite information commonly available about the index language is a list of those terms that are *not* acceptable to the system. This is the opposite of what a searcher usually knows about a system, since customarily he is in-

[‡] Roles indicate the function of a particular term in an indexing description. Links indicate a connection between two or more terms in an indexing description. Weights refer to the relative importance of the term in the total subject description of the document.

formed through a subject heading list, a thesaurus, or a classification schedule about those terms that are to be used and may be instructed on how acceptable index terms can be created. In a KWIC index a searcher must work with index terms that are identical with the words appearing in the natural language titles of documents. To do an exhaustive search he will have to look under all possible synonyms and word forms that he can think of. Since there is no hierarchical structure or cross-reference system in the file, it will be the searcher's job to remember the hierarchically or otherwise related terms to find material that appears in the index under those terms through the accident of language usage. He will be able to use coordination by scanning the context around a key word to ascertain that it appears in combination with another word or words in the title. He may consider or disregard links and roles in the same way. To explore all these possibilities, the searcher receives almost no guidance from the system, and he must depend on his own initiative and his familiarity with the terminology of the field searched.

If the required information were concerned with the EXTRUSION OF POLYETHYLENE FILMS, then the following may be considered in searching a KWIC index:

Synonyms—polyethylene, polythene, ethylene polymer

Word forms—film, films; ethylene polymer, ethylene polymers

Words with common roots—extrusion, extruded, extrude, extruding

Non-generic hierarchical relationship (with extrusion)—manufacture, fabrication, etc.

Generic hierarchical relation (with polyethylene)—polyolefines, thermoplastics, plastics, synthetic polymers, polymers

Coordination—by specifying, for example, that both polyethylene (or its appropriate substitute term) and extrusion (or its appropriate substitute term) should appear in the title

Links—by requiring not only the above but also that extrusion should refer to polyethylene in the title (and not to some other material that may also appear in the title)

Chemical Abstracts subject indexing uses a flexible controlled vocabulary. Such things as

synonyms, word forms, and common roots are controlled with emphasis on the main headings rather than the modifying phrases. CA indexing is highly specific; only very general articles are indexed under generic terms.

Synonyms—Because of synonym control, it is not necessary to search under all possible synonyms. Only the particular one used is located, and all material will be listed under it. See references are provided from not-used synonyms to the used one.

Word forms, common roots, etc.—These are also controlled, and one form is usually designated to be used as the index term. There may or may not be see references from not-used forms to used forms, and familiarity with the system and the terminology of the field helps in the location of the right term to search under.

Hierarchical relationships—These are not displayed in the file; material is indexed under the specific term. Moving to the hierarchically higher term will not result in a complete expansion of the class because only general articles will be found under the generic term. To expand the class completely, a searcher would have to search under all the specific headings that, taken together, will add up to the broader class.

For example, if one should want to broaden a search on polyethylene to include all polymers, it would not be sufficient to search under POLYMERS but would be necessary to search under the names of all possible polymers. Narrowing of a search is achieved in CA through modifying phrases.

It is obvious that compared to a system with no vocabulary control, the system with a controlled vocabulary provides a great deal of guidance to a searcher both before and during searching. Clearly defined index characteristics will help in the formulation of the search program, and feedback from the system will assist in the useful modification of this program. Searching will hold fewer unknowns in the sense that the control of index terms and the display of relationships among them will allow a searcher to have a better feel of what he actually covered or did not cover in his search. It should be pointed out, however, that this kind of increased control over the search is only one of many factors influencing over-all retrieval efficiency. In other systems there would be slight differ-

ences in usage. These systems were selected only as examples for the purpose of demonstrating the problems and possible approaches.

What are the implications of all this to the special librarian? He can and should look at himself as an intermediary between the user and the system. The ultimate objective of all his activities is to bring needed information to the users of his library quickly, efficiently, and accurately. His effectiveness will be greatly enhanced through his ability to understand the user's information needs and through his capability of expressing those needs in the language of the system to be searched. Since the limits of searching are determined to a considerable extent through inherent systems features, knowledge of these features will enable a searcher to match more successfully the information contents of his collection with users' information requests.

Footnotes

1. VICKERY, B. C. *On Retrieval System Theory*, 2nd ed. London: Butterworths, 1965, p. 117.
2. CLEVERDON, C. W. *Report on the Testing and Analysis of an Investigation into the Comparative Efficiency of Indexing Systems*. Cranfield: 1962.
3. ———, et al. *Factors Determining the Performance of Indexing Systems*, vol. 1: *Design*. Cranfield, 1966, p. 40.
4. FAIRTHORNE, R. A. Essentials for Document Retrieval. *Special Libraries*, vol. 46, October 1955, p. 340-53.
5. CLEVERDON, et al. *op. cit.*, p. 48.
6. *Ibid.*, p. 43.

Intercultural Programme in Special Libraries

"9. It is recognized that for research, special and government libraries, subject matter in line with the purpose of the research (nuclear warfare, life insurance, forestry, industrial hygiene, economics and banking, meteorology, art, music, agriculture, etc.) is of prime importance no matter what language is used in the work of reference. In short, language does not enter into the selection of these contributions to knowledge. If the special library considers the contribution sufficiently important, translation services are provided. It is unlikely that these collections of special knowledge need an intercultural programme."

From "Brief of the CLA-ACB to the Royal Commission on Bilingualism and Biculturalism," *Canadian Library*, vol. 21, no. 6, May 1965, p. 427.

Cites the common problem of inquirers not asking the reference questions they actually should pose to obtain the information they really need. Shows that all types of libraries and information centers are involved. Analyzes a wide range of causes for this phenomenon, including intellectual and psychological barriers to clear communication between inquirers and the reference staff. Describes the role of the reference staff in detecting irrelevant questions as well as some steps to take to help eliminate ambiguous and misleading questions.

Communication Barriers and the Reference Question

ELLIS MOUNT

DO YOU HAVE any recent literature on the design of radar circuits?" "Where can I find some German literature on banking?" "Is there a list of universities giving degrees in musicology?"

To the layman or the uninitiated, these probably sound like straightforward inquiries, but an experienced reference staff member is apt to think, "I wonder if I can find out what the patron REALLY wants." It has been known for a long time that more often than not, the question that is asked at the reference desk bears little resemblance to the question that should have been posed by a patron. For example, perhaps the first question should have been, "Do you have any information on the radar circuits used in the latest United States lunar spacecraft?" The second question perhaps should have been stated so as to indicate an interest in the post-war revisions of the German banking laws. The third may have been meant to lead to an index of the doctoral dissertations written in Eastern universities in the past few years on the history of music. These are all fictional inquiries, but they are examples of what commonly happens in reference work.

What causes patrons to ask irrelevant, incomplete questions? The answer is not sim-

Mr. Mount presented this paper at the "Circles of Communication" session at the 57th Special Libraries Association Convention in Minneapolis, May 31, 1966. He is the Science and Engineering Librarian at Columbia University in New York City.



ple, because there appear to be many reasons for the invisible barriers to clear communication that often complicate giving of good reference service. The literature offers much advice for the reference staff on how to detect and proceed from irrelevant questions to obtain patrons' real questions.^{1,2} Wood³ wrote that "the hardest part of answering a reference question is frequently not so much finding the answer as finding out the question." Wyr⁴ quotes E. V. Wilcox, who in 1922 wrote, "The chief art of the reference librarian is the knack of divining what the inquirer really wants." Now nearly half a century later, this is still quite true; it is definitely not a new phenomenon. Conceivably this same state of affairs might well have caused the reference staff of the ancient library of Alexandria to grumble as they put away the rolls of papyrus at the end of a busy day serving the royalty of their time.

Anyone who has worked for a long time to answer a given question, only to have the patron shake his head and say that it wasn't really what he wanted, will realize that this is not an insignificant problem. In many cases librarians are able to provide the service required by their patrons only by very quick work, and having to parry with them to find out the real question does not help their efficiency. Both patrons and the reference staff are affected by the problem.

Why don't patrons ask really pertinent questions from the start of their inquiry? The causes appear to stem mostly from the interactions of two people, the inquirer and the reference staff member. Since this is a common combination in an attempt to gain information, the problem probably exists in

all types of reference situations, whether it involves a small local branch of a public library or a scholarly research laboratory having a large information center, complete with computer. Although we are heading for, or are now already in, an era in which some inquirers will direct their questions directly to a computer, with nonhuman intervention, this type of interrogation may not necessarily solve the problem. Even the written report of the Massachusetts Institute of Technology's Project Intrex,⁵ which seems to stress the machine and software aspects of library planning more extensively than the characteristics and reactions of users, does at least mention this problem. In considering the design of the computer-based catalog in the library of the future, it raises the question, "Can a man-machine dialogue be programmed that will *force the user to specify enough of the characteristics he remembers to permit a successful search?*" (Author's italics.) This is one more indication that using the latest type of computer will not guarantee freedom from complications in posing the proper reference question. While there is no recorded case of a computer having a personal dislike for any inquirer, on the other hand there is at present little evidence to indicate that computers can be programmed to give tactful, warm encouragement to inquirers who are not asking the right questions. The problem may thus take on other aspects in advanced man-machine interactions.

Perhaps some day there will be more factual data available on the causes and cures of this communication problem. The following analysis makes no pretense of being exhaustive, nor are the suggestions for improvement to be considered as panaceas, but a review of the problem with an aim towards solving it is better than merely bewailing the continued existence of this particular communication barrier.

1. *An inquirer lacks knowledge of the depth and quality of the collection.*

Some inquirers feel that their questions are too complex or too obscure to be answered by library collections as they know them. But if a patron knew that a library had thousands of books on electronics and dozens of periodicals on the subject, he would no

doubt feel less foolish about asking a very detailed question that could only be answered by a good collection. In such cases, every bit of advertising that can be done about one's holdings, such as accession lists, special notices and letters, talks to patrons, and the like, will help. This is more difficult in institutions with a wide range of clients than in libraries with a compact, homogeneous patronage. Even if one's collections are not outstanding, no chance should be overlooked to inform patrons of what can be offered.

2. *An inquirer lacks knowledge of the reference tools available.*

A patron may be well aware of the quality of the collection but yet be totally ignorant of how many tools are available to find specific answers from books, periodicals, reports, and so forth. He feels obliged to ask broad, unspecific questions so as not to look foolish asking for something that he thinks a librarian could never find. Little does such an inquirer know of the array of periodical indexes, added entries, document indexes, computer programs for retrieval of indexed reports, and other sources. They are by no means perfect, but they can be extremely helpful when properly used. Again, the solution lies in more advertising.

3. *An inquirer lacks knowledge of the vocabulary used by a particular set of tools.*

In many cases a patron would like nothing more than to be cooperative and specific in his inquiry, but he doesn't know the particular terminology used in the indexes, abstract tools, or computer-type retrieval systems. By having readily available for all patrons a list of the official library terminology, whether it be called a thesaurus, an authority file of subject headings, a list of indexing terms, or what have you, librarians could do much to make it easier for inquiries to be given in terms recognized by their systems. It might help eliminate synonyms, slang, or foreign equivalents that would otherwise need "decoding" during the inquiry process. At least one major source of government reports (the Defense Documentation Center) has for years encouraged those sending in written requests to couch their inquiries in terms of the *Thesaurus of ASTIA Descriptors*.

4. *An inquirer does not willingly reveal his reason for needing the information.*

There are probably many reasons why some inquirers won't volunteer their reasons for their inquiries. Knowing *why* information is needed actually makes all the difference in the world in conducting a search, both as to speed, priority, depth of effort, type of literature selected, thoroughness, and so on. Patrons have been known to hide the fact that an emergency is involved or that a vital patent search is underway. Whenever possible, the reference staff should tactfully inquire about the "why" behind the request and explain why this information is needed.

5. *An inquirer hasn't decided what he really wants.*

This is more common than might be thought. Sometimes it occurs when people are on new assignments and they lack the necessary knowledge of what they specifically have to do and are reluctant to admit it to their supervisors. A similar case is that of a person on a rush project who may know the generalities of the problem but just hasn't formalized in his own thinking what is really needed, so he blurts out a question that may be far removed from the true topic to be searched. Such cases call for tact on the part of the staff to bring the person gently down to earth. By pointing out that the reference work cannot begin until the goal is clearly set, he may make the inquirer realize that in the future more thought on the problem may be desirable before starting a search. This does not overlook the fact that just one item located early in a search may change the course of the final question in ways that no one can possibly foresee, but it does mean it's necessary to pick a good first topic for the initial search.

6. *An inquirer is not at ease in asking his question.*

Many irrelevant questions may be asked for no other reason than that the requester feels ill at ease with the staff, whether it be due to shyness or a feeling that the staff is too busy to bother with him. Reference librarians should take a good look at themselves and see if they always present an air of helpfulness and friendliness, or do they appear cold and disinterested to patrons.

Some patrons may not even ask their questions if staff members make it look as if they don't want to help them. Careful attention to manners and techniques are in order, plus the usual advertising of the library's desire to be helpful.

7. *An inquirer feels that he cannot reveal the true question because it is of a sensitive nature.*

An inquirer may not be sure how much he can trust the reference staff to treat his question confidentially. If the staff is known to be gossipy and well-versed in spreading rumors or disclosing confidences, then an inquirer might well refuse to ask his real question. This probably is more common in cases of non-military security than with military information, because in the latter case an inquirer will not approach someone without being sure he has suitable military clearance, and government security regulations help him feel his questions should be safe. But in non-military matters, when management does trust its reference staff members, they may be called in to help do reference work on some projects that are highly delicate, such as labor relations, financial problems, or reorganization.

8. *An inquirer dislikes reference staff members (or vice versa) and consequently avoids giving a true picture of his needs.*

It is almost impossible to have good communication between two parties who suffer from mutual dislike. The reference staff must put personal feelings aside and try to be impartially helpful to all patrons. If one side tries to be friendly, the odds on communicating satisfactorily are better. Sometimes it may seem wise to have a brief chat with unfriendly patrons and make an appeal to their better nature.

9. *An inquirer lacks confidence in the ability of the reference staff.*

In this case, a patron feels it would be wasting time to give a detailed question to the staff. This may be difficult to detect in some cases. There is no quick and easy solution, but having a solid record of achievement with other patrons is helpful. There is no harm in casually mentioning past successes to doubting Thomases. Proving to a patron that one is skilled will reduce the chances

that he will be vague the next time he asks a question. If, on the other hand, the reference staff is not skilled, all possible steps should be taken to improve the level of service, whether by individual study in the areas covered by the collection or further practice in the use of existing tools. The staff must be sure a patron's lack of knowledge of its ability isn't a factor in creating or maintaining barriers of this sort.

It would be presumptuous to conclude that all the possible causes for poor communication between an inquirer and the reference staff have been described here, but perhaps some idea of the range of causes has been indicated—psychological, intellectual, physical, and so on. It is hoped that a reference worker in any sort of a library or information center will approach his next inquiry with more respect for the pitfalls possible in the encounter and with a resolve to utilize all his skills and ability to eliminate or at least reduce the causes for inquirers and reference workers being barred from clear, concise communication with each other.

Footnotes

1. HUTCHINS, Margaret. *Introduction to Reference Work*. Chicago: American Library Association, 1944. 214 p.

Chapter 3, on the reference interview, has much on ascertaining the reader's needs and other tech-

niques of arriving at successful service.

2. ASPNES, Grieg. Information Services of Special Libraries. In: *The Organization and Management of Special Libraries*. New York: Special Libraries Association (in preparation).

Deals with the problem in terms of the special librarian.

3. WOOD, Raymond F. What Exactly Do You Wish to Know? *California Librarian*, vol. 13, no. 4, June 1952, p. 213, 245.

Cites several amusing cases of vague inquiries and indicates what questions should have been asked.

4. WYER, James I. *Reference Work: a Textbook for Students of Library Work and Librarians*. Chicago: American Library Association, 1930. 315 p.

Lists 27 qualities for the reference staff member, including imagination ("read meaning into obscure requests and draw from the reader what he wants"). Also has one chapter on handling reference questions.

5. MASSACHUSETTS INSTITUTE OF TECHNOLOGY. *Intrex: Report of a Planning Conference on Information Transfer Experiments*. Cambridge: MIT Press, 1965. 276 p.

The cited sentence appears on p. 75 in the midst of a description of the design of a computerized catalog.

EDITOR'S NOTE: The papers presented at the "Circles of Communication" panels were limited to 2,000 words and were not intended to be comprehensive discussions of the topics being considered. Some of the papers have also been condensed in their published presentation here, but it is felt that the "meat" of the material has been preserved.

Call for Nominations for the 1967 SLA Professional and Hall of Fame Awards

The Board of Directors, Chapter Presidents, Division and Committee Chairmen, and Special Representatives have been asked by the SLA Professional Award and Hall of Fame Committee to present nominees for these awards. Nominations must be submitted by *January 5, 1967*, to William S. Budington, Chairman, The John Crerar Library, 35 West 33rd Street, Chicago, Illinois 60616. By definition, "The SLA Professional Award is given to an individual or group, who may or may not hold membership in the Association, in recognition of major achievement in, or significant contribution to, the field of librarianship or information science, which advances the stated objectives of the Special Libraries Association. The timing of the Award shall follow as soon as practicable the recognized fruition of the contribution. . . . SLA Hall of Fame election is granted to a

member or a former member of the Association near the close or following completion of an active professional career for an extended and sustained period of distinguished service to the Association in all spheres of its activities (Chapter, Division, and Association levels). However, prolonged distinguished service within a Chapter, which has contributed to the Association as a whole, may receive special consideration." The basic purpose of the SLA Hall of Fame is to recognize those individuals who have made outstanding contributions to the growth and development of Special Libraries Association over a period of years. Recognition may be awarded posthumously, and nominees should be selected as appropriate to a specific award as documented. Forms for submitting nominations for both awards may be requested from Association Headquarters.

Results of a questionnaire survey of the 56 individuals who attended a 1966 spring seminar sponsored by the American Management Association on "Developing and Managing the Company Library." The statistics on position, state of the library, and purpose of attending the seminar may be viewed optimistically or pessimistically, but they definitely have relevance to the membership and activities of Special Libraries Association.

What's in a Statistic?

CHARLES K. BAUER

RECENTLY Eugene B. Jackson, Director of Information Retrieval and Library Services, IBM Corporation, and the author had the opportunity to chair a three-day seminar in New York sponsored by the American Management Association on the subject "Developing and Managing the Company Library." This seminar was for AMA members and required a registration fee of \$150 per person. It was intended for managers to whom librarians and libraries report, though they themselves were not necessarily librarians. Fifty-six companies were convinced that this seminar would be important to their operation and were willing to spend the money to send representatives. Twenty more companies (equally as willing) had to be refused due to lack of accommodations.

To obtain a statistical picture of the interests represented, Mr. Jackson and the author distributed a questionnaire to each of the attendees. In reviewing the replies, we made several interesting—sometimes startling—discoveries, particularly in three areas: position, state of the library, and the purpose of attending the seminar.

Although the seminar was intended for higher management personnel, 38 out of 56 registrants were listed as librarians, 12 were information officers, and only six were higher management personnel. This could lead to any of several assumptions (depending, of course, upon how one interprets a statistic).

To look at it from an optimistic point of view, it might be thought that librarians have finally received the recognition they have been striving for. In this light it could be said that out of 56 registrants, 50 professionally-trained librarians or information of-

ficers have "made the grade," and are now considered a part of higher management. Further, it could be concluded that management now realizes the important role librarians are playing and has included library and information science in its support to the education of management in the state-of-the-art of the sciences.

On the other hand, looking at the statistics from a pessimistic point of view, it would be found that of the 38 attendees who gave their titles as "librarians," 21 are not listed in the 1964 edition of the *SLA Directory of Members*. Of 12 attendees who gave their titles as "information officers," eight are not in the directory; 29 of 50 possible librarians and information officers are not in SLA.

What does all of this mean and why does such a situation exist? It could be that some of the attendees carry the title without the proper educational justification. It could be conceived that the membership requirements of SLA are not as realistic as members hoped them to be. Or it could be that these individuals are not aware of Special Libraries Association or its activities and that someone has fallen down on the selling job.

Thirty-three out of 43 libraries represented plan major expansions in the near future. Optimistically, it could be believed that management has, at long last, given proper recognition to libraries and librarians and to their contribution to the success of their companies. Pessimistically, how would the 29 non-SLA librarians or information officers tackle the job without being aware of the state-of-the-art (assuming, of course, that they would be responsible for planning and organizing the expansion program)?

Mr. Bauer is Manager of the Scientific and Technical Information Department of the Lockheed-Georgia Company in Marietta, Georgia.

The questionnaire disclosed that 24 persons attended the seminar to acquire knowledge in the state-of-the-art of company library management, 12 attended because of their interest in the state-of-the-art of automation, and the remainder were present for various other reasons. Only this important conclusion can be drawn—35 out of 56 attendees at a seminar sponsored by a non-professional organization were there to update their thinking in matters concerning library and information science and automation. The large percentage of professional interest should indicate that SLA must continue to contribute to the state-of-the-art in our profession.

Bringing this into closer focus, it should be mentioned that all of those who lectured on professional topics are hard-working, active SLA members. It is rewarding to know

that these experienced SLA people are capable of teaching others who have come to a professional seminar for guidance. The author has always been of the opinion that if one exposes himself to the various activities of SLA, he will have the opportunity to acquire the latest state-of-the-art in the profession. It can be assumed, therefore, that membership in the Association is advantageous to those interested in moving forward in the profession—both in knowledge and in status.

Applying this philosophy to the statistics, does it mean that 29 non-members who attended the seminar have, somehow, "missed the boat" in not having availed themselves of the professional guidance offered through SLA membership? . . . Or is the Association at fault for not having recruited them in the first place?

Wanted—Authors and Editors for Association Publications

The SLA Board of Directors recently adopted a policy of paying individual authors or editors whose works are published and sold by the Association and who work completely on their own, e.g., without Chapter or Division sponsorship or assistance, ten per cent royalties of the annual gross income produced by their titles. In the future a formal contract will be made between such individuals and the Association.

Chapters and Divisions are also encouraged to undertake publication projects for the Association. In addition to earning royalties of 30 per cent of net profits for the sponsoring group, these projects make a genuine contribution to the professional and reference literature and give Chapter and Division members an opportunity to "put their knowledge to work" in a published volume.

The Association currently has an active publications program, but to keep it strong and flourishing, a backlog of works-in-progress is needed. The Non-serial Publications Committee welcomes

all proposals and suggests the following types of projects for possible publication:

- Guides to sources of information on a special subject, i.e., *Guide to Metallurgical Information: SLA Bibliography No. 5*
- Statistical indexes, i.e., *Sources of Insurance Statistics*
- Bibliographies of theses or bibliographies
- Glossary of library technology for use by management
- Proceedings of conferences and workshops*
- Guide to information retrieval systems for libraries, with chapters on manual and automated systems
- Evaluative, philosophical, historical, or theoretical works

Chapters, Divisions, or individuals wishing information on how to submit a proposal for possible publication should write the Publications Director at Association Headquarters requesting a project proposal form and an author's manual.

Trade literature has been collected at the Smithsonian Institution for many years, chiefly to document museum objects but also as source material for historical studies. The acquisition in 1959 of several large collections of catalogs resulted in the creation and adoption of a new, rapid, and economical cataloging scheme. The organizational scheme and methods of acquisition (by purchase, exchange, and gift) are described.

The Trade Literature Collection of the Smithsonian Library

JACK GOODWIN

THE SMITHSONIAN Library collects trade and auction catalogs for a variety of reasons, but chiefly for their value in documenting objects in the collections of the U.S. National Museum, and especially in the Museum of History and Technology. Often catalogs are the only source of information concerning various museum objects. They are also a valuable body of primary source material for the study of economic, technical, and social history. As Dr. Robin Higham noted in a recent letter to the editor of *Library Journal* (March 1, 1966, p. 1094), "Historians are moving increasingly now into such areas as science and technology, urban affairs, and other spheres of human activity which have long been neglected by their elders." Trade literature, so often ignored by general academic libraries wherein the historian had previously found his material, is a very important source for this "new" history as well as for the relatively new disciplines of industrial archaeology and historical archaeology (sometimes referred to as tin-can archaeology). Many of the catalogs are well printed and illustrated and are exhibited from time to time, usually in connection with objects depicted therein.

Prior to 1960, trade catalogs were handled in various ways depending upon where and how they were acquired. Those acquired by the library were occasionally given full cataloging and classification but more often were

treated as vertical file material. Those acquired by various sections of the Museum were generally arranged in vertical files or simply placed on shelves in various offices with no record of any kind being made of the holdings. These practices were unsatisfactory on several counts. Relatively few such publications have ever been cataloged by the Library of Congress, necessitating in most cases complete original cataloging by the Smithsonian Library. The great number of catalogs relegated to vertical files were lost to the use of everyone except the person maintaining the particular subject file. Unnecessary duplication was occurring in some areas.

The purchase of a special collection of nineteenth century catalogs in the summer of 1959, together with the donation of several large collections during the same period and the ever-increasing number of catalogs accumulated in widely dispersed vertical files, made it imperative that a new method of organizing and processing the catalogs be adopted. A rapid and economical process that would still provide for retrieval by subject and author was needed.

The scheme that was subsequently evolved and adopted for organizing the catalogs has met these objectives. The name of the issuing firm or agency as it appears on the publication is used as the author entry. No attempt is made to trace changes in corporate names. A brief title, as given on the publication it-

Mr. Goodwin has been Librarian of the Museum of History and Technology Library (a branch of the Smithsonian Library), Washington, D. C., since its establishment in 1958. He has held Chapter and Association offices in SLA and is active in several historical societies. His "Current Bibliography in the History of Technology" is published annually in the spring issue of Technology and Culture.



self, is used for the body of the card. When there is no title page or readily apparent title, an appropriate descriptive title, such as catalog, brochure, or leaflet, is supplied, written into the publication, and bracketed on the catalog card. Decisions must be made about what to use for a title in the case of firms manufacturing a variety of products but issuing consecutively numbered catalogs, each of which covers a different product (a fairly common pattern). It is easier, of course, to record these catalogs consecutively, but most often they are classified according to the subject covered in the particular issue and are cataloged as a separate. This is of great help to the users of the collection.

Pagination and size of the catalogs are not recorded. The phrase, "Lib. Has.:", is typed two spaces below the title, followed by the date and/or number of the catalog in hand. Additional holdings are pencilled in when received. Catalogs received on a more or less regular basis are recorded in the serial record, as are house organs, annual reports, most auction catalogs, and other recurrent publications. In such cases the catalog user is directed from the card catalog to the serial records.

The catalogs are classified according to the Dewey Decimal system. The letter "C" is prefixed to the classification number. At present the "C" is ignored for shelving purposes, and the catalogs are intershelved with the regular collection, thus bringing together in one area all types of material relating to the same subject. The "C" prefix, however, will make it possible to shelve the trade literature as a separate collection, without any additional processing, should it ever become desirable to do so.

Book numbers are assigned according to the simple scheme given on page 16 of Barden's *Book Numbers*.¹ Two identical cards are made for each title, one to be filed in the author-title catalog and one for the shelflist. Preprinted subject cards are prepared and filed in the subject catalog for each subject for which we have catalogs. Library of Congress subject headings are used, except for products for which there is no established heading, with cross references being made as necessary.

All cards for the collection are light blue. This makes for ready identification and is es-

pecially helpful when consulting the shelflist for holdings on a particular subject.

An alternative method of organizing trade literature collections is described in Meixell's *The Trade Catalog Collection*.² This plan was followed at Columbia University for many years, but that collection has now been presented to the Smithsonian Library and will eventually be recataloged in accordance with the procedures described here.

The collection has been built, and is currently being added to, by purchase, exchange, and gift. Occasionally whole collections, especially subject collections, are purchased, but purchases are more often specific individual catalogs (usually nineteenth century) from dealers specializing in such materials. The Columbia University collection mentioned above has been the single largest donation thus far, although the Baker Business Library at Harvard and the University of California Library at Davis have also transferred large collections to us. Many catalogs are received from manufacturing firms and private collectors, often as part of a gift of objects, machinery, and so on. One such very useful gift was Sears, Roebuck & Company's donation of a microfilm copy of a complete set of its catalogs from 1888 to date. Catalogs from the eighteenth century and the early nineteenth century are very important for museum work and are the most difficult to acquire. Such catalogs are often borrowed from private collectors and other libraries and facsimile copies made for our collection.

The curatorial staff of the Museum of History and Technology are good "scouts" for trade literature and have been responsible for obtaining many important items, ranging from a few trade cards in some cases to thousands of catalogs in others.

The subject range of the collection is practically universal in scope. Although the bulk of the collection is American, catalogs from Europe and Asia are added when obtainable. Duplicates are generally disposed of through exchange.

The auction catalogs include, besides such well known firms as Parke-Bernet, Sotheby's, and Christie's, long runs from many other auction houses both in the United States and Europe. The holdings in numismatics and philately are perhaps the strongest.

Catalogs of more than 50 pages, unless

issued in bound form, are given regular library binding in buckram after cataloging. Recurrent publications of a serial nature, when we have consecutive runs, are collected into volumes before binding. Catalogs of less than 50 pages are generally put into pamphlet binders. Broad-sides and trade cards are preserved in document protectors.

No discussion of trade literature can omit mention of Lawrence Romaine's very useful *Guide*.³ Romaine states in his preface, "Institutional collections are not properly cataloged and consequently not available at the moment for research." This was largely true of the Smithsonian at the time the *Guide* was being compiled, but if a revision is ever issued, we should be able to supply a complete,

accurate listing. The present collection of approximately 240,000 pieces is perhaps the most comprehensive, if not preeminent, institutional collection. Although not yet fully cataloged, the collection is available for use to our own staff, to visiting scholars, and, through interlibrary loan, to interested researchers anywhere.

Footnotes

1. BARDEN, Bertha Rickenbrode. *Book Numbers: a Manual for Students*. Chicago: American Library Association, 1937.
2. MEIXELL, Granville. *The Trade Catalog Collection: a Manual with Source Lists*. New York: Special Libraries Association, 1934.
3. ROMAINE, Lawrence B. *A Guide to American Trade Catalogs, 1744-1900*. New York: Bowker, 1960.

Are the data now provided at Columbia University Library when science monographs are ordered amenable to encoding on cards or paper tape for machine manipulation and use for cataloging as well as ordering? Analysis of a sample of data provided January-October 1965 said no, largely due to the uneven quality of the source data.

Data Analysis of Science Monograph Order/Cataloging Forms

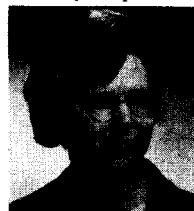
NATHALIE C. BATTS

IS IT feasible to encode data—on punched cards or paper tape—when an order is received in the Acquisitions Department and use these data for cataloging the item as well as for its acquisition? The goal is copy that would initiate the acquisitions cycle without unusual bibliographic searching when an order is originated. A 10-month study initiated at Columbia University using the order/cataloging data supplied by its nine Science Division libraries showed that not enough acceptable data are available at the time of acquisition to make encoding economically feasible with the present state of electronic data processing technology because of the un-

even quality of the sources of data. Orders are centrally processed, but selection is done by the individual libraries and orders originate from a wide variety of sources. The miscellaneous nature of these sources is the major reason for the uneven quality of the data provided.

This is a report of our experience and may be of interest to those facing similar problems of finding the most efficient way of handling material. It is a study of part of a large university research library system, situated in the metropolis of New York, with easy access to a large number of American publishers' books and those they import. The

Mrs. Batts is a cataloger in the Serials Section of the Cataloging Division of the Columbia University Libraries. This paper is condensed from a study prepared for a seminar at Columbia's School of Library Service, and thanks are extended to Paul J. Fasana, Dr. Theodore C. Hines, and Ellis Mount (all of Columbia University) for their helpful assistance, criticism, and encouragement.



Henry Verby

subject fields covered are broad and active as are Columbia University's selection and collection policies.

Forms Studied

An experimental 5 x 9 inch order/cataloging form was devised to record data for later machine encoding. It can be folded down to 5 x 3 inches for interfiling with card data in existing files. The form is used by the nine science libraries when ordering monographs and is completed under the direction of professional librarians (though the nine libraries used about two dozen typists during the period of the study). For this study a sample of the forms used during January-October 1965 were analyzed in terms of the basic bibliographic data for acquisitions and cataloging—author, title, edition, place, publisher, date, paging, and series. Data supplied on the forms and those found in the catalog were compared. The sample selected included all entries whose initial filing letter was A through F and S (to include symposia). This gave a total of 532 forms, about one-quarter to one-fifth of the total number used during the period. Data were used as they appeared in the catalog regardless of inconsistencies, e.g., form used for publisher on LC cards varied in different years.

Results of Study

The amount of Library of Congress copy studied outnumbered that of original cataloging by more than four to one. Of the 352 items studied, 441 had LC cards and 91 represented original cataloging. This reflects the current practice at Columbia of using bibliographic assistants to process books having Library of Congress copy or an LC number.* Cards for these materials are processed more rapidly than those for original cataloging, so a larger amount of LC copy is represented in this sample of the first ten months of the system's operation. Some items were not acceptable for more than one reason and therefore were tallied under several headings. Thus totals for some of the tables are greater than the number of forms studied.

* This system of NO (non-original) cataloging is described in a study prepared by Paul J. Fasana and James Fall titled *Processing costs for science monographs in the Columbia University Libraries*, November 1965. This study will appear in a forthcoming issue of *Library Resources and Technical Services*.

Table 1: Author

	LC	CU	TOTAL
Acceptable	113	26	139
Not Acceptable	472	66	538
Unacceptable form	58	14	72
Incomplete	203	26	229
Lack dates	166	12	178
Completely unacceptable	45	14	59

The lack of author's first name(s) and/or dates accounted for roughly 80% of the unacceptable tallies. Of the 59 main entries that were completely unacceptable, 13 (1 LC; 12 CU), or roughly 20%, were symposia.

Table 2: Title

	LC	CU	TOTAL
Acceptable	339	47	386
Not Acceptable	129	37	166
Unacceptable form	29	11	40
Incomplete	95	23	118
Completely unacceptable	5	3	8

This table shows the highest number of acceptable entries, 386, of any of the items studied.

Table 3: Edition

	LC	CU	TOTAL
Acceptable	49	5	54
Not Acceptable	15	5	20
Completely unacceptable	4	4	8
Not given	11	1	12

Columbia's acquisition practice is to request "latest edition" when none is specified on an order. The 74 items tallied here are the only ones in which edition other than the original was concerned.

Table 4: Place

	LC	CU	TOTAL
Acceptable	258	27	285
Not acceptable	199	57	256
Unacceptable form	100	29	129
Incomplete	34	8	42
Completely unacceptable	26	8	34
Not given	39	12	51

While the total of acceptable items is greater than those unacceptable, this seems to be a relatively simple item to record. However, examination of some of the sources used shows that place of publication frequently is not listed.

Table 5: Publisher

	LC	CU	TOTAL
Acceptable	195	21	216
Not Acceptable	264	63	327
Unacceptable form	103	21	124
Incomplete	117	19	136
Completely unacceptable	42	21	63
Not given	2	2	4

Part of the problem was caused by the cataloging practice of listing dual publishers when both appear on the title page. Another factor was the different form used in LC copy for the same publisher in various years.

Table 6: Publication Date

	LC	CU	TOTAL
Acceptable	123	33	156
Not Acceptable	339	55	394
Unacceptable form	39	10	49
Lack brackets	220	23	243
Completely unacceptable	53	17	70
Not given	27	5	32

The outstanding unacceptable feature was the lack of square brackets around dates on the forms and the frequent use of this device in finished copy, especially on LC cards. This may seem like a minor item, but it has been considered essential for an acceptable quality of cataloging at Columbia.

The preceding items—author, title, edition, place, publisher, and publication date—usually are considered necessary, along with price, in ordering a book. Paging and series information are needed for the proper cataloging of monographs. At Columbia, series information is essential at the earliest possible time because of the large number of standing orders for various series. In the Acquisitions Department searching series is as important as searching author or title.

Table 7: Paging

	LC	CU	TOTAL
Acceptable	83	17	100
Not Acceptable	335	59	394
Unacceptable form	14	4	18
Incomplete	117	13	130
Completely unacceptable	66	16	82
Not given	138	26	164

The main problem was incomplete information—usually meaning that preliminary paging was not given. This information frequently is available only from the book, e.g., *Library Journal* gives paging, but not preliminary paging. Therefore, this information could not be encoded until the book is cataloged.

Table 8: Series

	LC	CU	TOTAL
Acceptable	51	9	60
Not Acceptable	126	20	146
Unacceptable form	9	2	11
Completely unacceptable	6	5	11
Not given	111	13	124

Of the 532 titles, 206 (180 LC; 26 CU) had some series note on the finished cards. The main problem noticed in this tally was that the series note often was not given on the forms. Because of its importance in helping to avoid inadvertent duplication, any series should be noted as soon as possible.

Table 9: Summary of Acceptable Forms

(Total Sample: 532 forms)

	NUMBER ACCEPTABLE
Author	139
Title	79
Edition	75
Place	53
Publisher	27
Publication Date	6
Paging	0
Series	0

This reverse order check showed that the first acceptable forms appeared after series and paging were eliminated. Through im-

print, 6 forms were acceptable, and 12 more lacked only square brackets around publication date. From there back to author, the number slowly increased. It is obvious that not enough accurate and complete data are available at the time of acquisition to make encoding economically feasible. Too much sophisticated programming would be necessary to take care of the items partially acceptable or incomplete and too much reencoding would be needed for unacceptable items—and at the present state of the art both of these techniques are expensive. A certain amount of human error also was a factor in these results. Therefore routines must be planned so that the effect of human errors on the system will be reduced as much as possible.

Almost one quarter of the unacceptable data were caused by the lack of authors' dates (178 items) and lack of square brackets around publication dates (243 items). It would be interesting to redo the study to determine how many forms would be acceptable if these two requirements were dropped.

Sources of Data

Since the quality of the data given is governed by the sources from which they are gathered, their consideration of sources is of interest. Source information was given on 290 of the forms studied. The wide variety of special fields covered by the nine libraries is reflected in the sources used. Not surprisingly, much of the information was obtained from the publishers themselves.

Table 10: Sources of Bibliographical Data

SOURCE	NUMBER OF TITLES
Publishers	70
General listing services	58
Standard bibliographical listings	51
Subject journals, etc.	48
Specialized listing services	40
Other libraries' lists	20
Miscellaneous	3
Not given	242

The sources of the 70 items from publishers varied from catalogs and book news to announcements, flyers, and information provided by telephone. General listing sources

included American Book Service's *Quarterly Checklist*, *Book Publishing Record*, *Library Journal*, Library Service Association's *Les livres du mois*, and *Publisher's Weekly*. The 51 items taken from standard bibliographical listings were found in *Books in Print*, *Cumulative Book Index*, the Columbia University card catalog, on a Library of Congress card, or on Library of Congress proofslips. Specialized listing sources used for 40 titles were *Professional Books*, *Sci-Tech Book News*, and *Technical Book Review Index*.

Forty-eight items were ordered from 21 subject journals ranging from *Mechanical Engineering* and *American Psychologist* to *Civil Engineering* and *Electronics and Power*. The list prepared for this tally offered another way of checking the results set forth in this paper. A further study is in progress using reproductions of pages from these 21 journals and checking these data against those in the catalog. Similar patterns of unacceptable data are expected, and also citation patterns characteristic of each journal should be apparent. This latter information would be useful if a technique similar to cataloging-in-source could be worked out.

The statistics of the study indicate that a higher percentage of the data might be acceptable for a smaller library using a simpler cataloging requirement. For instance, in a library where a high percentage of acquisitions consisted of American trade books ordered by the librarian directly, *Book Publishing Record* might provide sufficient data. This Columbia study does indicate, however, that a careful check should be made before assuming that acquisition data would be either sufficient or accurate as cataloging information.

To meet demands and thus protect its equanimity, an acquisitions department is inclined to extend its record-keeping activity to the level where it can answer any question, even an absurd one. Although each additional record can be justified on a basis of individual, specific need, the resulting conglomerate often cries for a systems study.
G. E. Randall and R. P. Bristol in *PIL* or a *Computer-Controlled Processing Record*, *Special Libraries*, Feb. 1964.

Library Literature Gleanings

ASLIB PROCEEDINGS for January 1966 has several articles of interest, especially D. Mason's "Problems of Getting—and Keeping—Staff," discussing principles and practice of good personnel administration.

Curtis G. Benjamin's "Copyright and Government" in *Library Journal*, February 15, 1966, considered problems and questions regarding the copyrightability of material written by government employees or prepared with government sponsorship.

"State Library Agencies in the United States" by Phyllis Dalton appeared in *Libri* v. 15, no. 3, 1965. "The state library agencies in each state in the United States are in a changing role in all aspects of library services," she reported. She also discussed the duties, responsibilities, and potentials and included a bibliography.

Elizabeth E. Hamer gives a concise summary of "ARL's 67th Meeting" in *Antiquarian Bookman*, February 28, 1966.

D. D. Haslam, Deputy Secretary of the Library Association, reported in the *Library Association Record* for June 1966 on a survey commissioned by the Council in 1964 on staffing of industrial libraries. In the same issue is an article by R. Hindson called "The Dissemination of Published Information to Executives, Scientists and Technologists."

Annals of Library Science and Documentation for September 1965 contains an article by G. W. Hill, "Application of Computers to Library Work." Its abstract reads: "Discusses the possibilities of using modern computing equipment in library and documentation work in Australia. It is pointed out that machine retrieval depends to a large extent on an efficient indexing system. In this context the findings of the Cranfield Project are discussed. Some of the machine produced indexes are also discussed and their possible improvements by human interaction are also proposed."

"Obstacles Facing the Government Contractor's Librarian," a paper presented at the Aerospace Section's program at the SLA Convention, June 10, 1965, was published in the spring 1966 issue of *Sci-Tech News*.

The author, Francois Kertesz, discussed the special problems, the librarian's responsibility to "become acquainted with the contract system of the government and to understand all the legal implications," and the librarian as part of the management team.

R. J. McNeil described the Shell Photographic Library in *Aslib Proceedings*, May 1966. Shell International Petroleum Company Ltd.'s Photographic Library changed from a special and out-dated classification system for photographs to a keyword method of coordinate indexing. The results are described as flexible and simple, and accuracy or reliability of retrieval was not sacrificed.

Library Trends for January 1966 was devoted entirely to the topic "Library Service to Industry."

"The Future of Libraries in the Machine Age" was B. C. Vickery's topic in *Library Association Record*, July 1966. He discussed the flow of activity of library operations and how and where these could effectively be automated. Mr. Vickery points out the need for librarians at all levels to acquire the systems approach—"We must turn ourselves into systems designers."

D. J. Foskett in "Information Problems in the Social Sciences, with Special Reference to Mechanization" (*Aslib Proceedings*, December 1965) states that "information science is in itself a social science." There is a bibliography.

Wilson Library Bulletin has offered a wide variety of informative pieces, including the January 1966 issue, which is devoted to the "WLB Review of Books"—discursive essays, with bibliographies included. The March issue contains an "Oral History Symposium." A "Report on Latin American Libraries" by Marietta Daniels Shepard appears in the February issue. She brings out the need for professional education of librarians, a scholarly journal for librarianship, money and selection aids, and national planning throughout the area.

GLORIEUX RAYBURN, Librarian
School of Library Service Library
Columbia University, New York City

EDITOR'S NOTE: This is the first of a new bimonthly series that will report articles of interest to special librarians that have appeared recently in other periodicals.

Pittsburgh Chapter H. W. Wilson Company Chapter Award Entry

THE Pittsburgh Chapter organized its efforts in the spring of 1965. The Chairman, Committee members, and Chapter President sketched out the objectives and goals that could reasonably be attained within a year and would involve activities that fit the over-all Chapter program.

A graphic representation of the theme was designed. This depicts the pieces of a puzzle, first disjointed, and then bridged by the slogan "The Special Librarian—Vital Communications Key," and assembles into the Association's logo surrounded by symbolic representations of the media of communication. Throughout the year this graphic representation was used in the Chapter Directory, all Chapter Bulletins, and meeting announcements. The art work was reproduced and used on the publications of individual libraries within the Pittsburgh area.

The Chairman of the Committee also participated with the Program Committee in formulating the 1966 Chapter activities. It was decided to reinforce the theme in the selection of 1966 meeting topics. Each meeting's program was intended to accent the theme in a variety of ways. Examples of this are as follows:

- SEPTEMBER 1965. A detailed discussion of libraries in emerging nations and behind the Iron Curtain with speakers who had recent first-hand experiences with both areas. The librarian as a *communicator of western library science*.
- OCTOBER 1965. A joint meeting with the American Association of College and Reference Libraries, with discussion ranging from automation to fine arts. *Communicating with our colleagues*.
- NOVEMBER 1965. The new look in graduate business education—implications for the special librarian and *communication with tomorrow's business leaders*.
- DECEMBER 1965. *Communicating the season's cheer*.
- JANUARY 1966. An exploration in depth of computerized information retrieval—the *new media of communication*.

FEBRUARY 1966. An advertising agency at work. *Mass communication* and the special librarian.

MARCH 1966. The H. W. Wilson Company Award Committee Program—library resources in Western Pennsylvania. *The Librarian communicating the information needs of a region*.

APRIL 1966. The Pittsburgh Union List of Periodicals—a Computer Approach. The Special Librarian *communicates through a new technology*.

MAY 1966. Annual business meeting. *The Chapter communicates with itself*.

MARCH-MAY 1966. Car Card Campaign. *Communicating the profession of special librarianship*.

MAY 1966. Microforms . . . Progress, Problems, Possibilities, a one-day conference with nationally recognized authorities for the library professional, business community, systems specialists, etc. *Communicating new information systems technology*.

JANUARY-MAY 1966. Display of the H. W. Wilson theme on a poster at a variety of professional meetings held in Pittsburgh and at a recruiting booth in a downtown department store.

Attendance at Chapter meetings reached a high point when over 90 persons attended the March meeting, which was specifically arranged by the H. W. Wilson Award Committee.

The project, including the display for the Annual Convention, has been carried out without cost to the Chapter. Expenses such as the display and speakers have been contributed by local industrial organizations. This does not include the activities of the Recruiting Committee on the car card campaign or the Education Committee on the microform program.

EDITOR'S NOTE: *The Pittsburgh Chapter was the winner of the 1966 H. W. Wilson Company Chapter Award. A description of the car card used in the bus advertising campaign is on page 597.*

Government and Libraries

Special Libraries and State-Wide Plans for Library Service

State-wide planning for total library service is currently in varying degrees of study, of implementation and development of survey reports, and of revision of the reports. A review of the states demonstrates that plans are ever changing within the state as needs change and are varying from state to state by reflecting the characteristics of each state.

Special libraries are prominent in many of the present state-wide plans and almost without exception are included in future planning.

The Connecticut plan now under discussion is of special interest as it contains several factors relating to special library resources and services:

1. The State Library is to publish a directory of the subject strengths of the libraries of the state.
2. The State Library will serve as a location referral center upon request from local libraries.
3. Automated location control will be implemented by the establishment of a State Library Research Center as determined by the United Aircraft Corporate Systems Center Study.
4. A teletypewriter network will be tied in with TWX at the State Library and five major public and five college and university libraries.

The New Jersey plan for library development¹ provides for a research network supplemented by reference referral service at the State Library. Through this referral service the State Library will establish formal and informal relationships with special libraries in an effort to increase bibliographic control and public access to research resources wherever they exist in New Jersey. Teletype and other direct-line communication are contemplated, and a subject index to New Jersey resources is being developed. The State Library is assisted in this effort by a New Jersey Library Resources Committee on which special libraries and special "consumer" interests are represented.

In fiscal 1967 planning grants will be awarded to each of four regional interrelated

library systems in Rhode Island to enable them to plan for total library service in each area. Public, academic, school, and special libraries will be included in the planning.

The North Carolina State Library cooperates with special libraries in the Research Triangle. The State Library has communication by TWX and messenger with the special libraries in the Triangle. In Alabama the State Library Agency has conferred with libraries throughout the State with the single objective of determining a wise use of the special and/or total resources, how to locate special collections and a way to coordinate reference service.

The New Mexico State Library Agency is planning to have a statewide telephone network whereby the reference resources will be made available to all other types of libraries. The materials will not necessarily be made available, but the information will be supplied.

In Texas special libraries play an important part in state-wide planning. In each library district one public library is designated as a major resource center. These public libraries will draw on the special libraries to meet patron needs. The special libraries will, in turn, call on the public library. At the technical information level within the state-wide plan, special libraries are linked with large public and university libraries.²

The State Technical Services Act of 1965 will provide impetus to the coordination of library resources, including special library resources, in California. George Bonn, University of Hawaii, is beginning the study of library resources available to business and industry in California. The study and its potential implementation are made possible through an STSA grant.

The Tennessee state plan includes support of technical information centers in the metropolitan libraries in Memphis, Nashville, Knoxville, and Chattanooga. These centers use the resources of special libraries such as the Tennessee Valley Authority Technical Library at the Oak Ridge Institute of Nuclear Study as needed.³

The development of the 3 R's Program in New York state has included industrial libraries, museums, and other public and

private informational organizations. Two surveys are to be completed in 1966-67 and will finish laying the ground work for the 3 R's. These are:

1. The identification of the major resource centers of the state by subject strengths.
2. A study of the economy of interlibrary loan. It is anticipated that special libraries will participate in these activities. These surveys will include all types of libraries in keeping with the integrated character of the program.

Other studies are presently being made, such as that in Missouri by Dr. Robert Downs, that include special library resources. Library resources, including those of special libraries, are made available through union lists as in West Virginia. All library resources are cooperatively available as in Minnesota and Vermont, to mention a few of the states in which this cooperation occurs.

Kentucky is assisting special libraries with cataloging and processing. A card for their holdings is retained in the State Library. Future plans include contractual arrangements to stimulate more use of special library services, data processing, a book catalog, teletype services, and a state-wide survey of what exists in all types of libraries.

In Michigan major special research librarians meet regularly with the directors of university and public research libraries. Special library resources and needs are included in a major reference resources study now being conducted.

The *Union Library Catalog of Pennsylvania* includes many special library holdings and locates many materials for special libraries. The Catalog receives about one-half its support from the state.

Looking into the future, recent legislation in Illinois established four research and reference centers in the state. Special library resources will be utilized in the development of these centers and will in turn benefit from the state-wide system of public libraries with its research and reference centers. In Indiana the development of a state-wide plan presumes the involvement and consideration of special libraries and special librarians from the beginning. Nebraska is planning to include a special library representative on the State Association's Library Development

Committee. Georgia is discussing the possibility of a descriptive directory of special libraries that would indicate lending and reference of special libraries.

Two studies recently completed in Wisconsin include the resources of special libraries: *A Statewide Reference Network for Wisconsin Libraries* (by Guy Garrison. Urbana: Library Research Center, Graduate School of Library Science, University of Illinois, 1964. 111 p. Prepared for the Wisconsin Free Library Commission) and *Directory of Library Resources in Wisconsin* (by Marie Ann Long. Madison: Library Research Center, College and University Section, Wisconsin Library Association, 1964. 137 p.).

The Bibliographical Center for Research is a focal point for a cooperative pooling of resources in Colorado. The special business and industrial libraries special subject area will be shared in the Seven Rivers area between Davenport and Cedar Rapids, Iowa.

Oregon's state-wide development plan will include all types of libraries. It is anticipated that the State Technical Services Act of 1965 also will provide further coordination of state-wide resources including special libraries. The Nevada Council on Libraries has contracted for a state-wide survey that will include special libraries.

Ohio is beginning a state-wide survey this fall with a state-wide plan to be developed from it. Ohio has great research and reference library resources in special libraries. These will be considered in the development of the state plan.

The recent study⁴ of library service in Delaware included special libraries in the study and in the recommendations.

Wyoming is developing guidelines for planning for state-wide library resources. These guidelines will include all libraries and all subject strength as important factors in state planning.

South Carolina has completed a survey of the reference resources in the state in all types of libraries except those of elementary and secondary schools. The result of this survey is being published as "Guide to the Reference Resources of South Carolina" by the University of South Carolina Press. In the development of the area reference resource centers in the four major areas of the state, the special libraries in those areas will be

included as a part of the network of libraries cooperating in performing the reference function. A feasibility study has been completed in South Carolina on the establishment of a Technical and Textile Information Center⁵ which the State Library Board, cooperating county and regional libraries and industrial interests in the Piedmont plan to establish in the near future.

In Maryland the directory "A Topical Guide to Materials for Reference and Research in Libraries in the Baltimore Metropolitan Area"⁶ was published in 1964 as a guide to specialized resources. It is used by public libraries for interlibrary loan for the information of the library users.

Many state library agencies are looking forward to the future as Title III of the Library Services and Construction Act is implemented. Interlibrary cooperation will include in its scope all types of libraries. Special libraries will be strengthened through cooperation with other types of libraries and thus will strengthen all state-wide resources.

In the end interlibrary cooperation and the involvement of special libraries will be judged by the improved results in library services. Librarians have the responsibility to ensure that the cooperation will produce a new and improved service to all the people.

Footnotes

1. MARTIN, Lowell A., and GAVER, Mary V. *Libraries for the People of New Jersey, or Knowledge for All*. New Brunswick: New Jersey Library Association, Library Development Committee, 1964.

2. TEXAS LIBRARY ASSOCIATION. *Plan for State-wide Library Development*, 1965.

3. TENNESSEE NATIONAL LIBRARY WEEK COMMITTEE. *Today's Foundation for Tomorrow's Growth*, 1965.

4. HUMPHREY, John A., and HUMPHREY, James III. *Library Service in Delaware*. Dover: Delaware State Library Commission, 1966.

5. BUSH, Charles, Reference Consultant. *A Prospectus of a Proposed Information Research Center Specializing in Textiles and Textile Technology for the Greenville, South Carolina, Area*. Columbia, South Carolina: South Carolina State Library Board, 1965. 40 p.

6. MARYLAND STATE DEPARTMENT OF EDUCATION. Division of Library Extension. *A Topical Guide to Materials for Reference and Research in Libraries—in the Baltimore Metropolitan Area*. Baltimore: April 1964. 24 p.

PHYLLIS I. DALTON, Assistant State Librarian
California State Library, Sacramento

MESSAGE FROM LILLIPUT

The Brobdingnagians of the library profession have achieved their stature by virtue of position, longevity, and perhaps occasionally by sheer fortuitous circumstances such as being at the right place at the right time. There is not, however, any strict correlation between physical—or professional—size and intellectual perspicacity. Indeed, on occasion, we feel that the very exercise of administrative responsibility and the delicate juggling of the professionally desirable and the politically possible have dwarfed the faculty of perception, particularly in the area of the novel.

Those who have achieved prominence, occasionally by the exercise of ingenuity and by the implementation of new concepts or procedures, become strangely conservative once they are upon the plateau of success. This may not be a conscious reaction, but it has a surprising frequency of occurrence.

A single paper presented at the First Governor's Library Conference (Albany, New York, June 24-5, 1965) contained one of the few new concepts presented at any librarians' meeting during the past decade. Professor E. G. Mesthene of Harvard proposed that one of the major problems of the contemporary information scene was not the transfer of information from scientist to scientist but rather that from scientist to non-scientist.

While there may be difficulties in the communication among the members of the scientific community, the true problems can be found in the transmittal of information from the originators to industrial management, government officials, the man in the street. That this transfer exists in Western civilization may explain in part the ascendancy of European and American society over that of Africa and Asia. To the extent that this transfer can be understood and expedited via the science writer, the educator, the writer of textbooks and kindred communicators, the West may retain its position.

The lack of comprehension, interest, or enthusiasm among the elite of New York's librarians who heard the presentation is indicative of the intellectual awareness and acumen of the Brobdingnagians of our profession.

B. LITTLE

LTP Reports to SLA

SLA Representatives

Don T. Ho, Librarian of the Bell Telephone Laboratories, Inc., Holmdel, New Jersey, is the new SLA Representative on the Advisory Committee to the Library Technology Program. LTP welcomes him and looks forward to this continuing cooperation with SLA. Mr. Ho replaces Gordon E. Randall who was a member of the Committee from December 1961 to July 1966. Mr. Randall made many original and constructive contributions during his long service on the Committee. The LTP staff is grateful to have had the benefit of his membership for so long and wishes to extend its warmest thanks to him and to SLA which he represented so well.

New Projects

Buyers Laboratory is testing, for LTP, the wooden card catalog cabinets available on the American market. The Program's eventual purpose is to establish performance standards for this equipment. LTP proposes to apply tests relating to structural strength, finish durability, and operational uses to a comprehensive selection of wooden catalog cabinets to investigate two problems: 1) are the tests reasonable, and do they show the differences between the performance characteristics of the various samples? 2) on the basis of the test results, is it possible to postulate performance standards that might later be used to establish manufacturing specifications? If the answer to the second point is affirmative, LTP will undertake to have the resulting performance standards proposed as an American Standard through the American Standards Association's Sectional Committee Z85, which LTP sponsors. The results of the testing program will be published in *Library Technology Reports*. A grant from the Council on Library Resources is helping to pay for the testing.

As part of LTP's plan to examine new circulation control systems as they are introduced in libraries, Fry Consultants is evaluating two more systems—IBM 357 equipment and the Demco Charging Machine. Members of the Fry staff will visit six libraries to make detailed procedure and time analyses of

each operation to identify all operating variables. They will also make a comprehensive cost analysis of each system. The Council on Library Resources' grant of \$6,500 is supporting the project, which will take an estimated six months to complete. Results will be published in *Library Technology Reports*. Fry Consultants conducted the projects on which *Study of Circulation Control Systems* and later LTP reports have been based.

Library Technology Reports

The September issue of *Library Technology Reports* contains evaluations of four electric typewriters, two lines of filing cabinets, and University Microfilm's microform reader. The issue also includes four availability surveys, one of library keyboards for electric typewriters and three revised surveys of microform reading equipment. Planned for November are two reports, one on manual typewriters and one by William R. Hawken on the Magnaprint reader-printer.

Progress Report

Here is a brief progress report on LTP's activities for its fiscal year ended June 30. *Copying Methods Manual* was completed and scheduled for publication. Plans were well advanced for a new start on the furniture manual. The first phase of the book conservation manual had resulted in completion of an outline for the entire manual and good progress on a sample pamphlet being prepared for publication. The program to develop performance standards for binding used in libraries resulted in the development of three provisional standards. Publication of the manual on floors and floor coverings is planned for the coming fiscal year.

Personnel Changes

Robert Shaw, formerly of ALA's Library Administration Division, has replaced David Hoffman as head of LTP's Technical Information Service. Mr. Hoffman is the new Assistant Director of ALA's International Relations Office.

MRS. GLADYS T. PIEZ, General Editor
Library Technology Program
American Library Association, Chicago

Mary L. Allison Leaves SLA for Other Editorial Duties

MARY L. ALLISON, Publications and Public Relations Director of Special Libraries Association, has resigned, effective October 8, 1966, to become an editor of "Books for Educators" at Scholastic Book Services (Division of Scholastic Magazines, Inc.) in New York. She reported to the new position on October 10 after a four-week tour of Greece.



H. M. Schawang Photo Co.

Miss Allison began her duties at SLA in December 1955 as editor of *Special Libraries*. It came as something of a surprise to her a few months later when she learned that the scope of her position included book editing. Still later, in August 1960, she added public relations to her long and demanding list of Association responsibilities.

To each of these assignments she applied the same, sound editorial skill and the same sense of doing the most thorough and honest job possible in spite of the multiplicity and diversity of assignments. (Too much to do and so little time to do it!)

Under her editorship, *Special Libraries* grew from an annual volume of 468 pages in 1955 to 744 pages in 1965. She also edited 31 book publications, which will be her responsibility in her new assignment. Her public relations duties since 1960 produced 231 press releases, bringing the Association and special librarianship to the attention of many. She has also worked closely on membership, recruitment, awards, exhibits, and audio-visual activities.

Mary is a native of Maryville, Missouri, but spent most of her childhood in Wellesley, Massachusetts. She received her B.A. in history from Mount Holyoke in 1947. She worked briefly in the Readers' Service Department of P. F. Collier & Son, and then for two years in "The Weekly Record" Department of *Publishers' Weekly*. Following a six-month tour of Europe, she became a free-lance editor and writer. In addition to serving as Evaluation Editor of the Educational Film Library Association, she undertook a variety of assignments for the Grolier Information Service, R. R. Bowker Company, several encyclopedia publishers, and the New York office of the National Film Board of Canada, for whom she set up a television film library. Her published works include *The EFLA Review of Audio-Visual Equipment* (Educational Film Library Association, 1953), *Supplement* (1955), *A Guide for Evaluation of Film and Filmstrips* (with Emily Jones and Edward Schofield, Unesco: 1956), and *Controversial Mark Hopkins* (with E. Latta, Greenberg: 1953).

Mary hopes the new editorial position will give her more time for her many outside interests, such as reading history, traveling, hiking, swimming, skiing, theater, opera, and, of course, gardening on her Westchester County home at Croton-on-Hudson.

On October 1, Guy R. Bell, Managing Editor of *Church in Metropolis* of the Protestant Episcopal Church, became Publications and Public Relations Director of the Association.

Case Studies, Anyone?

THERE ARE now available exceptionally few well written case studies that deal with the problems inherent to the special library. More generous treatment has been given to other kinds of libraries. An Ad Hoc Committee has been appointed to investigate the feasibility of having Special Libraries Association publish a collection of studies to fill this gap.

Simply defined, a case study is a teaching device developed to simulate for the student, as nearly as possible, a real life work experience in which a problem must be solved, a policy formulated, or a decision made. Typically, the student reads the case and completes whatever research he thinks is necessary for making an intelligent decision. Afterwards, he is called upon to present his solution in the give and take of a classroom discussion.

The case study is based upon an actual situation although it is disguised to protect the identities of individuals and organizations. It must present details in a depth sufficient for the student to be approximately as well informed as he would be in an actual job situation. Relevant data included in a case might be such information as budgets, procedures manuals, personnel policies, organization charts, and descriptions of the human factors involved.

The phrase "case study" has been interpreted by some of the membership to indicate that the Committee's intention was to replace or overlap either the "Is This a Problem?" series (Louise Stoop, *Special Libraries*, 1965) or "Profiles of Special Libraries" (*Special Libraries*, 1966). Neither the humorously provocative "Problems" nor the well documented "Profiles" fall within the boundaries of the definition above.

Librarians probably do not need to be told that Kenneth R. Shaffer and Thomas J. Galvin of Simmons have been the leading proponents of the use of the case method in library school instruction. Their published collections of case studies are well known. Several of these publications briefly discuss the case method of study. However, the most extensive and, I believe, most articulate discussions will be found in the papers edited by Malcolm P. McNair, *The Case Method at*

the Harvard Business School (McGraw, 1954).

The first task of the Case Studies Committee is to answer the question: Is there a need for a collection of studies devoted to special library situations? The obvious consumer is the library school. Other uses might be in-service training programs, work-shops, and seminars. Librarians who have used case studies or would use new ones are asked to advise the Committee of their interests and of the uses to which they would expect to place the studies.

A second, more formidable task will be to ascertain if a worthwhile number of cases could be made available. Help of interested librarians is urgently needed to accomplish this phase of the work. Persons who believe they have the raw material for one or more special library studies are requested to write the Committee Chairman, giving the name of the library and a simple statement of the subject of the case. Examples are given below:

Name: Science Division, X State Library.
Subject of Case Material: Political pressures involved in making library purchases.

Name: XYZ Manufacturing Company Library.
Subjects of Case Material: (1) Erratic management policies in the allocation of the budget. (2) Depositing "problem" employees and secretarial duties in the library.

We should like to emphasize several points: 1) the anonymity of all respondents is respected by the case writer, 2) respondents should be reasonably certain that the management of the respective company or institution would release information to a case writer, and 3) respondents will not write the cases, neither will Committee members. This is a job for an experienced observer-writer.

Members of the Committee are Edwina Johnson, Biological Sciences Library, Duke University; Adrianna P. Orr, U.S. Federal Aviation Agency Library; and Phoebe F. Hayes, Denver Bibliographical Center for Research.

BETSY ANN OLIVE, Librarian
Graduate School of Business and Public
Administration, Cornell University, Ithaca;
Chairman, Ad Hoc Case Studies Committee

Fifty in Ten: An International Success Story

ON OCTOBER 1, 1966, the 50th librarian-grantee in the Jointly Sponsored Program for Foreign Librarians will be working on the staff of the Wisconsin State Library. Most appropriately, this grantee, Miss Nilawan Indageha, is the Executive Secretary for the Thai Library Association, which serves both as the "SLA" and the "ALA" of Thailand. Ten years ago the first librarian under the Jointly Sponsored Program, Miss Nguyen Thi Cut from Vietnam, started work at the Brookline (Massachusetts) Public Library. Thus the program has successfully completed its first decade in the ongoing orbital course of international librarianship at work.

Between the two grantees named above, 48 foreign librarians have been launched into a year's work and travel experience in a variety of American libraries through this smoothly operating cooperative effort of two major American library associations, SLA and ALA, the Library of Congress, and the Department of State. The Program is administered by a committee consisting of two representatives each from SLA and ALA, and an executive secretary, Mrs. Jean Allaway, International Relations Assistant, Library of Congress, Washington, D. C. 20540, who will provide details about the Program's operations on request.

Those American libraries that have participated in the program have had a unique opportunity for offering and receiving the benefits from contacts with libraries abroad. A full spectrum of United States sponsors have welcomed these foreign librarians. Among the hosts were eight special libraries, 11 college and university libraries, 15 public libraries, two school libraries, and the Library of Congress. The reason these figures do not add up to 50 is that some U.S. libraries have liked the program so well they have requested and received two or more grantees, either together or in sequence.

The grantees have come from just about everywhere: 14 from the Caribbean and Latin America, 12 from Europe, one from Africa, five from the Middle East, 16 from

Asia, and two from Australia and New Zealand.

The most important aspect of the program to the visitor is the opportunity to work rather than just to study, and thus learn new techniques while applying familiar ones. Fringe benefits have included 1) a chance to see the United States such as is afforded to few native Americans, 2) attendance at library conventions, 3) the opportunity to talk about their own countries (almost all grantees are called upon to speak to various groups), 4) the possibility of matrimony (there have been two we know about who have found wedded bliss in the U.S.), and 5) in almost all cases, traditional American hospitality and friendship.

The quality of the program can be illustrated by a few comments about three recent grantees—Katalee Sombatsiri, James Traue, and Douglas Koh.

A typically petite, attractive Thai, Miss Katalee is, in addition, an outstanding special librarian. Besides her formal education, she had had working experience in English libraries before coming to this country. Her job as librarian of the Bank of Thailand helps her play a key role in the exciting development of librarianship in her country as the Bank is a training center for Thai special libraries. Her library is also like any other national bank library and performs the usual services for that kind of institution. It has special collections in various languages and cooperates closely with the international agencies that have headquarters in Bangkok. Miss Katalee supervises a staff of eight (5 professionals and 3 clerical). The collection consists of 30,000 books, approximately 20,000 VF materials, and 100 Thai and 500 foreign language periodicals. Miss Katalee is treasurer of the Thai Library Association and a frequent contributor to professional journals.

With that background, she was invited to spend her year in the U.S. on the staff of the Economic Growth Center Library at Yale University, where in addition to performing

her duties well, she still had energy to visit numerous other libraries, shop for books for her own library, attend both the SLA and ALA Conventions, and arrange the wedding of her brother at the Thai Embassy in Washington. Now, with her year completed, Miss Katalee is on her way back to Bangkok, having contributed much both professionally and personally to the Americans with whom she lived and worked.

From Down Under, James E. Traue, Reference Officer of the New Zealand General Assembly Library came to work in the Legislative Reference Service of the Library of Congress in March 1965. His qualifications and prior achievements and activities (editor of the New Zealand national bibliography, *New Zealand Books in Print*, and editor of *New Zealand Libraries*, a publication of the New Zealand Library Association, to mention just a few) seemed to merit such an appointment. After Mr. Traue had completed his assignment, the Director of the Legislative Reference Service sent him this appraisal: "I want you to know that throughout your tenure . . . you displayed a knowledge that was eclectic and a capacity for hard work that seemed unlimited. Your assignments, consequently, were of wide range and presupposed for their fulfillment an uncommon ability. In no instance were we disappointed with the product of your labor."

In addition to his regular work, Mr. Traue managed to see libraries in at least 25 cities (concentrating on the effective but less known legislative reference libraries), attended both the SLA and the ALA Conventions, and saw most of America's scenic wonders. He experienced his first snowfall and first heat wave in the U.S., and his opinions of each were forcefully and vividly expressed. His engaging personality and wit combined with his professional capabilities made him a most satisfactory grantee.

Another of the 50 grantees, Douglas Koh of the National Library of Singapore was described by the Assistant Director of the Flint (Michigan) Public Library, H. G. Johnston, as follows: "He was a most intelligent, competent and adaptable young man and we were most pleased to have him on the staff. He was also most capable as a public speaker and we received many compliments on his outside speaking engagements."

Mr. Johnston concluded his comments with an opinion on the value of the program: "We continue to favor this program not because we gain an extra staff member for we do not generally use the foreign librarian in this capacity, but for the exchange of information and the broadening of our understanding of other libraries and other cultures."

In truth, because of its selectivity and specialization, this program has been able to develop an intensive and personalized relationship among professional librarians around the world. Each of the communities in which one of these grantees has lived has also been enriched.

ELAINE A. KURTZ, MARY ANGLEMYER
SLA Special Representatives to the Jointly
Sponsored Program for Foreign Librarians

H. W. Wilson Company Chapter Award Revised

During the past ten years, the H. W. Wilson Company has sponsored the H. W. Wilson Company Chapter Award, acknowledging a successful Chapter project based on a single theme. This year, because the themes usually chosen are not of particular interest or importance to a Chapter during a given year and because a worthwhile project frequently takes more than one year to be developed successfully, the SLA Board of Directors approved the following changes: "At the beginning of the 1966-67 Association year the H. W. Wilson Company Chapter Award will be given annually for any good project which has been carried out over no more than a two-year period. The previous requirement for a single theme is discontinued." The winning Chapter will receive \$100 and a scroll from the H. W. Wilson Company at the Annual SLA Banquet in New York next May. The judging and final decisions are made by the SLA H. W. Wilson Company Chapter Award Committee, chaired by Winifred Sewell. Notification of a Chapter's intention to enter the competition may be filed with the SLA Executive Director up through April 1. The written part of the entry must be in the Committee's hands before May 15, and the visual display is due at the Convention hotel the Friday preceding the Convention. Further details will be sent to all entrants around May 1.

Have You Heard . . .

Car Card Available for Recruitment

The effectiveness of bus advertising and a recruitment booth in downtown Pittsburgh paid off with success in the SLA Pittsburgh Chapter's winning the H. W. Wilson Company Chapter Award in June 1966, and now facsimiles of this car card are being used by Special Libraries Association to assist its members to recruit young men and women to special librarianship. Copies of the 28 x 11 inch card have been printed on heavy, white, glossy paper. On the left of the card are vertical red, white, and black panels showing an idea, symbolized by a lightbulb, disintegrating for want of a special librarian. The text on the right explains, "That's Why Special Librarians Are 'Vital Communication Keys'." Below is an invitation for those interested in a library career to contact Association Headquarters for further information. One or two copies of the recruitment car card are free, and a price list is available for quantity orders for this and other recruitment items.

Bio-Medical Librarianship Fellowships

The University of Minnesota Library School received a three-year, \$255,931 grant from the National Library of Medicine for a program to train librarians and information specialists in the bio-medical sciences. Candidates with a B.A. and postdoctoral fellows are eligible. Full-time study and a B plus average are required. Applications are available from Professor Wesley Simonton, Library School, University of Minnesota, Minneapolis 55455.

Scholarships for Librarians

The University of Chicago Graduate Library School will offer approximately 30 scholarships and fellowships for 1967-68, in amounts up to \$6,700. Included are six predoctoral (\$2,400) and two postdoctoral (\$6,500) training stipends, both tuition-free, for medical librarianship. A number of research assistantships are also being offered; these are on a half-time basis at an hourly rate dependent upon the qualifications of the applicant. Application deadline for scholarships and fellowships is January 15, 1967; for assistantships, any time during the year.

Address all inquiries to Don R. Swanson, Dean, Graduate Library School, University of Chicago, 1116 East 59th Street, Chicago, Illinois 60637.

Two Thesauri for Textile Industry

The Institute of Textile Technology at Charlottesville, Virginia, has prepared a 329-page *Thesaurus of Textile Technology Terms*, which follows a format similar to the *Thesaurus* of the Engineers Joint Council. It is being used to keyword index articles in the *Textile Technology Digest*, starting with the January 1966 issue. The Massachusetts Institute of Technology has prepared a *Thesaurus of Textile Engineering Terms*, which is to be used in conjunction with EJC's *Thesaurus of Engineering Terms*. It is being used to index literature of the past 20 years on textile mechanical processing, relying mainly on the *Journal of the Textile Institute Abstracts*. A revision now underway in the *EJC Thesaurus* will make it possible for the inclusion of many more textile terms than in the first edition.

Study of Canadian Academic Libraries

The Council on Library Resources, Inc., has made a \$20,000 grant to the Association of Universities and Colleges of Canada and the Canadian Association of College and University Libraries to study resources, administration, financial support, and automation in Canadian academic libraries. The study, which is expected to be completed by September 1967, will provide guidelines for the development of academic libraries for the next 15 years.

Clearinghouse for Periodical Title Word Abbreviations

A National Clearinghouse for Periodical Title Word Abbreviations was established in July 1966 by the American Standards Association's Sectional Committee Z39 on Standardization in the Field of Library Work and Documentation with a National Science Foundation grant. The Clearinghouse, which will be operated for a three-year period by the Chemical Abstracts Services Library, Columbus, Ohio, on a cost-recovery basis, will provide standard abbreviations for periodical title words that are not available in ASA

Z39.5-1963 *American Standard for Periodical Title Abbreviations*. The Clearinghouse will also provide additional abbreviations as needed. The CAS Library will answer requests for abbreviations by telephone, telegraph, TWX, or mail, Monday through Friday between 7:30 a.m. and 4:30 p.m. The requestee will be billed for reproduction costs plus labor and handling.

Members in the News

HERMAN H. HENKLE, Executive Director of The John Crerar Library, Chicago, and HERBERT S. WHITE, Executive Director, NASA Facility, Documentation, Inc., Bethesda, Maryland, have been appointed by President Johnson to the Advisory Council on College Library Resources, which will develop criteria for making supplemental and special purpose grants to college libraries for the purchase of books and other materials under the Higher Education Act of 1965.

JAMES HUMPHRY III has been elected Vice-President and President-Elect of the American Library Association's Association of College and Research Libraries. Other SLA members elected officers of ALA divisions and sections are: JULIUS P. BARCLAY, Secretary, and LAWRENCE S. THOMPSON, Vice-Chairman and Chairman-Elect, Rare Books Section; MARY E. SCHELL, Chairman, and RICHARD L. SNYDER, Vice-Chairman and Chairman-Elect, Subject Specialists Section; JAMES K. DICKSON, Vice-Chairman and Chairman-Elect, Art Section; JANE WILSON, Chairman, Law and Political Science Section; ROSE L. VORMELKER, Vice-President and President-Elect, Library Education Division; and WILLIAM S. BUDINGTON, Vice-Chairman and Chairman-Elect, Resources and Technical Services Copying Methods Section.

Two ALA Research Projects

The American Library Association's Office for Research and Development is undertaking a U. S. Office of Education supported "Project to Develop Requirements for Establishing an Information System for Research Activities in the Field of Librarianship and Information Science" and a National Science Foundation supported "Study of the Decision Making Procedures for the Acquisition of Science Library Materials and the Relation of These Procedures to the Require-

ments of College and University Library Patrons." The first study will run for six months and involve the ALA Library Research Clearinghouse information gathering operations. The second study, which will take two years to complete, will provide guidelines to be used by persons making decisions in the acquisition of science library materials. The emphasis will be on the smaller academic facilities.

Coming Events

The GEOSCIENCE INFORMATION SOCIETY will hold its first convention November 14-16 at the Hilton Hotel in San Francisco. The last day will be given over to a symposium on The Use of Automated Systems in the Storage, Retrieval, and Publication of Geoscience Information. Symposium details are available from Mrs. Harriet W. Smith, Geology Librarian, 223 Natural History Building, University of Illinois, Urbana 61801.

American University's Center for Technology and Administration will sponsor the INSTITUTE ON DATA-COMMUNICATIONS AND DISPLAY OF MANAGEMENT INFORMATION from November 14-16, 1966, at the Twin Bridges Marriott Motor Hotel, Washington, D. C. For enrollment, contact Paul W. Howerton, Director, Center for Technology and Administration, 2000 G Street, NW, Washington, D. C. 20006.

A SEMINAR IN SYNAGOGUE LIBRARIANSHIP, cosponsored by the Jewish Library Association of Greater Philadelphia and Drexel Institute of Technology's Graduate School of Library Science, will be held every Tuesday evening, October 18-November 22. All synagogue and temple librarians are invited to attend; enrollment is limited to 35. The cost is \$5. For further details, write Carol Yellin at the Drexel Library School, Philadelphia 19104.

The 1966 SYMPOSIUM ON THE MANAGEMENT OF IMPROVEMENT, sponsored by the School of Industrial Engineering, will be held October 31-November 4 on the campus of the Georgia Institute of Technology. The program is designed for various executives and professionals concerned with improvement activities. Registration fee is \$200, and further details can be obtained from the Director, Department of Continuing Education, Georgia Tech, Atlanta 30332.

Off the Press . . .

Book Reviews

COBLANS, Herbert. *Use of Mechanical Methods in Documentation Work*. London: Aslib, 1966. 89 p. 36 s.

When picking up a book on documentation, one often finds the contents to be of the "deep reading" type—a heavy style requiring a great deal of concentration on the part of the reader, involved discussions, and a highly technical language. Fortunately, this is not true of the book under consideration—or rather booklet, as it is only 89 pages long. Anyone who is at all interested in the subject of documentation will find it practically impossible to lay this work aside without having read a good portion of it.

Part I—probably the most important section—is, according to the author (p. 7), devoted to the following major purposes: an attempt to survey the potentialities of mechanical devices, an examination of equipment and costs, and a description of mechanized systems "as they exist in the United Kingdom." (Actually the book also covers applications in various other countries, including the United States.) The author first provides some basic information on the three "phases" usually involved in mechanization—input, storage, and output. He then proceeds with a discussion of types of applications: "housekeeping" functions, e.g., acquisitions, cataloging, and circulation; the production of abstracts, indexes and bibliographies; and special applications, such as the indexing of conference reports. The book describes various important projects, frequently citing the literature where more details may be secured.

The rest of the work (Parts II and III) is taken up mainly with questions of information retrieval, permutation indexing, and selective dissemination of information. Though the treatment as a whole is quite cursory, there are many helpful comments regarding existing methods. Also, several special features increase the usefulness of the book: a selected, pertinent bibliography, an appendix describing examples of equipment, and a detailed index.

In this booklet, the author obviously tries to present a review or survey of developments—with helpful suggestions. Because of the brevity of the work and the great number of subjects discussed, his attempt is only partially successful. Of necessity, depth of treatment has been sacrificed to extensiveness of coverage. Unfortunately, too, there are several annoying and distracting features in the physical make-

up of the book, such as a lack of clear organization of the numerous topics discussed and a rather strange distribution of the material into the various parts.

However, these limitations are more than offset by the extreme readability of the work, its coverage of many basic aspects, and its brief and incisive evaluations. The novice may find the book to be one of the first steps into the whole field of documentation, and the specialist may find it useful as a summary. Throughout the work, the author shows an unmistakable grasp of the subject. He has also demonstrated this knowledge in numerous articles which have appeared in various journals in the past several years.

MICHAEL S. KOCH, Chairman
New York Documentation Group, SLA
State University of New York
Downtown Medical Center Library
Brooklyn, New York

GODFREY, Lois E., and KELLER, Helen S., co-editors. *Proceedings of the Regional Workshop on the Report Literature*, Albuquerque, New Mexico, November 1-2, 1965. North Hollywood, Calif.: Western Periodicals Co., 1966, 150 p., \$10.

The *Proceedings of the Regional Workshop on the Report Literature* is a collection of 24 papers presented in six sessions of a two-day meeting held November 1-2, 1965, in Albuquerque, New Mexico. In the introduction to the Workshop Helen Redman presented the background of events involving the two sponsors—the Rio Grande Chapter and the Science-Technology Division of Special Libraries Association—which led to the conception of the regional meeting.

Librarians who have a concern for the stature of their profession should read these proceedings. There are several important challenges to be found here for those who desire to make worthwhile contributions to our Professional Estate. The regional meeting concept, if applied widely throughout the SLA membership, will produce a significant increase in our professional contributions. This very successful Workshop uncovered all too obvious areas of professional endeavor that SLA members should exploit.

The topics of the Workshop sessions included familiar areas of interest on current awareness, organization, processing, announcing report literature, security classification of AEC and DoD reports, and user habits and

needs. Selective Dissemination of Information (the computerized technique for achieving current awareness) was the topic presented by several speakers. The most notable speaker was Melvin Day of the National Aeronautics and Space Administration.

In addition to the papers presented, the Workshop conducted a project that featured seven speakers on the subject of government abstract publications. It was the intent of the project to evaluate several government agencies' published abstracts for comparative effectiveness of each indexing scheme, scope of coverage, and how each contributed to the retrieval of report literature. Each of the six speakers selected a different subject, e.g. guided missiles, semiconductors, metallurgy. Each speaker selected four reports related to his subject for use in evaluating the abstract journals. The data was recorded on evaluation forms as they searched the abstract publications. The primary publications used were: *Defense Documentation Center Technical Abstract Bulletin (DDC-TAB)*, *NASA Scientific and Technical Aerospace Reports (STAR)*, the Commerce Department's *U. S. Government Research and Development Reports (USGRDR)*, *Government-Wide Index to Federal Research and Development Reports (G-WI)*, and *Nuclear Science Abstracts*. The last speaker, instead of making an evaluation from the subject approach, presented a semi-critical review of one abstract publication—the DDC-TAB—and compared it in part with the NASA STAR.

The participants in the project concluded that these abstract tools were greatly improved over what they were a few years ago but there was still room for improvement in most of them. One suggestion was that all agencies coordinate to publish one or two good indices, instead of several mediocre ones. (This is a noble suggestion for the ideal we want, but it may be too rich for our blood and Uncle Sam's budget.)

Those who participated in planning the Workshop Program and those who prepared the presentations deserve special commendations for a job well done.

DEAN K. LITTLE, Supervisor of Libraries
Sylvania Electronic Systems
Waltham, Mass.

JACKSON, Isabel H., ed. *Acquisition of Special Materials*. San Francisco: San Francisco Bay Region Chapter, Special Libraries Association. 1966. 200 p. \$5.75. (Available from Joseph R. Kramer, SLA San Francisco Bay Region Chapter, P.O. Box 1184, San Carlos, California 94070.)

Government publications, serials, out-of-print titles, foreign materials, translations, technical reports, trade catalogs, standards, specifications, patents, conferences, symposia, maps, microtexts, interlibrary loan, and photocopy are the "special materials" displayed here. This information was originally presented in a series of lectures at the San Francisco Extension Center of the University of California in the spring of 1964. The series was planned by the San Francisco Bay Region Chapter and presented in cooperation with the University of California, Extension Continuing Education in Librarianship.

The lecturers, "practicing librarians familiar with the areas chosen," included the following specialists: Herbert K. Ahn, Mark H. Baer, Charlotte G. Owens, Danny T. Bedsole, Robert Maynard, Kenneth I. Pettit, and Thomas E. Ratcliffe. This distinguished collection of experts not only does an excellent job of presenting straightforward information on the materials covered but also volunteers a great deal of useful information concerning their personal experiences with publishers, book dealers, and issuing agents of some of the organizations referred to in the text.

The emphasis is placed on the means of identifying and obtaining materials that are generally considered unusual in most libraries. As is indicated in the chapter on technical reports, such materials are becoming increasingly more important and less unusual because these are quite often the only forms in which many of the organizations and institutions disseminating information will publish. Thus, quite a bit of information is presented on the policies and procedures of the issuing agencies of government organizations, international organizations, educational institutions, technical societies and associations, and symposia.

There has been a need for the type of information offered here on the acquisition of such non-book materials as maps and microtexts. Although there have been a great number of articles and some books published on the subject, none have really brought the problem into focus in such a comprehensive manner as has Mr. Pettit in his chapter.

This book is not unlike its British counterpart, Aslib's *Special Materials in the Library* (London, 1963), edited by Burkett. Although the latter covers less material and its slant is toward British publications, it is quite similar in format—a collection of lectures.

Each chapter is replete with useful information. Undoubtedly, some of the material will not be of interest to some more experienced librarians, but I think that most librarians will find the publication as a whole to be very use-

ful in their work with those special materials covered. As a supplement to the usual guides and textbooks required for courses in Library Literature, this publication would add a new dimension in subject matter. I recommend that every librarian should at least see it if not own it.

FLOYD L. HENDERSON, Assistant Librarian
Cargill Inc. Research Library
Minneapolis, Minnesota

SLA Official Directory Available

The 1966-1967 *Official Directory of Personnel* for Special Libraries Association is now available from Association Headquarters for \$3.00 a copy. The 88-page, mimeographed volume contains the names and addresses of the Board of Directors, Association staff members, committees, special representatives, and Chapter and Division officers and committee chairmen plus an index.

PB. AD Reports Published in Japan

The Science and Technology Section, Reference and Bibliography Division, of the National Diet Library in Tokyo, Japan, has recently published *PB. AD Reports Correlation Index*, which is a continuation of SLA's 1953 *Correlation Index Document Series and PB Reports* as well as covering entries appearing in the *U.S. Government Research Reports*, vol. 19, July 1952 to vol. 39, December 1964. The abbreviations for institutions are based on those used in SLA's *Dictionary of Report Series Codes*. The explanatory note is in Japanese but the listing is in English. The 500+ page, paperbound *Index* was printed in limited supply and is intended for use at the National Diet Library.

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VAINSTEIN, Rose. *Public Libraries in British Columbia*. 1964. 141 p. \$2.00 (Distr. by University Book Store, University of British Columbia, Vancouver 8, B. C., Canada.)

Library Publications: For and By Sought

As a result of its workshop at the Minneapolis Convention, the Publishing Division of Special Libraries Association is undertaking to gather samples of current bibliographies, special book lists, and promotional material currently being distributed by libraries of all types for their patrons. Mrs. Helen E. Wessells, Chairman of the Publishing Division, will welcome any such printed materials, which may be sent to her at 433 West 21st Street, New York 10011.

Journal Notes

CLUE (Clinical Literature Untoward Effects), a weekly service published by the International Information Institute, will report all side effects of drugs, prosthetic devices, cosmetics, pesticides, and food additives appearing in over 200 foreign biomedical periodicals. Abstracts are printed on 5 x 9 heavy stock paper perforated to include three 3 x 5 inch *CLUE* cards for storage. Quarterly indexes are published as an additional service. A one-year introductory subscription is \$175 to profit-making organizations and foreign destinations; \$50 to nonprofit organizations and individuals. Both subscriptions include indexes. For details, contact Dr. Robert R. Blanken, Editor, 3i, 2044 Chestnut Street, Philadelphia 19103.

NATIONAL LIBRARY OF MEDICINE CURRENT CATALOG, published by the Public Health Service of the U.S. Department of Health, Education, and Welfare, consists of 26 biweekly issues with quarterly and annual cumulations. Catalog citations carry the same bibliographic information appearing on the Library's catalog cards. Biweekly issues contain author-title citations and a directory of publishers' representatives. Quarterly and annual cumulations have author, title, and subject sections. The

annual will be clothbound and be included in the subscription; it will also be available separately. Subscription orders, accompanied by a check for \$15 (\$20 foreign) or indication to charge to a deposit account number, should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

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STECKLER, Phyllis B., ed. *The Bowker Annual of Library and Book Trade Information*, 1966. New York: R. R. Bowker Co., 1966. 421 p. \$10.25. (L.C. 55-12434)

Special items featured in this eleventh edition include an exclusive report on federal support of publishing, a description of federal legislative programs relevant to library anti-poverty efforts in 1966, and a question and answer guide to Title II ESEA. Includes also a summary, with pertinent tabular material, of the ALA findings concerning the existing wide gaps between U.S. library service and ALA minimum standard requirements.

THOMPSON, Lawrence S. *The Incurable Mania*. Berkeley, Calif.: Peacock Press, 1966. 20 p. pap. 4 x 5 1/4 inches. \$1.75. (L.C. 66-16385)

A speech on collecting manuscripts and books, originally delivered at a dinner meeting of The Manuscript Society, Los Angeles, on November 9, 1965.

Bibliographic Tools

ADMINISTRATIVE MANAGEMENT SOCIETY. *Management Information Guide 1965-1966*. Willow Grove, Pa.: 1966. 72 p. pap. \$5; \$2.50 to SLA and AMS members.

This guide is a revised edition of the former *Bibliography for Administrative Management*. Contains more than 1,000 selected and annotated references to films, books, articles, and reports indexed in 41 management categories. Gives easy access to references on subjects such as data processing, filing, forms, office layouts, system and work simplification, personnel, etc. Includes separate alphabetical, classification, and publishers' indexes.

ARGONNE NATIONAL LABORATORY, LIBRARY SERVICES DEPARTMENT. *Argonne List of Serials*, 4th ed. Argonne, Ill.: 9700 South Cass Ave., February, 1966. 233 p. pap. Gratis to appropriate libraries.

Supersedes and makes obsolete all earlier editions of this publication. Use and application of the list, which is computer-produced, are clearly and extensively explained in the foreword. Many of the entry items are available from the Laboratory through interlibrary loan.

ATOMIC AND MOLECULAR PROCESSES INFORMATION CENTER. *Bibliography of Atomic and Molecular Processes for 1964* (ORNL-AMPIC 3). Oak Ridge, Tenn.: Oak Ridge National Labora-

tory, P.O. Box Y, February 1966. ix, 208 p. plastic spiral binding. Apply.

Annotated bibliography containing references of interest to atomic and molecular processes research. Sources consisted of 52 scientific and four abstract journals. References are classified into 14 categories and listed alphabetically by author in each category. Appendix A contains a list of report abbreviations, Appendix B a list of journals searched in 1964.

BAKER LIBRARY, GRADUATE SCHOOL OF BUSINESS ADMINISTRATION, HARVARD UNIVERSITY. *Printed Catalog of Current Journals*, 2nd ed. Cambridge, Mass.: January 1966. 64 p. pap. \$5.

A computer-produced list of current periodicals and newspapers received more than twice a year. The list duplicates information now found in the library's card catalog. Revisions to be issued periodically.

———. *Subject List of Current Journals*. Cambridge, Mass.: January 1966. 72 p. pap. \$5.

A selected list, compiled with electronic data-processing equipment, which includes more than 2,000 titles of domestic and foreign journals and United States government publications. Of special value to those interested in the periodical literature of business and economics.

BENNETT, Melvin, comp. *Science and Technology: A Purchase Guide for Branch and Small Public Libraries: Supplement 1964*. Pittsburgh, Pa.: Carnegie Library of Pittsburgh, 4400 Forbes Avenue, 1965. 48 p. pap. stapled. \$1.25 prepaid.

340 titles, listed alphabetically by author (most of which are annotated), suitable for use of student and adult nonspecialist. Subject index.

BOWERS, Fredson, and BEAURLINE, L. A., eds. *Studies in Bibliography*, vol. 19. Charlottesville, Va.: University Press of Virginia, 1966. 282 p. \$10; \$8 to members.

A collection of papers of the Bibliographical Society of the University of Virginia, published annually. Appended are A Selective Checklist of Bibliographical Scholarship for 1964, Notes on Contributors, and Society Announcement and Publications.

CIVIL AEROMEDICAL RESEARCH INSTITUTE, AEROSPACE MEDICAL RESEARCH LABORATORIES, and USAF SCHOOL OF AEROSPACE MEDICINE, joint sponsors. *Biomedical Research Studies in Acceleration, Impact, Weightlessness, Vibration and Emergency Escape and Restraint Systems: A Comprehensive Bibliography*. Oklahoma City, Okla.: 1963. xii, 3,072 p. post binding. Gratis. (Available from FAA Aeronautical Center, Civil Aeromedical Research Institute, P.O. Box 1082).

A basic volume of a planned series, to be continued in supplements, this bibliography is divided into the four major areas mentioned in the title. Arranged alphabetically by author, it contains 10,036 entries, approximately 70 per cent of which include abstracts. Although covering materials dated as early as 1818 and as late as November 1963, this work is intended to aid, not to supplant, formal literature research.

It is based upon and prepared from an index file of McBee rim-punch cards. Admittedly contains errors in alphabetizing, page and abstract numbers, and some entry duplications, the entries themselves, are correct.

ECONOMIC RESEARCH INSTITUTE, AMERICAN UNIVERSITY OF BEIRUT. *A Cumulation of a Selected and Annotated Bibliography of Economic Literature on the Arabic-Speaking Countries of the Middle East, 1938-1960*. Boston: G. K. Hall & Co., 1966. \$30; \$40 after October 31, 1966.

This one-volume bibliography consists of the cumulated contents of an original volume (1938 through 1952) and of annual supplements (through 1960) all compiled by the Economic Research Institute of the American University in Beirut. More than 800 entries collected from libraries in London, Oxford, and Cambridge have been added to the original work for an estimated 9,600 entries. The present cumulation contains references in English, French, and Arabic to articles, books, reports, monographs, official documents, and ephemera.

EDUCATIONAL RESEARCH COUNCIL OF GREATER CLEVELAND. *Independent Study: An Annotated Bibliography*. Cleveland, Ohio: Rockefeller Bldg., 4th Floor, 1966. 26 p. pap. \$.75.

Lists and reviews approximately 150 books, pamphlets, and articles judged most useful in programs of independent study. This bibliography is now being used in more than 400 Educational Research Council Schools.

HOOKER, G. Vernon et al., *Air Force Scientific Research Bibliography 1959*, vol. 3 (AFOSR 700-III). Washington, D. C.: Air Force Office of Scientific Research, Aerospace Research, USAF, 1965. xiv, 693 p. illus. \$.75. (Available from Government Printing Office.)

A most comprehensive listing of research results, this three volume bibliographic series is supported and published by AFOSR and prepared through the cooperation of the Special Bibliographies Section, Science and Technology Division, Library of Congress. Provides ready access to both published scientific literature and unpublished technical reports. The present work spans research published in 1959, with the two previous volumes covering 1950 to 1956 and 1957 to 1958. Subsequent volumes now in preparation will make the bibliography current.

HUNT, Florine E. *Public Utilities, Information Sources*. Detroit, Mich.: Gale Research Company, Book Tower, 1965. 200 p. \$8.75. (L.C. 65-24658)

An annotated guide to literature and bodies concerned with rates, economics, accounting, regulation, history, and statistics of electric, gas, telephone, and water companies. Author, title, and subject indexes.

JENKINS, Frances Briggs. *Science Reference Sources*, 4th ed. Urbana, Ill.: University of Illinois. xvi, 143 p. pap. \$2.50. (Dist. by Illini Union Bookstore, Champaign.)

A useful guide to more than 1,300 bibliographical and reference tools. Includes general works

in engineering, agriculture, and medicine as well as source materials in the pure sciences. In this edition, entries have been numbered, references to reviews or discussions of many of the titles are included, and a reading list in each unit contains suggestions for background reading.

JORDY, Sarah S., comp. *International Bibliography of Studies on Alcohol, Volume I, References, 1901-1950*. New Brunswick, N. J.: Publications Division, Rutgers Center of Alcohol Studies, Box 566, 1966. \$40.

Contains approximately 26,000 references to scientific papers in 31 languages covering every aspect of topics such as alcohol, alcoholic beverages, alcoholism, etc. Entries are arranged alphabetically by author within each year. All English, French, German, Italian, Spanish, and Latin titles are listed in the original language, while those from 25 other languages are translated into English. Features references in each title to abstracts available in the *Classified Abstract Archive of the Alcohol Literature* and, after 1940, also in the *Quarterly Journal of Studies on Alcohol*.

KUHN, Warren B., comp. *The Julian Street Library, A Preliminary List of Titles*. New York: R. R. Bowker Co., 1966. 789 p. \$14.95.

Reproductions of Library of Congress cards for the carefully selected, broadly based supplementary collection of 8,555 books now housed in Princeton University's new Library Branch building. The cards, or where not available their facsimiles, are arranged under 30 broad subjects. Author-subject and title-price indexes.

LASKY, Benjamin, comp. *Communications and Electronics*, Sup. I. PACAF basic bibliographies for Base Libraries. San Francisco: January 15, 1966. iv, 44 p. pap. plastic spiral binding. Apply. (Available from Commander-in-Chief, Pacific Air Forces, Attn.: DPSR, Command Librarian, APO San Francisco, 96553).

Supplements the basic bibliography of the same title, dated July 1, 1964. Contains predominantly titles published during 1964; however, some titles of earlier publication dates that are considered of special value are included. Author-title index.

LATIN AMERICAN CENTER, DOCUMENTATION SECTION. *Periodicals for Latin American Economic Development, Trade, and Investment: An Annotated Bibliography*. Los Angeles: University of California, 1966. 72 p. \$2.50.

Provides full data and description of 220 English and Spanish-language periodicals on Latin America, published mainly in the Western Hemisphere. Gives detailed information, for each nation, in numerous fields such as agriculture, trade, finance, industry, production, marketing, transportation, business management, government activities, population, etc. Separate title, subject, and geographic indexes are included.

LEAMER, Laurence E. and GUYTON, Percy L., comp. *Suggestions for a Basic Economics Library*. New York: Joint Council on Economic Education, 2 W. 46 St., 1965. 64 p. pap. \$.75.

A revised, annotated bibliography designed to

guide in seven successive steps the building of an economics library for school, classroom, or the individual. More than 240 authors and over 80 publishers.

METCALF, Kenneth N. *Transportation, Information Sources* (Management Information Guide #8). Detroit, Mich.: Gale Research Company, 1965. 307 p. \$8.75. (L.C. 65-24657)

An annotated guide to publications, agencies, and other data sources concerning air, rail, water, road, and pipeline transportation. Includes appendices on transportation library collections, organization source books, university transportation activities as well as separate subject and authority-source indexes. By the recently deceased Director of SLA.

NATIONAL ARCHIVES AND RECORDS SERVICE, GENERAL SERVICES ADMINISTRATION. *List of National Archives Microfilm Publications, 1966*. Washington, D. C.: 1966. xii, 107 p. pap. Apply. (L.C. A61-9222)

Supersedes list of the same title published in 1965. Arranged according to government organizations, microfilm publications are listed by record group within each major unit. Entries for each microcopy contain information on: title, inclusive dates, total number of rolls filmed and their total price, microcopy number, and general descriptive or explanatory note when necessary. Includes a numerical list of microfilm publications with corresponding page numbers, subject index, and a supply of microfilm order blanks.

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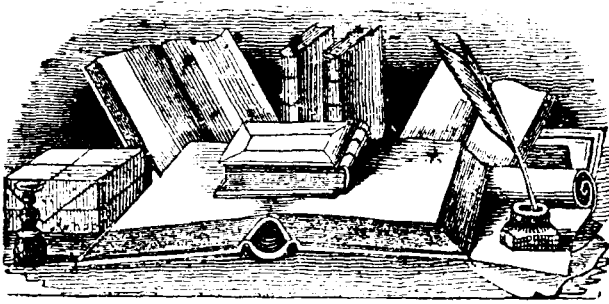
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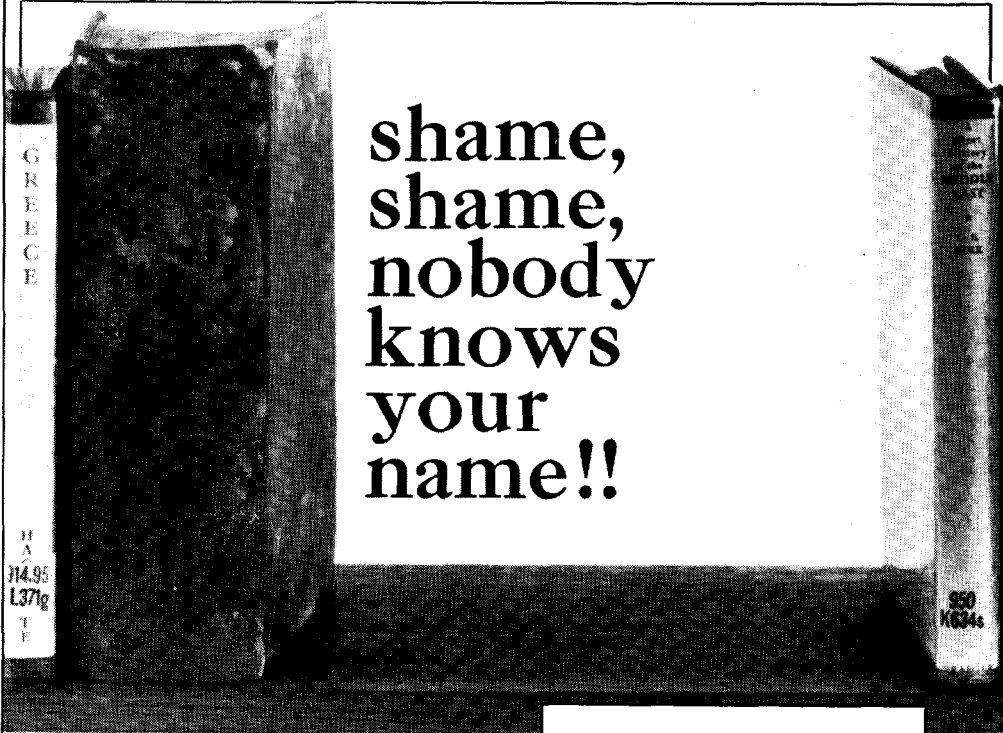
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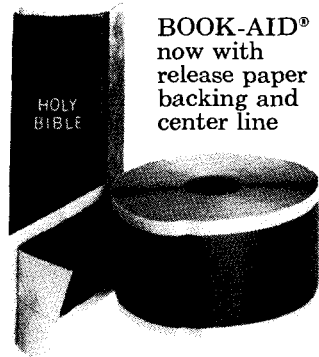
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