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SPLBA 67 (2) 63–120 (1976)
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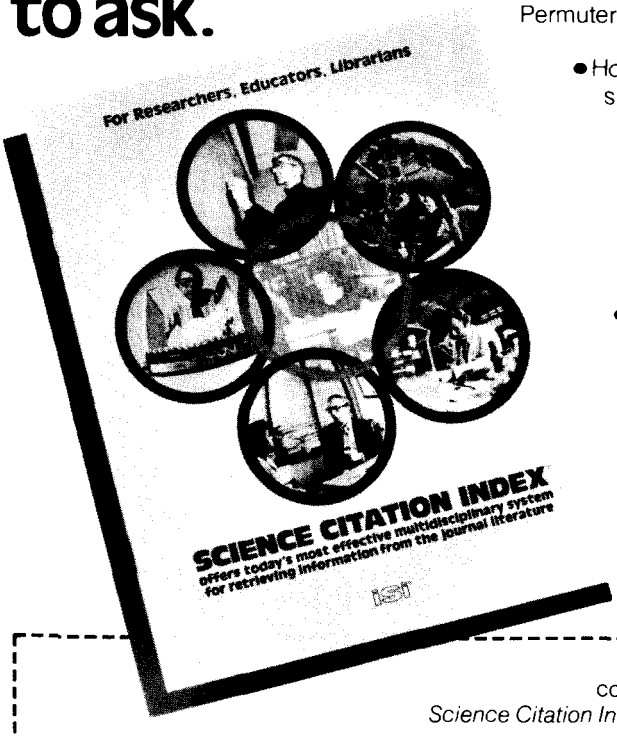

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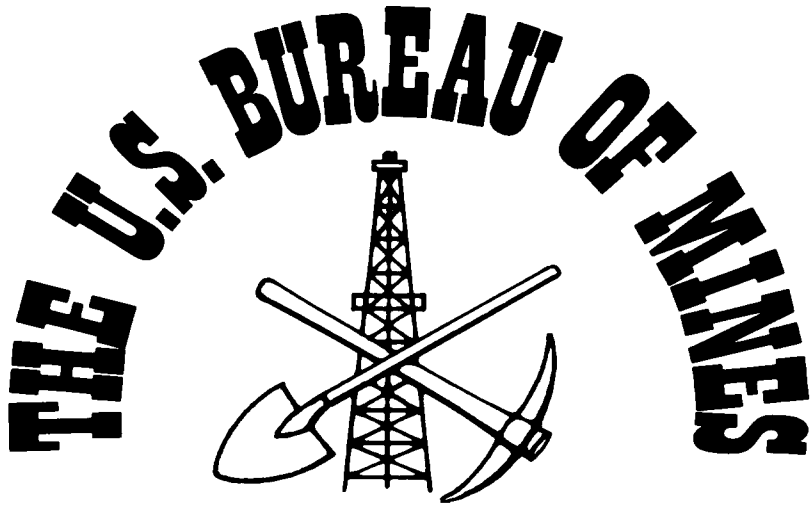

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Editor: JANET D. BAILEY
Assistant Editor: NANCY VIGGIANO
Advertising Sales: JOHN ROCK
Circulation: FREDERICK BAUM

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Back Issues & Hard Cover Reprints: Inquire Kraus Reprint Corp., 16 East 46th St., New York, N.Y. Microfilm & Microfiche Editions (1909 to date): Inquire University Microfilms, Ann Arbor, Michigan.

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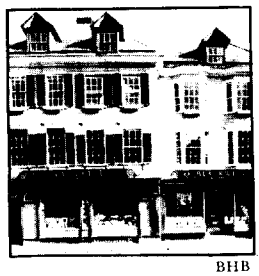

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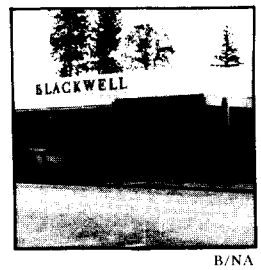

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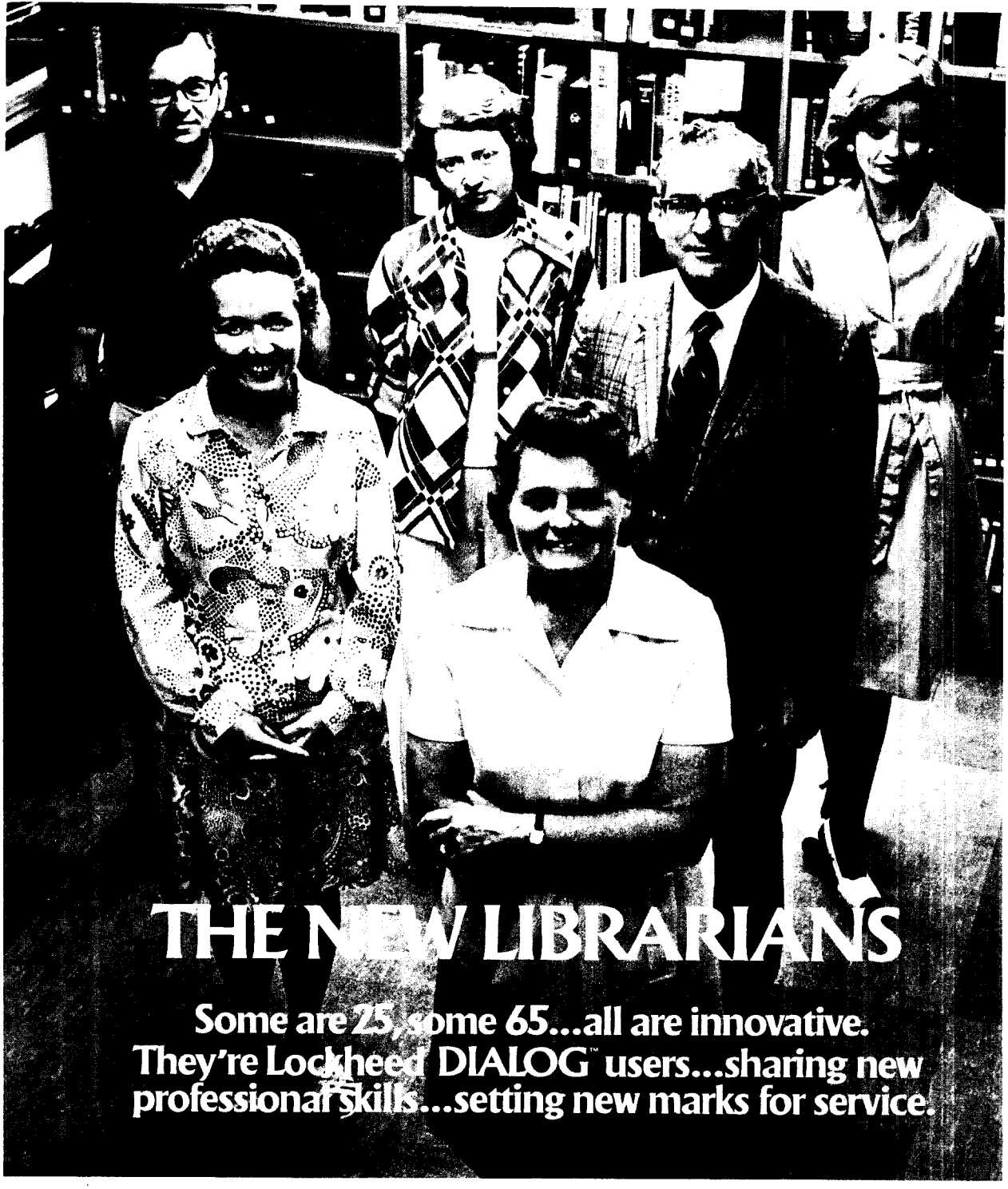

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LETTERS

Do Librarians Read?

The Publishing Division decided to sell reprints of its *Profiles of Special Libraries*. A flyer announcing the reprint with ordering instructions was prepared. Persons were requested to: 1) prepay $3.00 with a check, 2) made out to Special Libraries Association/Publishing Division, and 3) send the check to Ron Coplen at Harcourt Brace Jovanovich, Inc. Simple? Easy to follow? Right?

WRONG!! The experiences I have encountered and the time I have spent on this "simple" job were enough to make me wonder 1) if anybody reads instructions on order forms, and 2) if they do, why don't they follow them!

Instruction no. 1 requested prepayment. About 60 of the 130 orders received did not include checks. These requiring typing invoices, and photocopying the invoices to keep track of those who owed money. After the amount of work and time involved became apparent, I decided to follow my original request: *Prepayment only.*

I then typed another form letter saying "Thank you for your order—we did ask for prepayment of $3.00. Kindly return your request with a check made out to SLA/Publishing Division." Of the 12 to whom I sent billing, only 2 have bothered to pay. Is the return of $3.00 worth the time spent on typing the invoice, filing the duplicate copy, typing the envelope, and clearing all records if and when the check comes in? I was also amazed at how many persons sent in cash, thus requiring depositing the cash payments and making out a personal check to the Division.

Instruction no. 2 was to make the check payable to SLA/Publishing Division. The variations were amazing. Approximately one-fourth of the checks were made out to Harcourt Brace Jovanovich, Inc., which meant returning their check with a form letter requesting a new check. Many checks were made out to Ron Coplen. For these I deposited the checks and wrote personal checks to the Division. A few checks were made out to SLA offices at 235 Park Avenue South. These checks required either SLA to deposit them and reimburse us, or endorse them and return them to me. One check was for the university's dues *and* our reprint. In this instance, the Association office had to deposit the check and then send a check to me for the balance.

Those were the *simple* problems. The really hard ones began when *Instruction no. 3*—to mail to Ron Coplen at HBJ—was ignored. The checks made out to Harcourt Brace Jovanovich, without any mention of SLA or Ron Coplen on them, were applied to the account of the company or the university from which the check came. In some cases, the university "claimed" the special issue, the check had been deposited by HBJ, but the issue was not mailed. Some checks are still probably filed away in accounts receivable and may never be discovered. Some orders ended up in HBJ Customer Service Department (since neither Ron Coplen nor SLA were mentioned on the orders), only to be returned to the ordering party with the standard note attached: "not our publication." There were many more variations requiring HBJ's accounting department to get involved.

I pass on this information not to complain about all the extra work that has been caused me, but rather to call to the attention of all of us the fact that we are educated, professional people and should not be making these kinds of mistakes. If I, as a "publisher" of this one title, had so much trouble because of the way orders were placed, is it any wonder that publishers of hundreds of books, receiving hundreds of orders each day, have trouble with them??

Ron Coplen
Harcourt Brace Jovanovich, Inc.
New York

Vertically at the Bottom

I am interested by Smith and Fitt's article on "Vertical-Horizontal Relationships" in the November 1975 issue of *Special Libraries* [66(11):528-531]. However, they seem unaware of the possibility of a turned-tables situation in which the *librarian* is at the lower end of a vertical relationship.

Although this situation can occur in public or academic libraries, it is probably more endemic to private libraries, especially those associated with profit-making enterprises. In such places there may be the tendency to view the librarian as a servant or accessory, with connotations quite different from those of "public servant." Although personally I am not a stickler for rank and protocol, I have found that in order properly to perform one's job—properly *to serve,* in fact—and to be treated with professional dignity, it is necessary somehow to assert in a non-offensive fashion one's competence and professionalism. Just doing a good job is not always enough.

I have not fully worked out a solution to this on-the-job problem, but would be interested in the reactions of other readers who may be faced with similar situations.

Anonymous Librarian

ED. NOTE
Although it is not normally the policy of Special Libraries *to print anonymous letters, it was felt that this topic is of sufficient interest to merit publication.*

Shelving Problem with Chemical Abstracts

So far, depending upon the binding practices of the individual libraries, there are more than 700 individual bound volumes of *Chemical Abstracts.* These include a host of annual, semiannual, decennial and more recently quinquennial indexes. Again, within these indexes one has author indexes, subject indexes, patent concordances, subject guides and so on. Consequently, someone who is shelving these abstracts has to spend much time comparing a number of elements on the spines before locating the right place on the shelf. If the shelver is new or unfamiliar with the variety of indexes of the *Chemical Abstracts,* there will be much more confusion and there will be an inevitable disorder on the shelves.

This problem is solved simply by numbering the bound volumes of *Chemical Abstracts* sequentially starting with number one. It only takes a few hours for a librarian to arrange all the abstracts in order and put the labels on the bound volumes and then number them. If need arises, these labels can easily be peeled off.

The advantage is the time saved for the shelving assistant who now has to check only one element. Of course, it does not help the user as he/she needs all the information. On the other hand, the person who is shelving need only to locate the appropriate place for the volume on hand. This same system can be extended to other services such as *Dissertation Abstracts,* and *Biological Abstracts.*

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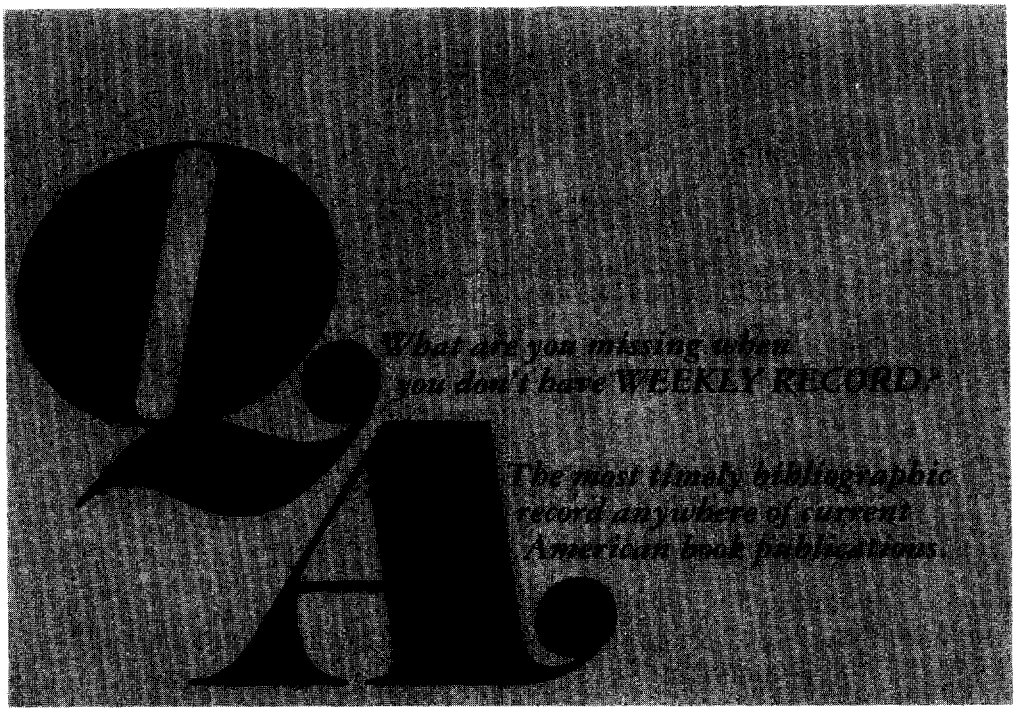

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Effective Interviewing

Ellen J. Kaplan

State University of New York at Binghamton, Binghamton, N.Y. 13901

■ The employment interview is one of the most crucial steps in the recruitment process. It is essential that the interview be effective as a communication process, as well as from the standpoint of the elimination of bias. The interviewer should, therefore, be aware of basic interviewing techniques, as well as cognizant of the EEOC and its decisions.

ON JUL 2, 1964, Congress passed the Civil Rights Act of 1964. Title VII of the Act, "Equal Employment Opportunity," prohibits discrimination in hiring, upgrading, and all other conditions of employment. It became effective on Jul 2, 1965. In addition, Title VII established the Equal Employment Opportunity Commission. The commission's basic responsibility is to promote equal employment opportunity through the administration of Title VII, and to insure that all are treated fairly in employment, without regard to race, color, sex, religion or national origin (*1*).

On Mar 24, 1972, the Equal Employment Opportunity Amendments were signed into law, cumulating years of effort to strengthen Title VII of the Civil Rights Act of 1964. The 1972 Act greatly expanded the jurisdictional coverage of Title VII and broadened the authority of the commission to obtain corrective action in eliminating employment discrimination, specifically mandating to the commission the authority to institute civil actions in federal court. (Prior to this, the commission was given power only to conciliate job bias problems.)

Clearly, one of the major purposes of the 1972 Amendments was to correct deficiencies in the original version of Title VII. The 1972 Act empowers the EEOC to bring civil actions directly to the federal courts in order to enforce the provisions of Title VII and to remedy instances of violation.

The 1972 Act also expanded the coverage of Title VII to encompass employers of state and local governments or governmental organizations, employers of educational institutions, and employers or labor organizations with fifteen or more employees or members. (The previous coverage had only included employers or labor organizations with twenty-five or more employees or members.) In addition, further protection is provided for federal employees regarding equal employment opportunity (*2*).

Commission Decisions

Commission decisions consist of fact finding and conclusions of law on the merits of individual charges. In addition to serving as the basis for voluntary compliance through conciliation proceedings in individual cases, commission decisions are a primary vehicle for informing the courts, the bar, the industrial relations community and the general public of commission interpretations and policies. Although the commission's findings and conclusions in a given case are not binding

in a subsequent court proceeding, they must be admitted into evidence and must be considered by the court (*3*).

Affirmative Action

In many companies, equal employment practices are a relatively recent development. However, the effects of years of discrimination against minority groups and women often cannot be rectified merely by correcting past discriminatory policies. In many instances, special remedial action is necessary in order for minorities and women to achieve their rightful opportunities and advancement. Therefore, the EEOC urges employers to take affirmative action to remedy the lingering effects of past discrimination. Affirmative action helps companies achieve equal employment opportunity by implementing aggressive recruiting policies, job training programs, and merit promotion plans (*4*).

Effect of the Law on Employers

Employers have a greater responsibility than ever before to insure that their employment and personnel policies are fully in accord with the principles of Title VII. It is incumbent upon employers to establish positive programs to bring minorities and women into the mainstream of employment by establishing hiring practices and programs which will not only eliminate discrimination in the future, but will also strive to correct any remnants of discrimination in the past (*5*).

The Employment Interview

One of the most valuable assets of any organization is the people who work for it. The knowledge and ability of each employee contribute to the quality of the organization. With the increased emphasis on proper employee selection, the interview is receiving more serious attention as a means of determining and clarifying qualifications.

Anyone who gives an opinion toward the final decision regarding the hiring of a candidate has a responsibility to interview as effectively as possible.

Purposes

The employment interview should be fundamentally a communication process. It may accomplish some or all of the following purposes.

1. Obtain relevant information about the candidate. The interview offers the candidate a means of directly communicating relevant information about himself. In addition, it provides a sample of behavior of the candidate to the interviewer. It is an opportunity to observe how the candidate conducts himself in an interpersonal situation in which he can express himself and put his best self forward. His behavior in this setting gives indications about his personality and social skills.
2. Give relevant information about the position and organization. The candidate should be informed of job specifics and given information about the organization and its community. It is important that as much attention be given to the candidate's best interests as to those of the organization.
3. Clarify any questionable information or warning signs from the résumé, application form or references.
4. Motivate qualified candidates to want to work for the organization. A word of caution here—the interviewer must be careful not to oversell the organization or the job, as that could lead to eventual disappointment and poor morale.

Methods

There are basically two types of methods of interviewing, usually called directed and nondirected or patterned and unpatterned. The nondirected or unpatterned interview has very little structure. The candidate is encouraged by the interviewer to do most of the talking. The directed or patterned interview is a much simpler method and is based on a prepared list of specific questions to which the interviewer expects specific answers.

In most library situations, neither of the above methods is entirely appropriate, and a combination of both techniques

produces the best results. The conversation should be guided by the interviewer, but the candidate should be encouraged to speak freely and at length about relevant topics.

Basic Principles

The basic principles for conducting the interview are:

Prepare for the interview. The interviewer should not enter the interview cold. He should have knowledge of all available information, such as the candidate's application form, résumé, and references. It should be noted that because people have taken legal action against former employers who gave a bad reference, references (especially written ones) are not always entirely reliable (*6*). Also, many people are reluctant to commit themselves on paper in regard to a person's deficiencies. Therefore, reference checks are usually more reliable if made, or followed up, either in person or by telephone.

After the interviewer is familiar with all background information, he should then decide what should be clarified and what additional information he needs. It is then possible to lay out a general pattern of questioning to be followed in the interview.

Arrange for privacy. If possible, interviews should be conducted where they cannot be overheard by persons who are not involved in the employment selection process. If the candidate feels the information he imparts may become public knowledge by being overheard, he may be reluctant to discuss his background or views frankly. In addition to privacy, an interview is best conducted where it is quiet, and with as few disturbances and interruptions as possible.

Establish rapport with the candidate. Some self knowledge of his own impact on people is helpful to the interviewer in establishing rapport. Although the focus is on the candidate, interviewing is an interaction between individuals, and the interviewer will get the best results if he is warm and easy-going. The interviewer should adopt a generally relaxed manner. Just sitting back in one's chair or coming out from behind one's desk and sitting in a chair next to the candidate will in itself give a relaxed, informal touch.

Avoid interviewer bias. More than we would like to think, interviewer bias, both conscious and unconscious, can be a major problem in the interviewer's interpretation of an interview or in the evaluation of the information the interview yields. The interviewer must strive to have enough self-insight and objectivity to avoid projecting his own values and motives onto others.

Avoid first impressions. There is a temptation to generalize about a candidate on the basis of a first impression. To classify someone because of his resemblance to someone else is another, often subconscious, mistake. To avoid unfair first impressions, the interviewer should make every effort not to form an opinion of the candidate during the first few minutes of the interview. If an opinion is formed on the basis of a first impression, it may destroy the value of the rest of the interview and cause the interviewer to overlook real facts, thereby basing his opinion on superficial grounds.

Another form of interviewer bias, similar to accepting a first impression as a concrete picture of a candidate, is that of the halo effect. The halo effect occurs when the interviewer likes or dislikes something about the candidate, and the interviewer then allows that like or dislike to affect the entire way he rates the rest of the information about the candidate. Contrary to what may be assumed from the term "halo effect," the effect on the rating can be either favorable or unfavorable. In short, the halo effect occurs whenever an interviewer is too strongly impressed by a single characteristic, negative or positive.

Know how to question. The way the interviewer asks questions is the key to keeping his talking to a minimum and still obtaining the information needed. The interviewer's manner of questioning guides and directs the candidate through the interview. The interviewer should not ask questions which can be answered by a simple "yes" or "no." Instead he should

ask open-ended, general questions which allow the candidate to think and give expanded answers. This gives the interviewer the opportunity to listen. In addition to what he actually says, the candidate's answers to this type of question may give clues to his attitudes and interests. Also, open-ended, general questions allow for probing further with additional questions, since the subject is not closed with a "yes" or "no" answer.

Know when not to question. It is also important for the interviewer to learn when not to interject into the discussion. He should not assume that he must ask another question every time the candidate pauses. If there is more that could be or should be said, the candidate will interpret the pause as an indication to say more.

Know how to listen. For a successful interview, the interviewer must listen not only to the words spoken, but to the meaning and intent the candidate is attempting to convey. He must listen attentively to grasp the entire meaning of what is being said and of what is not being said.

Avoid tricks or ruses. Cleverness will not produce good results in interviewing. If the interviewer's questions turn up discrepancies or conflicting statements, he is justified in asking questions to straighten things out, but he should do so frankly. In addition, the interviewer should not avoid questions which may seem unpleasant if they are pertinent to the situation. The interviewer should make it apparent that he is not prying into the candidate's private affairs out of meaningless curiosity, but that he is seeking information needed to evaluate the candidate's work and abilities. The interviewer should make it clear to the candidate that he is being given a chance to give his full explanation of any deficiency which might otherwise count against him.

There are questions on some subjects, however, whether they are asked on application blanks or by an interviewer, which are considered discriminatory by the EEOC unless it can be satisfactorily explained that they are not being used for discriminatory purposes.

Education is one such area. Unless the job specifically requires certain educational qualifications, the EEOC views such requirements as disqualifiers of minorities at a substantially higher rate than others and, therefore, discriminatory. Other such areas are arrest and conviction records, as well as garnishment records.

Questions pertaining to marital status, child care problems, contraceptive practices, plans to have children, unwed motherhood, and age are considered potentially discriminatory by the EEOC (*7*).

Conclude gracefully. It is up to the interviewer to conclude the interview gracefully and naturally. He should keep the interview on a steady, consistent, and apparently unhurried pace. Then, if possible, the interview should be concluded on a pleasant note.

After the interview, the interviewer should carefully evaluate all the information he has at his disposal. He should interpret the meaning of the facts he has gathered, investigate if necessary to make sure the information is accurate, and then weigh the information carefully—negative and positive. This should be done as soon after the interview as possible. The longer the time lapse, the greater the margin for evaluation error.

Conclusion

Effective interviewing can play a critical role in placing the right person in the right job, thereby reducing rapid turnover and organizational problems. Bad interviewing can be detrimental to an organization and create problems for those hired through it. It can haunt an organization and have numerous negative effects on candidates.

It must be remembered that equal employment opportunity is an essential part of every supervisor's responsibility. The EEOC stresses that the mark of a good affirmative action program is affirmative results, and that the extent of the support given to affirmative action determines the extent of the results.

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Received for review Dec 16, 1974. Revised manuscript accepted for publication Aug 14, 1975.

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Bibliographic Gaps in the Social Science Literature

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■ Data are presented on coverage of books and U.S. government publications by bibliographic services of psychology, sociology, political science and economics, and two interdisciplinary bibliographies. Coverage of books ranged between 45% and 68%; coverage of government publications was about 50%. Books that are reviewed are more likely to be listed than those that are not. Coverage increases with the number of bibliographic services in a field, but so does duplication. The meaning of the findings is discussed in relation to the problem of identifying scientific literature, and the problem of overlapping coverage by bibliographic services.

THIS STUDY investigates an aspect of bibliographic control of the social science literature: coverage of the literature by bibliographic publications. It is limited to publications in two formats—books, and social science monographs issued as government publications omitting the journal literature. This was done in order to focus on some problems of identification and evaluation which relate particularly to the monographic literature.

Previous studies of bibliographic coverage in the social sciences have concentrated on journal coverage and yield no data specific to monographs (*1–4*). However, there are indications that social science bibliographies cover monographs less thoroughly than serials. For example, the editors of *Sociological Abstracts,* in an editorial surveying their first twenty years of publication, speak with pride of their journal coverage, but add that the book literature "has not been documented by SA with any degree of rigour or order" (*5*). The American Psychological Association's Project on Scientific Information Exchange in Psychology reported that journal articles make up about 85% of the content of *Psychological Abstracts* and added, "The high contribution of journals is not necessarily regarded as an ideal. It appears quite possible that separates . . . should contribute more than the 15% of entries they now contribute (*1*). It is also noteworthy that some major bibliographic services in the social sciences, such as *International Political Science Abstracts* and *Index of Economic Articles* omit monographic works altogether.

Neglect or underrepresentation of the monographic literature in bibliographies would constitute a gap of serious propor-

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tions in social science communication. Citation studies have reported that references to monographs range between 30% and 60% in most social science fields (*6, 7*). This contrasts sharply with the natural sciences, where the figure tends to be under 10% (*6*).

But the importance of the monographic literature is more than quantitative. Many writers have observed that books have a distinctive role as evaluators and integrators of the bits of knowledge ground out piecemeal by the mills of research in the form of articles and technical reports (*5, 8–10*). On this reasoning, if a discipline's bibliographic apparatus fails to provide adequate access to its book literature, it is notably the cumulated, synthesized levels of scholarly output, the portion that ought particularly to serve as the springboard for further advancement, that is apt to be drained off and unexploited.

Procedure

A sample of books and government publications was checked in the main bibliographic publications of psychology, sociology, political science and economics. The sample, intended to be a broadly inclusive list unselected for quality, was constituted as follows:

The psychology books were the titles on the Books Received list in the November 1972 issue of *Contemporary Psychology*. The sociology book sample consisted of the Books Received list in the September 1972 issue of *Contemporary Sociology*, plus the titles judged to be sociology (rather than anthropology) from the American Bibliographic Service's *Quarterly Checklist of Ethnology and Sociology*, vol. 15 (no. 4) (1972), with duplicates eliminated. For political science and economics, the book samples consisted of the books listed in the *Quarterly Checklist of Economics and Political Science*, vol. 15 (nos. 2–3) and (4) (1972), divided between the two fields on the basis of title. In all instances, translations which could be recognized as such were eliminated.

The government publications sample consisted of all the items listed in the 1972 U.S. *Monthly Catalog* that seemed, on the basis of the catalog information, to be research reports or other contributions to knowledge in psychology, sociology, political science, or economics. Publications that are specifically and uniquely governmental in character, such as congressional hearings and routine statistical accounts on the order of *Current Population Reports*, were not included.

The bulk of the sample consisted of 1971 and 1972 publications, with a sprinkling of earlier imprints. The size of each subject sample and English/foreign language breakdowns are shown in Table 1.

Each of the subject samples was checked in the major bibliographic inventories of its discipline and some cross-disciplinary bibliographies. In the case of psychology, the only disciplinary tool used was *Psychological Abstracts*. For the other three fields, the disciplinary tools checked were the relevant section of UNESCO's *International Bibliography of the Social Sciences (International Bibliography of Sociology, International Bibliography of Political Science, International Bibliography of Economics)* and the discipline-wide abstracting publications: *Sociological Abstracts, Universal Reference System: Political Science, Government and Public Policy Series, Economic Abstracts*, and *Journal of Economic Literature*. The cross-disciplinary bibliographies were *American Behavioral Scientist's Recent Publications in the Social and Behavioral Sciences* (designated ABS in the tables) for all fields, and Public Affairs Information Service (both the English language *Bulletin* and *Foreign Language Index*) for sociology, political science, and economics. Due to the lack of author indexes in the *Journal of Economic Literature* and PAIS *Bulletin*, the procedure with those bibliographies was to check each item in the bibliography (in PAIS, each item marked as a separate) against the sample. Thirty items in the government publications sample lacked personal authors, and it was attempted to locate those by subject and title.

The bibliographies were checked from the year of the book's publication to the

Table 1. Number and Percentage of Sample Cited in Bibliographic Services

	All Books		English Language		Foreign Language		Government Publications	
	No.	%	No.	%	No.	%	No.	%
PSYCHOLOGY	(N = 170)						(N = 19)	
All services	77	45					7	37
Psychological Abstracts	68	40					5	26
ABS	10	6					0	0
PAIS	—	—					2	11
SOCIOLOGY	(N = 280)		(N = 270)		(N = 10)		(N = 48)	
All services	136	49	131	49	5	50	24	50
Intl. Bib. Sociology	90	32	85	31	5	50	3	7
Sociological Abstracts	2	0.7	2	0.7	0	0	0	0
ABS	—	—	61	22	—	—	0	0
PAIS	—	—	18	7	0	0	20	42
POLITICAL SCIENCE	(N = 159)		(N = 105)		(N = 54)		(N = 33)	
All services	108	68	86	82	22	41	22	67
Intl. Bib. Pol. Science	84	53	65	62	19	35	3	9
Univ. Reference System	58	36	58	55	0	0	0	0
ABS	—	—	24	22	—	—	0	0
PAIS	—	—	15	14	4	7	21	64
ECONOMICS	(N = 258)		(N = 149)		(N = 109)		(N = 54)	
All services	176	68	116	77	60	55	28	52
Intl. Bib. Economics	140	54	83	56	57	52	8	15
J. Economic Literature	80	31	77	51	3	3	0	0
Economic Abstracts	40	16	28	19	12	11	0	0
ABS	—	—	3	2	—	—	0	0
PAIS	—	—	25	15	6	6	26	48

— = not checked in this category

latest issue available. *Economic Abstracts* and PAIS *Bulletin* were cut off at the latest bound volume (1973), because of the difficulty of checking semi-monthly and weekly issues. Because of the lack of author indexes of *JEL* and PAIS *Bulletin* the earliest volumes searched were 1971.

In order to obtain some clues as to the status of the books in the sample in relation to "the literature" of their respective fields, the main reviewing journal of each field (*Contemporary Psychology, Contemporary Sociology, American Political Science Review,* and *Journal of Economic Literature*) plus *Book Review Index* were searched for reviews. The assumption was that a book selected for review in a scholarly journal had been judged by at least one competent evaluator to be worth bringing to the attention of the members of his discipline.

Results

Coverage of the samples by bibliographic services is shown in Table 1. The proportion of each field's book samples reached by its bibliographic services was 45% for psychology, 49% for sociology, and 68% each for political science and economics. In sociology, political science and economics, where more than one intra-disciplinary bibliography was examined, the leading sources for book listings were the components of the *International Bibliography of the Social Sciences,* followed by the disciplinary abstracting services in political science and economics, but not sociology, where *Sociological Abstracts* is virtually a total loss in this regard.

The interdisciplinary bibliographies reached smaller proportions of the samples, on the whole. PAIS reached more of

Table 2. Reviewed and Unreviewed Books Cited in Bibliographies
(English language titles only)

	Psychology		Sociology		Political Science		Economics	
	Re-viewed	Unre-viewed	Re-viewed	Unre-viewed	Re-viewed	Unre-viewed	Re-viewed	UnRe-viewed
No. cited	57	20	72	64	42	44	43	73
No. not cited	58	35	36	98	2	17	1	32
% Reviewed Books	115/170 = 68%		108/270 = 40%		44/105 = 42%		44/149 = 30%	
% Reviewed of Books Cited	57/77 = 74%		72/136 = 53%		42/86 = 49%		43/116 = 37%	

the political science and economics than sociology titles, while ABS seems to put more emphasis on sociology and political science than on psychology or economics.

Books that are reviewed in a discipline's journals are more likely to be cited in its bibliographic services than unreviewed books, as shown in Table 2. The "reviewed" figures include only books reviewed in journals of the discipline in question, ignoring reviews in adjacent fields or popular magazines, because the purpose was to consider reviews as a means of identifying the works belonging to "the literature" of a field. Also, only English language works are considered, because few reviews of foreign language books were found.

In all fields, a higher proportion of reviewed than unreviewed titles was included in the bibliographic services, and the reviewed books therefore constitute a larger proportion of the cited titles than of the sample as a whole. However, the pattern is not entirely consistent. Coverage of reviewed titles by the bibliographic services is high (over 90%) in political science and economics, but in those fields only a relatively small proportion of the sample was reviewed (42% and 32%, respectively.) In psychology, where a higher proportion of the sample was reviewed (68%) only about half the reviewed titles were cited by the bibliographic services.

Another clue to the relative cohesion or diversity of selection judgments is the frequency of multiple listings for a single title among the several bibliographic services of a discipline, a matter which also bears on the possibility of wasteful duplication of bibliographic effort. The relevant figures are shown in Tables 3, 4, and 5.

There is almost no duplication of listings in psychology, an outcome dictated by the design of this study, but also reflecting the near-total dominance of *Psychological Abstracts* over the bibliographic scene in that field. Multiple listing of titles, as well as overlap with the *International Bibliography of the Social Sciences,* the most generally inclusive of the bibliographic services, are fairly substantial in political science and economics, and somewhat less in sociology, a difference that is doubtless due in part to the negligible contribution of *Sociological Abstracts* to coverage of the book literature.

Coverage of the government publications sample by all bibliographic services was 53%, with PAIS accounting for 45%. The breakdown by disciplines and bibliographies is shown in Table 1.

Discussion

On the basis of the data presented here, it may be said that the bibliographic services of social science cite about one-half to two-thirds of the book literature, over a time span of three to four years following publication. *Psychological Abstracts* offers the best combination of coverage and speed; virtually all its listings of the 1971–72 sample were available by the close of 1973. The international bibliographies of sociology, political science and economics achieve equal or

Table 3. Multiple Listings

Listed by	Psychology N = 170 No.	% of listings	% of sample	Sociology N = 280 No.	% of listings	% of sample	Political Science N = 159 No.	% of listings	% of sample	Economics N = 258 No.	% of listings	% of sample
1 source	76	99	45	105	77	38	55	53	36	87	49	34
2 sources	1	1	0.5	27	20	10	29	27	18	65	37	25
3 sources				4	3	1	18	15	11	21	12	8
4 sources							4	4	3	3	2	1

Table 4. Duplication of International Bibliography Listings by Other Services

	Sociology International Bibliography of Sociology			Political Science International Bibliography of Political Science			Economics International Bibliography of Economics		
	No. of listings	No. also IBS	% overlap	No. of listings	No. also IBPS	% overlap	No. of listings	No. also IBE	% overlap
Abstracting Service	(Soc. Abstracts) 2	2	50	(Univ. Ref. System) 58	42	72	(J. Econ. Lit.) 80	54	68
							(Econ. Abstracts) 40	29	73
ABS*	61	25	41	24	20	83	3	2	67
PAIS Bulletin*	18	6	33	15	9	60	23	16	70
PAIS For. Lang.*				4	1	25	6	6	100

*Each subject sample considered separately

Table 5. International Bibliography of the Social Sciences: Unduplicated Listings

	Number	% of Field's Listings	% of Field's Sample
INT. BIB. SOC.			
Total	62	(N = 136) 46	(N = 280) 22
English language	57	(N = 131) 43	(N = 270) 21
Foreign language	5	(N = 5) 100	(N = 10) 50
INT. BIB. POLI. SCI.			
Total	38	(N = 108) 35	(N = 159) 24
English language	20	(N = 86) 23	(N = 105) 19
Foreign language	18	(N = 22) 82	(N = 54) 33
INT. BIB. ECON.			
Total	59	(N = 176) 34	(N = 258) 22
English language	21	(N = 116) 18	(N = 149) 14
Foreign language	38	(N = 60) 63	(N = 109) 35

greater coverage, but much more slowly. Some listings of 1972 publications will probably appear in the 1973 volumes, which had not yet been issued in the Spring of 1975, when these data were collected. Reviewed books are more heavily represented in nearly all the bibliographies than books that are not reviewed, suggesting some degree of shared perspective on the part of book review editors and the editors of bibliographies as to standards for judging a book's relevance and importance. Overall coverage of the literature increases with

the number of bibliographic services operating in a field, but so do overlapping and duplication. Coverage of contributions to the literature in the form of government publications runs around 50%, heavily concentrated in PAIS, with only marginal coverage by the disciplinary bibliographies.

These facts are fairly straightforward, but their meaning is not. Two difficulties in particular seem to stand between the data assembled here and a clear understanding of needed improvements in social science bibliography. One has to do with the dimensions of the universe within which the extent of bibliographic coverage is measured; that is, the problem of identifying "the literature" of a discipline, or "scientific literature" in general. The other is the matter of duplication among bibliographic services, and whether this ought to be viewed as a merit or defect of the system. Both issues arise in especially acute form in relation to the monographic literature.

Identification of a body of writings which members of a scientific community address to each other and recognize as "their" literature is a simpler matter for the journal literature than for publications in other forms. In the journals, the referee system performs a labelling, legitimizing function, so that an article comes to the bibliographic services already in possession of its credentials as a *bona fide* contribution to scientific literature. Nothing comparable occurs outside the journals. The editorial decisions underlying publication of a book may or may not focus on the work's scholarly respectability or potential contribution to scientific knowledge. Reports of government agencies or other operating organizations are normally shaped by the program requirements of the agency, rather than concern for the dissemination of knowledge as such. Thus books and other separate publications reach the bibliographic services without established scientific credentials, and their eligibility for inclusion in the scientific literature must be weighed on a case-by-case basis—a factor that doubtless inhibits coverage.

In the light of such considerations it has been suggested that the comprehensive, noncritical disciplinary abstracting service ought not to include books at all. Ilse Bry wrote, "It was logical for information services, when they became nonselective and noncritical, to omit books. It is not meaningful for books to be merely listed, indexed or abstracted; they have to be evaluated" (*10*). Bry advocated use of the book review as the basis for a bibliographic record of monographic literature, on the ground that the review conveys the scientific community's response to an author's communication, and thereby brings the book into the stream of relevant scientific discourse. This was the rationale underlying her *Mental Health Book Review Index.* A similar idea is reflected in the "International Review of Publications in Sociology" issued as an experiment in December 1972 by the editors of *Sociological Abstracts* to compensate for the lack of book listings in the *Abstracts.* It was a list of books received by *Sociological Abstracts,* together with a list of reviews in the journals it covers.

A bibliographic record based on book reviews deals with the problem of identifying the scientific literature by assigning the gatekeeper function to the book review editors, thus in a way extending the editorial apparatus centered in the journals to the realm of books. On the other hand, the data presented in Table 2 show that reviewed books comprised between 37% and 74% of the bibliographic listings, suggesting that use of reviews as a basis for selection of works to be listed in bibliographies would reduce existing levels of coverage. Whether it would also result in more useful and appropriate selections is a point which deserves consideration, but which the present study does not illuminate. In addition, work in formats that are almost never reviewed, such as government publications, would be eliminated. But the crucial consideration is the effect that splitting the bibliographic record on the basis of format would have on literature users' access to information. It is not only logical but essential for comprehensive in-

formation services to include books, if that is where scholars habitually turn to find the accumulated body of work on a question. Indeed, as was noted earlier, omission of books from the comprehensive bibliographic record is apt to mean particularly the omission of the more synthesized and solidified aspects of what is known about the subject.

Viewed from this angle, the significant bibliographic gap in coverage of the monographic literature is not the absence of some proportion of books from one or another bibliographic tool, but the general absence of gatekeeper arrangements, comparable to the referee system operating in the journals, for identifying the publications that are contributions to science.

Duplication of listings by bibliographic tools is another ambiguous issue. On the evidence of the present study, there would seem to be some good possibilities for improving the bibliographic system of the social sciences, in terms of cost-effectiveness, by consolidation of overlapping tools, notably those that cover essentially identical disciplinary territory: *International Bibliography of Sociology* and *Sociological Abstracts; International Bibliography of Political Science* and *Universal Reference System; International Bibliography of Economics* and *Journal of Economic Literature,* to mention only English-language examples that deal with monographic as well as serial literature. Conceivably, consolidation could reduce aggregate costs of production and make possible more elaborate description and indexing of the cited works—an attractive prospect. But it is interesting to consider also the implications of consolidation for selection of the materials to be identified as "scientific literature." If the routes of access to a discipline's literature are dominated by one consolidated bibliographic service, what are the risks that the information scholars receive will be dominated in turn by a single perspective or value system?

Again there is a visible difference between the journal and monographic literature. In the case of the journals the gatekeeper role is widely shared and this makes possible the representation of many points of view in the collective definition of scientific standards. But for the monographic literature, if the gatekeeper function tends to devolve on the bibliographic services, consolidation and reduction of duplication within the bibliographic system could imply a narrowing of perspectives and constriction of intellectual diversity.

Clearly any attempt to assess bibliographic gaps in the social science literature must first concern itself with what we mean by "literature" and what we mean by "gaps." As librarians we can, if we choose, decline to interest ourselves in these problems, on the grounds that we are not, by and large, the producers of bibliographic services and, come what may, will continue to place whatever is available in the hands of our readers. But if we see ourselves as providers of service, rather than simply materials, our concerns should extend to the potentialities of the bibliographic system and the shape of its future, and from that perspective the issues raised by the present study may merit consideration.

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Received for review Jun 4, 1975. Revised manuscript accepted for publication Jul 25, 1975. Presented Jun 10, 1975, as a Contributed Paper, during SLA's 66th Annual Conference in Chicago.

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Guide to the Indexing of U.S. Government Periodicals

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■ Despite the wealth of information contained in U.S. government periodicals, these documents are often excluded from standard indexing and abstracting tools. Perhaps even more unfortunately, those government issued journals which have been indexed are often omitted from the basic guides to periodical indexing. Attempts are made to deal with this problem.

DOCUMENTS librarians have long been aware of the deficiencies of *Ulrich's* handling of U.S. government periodicals—not only in terms of inclusion, but particularly, in terms of the inconsistent indexing of titles listed. (MONTHLY LABOR REVIEW indexed by issuing agency but not by title; AGING indexed by title but not by issuing agency.) To help alleviate this problem we have compiled the following guide for U.S. government periodicals. Only journals which are indexed are listed. Information given includes Superintendent of Documents number, issuing agency, any self-indexing of the title, and indexing and abstracting tools which review the periodical regularly. Following a practice common to separate documents collections and to conserve space, the names of all issuing agencies have been inverted and only the actual government author organization, whether parent or sub-agency, has been given. Arrangement is alphabetical by title. Although this list is based on the appendix of the February 1973 *Monthly Catalog* the bulk of the information continues to be valid for later editions of the appendix as well. Any additions or changes are most welcome.

Information for this list has been compiled from a number of sources including the 14th edition of *Ulrich's International Publications Directory*, 1971–1972 and Andriot's *Guide to U.S. Government Publications*, 1973 edition. In addition, lists of journals reviewed were checked for thirty-six abstracting and indexing services* and many titles were individually searched for self-indexing.

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*All of the indexing and abstracting services found in the Key to Abbreviations were reviewed for their coverage of U.S. government periodicals except the following three titles which, unfortunately, were not available to us: BIOLOGICAL AND AGRICULTURAL INDEX, GRAPHIC ARTS INDEX, and TOBACCO ABSTRACTS. In addition, ART INDEX and MUSIC INDEX were checked for their coverage, or rather lack of same.

Since this list was compiled, a new tool, *Index to U.S. Government Periodicals*, has been published by Infordata International (175 E. Delaware Place, Chicago, Ill. 60611). The price is $150 per year. This new computer generated author and subject index, devoted solely to U.S. government issued journals, attempts to cover many periodicals which are not included in the indexes and abstracts listed here.

Key to Abbreviations

A.S. & T. IND.	Applied Science & Technology Index
A.S.I.	American Statistics Index
AIR UN. LIB. IND.	Air University Library Index to Military Periodicals
B.P.I.	Business Periodicals Index
BIOL. ABSTR.	Biological Abstracts
BIOL. & AGRI. IND.	Biological & Agricultural Index
CHEM. ABSTR.	Chemical Abstracts
CHILD DEV. ABSTR.	Child Development Abstracts
CURR. CONT.	Current Contents
ECON. ABSTR.	Economic Abstracts
EDUC. IND.	Education Index
ENG. IND.	Engineering Index
GRAPH. ARTS. ABSTR.	Graphic Arts Abstracts
IND.	periodical is self-indexed
IND. MED.	Index Medicus
LEG. PER.	Index to Legal Periodicals
LISA	Library & Information Science Abstracts
LIB. LIT.	Library Literature
M.H.B.R.I.	Mental Health Book Review Index
M.L.A.	Modern Language Abstracts
MATH. R.	Mathematical Reviews
MENT. RETARD. ABSTR.	Mental Retardation Abstracts
MET. ABSTR.	Metal Abstracts
METEOR. & GEOASTROPHYS. ABSTR.	Meteorological & Geoastrophysical Abstracts
NUCL. SCI. ABSTR.	Nuclear Science Abstracts
NUTR. ABSTR.	Nutrition Abstracts & Reviews
P.A.I.S.	Public Affairs Information Service
POP. IND.	Population Index
PSYCHOL. ABSTR.	Psychological Abstracts
RAPRA	Rubber & Plastics Research Association of Great Britian
R.G.	Readers' Guide to Periodical Literature
REF. ZH.	Referativnyi Zhurnal
SCI. ABSTR.	Science Abstracts
SCI. CIT. IND.	Science Citation Index
SOC. SCI. & HUM. IND.	Social Sciences & Humanities Index
SOCIOL. ABSTR.	Sociological Abstracts
TOB. ABSTR.	Tobacco Abstracts
ZEN. MATH.	Zentralblatt fur Mathematik

Abridged Index Medicus. HE20.3612/2: National Library of Medicine. Indexed: IND.

Accessions List: Ceylon. LC1.30/7: Library of Congress. Indexed: IND.

Accessions List: Eastern Africa. LC1.30/8: Library of Congress. Indexed: IND.

Accessions List: India. LC1.30: Library of Congress. Indexed: IND.

Accessions List: Indonesia, Malaysia, Singapore and Brunei. LC1.30/5: Library of Congress. Indexed: IND.

Accessions List: Israel. LC1.30/4: Library of Congress. Indexed: IND.

Accessions List: Middle East. LC1.30/3: Library of Congress. Indexed: IND.

Accessions List: Nepal. LC1.30/6: Library of Congress. Indexed: IND.

Accessions List: Pakistan. LC1.30/2: Library of Congress. Indexed: IND.

Aerospace Medicine and Biology . . . NAS1.21:7011/ National Aeronautics and Space Administration. Indexed: IND.

Aerospace Safety. D301.44: Air Force Department. Indexed: AIR UN. LIB. IND.

Aging. HE17.309: Aging Administration. Indexed: P.A.I.S., R.G., SOCIOL. ABSTR.

Agricultural Economics Research. A93.26: Economic Research Service. Indexed: IND., BIOL. & AGRI. IND., CHEM. ABSTR., P.A.I.S., SCI. CIT. IND.

Agricultural Research. A77.12: Agricultural Research Service. Indexed: IND., BIOL. ABSTR., SCI. CIT. IND.

Agricultural Science Review. A94.11: Cooperative State Research Service. Indexed: IND., BIOL. & AGRI. IND., SCI. CIT. IND.

Air Force Civil Engineer. D301.65: Air Force Department. Indexed: ENG. IND., SCI. CIT. IND., AIR UN. LIB. IND.

Air Force Comptroller. D301.73: Air Force Department. Indexed: AIR UN. LIB. IND.

Air Pollution Abstracts. EP4.11: Air Programs Office. Indexed: IND.

Air Reservist. D301.8: Air Force Department. Indexed: AIR UN. LIB. IND.

Air University Review. D301.26: Air Force Department. Indexed: AIR UN. LIB. IND., ENG. IND., P.A.I.S.

Airman. D301.60: Air Force Department. Indexed: AIR UN. LIB. IND.

All Hands. D208.3: Naval Personnel Bureau. Indexed: AIR UN. LIB. IND.

American Education. HE5.75: Education Office. Indexed: EDUC. IND., MENT. RETARD. ABSTR., P.A.I.S., R.G.

Announcement of Highway Safety Literature. TD8.10: National Highway Traffic Safety Administration. Indexed: IND. (TD8.10/2)

Antarctic Journal of United States. NS1.26: National Science Foundation. Indexed: IND., BIOL. ABSTR., METEOR. & GEOASTROPHYS. ABSTR., NUCL. SCI. ABSTR., REF. ZH., SCI. CIT. IND.

Applications, Cases Approved, and Cases Discontinued for Public Assistance. HE17.641: National Center for Social Statistics. Indexed: A.S.I.

Approach . . . D202.13: Naval Air Systems Command. Indexed: AIR UN. LIB. IND.

Area Trends in Employment and Unemployment. L34.9: Training and Employment Service. Indexed: A.S.I.

Arms Control and Disarmament. LC2.10: Library of Congress. Indexed: IND., P.A.I.S.

Army Logistician. D101.69: Army Department. Indexed: AIR UN. LIB. IND.

Army Reserve Magazine. D101.43: Army Department. Indexed: IND.

Assessments Completed and Referrals to Manpower Agencies by Welfare Agencies . . . HE17.619: National Center for Social Statistics. Indexed: A.S.I.

Bureau of Census Catalog. C56.222: Census Bureau. Indexed: IND.

Business Conditions Digest. C56.111: Economic Analysis Bureau. Indexed: IND., P.A.I.S.

Cancer Chemotherapy Abstracts. HE-20.3160/4 National Cancer Institute. Indexed: IND.

Cancer Chemotherapy Reports, Pts. 1, 2, 3. HE20.3160:, HE20.3160/2:, HE20.3160/3: National Cancer Institute. Indexed: IND., BIOL. ABSTR., CHEM. ABSTR., CURR. CONT., IND. MED., NUCL. SCI. ABSTR., SCI. CIT. IND.

Carbon Black. I28.88: Mines Bureau. Indexed: RAPRA

Carcinogenesis Abstracts. HE20.3159: National Cancer Institute. Indexed: IND.

Catalog, Department of Health, Education and Welfare Publications. HE1.18/3: Health, Education and Welfare Department. Indexed: IND., A.S.I.

Cataloging Service Bulletin. LC30.7: Library of Congress. Indexed: LIB. LIT.

1970 Census Users Bulletin. C56.212/2: Census Bureau. Indexed: A.S.I.

Chartbook on Prices, Wages, and Productivity. L2.102/2: Labor Statistics Bureau. Indexed: A.S.I.

Checklist of Reports Issued by Economic Research Service and Statistical Reporting Service. A1.97: Agriculture Department. Indexed: A.S.I.

Chemicals . . . C41.35: Domestic Commerce Bureau. Indexed: P.A.I.S.

Child Care Arrangements of AFDC Recipients Under Work Incentive Program. HE17.609: National Center for Social Statistics. Indexed: A.S.I.

Children Today. HE21.9/2: Child Development Office. Indexed: IND., CHILD DEVEL. ABSTR., EDUC. IND., IND. MED., MENT. RETARD. ABSTR., SOCIOL. ABSTR.

Civil Rights Digest. CR1.12: Civil Rights Commission. Indexed: P.A.I.S.

Climatological Data. C55.214/2-47: Environmental Data Service. Indexed: IND.

Coal-Mine Fatalities. I28.10/2: Mines Bureau. Indexed: A.S.I.

Coal-Mine Injuries and Worktime. I28.89: Mines Bureau. Indexed: A.S.I.

Coast Guard Engineer's Digest. TD5.17: Coast Guard. Indexed: IND.

Commander's Digest. D2.15/2: Armed Forces Information Office. Indexed: IND. (D2.15/2-2)

Commerce Today. C1.58: Commerce Department. Indexed: B.P.I.

Commercial Fisheries Abstracts. C55.310/2: National Marine Fisheries Service. Indexed: BIOL. ABSTR.

Computer Program Abstracts. NAS 1.44:

National Aeronautics and Space Administration. Indexed: IND.

Congressional Record. X/a Congress. Indexed: IND.

Construction Review. C41.30/3: Domestic Commerce Bureau. Indexed: IND., B.P.I., P.A.I.S.

Consumer Legislative Monthly Report. PrEx 16.11: Consumer Affairs Office. Indexed: IND.

Consumer News. PrEx 16.9: Consumer Affairs Office. Indexed: IND.

Consumer Price Index. L2.38/3: Labor Statistics Bureau. Indexed: A.S.I.

Containers and Packaging. C41.33: Domestic Commerce Bureau. Indexed: P.A.I.S.

Cooperative Economic Insect Report. A101.9: Animal and Plant Health Inspection Service. Indexed: IND.

Copper . . . C41.34: Domestic Commerce Bureau. Indexed: Eng. Ind., P.A.I.S.

Crime and Delinquency Abstracts. HE20.2420: National Institute of Mental Health. Indexed: IND., P.A.I.S.

Current Housing Reports, Series H-111, H-121. C56.214:H-111/, C56.214:H-121/ Census Bureau. Indexed: A.S.I.

Current Industrial Reports: Plastic Bottles, Tire Cord and Tire Cord Fabrics. C56.216:M30E-, C56.216:MQ-22T.4-. Census Bureau. Indexed: RAPRA.

Current Literature on Venereal Disease . . . HE20.2311: Center for Disease Control. Indexed: IND., A.S.I.

Current Population Reports. C56.218:P-. Census Bureau. Indexed: A.S.I.

Current Wage Developments. L2.44: Labor Statistics Bureau. Indexed: A.S.I., P.A.I.S.

Decisions of Comptroller General of United States. GA1.5/a: General Accounting Office. Indexed: IND.

Defense Indicators. C56.110: Economic Analysis Bureau. Indexed: P.A.I.S.

Defense Management Journal. D1.38/2: Defense Department. Indexed: AIR UN. LIB. IND.

Department of State Bulletin. S1.3: State Department. Indexed: IND., R.G., P.A.I.S.

Department of State Newsletter. S1.118: State Department. Indexed: P.A.I.S.

Development Digest. S18.33: International Development Agency. Indexed: P.A.I.S.

Diabetes Literature Index. HE20.3310: National Institute of Arthritis and Metabolic Diseases. Indexed: IND.

Digest of Public General Bills and Resolutions. LC14.6: Library of Congress. Indexed: IND.

Economic Indicators. Y4.Ec7:Ec7/ Congress. Economic Joint Committee. Indexed: P.A.I.S.

Economic Stabilization Program Quarterly Report. PrEx17.9: Cost of Living Council. Indexed: A.S.I.

Employment and Earnings. L2.41/2: Labor Statistics Bureau. Indexed: A.S.I., P.A.I.S.

Employment and Wages of Workers Covered by State Unemployment Insurance Laws . . . L1.61: Labor Department. Indexed: A.S.I.

Employment Service Statistics. L1.60: Labor Department. Indexed: A.S.I.

Employment Situation. L2.53/2: Labor Statistics Bureau. Indexed: A.S.I.

Endocrinology Index. HE20.3309: National Institute of Arthritis and Metabolic Diseases. Indexed: IND.

Estimated Retail Food Prices by Cities. L2.37: Labor Statistics Bureau. Indexed: A.S.I.

Extension Service Review. A43.7: Extension Service. Indexed: BIOL. & AGRI. IND.

Family Economics Review. A77.708: Agricultural Research Service. Indexed: IND., A.S.I.

Farm Index. A93.33: Economic Research Service. Indexed: IND.

Farm Labor. A92.12: Statistical Reporting Service. Indexed: A.S.I.

FDA Consumer. HE20.4010: Food and Drug Administration. Indexed: P.A.I.S., RAPRA, SCI. CIT. IND.

Federal Home Loan Bank Board Journal. FHL1.27: Federal Home Loan Bank Board. Indexed: IND., P.A.I.S.

Federal Probation. Ju10.8: Administrative Office of United States Courts. Indexed: IND., LEG. PER., M.H.B.R.I., P.A.I.S., SOCIOL. ABSTR.

Federal Register. GS4.107: Federal Register Office. Indexed: IND.

Federal Reserve Bulletin. FR1.3: Federal Reserve System Board of Governors. Indexed: IND., B.P.I., ECON. ABSTR., P.A.I.S.

Feed Situation. A93.11/2: Economic Research Service. Indexed: IND.

Fertilizer Abstracts. Y3.T25:36/Tennessee Valley Authority. Indexed: IND.

Fire Control Notes. A13.32: Forest Service. Indexed: IND., CHEM. ABSTR.

FISHERY BULLETIN. C55.313: National Marine Fisheries Service. Indexed: IND., BIOL. ABSTR., SCI. CIT. IND.

Food and Nutrition. A98.11: Food and Nutrition Service. Indexed: A.S.I.

Foreign Agriculture. A67.7/2: Foreign Agricultural Service. Indexed: IND., BIOL. ABSTR., BIOL. & AGRI. IND., SCI. CIT. IND.

GAO Review: GA1.15: General Accounting

Office. Indexed: P.A.I.S.

Gastroenterology Abstracts and Citations. HE20.3313: National Institute of Arthritis and Metabolic Diseases. Indexed: IND.

Government Reports Announcements. C51.9/3: National Technical Information Service. Indexed: GOVERNMENT REPORTS INDEX (C51.9:), BIOL. ABSTR., CHEM. ABSTR., RAPRA.

Health Aspects of Pesticides, Abstract Bulletin. EP5.9: Pesticides Programs Office. Indexed: IND.

Health Services Reports. HE20.2010/2: Health Services and Mental Health Administration. Indexed: IND., A.S.I., BIOL. ABSTR., CHEM. ABSTR., CURR. CONT., MENT. RETARD. ABSTR. NUCL. SCI. ABSTR., NUTR. ABSTR., P.A.I.S., POP. IND., SCI. CIT. IND.

Housing and Planning References. HH1.23/3: Housing and Urban Development Department. Indexed: P.A.I.S.

Housing and Urban Development Trends. HH1.14: Housing and Urban Development Department. Indexed: P.A.I.S.

HUD Challenge. HH1.36: Housing and Urban Development Department. Indexed: P.A.I.S.

I & N Reporter. J21.13/2: Immigration and Naturalization Service. Indexed: IND.

Index Medicus . . . HE20.3612: National Library of Medicine. Indexed: IND.

Internal Revenue Bulletin. T22.23: Internal Revenue Service. Indexed: IND.

International Coal Trade. I28.42: Mines Bureau. Indexed: IND.

International Educational and Cultural Exchange. Y3.Ad9/9:9/ Advisory Commission on International Educational and Cultural Affairs. Indexed: IND., EDUC. IND.

Isotopes and Radiation Technology. Y3.At7:52/ Atomic Energy Commission. Indexed: IND., BIOL. ABSTR., CHEM. ABSTR., ENG. IND., NUCL. SCI. ABSTR., SCI. CIT. IND.

JAG Journal. D205.7: Judge Advocate General (Navy). Indexed: IND., LEG. PER., P.A.I.S.

JAG Law Review. D302.9: Judge Advocate General of Air Force. Indexed: IND., AIR UN. LIB. IND., LEG. PER.

Journal of National Cancer Institute. HE20.3161: National Cancer Institute. Indexed: IND., BIOL. ABSTR., CHEM. ABSTR., CURR. CONT., IND. MED., NUCL. SCI. ABSTR., NUTR. ABSTR., SCI. CIT. IND.

Journal of Research of National Bureau of Standards: A, Physics and Chemistry. C13.22/sec. A: National Bureau of Standards. Indexed: IND., A.S.&T. IND., BIOL. ABSTR., CHEM. ABSTR., CURR. CONT., ENG. IND., MET. ABSTR., NUCL. SCI. ABSTR., RAPRA, SCI. ABSTR., SCI. CIT. IND.

Journal of Research of National Bureau of Standards: B, Mathematical Sciences. C13.22/sec. B: National Bureau of Standards. Indexed: IND., A.S.&T. IND., BIOL. ABSTR., CHEM. ABSTR., CURR. CONT., ENG. IND., MATH. R., MET. ABSTR., RAPRA, SCI. ABSTR., SCI. CIT. IND., ZEN. MATH.

Journal of Research of National Bureau of Standards: C, Engineering and Instrumentation. C13.22/sec. C: National Bureau of Standards. Indexed: IND., A.S.&T. IND., CHEM. ABSTR., CURR. CONT., ENG. IND., MET. ABSTR., NUCL. SCI. ABSTR., RAPRA, SCI. ABSTR., SCI. CIT. IND.

Labor Developments Abroad. L2.32/2: Labor Statistics Bureau. Indexed: IND.. A.S.I., P.A.I.S., POP. IND.

Library of Congress Information Bulletin. LC1.18: Library of Congress. Indexed: IND., LISA, LIB. LIT.

Livestock and Meat Situation. A93.15: Economic Research Service. Indexed: IND.

Mac Flyer. D301.56: Air Force Department. Indexed: AIR UN. LIB. IND.

Manpower. L1.39/9: Labor Department. Indexed: P.A.I.S.

Marine Fisheries Review. C55.310: National Marine Fisheries Service. Indexed: IND., BIOL. ABSTR., CHEM. ABSTR., NUTR. ABSTR., P.A.I.S., SCI. CIT. IND.

Mariners Weather Log. C55.210: Environmental Data Service. Indexed: IND., METEOR. & GEOASTROPHYS. ABSTR.

Marketing and Transportation Situation. A93.14: Economic Research Service. Indexed: IND.

Medical Assistance . . . HE17.616: National Center for Social Statistics. Indexed: A.S.I.

Mental Retardation Abstracts. HE17.113: Rehabilitation Services Administration. Indexed: IND., IND. MED.

Military Law Review. D101.22:27-100-Army Department. Indexed: IND., LEG. PER., P.A.I.S.

Military Review. D110.7: Command and General Staff College, Fort Leavenworth. Indexed: IND., AIR UN. LIB. IND., P.A.I.S.

Monthly Benefit Statistics . . . HE3.28/6: Social Security Administration. Indexed:

A.S.I.

Monthly Catalog of United States Government Publications. GP3.8: Public Documents Department. Indexed: IND.

Monthly Checklist of State Publications. LC30.9: Library of Congress. Indexed: IND.

Monthly Labor Review. L2.6: Labor Statistics Bureau. Indexed: IND., A.S.I., B.P.I., P.A.I.S., POP. IND., R.G.

Monthly Vital Statistics Report. HE20.2209: National Center for Health Statistics. Indexed: A.S.I.

Monthly Weather Review. C55.11: National Oceanic and Atmospheric Administration. Indexed: IND., CHEM. ABSTR., METEOR. & GEOASTROPHYS ABSTR., SCI. CIT. IND.

Morbidity and Mortality Weekly Report. HE20.2310: Center for Disease Control. Indexed: A.S.I.

N.L.R.B. Statistical Summary . . . LR 1.15/3: National Labor Relations Board. Indexed: A.S.I.

National Clearinghouse for Poison Control Centers Bulletin. HE20.4003/2: Food and Drug Administration. Indexed: A.S.I., IND. MED.

National Food Situation. A93.16: Economic Research Service. Indexed: A.S.I.

Naval Aviation News. D202.9: Naval Air Systems Command. Indexed: IND., P.A.I.S.

Naval Research Logistics Quarterly. D210.12: Naval Research Office. Indexed: IND., MATH. R., SCI. ABSTR., SCI. CIT. IND., ZEN. MATH.

Naval Research Reviews. D210.11: Naval Research Office. Indexed: IND., BIOL. ABSTR., CHEM. ABSTR., NUCL. SCI. ABSTR., SCI. ABSTR., SCI. CIT. IND.

Naval Training Bulletin. D208.7: Naval Personnel Bureau. Indexed: IND.

Navigator. D301.38/4: Air Force Department. Indexed: AIR UN. LIB. IND.

Navy Civil Engineer. D209.13: Naval Facilities Engineering Command. Indexed: IND.

Newsletter for Research in Psychology. VA1.22:15-5/ Veterans Administration. Indexed: PSYCH. ABSTR.

Nuclear Safety: Bimonthly Technical Progress Review. Y3.At7:45/ Atomic Energy Commission. Indexed: IND., BIOL. ABSTR., CHEM. ABSTR., ENG. IND., NUCL. SCI. ABSTR., SCI. CIT. IND.

Nuclear Science Abstracts. Y3.At7:16/ Atomic Energy Commission. Indexed: IND. (Y3.At7:16-5/), CHEM. ABSTR.

Occupational Outlook Quarterly. L2.70/4: Labor Statistics Bureau. Indexed: IND., A.S.I., P.A.I.S.

Official Gazette of U.S. Patent Office: Patents. C21.5: Patent Office. Indexed: INDEX OF PATENTS (C21.5/2:), CHEM. ABSTR., RAPRA.

Official Gazette of U.S. Patent Office: Trademarks. C21.5/4: Patent Office. Indexed: INDEX OF TRADEMARKS (C21.5/3:), CHEM. ABSTR., RAPRA.

Personnel Literature. CS1.62: Civil Service Commission. Indexed: IND.

Perspectives in Defense Management. D5.16: Joint Chiefs of Staff. Indexed: AIR UN. LIB. IND.

Pesticides Monitoring Journal. PrEx14.9: Council on Environmental Quality. Indexed: BIOL. ABSTR., CHEM. ABSTR., IND. MED., SCI. CIT. IND.

Plant Disease Reporter. A77.511: Agricultural Research Service. Indexed: BIOL. ABSTR., CHEM. ABSTR., SCI. CIT. IND.

Printing and Publishing . . . C41.18: Domestic Commerce Bureau. Indexed: IND., GRAPH. ARTS ABSTR., P.A.I.S.

Problems of Communism. IA1.8: United States Information Agency. Indexed: ECON. ABSTR., P.A.I.S., SOC. SCI. & HUM. IND.

Productivity, Wages, and Prices. L2.102: Labor Statistics Bureau. Indexed: A.S.I.

Programs for the Handicapped. HE1.23/4: Health, Education, and Welfare Department. Indexed: MENT. RETARD. ABSTR.

Progressive Fish Culturist. I49.35: Fish and Wildlife Service. Indexed: IND., BIOL. ABSTR., CHEM. ABSTR., NUCL. SCI. ABSTR., SCI. CIT. IND.

Psychopharmacology Abstracts. HE20.2409/2: National Institute of Mental Health. Indexed: IND.

Psychopharmacology Bulletin. HE20.2409: National Institute of Mental Health. Indexed: BIOL. ABSTR., CHEM. ABSTR., IND. MED., MENT. RETARD. ABSTR.

Public Assistance Statistics. HE17.610: National Center for Social Statistics. Indexed: A.S.I.

Public Roads . . . TD2.19: Federal Highway Administration. Indexed: A.S.&T. IND., CHEM. ABSTR., ENG. IND., P.A.I.S., SCI. CIT. IND.

Quarterly Journal of Library of Congress. LC1.17: Library of Congress. Indexed: IND., LISA., LIB. LIT., M.L.A., P.A.I.S.

Radiation Data & Reports. EP6.9: Radiation Programs Office. Indexed: IND., BIOL. ABSTR., CHEM. ABSTR., IND. MED., NUCL. SCI. ABSTR., SCI. CIT. IND.

Reactor Technology. Y3.At7:36/ Atomic Energy Commission. Indexed: IND., CHEM. ABSTR., ENG. IND., MET. ABSTR., NUCL. SCI. ABSTR., SCI. CIT. IND.

Reasons for Discontinuing Money Payments to Public Assistance Cases. HE17.613/2: National Center for Social Statistics. Indexed: A.S.I.

Reasons for Disposition of Applications Other than by Approval. HE17.643: National Center for Social Statistics. Indexed: A.S.I.

Reclamation Era. I27.5: Reclamation Bureau. Indexed: IND., BIOL. ABSTR., ENG. IND., P.A.I.S., SCI. CIT. IND.

Rehabilitation Record. HE17.109: Rehabilitation Services Administration. Indexed: IND., IND. MED., MENT. RETARD. ABSTR., P.A.I.S.

Report of NRL Progress. D210.17: Naval Research Office. Indexed: CHEM. ABSTR., SCI. ABSTR., SCI. CIT. IND.

Research in Education. HE18.10: National Institute of Education. Indexed: IND., P.A.I.S., PSYCH. ABSTR.

Retail Prices and Indexes of Fuels and Utilities. L2.40: Labor Statistics Bureau. Indexed: A.S.I.

RRB Quarterly Review. RR1.7/3: Railroad Retirement Board. Indexed: IND., A.S.I., P.A.I.S.

Rural Manpower Developments. L1.63: Labor Department. Indexed: A.S.I.

Scientific and Technical Aerospace Reports. NAS1.9/4: National Aeronautics and Space Administration. Indexed: IND. (NAS1.9/5), CHEM. ABSTR.

Selected References on Environmental Quality as it Relates to Health. HE20.3616: National Library of Medicine. Indexed: IND.

Selected Water Resources Abstracts. I1.94/2: Interior Department. Indexed: IND.

Shellfish, Situation and Outlook. C55.309/4: National Marine Fisheries Service. Indexed: P.A.I.S.

Small-Area Data Notes. C56.217: Census Bureau. Indexed: A.S.I.

Smoking and Health Bulletin. HE20.2316: Center for Disease Control. Indexed: IND.

Social Security Bulletin. HE3.3: Social Security Administration. Indexed: IND., A.S.I., B.P.I., P.A.I.S., POP. IND., SOCIOL. ABSTR.

Soil Conservation. A57.9: Soil Conservation Service. Indexed: IND., BIOL. & AGRI. IND., SCI. CIT. IND.

Soldiers. D101.12: Army Department. Indexed: IND., AIR UN. LIB. IND.

Soviet-Bloc Research in Geophysics, Astronomy and Space. Y3.J66:14/ Joint Publications Research Service. Indexed: IND.

Sport Fishery Abstracts. I49.40/2: Fish and Wildlife Service. Indexed: IND.

State and Local Government Employment and Payrolls. L2.41/4: Labor Statistics Bureau. Indexed: A.S.I.

Statistical Reporter. PrEx2.11: Management and Budget Office. Indexed: IND., A.S.I., P.A.I.S., POP. IND.

Statistics of Navy Medicine. D206.15: Medicine and Surgery Bureau. Indexed: A.S.I.

Sugar Reports. A82.47: Agricultural Stabilization and Conservation Service. Indexed: IND.

Summary and Analysis of International Travel to U.S. C47.15: United States Travel Service. Indexed: A.S.I.

Summary of Passport Statistics. S1.27/2: State Department. Indexed: A.S.I.

Survey of Current Business. C56.109: Economic Analysis Bureau. Indexed: B.P.I., P.A.I.S., RAPRA

Technical News Bulletin. C13.13: National Bureau of Standards. Indexed: IND., ENG. IND., MET. ABSTR., SCI. ABSTR.

Tobacco Situation. A93.25: Economic Research Service. Indexed: IND., TOB. ABSTR.

Translog. D101.66/2: Army Department. Indexed: AIR UN. LIB. IND.

Transport Economics. IC1.17: Interstate Commerce Commission. Indexed: IND., P.A.I.S.

Treasury Bulletin. T1.3: Treasury Department. Indexed: IND.

Tree Planters' Notes. A13.51: Forest Service. Indexed: IND.

U.S. Department of State Indexes of Living Costs Abroad and Living Quarters Allowances. L2.101: Labor Statistics Bureau. Indexed: A.S.I.

U.S. Navy Medicine. D206.7: Medicine and Surgery Bureau. Indexed: IND.

Unemployment Insurance Claims. L1.62: Labor Department. Indexed: A.S.I.

Unemployment Insurance Statistics. L1.62/2: Labor Department. Indexed: A.S.I., P.A.I.S.

Uniform Crime Reporting. J1.14/7-2: Federal Bureau of Investigation. Indexed: A.S.I.

United States Air Force Medical Service Digest. D304.8: Air Force Medical Service. Indexed: IND.

United States Army Aviation Digest. D101.47: Army Department. Indexed: AIR UN. LIB. IND.

USAF Instructors Journal. D301.38/7: Air Force Department. Indexed: IND., AIR

UN. LIB. IND.

War on Hunger. S18.34: Agency for International Development. Indexed: P.A.I.S.

Weekly Compilation of Presidential Documents. GS4.114: Federal Register Office. Indexed: IND., P.A.I.S.

Weekly Weather & Crop Bulletin. C55.209: Environmental Data Service. Indexed: IND.

Welfare in Review. HE17.9: Social and Rehabilitation Service. Indexed: IND., MENT. RETARD. ABSTR., P.A.I.S., SOCIOL. ABSTR.

Wholesale Price Indexes. L2.61/10: Labor Statistics Bureau. Indexed: A.S.I.

Wholesale Prices and Price Indexes. L2.61: Labor Statistics Bureau. Indexed: A.S.I.

Wildlife Review. I49.17: Fish and Wildlife Service. Indexed: WILDLIFE ABSTRACTS (I49.17/2:), BIOL. ABSTR., CHEM. ABSTR.

Wool Situation. A93.19: Economic Research Service. Indexed: IND.

Work Stoppages. L2.62/2: Labor Statistics Bureau. Indexed: A.S.I.

Received for review Mar 21, 1975. Revised manuscript accepted for publication Jul 21, 1975.

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The Washington Library Network

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■ The objectives of the Washington Library Network (WLN) are 1) statewide sharing of resources among all types of libraries, 2) economically meeting the information demands of all citizens of the state, and 3) centralized computer-communication systems for bibliographical services. The development and current status of WLN are described.

A PLAN for developing an integrated library network in the state of Washington was proposed in 1967*. The plan was accepted in principle by the library profession and the State Library was made responsible for developing the network on a step-by-step basis.

One of the first steps accomplished was the inclusion of public and academic libraries in the State Area Controlled Network (SCAN). Seventy-seven libraries now use this telephone system for interlibrary loan communication.

Another component of the plan was the publication of resource directories representing the holdings of the libraries in the state. In 1972 a pilot project for production of resource directories was undertaken by the State Library. Boeing Computer Services performed the system development work for the state. In 1973 the Resource Directory System became operational providing service to a group of public libraries.

In 1974 a statewide Library Automation Committee was established for the purpose of cooperatively planning for the design, development, and implementation of the library network. This committee operating under the State Data Processing Authority is made up of representatives of the State Library, academic libraries, and public libraries. The integrated system, when fully developed, will provide acquisitions, cataloging, circulation, and reference services.

This paper briefly describes the currently operational Resource Directory System and its planned successor the On-Line Bibliographic Data Base System. Experience with the current system is reported and the network effects are discussed.

Resource Directory System

Eight public library systems and the State Library are currently participating in the automated system. The State Library serves as the network center and the Resource Directory System runs at

*Becker, Joseph and Robert M. Hayes/ A Proposed Library Network for Washington State, September 1967.

Figure 1. Computer System Hardware and Software

HARDWARE

- IBM 360 or 370
  - Uses 200K core
  - (4) 9-track tapes
  - (6) IBM 3336 disk packs
- ALA print train
- Modified IBM MT/ST
- Digi-data converter

SOFTWARE

- OS/MVT
- PL/1 75 routines, 16,800 statements
- Assembler 32 routines, 15,900 instructions

• •

the State Data Processing Service Center in Olympia, Wash.

The products of the system are catalog cards, spine and book card labels, and resource directories. The cards and labels are printed by the computer using an ALA Print Train to get the full library character set. The resource directories are photocomposed using a computer produced driver tape.

The *Resource Directory* is produced in the register/index form. The register consists of full bibliographic entries arranged by a sequence number in the order in which records come into the system. Brief entries are created for authors, titles, and subjects and are arranged in alphabetically sorted author, title, and subject indexes. These indexes serve as finding lists as well as indexing the full register entry by register number. The symbols of libraries holding each title are shown in the indexes. The register is in accession order; new records are added at the end and no merging of records is required for updating. Only the author, title, and subject indexes need to go through the cumulation process. Arrangement of entries in the *Resource Directory* is based on Library of Congress filing rules.

The following types of cross references are provided in the *Resource Directory:* 1) *see* references for personal, corporate, and meeting names, for uniform title headings, and for subjects; 2) *see also* references for subjects and uniform title headings; 3) *see also* former/later name of corporate and meeting names.

Entries in the *Resource Directory* are generated from Library of Congress MARC records and records locally input by Washington Library Network (WLN) personnel. The locally input records include Library of Congress cataloging not appearing on MARC tapes, NUC cataloging upgraded and matched to a book-in-hand, and original cataloging using LC standards.

The computer system hardware and software are listed in Figure 1. A flow diagram of the Resource Directory System is shown in Figures 2 and 3. The system runs on a weekly cycle. Current input is approximately 3,000 bibliographic records per week. Approximately 10,000 catalog cards are produced weekly. The resource directories are printed quarterly. The indexes are cumulated year-to-date. For 1974 the August cumulation included 13,650 register entries and 68,000 index entries.

On-Line Bibliographic Data Base System

The current WLN Resource Directory System builds and maintains large files of bibliographic and holdings information. As of December 1974 there were over 500,000 bibliographic records in the data base. At the same time the holding file contained location information on more than 60,000 titles. In order to provide more timely service to a larger number of users, it is necessary to provide on-line access to these data bases.

The following capabilities are to be provided to users at terminals located throughout Washington State: 1) Searching bibliographic files (including the MARC data base) by ISBN, author, title, LC or WLN number, and subject; 2) Searching for holdings information; 3) Searching and browsing of authority file data; 4) Input of local cataloging information in MARC format; 5) Input of holdings information; 6) Input of vocabulary data; 7) Entering requests for products such as catalog cards, spine labels and book cards.

These on-line functions will interface with batch processing programs for producing materials and updating the

Figure 2. Resource Directory System Flow Diagram. Washington Library Network

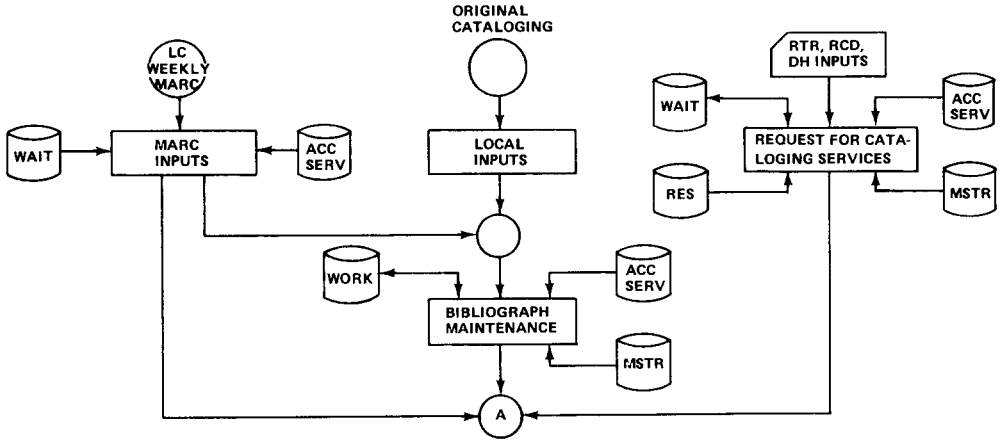


Figure 3. Resource Directory System Flow Diagram. Washington Library Network

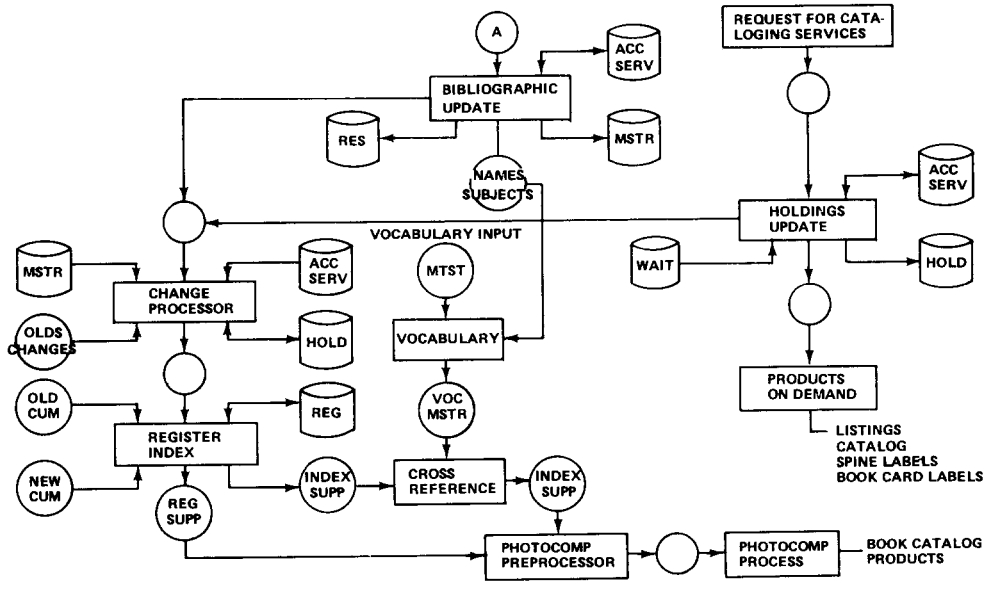


Figure 4. On-Line Bibliographic Data Base

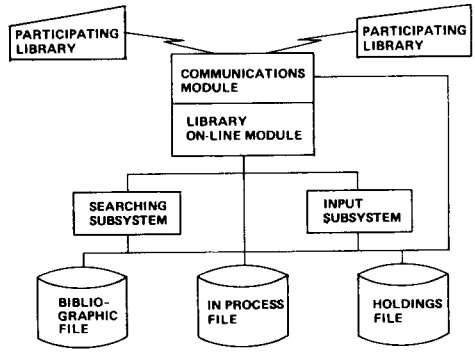
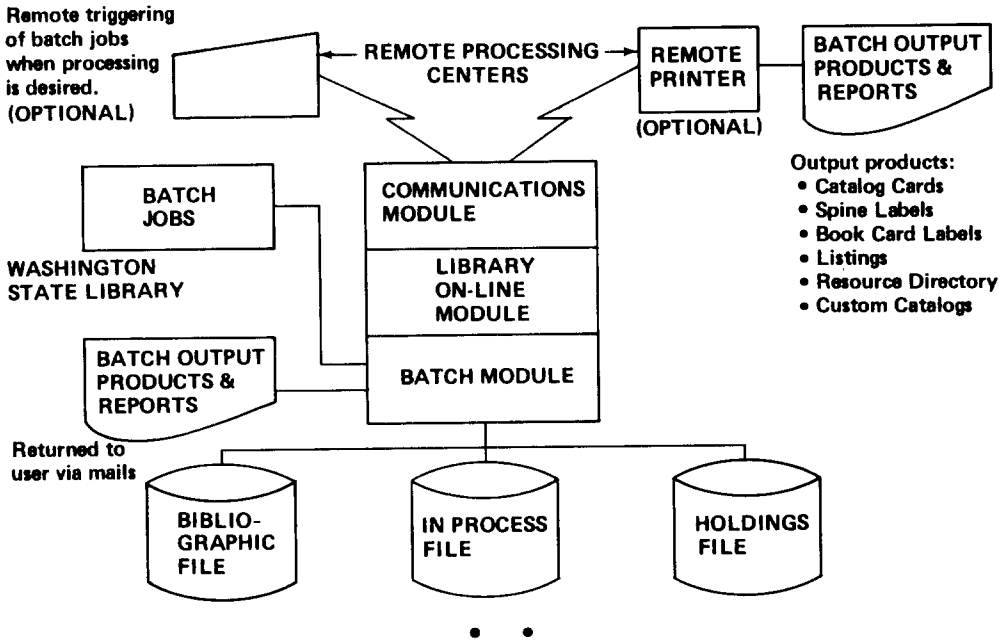


Figure 5. Bibliographic Data Base Batch Subsystem



MARC file. The operational concept of the system is illustrated in Figures 4 and 5.

The WLN Resource Directory System currently serves the Washington State Library and eight public library systems. The On-Line Bibliographic System is expected to serve these same libraries initially. It is then planned to gradually increase the size of the Washington Library Network so that it will eventually include: the State Library and its branches, the Pacific Northwest Bibliographic Center (PNBC), 21–25 public libraries, university and college libraries, and special libraries.

Network Effects

It is not easy to assess the network effects of this automated system. Our experience has been relatively brief and incomplete—with only part of the planned system for part of the anticipated users and not yet in its ultimate mode, on-line. Such experience does not support firm generalizations about the synergy of this network. The participating library systems, moreover, are autonomous organizations sharing no common authority. The resultant variations in operational circumstances, priorities, and style make data gathering, generalization, and even observation of effects difficult. The following remarks are offered as intimations of what a network like the Washington Library Network might accomplish and where the responsibility for doing so will rest.

There are indications that the sharing of the common data base—constructed from Library of Congress records, NPAC "Shared Cataloging" records, and WLN records (all in MARC)—may improve service to patrons by making materials available faster. At the same time that each of the participating libraries orders a book, it also requests cataloging and processing materials from WLN. There then follows a race, as it were, as to whether the book or the cataloging and processing materials will arrive at the library first. The WLN participants report that ordinarily there are more products on hand awaiting the arrival of books than books awaiting products. The ratio, which can fluctuate according to buying practices, is often as high as two to one. One library, upon entry into the network, had a six months' arrearage in cataloging that was elim-

inated. (They were also able to reduce technical services staff by 4 people.)

The hit rate for requests against the data base is relatively high on the first attempt—as high as 78%. The rate will surely change, in some fashion, as WLN goes on-line, the range of participants increases, and the data base becomes more varied. The present participants, all public libraries except for the State Library, deal largely in current English language trade books—the present strength of the LC MARC distribution service. None of our present experience in terms of ratio of products-waiting-for-books versus books-waiting-for-products, the reduction of arrearages, or hits on the first attempt could be generalized for another kind of library—university or special library, say—whose acquisitions patterns were substantially different. In the long run, success in this area will be influenced by the broadening scope of the LC MARC distribution service and the inclusion in the data base of new participants who share acquisitions patterns.

The effect even among the present participants has not been uniform, for it depends not only upon the previous cataloging operation in those libraries but also upon the effectiveness with which participating libraries utilize the system. Among the present participants, there is a marked difference in their ability to relinquish local tailoring of cataloging and to adopt nationally or internationally produced catalog records. Some libraries enthusiastically use, without alteration, the catalog cards (with overprinted headings and with call numbers formatted according to participants' agreements) and the labels for book spine, pocket, and cards. Others reject certain choices of entry and form of heading, add or delete entries according to a local vision of a dictionary catalog, "improve" the bibliographical description, and thus engage in varying amounts of local cataloging decisions, professional review, and consequent local production of catalog cards and processing materials.

The speed and economy with which we can provide patron access to materials in any network library depends not only upon grand cooperative arrangements—cataloging networks, if you will—of national libraries and bibliographical centers. The timely distribution of cataloging and processing materials from these sources through WLN can be offset by the practices of any local unit. Clearly, desired network effects (speeding up patron access to materials by speeding up the distribution of cataloging and processing materials is only one example) require vision as well as careful analysis and judgment from local administrators. A substantial portion of a network's potential lies outside the control of those who develop and ostensibly run the network.

Local administrators, beset by other complex management problems, may underestimate the need for administrative surveillance of the network effects and potential effects within the libraries they govern. It is perhaps too easy to view the network as an external development whose good effects simply arrive in the mail, or on-line, with their goodness fully intact, actualized. But any network like WLN requires informed local decision-making to maximize benefits. The present network services, for example, have reduced the need for cataloging staff in local libraries. That one library was able to reduce technical services staff by four people has already been mentioned. The on-line version of the bibliographical subsystem will have new personnel implications for libraries, and the full system, to include acquisitions, circulation, and serials control, will, as it becomes available, affect service patterns. (What will it mean for reference staff to have on-line access to the on-order files or for branch librarians to have access to central serials records? What will it mean for acquisitions staff to be able to search the network data base and the on-order files of other libraries before ordering items for the local collection?) The full system will present the need for staff reorganization, retraining, and potential reduction. These will be neither easy assessments nor easy decisions for local administrators, but to realize the full potential of networking will require them.

Sharing of Resources

The sharing of resources, on the other hand, is a problem whose resolution transcends the will of any particular administrator at any level of the network. One library cannot commit others to loan materials, and network operators, while promoting the sharing of resources by building a system that facilitates the identification of material and the location of it, cannot guarantee that sharing will take place. Washington State, although long noted for its climate of cooperation, will have to face this problem anew. The Pacific Northwest Bibliographic Center (PNBC), located in Seattle, serves as a major switching center for interlibrary loan requests among five states and the province of British Columbia. Academic, special, and other kinds of libraries in Washington send requests directly to PNBC, which identifies an appropriate location and forwards the request to the holding library. Public libraries, however, send their requests to the State Library, which serves as a major resource collection for them; if the State Library cannot fill the request, it is sent on to PNBC for further action. Under the influence of the network, the respective roles of the State Library and PNBC have begun to change and will continue to do so as we go on-line and the number of libraries increases. As public libraries more and more know what the State Library owns—now from the *Resource Directory* and soon from on-line inquiry—their requests can be for items known to be in that collection. To avoid delay, the State Library's role as a switching center will decline. It should become largely a supplier of material. PNBC might thus receive requests directly from public libraries as it does for other kinds of libraries. All network libraries, however, will increasingly know what PNBC knows—the locations of materials—and PNBC may receive fewer requests as libraries turn directly to each other.

The interlibrary loan librarians of the present participants have, for example, established mutual agreements to facilitate the direct borrowing of materials. These agreements eliminate postage charges, small photocopy charges, and late fines, while providing for reciprocal absorption of the cost of lost books, direct mail to patrons instead of libraries, and telephone renewals. Interlibrary loan activity among these libraries, without going through either the State Library or PNBC, is brisk, effective, and agreeable.

The present participants are a relatively homogeneous group. With the exception of the State Library, they are public library systems of similar size, patronage, and kind of collection. It has been relatively easy for them to reach the liberal agreements upon which their direct borrowing rests. As the range of participants grows and the libraries in Washington increasingly know what other libraries in the state own, these agreements will have to be reconstituted so that they apply to a heterogeneous group of participants with large disparities in size and nature of collection. For borrowing purposes, should public libraries continue to approach the State Library first? Should community colleges borrow first from each other? or from other kinds of libraries in their geographical area? Should the universities be approached last? Answers to questions like these, delicate and sensitive, are beyond the determination of any one administrator. They are questions for the library profession itself, and the profession in Washington State will have to establish agreements and protocols on a statewide scale just as the present participants have done on a limited scale.

The role of PNBC will vary accordingly. It may be largely bypassed for interlibrary loan within the State of Washington, or it may continue to be a switching center in order to discipline the flow of requests and to distribute the burden equitably. As long as there is a retrospective PNBC card file, it will be needed to identify locations so recorded, and until WLN is connected to other networks with which direct loan arrangements have been negotiated, PNBC will continue to handle Washington interlibrary loan requests for materials located outside the state.

Conclusion

The synergistic imperative seems clear enough when, in a time of rising costs and declining income, we regard the increasing information pool that human beings create and the increased demands, in a complex society, for information from that pool. Networks of various kinds seem promising alternatives. A network like WLN, comprised of autonomous libraries sharing a common data base within an automated library system of broad scope, offers to libraries the technological means to improve service to their constituencies, their patrons. The effectiveness with which this is accomplished depends not simply on network operators, its technocrats and administrators, but also on the managerial capabilities and vision of individual librarians and of the profession itself. The imperative seems clear enough; so does the responsibility; the full scope and nature of the synergy are yet to be determined and experienced.

Received for review Apr 17, 1975. Manuscript accepted for publication Aug 22, 1975. Presented Jun 10, 1975, as a Contributed Paper, during SLA's 66th Annual Conference in Chicago.

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On-Line Reference Retrieval in a Public Library

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■ There are many useful computer-readable data bases that are accessible only to major governmental units, universities, or industrial organizations. An experiment is described in which the public library is used as a "linking agent" between the public and such data bases. Retrieval terminals have been placed in four public libraries in Northern California to provide access to sixteen different data bases. The first year of this two-year experiment is described, and some of the technical, organizational, and economic aspects of the study are reviewed. Rapid acceptance of the system during this initial no-cost period has been achieved and useful evaluative data have been obtained.

IT IS NOW possible to perform computer searches of large data bases, ranging from one-quarter of a million to a million citations each. These data bases span the spectrum from science and technology to social sciences and business. Such searching costs from $35 to $120 an hour, depending on the data base used, plus the communication and terminal cost. The communication cost is that of a telephone call to the computer center or, alternatively, $10 per hour if the local Tymshare node, available in all major cities, is used to make that connection. A terminal rents for approximately $150 per month, including maintenance.

Because individuals and small organizations do not have a terminal available and do not have the required training in the retrieval access language, the public library appears to be a suitable location for computerized search. The purpose of the study was to probe the utility of the public library as a "linking agent" between the public and the many machine-readable data bases now available. The basic questions to be probed in the study are:

- Is computerized retrieval of use to the general public?
- Will the public be willing to pay to defray part of the cost?
- What impact will retrieval services have on the public as well as the library?

A two-year experiment was established to investigate these questions. The experiment was set up so that during the first year of operation the terminals—with 16 hours per month of search time, and 16 hours per month of demonstration time—are provided at no direct cost to the libraries. (The libraries only pay the telephone line charges.) For the second year of operation, the terminals and demonstration time are again provided

free, but half of the cost of the search time is billed to the libraries with the NSF paying for the balance. By the third year of operation, the library will be expected to pay for the full cost of the terminals and search time using internal funding or user's fees, or a combination thereof, if the service is to be continued.

The Cooperative Information Network (CIN), an information-sharing cooperative in the San Francisco Bay area consisting of both private and public libraries, selected the public libraries that were to participate, and Lockheed Information Systems provided the project coordination and the DIALOG™ retrieval service *(1)*. The data bases available in the service are technical (NTIS, INSPEC, Chem Abstracts, BIOSIS, CLAIMS, Compendex); educational and social sciences (ERIC, Social Sciences Citation Index, Psychological Abstracts); and business (Chemical and Electrical Market Abstracts, Abstracted Business Information, Predicasts). The study is being evaluated by Applied Communications Research (ACR) of Palo Alto, Calif., an independent evaluation subcontractor. An Oversight Committee of five experts reviews progress of the study periodically.

In June 1974, CIN selected four libraries for the terminal locations, with each library representing a somewhat different type of library service: large city library (San Jose), county library in a large suburban area (Cupertino), a county library with no "walk-in" traffic (San Mateo County), and a smaller city library with much "walk-in" business (Redwood City).

General Electric Terminet terminals were selected and procured through Western Union Data Services for installation in three of the participating libraries. This terminal was selected because it is relatively quiet in operation, prints in upper and lower case characters, has an impact printer and can therefore produce multiple copies, and can be acoustically coupled through an ordinary telephone to the Lockheed computer. (Eventually this terminal had to be fitted with a sound-proof enclosure because it was not quiet enough for service in the reference area of the libraries). A teletype terminal was used in one of the libraries, in an area not accessible to the public. Although noisy and having a high line cost, this type of terminal is often available at libraries and can prove useful for a library that plans to make infrequent use of the computerized retrieval service.

Librarians from each of the four participating libraries were given a two-day training course at Lockheed, and spent about one month familiarizing themselves with the system. A training follow-up was given six months later. A large amount of publicity was generated by the official opening ceremonies in August, and diverse publicity materials were developed. In addition, the participating libraries publicized the availability of the retrieval service by brochures, posters, and bookmarks, and by demonstrations held in various branch libraries and at meetings of professional and social organizations. A portable terminal was shared among the libraries for such demonstrations.

Mechanics of Search

To perform a search, the librarian dials the DIALOG™ telephone number and obtains a high-pitched tone indicating that the computer is available. The telephone handset is then inserted into the acoustic coupler which is part of the terminal. A message requesting the user password is printed out on the terminal. After the password is accepted, the librarian specifies the desired data base and then enters search terms via the keyboard. Search terms can be natural language (English) or numerical codes, such as product, event, or class membership codes, for some of the data bases. Displays of the alphabetically close as well as the conceptually close terms to an entered search term allow the user to select other terms that may be relevant. The system indicates the number of document citations in the data base that contain the specified term(s), and supplies an identification number for this set of citations. Sets can then be combined using

Figure 1. Some Typical Computerized Searches in DIALOG™

```
          Set  Items  Description
          ---  -----  -----------
File11: PSYCH ABS 1967-1975/APR
? select employee motivation

            1    135  EMPLOYEE MOTIVATION
? select job performance

            2   1373  JOB PERFORMANCE
? combine 1 and 2

            3     34  1 AND 2
? type 3/5/4

4
DOC YEAR: 1974 VOL NO: 52 ABSTRACT NO: 13352
  Relationships between performance and satisfaction under contingent
and noncontingent reward systems.
  Kesselman, Gerald A.; Wood, Michael T.; Hagen, Eileen L.
  Ohio State U.
  Journal of Applied Psychology  1974 Jun Vol. 59(3) 374-376
  Investigated relationships between performance and satisfaction in 2
samples of female telephone company workers under a contingent (i.e.,
pay based on piece rates and promotions based on performance) and a
```

All items indexed to "employee motivation" are selected.

There are 34 items having both terms.

The full record for the 4th item is printed in full (format 5). 3 is the set no.

a. Using Natural Language Search Terms

```
          Set  Items  Description
          ---  -----  -----------
File18: PATS F&S
? select alza

            1     53  ALZA
? select ec=15

            2  30402  EC=15
? combine 1 and 2

            3      5  1 AND 2
? type 3/5/2

2
1264237   OTC Chron  72/12/ 7  P9  SRCE:  4168     (1USA)
  Alza Ends Marion Laboratories acquisition talks
  Marion Laboratories Alza ends acquisition talks

  UNITED STATES  DRUGS & PHARMACEUTICALS  ACQUISITN OFF  DRUGS &
    PHARMACEUTICALS
  UNITED STATES  DRUGS & PHARMACEUTICALS  MRGR BROKEN
```

There are a total of 53 items on Alza in the F&S Index File

This is the event code for acquisition and mergers.

There are five items for Alza on this topic.

The second item is printed in full (format 5).

b. Using Natural Language and Numerical Code Search Terms

```
          Set  Items  Description
          ---  -----  -----------
File15: ABI DATA BASE
? select pension?

            1    660  PENSION?
? select deferred(w)compensation

            2     39  DEFERRED(W)COMPENSATION
```

All words with the stem "pension---" are selected.

This obtains all uses of the phrase "deferred compensation"

c. Other Types of Search Expressions

the AND, OR, NOT operators. For example, in Figure 1.a., Set 3 consists of all citations that contain the terms *employee motivation* and *job performance.* In Figure 1.b., Set 3 consists of all citations that contain the term ALZA and Event Code 15, denoting acquisitions and mergers.

Other forms of search-term specification, shown in Figure 1.c., allow the librarian to indicate that term stem endings are to be ignored (pension? specifies that citations having the terms *pension, pensions, pensioning,* etc., are to be selected), and to indicate full text specification (citations having the term *deferred* adjacent to the term *compensation* in the title or abstract are to be selected).

The First Year

The goals of the first year of the study were to publicize the availability of computerized search to the general public and the business community, to train the public librarians in computerized search, and to evaluate the use of the system during this period.

Although the use of the service was low for the first two months (an average of 3 hours of demonstration time and 3 hours of search time), by the middle of the year this had changed radically with the demonstration time dropping to less than 2 hours per month and search time increasing to 25–30 hours per month for each library. Thus, the libraries quickly moved from a demonstration mode in which the public was shown the capabilities of the system, to actual use of the system. By the end of the year, the intense use of the system was creating quite a strain on the libraries. One of the libraries used a graduate student in library science who operated the terminal 6 hours per week in return for college credits.

The difference in time per search varied widely from library to library. For example, one library performed 66 searches in 10.5 hours while another performed fewer searches, 42, in more than twice that time, 25 hours. Applied Communications Research is currently conducting interviews and analyzing data seeking to explain this wide variation.

Most of the libraries have chosen to limit terminal access to the reference librarians, or other librarians trained on the system. Only in a few cases have users been allowed to conduct the search themselves. Most librarians have also preferred to conduct the search without the patron being present. This is partly because many of the questions were received from branch libraries. However, for very technical questions patrons have been asked to attend search sessions.

Some of the effects of the computerized search on the public library during the first year are:

- *New Library Customers.* Computerized search seems to attract a new set of customers, who often pose questions of a technical nature, and who require rather fast turn-around service. The reference librarian who has been dealing with "layman-type" questions, and a relaxed time requirement, may be disturbed by the change.

- *Increased Workload.* The new customers also cause an increased workload, and this adds to the problems of the already overburdened reference librarian. However, because of the importance of some of the new customers (mayor's office, Board of Supervisors, important industry officials), it is difficult or undesirable to turn away such requests.

- *Increased Visibility of the Library.* Because the library is able to answer the somewhat technical questions posed by local government, the library suddenly becomes an important and visible organization. What are the dangers of PCV pipes in a burning building? (Fire Department) What are the safety factors in loading dry sulphur? (Port Authority) What are some experiences with redevelopment financing? (Mayor's office) What are some experiences in patrol car maintenance? (Police Department) These are some indication of the types of questions that arrive and can now be answered. Government leaders begin to turn to the library when such technical questions arise.

The public also begins to perceive the library in a different light because of the new ability to answer technical and business questions. Some of the questions asked by the public are: What are some characteristics of the pleasure boat building industry? What is the effect of cocaine on humans? What are the effects of hyperactive children on family relations? What are construction techniques for concrete water tanks?

• *Effect on Reference Librarians.* Many of the reference librarians find that the availability of the computer terminal, and the cost of search time, requires them to formulate their queries in a more precise manner than heretofore. This has an impact even on those questions that do not require the use of the computer terminal. Librarians find themselves consulting thesauri to obtain appropriate search terms, and in the process of delineating such terms obtain a better appreciation of the search questions. Computer terminal searching also becomes a specialty skill within the field of reference, supplementing the many other access tools and skills developed by the librarian. (See Ref. *2* for comments by one of the reference librarians.)

Evaluation

Applied Communications Research is evaluating the study by means of questionnaires, interviews with reference librarians and library management, and by analyzing search printouts. Results concerning the use of the system *(3)* can be briefly summarized as follows: The average user is highly educated; over 80% are college graduates, and 40% have advanced degrees. The two principal classes of users are 1) technical professionals, including civil, nuclear, and electronic engineers, geologists, and computer specialists, and 2) students at all levels. The next major category of users includes individuals in educational fields and librarians. Patrons say they request searches in order to get information for job-related activities or research papers. Almost 70% of the patrons felt that the results of their DIALOG™ search were of considerable or major value.

There is evidence that many DIALOG™ users are not the traditional library user; a large number of users indicated that they do not have a card at a public library. Some of these patrons are discovering the diverse resources of the public library for the first time.

Additional data concerning the time spent by librarians both on-line and off-line are now being analyzed. Off-line activities, such as delineating the patron's question, choosing search terms, and reviewing search results with the patron can equal the amount of time spent on-line, a fact some of the reference librarians overlooked when estimating the amount of time that the study would require.

The Coming Year

The goals of the first year of the study were achieved: The public used the service to the fullest extent possible, the librarians in the participating libraries became proficient in computerized search, and many valuable data were gathered and are now being analyzed. In the second year of the study that began in June 1975, the participating libraries decided to pass on to the patron the bill of one-half of the normal computerized search cost. Thus, we will soon see whether the public is willing to pay a fee for computerized search service. (For a discussion of fees for public library service see Refs. *4* and *5*.) Future reports will deal with the reactions of the patrons, the search volume, and the changes in search procedures in a fee-for-service environment.

Acknowledgment

The project could not have been carried out without the hard work and cooperation of the participating CIN libraries.

The authors also wish to thank Alice E. Ahlgren of Applied Communications Research for her data gathering and evaluation efforts, the Oversight Committee (consisting of Charles Bourne, Forrest F. Carhart, Jr., Douglas Ferguson, Virginia Ross Geller, and Albert H. Rubenstein) for their counsel and guidance, and Evelyn Helmer, publicity consultant.

The project was supported by Grant GN 42299, Office of Science Information Service, National Science Foundation.

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Received for review Apr 17, 1975. Revised manuscript accepted for publication Aug 5, 1975. Presented Jun 11, 1975, as a Contributed Paper, during SLA's 66th Annual Conference in Chicago.

SUMMIT

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FIRSCHEIN

Conversion to Automated Cataloging at the Map Division, NYPL

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■ A brief survey of cataloging systems in use at the Map Division is presented, emphasizing the current conversion to an automated cataloging system adapted from the Library of Congress Map MARC Program.

THIS IS a brief overview of the conversion to automated cataloging at the Map Division, New York Public Library. This conversion was one small aspect of an NYPL system-wide change to an automated Library of Congress MARC-based format in January 1971.

The Map Division contains some 310,000 sheet maps, 6,000 atlases, and 11,000 volumes on various map related topics. Some of the most treasured items are from the Astor and Lenox Libraries, both 19th century New York City "institutions." Thus, in the retrospective *Dictionary Catalog of the Map Division,* published in 1971, by G. K. Hall, in 10 volumes, there are a variety of cards. These range from the now often illegible handwritten cards, to early examples of mechanically reproduced cards, to the electrically typewritten cards. These may vary greatly in appearance and utility, but they are all end products of a slow, manual process of original cataloging, as performed in the Map Division for decades.

Cataloging of sheet maps has always taken place within the Map Division. Perhaps this is because maps as media, as sources of information, require a rather different cataloging scheme from that of monographs and serials in book format.

Map Division Retrospective Cataloging Format

Map Division cataloging differed from NYPL system-wide cataloging, as the geographic entity represented on the map served as the main entry, accompanied by a date notation. In addition, unlike most NYPL Divisions, the Map Division had *no* classification system, requiring the main entry and date to serve also as a filing key for sheet maps.

Tracings, both subjects and added entries, appeared on all cards. These served as reference aids and, indirectly, as selection tools. Tracings were made to the cartographer, compiler, and/or publisher. Map cataloging again differed from NYPL system-wide cataloging with the importance awarded the map publisher—who often is directly responsible for the intellectual content of a map item.

The scale of the map, along with the size, was included on all cards reproduced for any map. This information implied the geographic content (that is, area and detail) of the map, before actually retrieving the map from the file drawers. This aided in preservation of the maps by reducing indiscriminate paging practices.

Anglo-American Library of Congress Format

On publication of the retrospective catalog in 1971, and following the system-wide conversion, the Map Division converted to AA-LC cataloging format.

MARC tapes and cards were not yet available. Thus, all sheet map cataloging from 1971 until September 1974 was produced manually, by the Map Division sheet map cataloger (who also served a part-time reference function.) Some 50 sheet map titles were cataloged each month. In addition, some 200 continuations were processed monthly.

It was still a manual system and the main entry cards were typed in the Map Division, and reproduced by NYPL Preparation Services Division. The format was similar to that of an LC card. Because the Map Division had no classification system, and the main entry was now the cartographer or publisher, the first subject heading automatically served as a filing key. It always reflected the geographic entity and date (i.e., Chicago-Maps, 1975.) The map, labelled "Chicago, Ill.—1975" is filed with Chicago maps by date. The date, given as part of the subject heading, is a variation from LC style to meet Map Division retrieval requirements.

Because LC subject headings often do not trace to larger geographic entities to which smaller entities relate, at times there were filing notes on Map Division cards. A map traced to Lublin-Maps, 1974, would have a public note, "Filed with Poland, locals." This enabled the average American high school student, employed as a Map Division page, to file the map accurately, as there was no classmark reflecting the Poland locale, and the word 'Poland" might well not appear on the card.

Discussion concerning possible automation of sheet map cataloging began in 1970, and continued through 1973. The delay in implementation was a result of the Systems Analysis and Data Processing Office (SADPO) and Cataloging Section's deep involvement with the final production stages of the NYPL automated book catalogs for the Research Libraries and the Branch Libraries. In August 1973, Preparation Services Division personnel were examining the LC MARC program and selecting specific items for inclusion in an NYPL sheet map cataloging program, based on the automated monograph cataloging system already in operation. As of Aug 16, 1973, nonbook materials were included in the NYPL automated book catalog. This cleared the way for maps to be included in the automated cataloging program, and for sheet map cataloging data to appear in the catalog.

SADPO received MARC Map tapes from LC in late 1973. However, due to its priorities outside the Map Division, and difficulties in meshing the MARC Map program with the established NYPL program, there was to be some delay before obtaining a printout of any sort from the tapes.

In March 1974, Map Division staff learned that SADPO was reprogramming to make MARC tapes compatible with the NYPL system. A training program for the Map Division cataloger was set up with the Chief Cataloger. The NYPL monograph worksheet was revised slightly to accommodate map cataloging and a temporary separate Map worksheet (Figure 1) was produced. A combined permanent worksheet is now in the planning stage.

Automated MARC-Based NYPL Format

Four years after the initial discussions, in September 1974, map cataloging via automated techniques was begun. And now, materials that had been cataloged over the previous two years by AA-LC format are being converted to the automated program. The Map Division now receives from SADPO, on a quarterly basis, an updated printout of citations from the MARC tapes received from LC. The first such printout was received in January 1975. So far, some 12,000 citations are included. It is simply a list of sheet maps cataloged by LC, and whose complete cataloging data are included on the magnetic tapes stored at SADPO, NYPL. The list is arranged by main entry, and gives title, date, and LC number. The Map Division is presently checking all new material, backlog items, and AA-LC cataloged items against the printouts. When MARC cataloging is available, it is ordered from SADPO via

Figure 1. Map Worksheet

Date	01 Record M-MAP,	02 Type A S Mono Ser	03 NYPL	04 LC Card No.	06 Bib	11 Title	15 Date 1	16 Date 2

17 Tr	23 Lang 1	18 Lang 2	27 Cat	29 Country	30 Fest	31 Relief	32 Base	33 Format

090 Classmark	091 Classmark	A/F *	04 Ser: S	07 MARC Tag no.:
		05 KT:K	06: I	P=00 T=40
		08 Reg: D I		C=10 TS=50
		09 NYPL: N		CF=11 G=51
OK	OK	14 ED	16 Lang	A=30 PJ=52

1 -- MAIN ENTRY

245 TITLE

260 IMPRINT

300 COLLATION

4 -- SERIES

5 -- NOTES	591 CUR	592 CSR	593 LOC:

Repl	Add Cop
Sp loc	

	New Cat	Old Cat
Title		
Diff ed		
Ser		
NSCM		
Scp		

A	S
KT	SCAT
Receiver	
Searcher	

Main Entry	E	INV	NC
New Cat			
Old Cat			
New A/F			

(See over-)

(See over -)

Tag-no.	6--: Subj. 7--: Add. entry 740-Variant title 8--: 2d ser.	New Cat.	Old Cat	New A/F

900 DIV DES		901 CARD DESIGNATORS									
A	MU	SLD,1	CSR,1	DC,2	MUI,1	PRB,1	PRL,1	R,1	RBR,1	RP,1	SPB,1
AH	O	SLN,2	U,1		MUP,1	PRBI,1	PRS,1	RA,1	RD,1	RS,1	SPF,1
G	S	Z,1	P,2	MUA,2	MUR,1	PRE,1	PRU,1	RAL,1	RF,1	RV,1	SPI,1
J	T	UM,1	PCN,1	MUD,1	MUS,1	PRET,1	PRW,1	RAP,1	RI,1	RX,1	
MP		PCD,3	B,1	MUF,1	MUW,1	PRI,1		RB,1	RIB,1	RZ,1	UCM,1

902 Dec. Des.
[A] [C] [K] [I]

• •

the LC numbers on the printout list. The MARC record is cycled through the NYPL system for re-formatting into NYPL form and for automatic checking of headings against the authority file. The cataloger then works directly with proof copy showing results of this cycling and makes changes as needed. In addition, authority file worksheets are filled out as needed for all new entries added to the system. A particular title then enters the system for a "review" period. All authority file headings to be established are machine-checked against the established authority file. At the end of the 30 day "review" period, the item becomes "valid," which means all proof reading and authority file matching has been com-

Figure 2. Portions of Two Pages from the *Dictionary Catalog*, May 1975.

GREAT BRITIAN—MAPS.

(1967) Ferriday, Alan. A map book of the British Isles. London, Melbourne, etc., New York, 1967. 68 p. NN 72-395210 LC Map 68-853

[Map Div. 72-113]

(1972) Great Britain. Ordnance Survey. Ordnance Survey route planning map. Southampton. col. maps FULL PERIOD OF HOLDINGS IN MAP DIVISION. NN 74-4981881 LC 74-693934

[Map Div. 75-1076]

GREAT BRITAIN—MAPS—TO 1800.

Keere, Pieter van den, ca. 1571-ca. 1624. Atlas of the British Isles. Lympne Castle [Eng., 1972] [6], 44 (i.e. 88) p. NN74-4192167 LC74-150002

[Map Div. 74-204]

GREAT BRITAIN—MAPS—BIBLIOGRAPHY.

Skelton, Raleigh Ashilin. County atlases of the British Isles, 1579–1850. London, 1970. 1 v. NN 72-238117 LC 74-851714

[Map Div. 72-158]

(a)

Great Britain. Ordnance Survey.

Gazetteer of Great Britain giving the national grid references to all features named on the 17 Ordnance Survey quarter-inch maps. Rev. and reprinted. Southampton, c1972. 87 p. 2 col. maps. 30 cm. NN 72-4070684 LC 77-653730

[Map Div. 72-320]

New Forest. Chessington, Surrey 1966. col. map 82 × 102 cm. Scale 1:63,360; 1 in. to 1 mile. Relief shown by shading, hachures, and spot heights. Shows vegetation types. Includes index to "Selected places of interest," and reference diagr. to the "One inch seventh series sheets." NN 74-4981259

[Map Div. 75-1032]

Ordnance survey of Great Britain quarter inch fifth series. Great Britain. Ordnance Survey. Gazetteer of Great Britain giving the national grid references to all features named on the 17 Ordnance Survey quarter-inch maps. Rev. and reprinted. Southampton, c1972. 87 p. NN72-4070684 LC77-653730

[Map Div. 72-320]

Ordnance Survey route planning map. Southampton. col. maps 82 × 103 cm. FULL PERIOD OF HOLDINGS IN MAP DIVISION. Annual. Scale 1:625,000; about 1 in. to 10 miles. Relief shown by shading and spot heights. Legend in English, French, and German. Each edition complete in 2 sheets. Includes insets, distance chart, and sheet index. NN 74-4981881 LC 74-693934

[Map Div. 75-1076]

(b)

pleted and found acceptable. The final accepted copy is then printed in the NYPL automated book catalog (Figure 2).

Complete citations appear only under main entries. No tracings appear in the book catalog. For all added entries, the citation consists of classmark, entry, short title, imprint, and special location note, if needed. A fixed-order classmark, in use in many divisions, has not been adopted by the Map Division. Each map is assigned a fixed-order number, in case of future conversion to this filing system. At present, however, maps are still filed geographically, by date.

Because the scale and size did not appear automatically on added entries, a request was made by Map Division staff, for reprogramming to accommodate this need. As of Jun 16, 1975, both size and scale notations appear under the added entries. Thus, one will have an idea, before retrieving the maps, of what size and what scale are involved.

Conclusion

It is already clear to Map Division staff, in comparing AA-LC cataloging of the last two years with the MARC citation printout received, that much material on hand at the Map Division, NYPL, is not duplicated at LC Geography and Map Division, or at least not cataloged and widely distributed on the MARC tapes or cards. Thus we hope

original cataloging from the Map Division will serve to increase the scope and usefulness of the Union Catalog of Maps.

We are going to have to learn to be part of larger, more inclusive systems—even if it is painful. We have jealously guarded our "differentness" as map specialists in the library world. To enhance accessibility, live with the economy, and the information explosion, we must utilize, support, and push for cooperative efforts as the Union Catalog of Maps, cooperative acquisitions, affiliations such as the Research Libraries Group, and an expanded national (international!) MARC Map system.

Received for review Feb 7, 1975. Revised manuscript accepted for publication Jul 25, 1975. Presented Jun 10, 1975, as a Contributed Paper, during SLA's 66th Annual Conference in Chicago.

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Nontraditional Information Service

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■ The business of providing information for a fee on a free-lance basis is growing. Independent information services are often started by one or two persons, perhaps librarians, who wish to work in the field of information in a nontraditional manner. A description of one such organization—Information Unlimited—is presented here.

THE IDEA to establish a company which would offer an information service for a fee occurred to Sue Rugge in 1971. Sue had been a special librarian for ten years and discovered that persons who no longer had access to special libraries still needed literature searches and other library-related services they could not obtain any other way. She realized that there must be many small companies which did not yet need a full-time librarian, but needed the services that only special libraries provide.

When I met Sue, I had been an academic librarian, and more recently a special librarian, and was looking for even more service-oriented work. I felt that special librarianship was limited to organizations that could afford the luxury of a specialized collection for a small group of users. I wanted to see the man-on-the-street benefit from the same kind of services. So, Sue and I put our heads together and Information Unlimited was born.

We began by cultivating previous business and library contacts. We knew that both special libraries and businesses need an out-of-house service especially for documents not in their own collections. Usually their need is urgent, and regular grape-vine and interlibrary loan systems are not efficient enough. So we guaranteed a 48-hour turnaround (24-hour for rush) for anything within our control to obtain.

Our Clients

Now more than 50% of our business comes from special libraries. These range in type from medical, petroleum, and engineering to economic, business, and art. Their needs vary, of course. Many require document delivery and acquisitions. Some hire us to obtain material not available in their own collections. The requests are sent to us by the boxful, unverified, in the original form and handwriting of the research scientists. As many requests as possible are filled by our own staff who use the resources at UC Berkeley, UCLA, UC Medical Center, UC Davis, and the libraries and information sources in San Francisco and Boston. The requests that cannot be filled from these places are verified, checked in union lists for sources, and sent to places such as the National Lending Library, John Crerar, NYPL, LC, etc. Our clients do not need many different deposit accounts, coupons and rules on verifying because we do everything for them. Furthermore, they remain informed of the status of each request as it moves from one place to another.

We have established certain policies regarding the use of our photocopy service. The service is intended to provide information for research use only. Like other institutions, we limit the number of copies of any article to one per client. Our prices are set to cover costs, not to make

a profit and, in fact, we charge less than many academic and public libraries.

Some libraries require literature searching in subjects they do not usually handle or for tools they do not have in-house. We often perform searches on DIALOG™, the computerized information retrieval system developed by Lockheed. One library needed Library of Congress call numbers and card copy for new acquisitions. We accomplished this by searching proof slips and the NUC. Another library contracted us to write a procedures manual for their new automated serials renewal system.

We have organized several libraries. One company hired us to reorganize files it kept on companies being considered for possible acquisitions. Two government agencies asked us to reorganize their libraries—one was in occupational safety, the other in forestry.

Not all of our clients are libraries. Many businesses without libraries as well as individuals use us as their librarian-on-call. For these we do competitive market surveys, literature searching, and acquisitions. Projects have included a current awareness service on crystal growth and a survey of the packaged goods industry in California. We have performed many literature searches for a physician in Maine who studies various animals but has no access to literature from his home. One woman requested sources where she could publicize some techniques she had tried in raising a handicapped child. University professors frequently call us for literature searching and document delivery.

Our prices for our literature searching and research services are usually by the hour ($12.50/hr.), although we sometimes work on projects for a contracted fee.

Other Services

Information Unlimited's services are not limited to information gathering. We have also published several directories; an index to special collections in California libraries, a guide to information sources in San Mateo County, and a general directory of Bay Area libraries. We are currently working on a union list of standards and specifications in California libraries.

We also teach. Two of us have taught courses at University of California to undergraduates on how to use the library, and we conducted (and still offer) a seminar to special groups on information in the community.

Funding

The company began without any funding or capital investment; it has relied on billings to pay expenses. Costs such as phone bills and postage are charged back to clients to keep overhead low. We encourage deposit accounts and give better rates to deposit account holders. This improves cash flow and saves the customer the bother of purchase orders, etc.

Staff

At present, four full-time and nine part-time persons are employed at Information Unlimited. These persons range from librarians with broad general reference experience and literature searchers with specialized subject fields to former interlibrary loan assistants who love deciphering garbled citations and abbreviations. Six persons work for us in the field (Boston, San Francisco, Davis, Los Angeles) and fill requests for us from the university and public libraries and other information sources in those cities. Sometimes we contract with people—usually unemployed librarians—for special projects. The entire staff shares the desire to give efficient service and this is what really makes the company a success.

Soon the company will go into its fifth year. The last four have been the most rewarding adventure of my career. I believe that we and companies like ours have filled a gap in the information community and are offering a new facet to librarianship that has been needed for a long time.

Received for review Oct 20, 1975. Revised manuscript accepted for publication Nov 7, 1975.

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Overseas Report

Scientific Research and Information Facilities in Iran

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■ The growth of national income in Iran has led to the need for information and research in many areas. In order to provide for this demand, libraries and research organizations have proliferated. Several specific collections are discussed as well as the developing information services.

WITH THE GROWTH in national income the need for scientific and technological maturity has gradually been recognized in Iran, particularly in the mid-1960s, as a contributing factor to economic maturity. This has led to a rapid expansion of educational and research establishments in these disciplines. According to a survey conducted by the Institute for Research and Planning in Science and Education in 1971, there were more than 440 units in the country with some kind of research responsibility. Of these 365 were located in, or were affiliated with, institutions of higher learning, and the remaining belonged to different ministries and autonomous public organizations *(1)*. However, this expansion rendered few tangible results. For example, the Deputy Chief of the Plan Organization in his statement, issued Dec 30, 1971, said, "there were 442 teams officially engaged in research but in actual fact only a few of them did any research work, and that also only in the field of agriculture, medicine and social sciences. Research in industries and technology had made no progress" *(2)*.

The main factors responsible for this situation, according to Manzoor *(3)*, were: insufficient awareness at the national policy-making level; the lack of determination to formulate a long term and coherent science policy perspective; and finally, the absence of an organization to rationalize the process of resource allocation and integrate research efforts with national needs. However, the Ministry of Science and Higher Education, established in late 1967, has succeeded, particularly in recent years, in giving some kind of coherence to the scientific and research activities in the country. In accordance with Article 32 of the Charter of the Educational Revolution (1968), all research establishments are obligated to present their resource requirements for research work to the Ministry of Science, which if accepted, would then be sent to Plan Organization for implementation. To facilitate this work a National Research Council comprised of representatives of the government, universities, and industries was set up in 1971 by the Ministry as an effective forum for the scrutiny of various research projects already submitted *(4)*. This is the supreme research council. Furthermore, there are special committees, comprised mostly of

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university professors, for major disciplines, such as social sciences and humanities, basic sciences, medical sciences, agriculture and engineering.

The annual report of the council for the year 1972 listed receipt of 169 projects in the fields of medicine (58), agriculture (45), basic sciences (18), literature and humanities (21), and the remaining for other subjects. Of these, 59 projects were approved, including medicine (33) and agriculture (13). The report also indicates that the majority of projects belonged to the Universities of Pahlavi (23) and Tehran (22) *(4)*. Thus, it may be concluded that the research activities are concentrated in the universities.

Scientific research has not been regarded as an integral function of the university system in Iran. Traditionally, formal instruction had been the only function of the universities. With the coming of the Charter of the Educational Revolution (1968) the need to infuse the universities with scientific and development activities was emphasized.

Library Resources

The tradition of decentralized library service in the universities resulted in the growth of better faculty libraries, particularly in the field of medical sciences. The collections of faculty libraries belonging to scientific and technological disciplines normally range between 5,000 and 50,000 volumes. The majority of books and periodicals are in English, followed by French, German, and other European languages. LC and Dewey are the most favored classification systems, but LC will replace Dewey altogether in the future. Many faculty libraries at the Universities of Tehran and Pahlavi (Shiraz) have qualified staff, while others are looking to the country's library schools for qualified librarians. The services provided by such libraries include: answering quick reference questions; preparing subject bibliographies on request, and publishing lists of current acquisitions. Some of the outstanding faculty libraries will be discussed elsewhere in this paper.

The importance of better library service has been increasingly recognized by the various ministries and their subordinate departments and organizations. Today, almost every ministry has its own library. Among them the libraries of the Ministries of Agriculture, Education and Training, Economy, Finance, Labor and Social Affairs, Interior and Justice are worth mentioning. In the industrial sector, the National Iranian Oil Company is an established leader, followed by Oil Consortium libraries at Ahwaz and Tehran. Efforts have recently been made to establish technical libraries at the newer industrial establishments, such as the Machine Tool Factory and Tractor Manufacturing Plant at Tabriz.

Individual Libraries

The Central Library of the Industrial University Arya Mehr at Tehran, with 50,000 active volumes plus 13,000 periodicals on its current subscription list leads all the technological libraries in the country. The books have been classified according to LC. The main services provided by the library include those of procurement of photocopies for the faculty members, answering reference questions, and preparing the list of current acquisitions. An exchange service is being established. Other important libraries in the field of technology are those of Tehran Polytechnic (10,000 vols.) and Factory of Electricity (5,000 vols.; 1,500 technical journals) at Tehran.

The reference library of IRANDOC is another important special library, notably in the field of sciences and social sciences. The library came into being along with the establishment of IRANDOC in 1968, and at present it has a collection of more than 10,000 volumes and nearly 4,000 periodical titles. It is particularly important for its extensive collection of government documents and the collection of dissertations. The services provided by the library are: literature searching and preparing bibliographies on request; answering quick reference questions, and procuring photocopies of articles for researchers.

The interlibrary loan service in cooperation with more than 60 libraries is unique.

The library belonging to Bank Melli (Central Bank of Iran), established in 1961, is the main library on the subject of economics and its allied subjects. There are more than 30,000 volumes, with 2,000 new books added each year. The library receives 250 periodicals regularly on economics and related subjects. The Dewey Decimal System is followed for classification of materials, and LC printed cards are used. This library acts as a public library in its field, but loans are permitted to bank employees only. The main contribution of this library lies in its compiling and publishing periodical indexes on economics and allied disciplines.

In the field of medical sciences the libraries belonging to Faculties of Medicine at the Universities of Tehran and Pahlavi are eminent. The library of Tehran possesses more than 36,000 volumes and nearly 600 current periodical titles. Formerly, the library was classified according to the Dewey system, but it changed to LC in the late 1960s. It is headed by a graduate of Tehran University's library school. There are 12 sub-professionals—some university graduates, but having no formal library training. The library spent 2,800,000 Rials in 1971 (one U.S. dollar = 67 Rials), of which 1,800,000 Rials went for periodicals.

The library belonging to the Faculty of Medicine at Pahlavi University, containing 12,000 volumes and 800 periodicals, is an active and well-organized library. A good collection of reference books, which includes the major biomedical indexing and abstracting journals, is well used by the researchers. "As an institutional member of the Medical Library Association of the U.S.A., the library was able to acquire a number of journals through the exchange program. It is also making good use of both the photocopying and MEDLARS services available through WHO" (*5*, p. iv). The library is directed by Mrs. Afsar Mansourzadeh, who holds the Advanced Certificate from the University of Pittsburgh; she is assisted by 9 clerical workers. Previously, American librarians were in charge of this library.

The Razi Institute Library in Tehran, established in 1931, with more than 6,000 books on biology and pathology and more than 100 scientific foreign periodicals on subscription, is another significant library. In addition to the institute's staff, the library is heavily used by the students of medical schools. Another important library on medical sciences is Torab Mehra Library of the Nemazee Hospital (Shiraz) which serves the newly established Faculty of Dentistry. Thus, all dental literature previously housed in the Faculty of Medicine has been transferred to this library. "The library premises consist of two fairly large rooms, with the librarian's office and work area in between separated by glass partitions. Books and periodicals are arranged on the open shelves and readers have ready access to them. In addition, the library has also started to build an audio-visual collection, and has so far acquired 42 audio cassettes in internal medicine and 38 in surgery from the Audio Medical Digest Service" (*5*, p. vi).

Information Services

The concept of information service in Iran is a recent development, beginning in the mid-1960s with the Oil Consortium libraries in Ahwaz and Tehran, primarily by the foreigners working with these libraries. At that time the Ahwaz library "began using computer printouts to list and index its technical report collection" (*6*). Likewise, an indexing project in depth, using role and links, was developed in 1967 at the Consortium Library at Tehran. An indexing system was developing for a clipping and government report collection in addition to expanding UDC for the Iranian petroleum economic material.

During this period the need for modern information services was felt by the National Iranian Oil Company (NIOC). A staff member working in the Technical Information Section of the Research Department of the Company was sent to

Europe (England, Belgium, France) during 1965–66 to learn modern information techniques. Thus the Information Center of the Company was established on his return by utilizing the knowledge and experience of European information centers.

The Information Center of NIOC was primarily limited to the field of petroleum engineering. The center is a regular subscriber to the information services of the American Petroleum Institute, New York. A Peek-a-boo system was also developed here for control of the company's technical report collection. The coding of the company's technical reports utilizes an original descriptor thesaurus, and includes limited use of links and roles.

Iranian Documentation Center

The importance of information for scientific and technological research became more evident because of Iran's move toward industralization and increasing emphasis on scientific and technological education and research. It was thought that the present and future needs of Iranian scientists were not met successfully by the existing libraries. Thus the Iranian Documentation Centre (IRANDOC) was established in 1968.

The major functions of IRANDOC are (*6*, p. 2): 1) to collect, organize, develop, and service the national research library in science and social science; 2) to provide modern, quick, and intensive literature analysis services for Iranian scientists and professors; 3) to publish bibliographic and reference material useful to the scholarly world; 4) to serve as the Iranian link in a future West Asian information network; and 5) to encourage cooperation and coordination among Iran's research and special libraries and information centers.

To meet the above stated objectives, IRANDOC tried to recruit a team of qualified and competent staff. The centre's technical director did manage to recruit 75 full-time employees by 1970, including "professional librarians, searchers, serial assistants, editors, abstractors, technical writers, printers, indexers, and translators." Presently, the centre is directed by Ali Sinai, a graduate of the Queens University, Belfast.

For administrative purposes, the centre like its sister organization TEBROC (Tehran Book Processing Centre) is a part of the Institute for Research and Planning in Science and Education. The institute, created in May 1969, is responsible for "planning in research, determining the national scientific and research policies for the Ministry of Science and Education," of which it is a part. Internally, the centre has been organized according to functions performed. There are, at present, four departments: Processing, Publication, Documentation, and the Library.

The official leaflet notes, "IRANDOC provides literature searches, photocopies, inter-library loans, translations, open-shelf reading room and book circulation, SDI, state-of-the-art studies, and reference service, in person, by mail or by long distance telephone" (*7*). Other services provided by IRANDOC include: preparation of bibliographies on request, abstracting and indexing, and helping in establishing contact between Iranian and foreign scholars. These services, for the most part, are provided through its publications. Among the most important publications issued by IRANDOC, the following should be mentioned.

Abstracts and Indexes

1. *Contents Page Bulletin.* Inspired by the *Current Contents* published by the Institute of Scientific Information, IRANDOC began publication of this Bulletin in September 1969 on a monthly basis. Presently, it contains the contents pages of 75 Iranian periodicals on science and social science. This is one of the most popular publications of the centre, both in Iran and abroad.

2. *The IRANDOC Sciences and Social Sciences Abstract Bulletin.* Published quarterly since Winter 1970, the Bulletin contains abstracts of articles on economics, sociology, law, psychology and education, politics, agriculture, medicine, astronomy and physics, geology and mathematics, for "university studies or

use on a higher level." Besides the Persian edition, an English edition containing the abstracts of articles of international interest was also published. The number of periodical titles, reviewed for selection of articles by editors, comes to 75, and abstracts are prepared by a panel of subject specialists. An abstracting manual has also been prepared by the centre.

3. *The Iranian National Union List of Serials.* The history of this publication may be traced back as far as 1962, when a list called *The Tehran Union Catalogue of Scientific Periodicals* (TUCOSP) was prepared under the auspices of Central Treaty Organization (CENTO). Another similar effort was made in 1968 in the shape of a list of scientific periodicals from 12 different libraries in Tehran. Work on a comprehensive union list began in the Spring of 1969. Volume I (social sciences) covering 760 titles, both foreign and Farsi, held by 52 libraries was published in September 1971; volume II (science), published in February 1972, included 3,000 scientific and serial titles available at 60 libraries. The second edition is expected to include some 95 libraries.

Bibliographies

In addition to preparation of bibliographies on request for scientists and research workers, the centre has also published a number of subject bibliographies. These are: *Bibliography of Persian Printed Law Books up to 1345 (1966); Bibliography of Persian Books on Economics up to 1349 (1970); Bibliography of Iranian Scientific Publications; Selected Bibliography of Education* (with special emphasis on educational planning); *Bibliography of Persian Books on Dentistry; Bibliography of Persian Books on Chemistry; Index to Articles on Economics,* etc. Lists of government publications issued by the various ministries, based on the holdings of IRANDOC's library, have also been published.

To meet the current research needs of the country a number of serial bibliographies with abstracts are also published. These are: *Selected Bibliography of Chemistry* (bi-monthly, Sep 1971–); *Pollution: Air, Soil, Water* (quarterly, Oct 1971–); *Transportation and Traffic Engineering Bibliography* (semi-annual, Jul 1971–); and the *Bibliography of Education* (bi-monthly, Mar 1972–). These bibliographies are issued in limited circulation.

Reference Publications

A number of reference books have also been published under the auspices of IRANDOC. Some of these are: *A Directory of Iranian Periodicals* (1971) Farsi & English; *A Directory of Iranian Newspapers* (1970) Farsi & English; *A Directory of Iranian Libraries* (The directory is being published in several volumes; two volumes have already been published); *Directory of Scientific and Technical Research Institutions in Iran* (1972); *Thesaurus Rules & Conventions* (in Persian); *Glossary of Library Terms* (English-Farsi).

IRANDOC's National and International Activities

IRANDOC has always played an active role in the establishment of a national system for information services in Iran. Toward this end, the centre provides necessary advice, as and when requested by the various governmental and non-governmental organizations, for the establishment of new centres and improvement of existing ones. IRANDOC in cooperation with TEBROC offers in-service training of other centers, besides conducting short courses from time to time for its own staff and staff of other centers on specialized subjects, such as abstracting, indexing, use of UDC, and various retrieval systems. One course is normally held each year. Also, IRANDOC for the first time succeeded in organizing the interlibrary loan system at the national level. At present about 60 university and special libraries are participating in this program. In June 1971, a Coordination Committee of the Documentation Centres in Iran was established at the initiative of IRANDOC for better

coordination and cooperation among the existing documentation centers.

Similarly, the centre has also been active at the international level. As the National Member of FID, IRANDOC has served on the FID Committee for Developing Countries, and the Committee on Terminology. The List of Technical Journals for Industry (for Iran), an FID Project, was prepared in 1971 under the auspices of IRANDOC. The centre has close links with library organizations in other countries. Efforts have also been made to collaborate with PANSDOC (Pakistan National Scientific and Technical Documentation Centre) and TURDOK (Turkish Documentation Centre). IRANDOC acts as the Iranian national link with UNISIST.

Other Documentation Centers

The services provided by IRANDOC encouraged other organizations to establish their own documentation centers. Such centers, for the most part, have been established by expanding the activities of the special libraries already attached to these organizations. The major activities include the collection, organization, and dissemination of information in their respective fields. Along with the provision of traditional library services the services offered are: preparation of subject bibliographies, translation, and preparation of current contents and abstract bulletins. Excluding the Information Centre of NIOC and IRANDOC, there are 11 documentation centers, all located in Tehran, according to a survey by Hariri *(8)*. These are: 1) Central Library and Documentation Centre of Tehran University; 2) Documentation Centre and Technical Records of the Plan & Budget Organization (est. 1972); 3) Documentation Centre of the Ministry of Information (est. 1964); 4) Library and Documentation Centre of the Ministry of Economics (est. 1967); 5) National Documentation Centre and Library of the Population and Family Planning (est. 1972); 6) Research, Information and Documentation Centre of the Queen Farah Charity Organization (est. 1973); 7) Technical Documentation Centre of the Institute of Standards and Industrial Research of Iran—better known ISIRI (est. 1971); 8) Technical Documentation Department of National Petrochemical Company (1964); 9) Technical Information Centre of TECHNOLOG (est. 1969); 10) Archives of Custom Bureau (est. 1973); 11) Archives of Statistical Centre of Iran (est. 1968).

Training Facilities

The Universities of Tehran (1966) and Pahlavi at Shiraz (1974) have graduate programs leading to the master's degree in Library Science, and the BLS program is offered by the Universities of Azarabadgan (Tabriz), Tehran and Iranzamin College, Tehran. Also, short courses are organized by IRANDOC, TEBROC, and the Iranian Library Association from time to time.

The courses of short duration offered by various organizations usually are aimed to introduce the basic rudiments of librarianship, but the courses organized by IRANDOC in the past were primarily oriented to information work. These included courses on such topics as: "Use of UDC" (1970); "Abstracting and Indexing" (1971); "Information Storage and Retrieval" (1973) with three guest lecturers from VINITI. Staff members of IRANDOC and other information centres are regularly sent abroad for higher studies and in-service training.

IRANDOC has also established a Documentation Research Group for practical research in the field. For example, the preparation of abstracting and indexing rules for Persian materials is one of the projects in hand.

Prospects for Information Service in Iran

The scientific service in Iran has definitely made progress if one takes into consideration that the concept of modern librarianship itself is a phenomenon of the mid-1960s in the country. Also, more developments are likely to take place in this field as a result of the country's economic

prosperity and development programs. And therefore, as a national agency on scientific and technical documentation, IRANDOC shall have to play a more dynamic role in the future. The main group of users of IRANDOC's services are, at present, the students and university level researchers. But, it is hoped that the growth of heavy industries, such as the oil, petrochemical, natural gas and steel industries, will put pressure on IRANDOC for scientific and technical information. It was under this presumption that the centre from its inception tried to move toward automation, but the efforts made toward this objective were not successful. Several kinds of equipment, however, have already been acquired for this purpose. "Two photocopy machines are being used heavily. Of course, long distance telephone and telex contact can be made around the world. Audiovisual equipment is also available. Two dictating machines operate well and frequently, and several varieties of electric typewriters, about thirty machines in all, are heavily used" *(9)*.

The shortage of manpower with scientific and technological background is one of the problems Iran faces in providing scientific information services. However, it is hoped that the attractive salaries offered in recent years will attract more science graduates to the country's library schools. In short, there is a great future for information science in Iran.

Acknowledgment

The author would like to thank Mr. Hassan Ahmadi, who was formerly working with IRANDOC and was a colleague at the Dept. of Library Science, for providing some useful information, based on his experience, and materials, without which it was, in fact, impossible to complete this article.

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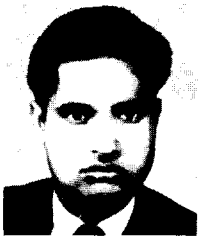
Received for review Jul 11, 1975. Revised manuscript accepted for publication Aug 22, 1975.



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Commentary on
Special Collections in University Libraries

IN OUR TIME we have seen the beginning and the end of area studies and the thorough integration of special collections and/or libraries into unified academic libraries. But is change necessarily progress? The recent Bryn Mawr Russian Department sponsored Seminar Workshop—*Russian for Business and the Academic Curriculum* (Jun. 9-11, 1975)—has indicated what may be the only possible direction for Russian academic programs to take to insure survival and even perhaps encourage expansion, even if modest. We are blind if we can not see the continuing contraction in our college and university Russian language (and literature) study programs—of all language study actually. As George F. Kennan noted in the last three paragraphs of his review of Solzhenitsyn's *Gulag* in the Mar 21, 1974, *New York Review of Books,* devoted to the status of Russian academic studies in the U.S., we in this country have now reached a serious low in the study of Russian. The decrease in Russian studies that he predicted in these paragraphs will probably go on for the next ten years and then the gap will be felt in its wide proportions; yet it would take another ten years to fill in the gap with trained specialists. Thus, for twenty years, we will suffer from today's unwise underproduction.

The same is true of library collections. Gaps may develop because at this time the departments are not holding their own, or because of budget deficits, or because departments (such as the Russian/Slavic departments) have been reduced or diminished. These gaps in the acquisition of publications and/or periodical runs are difficult to fill in later and are sometimes practically impossible and always very expensive to reproduce. Subsequently, research obviously suffers badly. Not only areas directly associated with a special field are affected but also research in all related fields.

In having the Russian collection at NYU, for which I was responsible, integrated into the total collection in the new NYU Bobst Library in 1973, I have become most subjectively involved in the effects of the elimination of special libraries in universities. It has meant healthy integration, of course; but it has also meant a not always healthy dispersion. Only the PG Library of Congress Class (Russian/Slavic languages and literature) remains a unit (with my office situated near this PG class) but any student or faculty member doing research or writing on a literary period will naturally be concerned with the history, the art, the economics, and the foreign affairs of his/her period of interest. In a special library it was possible because all the materials were together to give full library assistance on the spot. It was easier, too, to keep abreast of new materials as they were accessioned. This is possible now only with the expenditure of much more time in checking various floors according to call numbers. Being involved in the ordering of books in Russian (or other Slavic languages) does not make this easier since there is no follow-up in receipt of books ordered in a larger system. In a smaller special library there is a more immediate relationship, a more immediate concern with books or other materials as they are ordered and received.

Being so removed from his/her tools, his/her materials, the librarian is in many ways constrained. Handling the books, leafing through them, examining indices and tables of contents brings a fuller knowledge of contents than the most analytical catalog cards and this knowledge can then better be passed on in full dimension than can an isolated title on a card. At present, I require hours every week to go over new acquisitions all over our very large library building, through many departments on many floors. If I don't do this, I find it im-

possible to give our Slavic Department (and certain other departments where students do any related research—History, Economics, Education, Political Science) any kind of assistance in setting up bibliographies, writing papers and dissertations, doing any related research.

Naturally, new integrated programs in the fields of commerce will require the blending of many disciplines into one area of study. When this occurs, an integrated special collections library as a separate part of an academic library will be necessary to serve the new needs of these students, scholars, faculty. This kind of library will replace an integrated single academic library that is so much part of today's trend. Such reintegration into a special interest collection would be of value in giving wider bibliographic and research assistance to all departments working in associative fields: Russian/Slavic/Soviet/East European History, Economics, Political Science. As I have already mentioned, with dispersed materials and no integrated special collections, the user must depend for help on the Slavic bibliographer who does not necessarily have easy access to information in the wider though more integrated field of Russian/Slavic/Soviet studies. The bibliographer must, therefore, plow through catalog cards just as the user must. He has only the advantage of more intense library experience. Perhaps one solution would be to let the bibliographer become a library area specialist again (with or without area studies). Publishing area and subject bibliographies with monthly supplementary lists might also help. These are of vital importance, expecially in the fields of history, political science, economics, and current materials and are not necessarily included in books or are included at too late a date for proper research. I do honestly think, along with George F. Kennan, that we should arrest what may well be a destructive hand in the wholesale elimination of special collections in academic libraries before it becomes too expensive, and often impossible, to build up again. Consequently, I, for one, echo Mr. Kennan's sadly ignored warning signal—while it is late but not too late.

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In Progress–
A Study of GPO

The Government Information Services Committee, Special Libraries Association, by Committee definition, ". . . shall survey the policies, services, and products of government information-producing, publishing, and printing agencies . . . take appropriate action in these areas. Such action can include interviews with heads of agencies, questionnaires on the effectiveness of service or products. . . ." *(1)*

When two document librarians meet anywhere in the United States, or in Canada, the topic of conversation is almost always, "how are you coping with GPO these days?" Then what used to be called the game of "tall tales" begins and each librarian exchanges his/her experiences of dealing with the mammoth bureaucracy of the U.S. Government Printing Office.

In the past librarians have talked, talked, and talked about this seemingly insolvable problem. Even the U.S. Government Accounting Office (GAO) *(2)* and the Comptroller General of the United States *(3, 4)* have researched and written reports on some of the problems brought to their attention about the "GPO problem." However, there has never been a study *by* librarians to show the impact of pricing policies, the lack of delivery services, and the slow reporting of documents on the general user community here in the United States or in Canada.

Background for the Study

The GISC, under the chairmanship of Ruth S. Smith, Institute for Defense Analyses (1971–75), has been for the past four years a working Committee, opening channels of communication between users and suppliers of government information. In Boston, June 6, 1972, at the SLA Conference *(5)* GISC held a very successful dialog with government information service administrators responsible to user queries. This and subsequent GISC cosponsored meetings at the Annual Conferences have been outstanding communication links with suppliers of government information.

Another informal group of librarians, known as the Committee on Information Hang-Ups (Greater Washington Area), has been working since 1969 to achieve the same objectives as the GISC/SLA. Hang-Ups has successfully worked with National Technical Information Service (NTIS) and the Defense Documentation Center (DDC) in the user problem area. A subcommittee of Hang-Ups on the GPO was formed some 5 years ago and Mary Lou Knobbe (Metropolitan Washington Council of Governments) has served as chairman of that Committee from its inception.

Despite these conferences and establishment of better relations with various suppliers of government information, the one area that has not improved any, or very little, has been the Government Printing Office. In March 1975, the Committee on Information Hang-Ups decided to make an intensive study of the GPO and its operations from the user's point-of-view. Wellington Lewis, then Superintendent of Documents, pledged his support of such a study and invited the Committee to meet in May at the Government Printing Office—an all day session with tours of GPO as an afternoon feature. Since that time Carl La Barre, newly appointed Superintendent of Documents, has also cooperated fully with this study. La Barre or his liaison has met with each working group and briefed them on the current status of their interest area.

At the 1975 SLA Conference in Chicago the past and present GISC met (Cecilia Surace, Rand Corporation; John Henry Ritcher, University of Michigan; Helen Q. Schroyer, Purdue University; Denis M. Neuman, DeHavilland Aircraft, and Mary Lou Knobbe, Metropolitan Washington Council of Governments) with their proctor, Joseph Dagnese (Purdue University), and the GISC voted to co-sponsor the study with Hang-Ups. As chairman of both GISC and the subcommittee of Hang-Ups, Mary Lou Knobbe was named overall chairman of this project.

Basic Rules of Study Group

No U.S. government librarian will serve as a chairman of a committee. However, many government librarians are working members of the various committees. Each committee has at least one librarian/information specialist, who is knowledgeable of computers and library application of computer technology, as a working member. Pre-sampling questionnaires will be sent to Hang-Ups and GISC

members. Recommendations based on the results obtained will be published.

Time Schedule

An estimate of 12–18 months has been made from the beginning of the study until the final report is published. Pre-sampling will be finished by January 1976. The final questionnaire mailing date is March 1976. A return date for the questionnaires will be 30 working days from the date of mailing. The final report is scheduled to be published in September 1976, before the national elections.

Chronological Progress

The study began Jul 20, 1975, at a working session of Hang-Ups when committees were formed along subject interest lines. Members of Hang-Ups are serving as chairmen of these committees. The committees are Congressional Materials, *Monthly Catalog,* Pricing, Serials & Subscriptions, Customer Service, and Bibliographic Control. [Information note: Hang-Ups membership consists of document librarians holding membership in one or more of the following professional organizations: Special Libraries Association (SLA), American Association of Law Libraries (AALL), American Library Association (ALA), and the American Society of Information Science (ASIS).

The AALL has asked to be a part of the overall survey and their membership list will be used, along with the membership of SLA, in a random sampling of librarians who will receive the questionnaire. Also, each regional depository and one limited depository library in each state will be sent a questionnaire.

The staff of the Joint Committee on Printing, the Public Printer, as well as the Superintendent of Documents have been contacted and are aware of the study in progress. The final report will be sent to each of these agencies or persons, as well as the National Commission on Library and Information Science. Distribution of copies of the report to librarians will probably be made through ERIC or NTIS, to save the cost of printing a large number of copies and for better national and international distribution.

A second working session was held in September and a third was held in November. At the November meeting, Dr. Elizabeth Pan spoke to the committees on practical advice on survey question construction, data analysis, and interpretation of survey results. Dr. Pan is currently director of the National Information Center for Rehabilitation at George Washington University, and teaches a course in systems analysis for the Department of Library Science, Catholic University.

Cost of the Study

Cecilia Surace secured a cost estimate for computerizing a series of questionnaires to be used in this evaluative study. This well documented cost estimate was the basis for a proposal for funding, which was presented to the Board of SLA on Oct 2, 1975. After careful consideration the Board voted money for the survey, which will use the capabilities of the IBM/System 3 and SLA staff at the New York office to prepare the questionnaire and tabulate the data.

Other professional library associations have offered support—some even money if needed—to make this study a worthwhile effort representing all librarians.

Librarian Cooperation

As previously mentioned the questionnaire will be random sampling of the membership of SLA, AALL, Regional Depository Libraries and one limited depository library in each state. The Committee requests that questionnaires be returned promptly, since there will be neither time nor money for a second mailing. If librarians are as concerned about this massive problem as they have indicated in the past their cooperation will make this survey a valid sample of U.S. and Canadian librarians' problems in obtaining U.S. government documents.

Mary Lou Knobbe, chairman
Government Information Services Committee
Metro Washington Council of Governments
Washington, D.C. 20036

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Phoebe F. Hayes

The first sentence of a very brief obituary appeared in Denver's *Rocky Mountain News* on Friday, Sep 26, 1975, saying

> Miss Phoebe F. Hayes, for many years a special library research expert in the Rocky Mountain area, died Wednesday in the American Medical Center, Lakewood.

It is typical of Phoebe that a single sentence can convey with clarity, accuracy and brevity what Phoebe meant to special and other librarians in Colorado and the Rocky Mountain region. To Colorado Chapter of Special Libraries Association in particular, the words "special," "library," "research," and "expert" are particularly applicable, for Phoebe was a member of Colorado Chapter for 25 years, and had served in every capacity the Chapter offered.

A librarian all her professional life, Phoebe was born in Cleveland, Ohio, on August 12, 1915. At sixteen she moved with her family to a farm at Spring Green, Wis., and in 1937 she was graduated from the University of Wisconsin at Madison with a Library School Diploma. The special libraries in which she served were:

- Clearing House, Inc. (Chicago), Joint Reference Library, Public Administration, 1937–1941
- U.S. Bureau of the Budget (Washington), 1942–44
- American Federation of State, County and Municipal Employees, AFL (Madison, Wis.), 1944–50
- National Farmer's Union (Denver), 1950–1961
- Bibliographical Center for Research (Denver), 1961–1974
- Colorado State Library (Denver), Library Development Services, 1974–1975.

During these years she did graduate work in Library Science at Wisconsin, The University of Chicago, and the University of Denver, from which in 1965 she received the M.A.L.S.

Phoebe was one of the very early members of the Colorado Chapter of SLA, belonging to the Documentation and Natural Resources Divisions. She was a member of the SLA Board of Directors 1967–69, and president of

Colorado Chapter 1973–74. She was Conference Chairman of the 1963 Special Libraries Association Denver Conference. She was also a member of the American Library Association, Mountain Plains Library Association, and Colorado Library Association. One of her chief contributions to librarianship in Colorado and the west was that she herself maintained lines of communication and cooperation among these groups, and thus developed programs and cooperation that perhaps otherwise would have had no chance of development.

In this context, Phoebe was instrumental in starting the joint colloquium of the Colorado–New Mexico chapters. Many workshops bore her imprint, and many joint meetings and projects. She brought clarity to many discussions of library programs, policies and procedures with her characteristic preface of "Now, Just a minute."

The quality of leadership that she displayed is shown in an incident when Donald Oehlerts, then Social Sciences librarian at Colorado State University, Fort Collins, had produced as a labor of love his *Guide to Colorado Newspapers, 1864–1965*. The person who finally arranged financing and publication was Phoebe Hayes, thus giving the area one of its most indispensable research tools. The 1963 Denver Conference of SLA should stand to the entire Special Libraries Association as an example of her leadership.

Phoebe is survived by her mother, Hannah Hayes, of Minneapolis, a sister, Margaret, of Minneapolis and also a member of SLA, and a brother, Lewis Hayes, of Texas. She is also survived by many who knew and loved her as a person, and a very special librarian.

Enid T. Thompson
Denver, Colo.

CHAPTERS & DIVISIONS

Baltimore—"How to Cope with the GPO" was the topic of Mary Lou Knobbe's presentation at the October meeting. The Chapter was joined by the Washington, D.C. Chapter for the discussion.

The November meeting was a dinner at which Joseph Jensen spoke concerning "Early Medicine in Maryland."

Boston—The November meeting was a dinner at the Museum of Science with a program dedicated to Reference Update. Mark Mancevice, Katherine Schoellkopf, and Terry Moran concerned themselves with energy, finance, and the metric system, respectively.

Cleveland—A series of programs has been planned in conjunction with the Northern Ohio Chapter of the American Society for Information Science on Methods/Update Review. The aim of the sessions is to provide those attending with an opportunity to learn the pros and cons of deciding to use computers, how to begin such a project, and the various applications. The Jan 8 meeting dealt with basic problem of definition. The February meeting continued the discussion of flowcharted problems to programmed computers.

Colorado—A full day was set aside in September for a visit to the Air Force Academy. Highlights of the trip included a tour of the chapel, which has four separate areas (Catholic, Jewish, Protestant, and interdenominational); a film depicting the training and life at the academy; and a visit to the library system.

Miriam Tees visited the Chapter Oct 17 and spoke at a dinner meeting. On Oct 19 a joint meeting was held with the Colorado Library Association and the Mountain Plains Library Association concerning networks.

A Christmas fund raising dinner was held in December.

The Jan 15 presentation included an overview of basic research methods and legal materials and discussion of copyright laws and problems.

Connecticut Valley—A business and executive meeting was held Nov 13 which was followed by a discussion of library interior design.

Dayton—On Oct 10 the Chapter met for dinner and a tour of the new library quarters of the Ohio Supreme Court Law Library.

The Nov 10 meeting was addressed by Col. Wm. B. Haidler, dean of the School of Systems and Logistics, Air Force Institute of Technology, Wright Patterson, on the topic, "Energy—Where the Resources Are."

A joint meeting was held Jan 19 with CO-ASIS, ASM, COACM, and IEEE. Attorney General William Brown discussed the criminal justice information system.

Florida—Mark Baer spoke to a meeting Oct 31 on the objectives of SLA. Lamar Woodward, law librarian, Stetson Law School, talked about the "Ethics of Law Librarianship."

Geography and Map—At the Annual Division Business Meeting, the membership voted to award a $50.00 prize for the best paper to appear in the *Bulletin* each year. The prize will be called the "Bill M. Woods Award."

Heart of America—The Chapter held a Seminar in Special Librarianship Oct 25. Students from several schools attended. The morning was filled with a panel discussion followed by introductions of attending librarians by name, library, and subject specialization. After lunch various visits were planned to area libraries.

Hudson Valley—The first meeting of the year was a field trip to the U.S. Military Academy at West Point. A tour of the library and a demonstration of the OCLC on-line cataloging system were highlights.

Illinois—A dinner meeting was held Oct 22 at the Chicago Bar Association. John B. Harlan, president and founder of the American Library Society, spoke on "Come Bridge the Professional Generation Gap!"

Michigan—An all-day meeting Sep 12 was broken up into three sessions: Library Schools and Preparation for Special Librarianship; Problems, Programs, and Goals of Local (Michigan) and National Library Professional Groups; Problems Facing the Library Profession.

The Oct 1 meeting was sponsored by the Chapter's Education Committee at the Midwest Federation of Library Association's 1975 meeting. Three sessions were held on, "The Citizen and Statistics," "The Social Planner and Statistics," and "The Businessman and Statistics."

Mark Baer spoke to the Nov 6 dinner meeting in Dearborn.

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235 Park Avenue South
New York, NY 10003

National Library Week

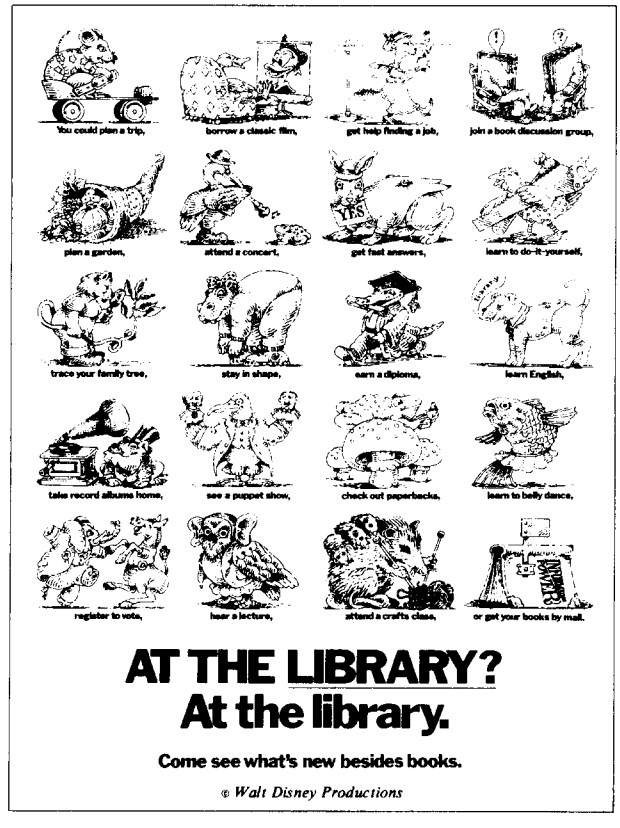
Apr 4–10, 1976

A variety of National Library Week materials is again available from ALA. The theme "Information Power" is carried out by whimsical drawings and the headline "At the library? At the library! Come see what's new besides books."

As a free bonus with any order, libraries will receive an ALA-compiled guide to the newest service innovations which explains how to implement them and includes a resource list of librarians who have had experience with these programs.

Also available for the cost of the film and tape are a 30-second service spot for television and six prerecorded radio spots.

Order forms are available from ALA, Public Information Office, 50 East Huron St., Chicago, IL 60611.



HAVE YOU HEARD

New Information Center

The center is devoted to the international spread of information on irrigation techniques for arid land farmers. The pilot program has been set up in Bet Dagan (near Tel Aviv) at the Israel Agricultural Research Organization's Volcani Centre.

If You Haven't Heard . . .

The United States Tariff Commission has changed its name to the United States International Trade Commission. Any inquiries should be made to Dorothy J. Berkowitz, librarian (202) 523-0208.

Black Studies

A Comprehensive Annotated Bibliography of American Black English has been published by Louisiana State University Press. The authors are Ila and Walter Brasch.

Copyright Status

A bulletin, "How to Investigate the Copyright Status of a Work," is available free on request from the Copyright Office, Washington, DC 20559. It is numbered Circular 22.

Law Library Scholarships

Three types of scholarships are offered annually by the American Association of Law Libraries: a library degree scholarship for law graduates; a final law year for MLS holders; a library scholarship for college graduates with meaningful law library experience. Applications must be received by Apr. 1. For more information write: Scholarship Committee, AALL Headquarters, 53 West Jackson Blvd., Chicago, Ill. 60604.

Fellowship Offered

The Medical Library Association is offering a six-month and/or a one-year fellowship for the period September 1976 to August 1977. The stipend provides for living, tuition, and approved travel expenses. All candidates must be working in or preparing to work in a medical library. Write to Mrs. U.H. Poland, chairman, MLA International Cooperation Committee, Schaffer Library of Health Sciences, 47 New Scotland Avenue, Albany, New York 12208, U.S.A. Applications and all supporting credentials must be received by Mar 1, 1976.

REVIEWS

Book Availability and the Library User, by Michael K. Buckland. New York, Pergamon Press, 1975. 196p. $7.50, paper. $13.00 hardcover.

This is a rather long study on a difficult topic. There must be some relationship between circulation statistics and the availability of books on the shelf. In a test case at the University of Lancaster (England) Library, where some simple changes were made in loan periods and in their duplication policy, the circulation statistics doubled. Mr. Buckland's book is devoted to the logic of what happens when loan policies change, when duplication policies change and the effect of acquiring, discarding, binding and lending books on the probability of finding a book on the shelf.

The changes made at the University of Lancaster were mainly in the change of loan policies. They had had a policy which allowed everyone to keep books out until the end of the term. When they changed this policy to a one-week loan for popular books (books circulated four or more times during the year) and end of the term for the rest of the monographs, their circulation doubled.

The special library where I work has had a two-period loan policy for at least ten years. We have a normal month loan, but if there is anyone waiting for the book, the loan period drops to two weeks. We have purchased duplicate copies of books in heavy demand. Our overdue notices go out regularly every week. We also watch our interlibrary loans to see if popularity develops for materials not held in the library but which have a real demand.

Perhaps a comparison between the special library and the academic library points out the real desire on the part of the special librarians to meet the needs of their patrons, using the practices in my special library as a guide. Academic librarians may have become more interested in the collections and the buildings and neglected their clientele. It is only when loan policies which create obstacles to the use of the book collection are eliminated that improvements can be made in circulation statistics. I doubt if there is much that could be done in my special library in terms of loan policies or duplicate copies policies that would improve circulation statistics.

It is nice to have elegant curves and mathematics to buttress arguments, but it is the service that librarians give which really matters. Reading this book will give the special librarian some insight into the academic librarian's mind. The text of the book can be read by all librarians with no trouble, including the math. However, I would not list this book near the top on a list of recommended books for special librarians.

Masse Bloomfield
Hughes Aircraft Company
Culver City, Calif. 90230

AFIPS Systems Review Manual on Security, by R. L. Patrick. Montvale, N.J., AFIPS Press, 1974.

This manual will be of considerable interest to those special libraries which are computerized; it will be of even greater interest to computer operations personnel because of its exhaustive handling of the computer security problem. A review of the computer literature for the past several years will reveal the extent to which literature on security is multiplying. The goal of the present work is "to allow each individual computer center manager to assess his needs for security and to become aware of the steps taken by others faced with similar problems."

The author divides the security problem into two parts: 1) good computer center practice and 2) the need for guards, security locks, enciphered communications and related subjects. He points out that tight security is expensive but cheap in terms of the catastrophe possible without it. Security includes not only the adequacy of protection of information from unauthorized exposure, but also against loss, damage, malfunction, etc. The main concerns of the manual are with system design and in system use. All forms of threats are described in detail in the chapters which follow.

The real meat of this volume, however, is represented by the substantial lists of queries which follow each chapter. These are designed to enable individuals responsible for computer operations to evaluate the security of their systems by checklists of questions relating to all facets of computer systems design and operation. By reviewing each set of questions the user can determine the status of his security program and take the necessary action to upgrade the program.

Librarians will be amazed at the seemingly endless array of potential threats to computer security, but it is the computer managers who will derive the most advantage from this work. The Preface states that the manual has been in preparation for two years, and the user will find little occasion to doubt it. Chapter fourteen is a brief summary of the text. This is followed by a two-page bibliography with annotations and a two-page index. Finally, there is a "Reader's Comment Letter" for use in providing feedback to the author. All things considered, this is a valuable addition to the literature on computer security.

C. David Rife
Lockheed-Georgia Company
Marietta, Ga. 30063

COMING EVENTS

Feb. 17–18. Computer Image Processing Division Seminar . . . Hilton-Airport, San Francisco, Calif. Cost: $100. For reservations: Department 100, National Micrographics Association Headquarters, 8728 Colesville Rd., Silver Spring, Md. 20910.

Feb. 26–27. Continuing Education and Public Service Conference . . . Pick-Congress Hotel, Chicago. Theme: Mandatory Continuing Education for Professionals: Prospects and Dilemmas. Sponsor: University of Illinois. Contact: Don Moore, Program Development Specialist, 114 Illini Hall, University of Illinois, Champaign, Ill. 61820.

Mar 7–12. 16th A-V Institute for Effective Communi • ions . . . Indiana University, Bloomington, Ind. Covers: "the art and technology of audio-visual communications." Tuition: $350. Registration limited. Write: The National Audio-Visual Association, Inc., 3150 Spring Street, Fairfax, Va. 22030.

Mar. 9–10. National Federation of Abstracting and Indexing Services, Annual Conference . . . Columbus, Ohio. Theme: Information—Dilemmas, Decisions, Directions. Contact: Secretary, NFAIS, 3401 Market Street, Philadelphia, Pa. 19104.

Mar 22–23. Computer Image Processing Division Seminar . . . O'Hare Hyatt, Chicago, Ill.

Write: Department 100, National Micrographics Association Headquarters.

Mar 23–25. EURIM2 . . . Amsterdam, The Netherlands. A Conference on the Application of Research in Information Services and Libraries. Contact: Conference Organizer, Aslib, 3 Belgrave Sq., London SW1X 8PL, United Kingdom.

Apr 4–10. National Library Week.

Apr 7–8. Computer Image Processing Division Seminar . . . Barbizon Plaza, N.Y. Write: Department 100, National Micrographics Association Headquarters.

Apr 19–22. Catholic Library Association Convention . . . Pick Congress Hotel, Chicago, Ill. Theme: Library Interdependence: Forward in Faith Together.

Apr 25–Apr 28. 13th Annual Clinic on Library Applications of Data Processing . . . Graduate School of Library Science, University of Illinois, Urbana. Theme: The Economics of Library Automation. For information: Edward Kalb, 116 Illini Hall, University of Illinois, Champaign, Ill. 61820.

Apr 27–30. National Micrographics Association, 25th Annual Conference and Exposition . . . McCormick Place, Chicago, Ill.

PUBS

(76-015) **Reader on the Library Building.** Schell, Hal B., ed. Englewood, Colo. Microcard Editions Books, 1975, 359p. (Reader Series in Library and Information Science) $18.95. LC 73-93967 ISBN 0-91072-43-5

Articles dealing with the planning of library buildings are reprinted in this volume.

(76-016) **A Union List of Selected Microforms in Libraries in the New York Metropolitan Area, 1975.** New York, METRO (New York Metropolitan Reference and Research Library Agency), 1975. 322p. (METRO Miscellaneous Publication No. 8) $25.00 ($22.75 prepaid).

Guide to microforms reported by 72 reference and research libraries in metropolitan New York. Six hundred and eighty-five entries, with locations. Includes subject index. Order from; METRO, 11 W. 40th St., New York, N.Y. 10018.

(76-017) **Library Services to the Disadvantaged.** Martin, William, ed. Hamden, Conn., Linnet Books, 1975. 185p. $10.00. LC 75-12955 ISBN 0-208-01372-5

Essays relate to public library services extended beyond traditional patterns, e.g., services to immigrants and services in prisons.

(76-018) **Improving the Dissemination of Scientific and Technical Information: A Practitioner's Guide to Information.** Prepared by Capital Systems Group, Inc., for the Office of Science Information Service, National Science Foundation, 1975.

Focus is on the "primary" dissemination of information: the technical journal or its equivalent.

(76-019) **Modern Archives and Manuscripts: A Select Bibliography.** Evans, Frank B., comp. Chicago, Society of American Archivists, 1975. $11.00 ($8.00 SAA members). LC 75-23058

Limited almost exclusively to writings in English. Emphasis is on archival theory and practice in the United States. Includes subject and author indexes. Available from: Society of American Archivists, University of Illinois at Chicago Circle, P.O. Box 8198, Chicago, Ill. 60680.

(76-020) **Popular Song Index.** Havlice, Patricia Pate. Metuchen, N.J., Scarecrow Press, 1975. 933p. $30.00. LC 75-9896 ISBN 0-8108-0820-X

Indexes 301 song books (all having both words and music) published between 1940 and 1972. In three parts: bibliography of books indexed; index by title, first line of song, and first line of chorus; and, composer and lyricist index.

(76-021) **Encyclopedia of Government Advisory Organizations: A Reference Guide to Presidential Advisory Committees, Public Advisory Committees, Interagency Committees and other Government-Related Boards . . . Serving in a Consultative, Coordinating, Advisory, Research, or Investigative Capacity.** 2d ed. Sullivan, Linda E. and Anthony T. Kruzas, eds. . . . Detroit, Mich., Gale Research Co., c1975. 668p. $75.00. LC 75-15619 ISBN 0-8103-0251-9

Guide to personnel, origin, affiliation, and activities of advisory groups. *New Government Advisory Organizations*, semi-annual supplement, inter-edition subscription, $65.00.

(76-022) **Essays on Information and Libraries.** Barr, Keith, and Maurice Line, eds. Hamden, Conn., Linnet Books, c1975. 211p. LC 75-11651 ISBN 0-208-01370-9

Among the essays in this volume are: "Special Libraries in the U.K. in Recent Years," by W. Ashworth and "The Organization of the Distribution of Scientific and Technical Information," by B. C. Vickery.

(76-023) **Womanhood Media Supplement: Additional Current Resources About Women.** Wheeler, Helen Rippier. Metuchen, N.J., Scarecrow Press, 1975. 482p. $15.00. LC 72-7396 ISBN 0-8108-0858-7

Supplement to Wheeler's 1972 work.

New in Geosciences

Compaction of Coarse- Grained Sediments, Vol. 1

G.V. CHILINGARIAN and K.H. WOLF

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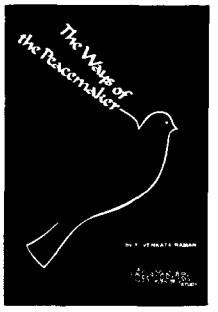

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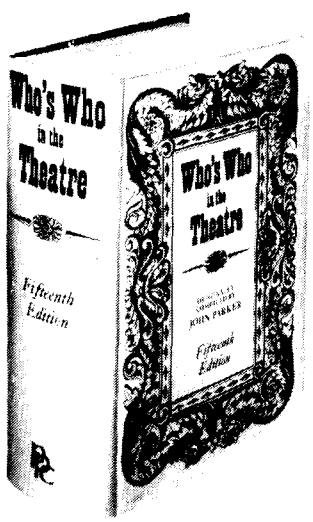

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