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SPECIAL LIBRARIES

December 1958, Vol. 49, No. 10

INDEXING

Business, Technical and Popular

Periodical Indexes . . . Indexing

Services . . . Z-39 Subcommittee on

Indexing Report . . . New York Times Index

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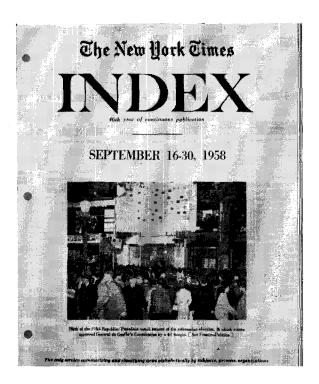
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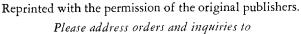
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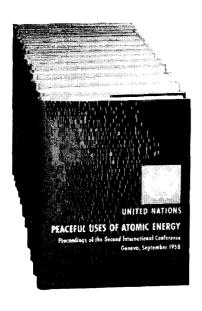




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Official Journal
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Volume 49, No. 10

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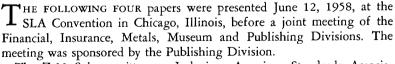
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Periodical Indexing Workshop

Introduction

ROSE BOOTS, Moderator

Librarian, McGraw-Hill Publishing Company, Inc., New York



The Z-39 Subcommittee on Indexing, American Standards Association, in its final report, October 1958, came up with the following definition of an index:

Within the fields of library practice and documentation, an index is a guide to the contents of any reading matter or other documentary materials, which provides a systematic, sustained subject analysis of the contents of such materials arranged according to alphabetical, chronological, numerical, or other chosen order. Each entry is followed by page number, paragraph number, or other indicator showing the exact location of the reference.

The Z-39 Subcommittee agreed also that an index is not a concordance, a glorified table of contents, a mere list of words not in subject entry form, a glossary, a checklist, a history nor a background analysis of an action arranged chronologically.

In this workshop we are concerned only with the important branch of periodical indexing. The importance of indexes is so widely recognized and the want of them so frequently deplored that no argument in their favor seems necessary among a group of librarians. With the vast accumulation of scientific and technical publications being published today, the need for adequate indexing is becoming increasingly necessary.

There are three types of periodical indexes: 1) the index to a single volume; 2) the cumulative index to several volumes of a single periodical; 3) the cumulative index to a large number of periodicals of varying scope and frequency of issue, for example, indexing services. 2 Our speakers will cover all three types of indexes. Two of them will explain the methods used in indexing magazines in the fields of business, industry and technology; one will present the problems encountered in indexing general and popular magazines; and another will describe the procedures followed by indexing services, specifically the *Applied Science & Technology Index*.

Fortunately there has been much improvement in indexing serial publications in recent years. The room for improvement is obvious when examining some of the earlier periodical indexes. Instead of a true table of subjects in one alphabet, many indexes offered several alphabetic lists of titles or subjects found in the various departments of the magazine under such headings as "The Week," "Editorial," "Contributed Articles" or "Correspondence." This forced the seeker to consult several alphabets to obtain all material on a given subject and often separated statements of fact from editorial comment or the criticism of correspondence.³

Yes, indexes have come a long way. There is always room for improvement, however, and that is why we are here today. We hope that you will obtain many practical ideas from this session. Perhaps our indexers will also take back to work some valuable suggestions from you—the users of the indexes.

Strange as it may seem, precious little of a practical nature has been written on the subject of periodical indexing. To my knowledge there is no adequate text covering all of the problems encountered in indexing periodicals. Most of the literature on indexing covers primarily book indexing. Surprising, too, is the fact that there are no practical courses devoted ex-

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clusively to periodical indexing—at least in the New York area. These are the reasons which prompted this meeting. We are proud and happy to say that, as a result of the interest shown at this meeting, the School of Library Service, Columbia University, New York City, plans an Institute On Indexing Periodicals, May 25-29, 1959, immediately preceding the SLA Convention in Atlantic City, which will be open to all SLA members. I am sure that the members of many library staffs throughout the country who are responsible for indexing company publications, as well as other magazines and professional journals of particular interest to their organizations, will want to take advantage of this opportunity to widen their horizons. In my estimation indexers and catalogers are going to play an ever-increasing part in the fields of documentation, information retrieval and machine literature searching, all of which are going forward with great strides today.

Indexing, in many respects, at times seems like a thankless job—many people just take it for granted, as often they are inclined to take libraries and librarians for granted. The indexers at the New York *Times* have some favorite sayings which help to bolster their morale from time to time—one of them is "Any fool can write, but it takes a genius to index." I go along with this.

- 1. WHEELER, Martha Thorne. Indexing Principles, Rules and Examples, 5th ed. Albany: New York State Library, University of New York, 1957, p. 7.
- 2. Ibid., p. 45.
- 3. Ibid., p. 44-45.

ROSE BOOTS, who has headed the library at McGraw-Hill Publishing Company since 1949, received her B.A. from Indiana University and her B.S. from Columbia University School of Library Service. Before joining the publishing field, she was a financial librarian in the Marvyn Scudder Financial Library, for Merrill Lynch, Pierce, Fenner and Beane and for Standard Brands, Inc. From 1953 through 1956 she taught a course on "Special Libraries" at Pratt Institute. A distinguished member of SLA, Miss Boots has served the Association in some capacity every year since 1934.

Indexing Business Week

MRS. LYNDON ARNOLD, Indexer Business Week, New York



THE BUSINESS
WEEK INDEX
covers the editorial
content of the magazine from 1930
(BW started publication September 7,
1929) to date and

the advertisements from 1944 through the first half of 1956. It has been published semi-annually, in booklet form, from 1938 to date. From January 1930 through December 1937 the index is available on cards only. The index is kept up to date by a current card file, which is cumulated for six months. The entire index, which is not cumulative, is

housed in the *Business Week* library where it is easily accessible to the editorial, advertising and library staffs. After the printed semi-annual index is published, the index cards for this period are discarded and the printed index is used by the library staff for answering questions.

The indexing is done by an indexer (formerly the librarian of Business Week) who does the work at home and is not a member of the library staff. The indexing and the typing of the cards require about 20 hours a week. An average of 300 cards are used for each issue and approximately 8,000 cards for each six months' cumulation for the printed index. The printed index runs to

about 90 pages, with three columns to a page.

Each issue of Business Week is indexed as soon as it comes off the press. Entries are typed directly on a glossy stock, 10 by 15 inches, with a carbon backing, which is marked off in 10 squares of 3 by 5 inches. This paper is manufactured by Copy Papers, Inc., 121 West 17th Street, New York 11, New York. By means of the Ditto duplicating process, six copies of each sheet are made by transferring the 10 entries to heavy sheets of index paper the exact size of the original. These six heavy sheets are then cut into 3 x 5 inch cards, thus producing six duplicate sets of index cards. The original glossy sheet is kept by the Duplicating Department for about a month in case a rerun is required. This process is rather expensive but to date it is the only way which has been found to obtain the six sets of cards needed for the indexer, the library and four news bureaus in Washington, Chicago, San Francisco and Los Angeles, all of which need the current index. The cost of the paper runs to about \$140 a year, and the duplicating and the cutting amounts to about \$450, making a total cost of \$590 a year.

All six sets of cards are sent to the Business Week library where one set is sorted out and filed in the cumulative six months' card file. This operation requires about three hours. The other five sets are sent to a company service department, which estimates that sorting and alphabetizing the five sets, for the indexer and the four editorial offices, takes from five to six hours each week. The set that goes to the indexer for her cumulative master file is proofread at the end of six months and then sent to the printer. It takes from two to two and one-half months for the final index to come back from the printer. A number of different printers have been tried, but they all seem to take about the same amount of time. At present the index is being printed by an Ohio printer whose rates are more reasonable than those of firms in the New York area.

All articles are indexed alphabetically by subject and by the names of individuals, companies or government agencies, in all

cases where such is either the subject of the story or has a primary relationship to the topic covered. The following are examples of subject, individual and company cards:

AUTOMOBILES

Chrysler Faces Up to Its Troubles: First victim of the auto industry's recession is going through a major reorganization (with chart and 3 illus) p. 28, May 3.

COLBERT, L. L.

Chrysler Faces Up to Its Troubles (with chart and illus) p. 28, May 3.

CHRYSLER Corp.

Chrysler Faces Up to Its Troubles: First victim of the auto industry's recession is going through major reorganization (with chart and 3 illus) p. 28, May 3.

No prepared list of subject headings is used—the same main subject headings are used in every index. As a check for subject headings the back copies of the index are used. The number of cards needed for each article varies—three or four cards are sufficient for some while others may require 14 or 15 cards.

In general, broad subject headings are used, such as Aviation, Petroleum, Taxation, Education. This makes it easy to locate all stories on a given subject. For example, articles on textiles are listed under that heading with subheadings, Rayon or Wool. Under the heading Wool there will be a cross reference card, see Textiles—Wool. Under the subject of Automobiles there are subheadings, Dealers, Models, Foreign. Articles on foreign cars are under the heading Automobiles—Foreign, also under the main heading of the country where they are produced. The following cards are examples of these entries:

AUTOMOBILES

Foreign

Fiat Will Float Its Cars Direct To U.S. West Coast p. 52, Mar. 29.

ITALY

Fiat Will Float Its Cars Direct To U.S. West Coast p. 52, Mar. 29.

In very few cases are foreign company names used, except when the company is

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well known, such as Rolls Royce. This is not true in the case of American companies. There is always an entry for the name of the company as well as a listing under the heading Automobiles.

General articles on labor are listed under this subject, with the subheadings, Boycots, Legislation, Strikes and so forth. Labor bargaining articles are always under the company name, the union and government agency, if one is involved. Proper names of the unions are not used, as few people know them, except for a few of the very largest ones. The heading AFL-CIO is used, with a subheading under the industry, such as Automobiles, Steel or Rubber. Articles dealing with independent unions can be found under that heading. In every case, under the name of the company involved, numerous cross references and "see also" cards are made.

Short items, of which Business Week has many like the "New Products" column, con-

sisting of only five or six lines, are marked by a number sign (#). This is of great help to the editors when they are referring back to an article written by them in the past. In most cases, they remember whether it is a long or a short story they are seeking. Full entries under each heading are listed in the order of publication so as to allow a quick and easy grasp of each article at a glance. If an illustration, chart or table is used with the article, it is so designated on the entry.

The printed index is not supplied automatically to all subscribers, but it is available upon request for \$1 for each six months, January-June and July-December.

The librarians of *Business Week* use the index constantly for answering questions of editors as well as those of subscribers, advertisers and librarians of other institutions. The four out-of-town news bureaus use the index extensively to inform readers, subscribers and advertisers in their areas about articles which appeared in the magazine.

MRS. RUTH ARNOLD has been indexing Business Week for 22 years, from 1936 to the present. She joined Business Week in September 1929 as assistant librarian and the following year became the librarian, a post she held until 1942. Although she now works at home, devoting about 20 hours a week to the BW index, Mrs. Arnold has the distinction of having the longest employment record of any living individual on Business Week.

Indexing McGraw-Hill Magazines

HELEN SCHAEFER, Chief Indexer, Library
McGraw-Hill Publishing Company, Inc., New York



Publishing Company's magazines are indexed in the McGraw-Hill Library by two and one-half persons, two full-time

indexers and one part-time indexer. The magazines include two bimonthlies, American Machinist and Chemical Engineering; five weeklies, Chemical Week, Electrical World, Engineering News-Record, Petroleum Week and Product Engineering; and seven monthlies, Coal Age, Control Engineering, Engi-

neering and Mining Journal, Factory, Fleet Owner, Food Engineering and Power. As can be readily seen from these titles, the subject matter to be indexed covers a wide variety of specialized information, ranging from the chemical field through the mining, construction, electrical, oil and power industries, to the latest developments in metalworking practices and plant trends. It even covers such unrelated fields as new products and processes in the food field, the trucking industry and the new, highly specialized field of control engineering and instrumentation.

No three indexers could hope to have sufficient technical background and knowl-

SPECIAL LIBRARIES

edge of so many subject fields to fully understand and interpret each of these publications. The fact that one of the indexers has a brother in the chemical field, that one comes from Kentucky and feels an affinity for coal mines and that I have developed a strong interest in oil (purely mercenary to be sure), makes our work more interesting and challenging. To help cope intelligently with this vast amount of highly technical information, we work more closely at times with the various editors than would be usual if the magazines indexed were of a more general nature.

Basic Indexing Rules

We have prepared and provided each indexer with 1) a general guide for indexing all magazines; 2) specific rules for indexing and printing each one; and 3) a list of subject headings for each publication. These form the basis from which the indexer works. The specific rules for the individual magazines list the sections to be indexed, explain how thoroughly they are indexed, note sections that are not indexed and give the footnotes and symbols used. All of these rules vary with each magazine.

Following are the specific rules for indexing American Machinist:

COVER: The cover is indexed according to the description given on page 2 of the magazine. Index by subject, using the exact title given on the cover. (cover) should be listed on each card after the title.

SPOT NEWS OF METALWORKING: Omit

GAGING METALWORKING: Omit

EDITORIAL: Index editorials by subject and by the name of the editor. Use exact title. On the subject cards (ed) should follow the title to indicate that this article is an editorial.

FEATURE ARTICLES: Articles are indexed by subject and author, or authors. Index also by company if the article is a special report on a particular company.

SPECIAL REPORTS: Index reports by subject, author and company if it applies to a particular company, and also under "American Machinist Reports." Use exact title on all cards. Type (report) on subject and company cards after listing.

ROUND TABLE: Index on one card consecu-

tively. "Round Table"—dates and pages for each issue. Omit "Round Table" discussions.

PRACTICAL IDEAS: Index by author and subject. (P.I.) is listed on all subject cards after the author's name.

REFERENCE BOOK SHEETS: Index by subject and author. There is also one card under "Reference Book Sheets" on which dates and pages are added consecutively. (Ref. Bk. Sheet) is listed on subject cards only, after the name of the author.

NEWS OF METALWORKING: Index this section by subject.

BOOK REVIEWS: Omit

NAMES IN THE NEWS: Omit

NEW SHOP, EQUIPMENT, MATERIALS AND PARTS: Omit

TALENTED TOOLING: List dates and pages consecutively on one card under title "Talented Tooling."

DIEMAKER'S KINKS: List on one card using title "Diemaker's Kinks" (same as above).

SHOP SHOTS: List on one card using title "Shop Shots" (same as above).

FIELD REPORT USA: Index first article only, if important, by subject.

Subject Headings

The selection of subject headings is one of the most important and difficult problems. The subject headings used are determined by the indexers and the editors and are constantly being revised. All changes must be approved by the editor of each magazine. When there is a major revision of a subject heading list for any publication or when a list of subject headings is compiled for a new magazine, the librarian meets with the indexers and the editors to discuss the problems and methods of procedure. When it is necessary to add a new subject heading or to change an old one, we check reliable indexing services, Subject Headings Used In The Dictionary Catalogs Of The Library of Congress (6th edition, 1957) and other sources, to determine what, if any, headings are being used for a new process or develop-

After selecting the new heading or headings that we believe to be suitable, we check with the editor of the magazine who either approves the new heading or suggests one he feels is more suitable. Most of the time we arrive at a satisfactory agreement but sometimes we do not. If the heading isn't too objectionable, we go along with the editor because, in the final analysis, we are indexing the magazine primarily for the use of the editors and the subscribers and we want to use terms familiar to them. It is understandable that the subject headings for each magazine be geared to the terminology used in the publication.

In 1955 we were called upon to begin an index for a new McGraw-Hill publication, Control Engineering. Since this was an entirely new field of publication, it was difficult to find any subject headings that would cover such specialized information. After talking to the editors we decided that they themselves weren't quite sure just what subjects they were going to cover and that the indexer had better draw up some sort of a subject headings list. This was done by going through the first few issues and classifying the articles by broad categories, such as computers, systems and telemetering. With this initial list in hand, the indexer and editors reviewed the entries and were able to make more specific breakdowns and to add additional headings. By this time the editors had more definite ideas about what they were going to write and include, and we had a better idea of what we were going to index, so the magazine and the index grew together.

Just last year one of the magazines decided that it needed a "bigger and better" index for promotional purposes. The proposed new, "bigger and better" index was, in itself, a wonderful idea, but the editors wanted not only additional subject entries but seven separate indexes (company, author, subject, commodity, geographical, title and personal) and an enormous list of cross references. We won half of the battle. Commodities and countries are listed in the regular subject index. The personal and title indexes were finally decided against, but the cross references remained. However, we have been informed that the new index has received favorable comment, and this proves that what one might think incongruous is sometimes just what the reader wants.

Preparation of Index Entries

When an indexer is ready to index a magazine, she takes out her list of subject headings and her specific rules for indexing the particular publication at hand and then begins to check through the issue itself. In some cases almost everything in the magazine will be indexed, and in others certain sections, such as new equipment briefs, book reviews or personals, will be omitted. The indexer begins with the first item to be indexed and classifies it by subject or subjects, author or authors, if any, and in some cases by company name. These entries can be written in the issue itself or typed immediately on the index cards, depending upon the preference of the indexer. After examining the articles, the indexer refers to her list of subject headings to determine the proper classification. If at all possible, one of the established headings is used.

Entries are typed on 3 x 5 cards, which come in perforated strips of eight with a wax carbon beneath so that an original card and a copy are typed at the same time. Using strips of cards saves time because it eliminates inserting and removing individual cards. These cards are made by Waxon-Carboff, Inc., 4 Commercial Street, Rochester 14, New York. The company will send sample sheets and a booklet giving discounts. The cost is approximately \$7 for 1000 sets.

One 3 x 5 card is used for each subject, author and company entry. The form used in typing is the same for each magazine. All typing is double spaced. The cards are typed as follows: in the upper left hand corner the subject heading, author name or company name, depending on the entry being made; in the upper right hand corner the volume number; below and indented, the title or short abstract of the article, as concise as possible, followed by the date and page number.

Subject Cards

Generally, most feature articles are listed under approximately four subject headings, brief items under two headings. When possible, the exact title of the article is used, especially if it is self-explanatory and to the point. In some magazines, however, catch titles or phrases are used by the editors; therefore it is necessary for the indexer to invert the title or to change it completely. When indexing briefs or news items that do not have a title, the indexer must invent one. In all cases the important word or phrase is, if possible, given at the beginning of the title, so that in long alphabetical listings it is easy to locate a particular article.

All descriptive words and symbols are entered on the subject and company cards, according to the written rules for indexing each magazine. These are entered after the title. Examples of descriptive words and symbols used by the various magazines are:

* (denotes illustrations)
(report)
(charts)
(tables)
(e) Equipment
(N) News items
(T) Trends
(D) Developments
(C) New Components
(Ed) Editorials
(DR) Design Roundup
(SP) Significant Parts
(P.I.) Practical Ideas
(P.D.) Product Development

Example: Subject Card Form

Subject heading Vol. # of magazine
Proper listing decided upon
Author's name

Date & page #

Year

Example: Subject Card

Metalworking 102
Where metalworking is heading
(charts) (report)
Mar. 10—113-124
1958

Author Cards

If there is more than one author, a card is made for each. Descriptive words and symbols are not included on these cards, except an asterisk (*) to denote illustrations, provided this symbol is used by the magazine being indexed. The asterisk is placed before the page number.

Example: Author Card Form

Author's name Exact title Vol. # of magazine

Date & page #

Year

Example: Author Card

Tucker, Spencer A. 102
The ABC's of machine-hour rates
May 5—113-128
1958

Company Cards

These cards are set up exactly as the subject cards, using the company's name in place of the subject, followed by the title, author's name, date, page, year.

Example: Company Card Form

Company name Vol. # of magazine Proper listing decided upon Author's name

Date & page #

Year

Example: Company Card

General Electric Company 99
How GE makes gas turbines
George V. Keller, Jr.
(charts and tables)
(report)
June 6—137-152

Cross Reference Cards

These cards are simple "see" and "see also" references. Two sets of cross reference cards are made, one set for the cumulative index and one set for the printer's file. After the index is printed and before the printer's cards are destroyed, the cross reference cards are removed and used again for the next year's index.

Number of Entries

The size of an index depends upon the decision of the editor of the publication concerned. A certain number of pages, ranging from 4 to 29, is allotted to each index. Some publications do not feel the need of a very detailed index, either because of the editorial content of the magazine or because of the actual cost. Other editors prefer more editorial or advertising pages than a detailed

index. The size of the printed index limits the number of entries that can be assigned to each article. An index is kept to the specified number of pages. This occasionally presents a problem to the indexer, for it may mean not only a less thorough indexing job but a more difficult choice for the indexer. If she has to choose just two subject headings when she would like to choose four, she can only hope that the reader will check under at least one of the headings she has chosen, rather than under one she had to omit.

The editors generally realize this problem, however, and as a result a number of our indexes have grown considerably in the last few years. For example, the Chemical Week semi-annual index ran 29 pages in 1957 compared to 8 pages in 1951, and the index for Engineering & Mining Journal grew from 12 pages in 1956 to 20 in 1957. We keep a record of the number of entries we make for each issue. In this way we can judge fairly well if an index is going to grow out of proportion. If this happens, we must talk with the editor, who decides if a more detailed index is justified or if certain sections will have to be omitted. Happily, in most cases, the editors have increased the size of the index rather than omit the indexing of certain sections.

Chemical Week is one publication in which everything possible is indexed. The lead story is generally regarded as a feature story and as such would probably be indexed under two, three or four subjects, plus company entries. Rarely are any articles signed by a particular author or editor, but authors are indicated for the special reports. Any author's name given, however, is indexed. In Chemical Week several sections are termed newsletters, the first of which is the Business Newsletter. Each of these newsletters may cover six or seven separate developments or news stories about companies. In the case of newsletters, all items are indexed by subject and by company. The company expansion section of Chemical Week is indexed only by company name. New product briefs, equipment briefs and research briefs are indexed by subject and by company. All feature articles are indexed in the same way as the lead story. All companies are indexed by company name, except in the rare case of an article which mentions briefly six or more companies in the space of a few paragraphs. This magazine has one of the larger indexes, but in indexing all of the publications the procedure followed is about the same, though perhaps not as detailed.

Printing and Production Procedures

After the magazine has been indexed, each strip of cards is separated by tearing along the perforations. All cards are separated into three categories—subject, author and company—then alphabetized under each category. The original cards are separated from the wax carbons. The originals are stamped with the name of the magazine in the right hand corner, above the volume number, and then filed by subject, author and company in the cumulative index file. The carbon copies are not stamped with the name of the magazine, and the volume number and the year are crossed out in pencil because the printer does not need this information. The carbon copies are filed in a separate file for the printer, cumulated for the current year. They are filed in the same order as the originals. Angle tab guide cards in the original cumulative index file and orange guide cards in the carbon printer's file are used for each subject heading and to separate the author and company cards. All of the filing is done by the indexer who is responsible for a particular magazine.

The cumulative file of wax carbons, or printer's cards, contains only current, non-published material. This duplicate card index serves an additional purpose by making available for quick reference, very current material on a particular subject, without having to use the 20 year cumulative file.

Indexers are responsible for overseeing the printing of the indexes, so all editing and proofreading is done by them. The frequency of an index depends upon each publication. As a general rule, semi-annual indexes are prepared and printed separately for the weekly magazines, separate annual indexes for the bimonthlies and annual indexes for the December issues of the monthlies. Some of the latter are printed separately also. The cost of printing depends upon how many pages the index runs, how many copies are printed and whether or not the index is printed separately or as part of an issue.

When an index is ready to be printed, the carbon copies are edited. The subject heading is left only on the first entry of each subject for which there are two or more entries, and subsequent duplicate headings are crossed out. All revisions, corrections and additions are made in pencil, and the cards are numbered consecutively with a numbering machine. They are then ready for the printer and are taken by the indexer to the Production Department. Each index is handled by the member of the Production Department who does the production work for the magazine concerned. The printer who prints the magazine prints the index too. If the index is to be varityped, it is handled by the Varitype Department. All galleys, together with the wax carbons, are returned to the indexers for proofreading. The proofread galleys are then returned to the Production Department to be made into pages. Some editors like to see the galleys or the page proofs so that they will know what they are finally going to publish. Occasionally they make deletions and changes. The printer's cards (wax carbons) are kept for two months in case any errors have to be verified.

When the annual index appears in the December issue, we have a deadline to meet. The annual index copy must reach the printer before the November issue of the magazine is published, so two issues of the magazine must be indexed before they are actually published. This is accomplished by keeping in touch with the editorial departments of the magazines, beginning sometime in October of each year, to make sure that information is indexed from the author's copy, galleys or page proofs of articles, whichever we can put our hands on first. Here again the indexers work with the editors. Usually the managing editor arranges for us to have the copy that is available. However, complete copy may be late or not available at all. In such instances we have

had to index an entire article from just a first page, and, on occasion, we have even indexed an entire issue from a contents page, with notes from the various editors.

When the November issue is indexed, the printer's cards are edited, numbered consecutively and taken to the Production Department. While the index is being printed in galley form, the December issue is indexed. When the index galleys are returned they are proofread and corrected. The cards that have been typed for the December issue are numbered and inserted by numbers under the correct subject heading on the galleys. The galleys and the December entries are then returned to the printer with instructions for page proofs to be made. The pages are then returned and proofread.

Other Indexing Services

Our indexing service does not end with the indexes we prepare. Fifteen other Mc-Graw-Hill magazines publish printed indexes. Only six out of 36 McGraw-Hill magazines are published without indexes, so it can be seen that the company thinks indexing is important! A few of the indexes are simple listings of articles, others are more detailed. Some of the magazines have continued to do their own indexing for historical, special editorial or cost reasons. The actual indexing is usually done by one of the editors or editorial assistants. From time to time these editors call upon us for help with their indexing problems. We answer their specific questions, explain in detail the methods we use, give them samples of our printed indexes and rules for indexing, show them various sources for subject headings and lend them books and articles on indexing and abstracting.

The McGraw-Hill indexes that are printed separately are not sent automatically to subscribers but they are available without charge (except *Business Week* and *Chemical Week*) upon request. Some magazines maintain mailing lists for indexes.

Our cumulative index files, covering approximately 20 years for each of the magazines indexed, with the exception of new

publications, provide one of the most valuable reference tools in the library. They are used constantly for reference by the editors, sales and business managers and the reference librarians. The editors use the files to obtain previous information they might have written on a particular subject, for references to use as "fish-backs," or even to make sure that they haven't already reported on something that turns out to be "old hat."

The McGraw-Hill indexes have grown from a simple aid for editors and subscribers to an important tool for all subscribers, manufacturers, advertisers, advertising agencies, librarians and promotion men in our own and related industries. We have every reason to believe that the demand for our services will continue to grow. We enjoy the recognition that has made our indexes a vital part in the communication of information.

HELEN SCHAEFER, the chief indexer of the McGraw-Hill Publishing Company, is responsible for the indexing of 14 of the firm's technical magazines. She began her career in the library as a clerk 11 years ago, in 1950 became the assistant indexer and four years later was made chief indexer. Miss Schaefer has studied library science at Columbia University and elsewhere and was trained for her job by the former chief indexer who had indexed McGraw-Hill journals for 24 years.

Indexing General And Popular Magazines

ANN BLANCHET, Chief Indexer Time, Inc., New York City



I NDEX, A SECTION of Time, Inc. Library, indexes and keeps cumulative files of Time, Life, Fortune and Sports Illustrated.

News and picture magazines with many-sided appeal and mass circulation present unusual indexing problems; there must be a wide range of subject headings and detailed annotation. We consider first who will use the index, what he will want to check, and how he will ask for it.

Uses And Users

Choice of subject headings and annotations on each card is determined by the varied demands on Index. Editors and researchers want to know if and when a story has been published. For them our cards must be fully annotated to differentiate one story from another, a most important factor in

continuing news stories. Many times they ask for background detail, a quotation or a footnote; if we are to give them the exact reference quickly, the index cards must show some of this detail.

Advertising promotion uses Index for roundups of coverage on an industry or a firm. Recently we had to list every item on aviation in *Time* during the last two years. Another project was a list of 140 recording artists to check for mention in *Time*. With a list of issue dates and page numbers, Ad promotion ordered all the tearsheets and then made a selection for a promotion piece.

Sports Illustrated Ad promotion used S.I.'s color spread "spectacles" on Caribbean and South American sports, which resulted in an ad placed by a south-of-the-border airline.

The letters correspondents who handle queries from readers and subscribers come to Index for the issue date and page number of requested stories. In 1957 Index checked 8,256 letters and found 96 percent of the stories.

Subjects most frequently asked for are book and movie reviews, diseases, satellites and paintings in color reproduction. Seldom do inquirers give the correct title of a painting or the artist's name, but they do give a detailed description, even down to the small dog in the right hand corner. We try to find the picture.

Requests from outside the company account for about half of the total requests. They come from special libraries, advertising agencies, radio and TV programs, students (from graduate schools down to the sixth grade) and the general reader who has a personal reason for wanting a story.

A survey of telephone calls for one day showed the variety of reader interests: a wireless electric light bulb, Gettysburg Battlefield, Polish tapestries, Knights of Columbus, mushroom rites of Mexican Indians, Brussels World's Fair, properties of light, DEW Line, Miss America, recipes for East Indian chicken dishes, punch shot in golf, roll-flow forming of metals, richest men, labor costs of non-productive worker vs. productive worker, Cleopatra's Barge and snickering purple baboons.

Indexing Practices

Indexers watch for heading and subheading uniformity and adequate cross references. Uniformity of subject headings is most important for a cumulative index, especially for a news magazine.

Cross references are used generously. "See also" references save duplication and indicate related material: VIENTIANE See Laos—Cities and Towns—Vientiane; MEDICINE See also diseases by name; Doctors; Drugs; Hospitals; Surgery.

All four magazines are fully indexed, but many brief entries are not printed in the semiannual indexes. Time's Business Time Clock, Medicine Capsules and Education Report Card are indexed for the files but are not printed. International editions are indexed only for articles and pictures that have not appeared in the regular editions. For Time, we indicate "CAN." or "L.A." on the index card, for Life, "INT." These entries are not printed in the semiannual index. Life en Espanol has its own index.

Fortune

Standard procedures for periodical indexing are followed for *Fortune*. Titles and authors of feature articles are noted under the main subject headings and are annotated to bring out the main points of the article. For example:

AUTOMOBILES

City and the Car, Francis Bello's report on U.S. metropolitan transportation growth since 1947, lead over public transit, expenditure increase 1930-1955, findings FORTUNE rushour driving test, charts, questionnaire commuters' views, table, traffic problem, relief proposals Oct 157.

Entries also appear under TRANSPORTA-TION, CITIES AND TOWNS, TRAFFIC, CHARTS. Signed articles are also listed under the author's name.

Life

Life's stories and photographic essays are fully indexed. Each picture must be noted under the general subject heading and is also indexed separately:

Sculpture

ART

Photo essay beauty of Madonna and Child in sculpture captured by three photographers; Golden Virgin of Amiens, Henry Moore's Mother and Child, Our Lady of Grace in Toulouse, Epstein's Madonna, details, Madonna of Church of St. Denis, gold image of Essen Cathedral, details, Michelangelo's Mary and Jesus, c.p., d.c.p., c.cov. 16 D 58.

The same entry is duplicated under MARY (VIRGIN) and PHOTOGRAPHY. These entries are cut to a line or two for the printed index:

SCULPTURE

Beauty of Madonna and Child in sculpture, c.p., c.cov. 16 D 58.

Life's features on photography, other than regular picture material, are indexed under PHOTOGRAPHY with subheadings Aerial; Multiple exposure; Time exposure. A picture of a chimpanzee imitating Picasso's flashlight drawing will be indexed under PHOTOGRAPHY—Stroboscopic. It will also appear under PICASSO and CHIMPANZEES, with a brief entry under FLASHLIGHTS. Under PHOTOGRAPHY—Trick is an entry on re-

flected lights appearing as flying saucers over New York. PHOTOGRAPHY—Microphotography includes a spider's fight with a fly; this entry also appears under SPIDERS, FLIES and INSECTS.

Time

News indexing with headline style is used for *Time*. The news peg is first. Background material in each story is indicated on the card. Titles of business essays and other boxed articles are indicated on the subject card. Titles of news stories are not indicated.

Continuing stories of foreign news are fully annotated to distinguish this week's news report from last week's. For example, stories on the Middle East appear nearly every week. Baghdad Pact meetings, actions and proposals by various nations or U.S. policy statements must be included in the entry under the heading MIDDLE EAST. Full annotations enable us to give the date of the right story without checking the issues. For example:

MIDDLE EAST

London meeting of Baghdad Pact, Iraq not present, U.S.'s Dulles pledges to back security and defense of member nations, declaration makes U.S. "full partner," boost in economic and military aid expected; Dulles aide claims no new commitments involved 11 Ag 19.

The same story is indexed under seven other headings: DULLES, JOHN FOSTER; BAGHDAD PACT; UNITED STATES—Foreign relations; IRAQ—Foreign relations; TURKEY—Foreign relations; IRAN—Foreign relations; PAKISTAN—Foreign relations. A picture of the meeting is indicated with "p." on the BAGHDAD PACT card. Four foreign ministers in a group picture are indexed under their names, "At Baghdad Pact meeting, p." These entries carry a symbol which indicates they are brief mentions and are not to appear in the printed index.

A recent story on France shows the need for duplication under the same main heading but under different subheadings.

Constitution FRANCE
Premier De Gaulle's proposed new constitution; submitted to Constitutional Consultative

Committee, expected win approval in popular referendum Oct. 5; provisions outlined would reduce National Assembly's powers, strengthen President's; controversial Article 14 granting emergency dictatorial rule to President 11 Ag 22.

Government FRANCE

Premier De Gaulle's proposal new constitution; submitted to Constitutional Consultative Committee, expected win approval in popular referendum Oct. 5; provisions outlined would reduce National Assembly's powers, strengthen President's; controversial Article 14 granting emergency dictatorial rule to President 11 Ag 22.

Political conditions

FRANCE

Premier De Gaulle's proposal new constitution; submitted to Constitutional Consultative Committee, expected win approval in popular referendum Oct. 5; provisions outlined 11 Ag 22.

GAULLE, CHARLES DE

Unveils proposed new constitution, submits to Constitutional Consultative Committee, expected win approval in popular referendum; provisions outlined; would reduce National Assembly's powers, greatly strengthen President's 11 Ag 22.

Three persons who made comments on the proposed constitution were also indexed briefly.

The following entries were made for a report in the medicine section:

VACCINES

Live-virus polio vaccine mass tested in Belgian Congo, complete safety and effectiveness reported; taken orally; Chat strain (Type I) and Fox III (Type III) used, made at Philadelphia's Wistar Institute; Dr. Koprowski and patients in Congo, p. 11 Ag 32.

INFANTILE PARALYSIS

Live-virus vaccine against paralytic polio mass-tested in Belgian Congo, complete safety and effectiveness reported; taken orally; made from two strains of polio virus at Philadelphia's Wistar Institute under Dr. Koprowski 11 Ag 32.

VIRUSES

Live-virus polio vaccine mass-tested in Belgian Congo, complete safety and effectiveness reported; Chat strain (Type I) and Fox III (Type III) used, made at Philadelphia's Wistar Institute 11 Ag 32.

KOPROWSKI, HILARY

Heads mass trial of live-virus polio vaccine in Belgian Congo, reports complete safety and effectiveness; with patients in Congo, p. 11 Ag 32.

WISTAR INSTITUTE

In Philadelphia makers of live-virus polio vaccine successfully tested in Belgian Congo, Dr. Koprowski project head 11 Ag 32.

Belgian Congo MEDICINE Mass trial of live-virus polio vaccine, complete safety and effectiveness reported; taken orally; U.S.'s Dr. Koprowski and patients, p. 11 Ag 32.

The WISTAR INSTITUTE card, preceded by the symbol "o", will not appear in the printed index. The rest of the entries will be much briefer in the printed index.

The indexing of congressional news presents unusual problems. The same piece of legislation may be referred to in one issue as the "labor-reform bill," in another as "Senator Kennedy's labor bill" or "the Kennedy-Ives bill for labor reform." We index all bills and probes under the subject, i.e., POSTAL SERVICE; LABOR—Legislation; UNIONS; UNITED STATES—Foreign relations or CIVIL RIGHTS. We also index congressional legislation and investigations under UNITED STATES—Congress—Senate or House of Representatives; committees and subcommittees are included in the entry but not indexed as headings or subheadings.

Assistant *Time* indexers confer with the chief indexer on new subject headings, name changes or major revisions in the files. The cumulative file is our best handbook of subject headings.

Sports Illustrated

Sports Illustrated, the youngest index, was set up with the first issue in August 1954 with an indexer and a typist-index clerk. This magazine has fewer subject headings but many more subheadings. There may be a dozen subheadings under FISHING making it easier to pick out the article on salmon or marlin or trout. S.I. has regional issues which must be indexed for material that does not appear in the regular edition.

Methods And Special Services

Index clerks type index cards, work with the indexers in making corrections, file and interfile. They also take telephone calls and check the files for issue dates. They must be familiar with subject headings to answer requests quickly and efficiently.

The indexing is written on yellow sheets, main headings circled to indicate they are to be typed in caps and subheadings added where needed. The typist adds the issue date and page number. Typing is done on strips of 2 x 5 inch perforated cards with a wax carbon. After correction by the indexer, the cards are torn, carbons of the "not to print" entries are discarded and the other carbons are filed with the card in the current year file. At the end of a half year period, the carbons are edited and sent to the printer. Filing the carbon with the original saves us a double job of filing and interfiling.

Auxiliary files for covers provide quick reference. Time's cover file is an alphabetical list by name, followed by a miscellaneous file for subject covers such as the stock market bull, space travel, do-it-yourself, roadbuilding machinery or U.S. taxpayer. We are often asked to list cover stories in combinations such as all covers picturing Canadian personalities, families that have had two or more members on Time covers or the number of baseball players. Recently we received the inquiry, "How many times have dead persons appeared on the cover?" There were six—Washington, Marx, Stalin, Freud. Theodore Roosevelt and the Lindbergh baby. We were once asked to list all the covers of people who came from Denver. That was impossible. We have a chronological list of covers in the cumulative file, with name and identification. It is a help in compiling lists for only a few years back. Life, Fortune and Sports Illustrated have title files.

In 1957 we added nearly 70,000 cards to the files: 27,600 *Time* entries (average 550 each issue); 18,500 *Life* (355 each issue); 9,000 *Fortune* (750 each issue); 14,300 *Sports Illustrated* (275 each issue).

We answer from 3,000 to 4,000 telephone calls a month and keep a daily tabulation of departmental and outside calls.

In 1957 we received 51,432 requests, including telephone calls and letters. We were able to answer 95 percent of these questions. Questions may be "Have you any material on Asia?"; "I am in the sixth grade and the project I have chosen is 'What effect has the United States had on Belgium in the last ten years?" and the same request from all the sixth-graders in the same town in California,

asking about United States influence on 30 other countries; "What do you have on acquisitions? I mean like getting others, particularly focusing objectives and component parts;" "Have you seen that play the *Desk Set?* Do you have an IBM machine?"

We are constantly aware of the need for a full and accurate index to satisfy our editors and subscribers.

ANN BLANCHET has been the chief indexer at Time, Inc. since 1949 and is responsible for indexing *Time*, *Life*, *Fortune* and *Sports Illustrated*. A graduate of Smith College, Miss Blanchet has taken post-graduate work at Columbia University's Teachers College and School of Library Service. Before coming to Time, Inc., she worked with the Columbia University Bookstore for 13 years.

Indexing Services

ROBERTA PURDY, Editor

Applied Science & Technology Index, The H. W. Wilson Company, New York



T HE H. W. Wilson Company began 60 years ago with a single publication. In the following years Wilson has gradually expanded, until at present it

publishes 12 periodical indexes in addition to numerous reference works. These indexes cover every field and include general works, such as the Reader's Guide to Periodical Literature, and specific works, such as the new Applied Science & Technology Index and the Business Periodicals Index.

Many hundreds of periodicals are included in the Wilson indexes. An effort is made to avoid duplication, but at times this is not possible. For instance, subscribers voted to duplicate eight periodicals in the two new indexes, Applied Science & Technology Index and Business Periodicals Index, both being outgrowths of the former Industrial Arts Index. With these eight periodicals, the technical articles are indexed in Applied Science & Technology Index and the articles pertaining to business are indexed in Business Periodicals Index. Business also duplicates five periodicals indexed in Reader's Guide and four in International Index, again by vote of subscribers.

There are general indexing policies that all the Wilson indexes follow. Everything of permanent reference value is indexed. Very brief items of temporary interest are omitted.

I shall describe the procedures followed by the Applied Science & Technology Index with which I am most familiar.

We index 197 periodicals elected by subscribers: 147 monthlies, two semimonthlies, 15 bimonthlies, 11 weeklies, six biweeklies, 13 quarterlies, two semiquarterlies and also the separately published articles of the Proceedings of the Institution of Mechanical Engineers.

Because of the time involved in the printing and because we try to have the *Index* in the mail by the middle of the month, the indexing period is always the month preceding the date of issue. For example, for the May 1958 issue the indexing period was March 27 through April 25. The June 1958 issue, which is a 3 month cumulation, includes indexing from February 25 through May 16. (The closing date was a week earlier this time, so that I could finish reading and editing the galleys before attending the SLA Convention.)

When indexing, we always try to keep in mind the phrase "permanent reference value." All signed articles are included. We index short abstracts if they contain pertinent information. We include panel discussions, symposiums, annual meetings of associations and unsigned articles that seem to have permanent reference value. In keeping with Wilson policy, we omit everything that is ephemeral and of temporary interest. If every item, both large and small were included, the *Index* would contain mainly ephemeral material, it would lose much of its reference value and, of course, the cost to subscribers would be greatly increased.

Each article is given careful consideration, and the most specific subject headings are assigned. The subject headings in the Applied Science & Technology Index are based on those used in the former Industrial Arts Index. In general we try to keep together similar subject material. To do this we often have to use inverted headings, for example:

PAPER
PAPER, Glass
(not GLASS paper)
RUBBER
RUBBER, Artificial
(not ARTIFICIAL rubber)
TEXTILE fibers
TEXTILE fibers, Synthetic
(not SYNTHETIC textile fibers)

We do not always invert headings. We have many beginning with the words electric, electronic, hydraulic, pneumatic. When using inverted headings, we make cross references, such as:

ARTIFICIAL rubber. See Rubber, Artificial ARTIFICIAL satellites. See Satellites, Artificial

For new headings we consult other Wilson indexes for suggestions. We also use the Library of Congress list of subject headings, Engineering Index, Chemical Abstracts and technical dictionaries. If these sources fail us, we then have to use the word or phrase commonly used in the articles. An example of this is the heading "SYSTEMS engineering." We could not find this heading used anywhere. Yet the January 1958 issue of Instruments and Automation contained many articles on this subject, and the phrase "sys-

tems engineering" was used throughout, so we decided to use "SYSTEMS engineering" as a heading. Another example is the heading "TRANQUILLIZING drugs." When we decided to use this heading last year, we could not find it used elsewhere. Most of our sources used SEDATIVES for the tranquillizers. We felt quite elated when, a while later, the Library of Congress also began to use "TRANQUILLIZING drugs" as a subject heading.

When a series appears in every issue of a periodical, we index it by using a blanket reference which includes the phrase "Published in monthly (or weekly) numbers of (name of the periodical)" For example:

LINOTYPE

Your slug-casting machine problems. L. Brewington. Published in monthly numbers of Inland printer.

Panel discussions and symposiums are indexed under a general heading. Individual papers are indexed separately only if a more specific subject heading is necessary. For instance, when this workshop is published, it will be indexed under "PERIODICALS—Indexing." The individual papers will not be separately indexed.

We write the subject headings and cross references directly in the periodicals. We indicate the title with check marks and encircle the author's name if it is hidden in the text. The magazine is sent to the Production Department where the copy is typed and revised. All the Wilson indexes use the same form of entry: Subject. Title. Author. bibliog (if any) il (if any) Name of periodical. Volume number: paging of article. Month. Year. For example:

PRINTING presses

Lubrication

Life of your press depends upon good lubrication. G. M. Halpern. il Inland Ptr. 140:12-3+ Mr '58.

We indicate bibliographies of five or more entries. For lengthy bibliographies we indicate the paging. For example: bibliog (p56-8).

The copy is typed on sheets of paper which are divided into five sections. When

the copy has been revised and removed from the periodical, these sheets are cut to form individual pieces of copy and are then filed.

The copy is then sent down to the Printing Department to be set on the Linotype machine. Galleys are then printed and sent up to the editorial office to be compared with the copy. They are returned to the Printing Department for correction.

The revised galleys are sent back in duplicate. One set is gummed, and these galleys are cut and the individual entries are pasted to the original typewritten copy. This forms the card catalog with which cumulated galleys are compared for missing lines.

The other set of galleys is read twice. The first reading is for typographical errors. The second reading is for subject matter, to make certain that articles are under the proper subject heading.

The galleys are then returned to the Printing Department for make-up into pages. When the pages, with the galleys, come back, the pages are measured to be sure no lines have been dropped and are compared with the galleys to see that all corrections have been made. They are then returned to the Printing Department for final printing.

The Index is printed in forms of 32 pages. The forms then go to the bindery where they are assembled into copies of the *Index* and then bound. The final step is the mailing of the copies to subscribers.

All Wilson indexes follow the same procedure as the Applied Science & Technology Index.

ROBERTA PURDY, editor of the new Applied Science & Technology Index since its inception in January 1958, was earlier the editor and an indexer for its predecessor, Industrial Arts Index. Miss Purdy has been at the H. W. Wilson Company since 1952, having had previous experience as a cataloger at Time magazine and the Russell Sage Foundation Library. She is a graduate of the Woman's College of the University of North Carolina and the School of Library Service at Columbia University.

Z-39 Subcommittee on Indexing American Standards Association

ANNE J. RICHTER, Chairman, Z-39 Subcommittee



Erich Haremann-Magnum

THIS FINAL REPORT of the American Standards Association Z-39 Sub-committee on Indexing is the result of many months of committee work. In the winter of 1955 the Subcommittee's chairman was appointed, and by the spring of 1956 representatives of various groups interested in indexing and individuals actively engaged in indexing were invited to serve on the committee. The first meeting was held in May of that year, and the decision was made to limit the recommendations of the group to 1) the scope of an index; 2) the style of an index;

3) the format of an index; and 4) the physical form of an index. Four committee members accepted assignments to prepare working papers. The group nearly bogged down on the question of the "definition" of an index, but finally agreement was reached on the definition and its accompanying glossary, as it now appears.

During 1957 the committee mct in the offices of various members—the Library of Congress, the New York Public Library, the United Nations Library, the New York Times Library and the R. R. Bowker Company—and by November of that year a preliminary draft had been mailed to members. A revised draft followed and this was presented in December 1957 to the Council of National Library Associations, the sponsoring organization of the Z-39 Committee. In April 1958 the report was given to the full Z-39 Committee for approval as a proposed ASA standard. There was practically unanimous acceptance except for

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certain reservations by the representative of *Chemical Abstracts* who, while approving the report in general, felt that no provisions had been made in the draft for indexing in accordance with CA's specific needs. During the past summer representatives of *Chemical Abstracts* have worked with the Subcommittee, and the final report incorporates the points this outstanding indexing service had suggested.

At the October 31, 1958 meeting of the Z-39 Committee, whose responsibility is to develop standards for concepts, definitions, terminology, letters and signs, practices, methods, supplies and equipment used in the field of library work and the preparation and utilization of documents, the report of the Subcommittee on Indexing was accepted for circulation among all Z-39 Committee members for a written ballot for final approval.

MRS. ANNE J. RICHTER, book editor of the R. R. Bowker Company, is vice-chairman of the Z-39 Committee and chairman of the Z-39 Subcommittee on Indexing, and has served as the SLA representative to the Z-39 Committee for the past four years. At the 1953 SLA Convention in Toronto, Mrs. Richter moderated a panel on "Standards for Magazine Format" and during her term as chairman of the Publishing Division, the "Checklist for Magazine Publishers" was prepared and widely distributed by the Division. In May 1959 she will be chairman of the five-day Institute on Indexing Periodicals, which is being planned by the Columbia University School of Library Service. In addition to her interest in libraries and library problems, Mrs. Richter is active in the book trade world. She is currently serving as the first national president of the Women's National Book Association and in 1957 received that association's Constance Lindsay Skinner Award for her outstanding contributions to the world of books.

Final Report, October 1958

Foreword

This standard was prepared by a subcommittee of Sectional Committee Z-39 on Standardization in the Field of Library Work and Documentation. Committee Z-39 is organized under the procedures of the American Standards Association and sponsored by the Council of National Library Associations.

The Subcommittee on Indexing was organized in May 1956. Eight meetings were held. Diverse types of indexes were discussed at length, and the subcommittee endeavored to base its recommendations on the best known and accepted indexing practices. The question of how to define an index was given careful study and considerable discussion. It was decided to add a glossary of terms and a section on "what an index is not" in order to make the definition completely clear.

Two bibliographies prepared for the Subcommittee's use are published in the standard as appendices to provide additional reference material. The bibliography of periodical articles was compiled for the subcommittee by J. Myron Jacobstein, assistant law librarian, Columbia University. The bibliography on books and pamphlets was compiled by Eleanor F. Steiner-Prag, R. R. Bowker Company.*

The members of the Subcommittee on Indexing who prepared the standard were Burton W. Adkinson, Office of Scientific Information, National Science Foundation (formerly of the Library of Congress); Mary D. Alexander, University of Chicago Press; John Askling, John Askling Associates, index consultant to Bell Telephone Laboratories; Mildred W. Benson, Encyclopaedia Britannica; William Bridgwater, Columbia University Press, representing the American Association of University Presses; Edwin B. Colburn, H. W. Wilson Company and secretary, Council of National Library Associations; James B. Coover, Music Library, Vassar College; A. P. DeWeese, New York Public Library; Henry J. Dubester, Library of Congress; Lavinia Dudley, Americana Corporation; Elizabeth Ferguson, Institute of Life Insurance Library; Bertha M. Frick, School of Library Service, Columbia University; Joseph A. Groesbeck, United

^{*} EDITOR'S NOTE: Copies of these bibliographies may be obtained upon request from Anne J. Richter at the R. R. Bowker Company, 62 West 45th Street, New York 36. They may also be consulted in *Library Journal*, May 1, 1958, vol. 83, no. 9, p. 1356-58.

Nations Library; Rollin Hemens, University of Chicago Press; Ernest Hildebrand, Americana Corporation; J. Myron Jacobstein, Law Library, Columbia University, representing the American Association of Law Libraries; Elaine Jost, Americana Corporation; Frank A. Lundy, University of Nebraska Library, representing the Association of College and Reference Libraries; William T. Morris, Jr., H. W. Wilson Co.; John Rothman, New York Times Index; George A. Schwegmann, Chief, Union Catalog Division, Library of Congress; Joseph W. Sprug, Catholic Periodical Index, representing the Catholic Library Association; and Anne J. Richter, R. R. Bowker Company, chairman. Laurence Leavey, St. Vincent College Library, former chairman of the Z-39 Committee; Robert E. Kingery, New York Public Library, former secretary of the Z-39 Committee; and Ruth E. Mason, American Standards Association, served as ex-officio members.

The Subcommittee completed its work and submitted the standard to the Sectional Committee Z-39 on April 3, 1958, and a revised final report on October 31, 1958. The Sectional Committee voted approval late in 1958. The sponsoring organization (CNLA) is expected to approve the standard at its December 6 meeting and will submit it for approval by ASA. The standard will then be given final approval as an American Standard.

Members of the Sectional Committee Z-39 at the time of approval of the standard were:

AMERICAN ASSOCIATION OF LAW LIBRARIES: Edith L. Hary, Law Librarian, Maine State Library

AMERICAN BOOK PUBLISHERS COUNCIL: Anne J. Richter, R. R. Bowker Company

AMERICAN CHEMICAL SOCIETY: Dale B. Baker, Associate Director, Chemical Abstracts (Alternate) James L. Wood, Librarian, Chemical Abstracts

AMERICAN DOCUMENTATION INSTITUTE: Williamina A. Himwich, Medical Research Associate, State Research Hospital, Galesburg, Ill.

AMERICAN LIBRARY ASSOCIATION, RESOURCES & TECHNICAL SERVICES DIVISION: Laura Cummings, Columbia University Libraries

ASA SECTIONAL COMMITTEE ON PHOTOGRAPHIC REPRODUCTION OF DOCUMENTS P-H5: Ralph

H. Carruthers, Chief, Photographic Service, New York Public Library (Alternate) Vernon D. Tate, Librarian, Annapolis

AMERICAN TEXTBOOK PUBLISHERS INSTITUTE: Theodore Waller, Grolier Society

Associated Business Publications: Ivan A. Given, Editor, Coal Age

ASSOCIATION OF AMERICAN LIBRARY SCHOOLS: Dorothy L. Bevis, School of Librarianship, University of Washington, Seattle

ASSOCIATION OF AMERICAN UNIVERSITY PRESSES: August Frugé, University of California Press

ASSOCIATION OF RESEARCH LIBRARIES: Jerrold Orne, Librarian, University of North Carolina BOOK MANUFACTURERS' INSTITUTE, INC.: Malcolm H. Frost, Executive Director

CATHOLIC LIBRARY ASSOCIATION: Laurence A. Leavey, Assistant Librarian and Assistant Professor of Bibliography, St. Vincent College Library

COUNCIL OF NATIONAL LIBRARY ASSOCIATIONS: Edwin B. Colburn, Chief, Indexing Services, H. W. Wilson Company

COUNCIL ON LIBRARY RESOURCES, INC.: Verner W. Clapp, President and Director, Council on Library Resources

JEWISH LIBRARIANS ASSOCIATION: Rabbi Isidore S. Meyer, Librarian, American Jewish Historical Society

JOINT COMMITTEE ON MICROCARDS: Fremont Rider, Godfrey Memorial Library

JOINT COMMITTEE ON PHARMACY COLLEGE LIBRARIES: Mildred P. Clark, Winthrop Laboratories

LIBRARY BINDING INSTITUTE: Dudley A. Weiss LIBRARY OF CONGRESS: Henry J. Dubester, Chief, General Reference and Bibliography Division

MEDICAL LIBRARY ASSOCIATION: Gilbert J. Clausman, Librarian, NYU-Bellevue Medical Center Library

Music Library Association: James Coover, Music Library, Vassar College

NATIONAL ASSOCIATION OF MAGAZINE PUB-LISHERS: George C. Lucas

NATIONAL BUSINESS PUBLICATIONS, INC.: Robert E. Harper, President, National Business Publication

(Alternate) William L. Chapman, Jr., General Manager, Medical Economics Inc.

NATIONAL RESEARCH COUNCIL: Harold Oatfield, Charles Pfizer & Company

NATIONAL SCIENCE FOUNDATION: Burton W. Adkinson, Director, Office of Scientific Information, National Science Foundation

SOCIETY OF AMERICAN ARCHIVISTS: G. Philip Bauer, National Archives

SOCIETY OF TECHNICAL WRITERS AND EDITORS, INC.: Mrs. Helen Friedemann, Dr. Henry Hausner SPECIAL LIBRARIES ASSOCIATION: Anne J. Richter, R. R. Bowker Company

TECHNICAL PUBLISHING SOCIETY: Edward A. Stearn, Ramo-Wooldridge Corp., Guided Missile Research Division

U.S. NAVY DEPARTMENT, BUREAU OF SHIPS: M. Bonniwell, Head, Technical Library Department of Navy, Bureau of Ships

MEMBERS-AT-LARGE: Robert E. Kingery, Chief, Preparation Division, New York Public Library; Chairman, Z-39 Committee John H. Ottemiller, Associate Librarian, Yale University Ralph H. Phelps, Director, Engineering Societies

Ex-Officio: Carroll C. Moreland, Chairman, Council of National Library Associations; Librarian, Biddle Law Library, University of Pennsylvania

Library

ASA STAFF REPRESENTATIVE: Ruth E. Mason, American Standards Association

1. Aims And Purpose

This standard provides basic criteria for indexing books, periodicals and other documentary materials. It includes a definition of an index and standards covering the nature, organization and style of an index, as well as certain observations about indexing procedure generally and the value of an index. It does not attempt to set standards for every detail of indexing, which must be determined on the basis of the type of material indexed and the readers to which the material is addressed.

2. Definitions

2.1. Definition of an Index

Within the fields of library practice and documentation, an index is a guide to the contents of any reading matter or other documentary materials, which provides a systematic, sustained subject analysis of the contents of such materials arranged according to alphabetical, chronological, numerical or other chosen order. Each entry is followed by page number, paragraph number or other indicator showing the exact location of the reference.

2.2. Glossary of Key Terms Used in the Definition

ENTRY: Any item in the index referring to a single specific place in the text and in-

dicating the nature of the material to be found there. Some indexes, such as those on punch cards, may not have entries in this sense.

SUBJECT: A unit concept found in, or derived from, the material indexed. The unit concept may be found or expressed as a thematic topic, a name, a date, the first line of a poem, the title of a work, an expression coined to give the gist of the material indexed, etc.

SUSTAINED: Comprising the entire work to be indexed, from beginning to end, and using the same method of indexing consistently for all its parts.

Systematic: Using a logical, consistent method of dividing the material indexed and grouping the resulting entries (except for certain punch card indexes which do not require such grouping).

2.3. What an Index is Not

An index is not a concordance, a table of contents, a mere list of words not in subject entry form, a glossary, a checklist, a history or background analysis of an action arranged chronologically.

3. Nature And Variety Of Indexes

- 3.1. The nature of an index is determined by the subject content of the material to be indexed and by the use to which the index is to be put. Hence, the qualifications and purposes of the prospective readership must be taken into account.
- 3.2. Indexes are applicable to single works, whether monographic or encyclopedic, in one or more volumes, and to multiple related works. The most common types of material indexed are: (a) single books, (b) multiple issues of a single periodical or newspaper, (c) single or multiple issues of multiple periodicals (indexing services), (d) encyclopedias, (e) collections and miscellaneous groups of publications or other documentary materials.
- 3.3. Indexes to these different types of materials vary not only in their organization and format but also in the extent to which the analysis of the content is carried out. An index to a single book of 200 pages, for

example, may be far more detailed than an index to a group of periodicals comprising 300 separate articles for a total of 2,000 pages; an index for an abstract journal may be more detailed than either of these.

- 3.4. The scope of an index is necessarily determined, and therefore its quality may be limited, by such practical considerations as (a) amount of space available, (b) cost of publication, (c) publication deadlines, and (d) size and quality of the indexing staff.
- 3.5. Indexes may be appended to the work indexed and published within it; they may be published as separate volumes; or they may be issued in card form (punched or unpunched) or otherwise.

4. Content, Organization And Style

4.1. General

4.1.1. Indexes should cover all material in the work indexed unless certain exceptions are predetermined and called to the attention of the user. Indexes should include significant material in forewords, prefaces, introductions, footnotes, addenda and appendices. An index may supply information implicit but not actually found in the text, such as full names, identifying dates, material such as names of chemical compounds and other important terms inadvertently omitted from abstracts indexed, etc., provided that such additions serve only for clarification and fall strictly within the scope and intent of the work indexed. Indexes need not cover the title page, dedications, the table of contents, detailed chapter analyses at the beginning of each chapter and the bibliography, although a note in the index referring to the bibliography and stating that chapter analyses may be found in the work will be helpful. If the work includes advertising matter of reference value, this should be indexed. Separate indexes to advertising and text material are advisable.

4.1.2. Indexes should be organized according to a logical, balanced, consistent and easily recognizable pattern. A note explaining the pattern and calling attention to necessary deviations, if any, should be present whenever it is thought useful. Such notes should appear at the beginning of the index

and also, if warranted, at major subject headings.

4.2. Entries (Heading, Subheadings and Modifications)

4.2.1. In its simplest form, an entry consists of a single, concise item derived from the text and the reference to its location there. In more complex indexes, an entry may have several subentries or modifications (e.g., Shakespeare, early years 4-6; education 5, 6), or several entries pertaining to the same subject may be grouped under a heading encompassing all, which may, in turn, be divided into several subheadings. The difference in method is outwardly one of typographical arrangement; the choice should be determined by the complexity of the material and the minuteness with which it is indexed.

4.2.2. The subject form of entries (for indexes which require such form) should be derived from the text indexed; and the terminology, once established, must be followed consistently. Through the use of "see" references provision should be made for synonymous terms (e.g., Aeronautics—Aviation), for popular as against scientific or technical terms (e.g., Heart Attack-Coronary Thrombosis), for terms well-known as abbreviations (e.g., AFL-CIO) and for obsolete as against current terms (e.g., Flying Saucers-Unidentified Flying Objects; Alabamine— Astatine). These "see" references should be used from the time when a given term comes into general usage until it has lost all popular currency.

4.2.3. Main headings should be as specific as possible, except in indexes designed to facilitate generic searching where main headings must be of a more general nature. Separate subheadings should be established, or modifying phrases (modifications) coined, for each aspect of a given subject, if feasible, and must be established whenever the number of references in any one subentry exceeds four. Subheadings and modifications under a given main heading should form a consistent pattern. Subheadings should all be on the same level of classification (e.g., if under a main heading Steel Industry a subheading

Labor Relations is used, then Strikes should not also be used as a parallel subheading. since it is in fact subsidiary to the other). For this reason, also, the Subcommittee suggests that subject subheadings and geographical subheadings not both be used under the same heading on the same level of classification. (For example: If under the heading Education both Canada and Elementary appear as parallel subheadings, the reader will not know whether entries on elementary schools in Canada will be found under Education-Canada or under Education-Elementary. To avoid this, use Education—Canada with Elementary as a further subdivision. or use Education—Elementary with Canada and other geographic entities as further subdivisions.) When headings have many subheadings and subentries, a note explaining the structure and listing the subheadings is often helpful.

4.2.4. The first page reference (or reference to a fraction of a page) under a given heading should be to the first introduction of the subject in the text, even if that is not necessarily the main reference.

4.3. Alphabetizing (Filing)

- 4.3.1. Standards are recommended here for the principal aspects of alphabetizing and filing. However, the American Library Association Rules for Filing Catalog Cards (1942) and the Library of Congress Filing Rules (1956) should be consulted for additional guidance.
- 4.3.2. In alphabetically arranged indexes, a single alphabet should be used in most cases. (Likely exceptions would be an anthology of poetry, in which separate alphabets for authors, titles and first lines may be advisable; or of chemistry, in which authors, molecular formulas, patent numbers, organic rings, subjects, etc., may be advisable.)
- 4.3.3. Subheadings, subentries and modifications should appear in alphabetical order, not in the order in which pertinent material appears in the text. However, subentries denoting historical periods should be filed chronologically (17th Century before 18th Century).

- 4.3.4. In multiple word headings, the word-by-word method of alphabetizing (New York before Newark) should be used rather than the letter-by-letter method. The Subcommittee recognizes that the latter method is widely used and suggests that a note stating which method is used should be included in the index.
- 4.3.5. Certain deviations from the strict alphabetical order may be made when it seems reasonable to do so (Henry II filed before Henry V).
- 4.3.6. Under authors' names, "by" entries should be filed before "about" entries in indexes which combine the two.
- 4.3.7. Where the same word denotes both a subject and a personal name, filing should be in the order of person, place, thing, title.
- 4.3.8. "See" references should be filed in normal alphabetical order.
- 4.3.9. "See also" references should be filed in normal alphabetical order before all entries except when they pertain not to the given heading or subheading as a whole but to only one specific entry under it, in which case they should follow that entry. Although there is a difference of opinion on this point, this standard is based on the consideration that the user of an index is told immediately in the heading what material is *not* to be found under it.
- 4.3.10. Abbreviations should be filed as if spelled out (St. Louis as Saint Louis), except (a) when the words abbreviated are not known (e.g., C.I.T. Financial Corp.) and (b) when abbreviations are used as headings for "see" references to the corresponding terms spelled out (e.g., ICC see Interstate Commerce Commission). Abbreviations should be filed preferably at the beginning of the letter; however, if they are filed as words, a note of explanation should be carried.
- 4.3.11. Elisions should be filed as printed, ignoring punctuation (e.g., Who's Who filed as though spelled Whos Who).
- 4.3.12. Hyphenated words should be filed as though two separate words, except, for instance, such words as cooperation, antitrust, postwar, which have become single words through usage.

- 4.3.13. Numbers should be filed as if spelled out, except as noted in 4.3.3. and 4.3.5.
- 4.3.14. Geographic entities having the same name should be filed in strict alphabetical order (e.g., New York City, -County, -Port, -State). Gazetteer-type filing (by size and location, and political feature before geographic feature) should be used only where gazetteer-type information is given in the index.
- 4.3.15. Where both subject and geographical subheadings are used, a single alphabet for both is preferred.

4.4. Inversions

The use of inversions should be governed by the type of material indexed (does the author always give the full, legal names of all companies, associations, and the like?) and by the character of the prospective readership (will the reader look under Teamsters Union or under International Brotherhood of . . .?). The index should contain a note explaining in detail whether inversions are used, what headings are inverted and how the inversions are run. "See" references from uninverted headings and from alternate inversions to the inverted headings should be used extensively.

4.5. References

- 4.5.1. References should be as precise as possible, even to the fraction of a page. When a reference is made to more than two consecutive pages, the first and last pages should be given, rather than the first page only, supplemented by "ff" (p. 3-8 rather than 3ff).
- 4.5.2. Indexes to a periodical or to a variety of periodicals should indicate the length of an article by giving inclusive pages.
- 4.5.3. Depending on the type of work indexed, it may be very useful to show in the entries in the index whether a given reference includes illustrations, maps or graphs, or whether it guides the reader to a direct quotation. If abbreviations are used in giving such information, a key to abbreviations should be given at the beginning of the in-

dex. A note informing the reader that such special information is available should also be given there.

4.5.4. If a series of references is given for a single item, the reference leading to the fullest information on that subject should be made distinct from the rest through some typographical device such as bold-face type.

4.6. Typography

- 4.6.1. The type face in an index should be in harmony with that used in the text. Its size may be, and usually is, smaller, but should not be smaller than 6 point size of a legible face. Variations in the type through the use of bold face, italics, and capitals are desirable.
- 4.6.2. The number of columns per page depends on the type of material in the index, especially the length of entry lines and on the page dimensions.
- 4.6.3. Indentations should be designed so that headings, subheadings, modifications, entries and page references can be located easily on the page. Progressive left-to-right indentation seems to be most successful with page reference run on. For example:

Main heading Subheading Entry

Shakespeare

Works About

Chute, M, Shakespeare of London 10

In listings such as those of first lines of poetry, the first line of each item should be set flush left and run-over lines indented, care being taken that such indented run-overs are not to be confused with indented subheadings. Indentations obviate the need for repeating headings. Where indentations are not so used, headings should be repeated rather than be replaced by dashes if the size of the index warrants. For chemical indexes, dashes may be used to replace names (or parts of names) of chemicals.

4.6.4. Single line entries are preferred to run-in (paragraphed) entries. However, in complex indexes entries under the lowest-level subdivision may be run together. When entries are run together, they should be in alphabetical order, not in the order in which

the material appears in the text (for example, in the index to a biography of Shakespeare, under Shakespeare—Works the plays should be listed in alphabetical order, not in the order in which they are discussed in the text). If the material in the text is arranged chronologically (for example, a chronology of the discussion of the United Nations Disarmament Subcommittee), then paragraphed entries in the index should also be in chronological order.

4.6.5. "Continued" lines should be used whenever an entry breaks from one column to another with headings repeated. The abbreviation "cont." is suggested.

4.7 Cross References

Cross references should be considered as substitutes for but equivalent to duplicate entries. They should be devised carefully and used generously. However, when a cross reference leads only to a single entry, a duplicate entry should be used giving exact

reference. A permanent master file of cross references has been found useful for indexes to abstract journals. A file of inverted cross references helps to control the cross reference file.

5. Further General Observations

- 5.1. Since indexes are of great value to all types of research, indexers should be given proper credit for their contribution. It is suggested that indexers be given credit by name in the publication indexed and that book reviewers be persuaded to comment on absence of or quality of indexes in their reviews.
- 5.2. Since objective analysis of the text is the basic requirement for a good index, it is generally advisable that the index be devised by a qualified person other than the author. The author can be of great help to the indexer in the analysis of the text, the selection of subject headings, etc.; but the author should beware of the tendency to impose on the index his own biases or own vocabulary.

INSTITUTE ON INDEXING PERIODICALS

A five-day Institute on Indexing Periodicals is to be held under the auspices of Columbia University's School of Library Service in New York City, May 25-29, 1959, immediately preceding the Annual Convention of Special Libraries Association in Atlantic City.

The Institute will be essentially practical in its purpose. It is designed for persons now engaged professionally in indexing or preparing for such positions. It will include an analysis of principles and practices in indexing general and popular magazines, business and technical journals, newspapers and general indexing services.

Mrs. Anne J. Richter of the R. R. Bowker Company and chairman of the Z-39 Subcommittee on Indexing of the American Standards Association, is to be the Institute Chairman. Associated with her, and serving as session chairmen, will be experts in the indexing of each of the four types of periodicals.

The preparation of the printed index from the start to the finished product will be illustrated. There will be an evaluation of existing indexes by professional users. Institute members will visit the larger indexing units in the New York area. The sessions will be held at the School of Library Service, Columbia University, each of the five days from 9:30-11:30 a.m. and 1:30-3:30 p.m.

Membership will be limited to 30 persons. Application for membership is open to working indexers with or without library school training. A fee of \$30 will be charged. No academic credit will be given.

Persons wishing to enroll or seeking additional information should write to the Dean of the School of Library Service, 515 Butler Library, Columbia University, New York 27, New York.

The New York Times Index

JOSEPH C. GEPHART, Editor
The New York Times Index, New York City

LIBRARIES and the New York Times Index have one boundless object in common. It is information. Information is your business and information is our business. And I think we'll all agree that, contrary to the songwriters, there is no business like the information business.

It is strange, in view of the magnificent service librarians have given for centuries, and given in so many instances to authors, that quotations singing their praises are practically non-existent. Well, at the *Index* we have two quotations. One is: "Librarians are the royalty of *Index* users." The other: "A librarian is the *Index's* best friend." And we hope the *Index* is one of your best and most helpful friends.

With the mass of information growing in mountainous quantities each day, there is a vital, an imperative necessity for a sweeping trend toward indexing more and more books and articles if we hope to find anything at all after it has been published. Authors and publishers should awaken to the fact that practically every book—and this includes many novels—leaving their hands and shops should be equipped with an efficient and comprehensive index. Surely, the failure of publishers to add indexes to their important books cannot be charged to penny-pinching in favor of a highly valuable and useful service for librarians and readers. And surely, it cannot be a matter of space that is stalling the creation of indexes. Show any manuscript to a good editor and in no time he will cut out enough unnecessary verbiage to make room for an index. As an example, a book so dear to the hearts of all Times people as Meyer Berger's The Story of The New York Times had 68,000 words cut from it.

The New York Times Index is a combination of an index and a classification. We enter material under specific headings and cross references run from general headings to the specific, as in an index; we also en-

ter material under broad headings and run cross references from specific headings to the general headings, as in a classification. Long years of experience have shown that it is advisable to use both methods in the *Index*, and they should not cause inconvenience or confusion to the user because he is protected by an extensive network of cross references.

The elements used in presenting a news story summary in the New York Times Index are:

Heading: AGRICULTURE

Cross references: See: Food, Product names

Subhead: United States
Paragraph: PRICES

Entry (Summary): Repr Keating hails Benson

policies

Date, Page, Column: S 11, 29:1

Historical Background

The New York Times Index is as old as the New York Times itself and it is supposed to be the earliest newspaper index in the United States. Both the Times and its Index were founded at 113 Nassau Street in 1851.

Perhaps it was Henry Jarvis Raymond, the *Times'* founder, who saw the advantages of having an index and ordered one to be compiled. Perhaps he believed that it was as important for the *Times* to keep a record of its news and editorial transactions as it was to keep a record of its financial transactions. Supporting this theory is the fact that the first *Index*, the 1851 issue, was recorded in a ledger, a business ledger, in a fine Spencerian hand.

The New York Times Index is the only complete news index published by a newspaper in the United States for the public. In England, the London Times produces a quarterly index.

In one form or another, the *New York Times Index* is available for every year, with the exceptions of 1859 and 1862 and the period of July 1905 through December

1912. A special project was set up some time ago to fill these gaps, and it is hoped that this enormous undertaking will be completed within a year or two.

The idea for the rebirth of the *Index* after its discontinuance in 1905 came from the genius-mind of the enterprising Adolph Simon Ochs in 1913 when it appeared as a quarterly. Since then the *Index* has been published continuously and it is now in its forty-sixth consecutive year.

In 1930 the *Index* speeded up its frequency of publication by changing from quarterly to monthly, and it also began the production of a cumulative annual volume.

Then in 1948, with the world moving faster and faster and making vast and sweeping changes every day and with the demand for information speeding up and growing accordingly, the *Index*, as a special service to its users, adopted a policy of semimonthly publication and also introduced a new, much easier to consult, much easier to use format.

In 1951 in the interests of economy and efficiency, the *Index* made a change in the mechanical phase of production, discarding the Linotype-letterpress method in favor of Varitype-offset.

Guiding Principles And Practices

What are some of the policies and principles that play an important part in building the solid character of the *Index?* At the top of the list would be, of course, accuracy. It is by far the most important, most respected, most essential factor in the

field of publishing and in most other fields. Without accuracy, all would be lost—unless one happens to be the politician who said, "When facts get in my way, they don't have a chance."

Another policy is consistency. The Index must keep its facts in the right places, under the right classifications according to subject matter, from issue to issue and from year to year, with a few practical exceptions. There should not be any strays at all and if there are, they must be rounded up and branded correctly. Although consistency has been called the quality of a stagnant mind, it pays big dividends in any enterprise dealing with classifications and cross references. However, in all types of work it might be well to remember what William Randolph Hearst once said: "I would rather be right than consistent.'

Another major policy is brevity. The *Index* does not have space to burn nor does it have money to burn; it is very definitely a non-profit organization. We have limits in space and money beyond which we should not go, just as other publications have. Our platform on being brief is to give the highlights of a story and the exact spot where the complete story can be found in the Times. If good judgment and some restraint are not used in adhering to a policy of brevity, the size of the Index would soon get out of hand and could become so large that the costs of production would be prohibitive. By being brief and by treating story entries on a basis of relativity, the Index is able to give an abun-

The editorial office of the New York Times Index



New York Times

dance of extra information that would not be possible otherwise. In adhering to the concept of brevity, the *Index* tries to keep in mind a remark by Robert Louis Stevenson: "It is not a hard thing to know what to write; the hard thing is to know what to leave out."

Another principle is objectivity—we must not slant an entry; it must follow the story exactly; and we must neither give a long entry to a dog story simply because we like dogs nor an inadequate entry for a major crime story simply because we do not like crime.

Still another policy deals with selectivity, which can be explained in general by saying that we index all the news that's fit to be indexed. Our definition of news that is fit to be indexed would be news that has definite and specific research value, something that has and will retain substance over the years.

Another policy is on-time production. The *Index* works on a deadline system just as the News Department does. All duties must be carried out according to schedule—and this means on time.

"Keep the public informed" is another creed of the *Index*. We cannot shift material from one heading to another, no matter how valid the reason, without advising the reader. A classic example of this occurred when the state of Israel came into being. An entry on that fact was made under Palestine, followed by a note that subsequent material would be found under the heading Israel. A cross reference was inserted under the Israel heading to guide readers to Palestine where preceding material had been carried.

Another instance of keeping the reader informed is when an error is discovered. We relay corrections to readers as quickly as possible by insertions in the addenda and errata section, published in the back of semimonthly and Annual issues.

Size And Scope

The making of each issue of the *Index* does not necessarily begin in New York—it begins in India and Indonesia, in Russia and in France, in the upper atmosphere

and in the depths of oceans, in the science laboratory and in the pulpit. It begins wherever news is made.

From a thousand or more sources every day a million words of news flow into the *Times* newsroom, largest in the world, where an army of editors eliminate duplications, cut excess wordage and kill the unimportant in order to reduce those million words to about 130,000, the average number found in a daily edition of the *Times*. These 130,000 words become the raw product of the *Index*. And it is the little *Index* that truly makes the big *Times* "the newspaper of record." As the *Times* is the raw product of the *Index*, so, in turn, the *Index* becomes the by-product of the *Times*.

In this world of rush, catastrophic changes and new discoveries, a day-by-day history of mankind on the march, whether it be a forward or a backward march, must be recorded in all phases of its activity and made available as quickly as possible and at all times. The Times Index performs that indispensable function and performs it thoroughly, completely, on time. This is a stupendous job, and more persons are needed to carry on the editorial operations of the Index than are on the entire news staffs of many big newspapers in mediumsized cities and more than there are in the editorial departments of many national magazines.

In one Annual issue of the *Index*, a book only two inches thick, there is in condensed form the news of 365 issues of the *Times*. That is condensation par excellence, for if those 365 issues were piled one on top of another, they would reach approximately 16 feet in height. And in that Annual there are more than two and one quarter million words covering more than 3,500 general subject headings under each of which there is the news of that subject for the entire year.

And that is not all. The history of nations and of oceans and mountains and of the space age are recorded under 930 geographical headings. There are 4,000 churches and other organizations, 770 educational institutions, and more than 5,000 company

names. On top of all this fabulous amount of information are 20,000 names of persons who made news during the year. In addition, 13,000 personal names will be found in the deaths listing and hundreds more under art, books, music, television, theatre, etc. The *Index* does not specialize in one type of news—it specializes in every type.

The Times Index is the only service summarizing and classifying news alphabetically by subjects, persons and organizations. It is an integral part of hundreds of public, college and university libraries, Government departments and agencies, business and professional offices and the offices of newspapers throughout the country. No newspaper has yet found a better method, as the Times has with the Index, to gain such an important and effective access to "minds in the making," the hundreds of thousands of students in our colleges and universities. The Index is a publication with an international reputation and circulation. In addition to having subscribers in every state of the Union, it has subscribers in 41 foreign countries, including Russia.

Four separate departments are vital cogs in the production of the *Index*. The copy is written and edited in the *Index's* editorial offices; from there it goes to the job shop where it is typed on Varitype machines; the Varitype galleys are cut up and pasted into page forms, and the pages are then sent to an outside plant and made into plates from which the *Index* is printed by the offset process. The final step is the delivery of an edition to the Library Services Department for distribution to subscribers.

Indexing And Editing Procedures

Twenty-seven persons comprise the editorial department, with men outnumbering women 17 to ten. As a group they have attended colleges ranging from Columbia, Harvard and Princeton to Pikesville Junior College in Kentucky. Eight members of the staff are native New Yorkers; others come from the Union of South Africa, England, China, Germany and Russia.

Controlling, channeling and handling the gigantic volume of information presented in the Times each day, especially on Sundays, calls for a system—and the system is a simple one. A production assistant checks each story of the paper and marks on it the identification letter of the indexer to whom that subject has been assigned. Each editorial worker has a letter of the alphabet assigned to him, which he uses in all his duties. After all stories have been marked, the papers are sent to the filing section, which consists of a supervisor and three clerks, where the month, day, page and column number (the elements of a date reference) are stamped on each story. The paper is then ripped, column by column, story by story, and the clippings are sorted and distributed to the indexers.

In addition to these duties the filing clerks, nimble of finger and of brain, file approximately 25,000 semimonthly and annual cards every two weeks. This is not an ordinary filing job for it involves filing not only alphabetically, according to many divisions, but chronologically as well.

Indexers must be thorough, fast, accurate readers; they also must be speedy typists. They must have an outstanding knowledge of the subjects they index; they must be experts in the backgrounds of those stories; they must be masters in the art of condensation, turning mountains of news into mole hills of succinct fact; they must have excellent memories and be able to bring to mind the proper classifications for a story at the snap of a brain cell; they must be experts in the art of selectivity, being able to sift the important from the unimportant; they must have the skill to make small words do the job of big words; and they must have a "nose for indexing."

An indexer types his entries and cross references on 3 x 43/4 inch cards of 20-pound stock that come in perforated sheets of six white cards backed by a sheet of six blue cards with a carbon in between. The blue cards (duplicates) on which cross references have been made are used to save time and insure accuracy in the edit-

ing of subjects. The duplicates also are kept as insurance against the possible loss of originals until publication of the issue, for if one section of a letter were lost or damaged and duplicates were not available, all papers of the entire semimonthly period would have to be re-indexed—a horrible thought when costs and the loss of time are considered.

Here is an example of a typical list of subjects to be found in one indexer's program: academic freedom, area studies, atomic energy, culture, colleges, displaced persons, education, foundations, freedom, Great Britain, language, minorities, Negroes, professions, religious education, research, scholarships, social sciences, vocational training. Each indexer has a similar program, which is balanced according to an average volume of news in the subjects in his program and according to the complexity of that news. Each program includes many related subjects.

Each day an indexer will receive 15 to 20 stories. He works on a strict deadline schedule, as does the entire office. In addition he does preliminary editing of all his indexing subjects and checks cross references. He also edits a miscellaneous section of a letter, such as Ch. to Cn. These miscellaneous editing assignments are made to give the indexer a certain diversity in his tasks and also to prepare him for possible promotion to a supervisory position. Indexing is by no means a dead-end job.

There are five supervisors of indexing, and they are responsible for the work of the indexers assigned to their desks. Their main job is the editing of copy for the semimonthlies and for the Annual. They also read proof and pick up the work of indexers who are on vacation or ill.

Two production assistants perform a variety of tasks, especially in times of emergency. The one who marks the paper also is in over-all charge of indexing, and it is his responsibility to see that all indexers complete their assignments on time and to give advice on matters of indexing policy. He also directs the training of new indexers. The other production assistant is in

charge of proofreading and also carries a heavy program of editing.

The assistant editor works closely with all indexers and supervisors and settles many problems of subject classification and the handling of complex stories. He plays a major role in the editing and proofreading of the Annual. He also takes over many of the editor's responsibilities when the editor is away from his desk.

The editor is in charge of the over-all production of the *Index* and assumes the full and final responsibility for the product. It is his job to see that the entire operation proceeds smoothly, efficiently and accurately and that all deadlines are met on time. His role is largely one of administrator. His is a job of planning, of introducing ideas and of weighing ideas offered by others; of selecting staff and of keeping the staff working effectively as a team; and of keeping subscribers satisfied from a standpoint of editorial content and on-time production. He determines final policy and handles all personnel matters.

He realizes that the main ingredient for success as an editor is to surround himself with competent persons and to see that the work is done properly. And, of course, the editor would be "lost" without the services of an exceptional secretary of outstanding ability.

One of the most serious problems of the Index is that of obtaining replacements when staff vacancies occur. If the News Department needs a new reporter, it usually has little difficulty locating one of proven worth who can jump in and turn in a good performance from the start. But if the Index needs a replacement, it has no source of trained news indexers to call upon. A new employee, even though he has had library and indexing experience of one kind or another, requires a training period of between six months and a year before he is properly prepared for the job. Replacements are a costly item at the Index.

At the end of each indexing period, the editing of copy begins. Four days are required by production assistants, supervisors and indexers to edit the copy for each semimonthly issue. As an extra precaution

in the battle for accuracy, the editor and assistant editor make a special recheck of all copy after it has been edited by the persons regularly assigned to it.

Just as we assign special subjects to indexers, we assign special subjects and sections of letters to those whose task is editing. In this way they become specialists in their subjects and are more likely to spot errors than if they were unfamiliar with them. For example, the indexers and editor on the subject of mortgages probably know as much about the subject as experts in the Real Estate News Department.

We use many checking, double-checking and even triple-checking processes in an effort to keep the Index as free from error as possible. And there is opportunity aplenty for error, especially when you consider the thousands and thousands of facts that are recorded, the thousands and thousands of proper names, many with difficult foreign spellings, and the thousands and thousands of numbers that must be typed in the making of date references. All this typing must be done twice, too-once by the staff member making the original cards and once by a varitypist typing the same matter in a different physical form (on galleys) from which the plates for printing are made.

The production of the Annual issue takes on, in some respects, a different formula. It is largely a job of combining the cross references and entries, under their respective subjects, that were made for the 24 semimonthlies. This requires considerable time and great care; editors must be alert to inconsistencies that are bound to occur during the year. They must be constantly on the lookout for errors, for the Annual is the final record for the ages and it should be perfect. The Annual also presents a formidable assignment in proof-reading of galleys and pages.

On a small scale, some phases of Annual work go on in one form or another most of the year but it strikes in full force in January and continues for three or four months. Careful planning must be carried out during Annual production, for we

must produce it and the semimonthlies of that period at the same time—and on time

Common Errors In Using The Index

Sometimes a person looks for something in the *Index* without success. Here are some of the reasons:

- 1. He hasn't bothered to take a few minutes to read the special section, "How To Use The Index." He is bound to find it helpful, and perhaps it will solve his problem.
- 2. He is looking for a story about the appointment of K. T. Keller as head of the guided missile program. He knows absolutely that Keller was named in 1952—but it turns out it was in 1950. Only two years off! This is nothing in comparison to some persons who are as much as ten or 15 years off in the time of an event.
- 3. He is ready to bet a million that a certain story about Governor Meyner appeared in the *Times*. But it didn't; it was in the *Tribune*. After a few days or weeks, some people think that everything they have read, whether it's James T. Farrell's Baseball Diary or Corey Ford's article on humor, appeared in the *Times*.
- 4. Then there's the chap who wants information about a scientist but he hasn't the faintest idea of the man's name and he expects a librarian to pull it out of a hat simply on the basis that the man is a scientist. And there is the case of the inquirer who knows only the first name of a person and thinks it is his family name. Not long ago, someone wanted material on "Senator Strom." What he really meant was Senator Strom Thurmond.
- 5. There's the person who incorrectly copies down the date in a cross reference or entry. He will write page 61 when the reference says page 16 and then curse the *Index* for what he think is an inaccuracy.
- 6. The impatient or lazy soul is another example. He looks up an entry in the *Index*, copies the date reference correctly and goes to the paper but can't find the information he wants. Why? He expects the part of the story he wants to flash before him in neon lights; he can't be bothered to

read through to the fourth paragraph where he will find the material he seeks.

- 7. Once in a while a person will be unable to find a story because he consults the city edition of the paper instead of the final late city edition which is the one we index.
- 8. There are strange cases too. A few years ago the magazine section ran a political article on India with the headline, "Volcanic Forces Rumble in India." A reader called and complained that he could not find the story under the heading "Volcanoes." There also is the case of the reader who tried to find a story about railroad rolling stock under "Stocks and Bonds."
- 9. And there are many, many cases of researchers who are too impatient to follow through on cross references.

Cross References

Speaking of cross references, may I say that the invention of the fascinating cross reference is as important in the boundless field of research and record keeping as the invention of the wheel is in the world of industry. Both get you where you want to go. Without the wheel, trains, planes and cars would be at a standstill; without the cross reference, great masses of information could not be stored and preserved and could not be made available to the public because of prohibitive costs. The cross reference is truly the economic guide to research.

Take the New York Times Index for example. It probably holds the championship for being the heaviest user of the cross reference in the publishing world. The estimate is that it uses 150,000 in its 24 semimonthly issues and 200,000 in the Annual—a total of 350,000 a year. If these cross references were set one to a line, they would fill 266 solid pages of the Times. So you see, we not only believe in cross references, we believe in using them.

The terminology used for *Index* cross references is of many varieties. It includes form or straight, see, see also, implied, reciprocal, dated, undated, qualified and eg (exempli gratia).

The cross reference that should be qualified and is not can have some interesting connotations. For example, District Attorney Frank S. Hogan is crossed to "Sex Crimes." Mr. Hogan has no connection with a crime of that type except as prosecuting attorney against someone who did commit the crime. The way to protect Mr. Hogan from having someone misunderstand the cross reference would be to qualify it with the word "prosecutor."

A statement once made by Dr. Julian P. Boyd sums up in noble words and brilliant phrases the purpose of the *Index*:

"The New York Times Index is far more than an index to the daily news; it is a reflection of the Times' consistent philosophy and practice of responsible journalism. It is an expression of the well-founded conviction that reliable information, painstakingly gathered from the ends of the earth, responsibly presented to an enlightened audience, should not be cast overboard into the vast sea of newsprint and thus lost to the inquiring scholar, the busy professional man, the reference librarian, the student of public affairs and the casual inquirer, but should be codified, analyzed and indexed."

May all your explorations in 13-13458* be fruitful ones!

FOR SALE

SLA Anniversary Seals

Blue and gold seals commemorating the Fiftieth Anniversary of Special Libraries Association have been widely distributed to Division and Chapter chairmen, presidents and membership and public relations chairmen. They are now available for purchase by individual libraries and librarians and may be ordered in quantity from SLA Headquarters at the following prices:

100 seals60¢

^{*} Library of Congress number of the New York Times Index.

Military Librarians' Workshop

THE Second Annual Military Librarians' Workshop was held at Fort Sill, Oklahoma, October 2, 3, and 4. Eighty-seven librarians representing 41 installations of the Army, Navy and Air Force in the United States and Canada were present.

Three days of Workshop sessions were devoted to roundtable discussions of those problems that are peculiar to military libraries. One afternoon session was devoted to cataloging problems, with particular interest in "Corporate Authors" and "Serial Publications."

Ernest DeWald, from the Army Map Service in Washington, led a discussion on "Utilization of Subprofessional Personnel." This discussion resulted in a resolution to be forwarded to the United States Civil Service Commission urging that it reconsider its stand on the revision of standards for subprofessional personnel.

Lt. Col. George V. Fagan, librarian of the Air Academy, led a discussion on "Size and Services of a School Library as Related to the Student Body Served."

Dr. Philip G. Seitner, of the Office of Scientific Information, National Science Foundation, spoke on "Inventory of Federal Scientific Information Activities."

Other subjects discussed were "Microfilm and Microcards," "Translation Problems," "Subject Headings," "Circulation Methods" and "Inventory Methods."

One outstanding achievement of the Workshop was the appointment of a committee on the expansion of the Military Periodical Index. The Military Periodical Index, which is published by the Air University, indexes about 70 of the better known military periodicals. At last year's Workshop, plans were made for an expansion of this index through the cooperative efforts of several other military libraries. Because of the success of this venture, a further expansion will be carried out during the coming year. A permanent committee to work on this was formed and will report on progress from time to time.

The entire group of conferees were the guests of Major General and Mrs. Thomas E. de Shazo, Commandant, U. S. Army Artillery and Missile School, at a reception on the evening of Thursday, October 2, at the Fort Sill Officers Club. The conferees accepted an invitation to hold the next Workshop meeting at the Naval Postgraduate School, Monterey, California. Professor George R. Luckett, librarian, will be the host for that meeting.

The conferees also witnessed a demonstration of the five major missiles now in use by the United States Army and visited the Fort Sill Indian School.

O. WILLARD HOLLOWAY, Librarian U.S. Army Artillery and Missile School Ft. Sill. Oklahoma

Major Robert C. Lutz (right) explains an Honest John rocket to military librarians attending the Workshop at Fort Sill (left to right): O. Willard Holloway, director of the U.S. Army A&MS Library, Fort Sill; Charles H. Stewart, Librarian at the Department of National Defense, Ottawa: and J. Bernard Vinet, chief librarian, College Militaire Royale, Quebec.



U. S. Army Photograph

Fall Meeting Of The Metals Division

The ninth annual fall meeting of the Metals Division of SLA was held in Cleveland this year in conjunction with the National Metals Congress and Exposition, which was in session the week of October 27-31, 1958. Over 50 SLA members participated in the two-day program, and open meetings were well-attended by other Congress visitors.

On Wednesday evening before the twoday conference, Alice Paulin, immediate Past-Chairman of Metals Division, entertained members at her home in Cleveland. This was a particularly happy affair as Mrs. Margaret H. Fuller, another Past-Chairman of the Division and now President of SLA, joined the party. An international atmosphere was evident as visitors from Sweden attending the Metals Congress were guests as were SLA members from Canada and the United States.

Thursday, October 30, the group boarded a bus and was taken to NASA Lewis Research Center. The National Aeronautics and Space Administration was launched on September 30, 1958, with the former National Advisory Committee for Aeronautics and its 43-year tradition of scientific accomplishments as a core. The Lewis Research Center, formerly the NACA Lewis Flight Propulsion Laboratory, was established on a 200-acre site near the Cleveland Airport in 1941 and has recently acquired an adjacent tract of 100 acres to provide space for future expansion. NASA directs all United States aeronautical and space activities, except those primarily military in nature. These activities include research into, and solution of, problems of flight within and outside the earth's atmosphere; development and operation of aircraft and spacecraft for research purposes; and the conduct of other activities needed for space exploration.

More than \$125 million worth of research facilities are in use at Lewis. Chemical, nuclear and nuclear-electric rockets for missiles and spacecraft are studied here, as are turbojet and ramjet power plants for missiles and aircraft. Unique tools of research are used to

study propulsion problems, from the chemistry of propellants to the operation of engines under conditions simulating flight within and outside the earth's atmosphere.

After a movie entitled "Beating the Heat," three NASA specialists were introduced in turn by George Mandel, librarian of Lewis Research Center and President of the Cleveland Chapter of SLA. Some phases of NASA research on materials for aeronautics and space were discussed. John C. Freche spoke on "Materials for Propulsion and for Space Vehicles," George C. Deutsch on "Materials for Nuclear Reactors" and Dr. Robert A. Lad on "Some Problems in Solid State Physics and High Temperature Chemistry."

Following luncheon on the reservation, a tour of the facilities took up the balance of the afternoon. Included were the Lewis Library, the Rockets Operations Laboratory, the Materials and Structures Building and the 10 x 10-foot supersonic wind tunnel, so-called because of the size of its test section. Members of NASA staff conducted the tour and answered the multitude of questions posed by the group.

Thursday evening the Cleveland Chapter of SLA invited Metals Division members to meet with them at a joint dinner held at the new Cleveland Engineering and Scientific Center. George Mandel, Chapter President, introduced the special guest of the evening, Mrs. Margaret H. Fuller. Mrs. Fuller talked about the past, present and future of SLA, highlighting the organization's 50th anniversary this year. The speaker for the affair was then introduced by Mr. Mandel—George F. Sullivan, editor of Iron Age. His talk centered around his recent three-month tour through Russia with a group of Americans representing various steel companies. His observations of the steel industry there covered such phases as steel production and handling, the union situation, the mode of living of employees and other interesting areas. Mr. Sullivan showed colored slides of his trip and they were coupled with running comments on the



The active, well-attended Metals Division Exhibit Booth

Miller-Ertler Studios

plants visited, the people whom he met and the treatment of these American visitors by the Russians.

On Friday, October 31, at an open meeting held at the Public Auditorium, the theme of the four-member panel discussion was "Metals Meet the Competition." Robert Gibson, Chairman of Metals Division, introduced the speakers at a well-attended, outstanding session. The first participant, I. Grant Clark of Reynolds Metals Company, discussed "The Trend to Curtain Walls." The increasing use of aluminum in buildings of all kinds and in bridges and the anodizing of aluminum for these purposes were discussed, accompanied by slides and illustrations of the high points. "Aluminum Foil for Packaging Applications" was covered by Arvil B. McKee, assistant chief, Foil and Packaging Division of Alcoa Research Laboratories, New Kensington, Pennsylvania. Mr. F. A. Loebach's talk, entitled "Aluminum-The Modern Building Material," was most enlightening and aroused considerable discussion later. Mr. Loebach is a registered architect and presently manager of Architectural Sales of Kaiser Aluminum and Chemical Sales, Inc. The final speaker, John D. Briggs, is manager of Commercial Research and Industrial Development of Bethlehem Steel Company. He challenged special librarians in the metals field to aid the cause of research as he talked on "Implications of Steel Industry Growth."

The Friday afternoon session began with a luncheon as guests of Republic Steel Corporation, after which a very interesting and informative tour of Republic's new Research Laboratory was conducted.

During the entire week of the Metals Congress, the Metals Division Booth attracted large numbers of visitors. This year the exhibit was completely planned and executed by Robert Gibson and members of the Battelle Memorial Institute art staff. The effectiveness of the booth was evidenced by the early exhaustion of the bibliographies and other materials prepared for distribution for this particular event. Metals Division members manning the booth commented on the greater-than-ever interest in the materials on display, requests for information and the work of the organization. Bibliographies prepared for distribution were: Aluminum (Alcoa Library), Hafnium Carbide (Linde Company), High Temperature Scaling (International Nickel Company), Ultra High Strength Steels (U.S. Steel Corporation) and Hydrogen Embrittlement of Steels (Socony Mobil Oil Company).

> MRS. RUTH L. MACDONALD, Librarian Erie County Technical Institute Buffalo, New York

EDITOR'S NOTE: Copies of the four papers presented at the "Metals Meet the Competition" panel are available upon request from SLA Headquarters, 31 East 10 Street, New York 3, New York, as long as the supply lasts.

New Horizons for SLA Translation Center

As of January 1959, the Special Libraries Association and the Office of Technical Services of the United States Department of Commerce will begin a new cooperative venture in the collection and distribution of unpublished translations. This new program will bring about some changes for the Center that are expected to provide an increased coverage of the field of translations and better service to users of the Translation Center.

The major change is the discontinuance of **Translation Monthly** with the December 1958 issue. This will be succeeded by **Technical Translations**, which will be issued by the Office of Technical Services. This publication will appear semimonthly and will list material available in translation. Titles will be arranged under broad subject headings and will be followed by short abstracts. The first issue will appear in January 1959, and subscriptions can be placed through the Office of Technical Services, Department of Commerce, Washington 25, D. C. The annual subscription will be \$12 domestic and \$16 foreign.

The second major change as a result of this agreement with OTS is the designation of areas of collection. The SLA Translation Center will collect translations from non-governmental agencies (industries, societies, universities, institutes, etc.) both domestic and foreign. OTS will collect translations from governmental agencies, both domestic and foreign. Copies of all non-governmental translations received by the Translation Center will be forwarded to OTS for indexing and abstracting, and in turn copies of all governmental translations received by OTS will be deposited in the Translation Center. For the year 1958 it is estimated that the Center will receive about 5,500 items. Under the new cooperative setup, it is estimated that the Center and OTS will jointly collect over 10,000 translations. All of these will be on deposit at the SLA Translation Center at The John Crerar Library in Chicago and in the Library of Congress. Identical indexes and files pertaining to translations will be maintained at both centers.

Translations listed in **Technical Translations** will generally be available from either center at the same price. In cases where multiple copies are received by OTS, these will be sold only by OTS until the original copies are gone. Photocopies will then be available at both centers. **Technical Translations** will also list translations available from commercial firms, translations of available abstract publications and work in progress in translation in government agencies.

Richard A. Davis, Chief of the SLA Translation Center, has made the following statement in regard to the new situation:

"It is felt that this cooperative agreement between the Center and OTS should enable us to give better and more complete service to those industries, agencies and institutions interested in translations or translation activities. The listing of the available translations will prevent duplication of effort and expense in the making of translations and will prove to be an even larger contribution to our scientific wealth. All organizations engaged in translation activities are urged to cooperate with the Center by depositing copies, and to make use of the Center's fast copying service. It is hoped that those who have questions regarding translations or translation activities will turn to us for aid."



RICHARD A. DAVIS has recently been appointed Chief of the SLA Translation Center at The John Crerar Library in Chicago. Born in Pasadena, California, Mr. Davis served as a Lieutenant in the U.S. Naval Air Corps during World War

II, and then attended the University of California where he graduated in 1948. From there he went to Joliet, Illinois, where he was for two years

editor of the Farmers Weekly Review, then a production chemist and later purchasing agent at the Bio-Process Co. With the advent of the Korean conflict, Mr. Davis rejoined the U.S. Navy Air Corps as a Lt. Commander and was awarded the Air Medal. From 1954 to 1957 he attended the University of Chicago Graduate Library School, becoming a member of Phi Beta Kappa in 1957 while concurrently working in The John Crerar Library. Prior to his SLA appointment, Mr. Davis was Chief of the Technology Department at Crerar.

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A pilot plant research program, conducted by the Center for Documentation and Communication at Western Reserve University and sponsored by the American Society for Metals, has proved conclusively that metals engineering technical and scientific literature can be searched by an electronic "brain." A \$7,000 increase in the Center's annual grant will provide for the gradual transition from the experimental to the operational stage and for training a staff for a future ASM Metals Information Center. During 1959 the Center hopes to prepare 75000 encoded abstracts from current metals periodical literature. This literature searching project is an expansion of the published abstracting service, ASM Review of Metal Literature.

Chemical Trademark File

The Cheminform Institute, located in the Coliseum Towers, New York 19, has announced the formation of a new chemical information service. This service features a file of trademarks, international in scope and including registered, unregistered, common, trivial, foreign, scientific and technological names in every type of chemical and chemical using industry. The director of this new service is H. Bennett, Editor-in-Chief of the *Chemical Formulary*.

Index to AALL's Journal

A one-volume Cumulative Index to the Law Library Journal's first 50 volumes will contain a detailed author-subject analysis covering legal research methods and legal bibliography. It will be published by the American Association of Law Libraries and distributed early in 1959 at \$16. Orders may be placed now with Dorothy Salmon, Law Librarian, University of Kentucky, Lexington, Kentucky.

Members In The News

MRS. JIMMIE M. McWHORTER, librarian at Brookley Air Force Base, Alabama, won for the second consecutive year the John Cotton Dana Publicity Award. The Brookley AFB Library won first place in the Air Materiel Command and third place in the Air Force, collecting \$400 in award money.

MELVIN VOIGT, assistant librarian at the University of California, Berkeley, has been awarded a Fulbright Research Grant for study at the University of Copenhagen, during the academic year 1958-1959. His project is entitled "An Evaluation of Scientific and Technical Abstracting and Indexing Services Based on Their Intrinsic Values."

Coming Events

"A better-read, better-informed America" is the objective of the second NATIONAL LIBRARY WEEK, scheduled for April 12-18, 1959. The National Book Committee, Inc., a non-profit citizens group, is sponsoring the program in cooperation with ALA and other library and publishing organizations.

Advertising Sources Course

A comprehensive recap of up-to-date research, advertising and marketing sources has been made available by the New York Advertising Group of SLA. The notes are based on eight lectures given by the group earlier. Topics included were: general sources (leading books and periodicals for basic information); media sources (vital information offered by trade publications); picture sources (outstanding pictorial reference books, indices and others); paid research sources (organizations providing data on specific markets); U.S. government sources (description of government references, available statistics for industries, etc.); association sources (associations offering historical and marketing data to non-members). Copies of the notes are available at \$2.50 from Mrs. Doris B. Katz, National Broadcasting Company, 30 Rockefeller Plaza, Rm.-RKO 304, New York 20, New York. Please make checks payable to Mrs. Katz.

Off the Press . . .

New Serials

THE CZECHOSLOVAK JOURNAL OF PHYSICS IN ENGLISH TRANSLATION will be published by the Consultants Bureau, Inc. starting with the January 1959 issue, at an annual subscription rate of \$50 for six issues. The translations, by bilingual physicists, will include all tabular, diagrammatic and photographic material integral with the text and are designed for scientists who are not conversant with Russian, German or French, original languages of many articles.

EXECUTIVE BOOK REVIEW selects and gives thumb-nail reviews of 50 or 60 books on management, personal development, community, national and international affairs, history, biography and science. The monthly, published at 3209 Columbia Pike, Arlington 4, Virginia, costs \$7.50 for the first subscription and \$3 for each additional subscription to the same address.

Book Review

PROCEEDINGS OF THE INTERNATIONAL STUDY CONFERENCE ON CLASSIFICATION FOR INFORMATION RETRIEVAL, HELD AT BEATRICE WEBB HOUSE, DORKING, ENGLAND, 13-17TH MAY, 1957. ASLIB, London; Pergamon, New York, 1957. 154 p. \$5.50.

This book contains eight papers by men prominent in the field, a memorandum report of the Classification Research Group in London, a classification scheme for documents on occupational safety and health and a lengthy but rather disjointed summary of the conference discussions.

It is an important book, and one that anyone involved in document and information retrieval will find profitable and enjoyable. It is a surprisingly comprehensive statement of the background, moment, methods and preliminary results of the world-wide reexamination of library and documentation philosophy and practice. (I should think some editors would wish to have arranged the papers in a sequence that would better display this cohesion.) Not a few readers may find pleasure in its format and make-up as well. Although letterpress, like classification itself, especially in the United States, has fallen into disrepute as a tool of communication, it is nevertheless agreeable to read the subject dressed up beyond the now usual unjustified typescript and stapled paper bindings.

Ranganathan's paper on "Library Classification as a Discipline" relegates that subject to the closing paragraphs and is mainly a restatement of the principles of faceted classifications as embodied in Colon. As such, it will serve as a good introduction to Colon for those who are unfamiliar with it. Fortunately, D. J. Campbell has supplied a glossary. Colon's terminological requirements make for difficult reading.

Dean Shera's paper on "Pattern, Structure and Conceptualization in Classification" is another of his erudite, well organized and well written essays. In many ways, this paper is an explanation of the background and significance of the reexamination of which the other papers are part-reports. Shera examines the nature of classification itself, its objectification in retrieval tools and the purpose and logic of its varied applications and misapplications. The paper impressed me as a classic. It ranges from a discussion of the "unwarranted assumption that classifications of knowledge are . . . applicable to books" to a projection of librarianship as not only a matrix but also a catalyst in the acquisition of knowledge. It is alone worth the price of the book.

Mills and Vickery discuss the value of faceted classification in solution of the problem of multiple significance, Mills within separate disciplines, Vickery between disciplines. In both papers one sees how the demands of terminology and spatial sequence inevitably throttle philosophies of scientific schemata and deform them to the compromises imposed by that ancient tool, the book. Coates' paper is an interesting experiment in facet notation for infinite hospitality; Farradane's a brief plea for construction of mechanical systems of selection on the reliable basis of classification.

All of these papers, though they are facet-oriented (the Research Group Report also settles on the need for a faceted classification), are generally valuable for their demonstration of the direction of research in mathematics, linguistics logic, notation and abstract classification, to enable librarianship to accomplish the goals Dean Shera's paper sets for it. Doing this, they may oppress some readers, but N. T. Ball and Grolier wisely show in their summings-up that librarianship and classification have already come a long way.

ROBERT L. HAYNE, Head Document Analysis Unit Smith, Kline & French Laboratories Philadelphia, Pennsylvania

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COLON CLASSIFICATION, vol. 1: Basic Classification, 5th ed. S. R. Ranganathan. Madras, India: Madras Library Association, 1957. 464 p. About \$5. (Available from G. Blunt and Sons, London.)

CONTEMPORARY LIBRARY DESIGN (Frontiers of Librarianship, no. 1). Wayne S. Yenawine, ed. Syracuse, N. Y.: Syracuse University Press, 1958. 32 p. pap. \$1.50.

Three papers, "Public Library Design" by Francis Keally, "School Library Design" by Margaret I. Rufsvold and "College and University Library Buildings" by Howard Rovelstad, originally presented at the Symposium on Contemporary Library Design held at Syracuse University on July 18, 1957.

JARGON OF LIBRARIANSHIP (Aspects of Librarianship, no. 16). Kent, Ohio: Department of Library Science, Kent State University, 1958. Gratis. (Available from John B. Nicholson, Jr., Department of Library Science, Kent State University, Kent. Ohio.)

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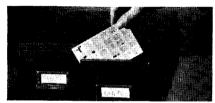
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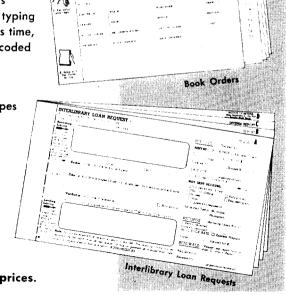
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