

Management Improvements in Libraries

The following three papers were presented at the 39th Conference of Eastern College Librarians, held on November 28, 1953, at Columbia University.

By MAURICE F. TAUBER

Surveys by Librarians

ON THE BASIS of correspondence with the Committee Chairman, I gather that this program is a unit and the parts are inter-related. In the early part of the correspondence with your chairman I was concerned with the implication that there was a necessary serious dichotomy of approach between surveys by librarians and those by management engineers. The implication is probably warranted to some extent. For that reason, I have found it desirable in my comments to note some similarities in the procedures of librarians and management engineers in their analysis of library problems, although the focus and emphasis of each group have been different. Policy making and administration have been the primary concern of library surveys. Specifically, this discussion will deal with the purposes, with some attention to self-evaluation, problem areas, methodology, and results of surveys by librarians. While stress is on academic library surveys, references to public and other library surveys are included.

PURPOSES

Perhaps some of you will recall the article by Louis R. Wilson, "The University Library Survey: Its Results," which appeared in the July, 1947 issue of *College and Research Libraries*. Dr. Wilson, leading surveyor of university libraries, after describing the general and limited types of library surveys, directed his attention at isolating some of the beneficial results of those in which he had participated. Specific information concerning results of five surveys is recorded, with particular attention to accomplishments based on the University of Georgia Library survey, the oldest of the general surveys of university libraries. But Dr. Wilson's final paragraph is worth quoting:

The results of the five surveys have not been so extensive or so substantial as those set forth by Dr. Parker [then librarian of the University of Georgia]. But they are substantial. The criticism could be made that the surveys are very much alike in form and scope, that they are elementary, that when one is read there is little need to read the others. Such criticism is easy to make but is wide of the mark. They have been somewhat alike because they represent prescriptions for libraries, for different libraries, however, and they are directed at specific as well as general ends. They are elementary because they have been intended for administrative officers and faculty members who are not experts in library administration but whose sympathetic understanding and cooperation are essential to the carrying out of an effective, significant library program.¹

It is obviously not possible to discuss in detail the many surveys made by librarians. Among the larger institutions surveyed by librarians are the Library of Congress, Armed Forces Medical Library, the Chicago Public Library, the Cleveland Public Library, the Los Angeles Public Library (made in collaboration with the Los Angeles Bureau of Budget and Efficiency), the Michigan State Library, the Illinois State Library, the New York State Library, the Air University, the United Nations Library, the libraries of the universities of Florida, Georgia, Indiana, Minnesota, Mississippi, Montana, and South Carolina, Texas A. & M. College, Alabama Polytechnic Institute, Virginia Polytechnic Institute, Notre Dame, Stanford, Columbia, and Cor-

¹ *College and Research Libraries*, 8:375, July, 1947. See also McDiarmid, E. W., *The Library Survey: Problems and Methods*. Chicago, American Library Association, 1940; and statement on value of "the perception of a single person," by Devereux C. Josephs, in *Annual Report*, 1946, p. 29, of the Carnegie Corporation of New York.

nell. The special studies at the Montclair Public Library have been well publicized. There are many others, including two series which are ordinarily not available—those made for larger general surveys or for accreditation boards, and those which were made on a confidential basis. As a rule, however, general library surveys and many of the special surveys have been reproduced and given limited distribution. One of the most active public library surveyors has been Joseph L. Wheeler, formerly librarian at Enoch Pratt Free Library in Baltimore, and an expert on library buildings. He has participated in 82 surveys of various kinds.

Very simply stated, the major purposes of a library survey are to describe and evaluate. Whether it is a general library situation, a departmental matter, or a specific problem area, the goal is to gather all facts concerning it and to suggest steps for overcoming any shortcomings which are found.

Self-Surveys.—Any effective librarian is always trying to analyze and evaluate his own library situation. The well-run library is operated on the basis of continuous study of organization, facilities, services, and routines. Self-surveys, or studies of problems by administration and staff, are essential to effective library operation. These studies may be directed at the clarification of the aims and functions of the library, determination of the status of the library, the isolation of factors which limit or contribute to the efficiency of service, or at specific matters of immediate importance, such as a change of organization, evaluation of book or periodical collections, an examination of acquisition policy, a personnel clarification, financial support for special purposes, building alterations, equipment needs, cataloging operations and routines, binding procedures, reference service alterations, problems of users. Self-surveys, as well as those made by outside consultants, are frequently designed to blueprint the course of action for the future.

One may get a glimpse of the current efforts to introduce scientific management into their operations and routines by examination of annual reports of librarians. For example, the following quotation is taken from the "Annual Report of the University of Oklahoma Libraries for 1952-1953":²

² Page 6. Arthur M. McNally is director of libraries.

Various technical changes were made to improve the economy and efficiency of library operations. An experiment was conducted in open-stack service in the general library on weekends and proved pleasing to all concerned; along the same lines, the Lower Division and Pharmacy libraries became fully open-shelf.

In Acquisitions, accessioning was discontinued, multiple order forms adopted, and punched cards used for faculty recommendations and for accounting. In Cataloging, the LC depository set of cards occupying a room 28' × 15' was abandoned, the discarded card cabinets used to expand the general card catalog, and the space added to cataloging work space; pre-ordering of LC printed cards was begun to speed up cataloging.

In Reference, a rotary Kardex was installed to make it easier to find periodicals, and multiple-carbon interlibrary loan forms were adopted. A study of binding standards and costs was made and arate collections in the Biological Sciences Library were consolidated and their catalogs combined, to facilitate use. Several library units improved their processing of non-book materials.

Two other examples of libraries which endeavor to introduce management improvements as part of the current responsibility of the staff are the U.S. Department of Agriculture Library and the Brooklyn Public Library. Librarian Shaw at Agriculture has been a constant student of management engineering applied to library procedures.³

His recent work with the photoclark was based on experiments in the Agriculture Library. The machine was later tested in selected libraries. He is also the editor of an issue of *Library Trends* published in January on "Scientific Management in Libraries."

In an article in the April, 1953, issue of *College and Research Libraries*, Librarian St. John of the Brooklyn Public Library has spelled out in some detail management improvements with specific savings made in that institution. Mr. St. John writes as follows:

The development of management improvements in the Brooklyn Public Library is a joint affair and much of the basic discussion takes place in an Advisory Board meeting. The Advisory Board is made up of superintendents of all phases of our work performed by the professional, clerical, and maintenance staffs. Since they meet weekly there is a regular opportunity of bringing

³ Shaw, R. R. "Scientific Management in the Library," *Wilson Library Bulletin* 21:349-52+, Jan. 1947.

to bear upon any problem, the experience and knowledge of all.⁴

However, Donald Coney, after describing some efforts of libraries and groups to come to grips with specific problems, summarized the current status in library management with a general conclusion that "there is a regrettable lack of first-hand acquaintance with management literature, and of orientation in the management field, on the part of library administrators and those who write on library management."⁵

More and more libraries are facing their obligation to support a program of periodic study of problems. California, Chicago, Columbia, Idaho, Illinois, Iowa State, Harvard, Stanford, Temple, and Yale are a few examples of academic libraries which have been studying problems systematically. Many public libraries—Cleveland, Los Angeles, New York, Montclair, and others have been working constantly at improving operations. Whether it is done on a general basis or for a specific area is not as important as the recognition that the inherited problems of the past must be solved today.

Andrew D. Osborn and Susan M. Haskins, in an article in the October 1953, issue of *Library Trends*, describe the approach to the problem of catalog maintenance at Harvard. The Library of Congress, through staff committees and a consultant on Bibliographic Policy and Cataloging, has established a basis for a frontal attack on a variety of problems. It is not surprising that a state library has set up the following position:

Library Management Officer

\$6700.00 \$7060.00 \$7420.00 \$7780.00

Duties:

Under general direction as to policies, but with considerable latitude for the exercise of initiative and resourcefulness, analyzes library organization, procedures, and operations in relation to the responsibilities and commitments of the library.

Develops policies for economical and effective operation of the central library and its branches.

Initiates suggestions for improvement of the management function of the library system through alteration of the organizational pattern, through simplification of routines,

⁴ St. John, F. R. "Management Improvements in Libraries," *College and Research Libraries*, 14:174, April, 1953.

⁵ Coney, Donald, "Management in College and University Libraries," *Library Trends*, 1:83-94, July, 1952.

and through introduction of new or improved methods of work.

Conducts management research projects designed to aid the director and staff of the library in the formulation of decisions.

Advises on training programs aimed at the development of cost-consciousness on the part of the staff.

Examines new items of library and office equipment for possible use or extended application to library operation.

Does related work and prepares reports as required.

Minimum qualifications:

Formal education or other education or training showing attainment of the level represented by graduation from college and at least one year of graduate study in a curriculum for industrial or management engineers and library science in an accredited graduate institution.

Three years of successful experience in industrial or management engineering or in librarianship.

Freedom from physical defects which would prevent efficient performance of the duties of the position.

The Washington, D.C. Public Library in its *Management Improvement Reports*⁶ contains a series of techniques and methods to be employed in reviewing operational problems. These include staff conferences and meetings, periodic and special reports, budgetary (cost) control, special studies and surveys, spot checks, statistical sampling, time studies and work load surveys, pooling and centralization, rotation of staff, orientation of new staff members, consultation with authorities outside the library (including visits), staff attendance at professional meetings and seminars, study of mechanical and technological processes, issuance of bulletins to the staff, review and analysis of staff operations, maintaining a staff reference collection of library and management literature, forms analysis, and staff questionnaires.

Surveys by Outsiders.—The outside library surveyor is sometimes called into the picture because detailed analysis of operations and routines and other parts of the enterprise has been lacking. It is frequently not possible for the library administrator and members of the staff, with their daily, pressing responsibilities to engage in systematic study of problems. This does not mean that the

⁶ Staff Bulletin No. 24, September 15, 1951.

librarian is necessarily unaware of deficiencies. In truth, many surveys have been initiated by librarians who, through experience and observation, have been able to single out the problem areas. They may have already assembled relevant data on the problems for the use of the surveyors.

Despite the fact that the personnel of an organization may engage in self-surveys, a fresh outside point of view is sometimes desired. To gain this point of view there may be involved exhaustive examination of operations and routines which will confirm conclusions which have been tentatively reached by the administration and staff members. But this confirmation may have beneficial results on the program of the enterprise. In many instances, it may help to impress realistic business men who are accustomed to efficiency experts and respect their findings. An investment in a survey of this type probably can be justified on this basis. Even in self-evaluation of problems, a number of libraries have worked closely with building and equipment specialists, as well as with experts in the development of forms for acquisitions, binding, cataloging, photographic work, circulation, and other services. Usually, in these cases, the consultants work with the librarians through the stage of installation.

Librarians, not having time to conduct surveys, in order to provide facts for budgetary officers sometimes find it desirable to obtain outside surveyors or consultants to work on problems that the library administration cannot itself solve. Specialists in management are also approached to provide data which are generally not available in either the literature or the experience records of libraries.

When library organizations were small, the librarian had little difficulty getting a book from his limited collection to a reader. Records and routines were simple, there were no serious disturbances because of building or financial situations, and personnel recruitment and organization were not constant sources of distress. Surveys, therefore, usually represent one of the concomitants of size and complexity, although it is readily understandable that even a one-man enterprise can become chaotic. With great size, organizational and operational problems become increasingly acute. Without careful planning organizational control becomes divided, records become

cumbersome and difficult to change, new records and forms are not always thoughtfully introduced, turnover of staff is frequent and recruiting of personnel becomes a daily burden, responsibilities of staff members are not carefully outlined, lines of work cross and recross unsystematically, activities are carried on without regard to related activities, space becomes inadequate and equipment insufficient or outmoded. It is time to take stock of the situation.

The authorization for a survey usually comes from an individual or group within the institution—from the librarian, the faculty library committee, the president, or the board of trustees. Sometimes it may come from an interested supporting constituency of the institution, an educational or philanthropic foundation, or, as noted earlier, an accrediting association. The selection of surveyors may be made directly by the institution involved, by an interested foundation, or by a library organization acting as intermediary.

It should be noted briefly also that there are examples of surveys of libraries having been made jointly by librarians and management engineers. The Los Angeles survey was carried out under the supervision of the Los Angeles Bureau of Budget and Efficiency.⁷ The report on "Technical Services," of this survey, for example, includes detailed work analyses and cost studies in the operations of acquisitions, cataloging, circulation, and binding. The New York Public Library survey represents an example of close staff cooperation and collaboration with management engineers. The administration of the New York Public Library, however, has consulted with other librarians whenever it has found it desirable to do so.

PROBLEM AREAS

The nature of the problems met by surveyors differ, of course, from library to library. When a total library situation is studied a typical pattern of problems has generally been considered. This pattern differs only slightly from the pattern found in non-library enterprises. The history of the institution, the governmental relationships, finances, organization, personnel, controls, methods, facilities, and physical factors are

⁷ Los Angeles, Bureau of Budget and Efficiency, *Organization, Administration and Management of the Los Angeles Public Library*. Los Angeles, 1950. Volume I. *General Service Factors*.

consistently parts of the library survey pattern. There are certain functions which are characteristic of libraries, such as use, the acquisitions program, cataloging, reference work or cooperation.

History and Background.—Most general surveys include a section on the history and background of the library. This is developed from various institutional and library reports, library committee reports, published materials relating to the institution, and other records which may be available. The history is important in assessing present problems, since it usually provides the basis for the current status and operational problems of the library.

Governmental Relationships.—One of the important factors in a study of an academic library—and indeed, of other types of libraries as well—is the government of the library. In some instances, library service and support have suffered because specific legislation regarding the place and responsibility of the library has been lacking. Surveys have clearly pointed out how particular library systems might be strengthened by such procedures as codifying regulations, improving the position of the librarian in respect to knowledge of developments affecting the library, activating library committees so that they help in library planning and programs, emphasizing the need for centralization of administrative direction, pointing out deficiencies in personnel policy, and indicating ways by which the librarian can work closely with the administration and the faculty. It has been useful in surveys to refer to successful situations where governmental relationships are concisely stated.

Financial Administration.—Funds are essential for carrying on library system programs. It is therefore important to show how well the library has been financed and how well the funds are being spent. In both the Stanford and Cornell surveys, for example, it was found that the library systems were actually spending more for library purposes than usually indicated in their statistical reports. A detailed examination of budgetary procedures will sometimes reveal hidden expenditures which are actually devoted to library purposes. The study of financial administration will also suggest improved methods of bookkeeping and accounting, records, and reporting. Surveys of some state

institutions have been instrumental in eliminating in acquisitions work for the library red tape which might be necessary for the purchase of a supply of lumber or asphalt by other units of the institution.

Organization and Administration.—One of the usual trouble spots in library service is faulty organization and administration. At Stanford, the central library administration was "found to be too weak to serve adequately the interests of all instructional and research departments." In other institutions it has been found that library units have developed without relation to central services. Moreover, surveys have been concerned with the nature of the organizational pattern as a whole—a clear marking out of the objectives of the library, the type of administrative officers necessary and their responsibilities, the character and number of positions needed to do the work of the library, and the distribution of the positions. A clear statement of functions of each person who is placed on the staff is essential.

Technical Services.—In acquisitions, cataloging and classification, binding and photographic service, operations and routines assume special importance in library administration. Even in small library operations, considerable waste can occur in the use of professional assistants for clerical work. In large operations, which may involve the acquisition, recording, organizing and servicing of materials in all forms on all subjects and in all languages, the use of personnel well trained in subject fields and with linguistic ability has been found to be essential. Difficulties in some library organizations surveyed have arisen because of the failure to employ proper personnel. The technical services in an effectively operated library will provide prompt flow of work, economical routines, simple but adequate forms, and proper use of mechanical equipment. Poor technical facilities and routines have frequently been the primary reason for a library's failure to provide effectual service. Surveys have revealed there is a high correlation between failure in technical routines and the ability of library personnel to provide adequate readers' services.

Readers' Services.—The study of readers' services is concerned usually with the calibre of the reference service, the nature and effectiveness of the circulation system, inter-library loans, and the character and problems

of departmental and branch libraries and special collections. Questions of organization, controls, facilities, and routines are involved here as elsewhere.

Personnel.—In the Stanford survey, the portion of the summary concerning personnel began with the statement: "The problems relating to library personnel are among the most urgent confronting the Administration in its effort to improve the library program." Then followed specific recommendations calling for a reclassification of positions, a listing of needed positions, recruitment of individuals with proper educational background and experience, particular need for personnel with subject specializations, and the inclusion of professional librarians in the membership of the University Staff. In most other surveys, considerable attention is given to the organization, size and training of staff, division of professional from clerical activities, working conditions, salary scale, physical quarters, and esprit de corps.

Holdings.—Examination of a library's holdings becomes an involved task since acquisition and collections need to be considered in conjunction with a study of the instructional and research programs and future plans of the institution. This varies considerably from institution to institution in various time periods, and the considerations of financial support, distribution of book funds and character of collections call for tailored measurements.

Use of Libraries.—The true evaluation of a library should be arrived at by a study of the extent to which its clientele accomplishes its purposes. Company and other special libraries are compelled constantly to justify their existence—they either become integral parts of the organization supporting them or they are short-lived. There is no reason why other types of libraries should not justify their expenditures in terms of the achievement of their patrons. For this reason, those engaged in general surveys are keenly conscious of the need to examine user satisfaction and difficulties.

Buildings and Equipment.—In most general surveys, building problems are of a pressing nature. Lack of space for books, readers, and staff is a common failing. The surveyors are frequently faced with the need to examine plans for new structures, or with the development of plans for renovations or expansions. Unless it is stipulated, surveyors do not draw

up plans for a new building. However, recommendations may involve working out plans for the better utilization of floor space, the purchase of efficient furniture and other equipment, the installation of modern lighting and ventilating systems, the painting of walls, and so on.

Cooperation.—Another general area studied in some of the university library surveys has been state or regional cooperation. In state universities, the problem of support involves the usual availability of limited funds for all state-aided educational and library facilities. The surveyors are sometimes called upon to outline a program of cooperation which will be designed to make the greatest use of the funds which are available. Specialization in collecting, exchange programs, coordinated use of standard forms, and other proposals have been developed. A survey of one state university library has resulted in the development of a council of librarians of all state libraries. Meetings are held for discussion and action on problems of mutual interest.

METHODOLOGY

The methods of surveys are probably familiar to most librarians. Perhaps the best way of indicating the methodology is to follow through a typical survey, that of Virginia Polytechnic Institute made in 1949. Correspondence with the Librarian of V.P.I. began in the fall of 1948, after the President of the institution had received a grant from the General Education Board for a survey. A collaborator on the survey staff was selected. A contract was drawn up, and included the major purposes of the survey (to make a comprehensive study of the entire library situation, and to submit recommendations for a plan of development for the library), an outline of the project, responsibilities of the library staff, distribution of budget, and plan for publication.

Prior to the arrival on the campus, January 5, 1949 (the survey staff was in Blacksburg for two weeks), correspondence with the librarian was concerned with materials available for study. Historical materials, staff manuals, special and annual reports, reports and catalogs, special statements of departmental and general library problems, and other papers were provided the surveyors for study prior to the visit to the campus. The library staff assisted in checking holdings, fill-

ing out job description sheets, and developing reports on areas which apparently had not been studied. Meanwhile, the librarian was carefully building up a spirit of cooperation on the part of the staff.

On arrival, discussions were first held with the librarian and the president. The president, who was looking ahead to a ten-year development of V.P.I., indicated what he expected of the survey, and listed a number of specific questions on such basic matters as budget, personnel, centralization of services, building, and state cooperation. He issued a memorandum to the faculty and administrative officers of the institution asking for collaboration on the survey.

For the first few days conferences were held with the Agriculture branch library committee (there was no general library committee), the several deans, department heads, all other administrative officers, many individual members of the faculty, a representative group of students, individual students, and members of the library staff individually and in groups. The librarian and supervisors were constantly consulted during the stay. Visits were made to the departmental and branch libraries, and to the Rad-Tech and Radford College (Women's College of V.P.I.) libraries. Correspondence was carried on with the extension division and experiment stations of the institution.

After a review of the materials on hand, a series of questionnaires were drawn up: one on holdings and needs to instructional department heads, one on technical services in the various library units, one related to other matters concerning departmental libraries, and one to users (students and faculty members). The responses on the questionnaires were thorough and prompt.

In addition to the interviews, questionnaires, and visits, there was also the task of checking holdings against special lists, which provided some idea of the strengths and weaknesses of the collections. The job descriptions provided a useful body of data regarding the duties and responsibilities of all staff members. Job analyses were also prepared, with members of the survey staff working with staff for certain periods in order to observe the nature of the problems facing them. Staff manuals, organization charts, and flow charts were used where appropriate. Efforts were made to use such standards of effective library

service which have been developed. The practice of using the comparative method was also introduced into this study. V.P.I. is relatively a small organization, and the elaborate analysis sometimes made in other studies was not required for every routine. Despite certain delicate situations, particularly in connection with centralization of services, collaboration and cooperation were excellent. The campus family as a whole was aware of the inadequate library facilities and was anxious for improvement.

During the stay of the surveyors, the problem areas were outlined in considerable detail. Use of an ediphone made it possible to transcribe materials from confidential reports and from interviews. Approximately 20 cylinders of material were recorded before the surveyors left the campus. Before the surveyors departed, an interview was held with the president to inform him of tentative answers to the major questions that he had raised.

Writing of the report extended from the completion of the visit to the month of May. My collaborator on the survey, William H. Jesse, made another visit to Blacksburg before the completion of the report, and of late he has been the consultant to V.P.I. for its new building. The various portions of the survey report were examined by the librarian and his staff, and where errors of fact or misinterpretation arose they were pointed out. The conclusions of the surveyors were drawn on the basis of the evidence. Like all surveys in which there is frankness and cooperation between the parties involved, the findings are based on actual conditions and the recommendations are framed within the bounds of possible achievement. The published report, like many reports of university library surveys, does not contain all the work-sheets, work analyses, diagrams, building sketches and other materials which the administration may use in developing the library program. Questionnaires used, however, were incorporated in the final report. The presentation also included tabular data, organization charts, and other illustrative matter.

The president of V.P.I. used the survey report for the preparation of a condensed report which was distributed widely in Virginia to inform friends and others of the library needs of the institution. It met with prompt response from the Virginia legislature,

which provided the additional book funds and personnel required for improved library service. A \$2,000,000 library building, for which funds have been acquired, is under construction.

RESULTS

The improvements resulting from the V.P.I. survey have been duplicated in other institutions which have had general library surveys. These results, which have been spelled out in detail by Dr. Wilson in the article cited earlier, may be summarized briefly. Surveys have been instrumental in increasing the understanding by the administration and faculty of what constitutes a proper library program, in clarifying the policy or government of the library, in integrating the library program with instruction and research, in raising the position of the library personnel, in gaining increased support for the library, in improving operations of the library, and in stimulating use of the library.

The speed with which implementation of recommendations and suggestions made in surveys is initiated varies among libraries. In a number of instances, changes in operations and routines have been made while the surveyors were still on the campus. In others, as Wilson has pointed out, there may be delays which have developed because of the general slowness of some academic institutions to change. This has been especially true in regard to personnel classifications. Improvements in general organization and in technical services appear to be most speedily introduced.

It is not always possible for specific personnel to have the advantage of putting into practice the recommendations of a library survey. This is undoubtedly a difference between the library survey and the long-term management analysis. The Stanford library survey, by L. R. Wilson and R. C. Swank, is an example of such a situation. Librarian Swank has had the opportunity of taking each recommendation and working with it in the development of the library's services. Elmer M. Grieder has written about some of the organizational results in the July, 1952, issue of *College and Research Libraries*, in an article entitled "The Reorganization of the Stanford University Libraries."

Two of the most important surveys of large non-university libraries in recent years

which were mentioned earlier were those by Joeckel and his associates at the Library of Congress (1939) and by Metcalf and his associates at the Army Medical Library (1943), now the Armed Forces Medical Library. A recent letter from Verner W. Clapp, acting librarian of Congress, points out that the Joeckel committee report marked the beginning of a new era in processing in the Library of Congress, but that so many changes have been made since that time that it is practically impossible to say how many of them were due to the Committee. One consultant to the Joeckel team was appointed to the Library of Congress staff for a year which facilitated the consideration of the committee's recommendations.

The Armed Forces Medical Library reports more specifically on the relation of the survey to the reorganization of the library as follows:

The Survey Committee lent the great weight of its prestige and authority and made it seem much easier to

- (1) convince the higher echelons holding the purse strings that action was necessary;
- (2) gain the confidence and cooperation of the staff;
- (3) steel the souls of the top administrative officers to go ahead with the enormous task of the reorganization.

The Survey Committee also pointed the direction in some specific ways. This was desirable, if only to illustrate the more general charge. Some of the specific proposals were followed faithfully; others have been modified in the course of time and changing pressures, as one might expect.

There is no doubt we have made great progress since the Survey, and that a large part of the progress has been expedited by the Survey findings.

A further examination of the reports of various members of the Armed Forces Medical Library reveals the implementation of specific recommendations. The article by M. Ruth MacDonald in the June, 1953, issue of the *Journal of Cataloging and Classification* on "Cataloging at the Armed Forces Medical Library, 1945-1952," points up in some detail the important changes that have occurred. As Miss MacDonald observes:

The survey recommendations on cataloging were based on a reassessment of the Library's mission at the end of its first one hundred

years, and the changes specified were not indictments of past activities but were due, rather, to a recognition of the Library's enlarged responsibilities.

In most library surveys there is a continued interest in the institutions by the surveyors. In the South Carolina survey, a member of the staff went back to the institution to help install the reclassification project. As a result of the Cornell survey, correspondence with surveyors on various questions has continued even to the present day. In the Dartmouth survey, the consultant worked closely with the personnel in the development of various forms for acquisitions.

What about the future of surveys? Undoubtedly, library administrators will face even greater problems in the future than they have had in the past. The study of individual library problems will necessarily have to go on without end. The skills of management analysis and scientific personnel administra-

tion will need to be assimilated within the general administration of libraries and the professional training of librarians. The various cooperative undertakings (and proposals for new ones) which the library profession has had before it for the last few years will require the earnest attention of all. Specialization in collecting, interlibrary centers, storage libraries, union catalogs, printed book catalogs, and other instruments of cooperation—if developed and expanded—should have definite effects upon the individual library situation in many of the problem areas that have been discussed in this paper. Efficiency in management must be a constant concern in the individual library, and the experiments of any library should be encouraged. There is little need to emphasize the fact that implementation of recommendations is directly related to the morale of the staff and the ability of the supervisory personnel to plan and control the work of the program.

By T. D. MORRIS

The Management Consultant in the Library¹

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CAN THE MANAGEMENT CONSULTANT render a genuine service to librarians?

This is not a question which the consultant can answer in general terms. In fact, the writer's firm feels that this question cannot be answered with a positive "yes" or "no" for any prospective client *until* the client's problem is clearly defined and the objectives of the proposed study have been established. When these determinations have been made,² it may then become apparent that:

- the library staff itself is best equipped to solve its problems; or that
- a library specialist should be retained to conduct the study; or that
- a management consultant is the proper vehicle for achieving the desired improve-

¹ Developed from a slide presentation at the Eastern College Librarians Conference, Columbia University, November 28, 1953.

² The consultant is glad to aid in making these determinations.

ments—usually in collaboration with one or both of the first two approaches.

How can the librarian determine when and for what purposes the management consultant should be retained? The following comments provide background information to assist "the librarian with a management problem" in securing an answer to this question. Three subjects are explored: I. The Role of the Consultant in Management; II. The Techniques of Management Consulting; III. The Application of Consulting Techniques to Professional Organizations such as libraries.

I—The Role of the Consultant in Management

Historically, management consulting sprang from the pioneering efforts of Frederick W. Taylor, who, 70 years ago, evolved and applied "scientific management techniques" to production operations. Taylor, with remarkable insight, defined scientific management as:

- The development of a true science in the operation of an enterprise.

- The scientific selection of the workman.
- His scientific education and development.
- Intimate, friendly cooperation between the management and the men.

While some of the early successors to Taylor (the "efficiency experts") lost sight of the all-important human equation, present-day practitioners have returned to these principles. Above all else, today's professional management consultant is concerned with the best use of human resources through the application of skillful supervision, adequate incentives and working conditions, and the numerous other factors which mold a group of people into a harmonious working team.

To define the role of the modern consultant, let us inquire into the types of services he performs, his personal characteristics and the clients he is serving.

A—Services Performed. Firms engaged in a general practice of management consulting conduct studies and render counsel in all or most of six basic fields of management:

1. Executive Management—which is concerned with over-all questions of organization, policies, objectives and controls. This is the sphere of the top policy group (Board of Directors or Trustees) and the top executive staff (President, Director, Chancellor or Librarian and the key department heads).
2. Personnel Management—which embraces all of the aspects of human relations in any organization, including procurement of personnel, training, assignment, compensation, upgrading, employee welfare and benefit programs, etc.
3. Consumer Relations Management (Sales Management)—which is that phase of managing an enterprise concerned with merchandising and distributing its products or services to its users. While such activities are most readily identified in profit-making enterprises, skillful presentation and distribution are essential elements in the management of any organization which is dependent upon reaching an audience or clientele. The library has a substantial interest in consumer relations management.
4. Office Management—which comprises the administrative and supporting clerical operations of an organization. The chief product of the office is "paper work"—records, files, reports, correspondence, etc. Office management is thus concerned with the personnel, materials, methods and facilities (space, furniture, equipment)

required to process the organization's administrative work. Office management is a major part of library administration.

5. Production and Plant Management—which refers to the "physical aspects" of an enterprise—the personnel, materials, methods and facilities required to manufacture a product as well as to maintain the physical plant and equipment. Production problems are most characteristic of manufacturing organizations. However, a library requires a substantial physical plant and the librarian has an important interest in plant design, layout and maintenance, as well as in materials handling methods and devices.
6. Financial Management—which comprises those policies and procedures by which an organization budgets and accounts for the use of its funds. This is, obviously, an indispensable phase of management in any organization, profit or non-profit.

The typical consulting assignment covers a combination of the above phases of management. Thus consulting surveys are usually conducted by teams chosen to provide the full range of specialized knowledge required.

B—Personal Characteristics of Management Consultants. When my firm added its hundredth staff member recently, a study was made of the characteristics of the group. It was found that all were college trained, almost half holding postgraduate degrees. Three out of four were trained for a business career. Since graduation, the average member of the group had had twenty years of progressively successful working experience, and prior to entering consulting had held five significant positions in several different organizations. Especially striking is the interest of the group in speaking, writing or teaching—indicating that "adult education" is a strong motivation among those who enter professional consulting.

The combined talents of the group cover the six fields of management described earlier, but few members are specialized in a single field since the goal of the management consultant is to become a well-rounded generalist.

C—Clients Served. An analysis of the clients served by the writer's firm during the past eight years reveals that organizations of all types are drawing upon consulting services. Almost half are production enterprises (including construction, manufacturing, mining, refining, publishing, utilities). Another 20 per cent are service enterprises (including

financial, retailing, transportation, recreation). Over 30 per cent are non-profit organizations (including educational, religious, civic, charitable and governmental). These organizations draw upon the services of management consultants for reasons such as the following:

1. *The Need For Specialized Knowledge—Not Readily Available In The Organization*

There is a shortage of executives and technicians in our nation's organizations who have "time to spare" for critical, painstaking self-analysis. Consulting firms represent a reservoir of trained executives and technicians with "time to sell."

2. *The Need For Objectivity*

This frequently is of greater importance than the first reason. Established organizations, like family units, often find it difficult to make an impersonal and realistic appraisal of internal strengths and weaknesses.

3. *The Desire To Have A "Fresh Look"*

Progressive managements are ever alert to the need for breaking through the barriers of habit and tradition. Outsiders with comparative knowledge of management practices can concentrate on conceiving new approaches to old problems, free from the restraints of past policies and practices.

II—*The Techniques of Management Consulting*

Organizations retain consultants for their knowledge and experience either in a particular subject field or in a particular phase of management. But it is not knowledge alone which makes the consultant of value, since there are executives in every organization who possess a knowledge of their business far beyond that of the average consultant. The proven consultant has one ability which is rare . . . this is the ability TO ANALYZE MANAGEMENT PROBLEMS.

In principle this is a simple ability. In practice we have not learned how this ability is acquired or how it can be taught. At best we can describe the steps which the analytical mind employs.

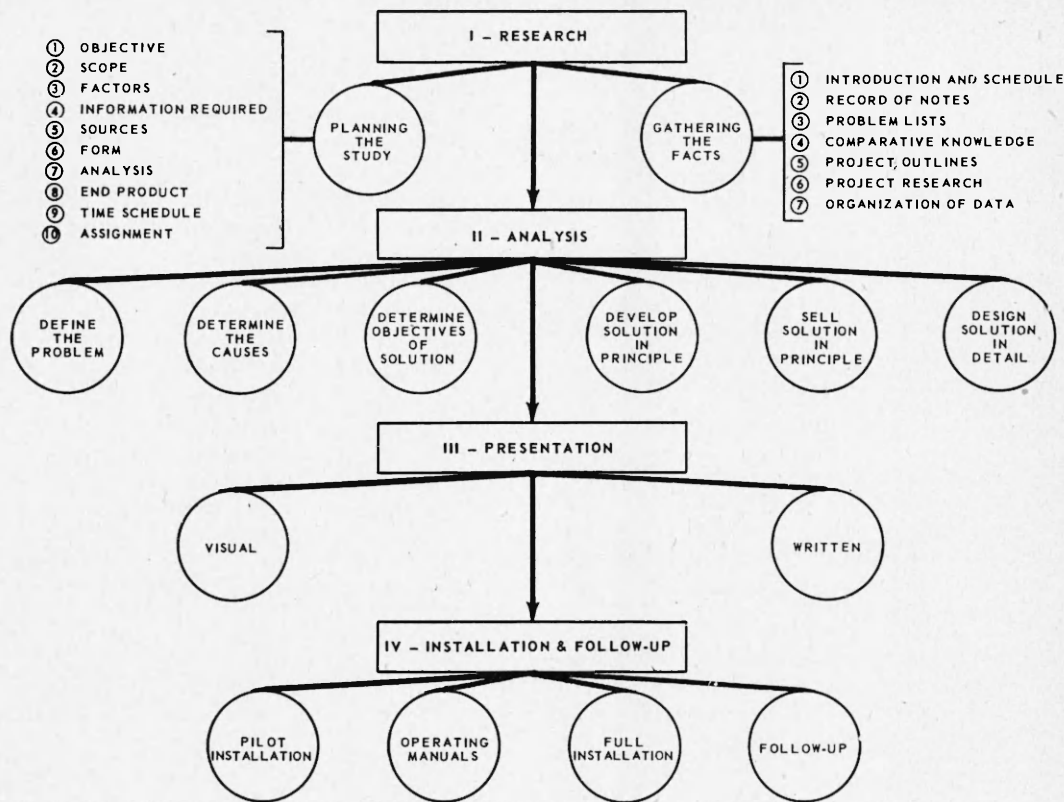
First, a word about the philosophy of the management consultant. In simple terms the consultant's aim is to solve problems which are within his competence or to help management find the means of solving problems which are beyond the technical competence of both. The consultant is concerned

with three criteria in designing a satisfactory solution: workability, timeliness and acceptability. The first criterion means that the consultant must validate the feasibility of his ideas by sufficient test evidence; otherwise he will be presenting experimental ideas which the client must validate. The second criterion requires the consultant to complete his work within the calendar and man-day "budget" arranged with his client, and that he deal in solutions which can be effectuated quickly enough to sustain the client's interest in the change. In some situations the client may have the patience to digest changes extending over several years (long-range improvements); in other cases the client may insist that results be produced immediately, or concurrently with the findings of the survey. The third criterion stipulates that solutions must be understood and adopted by management (present or future). Thus the consultant's ability to present, explain and defend his ideas is just as important as his ability to develop workable and timely ideas.

The management consultant applies this philosophy through the systematic application of principles long recognized by the engineer and the scientist. Careful scrutiny of the management consultant reveals that his "work cycle" consists of the following four phases (illustrated in the exhibit).

1. *Research Phase.* This first phase of a management survey involves careful pre-planning of the study, followed by painstaking fact gathering. Between one-half and two-thirds of the time spent in conducting a management survey is spent in the research phase. It is rare, in fact, that the consultant is able to spend enough time in research to exhaust the subject (or fully to quench his thirst for factual knowledge). As a consequence, most management research is a selective process of exploring, in priority order, the various elements of the problem under study.
2. *Analysis Phase.* Facts are but the raw material of the management survey. Analysis is the application of the creative skill of the management consultant. The process of analysis consists of six steps portrayed in the exhibit: (i) precise definition of the problem under analysis, (ii) determination (from the facts) of the causes of the problem, (iii) establishment of the objectives—i.e., specifications—of a satisfactory solution, (iv) development of the solution in principle—i.e., in broad outline,

THE FOUR PHASES OF MANAGEMENT PLANNING



- (v) confirmation of the acceptability of the solution in principle with the client, and finally (vi) design of the solution in detail.
3. *Presentation.* This is the stage which brings the end product of the management survey into being. The presentation involves not only the submission of a report (visual or written) but the explanation and defense of the findings to the client's organization.
 4. *Installation and Follow-up.* The extent of the consultant's participation in the fourth phase is dependent upon the client's desire for continued assistance in the implementation of the proposals. Whether he administers the installation or not, the consultant keeps in touch with the progress of the installation in order to counsel upon the inevitable adjustments required to introduce a new management program.

A successful management survey cannot be a one-sided effort by the consultant. The client must not only cooperate with the consultant; he must actively collaborate if he is to secure full and lasting benefits from the

undertaking. Examples of the client's part in each phase of a management survey are as follows:

Client Participation In The Research Phase

- Prepare the organization for the study by appropriate announcements and the display of interest and confidence in the survey.
- Review the plan of study with the consulting team and acquaint the organization with the fact finding process and schedule.
- Provide all practical assistance to the consulting team in fact gathering. It is frequently desirable for a member of the client organization to participate in the survey.

Client Participation In The Analysis Phase

- Meet with the consulting team periodically to discuss the validity of findings and alternative courses of action.
- Keep an open and experimental point of view.

—Begin to “condition” the organization to the possible courses of action which will be recommended by the survey.

Client Participation *In The Presentation Phase*

As quickly as possible, bring the key members of the organization into full participation in the review and discussion of the survey report. This frequently involves the appointment of task groups to analyze the report and develop proposed plans of action. Care must be exercised to avoid unnecessary time being devoted to this phase, since it is easy for a survey report to be “talked to death.”

Client Participation *In The Installation Phase*

This is normally the responsibility of the client organization, with the advice and encouragement of the consultant. When the consultant is retained to manage the installation, he becomes in large measure a part of the client's organization.

III—Application of Consulting Techniques to Professional Activities Such as Those Performed by Libraries and Educational Organizations Generally

The writer's firm has performed studies for a large number of institutional organizations. These projects have ranged in duration from a few weeks to more than a year. A review of the benefits derived by these clients indicates that the consultant's contribution may result from three different circumstances:

1. Specialized Knowledge and Skill. This type of contribution occurs when the consultant is qualified by reason of (1) specialized knowledge of the subject, and/or (2) specialized skill and objectivity in analysis.
2. Ability to Correlate Ideas of Others. Here the consultant's contribution lies in formulating definite plans of action by drawing upon the ideas of client personnel, as well as his own.
3. Ability to Secure Agreement On Broad Principles and Objectives. When the issues are concerned primarily with judgment and opinion, the consultant's contribution is to secure agreement on broad principles and objectives in order to stimulate action by those who are responsible for the policy management of the organization and its program.

The reader should reread the above statements so as to understand the fact that consultants are *not substitutes* for effective management, but rather a means of *supplementing* management in the analysis of its problems. The degree and scope of the consultant's contribution varies from organization to organization, and from subject to subject. Keeping this fact in mind, the reader may be interested in the following examples of subjects which have been studied by management consultants in libraries and educational organizations generally.

Examples of General Management Studies

1. Evaluation of the role of the trustees and top policy officials.
2. Evaluation of basic departmental organization to secure best balance in distribution of responsibility and best use of the capabilities of key personnel.
3. Development of long-term plans to increase the administrative competence of supervisors and prospective supervisors.
4. Securing of agreement on fundamental objectives and policies.

Examples of Personnel Management Studies

1. Application of job analysis to identify professional versus nonprofessional work content, and to propose ways of securing greater utilization of professional skills.
2. Wage and salary administration practices.
3. Performance evaluation techniques.
4. Recruitment and training plans for professional and nonprofessional staff.

Examples of Office Management Studies

1. Analyses leading to simplification of work methods; introduction of labor-saving devices; improvement in furnishings, layout and physical factors.
2. Work measurement to improve control of clerical costs.
3. Work planning and scheduling to improve control over professional costs.
4. Improvement of inspection, revision and quality controls.

Examples of Production and Plant Management Studies

1. Studies of materials handling and storage practices.
2. Studies of plant maintenance procedures, programs and cost controls.
3. Studies of building layout and space utilization.

Examples of Consumer Relations Management Studies

1. Development of more effective techniques for the presentation of materials and services to the user.
2. Studies of clientele served and the nature of current demand for services.
3. Forecasts of prospective clientele and nature of future demand.

Examples of Financial Management Studies

1. Development of budgetary techniques to relate proposed and actual expenditures to program performance.
2. Cost accounting analyses of revenue-producing services to establish an accurate basis for fees.
3. Development or refinement of chart of accounts.

When a management survey is made primarily for the librarian or a single major department of an institution, the full focus of the analysis is brought to bear on matters of greatest interest to these officers. The following are typical matters of greatest import:

- Studies of the basic organization structure, and evaluation of the performance and potentiality of key personnel.
- Studies of detailed work methods and procedures, especially in departments having the largest numbers of personnel.
- Studies of personnel utilization, both professional and clerical.
- Studies of layout, furnishings and equipment.
- Studies of clientele and type of demand.

When it is but one component of an educational institution which is being studied as a whole, the library is viewed primarily as it fits into the over-all organization and professional program of the institution. Internal operations of each department are audited in order to identify major opportunities for improved performance. Primary questions considered include (1) size and cost in relation to the over-all organization, (2) adequacy of organization and management in relation to the over-all organization, (3) principal needs for improvement, (4) principal opportunities for reduction in cost, (5) respects in which the library should be subject to controls and

services in common with other departments—particularly on matters of budget and personnel.

Management studies may be undertaken for a group of cooperating libraries. The objectives here may include the framing of plans for the sharing of holdings, facilities and services. Another important objective may be the establishment of uniform accounting and statistical reporting practices to facilitate performance and workload comparisons.

SUMMARY

The Role of The Consultant in Management

The management consultant's value to any organization lies in the fact (1) that he is a trained analyst with varied experience, (2) that he has the time and opportunity to perform a systematic job of management research, and (3) that he is objective.

The Techniques of Management Analysis

The techniques of the management consultant are illustrated by the systematic procedure followed by the trained analyst: (1) precise definition of the problem, (2) precise determination of the causes of the problem, (3) formulation of attainable objectives for an acceptable solution, (4) development of the solution in principle, (5) confirmation of the solution in principle with the client, (6) design of the solution in detail.

Highest results are achieved when the client plays his part throughout all phases of the survey.

Application of Consulting Techniques to Professional Organizations

In libraries and other professional organizations there are respects in which the consultant makes a contribution due to his specialized knowledge, analytical skill, and objectivity. There are respects in which his contribution is to correlate the ideas found in the client organization with his own and to formulate definite plans of action. Finally, there are respects in which the consultant's contribution is to secure agreement on broad principles and objectives in order to stimulate action by those whose professional judgment is the key to the solution of problems.

What Happens When the Management Engineers Leave?

Mr. Kingery is chief, preparation division, New York Public Library.

OBVIOUSLY, the possibilities are two: nothing, or something. While there is great temptation to discuss the specific applications of the principles and procedures Mr. Morris so vividly exposed, or to consider again the body of exciting theory¹ behind the seventy-five recommendations he and his staff developed for the Preparation Division of the Reference Department of The New York Public Library, I had best stay with my original assignment which I understand to be "How to make something happen when the management engineers leave."

Customarily, such gentlemen leave behind a report, which in our case runs to several hundred pages and was made to the Director of The New York Public Library on August 22, 1951.² Thus, our initial problem was to secure administrative acceptance of the report. Fundamental to Mr. Morris' method is his insistence upon the participation of the staff of the organization being surveyed in the survey, itself. This participation was continued by our Director, Ralph A. Beals, in the process of administrative examination of the Report.

The Director authorized the release of the Report to the general and unit supervisors of the Preparation Division immediately upon his receipt of it. For a three-week period it was read, studied and discussed informally by this group. Because of the involvement of these people in the survey, much of the Report itself was already familiar to them and in many instances reflected their own suggestions.

On September 13, Mr. Beals called the general and unit supervisors of the Preparation Division together and asked each one to comment on:

1. The adequacy of the fact-finding on which the Report was based.
2. Their own reactions to the general recommendations made in the Report.
3. Their guess as to the probable reaction of the division staff as a whole to the recommendations of the Report.

There were, of course, some reservations. However, the group found the fact-finding adequate, agreed that all the recommendations deserved careful consideration, and felt that the majority of the staff would react favorably. Accordingly, the Director authorized the release of the report to the staff as a whole.

Beginning with September 14, ranking assistants next to the unit supervisors were assigned the reading of the reports as a whole during working hours. Other members of the staff were given time to read as much of the report as they wished, and as rapidly as copies could be made available.

Having secured the initial administrative acceptance of the report, subject to subsequent examination of specific recommendations, our next task was to secure thorough, reasoned consideration of each of the Report's seventy-five recommendations. From September 19 through October 19, bi-weekly meetings of the supervisory group including ranking assistants were held and each of the recommendations and the plan of installation, included in the Report, were discussed. Many of the recommendations were enthusiastically endorsed without much discussion. In other instances, the initial reaction was emotional and sometimes impatient. When this happened, the group simply moved on to the next recommendation, withholding final opinion. Once the recommendations and plan of installation had been considered, the group back-tracked and reconsidered those upon which we had bogged down the first time through. Because the whole picture was clearer on the second go round, more of the recommendations were endorsed so that at this point, the score stood sixty-two accepted, four rejected and nine held for future consideration. Of those accepted, some under-

¹ Cf. Kingery, Robert E., "A Management Engineering Look at Cataloging," *College and Research Libraries*, 14:52-56, Jan., 1953.

² Cf. Cresap, McCormick and Paget, *The New York Public Library Survey of Preparation Procedures, Reference Department*. [New York, 1951] n.p.

went immediate revision, and all were considerably elucidated in terms of what they meant in policy and procedural changes.

At this point, the supervisory group had had full opportunity to become familiar in detail with and to react in a reasoned way to each of the recommendations. Accordingly, each supervisor was asked to prepare a written report on his reactions to the survey. These reports were later forwarded to the director as evidence of general supervisory support.

Meanwhile, the non-supervisory staff had access to the Report. During the week of October 23, the division chief met with the entire staff of the Preparation Division in eight appropriate groups to discuss the basic theory behind the various recommendations, to clarify misconceptions as to what the Report's recommendations really were, and to answer questions. While, as anticipated by the supervisors, the general reaction was highly favorable, many members were concerned with the effect of a subsequent reorganization on their own jobs. Frankness was the only possibility. They were assured that while nobody at this point could anticipate such effect, simplification of specific tasks would lead to assignment to new tasks appropriate to their abilities.

During the period of the supervisory meetings on the survey, minutes were taken and circulated to the whole staff as well as to the director of the library and the chief of the Reference Department.

On November 7, the chief of the Preparation Division made a detailed report on what had been done up to this point. This report said in summary, "The attitude of the staff of the Preparation Division toward the CMP (Cresap, McCormick and Paget) report is generally enthusiastic against a realization that the report is a blueprint, subject to necessary alteration as further experience and thought may indicate, as to final form of organization, specific procedures, and timing."

Meanwhile, the chief of the Reference Department had circulated the Report to the various division chiefs and their staffs. Late in November, the chief of the Preparation Division was given the opportunity to present the major recommendations in a division chiefs' meeting and to answer specific questions. Again, the general reaction was favorable. Shortly thereafter, the director pre-

sented the Report to the Trustees, indicated that the division's staff recommended its acceptance and requested authority to proceed to implement such recommendations as the staff felt could be undertaken. This authority was given so that final administrative acceptance was achieved. Because of the emphasis on staff participation, the various stages of administrative acceptance and staff examination were largely concurrent.

There is no necessity for going into the technical details of the implementation of the various recommendations. Much of it would not be of interest. Rather, I will discuss briefly some of the things we feel we have learned in our reorganization, things that seem very obvious now.

I must first report disillusionment. During the survey, when many of us spent long hours on it, we looked forward to that happy day when life would be normal again. We realize now that life never will be "normal." For it appears that one result of a successful survey is the recharging of the batteries of those surveyed, so that it seems certain as the days pass and add into years, this critical self-examination by ourselves will never end. This, not any one or all of the seventy-five recommendations, is *the* important result of what Mr. Morris and his staff did with us, and ultimately to us.

We hear much of the importance of communication "up" and "down" these days. Reorganization makes communication even more important. As we developed and installed new procedures, it was necessary to put them in writing, to explain them in meetings, to watch them carefully during their initial use, and then to revise them.

The need for revision arises out of several factors:

- a. In a sense, a survey is done in a vacuum in that as recommendations are built one upon another, the movement is away from the known, present organization and operation into the increasingly unknown and theoretical.
- b. Accordingly, new procedures were also thought through in a vacuum, and while we attempted to bring our full collective knowledge to bear, we were never successful in developing a perfect, final procedure until we had tried it out.
- c. As more and more new procedures are installed, they have impact on each other, so that the new procedures as a body

undergo revision from time to time, and still do.

One reason for the survey was the large and growing backlogs of material in various stages of process. As new procedures were installed for current material, we still had on hand the backlogs partly handled under old methods. The result of this was to create a double operation where some material was handled under new methods and other material under the old. In the later stages, when more of the new procedures were developed, we discovered that, in many instances, it was simpler to disregard the work already done and to handle backlog material as if it were being currently received. This took courage.

Several factors appear to influence the speed of implementation:

- a. Where procedures being changed are long-standing (in this instance, some had been in effect for ten to twenty years or more) and the staff members have been following them for comparable periods, training in the new procedures is complicated by the need to untrain. Often, new staff members can learn new procedures in a shorter time than those familiar with the old ways of doing things. Understanding of this problem removes the danger of impatience.
- b. The number of new procedures that can be developed within a period of time is limited because of the pressure of current work, the limited amount of creative thought and energy available to most of us within a span of time, the difficulty of arranging for staff members to have the necessary "peace of mind" to do it, and the importance of not having the whole organization in a state of flux at the same time.

There is no rule of thumb I can give you on this. I do know that the tempo of reorganization has much to do with the temper of it. The head of the operation must be constantly

on the watch for signs of tension. Spaced change with periods of absorption of the change and recuperation from change is indicated. By consensus, our supervisory group would frequently conclude that we had had enough for the present.

The problems of communication, training and rate of change can be eased if careful attention is given to using the full available experience of the staff in developing new routines—"participation" in short. Few will argue the necessity for it, certainly fewer still will argue that it is easy to achieve. Mr. Morris and his staff launched participation for us, and it was thus easy to continue to involve those most concerned in the various stages of our reorganization. One benefit not anticipated by us was the effect participation has in raising the level of performance of the participated staff member. There is a considerable temptation that no administrator or supervisor can completely resist to be too conscious of the passing of days and months. In these, our final stages of major reorganization, we see clearly that the surest way to move slowly is not to travel too fast.

These then, are some of the things we have learned, and one most important thing—that we will go on learning together.

Finally, there seems to be much discussion on the place of the management engineer in libraries. Should we librarians carry on such examinations or should we go outside the profession? In our survey, we had the helpful participation and advice of the staffs at the Library of Congress, Harvard and Yale. Among our own staff, we had substantial competence in the technical aspects of cataloging. Mr. Morris and his staff gave the catalyst, the competence of the management engineer. Perhaps the important thing now is not to argue about who is going to solve our problems, but rather to bring to bear on those problems the necessary insights to solve them, wherever they may be found, in or out of this profession or that one.