THE BOOK WAS DRENCHED

UNIVERSAL
LIBRARY
OU_158312
UNIVERSAL
LIBRARY

OSMANIA UNIVERSITY LIBRARY

RL
Call No. 025.3 Accession No. 19722

R19T
Author Ranganathan, S. R.

Title Theory of Library catalogue. 1938

This book should be returned on or before the date last marked below.

Mādras Library Association

Publication Series, 7

THEORY OF LIBRARY CATALOGUE

Madras Library Association

PUBLICATION SERIES

1. **Library Movement.**—A Collection of Essays by Divers Hands, with a Foreword by the Rt. Hon'ble V. S. Srinivasa Sastri, P.C., C.H., and a message from the Rt. Hon'ble Viscount Goschen of Hawkhurst, G.C.S.I., C.B.E., V.D. Demy 8vo, 1929. *Out of print.*
2. **The Five Laws of Library Science**, by S. R. Ranganathan, M.A., L.T., F.L.A., University Librarian, Madras with a Foreword by Sir P. S. Sivaswamy Aiyar, K.C.S.I., C.I.E., and with an Introduction by W. C. Berwick Sayers, F.L.A., Chief Librarian, Croydon Public Libraries. Demy 8vo., 1931.
3. **Colon Classification**, by S. R. Ranganathan, M.A., L.T., F.L.A. In three parts. Demy 8vo, 1933.
4. **Classified Catalogue Code**, by S. R. Ranganathan, M.A., L.T., F.L.A., University Librarian, Madras, with a Foreword by W. Erlam Smith, M.A., I.E.S., Director of Public Instruction, Madras. Demy 8vo, 1934.
5. **Library Administration**, by S. R. Ranganathan, M.A., L.T., F.L.A., University Librarian, Madras, with a Foreword by R. Littlehailes, C.I.E., Vice-Chancellor, University of Madras. Demy 8vo. 1935.
6. **Prolegomena to Library Classification**, by S. R. Ranganathan, M.A., L.T., F.L.A., University Librarian, Madras. Demy 8vo, 1937.
7. **Theory of Library Catalogue**, by S. R. Ranganathan, M.A., L.T., F.L.A., University Librarian, Madras, with a Foreword by Diwan Bahadur S. E. Runganadhan, M.A., L.T., Vice-Chancellor, University of Madras. Demy 8vo, 1938.
8. **School and College Library**, by S. R. Ranganathan *Ready for the Press.*
9. **Colon Classification**, by S. R. Ranganathan. Second revised edition. *In preparation.*
10. **Reference Work**, by S. R. Ranganathan. *In preparation.*

Obtainable from—1. **The Madras Library Association, Triplicane, Madras.**

2. **Edward Goldston, Ltd., 25, Museum Street, London, W.C.1.**

Theory of Library Catalogue

BY

S. R. RANGANATHAN, M.A., L.T., F.L.A.

Librarian, Madras University Library

Secretary, Madras Library Association

WITH A FOREWORD

BY

S. E. RUNGANADHAN, M.A., L.T.

Vice-Chancellor, University of Madras



MADRAS

THE MADRAS LIBRARY ASSOCIATION

LONDON: EDWARD GOLDSTON, LTD.

1938

PRINTED BY R. NARAYANASWAMI IYER,
AT THE MADRAS LAW JOURNAL PRESS, MYLAPORE, MADRAS.

TO
ŚRĪ SĪTĀLAKṢMĪ
MY MOTHER

ACKNOWLEDGMENTS

The thanks of the author are due to the following persons and institutions:—

To the University of Madras, which gave the author generous facilities to make a special study of Library Science and Library Organisation in Great Britain, for permission to publish this book which is based on the experience gained during the last fourteen years in organizing the Madras University Library and teaching the subject to the students of the School of Library Science;

To Diwan Bahadur S. E. Runganadhan, Vice-Chancellor, University of Madras, for his kind foreword;

To Mr. Rudolph Gjelsness, Chairman, A. L. A. Catalog Code Revision Committee for permission to use the Revised Draft of the *A. A. Code*;

To the Madras Library Association for having taken up the publication of the book;

To Mr. L. Thompson for many valuable suggestions;

To Messrs. C. Sundaram, B. A., and K. M. Sivaraman, B.A. for the help given by them in the preparation of the manuscript and for reading proofs for the author; and

To the proprietor of the Madras Law Journal Press for the efficient, expeditious and obliging way in which the printing had been carried out.

CONTENTS

Chap.		Page.
	Acknowledgments ..	7
	Preface ..	10
	Foreword ..	11
	Introduction ..	12
	Key to References ..	16
	Part 0. Preliminaries	
01	What is a Library Catalogue? ..	19
02	Shorten the Main Entry ..	27
03	Kinds of Library Catalogue ..	31
04	Name the Entries ..	35
05	Guiding Principles ..	52
	Part 1. Subject Entries	
11	What is Specific Subject? Find it by Chain Procedure ..	79
12	Conflict of Headings. *See* Reference Entries ..	123
13	Subject Entries and the Classified Catalogue ..	154
14	*See Also* Reference Entries ..	162
15	Syndetic *vs.* Systematic Arrangement ..	174
	Part 2. Series Entries	
21	Series *vs.* Editor ..	201
22	Some Details ..	210
	Part 3. Analytical Entries	
31	Author Analytics ..	217
32	Subject Analytics ..	223
33	Catalogue *vs.* Bibliography ..	232

Part 4. Periodical Publications

41	Main Entries	..	239
42	Card Technique	..	251
43	Added Entries	..	269

Part 5. Name Entries

51	Personal Names	..	277
52	Corporate Names	..	301
53	Substitutes for Names	..	317
54	Who is the Author?	..	323

Part 6. Odds and Ends

61	Physical Form of the Catalogue	..	343
62	Co-operative Cataloguing	..	346
63	Annotations	..	351
64	Alphabetisation and Gestalt Value	..	354
65	Summary and Conclusion	..	367
	Index	..	377

PREFACE

BY

THE MADRAS LIBRARY ASSOCIATION

With the object of spreading the essential ideas of the Library Movement and of directing thought towards the creation of a library service suited to our country, in 1929 the Madras Library Association inaugurated its Publication Series. The first volume, *The Library Movement*, was by Divers Hands. The next five volumes were all by S. R. Ranganathan. As their titles show they dealt with technical and practical aspects of library work: *The five laws of library science*, 1931; *Colon classification*, 1933; *Classified catalogue code*, 1934; *Library administration*, 1935; *Prolegomena to library classification*, 1937. All these volumes have circulated well both in India and abroad.

As another instalment of this Publication Series the Association now publishes the present volume, *Theory of library catalogue*, the manuscript of which Mr. S. R. Ranganathan has been good enough to place at its disposal.

The Association hopes that this volume will circulate as widely as its predecessors and that it will help libraries in India and elsewhere to organize their work in an efficient, scientific and serviceable way.

FOREWORD

I have much pleasure in writing this Foreword to the *Theory of library catalogue.* In this book, the author examines the theoretical foundations of cataloguing practice, and formulates the principles which should underlie the preparation of a library catalogue. After a careful and critical appraisal of the merits of different types of catalogues, he comes to the conclusion that the classified catalogue, though its arrangement may seem somewhat elaborate and complicated to the general reader, is the most efficient means of enabling him to get at the book or books dealing with the subject in which he seeks information, and that it most nearly fulfils the canons of library science.

Mr. Ranganathan brings to his task not only a very thorough knowledge of his subject but also a wide experience of all aspects of library organisation and administration gained as the Librarian of the Madras University Library for several years. The book in spite of the technical nature of its subject is written with great lucidity and a wealth of illustrative detail, and should make interesting and profitable reading both for the professional librarian and for the general reader.

The library movement in India is still in its infancy, but there are indications of its rapid extension in the near future. The work of the Madras Library Association, under whose auspices this book is published, in stimulating the growth of the movement in this Presidency has been wholly praiseworthy. I trust that this book along with the other publications of the Association will contribute in increasing measure to the proper organisation and efficient service of libraries in our land.

UNIVERSITY BUILDINGS,
CHEPAUK, MADRAS,
28th November, 1938.

S. E. RUNGANADHAN
Vice-Chancellor.

INTRODUCTION

Said the philosopher: You think that I have learned a
Great deal and keep the whole of it in my memory?
Sse replied with respect: Of course. Isn't that so?
It is not so. I have reduced it all to one principle*

—*Confucius.*

In the *Five laws of library science* (1931) most of the major tendencies in library practice were traced to five fundamental principles. In the *Prolegomena to library classification* published last year the foundations of library classification were examined and twenty-eight canons were isolated. These canons will be of use to originators of classification schemes and to classifiers who apply them in their daily work. They also furnish an objective method for comparing schemes of classification. In this book a similar attempt is made to examine the theoretical foundations of cataloguing practice.

***

In his introduction to Sharp's *Cataloguing* Jast rightly points out that the "Many rules in a comprehensive code . . . have a certain intellectual unity though it must be confessed that they are generally presented

* Pound (Ezra), *Guide to Kulchur*, 1938, p. 15.

in a fashion to disguise the unity behind. All the more reason for a text book to explain all this." In *A manual of cataloguing and indexing* Acomb begins his contribution thus: "Cataloguing is not an art, for self-expression in a catalogue would lead to disaster; nor it is a science, for it does not depend upon ascertained and unalterable facts." My feeling is that cataloguing has so long been practised as "simply a technique" that we may now attempt to evolve a theory.

The irreconcilable views of the British Library Association and the American Library Association on certain Author Entries, the undecided and self-conflicting statement of Cutter on Subject entries, the facile evasion by most text-books of moot questions connected with the latter and the difficulties presented by Periodical Publications and Corporate Authors are some of the things about the present state of technique that left me dissatisfied. Personally, I was taught only a bundle of detached rules ; all my attempts in those days to understand their organic interrelation failed. As a practising cataloguer I had neither time nor freedom to go beyond the code put into my hands. Even when I was working out the *Classified catalogue code* my understanding of theory was not yet ripe, though no doubt it was guiding me preconsciously. Only the attempt to teach cataloguing finally matured it.

***

Like the *Prolegomena*, in fact this book owes much to the classes of the Madras School of Librarianship

All teaching is reciprocal, particularly if the subject taught has not yet reached the stage of deduction from principles. Rule of thumb really satisfies neither teacher nor taught. There can be no rest for a teacher till he arrives at a few easily remembered fundamental principles from which rules to meet any practical situation can be promptly and unerringly derived.

This self-educational effect of teaching has been well emphasised by the Upanishadic seers. According to them four stages can be recognised in education:

(1) *Adhīti* (Study)
(2) *Bōdha* (Understanding)
(3) *Ācaraṇa* (Practice)
(4) *Pravāraṇa* (Teaching)

and one's education is not complete till the last has been lived. It is usually at this stage that principles are crystallised.

***

Part 0 is concerned with definitions, terminology and guiding principles.

Part 1 (the longest) is devoted to Subject Entries. After theoretical analysis of the concept "Specific Subject of a book" a practical method (Chain Procedure) is evolved for determining it and representing it in the Heading. Use of this procedure in the choice of Headings for *See Also* References is also explained. The last chapter (15) of this part discusses the syndetic

vs. systcmatic arrangement and establishes the essential similarity between the Classified and Dictionary Catalogues.

Series Entries, Analytical Entries and Periodical Publications (all topics easily isolated) are studied in Parts 2, 3 and 4 and serve to illustrate the application of the principles enunciated in chapter 05 to specific problems and to the comparative study of standard cataloguing codes. The *Classified catalogue code* and the *Guide to the cataloguing of the serial publications of the societies and institutions* are closely compared in Part 4.

Part 5 deals with the difficulties relating to Name Entries, personal and corporate. Its last Chapter (54) makes a systematic study of some of the outstanding rules of the *A. A. code.* It singles out certain unsolved Author Entry Problems and shows that in certain cases the *A. A. code* mixes up Author and Subject Entries.

Part 6 deals with various odds and ends. In chapter 64 the concept of Gestalt Value of items in an Entry is introduced to clarify the problem of alphabetisation. In Chapter 65 the case is summarised for preferring the Classified Form of Library Catalogue.

The book does not consider the organisation and routine of the cataloguing section of a library which has been fully dealt with in Chapter 5 of my *Library administration.*

KEY TO REFERENCES

A. A. Code	AMERICAN LIBRARY ASSOCIATION and (BRITISH) LIBRARY ASSOCIATION. Catalog rules: author and title entries. 1908.
Acomb	QUINN (J. Henry) and ACOMB (H. W.). A manual of cataloguing and indexing. 1933.
C. c. code	RANGANATHAN (S. R.). Classified catalogue code. 1934.
Childs	CHILDS (James B.). Author entry for government publications.
Colon classification	RANGANATHAN (S. R.), Colon classification. 1933.
Cutter	CUTTER (Charles A.). Rules for a dictionary catalog. 1904.
Five Laws	RANGANATHAN (S. R.). The five laws of library science. 1931.
Guide	PIERSON (Herriet Wheeler). Guide to the cataloguing of the serial publications of societies and institutions. 1931.
List	AMERICAN LIBRARY ASSOCIATION. List of subject headings for use in dictionary catalogs. 1911.
Mann	MANN (Margaret). Introduction to cataloguing and the classification of books. 1930.
Prolegomena	RANGANATHAN (S. R.). Prolegomena to library classification. 1937.
Quinn	QUINN (J. Henry) and ACOMB (H. W.). A manual of cataloguing and indexing. 1933.
Quinn (old)	QUINN (J. Henry). Library cataloguing. 1913.
Readings	ARNETT (L. D.) and ARNETT (E. T.), Readings in library methods. 1931.
Rules	CUTTER (Charles A.). Rules for a dictionary catalog. 1904.
Sharp	SHARP (Henry A.). Cataloguing: a text book for use in libraries. 1937.
Subject headings	LIBRARY OF CONGRESS. Subject headings used in the dictionary catalogues of the Library of Congress.
Yearbook	Catalogers' and classifiers' year book.

PART 0

Preliminaries

01 What is a Library Catalogue'
02 Shorten the Main Entries
03 Kinds of Library Catalogue
04 Name the Entries
05 Guiding Principles

01 WHAT IS A LIBRARY CATALOGUE?

According to the *New English dictionary* a catalogue is "now usually distinguished from a mere list or enumeration, by systematic or methodic arrangement, alphabetical or other order and often by the addition of brief particulars, descriptive or aiding identification, indicative of locality, position, date, price, or the like." As applied to a library, then, a catalogue is in this sense a methodically arranged record of information about its bibliographical resources. These may include (1) manuscripts, (2) incunabula, *i.e.* books printed before 1500 A.D., (3) modern books, (4) periodical publications, (5) scores of music, (6) maps, (7) lantern slides, (8) such extension materials as cinema films and gramophone records and (9) any other printed or pictorial material. We shall confine ourselves to the theory relating to the cataloguing of modern books and periodicals.

Let us first define certain terms.

ENTRY is a record about (or suggested by) a book in a catalogue. If there be more than one Entry about (or suggested by) a book, the one that gives the fullest information is called the MAIN ENTRY. The other entries (usually briefer) are called ADDED ENTRIES.

Types of Catalogue

As applied to a collection of books three functionally different types of Catalogue may be recognised. The functions of these three types may be indicated as follows:

(i) Bibliographical description;

(ii) Inventory; and

(iii) A tool for the fulfilment of the Laws of Library Science by

(*a*) disclosing to every reader his book;

(*b*) helping every book to find its reader;

(*c*) saving the time of the reader; and for that purpose,

(*d*) saving the time of the staff.

Characteristics of the Types

A catalogue of the first type will be characterised by

(*a*) one book, one Entry; and

(*b*) that Entry an elaborate one.

This type may be referred to as Descriptive Catalogue or Bibliographical Catalogue.

A catalogue of the second type will be characterised by

(*a*) one book, one Entry; and

(*b*) that Entry a brief one.

This type may be referred to as Inventory Catalogue.

A catalogue of the third type will be characterised by

(*a*) one book, many Entries;

(*b*) the Main Entry, in its elaboration midway between the Entry in a Descriptive Catalogue and that in an Inventory Catalogue; and

(*c*) the Added Entries (briefer) derived from the Main Entry. Their number will also be indicated by the details of the Main Entry. In modern card technique the back of the main card gives a list of all the Added Entries.

This type may be referred to as Library Catalogue.

The Descriptive Catalogue is really a survival of the bibliographical description developed for listing manuscripts and incunabula. It will be seen from the tabular statement on p. 22 and from the discussion following that so elaborate a Main Entry is not required for obedience to the Laws of Library Science. The Fifth Law, in particular, will consider it a definite fault. The second column of the table shows that if the Descriptive Catalogue errs on the side of over-elaboration, the Inventory Catalogue may be accused of meagreness.

Contents of Main Entries

The table also gives a comparative view of the details usually given in the Entries of the first two types of catalogue and in the Main Entries of a

ITEMS IN AN ENTRY OF		ITEMS IN THE MAIN ENTRY OF A LIBRARY CATALOGUE		
Descriptive Catalogue	Inventory Catalogue	Minimum	Maximum	As prescribed in the *C. c. code* and practised in the Madras University Library
1. Name of author or its substitute	1. Name of author or its substitute	1. Name of author or its substitute	1. Name of author or its substitute	1. Name of author or its substitute
2. Title (Literal transcription of title-page excluding imprint)	2. Short title (*i.e.* title reduced to the minimum number of words)	2. Short title	2. Title (Transcription from title-page excluding imprint, name of series, qualifications of author, etc.)	2. Title (Transcription from title-page excluding information about author, qualifications of contributor other than author, imprint, and name of series, and the title shortened by omission of puffs)
3. Edition if not included in 2	3. Call number		3. Edition if not included in 2	3. Edition if not included in 2.
4. Publisher	4. Accession number		4. Publisher	4. Series note
5. Place of publication			5. Place of publication	5. Call number
6. Date of publication			6. Date of publication	6. Accession number
7. Series note			7. Series note	7. Format, size (Symbolic indication only)
8. Format, size			8. Format, size	8. Collation (Symbolic indication only)
9. Collation (elaborate)			9. Collation (brief)	
10. General descriptive note			10. Call number	
11. Peculiarities in binding			11. Accession number	
12. Call number			12. Annotation	
13. Accession number				
14. Annotation				

Library Catalogue. The first column, with fourteen items, shows the most elaborate Entry possible in a Descriptive Catalogue. The second column (Inventory Catalogue) shows only four items in its Entry. The corresponding features of the Main Entry of the Library Catalogue are shown in three columns, the first giving the minimum number of items, the second the maximum one may expect to find and the last, the number used in the Madras University Library and prescribed in the *C. c. code.*

VARIETIES OF CATALOGUING STYLE

We may first consider how many cataloguing practices are theoretically possible. The third column shows that, in the "minimum" style, only Name of Author (or its substitute) and short Title occur in the Main Entry. The fourth column shows that ten additional items occur in the "maximum" style. We can thus enumerate all intermediate styles by taking all possible combinations of the ten additional items of the "maximum" style none, one, two... nine or ten at a time. Denoting the total number of styles by N and adopting the usual algebraical notation for combination we get:

$$\begin{aligned} N &= {}_{10}C_0 + {}_{10}C_1 + {}_{10}C_2 + \ldots + {}_{10}C_9 + {}_{10}C_{10} \\ &= (1+1)^{10} \\ &= 2^{10} \\ &= 1024. \end{aligned}$$

This large number of possible styles for the Main Entry explains the bewildering variety we find on comparing catalogues of different libraries. And

to this may be added the number due to possible variations in the shortening of title, in the specification of collation and in the number and style of Added Entries.

Why a Library Catalogue is a Hotch-potch

Still further variations are introduced in practice by refractory books and developmental changes occurring in the chosen language of the catalogue.

It is therefore practically impossible to maintain purity of style in a Library Catalogue, *i.e.* to sustain *one* style consistently for all time. The catalogue of a growing library can hardly escape the tendency sooner or later to become a hotch-potch.

The Library Catalogue to be Humanised

The outlook and purpose of a library determine and find themselves reflected in its catalogue.

The saying of Horace: *Habent sua fata libelli* (Books have their destiny) has many implications. With the ancient librarians of pre-printing and incunabula days it often happened that each volume in the library was rare, if not unique. It was therefore naturally regarded not only primarily as a possession but even as a curio with a special individuality. Catalogue-forms developed in such an atmosphere could not but have been of the Descriptive Type.

Again, till the turn of the present century libraries were looked upon merely as institutions

charged with the care of books and the duty of producing them on demand. Library authorities were administratively minded. Libraries existed primarily to preserve their books and this often meant that they rarely quitted the shelves. The most suitable type of catalogue for such a library was the Inventory Catalogue.

The modern librarian, however, is chiefly concerned to reveal as completely as possible the material available for readers. His function is "salesmanship" rather than safe-guarding. This outlook was formed by a new view of the library as an institution charged with the duty of making everyone in its area a customer and serving its customers so well, so promptly and with such exact reference to their special needs that they become 'regulars'. A library is not a museum but a workshop.

According to this view it is not the book rapidly worn out by constant use that should worry a library; it is the stay-on-the-shelves that need attention.

In this connection I have a grievance against the *New English dictionary*. Its definition (which I summarise) fixes the library at its nineteenth century phase and the 1935 *Supplement* does nothing to correct this:

Library: a public institution or establishment, charged with

(1) the care of a collection of books; and

(2) the duty of rendering the books accessible to those who require to use them.

It misses altogether the vital function:

(3) the duty of making every citizen in its area a regular user of books.

This giant dictionary exercises a giant influence on lay library authorities. This serious omission therefore greatly handicaps implementing of the new and more human outlook of the library profession. Surely the British Library Association should take up this matter with the editors of the *Dictionary*.

But can the new library spirit afford to wait till this is done? Certainly not. Every effort must be made to ensure that books reach their readers' hands. Readers must be brought to the library in ever-increasing numbers. They must be given direct access to the shelves, they must be offered every help and comfort. In a word, the library must be humanised.

And the Catalogue too. It is not the "possession-value" of books that should govern it. Nor the Victorian value attached to objective arithmetical accuracy in a periodical roll-call of the books.

What type of catalogue will best help books to reach their readers' hands? The advance-guard of the library profession has decided on the "One Book, Many Entries" type. The wisdom of this decision is now being recognised even by the non-professional library authorities.

02 SHORTEN THE MAIN ENTRIES

The next question is, what details should the Main Entry give? Here we meet the prejudice of age in favour of the merely old and familiar; even the library profession has not yet tully escaped the timelag in this matter. The ghost of the Descriptive Catalogue—whose proper place is in manuscript libraries, national depository libraries and collections of incunabula—is still found haunting modern libraries. It makes the profession forget that "open access" is the order of the day. It robs it of strength to assert: "One should no longer expect the library catalogue to carry the bibliophile's load of information about publisher, place of publication, date of publication, format, size and collation. One may either find such information in the books themselves or in bibliographical records in the library".

Even such a story as the following is quoted in its favour:

Yearbook (1934)[1]:

> "A literary editor engaged in reading a manuscript of a novel about the eighteenth century submitted for publication, once telephoned me that he doubted the author's knowledge of the period, as at one point in the story the hero, interrupted while read-

[1] P. 12.

ing a classical author, was represented as hastily putting the book in his pocket. The editor's question was: "I thought all eighteenth century editions of that author were either quartos or folios and even a hero can't cram a folio into his pocket." When I offered to look up the question while he held the wire, he made the comment which lends point to this story. What he said was "Don't take any trouble, just step to your catalogue and tell me if you have any edition of this work before 1800 which is less than 15 centimeters in height." As I reported one 14 centimeters tall the submitted manuscript passed on period accuracy".

But one swallow does not make a summer!

It is refreshing however to find simplification upheld by Currier in the *Yearbook* (1938):[1]

"Turning...to... main entry cards, it is noticeable that in the matter of the individual title simplicity is more enduring than amplification of detail. When we pile up minute bibliographical description, we are in danger, as the saying goes, of "putting out our heads to be hit," and this often at undue expense and without sufficient recompense. Here is where skill must be used in distinguishing the needs of the library catalogue from those of the bibliography".

But years ago Cutter gave a warning in his *Rules*:[2]

"Bibliographers have established a cult of the title page; its slightest peculiarities are noted; it is followed religiously, with dots for omissions, brackets for insertions, and uprights to mark the ends of lines; it is even imitated by the facsimile

[1] P. 21. [2] P. 24.

type or photographic copying. These things may concern the cataloguer of the Lenox Library or the Prince collection. The ordinary librarian, in general, has nothing to do with them".

The *C. c. code*[1] recommends complete omission:

"It will be noticed that two sections which are still lingering in cataloguing codes are omitted, *viz.*, collation and imprint. The persistence of these two sections is really due to the tradition of the printed catalogue. But in a modern library, which is rightly compared to a workshop rather than a museum and which replaces the printed catalogue by the manuscript or type-written card catalogue, it is felt that the information contained in these two sections is seldom sought by the majority of readers and hence is to be regarded as unnecessarily over-crowding the card. For the few that do want them, the accession register may be made to furnish the requisite information.

"Further, with regard to the date of publication, it is contained in the Call Number, if the Colon Classification is used. If any other scheme of classification which does not give the date of publication in the Call Number of the book is used, the date of publication may be added at the end of the title portion of the entry.

"With regard to collation, the exact size is not usually of prime importance to most of the readers. On the other hand, every reader would like to have some rough indication whether the book is of normal size or not — in particular, whether it is a pamphlet or a giant folio or whether it contains

[1] Pp. 56-57.

too many plates. A reference to Rule 037 of Chapter 03 and its sub-divisions will show the simple devices invented in the Madras University Library for conveying such information," without over-crowding the Entry.

03 KINDS OF LIBRARY CATALOGUE

Assuming that in accordance with general modern library practice an Entry is written on a card, and following the terminology of the *C. c. code,* we get the following definitions:

The topmost horizontal line of an entry is to be called the Leading Line.

The section of an entry that is written or at least begun on the Leading Line is to be called the Leading Section.

If we remember that arrangement is the very essence of a catalogue and that our habit is to sort and arrange a set of cards in the first instance by the contents of the topmost line, the appellations "Leading Line" and "Leading Section" will appear sufficiently appropriate.

Leading section, the criterion

For the moment, then, we may consider the different possible ways of composing the Leading Section of an Entry, Main or Added. We shall assume that the only elements that will in practice tend to appear as the Leading Section of a Main Entry of a Library Catalogue are:

1. Name of Author;
2. Title;
3. Name of Series; and
4. Call Number.

As the Added Entries are exclusively derived from the Main Entry we may assume that their Leading Sections will as a rule be similar, though a few Leading Sections may consist of the Name of a Subject or its equivalent Class Number.

Let us now consider the following possibilities:

1. All the Entries may have a word or words in their Leading Sections.
2. All the Entries may have only a Call Number or a Class Number in their Leading Sections.
3. Some Entries may have a Class Number or a Call Number and the others may have a word or words in their Leading Sections.

ALPHABETICAL CATALOGUE

In the first case the Leading Sections of all the Entries will consist of names of persons, corporate bodies, series, subjects and titles. The obvious method of arranging Entries of this kind is the alphabetical one. A Library Catalogue of this form is usually called an Alphabetical Catalogue. Cutter's *Rules* recognises different forms of Alphabetical Catalogue as determined by the contents of the Leading Section:

> *Alphabetic subject catalog,* a catalog arranged alphabetically by subject heads, usually without subdivisions.
>
> The term is also used to include alphabetico-classed catalogs.

Alphabetico-classed catalog, an alphabetic subject catalog in which the subjects are grouped in broad classes with numerous alphabetic subdivisions. It may also include author and title entries in the same alphabet.

Author catalog, an alphabetic catalog of author entries and entries under editors, translators, etc. It also usually contains titles, but is then more properly called an author and title catalog. See also *Name catalog* and *Personal catalog.*

Dictionary catalog, so called because the headings (author title, subject and form) are arranged, like the words in a dictionary, in alphabetical order.

Name catalog, a catalog arranged alphabetically by names of persons and places, whether used as authors or subjects. A title catalog may be included in the same alphabet.

Personal catalog, one which gives under a person's name both the books *by* and those *about* him.

E.g., the "author" part of the Harvard University Library's catalog, and of the catalog of the Public Library of New South Wales at Sydney.

Of these the Dictionary Catalogue is most used in modern libraries.

PURE CLASSIFIED CATALOGUE

In the second case the Leading Sections of all the Entries will consist of Class Number and Call Numbers — all ordinal numbers whose values are determined by the Scheme of Classification used. The only method of arranging these Entries is by the ordinal value of these numbers. A Library

Catalogue of this form may be called a Pure Classified Catalogue.

Classified Catalogue

In the third case the Entries fall into two distinct groups — those that have numbers and those that have words in their Leading Sections. The Entries in the former group will be arranged by the ordinal value of the numbers, those in the latter alphabetically. A Library Catalogue of this form is usually called a Classified Catalogue with an Alphabetical Index or simply a Classified Catalogue. This type is in great favour with all academic, research and business libraries and deserves to be more generally used.

In this book we shall deal only with two kinds of Library Catalogue — the Dictionary Catalogue and the Classified Catalogue.

04 NAME THE ENTRIES

A Library Catalogue is like a box of tools: the Entries may be named according to the use for which they are designed. We shall now introduce such names by means of examples. Here is the title-page of a book whose Entries are named in the succeeding pages:

THE INTERNATIONAL PSYCHO-ANALYTICAL LIBRARY
EDITED BY ERNEST JONES
No. 30

THE EGO AND THE MECHANISMS OF DEFENCE

ANNA FREUD

TRANSLATED FROM THE GERMAN BY
CECIL BAINES

PUBLISHED BY LEONARD AND VIRGINIA WOOLF AT THE HOGARTH PRESS, 52 TAVISTOCK SQUARE, LONDON, AND THE INSTITUTE OF PSYCHO-ANALYSIS
1937

Name the Entries

Main Entry

With Maximum Details

N.B. The names of the various sections of the entry are shown against them in the right-hand margin.

SM95 :56 G7	Call Number
FREUD (Anna).	Author
Ego and the mechanisms of defence by Anna Freud. Tr. from the German by Cecil Baines.	Title
London, Leonard and Virginia Woolf, The Institute of Psycho-analysis, 1937.	Imprint (Place, Publisher, Date)
X, 196 p. 22 cm.	Collation and Size
(International psycho-analytical library, ed. by Ernest Jones, 30).	Series note
The author is the daughter of Sigmund Freud, the founder of the Psycho-analytical School. First English translation. A Psychoanalytic treatment of anxiety.	Annotation
92775	Accession Number

The Different Entries

Classified Catalogue

The following are the Entries according to the *C. c. code.* Of the names in the right-hand margin the first is the Specific Name of the kind of Entry to which it refers, the others form a Chain of its more general names arranged in the order of increasing extension.

Name the Entries

SM95 : 56 G7
FREUD (Anna).
Ego and the mechanisms of defence tr. by Cecil Baines.

(International psycho-analytical library, ed by Ernest Jones, 30). 92275

Call Number Entry

Main Entry

Psychology
Psycho-analysis
Feeling
Anxiety
Worry
Freud (Anna)
Baines (Cecil). *Tr.*
International psycho-analytical library, 30.
Jones (Ernest). *Ed.*

Back of the Main Card.

FREUD (Anna).

Ego and the mechanisms of defence. SM95;56 G7

Author Entry
Book Index Entry
Index Entry
Added Entry

BAINES (Cecil). *Tr.*

Ego and the mechanisms of defence by Freud. SM95:56 G7

Translator Entry
Book Index Entry
Index Entry
Added Entry

INTERNATIONAL PSYCHO-ANALYTICAL LIBRARY, ed. by Ernest Jones.

30. Freud: Ego and the mechanisms of defence. SM95:96 G7

Series Entry
Book Index Entry
Index Entry
Added Entry

ANXIETY.

In (S) psychology. Problem (II) Characteristic 56

Characteristic Division Entry
Class Index Entry
Index Entry
Added Entry

Name the Entries

FEELING. In (S) psychology. Problem (II) Characteristic. 5	*Characteristic Division Entry* Class Index Entry Index Entry Added Entry
PSYCHO-ANALYSIS. In (S) psychology SM95	*Epochal Entry* Class Index Entry Index Entry Added Entry
PSYCHOLOGY. Main Class. S	*Main Class Entry* Class Index Entry Index Entry Added Entry
WORRY. In (S) psychology. Problem (II) Characteristic. 56	*Characteristic Division Entry* Class Index Entry Index Entry Added Entry
JONES (Ernest). *Ed.* *See* INTERNATIONAL PSYCHO-ANALYTICAL LIBRARY.	*Editor of Series Entry* Cross Reference Index Entry Index Entry Added Entry

The Class Index Entries called Characteristic Division Entries are reproduced here with fully worked out Class Numbers and may be called Specific Subject Entries.

ANXIETY. Psycho-analysis. SM95:56	*Specific Subject Entry* Class Index Entry Index Entry Added Entry

FEELING.

Psycho-analysis. SM95:5

Specific Subject Entry
Class Index Entry
Index Entry
Added Entry

WORRY.

Psycho-analysis. SM95:56

Specific Subject Entry
Class Index Entry
Index Entry
Added Entry

The following Entries belong to other books:—

WEBB (Sydney *Mrs.*).

Diseases of organised society.
Forming part of
Adams: Modern state. W G3

Contributor Entry
Author Analytical Entry
Book Index Entry
Index Entry
Added Entry

BwM87

See also
BxM87 F7
RAMANUJAN. Collected papers.
Pp. *xi—xix.*

Cross Reference Entry
Subject Analytical Entry
Added Entry

Dictionary Catalogue

Here are the Entries for the same book in the Dictionary Catalogue:

FREUD (Anna).

Ego and the mechanisms of defence *tr.* by Cecil Baines.
(International psycho-analytical library, *ed.* by Ernest Jones, 30).

SM96:56 G7

92275

Author Entry
Main Entry

Name the Entries

Psychology Psycho-analysis Feeling Anxiety Freud (Anna) Baines (Cecil). *Tr.* Worry International psycho-analytical library, 30. Jones (Ernest). *Ed.*	Back of the Main Card

BAINES (Cecil). *Tr.* Freud (Anna). Ego and the mechanisms of defence. SM95:56 G7	*Translator Entry* Book Entry Added Entry

INTERNATIONAL PSYCHO-ANALYTICAL LIBRARY, *ed.* by Ernest Jones. 30. Freud (Anna). Ego and the mechanisms of defence. SM95:67 G7	*Series Entry* Book Entry Added Entry

WORRY. Freud (Anna). Ego and the mechanisms of defence. SM95:56 G7	*Specific Subject Entry* Subject Entry Book Entry Added Entry

JONES (Ernest). *Ed.* *See* INTERNATIONAL PSYCHO-ANALYTICAL LIBRARY.	*Editor of Series Entry* Cross Reference Entry Added Entry

ANXIETY. *See* WORRY.	*See Reference Entry* Subject Reference Entry Subject Entry Added Entry

Name the Entries

FEELING. *See also* WORRY.	*Upper Link Reference Entry* *See Also* Reference Entry Subject Reference Entry Subject Entry Added Entry
PSYCHO-ANALYSIS. *See also* WORRY.	*Upper Link Reference Entry* *See Also* Reference Entry Subject Reference Entry Subject Entry Added Entry
PSYCHOLOGY. *See also* WORRY.	*Upper Link Reference Entry* *See Also* Reference Entry Subject Reference Entry Subject Entry Added Entry

Analytical Approach to Names

We shall next make an analytical approach to the names of Entries. We have seen that the Laws of Library Science oblige the Library Catalogue to be of the "One book, many entries" type. We have also observed that one of these many Entries is usually made the Main Entry, all others (Added Entries) being derived from it. Thus in the first phase of analysis we have two classes of Entries.

Main Entries

Main Entries may be differentiated according to the elements that occupy their Leading Sections. Of the fourteen possible constituents of a Main

Entry it has been customary to reserve this privilege for:

(1) Call Number;

(2) Author;

(3) First word of title other than an article (or according to some the whole of the title); and

(4) (According, *e.g.*, to the old so-called author catalogue of the Madras University Library) the Names of Series.

It is not difficult to see why the other elements are excluded: they hardly ever determine a reader's approach. No reader asks for the "quarto book" or "the book of about 256 pages". And it is seldom that a serious reader approaches his books through the imprint.

But most readers do make a subject approach. That is why the Call Number — a numerical expression of the subject — is given first rank among aspirants to the Leading Section. We shall see in the part devoted to Subject Entries why the subject must be expressed as a Number in the Leading Section of a Main Entry.

The author approach is only next in popularity. The title is often only a more or less clumsy indication of the subject. The precise subject having been isolated and given first rank in the form of the Class Number, it is thus usually debarred from

the Leading Section. In Library Catalogues that will have words in the Leading Section at any cost a situation sometimes arises when the author (the element usually installed in the Leading Section) does not exist or turns out to be a will-o'-the-wisp. Witness for example Cutter's statement[1] about the reputed German dread of Corporate Authors of Periodical Publications. In such desperate situations the title or rather its first word is usually called upon, in addition to its own duties, to officiate in place of the Author. We have already referred to the remote chance of the Name of the Series usurping this position.

In effect, then, we need recognise only four types of Main Entries:—

(1) Call Number Entry;

(2) Author Entry;

(3) Title Entry; and

(4) Series Entry.

The first of these belongs exclusively to the Classified Catalogue, the second and third to the Dictionary and Author Catalogues, while the fourth may appear as a freak in any form of Alphabetical Catalogue.

---

[1] P. 44.

ADDED ENTRIES

We may now turn to Added Entries. Let us first divide them into two main classes:—

(1) Analytical Entries; and
(2) Ordinary Added Entries (often called simply "Added Entries").

ANALYTICAL ENTRIES

These invite the reader's attention not to the book as a whole but to a certain part of it. For example, if the chapters of a book are by different authors a separate Analytical Entry may be given under each such author. These may be called Analytical Author Entries. Such a book may also be given Analytical Subject Entries under the Specific Subject of each chapter. If the subjects are expressed as Class Numbers and Entries made under them we have Analytical Class Number Entries (the *C. c. code* calls them Cross Reference Entries[1]).

OTHER ADDED ENTRIES

Classified Catalogue

In the Classified Catalogue these may first be divided into three classes:—

(1) Class Index Entries;
(2) Book Index Entries; and
(3) Cross Reference Index Entries.

---

[1] Chapter 2.

CLASS INDEX ENTRIES

In a Class Index Entry no name of a book occurs. Its heading is the name of a knowledge-class occurring in the scheme of classification and it ends with the Class Number of that knowledge-class. Evidently no Book Number can figure in a Class Index Entry whose function is to show the reader under what disguise the knowledge-class (subject) appears in the Main Entries. This clue leads him to the region of the Catalogue where all books on the knowledge-class in question are grouped in consecutive Entries. The *C. c. code* further subdivides Class Index Entries into various types according to the nature of the class whose name appears in the Leading Section. These types are:

(1) Main Class Entry;

(2) Common sub-division Entry;

(3) Geographical Entry;

(4) Language Entry;

(5) Epochal Entry;

(6) Favoured Category Entry;

(7) Alphabetic Device Entry; and

(8) Classic Entry.

As most of these names are intelligible only in terms of Colon Classification we need not discuss them here: Rule 31 and its sub-divisions in the *C. c. code* give the necessary information.

BOOK INDEX ENTRIES

These are Entries containing the name of a specific book — its Heading, Title and Call Number. Their function is to find for every reader his book, whether he approach it through:—

(1) the name of the author;

(2) the name of any collaborator (Joint Author, Editor, Translator, Joint Editor, Joint Translator, Commentator, Compiler, Illustrator, Writer of Introduction, etc.);

(3) its title if that is fanciful and does not indicate the subject; or

(4) the series to which it belongs.

It is obvious that Book Index Entries may be named after the type of information that appears in their Leading Section.

Thus (1) Entries of the first type may be called Author Entries;

(2) Entries of the second type may be given the generic name Collaborator Entries and distinguished as Joint Author Entries, Editor Entries, Translator Entries, Commentator Entries, Compiler Entries, Illustrator Entries, Introduction-writer Entries, Foreword-writer Entries, Joint Editor

Entries, Joint Translator Entries and so on.

(3) Entries of the third type may be called (Fanciful) Title Entries; and

(4) Entries of the fourth type may be called Series Entries.

CROSS REFERENCE INDEX ENTRIES

In Cross Reference Index Entries the names of books do not occur, nor do Class Numbers. They have therefore no direct connection with the Main Entry but only with the Book Index Entries from which in a sense they are all derived. Since Book Index Entries are themselves derived from a Main Entry the Cross Reference Index Entries may be called "derivatives of the second order". Their function is to direct the reader to the Book Index Entry where he can find information about a book of which he remembers only:

(1) any alternative name of the author;

(2) any alternative name of a collaborator;

(3) any alternative name of the title;

(4) any alternative name of the series;

(5) the name of the editor of the series; or

(6) the form of the book (Encyclopedia, Periodical, Serial, Yearbook, Directory, etc.) or the nature of the institution, if any, relating to it.

Cross-Reference Index Entries may be named as follows after the type of information they give in the Leading Section:—

(1) }
(2) } Alternative Name Entry;
(3) Alternative Title Entry;
(4) Alternative Name of Series Entry;
(5) Editor of Series Entry; and
(6) Label Entry.

The term Label Entry is from the *C. c. code.* The commonly accepted term 'Form Entry' was rejected as we have also Cross Reference Index Entries with Headings like Universities and Churches from which reference may be made to the names of individual institutions under which Book Index Entries are given.

OTHER ADDED ENTRIES

Dictionary Catalogue

Let us now examine the Other Added Entries of the Dictionary Catalogue. They may first be divided into three Classes:

(1) Subject Reference Entries (called also Cross Reference Entries or simply Reference Entries);

(2) Book Entries (may perhaps be called Substantial Entries as opposed to Reference Entries); and

(3) Cross Reference Index Entries.

It must be remembered that the Main Entry in a Dictionary Catalogue is an Author Entry and in exceptional cases a Title Entry. What follows will justify our first discussing

BOOK ENTRIES

These are the Entries in which the name of a specific book occurs — its Heading and Title and Call Number (if the library is classified). As in the case of the Book Index Entries of a Classified Catalogue, their function is to find every reader his book whatever be the specific information (other than its author) through which he approaches it:—

(1) Its Specific Subject;

(2) Any Collaborator;

(3) Its title (if only fanciful) provided it has not been used as the Heading of the Main Entry; or

(4) The series to which it belongs.

Book Entries may be named as follows after the type of information they carry in the Leading Section:—

(1) Entries of the first type may be called Specific Subject Entries;

(2) Entries of the second type may be given the generic name Collaborator Entries

and distinguished by the respective names: Joint Author Entries, Editor Entries, Translator Entries, Commentator Entries, Compiler Entries, Illustrator Entries, Introduction-writer Entries, Joint Editor Entries, Joint Translator Entries and so on.

(3) Entries of the third type may be called (Fanciful) Title Entries; and

(4) Entries of the fourth type may be called Series Entries.

Subject Reference Entries

In these the names of books do not occur. They establish no connection with the Main Entry but only with Specific Subject Entries, from which in a sense they are all derived. Since Specific Subject Entries themselves are derived from the Main Entry, Subject Reference Entries may be called derivatives of the second order. Their function is to direct the reader to the Specific Subject Entry where he can find information about a book approached through:—

(*a*) a synonym of the term that appears in the Leading Section of its Specific Subject Entry;

(*b*) a subject other than but related to its Specific Subject, such as:—

(1) a subject of greater extension and smaller intension than the Specific Subject and containing it as a subdivision;

(2) a subject of smaller extension and greater intension than the Specific Subject but occurring as one of its subdivisions; and

(3) the name of a subject collateral with the Specific Subject.

If the approach is of the type (*a*) there will be no Book Entry with the synonym in question as Heading and the Entry will be a *See* Reference Entry.

If the approach is of type (*b*) the Entry will be a *See Also* Reference Entry, some Book Entries having the name of the Subject in question as the Heading. The *See Also* Reference Entries may be called Upper Link Reference Entries, Lower Link Reference Entries or Collateral Reference Entries according to the category of the subject through which the book is approached. The significance of the first two of these names will become obvious when we establish in the Part dealing with Subject Entry an objective 'Chain Procedure' for finding out Headings for Specific Subject Entries and *See Also* Reference Entries.

CROSS REFERENCE INDEX ENTRIES

The Cross Reference Index Entries in a Dictionary Catalogue are similar to those in a Classified Catalogue.

NUMBER AND FUNCTION OF ENTRIES

The above analysis leads to certain inferences that will be considered in detail in later chapters. For the moment they may be indicated by the following equalities relating to the number and function of Entries in the two kinds of Catalogues:

(1) Call Number Entry (Main Entry)+Class Index Entries (of a Classified Catalogue)

= Specific Subject Entry+*See* Reference Entries (of a Dictionary Catalogue);

(2) Book Index Entries (of a Classified Catalogue)

= Author Entry (Main Entry)+Book Entries (of a Dictionary Catalogue);

(3) Analytical Entries (of a Classified Catalogue)

= Analytical Entries (of a Dictionary Catalogue); and

(4) Cross Reference Index Entries (of a Classified Catalogue)

= Cross Reference Index Entries (of a Dictionary Catalogue).

These equalities may be tabulated thus:—

Entries of Dictionary Catalogue	Corresponding Entries of Classified Catalogue
1. Specific Subject Entries & *See* Reference Entries	1. Call Number Entries and Class Index Entries
2. Other Book Entries and Author Entries	2. Book Index Entries
3. Analytical Entries	3. Analytical Entries
4. Cross Reference Index Entries	4. Cross Reference Index Entries
5. *See Also* Reference Entries	5. *None*

The *See Also* Reference Entries are necessary only to the Dictionary Catalogue. Their function is performed in the Classified Catalogue by the very order of the Call Number Entries. Thus the Classified Catalogue is able to perform all the functions of the Dictionary Catalogue with a smaller number of Entries.

05 GUIDING PRINCIPLES

We shall conclude this part by bringing together certain general and special principles to be used as deciding factors in solving the various problems that may arise from time to time.

Laws of Library Science

The following are the special laws that form the foundation of Library Science in general and of cataloguing in particular:

First Law: Books are for use

Second Law: Every reader his book

Third Law: Every book its reader

Fourth Law: Save the time of the reader

Fifth Law: A Library is a growing organism.

These fundamental laws have been fully worked out and their general implications shown in the *Five laws.* The main task of most of the following chapters will be to effect a compromise between the demands of the Five Laws on the one hand and the Law of Parsimony on the other.

Law of Parsimony

Perhaps the most elementary general principle governing cataloguing — or any other scientific — practice is the Law of Parsimony.[1] Its watchword

[1] ***Entia non sunt multiplicanda praeter necessitatem.*** **William of Occam.**

is economy — in materials, space, time and energy. Its function is like that of the Finance Secretariat in a modern Government: it would oppose anything that involves expenditure.

Left to itself the Law of Parsimony would provide only for a catalogue of the title-a-line type. If an elaborate entry be insisted upon it would at least require it to be single; if Added Entries are imposed it would require them to be brief.

Throughout the following Chapters we shall witness its struggle with the special Laws of Library Science. We shall also see that many types of Entries are its creation—*e.g.* Class Index Entries, Cross Reference Index Entries, *See* Reference Entries and *See Also* Reference Entries, in none of which does the name of a book appear.

But on their side the Laws of Library Science have a right to insist that economy be interpreted as actual saving of expense in money or time not only in the library budget but also for the public as a whole: a saving in the cataloguing section of expense or labour that is transferred to the reference section or to individual readers or to some future time is obviously illusory. The *Yearbook*[1] (1934) gives several examples of false economy:

> "Columbia University tried, years ago, to cut its cataloguing cost by omitting many editor, translator, and title cards, which under ordinary rules would

[1] P. 46.

have been made. It is still engaged in the task of adding these cards, and the cost of supplying deficiencies is considerably more than the original cost of making the cards in the first place would have been".

SELECTIVE CATALOGUING

During recent years the Law of Parsimony has made a new move against the innumerable Entries that are thrust into the Library Catalogue in the name of service to readers. In 1928 a book called *Selective cataloguing* (a suggestive title) and edited by Henry B. Van Hoesen was published by those enterprising friends of Library Science, H. W. Wilson & Co.

In this book the Law of Parsimony raises some fundamental issues:

(1) Is a library to accept every book and every scrap that comes its way? May it not be wiser to discard some as valueless or outside its scope?

(2) Is everything that is accepted to be catalogued? Is it not better to leave some things uncatalogued and simply to keep them

(*a*) in accession order if they are accessioned at all; or

(*b*) in alphabetical order by authors; or

(*c*) in rough subject order

till the time comes for their periodical elimination? The reference staff will be able to draw from them whenever occasion arises.

(3) Is everything that is shown in the catalogue to be given an independent entry? Is it not sufficient if sets of pamphlets and other slight and fugitive materials are brought to the notice of readers by an entry in general terms like "Pamphlets are not separately catalogued. They are placed on the shelves after books on the subject"?

One of the earliest recorded accounts of selective cataloguing going to the extent of entire omission of certain items from the catalogue relates to the Harvard University Library. *Readings*[1] extracts it from the *Library journal* (1924):

> "The question of high costs brings up one more phase of selective cataloguing which I must touch on before closing. So far I have discussed only subject headings. Is selective cataloguing ever excusable as applied to entire omission of catalogue entry?
>
> "The necessity of accurate and clearly arranged author headings to ensure prompt tracing of essential books is axiomatic. We agree that every monograph should be recorded properly under its author. How about monographs issued as parts of series? Where is the boundary between monographs of this nature that must be recorded and the paper published in a society's proceedings? We must stop somewhere from sheer lack of funds. Then there is the pamphlet. Theoretically each pamphlet must have its author record, but is it not better to make available on the shelves in chronological order six thousand tracts covering the 17th

[1] Pp. 120-121.

century of English history and postpone even author entries than to lock them in your uncatalogued reserve until the necessary five hundred (or is it fifteen hundred) dollars are forthcoming to catalogue them? May not librarians who have in custody huge collections of contemporary and ephemeral matter be forced more and more to adopt methods by which the material is, so to speak, self-catalogued? Examples of self-cataloguing methods in our building are the English Civil War pamphlets alluded to, collections of South American political pamphlets, courses of study, rules and regulations and leaflets in our Education collection, a file of 50,000 songs, and the vast files of railroad material in the library of our Business School. Verily, selective cataloguing is already with us, not only as applied to omission of subject cards, but also as regards entire omission".

Sharp[1] records:

"Sheffield, for example, which has by general consent one of the most progressive library systems in the country, has drastically curtailed its cataloguing... Five (libraries) did not catalogue fiction at all... Mr. Cranshaw has estimated that 60 per cent. of the stock of a municipal library is constantly changing; on this ground it is regarded by some librarians as a waste of time and materials to catalogue fiction and other ephemeral literature".

Again we have Sharp[2] quoting Cranshaw:

"If a library possesses a shelf register, it can institute a real saving by omitting entries under certain popular subjects like wireless, sports, pastimes, hob-

[1] Pp. 19-20. [2] Pp. 159-160.

> bies, gardening, cookery and other domestic headings the titles in which are in many ways as ephemeral as the fiction the library discards. Such books are rarely enquired for by author or title, the subject is the all-important thing. They are quickly worn out and superseded by new publications. Why then catalogue under subjects for a public which is not greatly interested in what you have on stock, but chiefly in what is available for loan at a particular moment. A simple subject index card referring the reader to the place of shelving is usually enough; if further information is required the use of the shelf list will give the extent of the stock. This suggestion was not received with any great enthusiasm when I broached it in 1933, but I find from a recent digest of library literature that both Detroit and Cleveland find it workable".

The *Report* (1937) of the Brown University Library shows that it sets aside without cataloguing books in less frequent demand. They are of course so placed as to be available with only slight delay.

The Laws of Library Science stand dazed at this new *coup d'état* of the resourceful Law of Parsimony. We only hope they will not in their despair be so foolish as to mislead Library Authorities into reviving the Victorian inventory-outlook, insisting that every "scrap of paper that comes into the library" be entered and accounted for from year to year for ever. Such a blind revenge on the Law of Parsimony, recoiling on themselves, will only bring them to suicide.

Canon of Consistency

We shall next enunciate certain principles (Canons) that it will be useful to observe in framing any set of rules for cataloguing.

Perhaps the most widely recognised principle is what may be called the Canon of Consistency.

At the lower level this Canon stands for strict consistency with the code adopted. Acomb[1] emphasises:

> "The paramount quality of a catalogue should be strict Consistency with the rule on which it is based. It matters, perhaps, less that the best available Code should be adopted, in the beginning to compile a catalogue, than that the most careful consistency should characterise the application of the rules when once they are chosen".

At a higher level the Canon of Consistency will impose it on the Code itself that similar situations shall be similarly dealt with. Cutter mentions it among the "reasons for choice" in his *Rules*:[2]

> "Among the several possible methods of attaining the objects, other things being equal, choose that entry that is consistent with other entries, so that one principle can cover all".

We must pay special attention to Cutter's condition "other things being equal", or this Canon may lead us to unwanted results. Subject to this proviso the Canon of Consistency must be paramount in a Code of Rules for cataloguing.

---

[1] P. 21. [2] P. 12.

What Acomb[1] has stated at a lower level holds good at this higher level too. With some modification his statement will amount to this:

Any departure from consistent practice will eventually cause trouble and its cumulative effect will be far greater in proportion to the apparent importance of the original lapse than can be foreseen. The truth of this statement is difficult to demonstrate but it must be accepted as the result of experience and the principle it contains must be adopted in the framing of any cataloguing code.

Canon of Relevance

Another principle that should be borne in mind both in framing and applying cataloguing rules may be called the Canon of Relevance. It demands that the items included in an Entry should be relevant to its purpose. For example, if the purpose of an Entry is to show what books the Library has by a particular author, its Leading Section should contain the Name of that author while succeeding sections should give names of books by him and other necessary information, such as their Call Numbers. Similarly, if the purpose of an Entry is to show what books the Library has on a Specific Subject, its Leading Section should be occupied by the name of that Specific Subject while later sections should give the author, title and Call

---

[1] P. 22.

Number of books on the Subject, other irrelevant details being omitted.

If the object of an Entry is simply to direct the attention of a reader who remembers a subject by a particular name to the name under which he can actually find his books listed, the Leading Section should be occupied by the name the reader remembers and the only other substantial section should give the name under which the catalogue lists the books. It would be irrelevant to the purpose of such a *See* Reference Entry to mention names of books.

Canon of Ascertainability

This Canon requires that no Entry shall include any information that is not definitely ascertainable. One might think it unnecessary to enunciate this as a principle but many difficulties in cataloguing in fact arise from overlooking this obvious rule.

In cataloguing practice the term "ascertainable" is taken in the restricted sense of "ascertainable from the words found on or at the back of the title-page of the book". As a rule only the Subject Entry takes the cataloguer beyond the title-page and even then it is simply to seek the appropriate word for the Heading.

Inadequate Title-page

There are however books whose title-pages do not contain the information necessary for the Main

Entry. The volumes of the Mermaid Series of Elizabethan plays, for instance, have no title at all.

For example:—

THE MERMAID SERIES

Thomas Otway

with an introduction and notes

by

THE HON. RODEN NOEL

In this case the Cataloguer has to supply [Plays] as the title to make the Entry intelligible. Authority for bracketing words not found on the title-page is usually derived from Cutter's *Rules*:

"242 *Additions* made to a title are to be marked by including the words in brackets [ ]. All additions to be brief and in the language of the title..... After a word spelled wrongly or unusually insert (*Sic*) or (!)."

TITLE-PAGE WANTING

What is to be done when the title-page as a whole is wanting? The Rule of the *A. A. code* for such cases is fuller than Cutter's:

"147 *Title-page wanting.* When the title-page is lost, supply the title from some bibliographical source, citing the authority in a note. If the title cannot be ascertained, give the half-title, running title, or colophon, and state in a note which has been selected; if there is no half-title, running title, or colophon, supply a title (within brackets) and give

in a note the beginning of the text and a brief description of contents.

"In the case of a book published without a title-page, give the half-title, running title, caption title, or colophon, as the case may be, stating in a note the form in which the title occurs".

MORE THAN ONE TITLE-PAGE

The Canon of Ascertainability demands definite conventions for dealing with failure of ascertainability through there being more than one title-page. The convention recommended by the *A. A. code* is as follows:

"142. *Titles of works (other than periodicals) in more than one volume.* Works in more than one volume (other than periodicals) are, as a rule, to be catalogued from the title-page of the first volume, subsequent changes being explained in notes or shown in contents.

"143. *Same works published under different titles.* If a book has been published under two or more titles, make full entry for each of the editions in the library and give in a note under each entry the other title or titles under which the book has appeared. If the library has but one of the editions make full entry under this title and refer from the others.

1. *Meredith,* George. Emilia in England.
Afterwards issued under title: Sandra Belloni.

Meredith, George. Sandra Belloni.
Previously issued under title: Emilia in England.

2. *Meredith,* George. Emilia in England.
Afterwards issued under title: Sandra Belloni.

Meredith, George. Sandra Belloni.
See his Emilia in England. (The same work published under a different title).

"144. *Books with several title-pages.* If a book has several title-pages, select the most general, and give others, if necessary, in a note or as contents.

"This rule applies only when the title-pages come under the same heading. If the several title-pages require separate entry (as when one is the title of a series, the other that of a work in the series) each title will be used under its own heading.

"Of an engraved and a printed title-page the latter is usually to be preferred and always when it bears a later date.

"Of two title-pages equally general choose the first when one follows the other, the second when they face each other.

"Cutter, 156-158.

"145 *Titles and title-pages in different languages.* Of titles and title-pages in different languages, if only one is in roman characters, use that; if both or neither are in roman, use the one in the original language. Mention in a note the unused title.

"In the case of Greek classics with the title in Greek and also in Latin on the same title-page, give both titles.

LIBRARY OF CONGRESS SUPPLEMENT RULE 20

"1 *Title-pages and text in two or more languages.*

"Of title-pages in different languages, with text likewise in more than one language, choose the one

which is printed in roman or gothic characters. When neither title-page is printed in roman or gothic or when both are in one or the other of these types, select the one which is in the original language. When the original language cannot be ascertained, the main title-page is to be chosen, or, when that cannot be determined, the first. Mention in a note the other title or titles and the languages of the text.

"The added title is to be quoted when it contains additional information of importance.

"2. *Title pages in different languages, text in one language.*

"When there are two title-pages with text in only one language the title-page which agrees with the text is to be followed. Exceptions to this are Greek, Russian, Oriental and occasionally also American Indian texts with title-pages in the original and also in Latin, French, English or some other language which employs roman or gothic characters. Here the title in roman or gothic is always to be selected. Mention in a note the other title and the language of the text.

"3. *One title-page with titles in two languages.*

"When the title is printed in two languages on the same title-page (there being but one) give both titles with the customary abbreviations and notes.

"*Exception*: When one of the titles is in a language which employs characters other than roman or gothic, it is to be omitted, only the title which is in roman or gothic type being then given. A note is to be made of the other title and the language or languages of the text.

"In early and rare books, or when some material variation exists between the two titles, both are to be given.

"When there are more than two titles, give the first two which are printed in roman or gothic type. If one of the succeeding titles is in English, this also is to be given.

"4. Arrangements or combinations of titles and title-pages in different languages not provided for in rules 1-3 are to be submitted for special decision.

"146. *Reprints with two title-pages.* When a reprint includes in addition to its own title-page, a reproduction of that of the original, follow the title-page of the reprint, and mention the other in a note, giving place and date of publication and quoting the title if it differs from that of the reprint.

Apart from these recognised types of cases particular books may present peculiarities which will be met to the best advantage only if the Canon of Ascertainability is borne in mind.

Canon of Permanence

According to this Canon the item chosen to occupy the Leading Section of an Entry should represent something permanent. The ideal is, however, seldom realised in practice. Most of the Entries in a Library Catalogue are Name-Entries (Names of persons and corporate bodies — Governments, Departments of Governments, Societies, Institutions, etc.). Cataloguers know very well how often these names are varied. People change their

names sometimes voluntarily, sometimes by marriage, or on succession to an hereditary title. Reorganisation of administrative machinery may bring about changes in the names of Government Departments. Learned societies and institutions, also, form a common field for experiment in nomenclature. There are Societies which have changed their names twice or more in a year. Even names of places are not free from such vagaries. These changes are evidently beyond the control of the Cataloguer, but the Canon of Permanence has none the less to be satisfied. One solution recommended by the British Library Association is adoption of the earliest known name for cataloguing purposes. But the American Library Association disapproves this evasion of actuality and appeals to the Canon of Currency.

We shall see in later chapters how often in cataloguing practice this Canon of Permanence marks a parting of the ways.

Canon of Currency

According to this Canon the name chosen for the Heading of an Entry should be the current one. If it is that of an author (Personal or Corporate) it should be written as given in the title-page of the book. If it is that of a Subject the cataloguer should adopt the form most popular among its specialists. Many such situations will arise in day to day cataloguing. This Canon usually pulls against the Canon of Permanence. It may even

occasionally come into conflict with the Canons of Consistency and Ascertainability, but it is the business of cataloguing rules to devise a definite procedure for meeting such situations. The Class Index Entries of a Classified Catalogue and the Subject Entries of a Dictionary Catalogue should be constantly revised to satisfy this Canon. According to the *Prolegomena*:[1]

> "Cards which have old obsolete terms for headings should be marked obsolete and, if practicable, be furnished with an additional note in distinctive style showing the period when they were current. Also new cards should be written in terms of the current equivalent headings".

The *C. c. code*[2] also lays it down:

> "It is here that the need for repair of the catalogue comes,—internal repair as distinct from the repair of the physical card.... This process requires constant vigilance and industry. Otherwise, instead of the catalogue helping the people, it may prove to be harmful and misleading. Again the need for such replacement of isolated entries from time to time makes it imperative that the physical form of catalogue should be such that any given entry can be removed, corrected or replaced without disturbing the other entries. This would rule out the ledger form of the catalogue and make the Card Catalogue, the form *par excellence*".

The Canon of Currency will even ask that libraries should prefer locally current terms to standard ones. Car or Automobile? Cinema or

[1] P. 66.

[2] Pp. 168-169.

MOVIE?—local usage should decide. This Canon demands periodical research like that conducted by the New York Regional Catalogue Group and published in the *Yearbook* (1934).[1]

CANON OF PREPOTENCE

Most of the Canons mentioned so far have been fully discussed in the *Prolegomena* since they are equally applicable in the field of Classification. But the Canon of Prepotency is special to Cataloguing. We have stated at the outset that arrangement is the very essence of Cataloguing. The *ordinal position* of a given Entry among the rest is especially a vital factor.

The question is: Can we single out any particular section of an Entry completely determining its ordinal position or is the potency that decides it distributed among its various sections? In other words, is the potency concentrated or diffused? In the latter case, is it shared equally by all the sections? Or is there some gradation in its incidence?

Let us first make these issues clear by means of an example. Take the case of a heap of letters to be sorted for despatch. The sorting naturally takes place in stages. Let us watch the shifting of Potency from stage to stage.

First stage:—The letters are sorted according to their town of destination. Here the name of the town is the prepotential element.

[1] Pp. 58-84.

Second stage:—The letters received in a particular town are now sorted in the first instance by streets. Here the name of the street is the prepotential element.

Third stage:—The postman next arranges letters addressed to the same street by the house-numbers in that street. Here the house-number is the prepotential element.

Fourth stage:—Letters addressed to the same house are finally distinguished by the name of the addressee which here in its turn becomes the prepotential element.

Thus at one stage or another all parts of the address play a part in the sorting. If a mistake occurs at the first stage the letter will perhaps go thousands of miles out of its way. I know of cases in which letters addressed to "Londa" (a town in the Bombay Presidency) have been sent to London. This involved 5 weeks' delay and extra work for several post offices.

If a mistake occurs at the second stage the letter will go to a wrong part of the town, but can be returned to the right street in a day or two. Still the intervention of the post office is necessary.

If there is a mistake only in the house-number it can be rectified by the postman himself at the time of delivery.

Thus we see that the potency of the place-name in a postal address is far greater than that of the

street-name or the house-number. We may express this by saying that the place-name is the prepotential element in the address. We know of cases in which letters addressed by young boys simply to "Father" so-and-so street, so-and-so town have reached the right father's hands without much ado. I know also of an address in which everything else was correct but which omitted the name of the addressee. But since the letter came to the right house it reached him nevertheless. The name of the addressee had been rendered impotent by more powerful factors.

Applied to letters, the Canon of Prepotence would insist that the name of the town be correctly, legibly and prominently written—of course a commonsense rule. Is it due to this Canon working behind the scenes that the topmost line of an address, since it is liable to be obliterated by postal marks, is reserved for the comparatively impotent name of the addressee while the prepotential name of the town occupies the line farthest from such dangers?

Let us now take an example from the catalogue itself. Let us assume that the catalogue cards of a library are filed in 26 cabinets, one for each letter of the alphabet. Let us also assume that each cabinet has 26 drawers, one for each letter, and that each drawer contains 2,600 cards (100 per letter). A mistake in the first letter of the Heading will be practically equivalent to loss of the card, for it will go to a wrong cabinet altogether. A mistake in the second letter will be almost as serious, for the card

will go to a wrong drawer. A mistake in the third letter will misplace the cards about 100 removes from its correct position, while a mistake in the fifth or sixth letter may involve no misplacing at all. Thus the first letter in a Heading is the prepotential one. The preponderance of potency in the Heading is recognised by the practice of writing it in block letters so as to minimise chances of error in filing due to illegibility.

In alphabetical entries several cards may have the same Heading (different books by the same author, different books of the same series, different books on the same subject). In all such cases, the potency is obviously not exhausted in the Heading. In the Call Number Entry of a Classified Catalogue, however, the potency is entirely concentrated in the Leading Section, so that if the scheme of classification is an individualising one in which no two books can have the same Call Number, every other section is rendered impotent.

Left to itself the Canon of Prepotence would select the element for the Leading Section in such a way that all other sections would be rendered impotent. But the Laws of Library Science have a prepotence of their own which modifies that of the Canon itself! It must, therefore, content itself with governing the construction of the Main Entry. If the Library Catalogue refuses to respect this Canon even to this extent it does so at its peril.

It would be most happy, no one will deny, if the Main Entry could be entirely faithful to the title-page of the book in representing the name of the Author. But in the case of any Alphabetical Catalogue this is prevented by a host of rules. All these obstacles arise from the author's name having been invested with prepotency. The Classified Catalogue, however, which concentrates the prepotence of the Main Entry in the Call Number, renders the author's name and title impotent. The Main Entry is thus more free to copy the name of the author and title exactly as it appears on the title-page.

In the Classified Catalogue, again, the element that connects any added Entry with the Main Entry is the Call Number. In this matter also the name of the author is impotent; we are therefore free to shorten it, for example by omission of forenames, whenever it occurs in the intermediate item of an Added Entry. But in the Dictionary Catalogue the connecting element is the name of the author which is prepotential in the Main Entry. It must therefore be written in all Added Entries as fully as in the Heading of the Main Entry. Nor can we compensate for this by shortening the Call Number —its full form is necessary to trace the book on the shelves.

The Canon of Prepotency will similarly clarify other problems.

As this Canon is newly introduced we may explain it formally as follows:

When applied to Library Catalogue, Potency means potency from the point of view of arrangement.

In a Catalogue Entry it is desirable to avoid diffusion of potency throughout all its sections. If diffusion is inevitable it should at least progressively decrease as we traverse the sections, *i.e.* the Leading Section should be prepotential. The ideal is to choose the Leading Section in such a way as to concentrate in it the whole potency of the Entry, *i.e.* to make that section omnipotent and the others impotent. Even within the Leading Section this Canon will seek to choose the Entry Word in such a way that it shall be prepotential (the other words less potent).

PART 1

Subject Entries

11 What is Specific Subject? Find it by Chain-Procedure

12 Conflict of Headings. *See* Reference Entries

13 Subject Entries and the Classified Catalogue

14 *See Also* Reference Entries

15 Syndetic *vs.* Systematic Arrangement

11 WHAT IS SPECIFIC SUBJECT? FIND IT BY CHAIN PROCEDURE

Let us first examine the Entries that can be derived from the subject-matter of the book. If we remember that most of the questions arising in a library take the form "What has the library on a Specific Subject?", we shall realise that it is this class of Entries that is likely to be most useful.

According to the *Yearbook* (1938),[1] when letters were written to outstanding cataloguers asking them for a list of the Cataloguing problems which they felt needed original investigation or further study, "the field of subject headings was mentioned more frequently than any other as needing investigation." This is another reason why we propose to deal with Subject Entries first.

Assuming that a reader knows the Specific Subject on which he wants information, the library catalogue should disclose to him:

(i) Books exclusively devoted to the Specific Subject;

(ii) Books of a greater extension than the Specific Subject, but having substantial portions devoted to it;

---

[1] P. 62.

(iii) Books of a smaller extension than the Specific Subject but dealing with some aspect or part of it;

(iv) Books in Collateral Subjects which contain some information, though indirectly, on the Specific Subject.

We shall discuss these four categories in order.

SPECIFIC-SUBJECT ENTRIES

A Classified Catalogue seeks to perform the first of these functions by making the Main Entry of a book a Call Number Entry, that is, by placing in the Leading Section of the Main Entry the Call Number which includes the Class Number of the Specific Subject. All the resources of the library on any one Specific Subject are thus shown together in consecutive Entries having the same Class Number in their Leading Section. The Dictionary Catalogue seeks to perform the same function by means of the Added Entry known as Specific Subject Entry which bears the name of the Subject in its Leading Section, i.e., as Heading. But it experiences quite a number of difficulties. For the moment we shall confine ourselves to examining them, reserving for a later chapter an account of the way in which the Classified Catalogue either evades or solves them.

A CONCRETE PROBLEM

Let us begin with a specific difficulty about which much has been written. Cutter calls it Subject *vs.*

Place. It is essentially a difficulty that arises in dealing with alternative names obtained by transposition of the constituent words of a doublet consisting of the name of a subject and the name of a place. Cutter's rule about it is:

> "164. The only satisfactory method is Double Entry under the Local and Scientific Subject—to put, for instance, a work on the Geology of California under both California and Geology and to carry this practice through the catalogue".

But in the very middle of this rule he seems to be suddenly reminded of the Law of Parsimony and feels obliged to end with the sentence:

> "But as this profusion of entries would make the catalog very long, we are generally obliged to choose between country and subject".

But *how* to choose, that is the question. Cutter is apparently baffled. No rule is more violated by cataloguers than that he lays down on this subject. It reads:

> "A work treating of a general subject with special reference to a place is to be entered under the place with merely a reference from the subject".

Cutter himself recognises that:

> "There is not as yet much uniformity in catalogs, nor does any carry out this principle ... absolutely".

But he employs all his cleverness to uphold his prescription by example and argument. Nevertheless, as Sharp[1] says:

[1] P. 113.

"Many cataloguers are not in complete agreement with Cutter in this point. In his example he puts localised ornithology under the place with a reference from the subject. His argument is interesting but not convincing".

Mann[1] tries to improve upon Cutter. She says:

"1. Use subject subdivided by country for scientific and technical headings, also most economic and education topics...

"2. Use country subdivided by subject for historical and descriptive subjects together with the political, administrative and social headings".

How baffling this prescription is to the Canon of Ascertainability may be inferred from the following incident. It happened this year that the very first book I gave my class for practical work in Dictionary Catalogue was a volume of *Monumenta Asiae Minoris antiqua*. It had been selected at random and independently by a member of my staff from among the new arrivals of the week Here the subject is "Archaeology". Does it come under the first or second category of Mann? Is it a technical subject or historical and descriptive? In the Colon Classification "Archaeology" is given as a problem division of "History". In the Decimal Classification "Archaeology" occurs under both "History" and "Science". In class 913 it occurs in company with "Antiquities", in class 570 in display type in company with "Biology".

[1] P. 181.

In the sub-class 571 it is headed "Prehistoric archaeology" with the explanatory note "for archaeology of special countries, see 913". We had to argue in the class somewhat as follows: "Mann was probably guided in her determination of the subject by the Decimal Classification. As we have difficulty in interpreting her rules and though it will perhaps be admitted only as a last recourse, we must go behind the written words and examine the probable intention of their framer. It seems likely that for the purpose of this rule Mann intended Archaeology to be regarded as a descriptive subject.

Mann herself admits[1] how tantalising her rules will be to the Canon of Ascertainability and the Canon of Consistency. She says:

> "As there are numerous subjects nearly on the border line, absolute consistency in decisions cannot always be preserved".

This amounts to a confession that it is hardly possible to resist the tendency in the long run of the problem of alternative names of Specific Subjects to make the Library Catalogue a hotch-potch.

This tendency may however be considerably minimised if the cataloguer will abstain from placing books on the self-same subject under two

[1] P. 182.

or more Headings. In this connection the warning given in the *List* should be remembered:[1]

> "It will of course be understood that where the reference is simply "*see*" no subject entries are to be made under the heading referred from".

Quinn repeats this warning:[2]

> "It must be clearly understood that a book should not be entered under one heading when there is already a direct reference to another. This is the purpose of the "*See*" reference as distinct from the "*See also*" one.

WHAT IS SPECIFIC SUBJECT?

The difficulty discussed above with regard to a Doublet does not merely depend on a choice between alternative names obtained by transposition; it is more deeply rooted. It is in fact inextricably involved with the very concept of Specific Subject. There are also other similar difficulties (isolated by Cutter) whose roots really strike the concept of Specific Subject. To my mind most of these difficulties are traceable to absence of a definite objective impersonal method of arriving at the Specific Subject of a book. The impression produced by Cutter's rules is that he intends the Specific Subject of a book to be determined by the cataloguer. But surely determination of the Specific Subject of a book belongs to classification rather than to cataloguing. Even classification should not be dependent on the discretion of an

[1] P. viii.

[2] P. 143.

individual classifier in an individual library. According to the *Prolegomena*,[1]

Classifying usually implies:

(i) presence and adoption of a scheme of classification;

(ii) implicit or explicit indication of the associated succession of characteristics;

(iii) assignment of a book to the appropriate class of the scheme of classification by ascertaining the way in which each of the characteristics of the scheme is shared by it; and

(iv) assignment of the appropriate class number to the book.

Thus determination of the Specific Subject of a book is ultimately in the hands of the scheme of classification adopted. We shall see presently how this shifting of the burden of determining the Specific Subject of a book from the cataloguer to the scheme of classification will resolve all the nightmare difficulties in framing rules for the Specific Subject Entry in a Dictionary Catalogue.

We must begin with the very definition of the term 'Specific Subject of a book'. Cutter says:[2]

"It is its special subject as distinguished from ... a class which includes that subject".

Sharp simply paraphrases:[3]

"The actual subject as distinct from ... some broader [one] embracing that subject".

[1] P. 29. [2] P. 22. [3] P. 465.

Such a definition seems to fight shy of recognising the helpfulness and appropriateness of adopting the method and terminology of the theory and art of classification. To emphasise the relation of the determination of Specific Subject to the art of classification in the *Colon classification* I coined the term 'Ultimate Class'[1]

In the *Prolegomena*[2] this has been defined as follows:

> "By the ULTIMATE CLASS of a book is meant the class of the least extension and the greatest intension in the basic Scheme of Knowledge Classification in which it may be placed".

A DEFINITE PROCEDURE

If the scheme of classification in use possesses the necessary devices for fully satisfying the Canon of Hospitality in Array and the Canon of Hospitality in Chain, the Ultimate Class of a book will represent its Specific Subject. A definite procedure is to find the Class Number of the book and represent it in the form of a Chain of Classes. The last link in the chain gives the Specific Subject. It will be seen later that this chain will be useful, too, in determining the *See Also* Entries of a book.

BASIC RULE

Let us now examine some of the categories singled out for special discussion by Cutter and see how far this procedure will clarify the situation.

---

[1] Rule 03. [2] P. 176.

Cutter's basic rule on the subject is:

"161. Enter a work under its subject-heading, not under the heading of a class which includes that subject".

To-day this rule will perhaps be written:—

Enter a work under its Specific Subject.

The next fourteen rules are chiefly intended to show how this rule is to be implemented(?) under certain conditions. The first category considered is "Choice between person and country". We shall denote it as

Person vs. *Place*

Let us begin with a specific book, say, *History of the reign of King George V*. Let us assume that it deals only with the history of England. If the Decimal Classification is used its Class Number is 942.083. Representing this as a chain, we get

9 = History
↓
94 = Europe
↓
942 = England
↓
942·08 = Windsor
↓
942·083 = George V

The last link in the chain is the ultimate class of the book and represents its Specific Subject. Thus, by Cutter's Rule 161, the Heading for its Specific Subject Entry should be "George V."

Let us see what Cutter prescribes. It proves an interesting study in the psychology of the nightmare!

First Stage:—

Cutter's intuition points him in the right direction; he begins Rule 162 in the right way:

> "Put under the name of a king or other ruler all his biographies, and works purporting to be histories of his reign".

But it is well known that intuition will not tolerate ratiocination.

Second Stage:—

Evidently the Second Law argues with him: "The ordinary reader is more likely to look for this book under English History". Cutter is perturbed. His intuition pulls him in one direction, this suggestion in another. Result: a self-stultifying commentary:

> "Books of this sort have really two subjects and ought to be entered twice".

He agrees to enter the book both under "George V" and under "British History". There apparently can be *two Specific* Subjects for one and the same book!

Third Stage:—

The Law of Parsimony enters. The very sight of it throws Cutter into confusion. He returns to

defend the intuition of Rule 162. He adds another sentence to the commentary:

> "The rule above is simply an economical device to save room at the expense of convenience".

Intuition merely sighs at this weakness of Cutter, not realising that the worst is still to come.

Fourth Stage:—

Cutter turns to the Second Law with an imploring look. But it is adament: "The requirement of the ordinary reader is paramount in the Library Catalogue. If your intuition goes counter to it and if the Law of Parsimony will not allow you to satisfy both your intuition and the ordinary reader's need, how dare you favour the former to the exclusion of the latter?" Cutter is powerless. He adds to his commentary yet another sentence, which virtually turns out intuition and cancels the rule itself:

> "Perhaps a better practice would be to enter all lives of kings as well as histories of their reigns under country only".

I wonder if there exists anywhere else another such instance of direct negation of a rule by its commentary especially when the framer of the rule himself is the commentator and the rule and the commentary were both written at the same time. Is it too much to infer that this grotesque situation results from lack of a definite procedure for arriving at

the Specific Subject and the refusal of help from classification which alone, here, can serve our turn?

It may be asked: "If the help of classification is taken and the rule of Cutter is adhered to, will it not amount to a flouting of the Second Law?" No, the Second Law need not feel flouted. It will be seen later that the very chain of classes which the class number has unfolded will help us to give a *See Also* Reference Entry in the form:

ENGLISH HISTORY.
See also
GEORGE V.

The ordinary reader may look under English History. As he scans this entry he will find several books and at the end the direction "*See also* under George V." That should satisfy the Second Law.

Perhaps it may, but won't the Fourth Law protest? The reader will have to spend some time running through the entries under English History until he arrives at this *See Also* Reference and then he must travel to another part of the catalogue to examine the entries headed "George V." Surely this is not calculated to "Save the Time of the Reader". We shall leave it to the Law of Parsimony to answer. It may argue: "How much time after all will any reader have to waste as a

result of my *See Also* Reference? And when he comes again for this particular book will not his previous experience eliminate even that insignificant waste of time?". But at this stage the Canon of Consistency will emphasise: "I should certainly prefer your having a definite procedure invoking the aid of classification, which will ensure absolute consistency in decisions of this sort". Perhaps the Canon of Ascertainability will also throw in its weight: "The cataloguers' vague unaided way of divining the Specific Subject of a book will often make it unascertainable. I too prefer to accept the help of classification to escape the nightmares that otherwise confound me"

Event vs. *Place*

Cutter's rule on this category is:

> "163. Events[1] or periods[2] in the history of a country which have a proper name may be entered under that name with a reference from the country; those whose name is common to many countries[3] should be entered under the country.

Why is Cutter "in two minds" on this matter? How can the capacity of an event or a period to constitute a Specific Subject be dependent on the accident of its having or not having been given a proper name? The trouble is really due to the cataloguer's being obliged to function as classifier

---

"1 Bartholomew's day. 2 War of the Roses. 3 Civil War".

and yet being unwilling to submit to the discipline of classification.

History, however, explains and exonerates Cutter's "two minds". Cutter drafted his *Rules* prior to 1876. In those days there was no scientific scheme of classification in the field — no scheme that sought to satisfy the Canons of Hospitality and to individualise subjects to any helpful extent. At any rate the discipline of scientific classification had not yet been developed: the Decimal Classification with its wide influence in this field was yet to appear. In fact the first infant edition of the *Decimal classification* (42 pages — *cf.* the 1243 pages of the current edition) and Cutter's *Rules* appeared simultaneously in 1876 as parts of the same *Annual report* published by the Commissioner of Education. In such circumstances Cutter could not have thought of invoking the aid of the discipline of classification. This only makes more obvious his genius in having explored single-handed a *terrain vague.*

The wonder, however, is why no attempt has been made since Cutter's time to harness the vast experience gained by the phenominal progress of classification to re-examine and re-state the rules for a dictionary catalogue. Why has nobody done more than reproduce Cutter's old rules in less terse and more ambiguous terms? Is it not due to the tyranny of blind tradition? Should we not get out of this slough of inertia?

Let us now examine the Decimal Chains for *Wars of the Roses* and *the English civil war.*

9 = History
↓
94 = Europe
↓
942 = England
↓
942·04 = Wars of the Roses

9 = History
↓
94 = Europe
↓
942 = England
↓
942·06 = Stuart period
↓
942·063 = Civil war

The last link in either chain is an ultimate class and represents the corresponding Specific Subject. Then by Cutter's basic Rule 161 the Heading for the Specific Subject should be respectively:

WARS OF THE ROSES and CIVIL WAR. ENGLAND

Since "Civil War" is not a proper name it should be augmented by the individualising term 'England' — a term that virtually makes it a proper name. The Canon of Consistency rightly demands this method of upholding the basic Rule 161 and quashing contradictory rulings like No. 163.

Subject vs. *Place*

We have already discussed this category in connection with alternative names. Let us now re-examine it. The intuition that helped Cutter to hit upon the right prescription in Rule 162 appears to have failed him here. Led simply by the Second Law, and perhaps in despair, he enunciates:

"164. The only satisfactory method is double entry under the local and the scientific subjects—to put,

> for instance, a work on the geology of California under both California and Geology and to carry out this practice through the catalogue, so that the Geographical student shall not be obliged to search for works on California under Botany, Geology, Natural History, Palaeontology, Zoology and a dozen similar headings and the scientist shall not be sent to California, England, Russia and a score of other places to find the various treatises on Geology—"

Surely Cutter cannot have been in his normal condition when he drafted this rule. In his pursuit of the elusive Specific Subject he has fallen very far from his usual high standard of drafting. In no other rule has he included arguments of this kind, which have usually been relegated to the commentaries.

As additional proof that Cutter was not in a normal state let me show how he completed the rule. At the point where we left him, the sceptre of the Law of Parsimony evidently flashed before his mind's eye, for he suddenly concludes as follows:

> "But as this profusion of entry would make the catalog very long, we are generally obliged to choose between country and scientific subject".

In this abnormal state of mind, you see, he has forgotten to make Rule 164 self-contained; he does not specify whether country or scientific subject should be chosen. When after-thought prompts

him he is driven to repair this serious omission by enunciating a separately numbered rule:

> "165. A work treating of a general subject with special reference to a place is to be entered under the place with merely a reference from the subject".

In Rule 164 he speaks of scientific subject, in Rule 165 of general subject. Can we defend Cutter by assuming that he meant Rule 165 to apply to non-scientific subjects? His example given under Rule 165 says "No":

> "Put Flagg's *Birds and seasons of New England* under New England and under ornithology say *See also* New England".

We have already shown how Mann meets the situation, how incomplete her ruling is and how it obliges us to take refuge in the Last Rule of Interpretation. All this because Mann is in "two minds" before the problem of Subject *vs.* Place. This could have been avoided if she had recognised that determination of Specific Subject is essentially a problem of classification and had followed its beaten tracks.

APPLY THE CHAIN-PROCEDURE

Let us consider Mann's own examples and find out:

(i) What result will be obtained in their case if we follow the chain-procedure of classifiers for finding out the Specific Subject; and

(ii) What intrinsic features of the situation, viewed even as a problem in classification, had put Mann "in two minds".

Her examples are:

(*a*) For country subdivided by subject:

SPAIN.—*History.*

ITALY.—*Descriptive Travel.*

U. S.—*Diplomatic and Consular Service.*

U. S.—*Army.*

FRANCE.—*Social Life and Customs.*

(*b*) For subject subdivided by country:

TRADE UNIONS.—*U. S.*

MINES AND MINING.—*Germany.*

AGRICULTURE.—*England.*

BOTANY.—*U. S.*

EDUCATION.—*Norway.*

Now the Decimal chains for the first examples in (*a*) and (*b*) are respectively:

9 = History
↓
94 = Europe
↓
946 = Spain

3 = Social sciences
↓
33 = Economics
↓
331 = Labour
↓
331·8 = Labouring Class
↓
331·87 = Organisation of labour
↓
331·87973 = United States

These chains indicate that in both cases the ultimate class is geographical and that the Specific

Subject is essentially expressed in the name of a place. This confirms the Heading.

SPAIN.—*History.*

but contradicts.

TRADE UNIONS.—*U. S.* for which we should write:

U. S.—*Trade Unions.*

precisely as Cutter would have it.

If Mann's rule goes counter to the basic Rule 161 on Specific Subject Entry while Cutter's Rule 165 conforms to it, it is evidently because they are adopting different methods for determining Specific Subject. If they had adopted an explicit method, preferably linked to an accepted scheme of classification, this situation would not have arisen.

AN ANALYSIS

Let us now try to find out what led Mann to deviate from the basic rule. The terminology developed in the *Prolegomena* and used in the *Colon classification* will help us in this task.

In the examples of group (*a*) the Main Subjects are History (general, cultural or military) and Geography (travel). Now for both these subjects the geographical characteristic is prescribed for classification—explicitly in the Colon Classification[1] and implicitly in the Decimal Classification.

[1] Rules 80 and U0.

But in the examples of group (*b*), according to the Colon Classification the Main Subjects are Economics, Engineering, Agriculture, Botany and Education. For none except Economics is the geographical characteristic prescribed: most works on these subjects do not need it. Mann would probably hold that even Economics need not be divided by the geographical characteristic. If certain historical or descriptive books belonging to these classes need geographical subdivision, the method prescribed is to use an appropriate Common Subdivision.

It is perhaps the fact that use of the geographical characteristic is essential and universal in the classification of the Main Subjects represented in group (*a*) but not in group (*b*) which is responsible for Mann's decision that the *place* contributes the dominant word in the Specific Subject in group (*a*) but not in group (*b*).

This really raises another fundamental issue in the implementing of the basic Rule 161. In Mann's terminology this issue is:

Form Headings vs. *Form Divisions*

Mann[1] warns us that:

> "Form Headings should not be confused with Form Divisions under subject. As usual here the Form Headings are of equal importance to Subject

---

[1] P. 185.

> Headings. They group together Entries for books having other than subject use"

She cites as examples *Readers and speakers, Debates and debating,* and *Scientific recreations.*

Of Form Divisions she says that they are usually similar to those in any other system of classification. They may be used under any subject where it is necessary to subdivide.[1]

This conscious use of the discipline of Classification is refreshing! Let us therefore examine what light is thrown by the theory of classification on the problem of Form Headings *vs.* Form Divisions in particular and on that of Specific Subject in general.

THE FIRST STAGE OF CLASSIFICATION

The *Prolegomena*[2] mentions four stages in the classification of a book. We are here concerned only with the first two. In the first stage we deal with the subject-matter of the book and determine its Specific Subject in terms of an accepted scheme of knowledge classification. We do so by finding, in accordance with the rules and devices prescribed by the scheme, that one of its knowledge classes which is best fitted to stand as ultimate class. Having thus found out the Specific Subject we express it at once as a Class Number so as to escape the vagueness and instability incidental to verbal description.

---

[1] P. 184.

[2] Pp. 269-279.

Then we express this Class Number in the form of a Chain of Classes, as we have already illustrated. The term which is specific to the last link of the Chain should be used as the Heading for the Specific Subject Entry. If that term is too general and does not by itself individualise the Specific Subject we should use as Subheading appropriate individualising terms. These are to be obtained from among the terms specific to the earlier links in the Chain in accordance with the Canon of Context,[1] which reads:

> "The denotation of each term in a scheme of classification should be decided in the light of the different classes of lower order belonging to the same primary chain as the class denoted by the term".

The commentary on this Canon reads:

> "This canon is necessitated by the fact that one and the same term denotes several different entities, in popular as well as technical usage. It may be stated that this canon is usually overlooked by beginners. It leads to many absurd placings".

In most cases a single individualising term will be sufficient but more may occasionally be necessary.

If this procedure is adopted Cutter's Rules 162-166 are superseded. The first four consider the claim of the name of a country to be used as Heading. But it will obviously have a claim at all only if it occurs as the name of the last link of the chain concerned. In discussing Cutter's Rule 163 we

---

[1] *Prolegomena* P. 71.

have shown how a general term like 'Civil War' is to be individualised by an additional term so that it may be used as the Heading in accordance with the basic Rule 161. Rule 166 which deals with "Subjects that overlap" becomes redundant: basic Rule 161 in association with the chain of classes concerned will decide the Heading quite definitely.

THE SECOND STAGE OF CLASSIFICATION

Let us next examine the 2nd. stage of classification and see what help it can give in solving the difficulties that arise when we attempt to implement the basic Rule 161 without recourse to additional special rules. According to the *Prolegomena*:[1]

> "The second stage in the classification of a book is that of amplifying, by an appropriate Common Subdivision Number, the Class Number reached at the end of the first stage".

And according to the Canon of Common Subdivisions enunciated in the *Prolegomena*:[2]

> "A scheme of Book Classification should have a schedule of Common Subdivisions with the aid of which books belonging to the same knowledge-class may be differentiated and further classified on the basis of the form of exposition adopted by the book".

However detailed the scheme of knowledge classification adopted may be there always comes a time when further subject division is impossible. Here is the opportunity for further subdivision on the

---

[1] P. 270. [2] P. 163.

basis of the 'form of exposition'. These further divisions are sometimes called 'Form Divisions', but the Colon Classification calls them 'Common Subdivisions'. Although in all the earlier editions the Decimal Classification called them Form Divisions, in the current edition it has adopted 'Common Subdivisions'.

These Common Subdivisions are involved in all schemes of Classification and are represented in the Class Numbers. There may thus be difficulty in distinguishing which part of a Class Number relates to the Subject-matter and which to Form of Exposition or Common Subdivision. To meet this difficulty the *Prolegomena*[1] prescribes the Canon of Distinctiveness:

> "The Notation of the Schedule of Common Subdivisions should be tolerably distinct from that of the Schedule of the Knowledge Classification which forms the basis".

Whether the notation obey this Canon or not, in representing the Class Number as a Chain in order to arrive at a Specific Subject the cataloguer must exclude from it the portion relating to the Common Subdivision. This means: he must remember that the terms that relate to the mere Form of Exposition (Common Subdivision) can have no place among and should not be allowed to compete with the terms that deal with the Subject-matter. If this important rule is observed many of the tanta-

[1] P. 163.

lising situations that arise in applying Cutter's basic Rule 161 will be avoided.

The Common Subdivision part of the Class Number should however be used for constructing Subheadings. This accords with Cutter's rule:

> "191. Make a form entry of encyclopedias, indexes and works of similar PRACTICAL FORM, ... the special ones in groups under their appropriate subjects.
>
> "Thus an agricultural dictionary will not be entered under DICTIONARIES, but under AGRICULTURE, in a little division *Dictionaries*".

And with Mann's[1] prescription:

> "Form subdivisions may be used under any subject where it is necessary to subdivide".

Such Subheadings may for convenience be called Common Subdivision Subheadings (Mann's "Form Divisions") in contradistinction to the Individualising Subheadings that may be necessary, as we have indicated, when the Heading itself consists of a general term. It may be noted, by the way, that if both types of Subheading have to be used in the same entry the Common Subdivision Subheading should come last.

Our discussion so far makes it clear that it will be best to leave it to the scheme of classification, as Mann recommends, to decide what Common Subdivision Subheadings should be used in a Dictionary

[1] P. 184.

Catalogue. The *Prolegomena*[1] enumerates the Common Subdivisions current in the Decimal Classification, Colon Classification, Subject Classification and Expansive Classification. The *List*[2] tabulates them independently as follows:—

Bibliography	Hand books
Biography	History
Collected works	Outlines, Syllabi, etc.
Collections	Periodicals and Society publications
Dictionaries	Poetry (about)
Drama (about)	Statistics
Essays, Addresses, etc.	Study and Teaching
Fiction (about)	

Here are some examples of the use of Common Subdivision Subheadings:

ASTRONOMY.—*History* INSURANCE.—*Dictionaries*
BIBLE.—*Bibliography* INSURANCE.—*Periodicals*
BIBLE.—*Study and Teaching*
CIVIL WAR.—*England. Bibliography*
GEOLOGY. *India.—Museum*

In the Colon Classification the Common Subdivisions are treated very elaborately so that the Common Subdivision part of the Class Number obeys all the Canons of Classification. One result of this is that many Common Subdivisions are amplified geographically. Thus in subjects like scientific ones for which division on the basis of geographical characteristic is not prescribed, if a book happens to give a historical or descriptive exposition in relation to a geographical area, the

[1] Pp. 164-165. [2] P. ix.

number representing the country or place will figure in the Common Subdivision part and not in the Subject (first stage) part of its Class Number. This will automatically spare the cataloguer the task of deciding *ad hoc* whether the name of the place should form Heading or Subheading.

TWO EXAMPLES

Consider the two titles *Mining in India* and *Bibliography of Indian music*. Their Colon Chains of the first and second stages, Class Number of the first stage, full Class Number, and its Common Subdivision part are respectively:

D = Engineering
D3 = Mining (First stage ends)
D3*v* = History (Second stage begins)
D3*v*2 = India

N = Fine Arts
N8 = Music
N84 = Asia (Style of)
N842 = India (First stage ends)
N842*a* = Bibliography (Second stage begins).

In the first example, the last link in the Chain of the first stage Class Number represents "Mining"; its Specific Subject Heading is therefore "Mining". The dominant word pertaining to the second stage (*i.e.*, as far as the Common Subdivision goes) is "History". Hence "History" is the Subheading. "India" is required for individualisation. Thus the full Heading for the first book is

MINING.—*History. India.*

In the second example, the last link of the Chain of the first stage Class Number is India. Hence "India" should figure in the Specific Subject Heading. But "India" by itself does not individualise the subject. Applying the Canon of Context we find that the second link contributes the necessary individualising term "Music". The second stage of the Class Number contributes the Common Subdivision Subheading 'Bibliography'. The full Heading is therefore

Indian Music.—*Bibliography.*

In this way the Colon Classification will help the cataloguer to avoid several pitfalls. But if a library uses a scheme of classification that does not observe the Canons of Classification so well in building the Common Subdivision part of the Class Number, the cataloguer, like the classifier himself, must be on his guard. Such pitfalls, discussed in detail in the *Prolegomena*,[1] are restated here in terms of Cataloguing.

Conflict between Headings and Subheadings

The first pitfall is due to the occurrence of certain terms both in the category of Common Subdivisions and in the category of Knowledge Classes. Care must be taken to see that no mistake occurs on account of this.

(*a*) The term History, for example, occurs in both categories. The Canon of Context and the

[1] Pp. 273-279.

Canon of Enumeration should be carefully borne in mind in deciding whether a book whose title contains the term History should have History as the Heading of its Specific Subject Entry or whether some other subject should be placed as Heading with History as a Subheading.

To give a concrete example: a *Methodology of history* should have for its Heading

HISTORY.

But for a book on the History of Indian Philosophy 'History' is merely a Subheading, thus:

INDIAN PHILOSOPHY. *History.*

(*b*) The term Bibliography also occurs in both categories and requires similar precaution.

(*c*) Terms like Encyclopedias, Societies, Periodicals, Congresses, Yearbooks and Biographies also occur in both categories. Here also a book should have the appropriate term of this category (Encyclopedia, etc.) for the Heading of its Specific Subject (Form) Entry only if the subject-matter covered by the book is not specific but answers to the definition of Generalia. If on the other hand the subject-matter belongs to a Specific Class of Knowledge the Specific Subject should be used as the Heading while the Subheading should be chosen from among the terms Encyclopedias, Periodicals, *etc.*

For example:

(*a*) (1) The *Encyclopaedia Britannica* should have for the Heading of its Specific Subject Entry:

Encyclopaedias.

(2) But for the *Encyclopaedia of social sciences* this term will appear only as a Subheading:

Social Sciences. *Encyclopaedias.*

(3) Similarly the *Browning cyclopaedia* should bear as the Heading of its Specific Subject Entry:

Browning (Robert). *Encyclopaedias.*

(4) The *Banking cyclopaedia*

Banking. *Encyclopaedias.*

and so on.

(*b*) (1) Again, since the *Indian antiquary* deals with all kinds of subjects it should have for the Heading of its Specific Subject (Form) the term

Periodicals.

(2) But the *Indian journal of obstetrics* should have

Obstetrics. *Periodicals.*

Main Subject

(ii) A second kind of pitfall awaits us in determining the Main Subject of the book. It may occur in various forms.

Deceptive Title

(*a*) A common mistake of beginners is to put too much faith in the title without first confirming

it by reference to the contents-table, preface, or if necessary the whole book.

There are for example three books with the title *Grass*. One by K. Rangachari is a botanical book the second is a poem, while the third, by Merian C. Cooper, deals with the migration of tribes in Persia and belongs to human geography.

OBLIQUE INTENTION

(*b*) Another cause for such a pitfall is the difficulty of deciding the main intention or purpose of a book.

(1) Consider for example, the solid, thought-provoking book:

ROYDEN (Maude), *etc.*, *Seven pillars of fire.*

It is a symposium of the following seven essays.

The way of religion by Maude Royden;
The human fact by L. P. Jacks;
Erewhon come true by A. E. Richardson;
The riddle of money by the Marquis of Tavistock;
The art within the bellicose civilisation by C. R. W. Nevinson;
The coming reformation by Bernard Acworth; and
Utopia while you wait by E. Denison Ross.

No wonder if a beginner is puzzled by the range of these essays and is tempted to consign it to the class Generalia! But if the whole book is studied and its background properly determined it becomes clear that its main purpose is etiological analysis

of present-day social ills and maladjustments. Its proper place, therefore, is in the class Social Pathology. The foreword confirms this view.

(2) To take another example: a book in metaphysics may apparently be engaged in attacking Monism while its real intention is to establish Dualism. Such a book should be classed under Dualism.

(3) Chesterton's *Browning,* similarly, should be given the Subject Heading BROWNING.

(4) So also the Subject (Form) of a literal Tamil translation of Kalidasa's *Sakuntala* should be taken as Sanskrit, not Tamil, Literature and Maude's English translation of Tolstoy's works belongs to Russian Literature.

One rule that will often be helpful to beginners is: "Reduce the title to *one* word, the *most significant.* The Main Subject of the work will then very probably be suggested by that word". In the following examples the *one* word to be retained is shown in *italics*:—

(1) Grammar of *politics.*
(2) Science of *society.*
(3) *History* as a science.
(4) Adventures in *philosophy.*
(5) *Number* books for infants: a graduated series of exercises in addition and subtraction.
(6) *Money* and a changing civilisation.

Further Subdivision

iii A third pitfall may be met with even when the Main Subject of a book has been correctly determined. As in the case of the second pitfall this may be due to:

(*a*) Putting faith in the title without first confirming its appropriateness by reference to the contents-table, preface, or if necessary the whole book.

Example:—A book by A. S. J. Baster has the title *International banks.* This suggests that the Subject is "Bank of International Settlement". But the preface and the text show that the book deals only with "the London banks operating mainly in foreign countries". It would therefore be more appropriate to take "Commercial Banks" as the Subject of the book.

Oblique Intention

(*b*) Difficulty in deciding the main intention or purpose of the book.

Example:—A book by Harry Mamilton Laughlin has the title *Duration of the several mitotic stages in the dividing root-tip cells of the common onion.* In this title, the term *onions* occurs. This might lead a beginner to consider this a book on onions. But careful perusal will show that the purpose of the book is to study the dynamics of mitosis and the onion has been taken only as a representative plant for experiment. In fact we read on page 25 of

the book under the heading *Material for Experiments*:

> "The temperature-range having been decided upon, it is next necessary to select suitable material. The onion, having proven to be so well adapted to the sort of study in hand, was chosen for the completer investigations. Not only has it long been known to show mitotic rhythm; but it presents a homogeneity of samples not so easily obtained in other types of organisms.... Moreover, one sample may be taken without disturbing the activity of the others, at least during the few hours of sampling. They are not difficult to prepare cytologically...Finally the cells are large and the rate of mitotic activity permits convenient (10-minute) sampling intervals".

This settles it that the Subject of the book is not Onions but Mitosis, a topic in Cytology.

Another Pitfall

(iv) Books of Partial Comprehension[1] form another source of trouble. If the emphasis is obviously on one branch or aspect of the Subject comprehended the Specific Subject of the book can be determined as that aspect or branch. The book must otherwise be given a Subject Entry under every branch or aspect that it comprehends. If on the other hand the book comprehends all divisions and aspects of a Subject, that Subject itself should appear in the Heading and no other Subject Entry is called for.

---

[1] *Prolegomina*. Pp. 143-148.

Apart from these general hints which may be applied in association with any scheme of classification, each scheme of classification needs special rules to facilitate objective determination of Headings for Specific Subject Entries. The better the scheme satisfies the Canons of Classification the fewer will be the special rules required and the less the cataloguer will need to concern himself even with the general hints given above; for, as we have already pointed out, the results of these general hints will have been embodied in the Class Number. Special hints and rules will apply only at the stage of Chain-procedure, *i.e.* when the Class Number has been expressed as a Chain and the Heading is to be derived from its links.

A set of special rules applying to the Colon Classification is here given as a model. Only the last 6 are substantive rules; the rest merely offer definitions and develop a precise terminology.

Special Rules for deriving the Specific Subject from the Colon Chain

(1) As we evolve the Chain the first link with a small letter or: 9 (not immediately followed by an Arabic numeral or Capital letter) marks the beginning of the phase corresponding with the second stage of classification — Form (Common Subdivision) phase. The phase that ends with the preceding link corresponds with the first stage of classification — Subject Phase.

It is possible to have Chains without a Form Phase. It is not, however, possible for the Subject Phase to be absent. The extreme possibility is of there being only one link. This will happen if the Class Number is of a single digit and then that digit will represent a Main Subject. One cannot strictly speak of a Chain of only one link but we may call it a degenerate Chain.

(2) To make later reference easier a Chain with a Form Phase may be called a Compound Chain and a Chain without a Form Phase a Simple Chain. A chain containing links with two small letters or a small letter and : 9 may be called a Complex Chain.

(3) If in evolving the Subject Phase of a Chain we come upon a link having a zero followed in the

succeeding links by a capital letter, the Chain may be called a Biassed Chain.

(4) The phase of a Biassed Chain comprising sequent links with a zero followed by a capital letter but without a small letter or : 9 may be called the Bias Phase.

(5) The section of the Subject Phase preceding a Bias Phase may be called the Basic Phase of the Chain.

(6) If the last link of the Form Phase of a Chain contains an x and ends with an Arabic numeral (other than: 9), the Chain may be called a Classic Chain. If the last link of the first Form Phase of a Complex Chain has a similar characteristic, the section of the Chain ending with that link may be called the Classic Phase of the Chain.

(7) If the last link of the Form Phase of a Chain ends with a Chronological Number of three or more digits the Chain may be called an Epochal Chain. If the last link of the first Form Phase of a Complex Chain has a similar characteristic, the section of the Chain ending with that link may be called the Epochal Phase of the Chain.

(8) If the last link of the Basic Phase of a Biassed Chain or the Subject Phase of an Unbiassed Chain or the Form Phase of a Chain ends with a Chronological Number of two digits it may be called a False Link.

S = Psychology
↓
SM95 = Psycho-analysis
↓
SM95:5 = Feeling
↓
SM95:56 = Worry

} Simple Chain

V = History
↓
V3 = Great Britain (First phase ends)
↓
V3*a* = Bibliography (Second phase begins)

} Compound Chain

0 = Literature
↓
01 = Indo-Germanic
↓
013 = Greek
↓
013:1 = Poetry (First phase ends)
↓
013:1:9 = Criticism (Second phase ends)
↓
013:1:9*x*1 = Aristotle. *Poetics* (Third phase ends)

} Complex Chain

S = Psychology
↓
SM95 = Psycho-analysis

} Epochal Chain

S = Psychology
↓
SM95 = Psycho-analysis

} Basic Phase

↓
SM950T = For Teachers
↓
SM950T3 = For teachers in Adult schools

} Bias Phase

} Biassed Chain

(9) All False Links, and the Bias Phase of a Chain, are to be ignored in deriving the Specific Subject and the Heading for the Specific Subject Entry. The link that first precedes a False Link may be called the Last Effective Link of the Phase concerned.

(10) The Heading of the Specific Subject Entry is to be the term represented by the last digit of

(*a*) the Last Effective Link of the Subject Phase or the Basic Phase of the Chain, as the case may be;

(*b*) the last digit of the Last Link of a Classic Chain or the Classic Phase of a Chain; and

(*c*) the Chronological Number at the end of the Last Link of an Epochal Chain or the Epochal Phase of a Chain.

(11) If the term derived for the Heading by Rule 10 does not by itself individualise the Specific Subject but, in order to secure individualisation, has to be interpreted as specified by the Canon of Context, the individualising word is to be derived from the last digit (or the Epochal Number) of one or more of the preceding links, as may be required. The smaller the number of such links used and the smaller the number of individualising words the better. The individualising word or words may be called the Individualising Subheading. The Main Heading and the Individualising Subheading

are to be regarded as separate sentences. The Individualising Subheading is to be in ordinary italics.

(12) If there is a Form Phase after the link contributing the Heading a further Subheading is to be the term represented by its Common Subdivision digit, *i.e.* small letter or: 9 or in certain specific circumstances 9. This Subheading may be called Common Subdivision (Form) Subheading. It should be in ordinary italics and should be regarded as a separate sentence. It should come after the Individualising Subheading, if any.

(13) If the Common Subdivision digit used in Rule 12 is *b*, *e*, *y* or *z*, the Arabic numeral or numerals immediately following it should be taken along with it in deriving the Common Subdivision Subheading.

(14) If the Common Subdivision digit contributing to the Common Subdivision Subheading happens to be amplified geographically, the name of the geographical area is to be added as another Subheading. It may be called an Amplifying Subheading and written and treated like any other.

(15) In the case of a Complex Chain that is neither Classic nor Epochal and has neither a Classic nor an Epochal Phase, a second Common Subdivision Subheading may be derived from the second Common Subdivision digit and written, treated and amplified (if necessary) as the first Common Subdivision Heading.

ANOTHER CLOUD

If a definite procedure like the one indicated above for determining the Specific Subject of a book and for choosing the proper Heading and Subheading for the Specific Subject Entry in terms of an efficient scheme of classification is not followed, one is likely to meet not only the difficulties already discussed but several others as well. Before leaving the subject we may refer by way of illustration to another cloud raised by Mann as a result of the traditional non-co-operation between cataloguing and classification. Mann[1] makes it appear a big issue:

Subdivision of headings

"*a. By subject.* The tendency to group under one heading all the books covering one field is desirable up to a certain point, but such procedure will lead to a day of reckoning when the entries under one caption become so numerous that it is difficult to differentiate between titles. When this happens the subject must be subdivided. For example, if there are thirty-five or fifty cards under *Drama* the cataloguer should go over them carefully, selecting all those treating the history and criticism of the drama, the technique of the drama, and other special phases, and segregate them from the general books. The headings would then read:

DRAMA

Drama—History and criticism.

---

[1] P. 183.

Drama—19th Century.
Drama—Technique.

"When the average public library reaches 50,000 volume mark, subject headings demand more attention than at any other time, because many of the broad headings begin to need expansion as new additions are made in the book collection".

Here are some obvious criticisms. In the first place, is not "history and criticism" a Form Division? How does it occur under "By subject"? Besides, will this problem arise at all if the play of discretion on the part of the cataloguer in determining the Heading and the Subheading of Specific Subject Entries is reduced to a minimum by obliging him to decide them in terms of a scheme of classification and in accordance with the Chain-procedure? In the Colon Classification, assuming that the element of criticism is dominant in a book on the history and criticism of drama it will be numbered O29. Here O2 is the Subject part of the Class Number and 9 the Common Subdivision part. The full Chain is

O = Literature
↓
O2 = Drama (first stage ends)
↓
O29 = Criticism (second stage begins)

Thus Drama is the Specific Subject of the book and must be used as the Heading. Since the Class Number has a Common Subdivision part that

stands for criticism the cataloguer will not have the option of leaving the Heading simply as

DRAMA.

He must add a Subheading and will arrive at

DRAMA. *Criticism.*

If the book is predominantly historical he will have arrived in a similar way at the Heading

DRAMA. *History.*

Assuming for the sake of argument that the scheme of classification used treats "History and Criticism" as a single Common Subdivision, he will reach

DRAMA. *History and criticism.*

He will by no means have been able to stop with

DRAMA.

CLEAR THE CLOUD

What do we gain by giving the cataloguer freedom in this matter? Will anything be lost by making it obligatory for him to do everything that the first stage Class Number, the Common Subdivision Number and their Chain demand? Why should "the day of reaching the 50,000 volume mark" and not the very day of cataloguing be the "day of reckoning"? Is not this tendency to procrastinate traceable to there being no definite objective procedure for arriving at the Specific Subject Heading? And is not the absence of such a procedure due to neglect of the help of Classification? The fact is that lack of the discipline that classification alone can provide has made it

possible for Cataloguing to slip into pitfalls that it might otherwise have learnt to avoid.

An Appeal

The Subject Entry attempts to make the Dictionary Catalogue serve the purpose of classification. What Classification indicates by Class Numbers the Subject Entry wants to indicate by words. Now numbers and symbols are more efficient, more stable and less ambiguous than words. By their very nature they demand a clearer and more systematic approach. They are free from the distracting associations bound up with words. Thus the Specific Subject and the appropriate Heading are more consistently and unerringly revealed by an approach through Class Numbers. This factor must be fully exploited by the Dictionary Catalogue. Classification and Cataloguing should be made to supplement each other in the most intimate way. Each should unhesitatingly take from the other what it is best fitted to give; their resources must be pooled. One should not persist in doing clumsily by one method what can be done by another far more efficiently. There must be a scientific division of labour and an ungrudging sharing of its fruits. Such an agreed co-operation will sharpen both classification and cataloguing without in the least prejudicing their true individuality.

The rules for a Dictionary Catalogue stand in need of a recodification exploiting these intrinsic potentialities.

12 CONFLICT OF HEADINGS

See Reference Entries

Subject Reference Entries in a Dictionary Catalogue are, as Mann[1] puts it, of two kinds:

(i) *See* Reference (referring from a term under which no books are entered to one under which books are entered) and

(ii) *See also* Reference (referring from a term under which books are entered to another related term where also books are entered).

See References

See References were mentioned in the last chapter when argument and illustration demanded their use. But the main function of that chapter was to deal with the determination of the Specific Subject of a book. We showed that this question is best answered by an approach through classification. We said that if the scheme of classification in use satisfies all the Canons of Classification (particularly the Canon of Hospitality and the Canon of Distinctiveness — in the first and second stages of classification) we may depend upon the Class Number to show us the Specific Subject. We remarked that Cataloguing should therefore leave this problem in the hands of Classification, which is best fitted to solve it. This does not mean, how-

[1] P. 187.

ever, that Cataloguing will find it easy to deal with Specific Subject Entries: many difficulties remain even when the Specific Subject has been taken over from classification. But these subsequent difficulties lie exclusively in the sphere of Cataloguing.

They arise in the process of expressing the Class Number of the Specific Subject in words suitable for adoption as Heading. As we saw at the beginning of the last chapter, the term available to denote the Ultimate Class (= Last Effective Link = Specific Subject) is by no means unique: there are several alternative terms.

The Law of Parsimony will not allow us to enter each book under every possible alternative name of its Specific Subject: it presses us to choose a single name. We have also seen what Cataloguing should do to satisfy the demands of the Canon of Consistency. The Second Law is to be placated by *See* Reference Entries from every other possible alternative name of the Specific Subject.

But the Law of Parsimony is inexorable! It wants to reduce even the *See* Reference Entries. To see how far we can yield to its pressure without undue injury to the Second Law, let us enumerate the various ways in which *See* References and alternative names and forms of names arise.

Conflict of Languages

The first consideration is: In what language is the subject to be named? One obvious principle is

that as far as possible all names should be in one language, whatever be the language of the book or the language in which the subject is named on its title-page.

The next question is: What should that one language be? Here the concept of favoured language developed in the *Colon classification* may be useful:

> "0331. The FAVOURED LANGUAGE of a library is the language in which the majority of the books of the library are written.
>
> "Normally the language of the country is likely to be the Favoured Language. But under the peculiar conditions of India, and Madras in particular, the Favoured Language of many of the libraries, is likely to be English".

Although this works very well for classification purposes, it may be made inoperative in cataloguing when political and other external considerations come into play. Then the subject should be named in the language adopted by the library for other parts of the catalogue and for other purposes — the official language of the library.

There are, however, many difficulties in applying this principle uniformly. Cutter recognises this in the *Rules*:

> "167. When possible let the heading be in English, but a foreign word may be used when no English word expresses the subject of a book.

"*Ex.* ECORCHEURS, EMIGRES, RASKOLNIK. Many terms of the Roman or civil law are not exactly translatable; neither Fault nor Crime gives the idea of Culpa; the Debitor inops is not our bankrupt or insolvent; he would have been very glad to have the privileges of a bankrupt. Some other technical terms, and some names of bodies, sects, events, should be left in the original language. The use of the Latin names of Greek deities (Jupiter, Neptune, Venus, in place of Zeus, Poseidon, Aphrodite) is a manifest inaccuracy. Yet it may be defended on the plea: (1) that the Latin names are at present more familiar to the majority of readers; (2) that it would be difficult to divide the literature, or if it were done, many books must be put both under ZEUS and JUPITER, POSEIDON and NEPTUNE, etc., filling considerable room with no practical advantage".

Many similar examples might be drawn from other languages. 'Vedanta' is not exactly translatable by 'Philosophy' nor does 'Logic' give the idea of 'Nyaya'. 'Campu', a literary form in Sanskrit and some other Indian languages, has no equivalent in English. Even where there are approximate equivalents it is felt that the English word does not convey the specific aroma of the original. In such cases the British Museum Catalogue is inclined to recognise the desirability of retaining both terms. For example,

Philosophy of Grammar. Sphota.

Prosody. Chhandas (Sanskrit). Yappu (Tamil).

Rhetoric. Alamkara (Sanskrit and Tamil).

Such untranslatable words are continually appearing. Mahatma Gandhi's *Satyagraha* (Sanskrit) has naturally been absorbed by all the Sanskritic and other associated Indian languages. The English terms 'Soul-force', 'Non-co-operation', Non-violence' and 'Passive Resistance' express only partial aspects of it and lack its characteristic aroma. There are several books containing a few pages on this new political weapon and even a few books exclusively devoted to it that use these terms to express the idea. Yet books in European languages are also bringing the original term *Satyagraha* into currency.

It is obvious that in such cases we should give *See* References from the rejected term to that chosen as the Heading of the Specific Subject Entry.

A special form of this problem is that of place-names. Assuming that the language of the catalogue is English, are we to adopt the original Indian name Tanjavur or the English form Tanjore?; Kashi or Benares?; Iran or Persia?; Wien or Vienna?; Rayalaseema or Ceded Districts?; Nippon or Japan?; Oesterreich or Austria?

Cutter's answer is:

> "42. Give names of PLACES in the English form (Refer from the vernacular, if necessary)".

Thus we have another source of *See* Reference Entries. In the next rule Cutter unnecessarily violates the Canon of Consistency:

"43. But if both the English and foreign forms are used by English writers, prefer the foreign form".

This rule offends the Canon of Ascertainability also but none the less it continues to be a source for *See* Reference Entries.

The *A. A. code* embodies these two rules of Cutter in the single Rule 130. But it satisfies the Canon of Ascertainability by adding in a note a useful hint towards choice of the correct form:

"In deciding between different forms of place names refer to Standard Gazetteers such as Lippincott's new Gazetteer; Longman's Gazetteer; Century Cyclopaedia of names; Ritters Geographisch-statistisches Lexikon; Vivien de Saint-Martin's Nouveau dictionnaire de geographie universalle.

For place names in the United States American libraries will follow the form prescribed by the U. S. Geographic Board provided it has made a decision (*See* its latest report)".

Conflict of Stages in the same language

Assuming that choice of language has been made, one still has to recognise that growth with consequent change in words is a common phenomenon in living languages. It is not the concern of the cataloguer to know whether the change in words is due to natural internal forces or to the influx of foreign elements either abruptly or imperceptibly. What does concern him is the particular term or form of a given term that he should use in the Heading of the Subject Entry. Here the *Prolegomena*[1]

[1] P. 64.

refers to the Canon of Currency: each of the terms used to denote Subjects in the Headings of Subject Entries must be that in current use among specialists in those subjects. But current when? Surely at the time when the catalogue entry is written. But as the *C. c. code* remarks:[1]

> "There are forces, beyond the control of individuals which change the meaning of terms in course of time. The vicissitudes in the meaning of terms like Philosophy, Philology, Anthropology, Sociology and so on, are cases in point. Nobody in the world, much less the classifier and the cataloguer, can arrest this semasiological change and evolution of the words in human use. Apart from the changes that come through ages,—a library catalogue, being a permanent entity, has no doubt to take note of these—the recent publication of the supplementary volume of the Big Oxford Dictionary demonstrates the extraordinary rate at which new terms are born and, old terms change their colour and meaning even in a single generation.
>
> "What cannot be prevented must be met by suitable adjustments".

'Suitable adjustments' means *See* Reference Entries from terms suppressed to the term used. It may further happen that at one stage the term chosen for the Heading of the Specific Subject Entry has to be changed for later ones following changes in usage among Specialists. The Canon of Currency will insist on this. The *See* References also will then share the change.

[1] Pp. 168-169.

Here again place-names form a special problem. Cutter provides for it as follows:

> "44. Use the modern name of a city and refer to it from the ancient, provided its existence has been continuous and there is no doubt as to the identity".

See Reference Entries from the ancient names are obviously called for.

Conflict of Spellings

We must next consider the details that arise in representing the chosen terminology in the Heading. Every problem in the grammar of the language concerned may give rise to *See* Reference Entries.

The first problem to be considered is spelling. Since the Heading is prepotent in the arrangement of the Entries of a Dictionary Catalogue and since its prepotency is inseparable from its spelling, the greatest attention must be paid to it.

Some words, unfortunately, have variant spellings. Choice of one for the Specific Subject Entry will incidentally decide which shall be used for *See* Reference Entries.

Variation in the spelling of proper names will be dealt with in the Part on Name Entries; we shall confine ourselves here to the other classes of words.

The American Library Association has gone into the question and the result of its findings is embodied

in its *List*. Here are some examples. The spelling in the second column is to appear in the Heading of the Specific Subject Entry and that in the first should have *See* Reference Entry:—

Aesthetics	Esthetics
Aether	Ether
Bahaism; Behaism	Babism
Cabbala, Kabala, Kabbala	Cabala
Caffres, Kaffers	Kafirs
Califs, Kalifs, Khalifs	Caliphs
Caryokinesis	Karyokinesis
Cyphers	Ciphers
Dakoits	Decoits
Damascening	Damaskeening
Dayaks	Dyaks
Dykes	Dikes
Electricution	Electrocution
Encyclopædias	Encyclopedias
Esquimaux	Eskimos
Eetichesm	Eetishesm
Fibres	Fibers
Gastropoda	Gasteropoda
Gauging	Gaging
Gypsies	Gipsies
Gypsy moth	Gipsy moth
Hindoos	Hindus
Hindoostanee	Hindustani
Homœopathy	Homeopathy
Kaki	Khaki
Kathode rays	Cathode rays
Kelts	Celts
Koomis, Koimys	Kumiss
Maffia	Mafia
Mahommedanism, Muhammedanism	Mohammedanism

Marathas	Mahrattas
Masks (plays)	Masques (plays)
Mastersingers	Meistersingers
Mediæval	Medieval
Metre	Meter
Moghul empire	Mogul empire
Mould	Mold

Another difficulty associated with spelling relates to the writing of compound words. Are the two elements to be written together or separately and in the latter case should they be hyphened? The *List* recommends writing them as a single word and giving *See* References from the other alternative forms. The following are some examples in which the terms given in the first column are to be used for *See* References and those in the second for the Specific Subject Entries.

Chap-books	Chapbooks
Coffee-houses	Coffeehouses
Earth-worms	Earthworms
Eye-strain	Eyestrain
Fire-places	Fireplaces
Folk-lore	Folklore
Free-masons	Freemasons
Hand-ball	Handball
Head-gear	Headgear

The *List* recommends retention of the hyphen in 'Head-hunters'. The *Subject headings,* on the contrary, retains the hyphen in almost all cases, though agreeing with the *List* in omitting it in 'Photogravure', 'Photoheliograph', Photolitho-

graphy', 'Photomechanical' and 'Photomicrography'.

CONFLICT OF SINGULAR AND PLURAL

Among morphological forms singular and plural have chiefly engaged the attention of cataloguers. Mann[1] recommends:

> "*Use plural rather than singular forms.* The plural form is usually adopted for the Subject Heading. It is inclusive, *e.g., Canal* might mean one canal, as the Panama Canal, but as soon as *Canals* is used all phases of the Subject including the commercial, engineering and transportation treatises may be entered under this Heading. Singular and plural may both be necessary if the two forms of a word have a different meaning, as *Theater and Theaters*".

Sharp[2] repeats this recommendation as a general rule but he would exempt cases of

> "Fruit and possibly Flowers, with references if necessary".

The *List*[3] would have further exceptions:

> "The plural is used rather than the singular except where subjects are generally thought of under the singular. The singular form is used for Fruits, in order that the same Heading may cover both Fruit and Tree".

These remarks are rather disquieting for the Canon of Ascertainability and the Canon of Consistency. The *List* does not give any objective method of

---

[1] P. 178. [2] P. 111. [3] P. vi.

dealing with the matter. The following tabular statement gives in the first column some of the terms for which the *List* recommends the singular form; for the terms in the second column it recommends the plural form. No doubt a subtle guiding principle can be distinguished. But however this may be, the *List* recommends a *See* Reference Entry from the rejected form to the chosen form.

Cross	Apes
Eye	Arches
Family	Armies
Foot	Boys
Fish	Cats
Fur	Cows
Grape	Dogs
Horse	Flowers
Leg	Flies
Paint	Grasses
Pear	Guns
Wood	Mice

Conflict between noun and adjective

Conflict between noun and adjectival form looms large in the choice of words for Specific Subject Heading. There appears to be no agreement on this matter. Shall we say

English History, *or*
History of England?

If we adopt the noun form will not the Law of Parsimony object to the introduction of the new connecting word 'of'? No doubt it will: we cannot

adopt the noun form unless we have a device by which the connecting word will become unnecessary. Usage has established that the two nouns are to be treated as two independent sentences. Thus we are to write

ENGLAND. *History, or*
HISTORY. *England.*

We shall see later which of these forms is to be adopted. But we observe that this device simply harnesses for cataloguing purposes the tendency of modern analytical languages to define the function of words by position rather than by connecting words or by morphological variations—to exploit syntax so fully as to make the latter impotent and hence unnecessary, a tendency carried to its logical conclusion in the familiar telegraphic style.

NOUN EQUIVALENTS

The use of Chain Procedure will help us in many cases to break up a Heading into elements like Main Heading, Individualising Subheading, Common Subdivision Subheading and Amplifying Subheading, each of which is written as a separate sentence. Most of these elements will consist of nouns. Thus many of the types of noun-equivalents (compound subject-names) enumerated in Cutter's *Rules*[1] are automatically resolved into sets of nouns and arranged in a definite order.

[1] Pp. 71-75.

There will still however be some noun-equivalents that cannot thus be resolved by the Chain Procedure into sets of nouns. The most important rule for dealing with such irresolubles is given by Cutter:

> "175. Enter a Compound subject name (noun-equivalent) by its first word, inverting the phrase only when some other word is decidedly more significant or is often used alone with the same meaning as the whole name".

While Cutter would thus use inverted headings only sparingly, Mann is more liberal. Her reasons are not however convincing. They amount to simple *preference* of classified to alphabetical order. We shall deal with them in chapter 15.

The proper course will be to decide each case on its merits. In many cases the question "Which is the prepotent word in the name-equivalent from the point of view of specificity of subject?" will indicate the word that should be written first. We shall write

Digestive System.

and not

System, Digestive.

Zodiacal Light.

and not

Light, Zodiacal.

DOMESTIC ECONOMY.

and not

ECONOMY, DOMESTIC.

In the light of this test it is difficult to reconcile the prescriptions of the *List*. We are asked to use

Libraries, Children's Libraries, College Catalogs, Library	Inverted.
Children's literature School libraries Medical libraries	Not inverted.

Nor is it easy to reconcile prescriptions like the following in *Subject headings*:

Theater, Open air Pensions, Military Manuscripts, Persian Blind, Poetry for the Electric lamps, Portable	Inverted.
Open air schools Civil service pensions Persian newspapers Children's poetry Portable engines	Not inverted.

Whatever be the form chosen, the rejected form should be used as Heading for a *See* Reference Entry.

Combined Terms

The *List* as well as *Subject headings* introduces another class of noun-equivalents which Mann[1] calls *Combined terms*:

> "Terms are combined into a compound heading to be used for books covering two phases of a subject so closely allied that one is rarely discussed without the other, *e.g., Flour and flour mills; Dyes and dying; Clocks and watches, Manners and customs.*
>
> "Reference should always be made from the second part of the heading to the one chosen as *Watches* See *Clocks and Watches*".

Almost every page of the *List* and *Subject headings* contains examples of such *combined terms.*

Alternative Names (Synonyms)

Both in the Classified and the Dictionary Catalogues there is another problem to be faced, for it is a matter of experience that hardly any Specific Subject has a single name. Most Specific Subjects have several *alternative names.* Here is an example: According to the *List,* heredity, ancestry, atavism, descent, inheritance (biological) and transmission (biological) are synonymous terms for the same Specific Subject.[2] A reader interested in this Subject may, therefore, mention any one of these six names. The Second and Third Laws insist that the library catalogue shall disclose to him all books in the library on the Specific Subject under whatever name he may look for it. An actual count

[1] P. 179. [2] P. 177.

shows that the *List* gives an average of at least two synonymous names for each Specific Subject and it points out that still further synonyms must suggest themselves in cataloguing.[1] Mann also recommends a generous use of synonyms.[2] The *C. c. code* prescribes in Rule 311 that a Class Index Entry is to be given using as heading the name as well as the current alternative names of each subject. The following commentary[3] on this rule is significant:—

> "It is difficult to give theoretical standards for the number of different alternative Headings under which a Class should be given Class Index Entries. ... One paradoxical direction may be 'Be profuse, be profuse but not too profuse'. The object of the Class Index Entries is to inform the reader about the Class Number under which he can find his materials, however remotely or vaguely he remembers or gives the name of the subject in which he is interested. Hence, it follows that every conceivable nomenclature and synonym must be drawn upon to construct the Headings for Class Index Entries. But at the same time there is a practical limit to the number of catalogue cards beyond which the increase in number may tend to hinder rather than help.
>
> "The correct line of demarcation between a helpful Heading and an obstructive Heading can only be drawn by the selective instinct of the cataloguer for what is paying. This flair is more often born with the cataloguer than acquired. It is the same

[1] P. vii. [2] P. 187. [3] Pp. 167-168.

old case of nature *versus* nurture here. Those that are not born with the minimum of this flair may never develop into satisfactory cataloguers. At the same time, given the minimum, much can be added by training and experience".

Alternative Names (By transposition)

Synonyms are not the only factor in the problem of Alternative Names of Specific Subjects. They might be if all the names of all Specific Subjects consisted of single words. But we know that many Specific Subjects have at least two words in their names, while some may have more than two. We shall first confine ourselves to those whose names contain only two essential words. For convenience we shall call them *Doublets*. Consider, for example, the Specific Subject "Education in India". I shall take it for granted that in the Heading of an Entry this Subject receives the form:

Education. *India.*

An alternative name arises by transposition:

India. *Education.*

For convenience, as we have seen, it is usual to call the second word in a Doublet of this kind *Subheading* and the first, *Main Heading*. The Second Law reminds us that a reader interested in this Subject may look for books on it under either of the Headings we have mentioned. It may even suggest his looking for it under "Indian education". Cutter rightly points

out in his *Rules*[1] that it is by no means possible to teach the public to expect one and only one of these alternative forms of Doublets in a Library Catalogue.

SYNONYMOUS DOUBLETS

It is also possible to have Synonymous Doublets like "Capital punishment" and "Death penalty". Theoretically, if the number of synonyms of the two terms of a Doublet be m and n respectively the number of Alternative Headings will be $2mn$. If the number of synonyms of the two terms in a Synonymous Doublet be p and q respectively the number of additional Alternative Headings will be $2pq$. Similarly, a third Synonymous Doublet may give rise to $2rs$ additional Alternative Headings. Thus the total number of Alternative Headings available to denote the Doublet may be $2(mn+pq+rs+\dots)$. Quinn recommends the following five synonyms for a Doublet:—

BRITISH HISTORY.
ENGLAND, HISTORY OF.
ENGLISH HISTORY.
GREAT BRITAIN, HISTORY.
HISTORY OF ENGLAND.

There are two obvious criticisms of this example. In the second heading the Canon of Consistency would require omission of the preposition 'of'. And the alternative heading:

HISTORY OF GREAT BRITAIN.

[1] P. 73.

should be added so as to bring the number to $2 \times 3 \times 1 = 6$ as required by the formula.

In the same way one may work out the number of Alternative Names obtainable for Specific Subjects that require three or more words to denote them. For example, the formula for the number of Alternative Headings available to denote a Triplet will be 6 $(mnp + qrs + tuv \ldots)$ where m, n and p are respectively the number of synonyms of the three terms of the Triplet, q, r and s respectively the number of synonyms of the three terms in a synonym of the Triplet, t, u, v the number of synonyms of the three terms in another synonym of the Triplet, and so on. For the amusement of the theoretical cataloguer who understands "Permutation", let me give the following formula for the total number of Alternative Headings that may be coined to denote a Specific Subject whose name consists of n words. It is

$$n!\,(p_1p_2p_3 \ldots p_n + q_1q_2q_3 \ldots q_n + r_1r_2r_3 \ldots r_n + \ldots)$$

The Law of Parsimony may well be bewildered at the very possibility of such multitudinous ways of naming a Specific Subject. But how much more bewildering is the task of a cataloguer who out of deference to the Law attempts to choose a few only of the many possible alternative names has been shown by Cutter with many concrete examples under the heading *Compound subject-names* in his *Rules*.[1]

[1] Pp. 71-75.

Even the valiant Cutter is driven to despair:

> "Is there any principle" he asks, "upon which the choice between these ... can be made so that the cateloguer shall always enter books on the same subject under the same heading? I see none. When there is any decided usage (*i.e.* custom of the public to designate the subjects by one of the names rather than by the other)—the Canon of Ascertainability will no doubt smile at this suggestion — let it be followed .... As is often the case in language, usage will be found not to follow any uniform course".

The fact is that the Law of Parsimony is here violently pitted against three canons: the Canon of Ascertainability, the Canon of Permanence and the Canon of Consistency. The commentary already quoted in this section shows that the *C.c.code* would seem to recommend with equal desperation: "Let flair flout these Canons and support Parsimony at all costs".[1]

We have here another of the unavoidable factors that tend in the long run to make every Library Catalogue a hotchpotch.

CHOICE BETWEEN SYNONYMS

We have now seen that as far as their mere number is concerned the alternative names of Specific Subjects baffle the Classified Catalogue and the Dictionary Catalogue in equal measure. But there is one other point at which this problem creates a

[1] P. 168.

difficult situation for the Dictionary Catalogue alone. It will be shown later how the Classified Catalogue escapes this difficulty.

The Second Law would urge that in a Dictionary Catalogue every book should be given a Subject Entry headed with every one of the alternative names of its Specific Subject. But this would swell the catalogue too much. Recognising as it were the legitimate protest of the Law of Parsimony, Cutter prescribes in Rule 168:

> "Of two exactly synonymous names, choose one and make reference from the other".

Again, in Rule 170 he lays it down:

> "In choosing between two names not exactly synonymous, consider whether there is difference enough to require separate entry; if not, treat them as synonymous".

How do these rules benefit the Law of Parsimony? Suppose the library has 100 books on "Heredity". If the Second Law has its way the library catalogue will have 100 Subject Entries not only under "Heredity" but also under each of its five alternative names: "Ancestry", "Atavism", "Inheritance (biology)" and "Transmission (biology)". In other words, there will be 600 Subject Entries. But according to Cutter's rules cited above there need be only 105 Subject Entries—100 Regular Subject Entries headed, say, "Heredity" for each of the 100 books and five *See* Reference Entries, like:

See REFERENCE ENTRIES

ANCESTRY. *See* HEREDITY.

directing the reader for titles of books to the Entries under "Heredity". This satisfies the Law of Parsimony without serious violence to the Second Law.

But Cutter's rule of choosing between synonymous Headings for the Regular Subject Entry baffles the Canon of Ascertainability, the Canon of Permanence and the Canon of Consistency. In Rule 169 Cutter prescribes:

> "In choosing between synonymous Headings, prefer the one that—
>
> (*a*) is most familiar to the class of people who consult the library;
>
> (*b*) is most used in other catalogues;
>
> (*c*) have fewest meanings other than the sense in which it is to be employed;
>
> (*d*) comes first in the alphabet so that the reference from the other can be made to the exact page of the catalogue; and
>
> (*e*) brings the subject into the neighbourhood of other related subjects".

This rule naturally causes greatest distress to the Canon of Consistency. As if this long list of alternative methods of choosing the Heading were not by itself sufficiently alarming, Cutter supplements his rule with the following note:

> "Sometimes one and sometimes another of these reasons must prevail; each case is to be decided on its own merit".

Sharp simply records Cutter's prescription, disapproving only its preference for the Synonymous Heading that comes first in the alphabet. He says:

> "This is the relic of the days of the printed catalogue and scarcely applies in these days of card catalogue".[1]

But even if this particular prescription is excluded, the Canon of Consistency will still be dissatisfied over choice of the Heading for the Regular Subject Entry from synonyms in a Dictionary Catalogue. And there seems to be no way of removing this discontent.

Popular vs. *Technical Terms*

It is usually prescribed that common words be used as Specific Subject Headings, technical terms being reserved for *See* Reference Headings. For example in the *Subject headings* we find:

Ornithology	*See* Birds
Osteology	*See* Bones
Osteoplasty	*See* Bone-Surgery
Otitis	*See* Ear-Diseases
Pasteurisation	*See* Milk-Sterilisation

The *Prolegomena*[2] calls this practice "A Helpful and Harmless evasion" and would support it as follows:

> Apart from Parsimony such a provision also invests the Library Catalogue with an element of evasion, which is of advantage to the choice of Specific

[1] P. 116. [2] P. 139.

Subject Heading without resulting in any disadvantage to the users of the Dictionary Catalogue. The Derived Composite Terms are likely to take time to get settled and may also be unsettled and changed from time to time by usage and by the committees on terminology in different subjects. But the FUNDAMENTAL CONSTITUENT TERMS will be relatively more stable. Hence by mooring itself to the FUNDAMENTAL CONSTITUENT TERMS and by merely providing the necessary apparatus to deal with the Derived Composite Terms, a Dictionary Catalogue escapes many of the ordeals of terminological flickerings and fights leaving them to be negotiated by and reflected in the *See* Reference Entries. These references can be added from time to time to satisfy the Canon of Currency but the Specific Subject Entries themselves can be left intact under the more stable Headings made up of Fundamental Constituent Terms.

In the following commentary occurring in the *Rules*[1] Cutter would also appear to support this practice:

"It sometimes happens that a different name is given to the same subject at different periods of its history. When the method of study of the subject, or its objects or the ideas connected with it, are very different at those two periods (as in the case of ALCHEMY and CHEMISTRY), of course there must be two headings. There is not so much reason for separating Fluxions and Differential calculus, which differ only in notation. And there is no reason at all for separating NATURAL PHI-

[1] P. 70.

losophy and Physics. I am told that medical nomenclature changed largely three times within the last century. How is the cataloguer, unless he happens to be a medical man, to escape occasionally putting works on one disease under three different heads?"

Chain Procedure is Independent of Language

So far as alternatives due to permutation of the nouns constituting the Main Heading and the Subheadings are concerned, we have already seen that the Chain Procedure singles out a particular permutation for use as Specific Subject Heading. This procedure will incidentally secure uniformity of treatment independently of the language of the catalogue. An example will make this clear. Let us consider the Specific Subject: Bibliography of English History. Neglecting morphological changes and connecting words, we isolate the three nouns in the following order:

Bibliography. *England. History.*

With the equivalent phrase in the Tamil language we get:

England. *History. Bibliography.*

In French the corresponding result will be:

Bibliography. *History. England.*

Thus because of difference in syntax the Specific Subject Heading will differ in various languages even when the constituents of the Heading are reduced to noun-form. The Chain Procedure, on the other hand, will protect the Specific Subject Head-

ing from the vagaries of syntax, emancipate it from the hold of particular languages and prescribe the order of the constituent elements on the basis of the scheme of classification. An international code for Dictionary Catalogue should welcome this service of the Chain Procedure.

This does not however save us from the necessity of writing *See* Reference Entries for the rejected permutations though in certain cases we may be able to decide that some of them are not likely to occur to readers. For example in the case mentioned above we may not require *See* Reference Entries for the following headings:

History. *Bibliography. England.*

England. *Bibliography. History.*

But we must give *See* Reference Entries for the other three permutations as follows:

1. Bibliography. *History. England.*
   See
   England. *History. Bibliography.*
2. Bibliography. *England. History.*
   See
   England. *History. Bibliography.*
3. History. *England. Bibliography.*
   See
   England. *History. Bibliography.*

Local Collections

One exception to the Chain Procedure or to any other way of arriving at the Main Heading of Spe-

cific Subject Entries is warranted in what are usually called "Local Collections", *i.e.*, according to Sayers, everything in literary form written about the locality (in which the library is situated) or by those who have lived in it. All such items will have the name of the locality as the Main Heading of their Specific Subject Entries. If the Chain Procedure is followed we must take that permutation of the constituent elements of the Specific Subject Heading which gives first place to the name of the locality with least disturbance to the relative order of the others. The other elements will then naturally become Subheadings.

The *List* has given the following special set of Subheadings to be used for Local Collections:

Subheads to be used under Cities

Amusements
Annexations
Antiquities
Architecture
Arsenals
Arts
Asylums *see* Hospitals and asylums
Atlases *see* Description—Maps
Banks
Benevolent institutions *see* Charities; Hospitals and asylums
Bibliography
Biography
Boundaries
Bridges
Business
Business associations
Carnivals *see* Festivals, etc.
Cemeteries
Census
Centennial celebrations, etc.
Charities
Churches
City hall
Claims
Climate
Clubs
Commerce *see* Business

Commercial institutions *see* Business associations
Conventions and public meetings
Courts
Crime and criminals
Custom house
Description
    Guide books
    Maps
    Views
Directories
Ecclesiastical institutions *see* Churches; Religious institutions and affairs
Education
Elections
Epidemics
Exhibitions
Fairs
Ferries
Festivals, etc.
Finance
Financial institutions *see* Banks, Business associations
Fine arts *see* Art
Fires and fire prevention
Foreign population
Fortifications
Galleries and museums
Genealogy
Geology
Gilds
Government and politics
Guide books *see* Description—Guide books
Harbor
Historic houses, etc.
History
Hospitals and asylums
Hotels, taverns, etc.
Industries
Intellectual life
Labor and laboring classes
Learned institutions and societies
Libraries
Lighting
Literary institutions *see* Learned institutions and societies
Literature
Manners and customs *see* Social life and customs
Manufactures *see* Industries
Maps *see* Description—Maps
Markets
Monuments
Moral conditions
Morgues
Museums *see* Galleries and museums
Music
Musical organisations
Name
Parks
Paving *see* Streets

Police
Politics *see* Government and politics
Poor
Population
Post-office
Prisons and reformatories
Public buildings
Public lands
Public meetings *see* Conventions and public meetings
Public schools *see* Education
Public works
Railroads
Reformatories *see* Prisons and reformatories
Registers
Religious history
Religious institutions and affairs
Riots
Sanitary affairs
Schools *see* Education
Scientific institutions *see* Learned institutions and societies
Sewerage
Social conditions
Social life and customs
Statistics
Street railroads
Streets
Suburbs
Taxation
Theaters
Topography *see* Description
Views *see* Description—Views
Vital statistics *see* Statistics
Voters
Voting precincts
Ward
Water supply
Wharves

These Headings are only suggestive: each library must adapt them to the peculiar needs of its Local Collection.

If the Local Collection relates to a district or a county and not merely to a town in which the library is situated there is a further complication. Is the division to be first by locality and then by subject or *vice versa*? This is still a moot point.

Brown is said to have stated:

> "My own preference is for a topographical arrangement with a subject subdivision. This appears to me not only the most practical method as established by a rather long experience, but also because the essential characteristic of a local collection *is* topography".

There are those who uphold the opposite practice and there are still others (like Ormerod) who would overlook the Law of Parsimony and adopt double-entry.

This subject has been fully discussed by Murray in the *Yearbook* (1934)[1] which also gives a full bibliography.

---

[1] Pp. 110-126.

13 SUBJECT ENTRIES AND THE CLASSIFIED CATALOGUE

In the last chapter we saw that the chief difficulty experienced by the Dictionary Catalogue in providing Subject Entries was in translating the Specific Subject of a book into a suitable heading. We saw that problems were raised by every branch of grammar. The result was a multiplicity of names (nouns and noun-equivalents) for any given Specific Subject. The Dictionary Catalogue has not developed any systematic method for choosing among these names. The only attempt so far has been the authoritative lists of Subject Headings published by central agencies like the American Library Association and the Library of Congress. Even these lists show no uniformity of treatment. The Chain Procedure developed in the last two chapters may give some relief but its success depends very much upon the scheme of classification in use and not every scheme attempts individualisation of subjects.

This apparently insoluble difficulty is avoided when the Classified Catalogue makes its Specific Subject Entry a Call Number Entry. As we have already seen, numerical specification of a subject is

free from all the ambiguities and uncertainties of verbal description. The language of numbers is no doubt not intelligible to the reader. But to make up for this the Classified Catalogue provides Class Index Entries in its alphabetical section. A Class Index Entry, it must be remembered, does not mention specific books; it has the same function as a *See* Reference Entry in a Dictionary Catalogue. It consists mainly of a name of the Specific Subject used as Heading, with the Class Number under which the books are listed. It is given for each of the alternative names of a Specific Subject. Thus the embarrassing choice of one of them for special treatment is avoided.

So far as the work of finding out alternative names is concerned the Classified Catalogue shares the difficulty equally with the Dictionary Catalogue. Yet even here the *C. c. code* has developed a new type of Class Index Entry (Subject Entry) which it calls Characteristic Division Index Entry. This kind of Entry is applicable only to synthetic types of Classification. It is claimed for it that it leads to considerable saving in the number of Class Index Entries.

WHY REPRODUCE SLICES OF DICTIONARIES?

We may illustrate the economy effected by the Characteristic Division Index Entry by taking a particular subject, say Medicine. Is it necessary to load the catalogue with names of diseases, like:

(1)—

Nephradenoma
Nephralgia
Nephrapostasis
Nephratonia
Nephrauxe
Nephrectasia
Nephrectomy
Nephrelcosis
Nephremia
Nephremphraxis
Nephria
Nephritis
Nephroccle
Nephrocolic
Nephrocystosis
Nephroecysipelas
Nephrohydrosis
Nephrohypertrophy
Nephrolith
Nephrolysis
Nephromalacia
Nephromegaly
Nephroparalysis
Nephropathy
Nephrophthisis
Nephroptosia
Nephropyelitis
Nephropyosis
Nephrorrhagia
Nephrosclerosis
Nephrosis
Nephrospasia
Nephrotuberculosis
Nephrotyphoid
Nephrotyphus
Nephrozymosis

(2)—

Adrenalitis
Alveolitis
Amniotitis
Angitis
Angiocarditis
Angiocholitis
Angiodermatitis
Annexitis
Antiaditis
Aortitis
Aponeurositis
Apophysitis
Appendicitis
Arthritis
Gastritis
Tonsilitis?

LAW OF PARSIMONY

Is the Library Catalogue to ignore the existence of dictionaries? Does not the Law of Parsimony show that such a course is wasteful, that it

is desirable to recognise the existence of other informative books and to economise in the Class Index Entries by providing the necessary apparatus for drawing the maximum possible help from them?

To show how a Classified Catalogue based on a synthetic scheme of classification can take advantage of the existence of dictionaries and other reference books in constructing the class numbers of DERIVED COMPOSITE TERMS from FUNDAMENTAL CONSTITUENT TERMS (which alone are to be specified in the library catalogue), we shall illustrate from the Colon Classification.

Taking *Nephrauxe,* we find from the dictionary that it is hypertrophy of the kidneys. In the library catalogue we need therefore give only the Characteristic Division Index Entries:

KIDNEYS. In (L) Medicine. Organ (1) Characteristic.	51

and

HYPERTROPHY. In (L) Medicine. Problem (2) Characteristic	412

The reader who knows what Nephrauxe is (and he will otherwise have already consulted the dictionary) will naturally look for books on it under

the Class Number L51:412. In the classified part of the catalogue guide-cards like

L Medicine;
L51 Kidneys; and
L51:412 Hypertrophy,

will be inserted in appropriate places. They will lead him on to the right region so long as he has taken the trouble to find out that his topic belongs to the Main Class Medicine, denoted by L.

To take another example: the dictionary tells us that Aortitis is inflammation of the aorta. The catalogue gives the number 34 for Aorta and 415 for Inflammation. Thus L34:415 is the number for Aortitis.

EXTENT OF SAVING

As these examples show, the Colon Device gives the maximum possible satisfaction to the Law of Parsimony in the matter of terminology. And so it will be with every synthetic scheme of classification. The saving can be explained symbolically as follows:

FUNDAMENTAL CONSTITUENT

vs.

DERIVED COMPOSITE TERMS

Suppose that in a given subject there are *a* divisions on the basis of characteristic A, *b* divisions on the basis of characteristic B and *c* divisions on the basis of characteristic C. Then it is possible to form *abc*

classes by combining them in all possible ways. The catalogue should give the FUNDAMENTAL CONSTITUENT TERM of the subject; then since the meaning of any DERIVED COMPOSITE TERM can be got from a good dictionary there is no need to load the catalogue with the *abc* DERIVED COMPOSITE TERMS indicated by the *abc* classes: enumeration of the $a+b+c$ FUNDAMENTAL CONSTITUENT TERMS is sufficient, and it is a matter of elementary algebra that $a+b+c$ is considerably smaller than abc!

A NUMERICAL EXAMPLE

To realise how great a saving this implies in the actual number of Entries, let us suppose that there are 100 divisions on the basis of the First Characteristic, 200 divisions on the basis of the Second and 300 divisions on the basis of the Third. As a result of the Colon Device only 600 FUNDAMENTAL CONSTITUENT TERMS need figure in the catalogue. The reader and the reference staff should use the catalogue in conjunction with a good dictionary or other suitable reference book to construct class numbers to represent any of the 6,000,000 DERIVED COMPOSITE TERMS as and when need arises. There is surely a great difference between 600 and 6,000,000!

SOLVITUR AMBULANDO

One might ask: How are readers to know how divisions in the unit schedules are combined to form a class? Theoretically it may look

difficult. But it has been found in actual practice that readers easily accustom themselves to this task and that without necessarily understanding the details of the scheme. In most cases where familiar classes are wanted readers help themselves easily after the slight initiation they get from their first visit to the library. And if a reader is pursuing an unfamiliar subject the reference staff can always direct him. Theoretical speculation on this question without actual experience is sure to create nightmares. *Solvitur ambulando.*

HOLISTIC VIEW

In a modern library, moreover, the catalogue does not exist in a vacuum. The open access system, the classification scheme, the classified shelf-arrangement, the plan of the stack-room, the floor guides, gangway guides, bay guides and shelf guides, the reference staff and their careful and sympathetic initiation of readers, the fact that from the school library onwards one is gradually accustomed to modern library arrangement and apparatus and that provision is nowadays regularly made in schools and colleges for drilling students in the use of a classified arrangement and classified catalogue both formally and informally — all these factors, it must be realised, hang together with the Library Catalogue. It would be absurdly abstract to develop any one of these as if the others did not exist. We must take the Holistic View. The Dictionary catalogue, with its insoluble problems, may have been

the best available in mid-nineteenth century conditions; but to-day it is neither necessary nor sufficient. Only bigotry or perversity can argue: "The books are already arranged in classified order. The catalogue may just as well be alphabetical" or "The card catalogue is in classified order; let the printed catalogue be in dictionary order". We must not be blinded by the fascination of the familiar; we must follow the path of evolution. The Classified Catalogue must be boldly affirmed. To-morrow may evolve something even more efficient; but this will be entirely prevented if the reign of the Dictionary Catalogue is unnaturally prolonged. It should be allowed to retire honourably before the Classified Catalogue which after all, as will be shown in Chapter 15, is its own image.

14 *SEE ALSO* REFERENCE ENTRIES

The beginning of Chapter 11 has shown that there are three situations that warrant a *See Also* Reference Entry. We shall first consider the obligation thrown on the Library Catalogue to disclose to a reader interested in a certain subject not only the books dealing with that subject in a more or less exhaustive way but also all books dealing with some aspect or part of it. This makes it necessary to enter a book not only under its Specific Subject but also under every subject of greater extension that contains it as a subdivision of any order whatever.

Upper Link References

This demand naturally affronts the Law of Parsimony. Cutter, therefore, rules without argument:

> "187. Make references from general subjects to their various subordinate subjects".

To realise how far this simple rule satisfies the Law of Parsimony, let us suppose that a reader is interested in University Education. The *List* gives many subordinate subjects such as

> "Class-day; Commencements; Academic costume; Curriculum; Academic degrees; College fraternities; Hazing; Research; Scholarships; Self-government

> (in education); Student life; Student volunteer movement; Students' periodicals; Exemption from taxation; also, headings beginning College like College athletics, College entrance requirements, College plays; College Sermons; College songs, College stories, College verse''

and so on.

Let us suppose that the library has ten books in each of twenty of these subordinate classes. The Laws of Library Science then require 200 Entries under the Heading *University Education.* Cutter's rule tries to satisfy them by giving 20 *See Also* Reference Entries in the form, say,

> COLLEGES AND UNIVERSITIES.
> *See also*
> RESEARCH.

Or better still, these 20 Entries may be consolidated into one in which the 20 subordinate subjects are listed alphabetically in two or three columns after the connecting phrase *See Also.* This is a simple method of satisfying the Law of Parsimony. But the rule is too vague to satisfy the Canon of Ascertainability. Mann[1] admits:

> ''It is almost impossible to make rules for the use of 'see also' references. The thing to remember is the purpose of such references. They must be made as judgment dictates, and the Cataloguer must constantly draw on his knowledge of classification as well as his information of subjects.

[1] Pp. 187-188.

> "It is wise for the beginner to conform to the printed lists of subject headings .... but the suggestions found there should not be accepted without thought and consideration. It is only by analyzing the whys and wherefores of these suggested references that one comes to understand their use".

Sharp[1] feels no less embarrassed:

> "The greatest difficulty of the cataloguer in this connection is to fix limits at which his cross-referencing shall begin and end. Many dictionary catalogues are imperfect through under cross-referencing, but as, on the other hand, a completely referenced catalogue would become very complicated, cataloguers have to adopt a medium course and leave the rest to the intelligence of the user and to the expert knowledge of the staff".

Chain Procedure Again

It is surely desirable that some definite procedure should be instituted for deciding exactly what *See Also* Reference Headings are called for by a given book. The following example will show that the Chain Procedure developed for arriving at the Specific Subject will also be useful here:

Consider again

SM95:56 G7
FREUD (Anna).
Ego and the mechanisms of defence.

[1] Pp. 123-124.

Its Chain is

S = Psychology
↓
SM95 = Psycho-analysis
↓
SM95:5 = Feeling
↓
SM95:56 = Worry

The last link gives the Specific Subject "Worry". A *See Also* Reference Entry should be provided from each of the preceding links:

PSYCHOLOGY.
See also
WORRY.

PSYCHO-ANALYSIS.
See also
WORRY.

FEELING.
See also
WORRY.

This procedure satisfies the Canon of Ascertainability. It may therefore be stated as a definite rule and added to the Rules of Chain Procedure codified towards the end of Chapter 11:

Rule 16. Provide *See Also* Reference Entries with every one of the links of the Basic Subject phase of the Chain as Heading and referring to the Specific Subject defined by the Chain.

These references may be called Upper Link References.

See Also Reference Entries

Law of Parsimony Again

The Law of Parsimony, however, may still protest as follows: "Cutter's Rule 187 sharpened by Chain Procedure Rule 16 implies the writing of many *See Also* Reference Entries. There can in fact be as many of these Entries as there are classes in the scheme of classification, assuming that we consolidate into a single Entry all having the same Heading. If the Heading is the name of a class of low order (great extension and small intension) the names following the connecting phrase *See Also* will be very numerous — the name of every class occurring in every chain emanating from the Class involved in the Heading. Such Entries will be too long for easy reference. Each such entry will, in fact, be equivalent to a section of the schedule of classification without its economical filiatory arrangement".

In other words, the name of a class will have to appear in *See Also* Reference Entries to the number of its own order — if the class is of the tenth order, its name must appear in ten *See Also* Reference Entries. Cutter himself calls these "a pyramid of references".

Syndetic Arrangement

One concession that has been advocated in response to this general pleading of the Law of

Parsimony is what Cutter has called Syndetic Arrangement.

In the words of the *List*[1] this "method of shortening the list of references is to refer from the most general to the next less inclusive heading and from the later to the next lower:

e.g. Zoology *See also* Vertebrates
Vertebrates *See also* Mammals
Mammals *See also* Carnivora

and so on to the specific animals!"

In the terminology of the *Prolegomena* this means that each *See Also* Reference will link up only two consecutive links of a Chain, so that no class-name appears in the body of more than one *See Also* Reference Entry. This would no doubt considerably simplify *See Also* Reference Entries.

Particular cases of its plea will certainly incline us even more strongly to support the Law of Parsimony. One implication of Cutter's Rule 187 is that the names, *e.g.*, of all the English poets must appear in each of the *See Also* Reference Entries having for their Headings

Literature;
English Literature;
Poetry; and
English poetry.

[1] P. 123.

Under Literature, in fact, the names of all men of letters of every kind in every language must appear!

Sharp[1] sees the reasonableness of the protest of the Law of Parsimony against such extravagance and concedes

> "Such references are usually couched in general terms to save time and space."

Another equally glaring case is that of listing in the *See Also* Reference Entry having the name of a country as Heading all its provinces, districts, taluks, towns, *etc.*. And, conversely, the name of a town must appear under its country, province, district and taluk.

Under the name of each country we must also mention the names of all its rulers, ministers, judges, administrators, patriots, ambassadors and so on; under the Heading "Mathematics" the names of all mathematicians; under "Physics" all physicists; under "Art" all artists and so forth. "Cauching in general terms" is evidently the way to propitiate the Law of Parsimony in this matter.

But Cutter has made it plain in his commentary that Rule 187 is meant to provide for all such elaborate *See Also* References:

> "Cross-references should be made by Full from Classes of persons (Merchants, Lawyers, Artists, Quakers, *etc.*) to individuals belonging to those classes; from

[1] P. 123.

Cities to persons connected with them by birth or residence, or at least to those who have taken part in the municipal affairs or rendered the city illustrious; from Countries to their colonies, provinces, counties, cities, *etc.* (unless their number is so great or the divisions are so well known that reference is useless); also, under the division *History* to rulers and statesmen, under *Literature* to authors, under *Art* to artists, and so on; from other Subjects to all their parts, and to the names of persons distinguished for discoveries in them or knowledge of them. Short and Medium will make such of these references as seem most likely to be useful".

So much for Upper Link References.

Lower Link References

We now pass on to what may be called Lower Link References. In terms of Chain Procedure they will be obtained by providing *See Also* Reference Entries using every one of the links of a higher order and referring to the link that contains them as their common universe. Cutter himself realised how much more numerous than the Upper Link References the Lower Link References would be. He seems to have enunciated his rule on the subject almost in dread of the Law of Parsimony:

"188. Make references *occasionally* from specific to general subjects".

The Canon of Ascertainability demands elucidation of this "occasionally". But Cutter devotes

his commentary to propitiation of the Law of Parsimony and virtual annulment of the rule itself.

> "Of course much information about limited topics is to be found in more general works; the very best description of a single plant or of a family of plants may perhaps be contained in a botanical encyclopaedia. This fact, however, must be impressed upon the inquirer in the preface of the catalog or in a printed card giving directions for its use; it is out of the question to make all possible references of the ascending kind. From CATHEDRALS, for example, one would naturally refer to CHRISTIAN ART and to ECCLESIASTICAL ARCHITECTURE, because works on those subjects will contain more or less on cathedrals. But so will histories of architecture and histories of English, French, German, Italian or Spanish architecture; so will travels in England, France, Germany, Italy, Spain. And any one who desired to take an absolutely complete survey of the subject or who was willing to spend unlimited time in getting information on some detail, would have to consult such books. Yet the cataloger may very excusably not think of referring to those subjects, or if he thinks of it may deem the connection too remote to justify reference, and that he should be overloading the catalog with what would be generally useless".

The Canon of Ascertainability persists in asking "When does the *occasion* arise for applying Rule 188?" The *List*[1] attempts an answer:

> "The best material on a specific subject is often found in a work upon a larger subject, so general in its nature that it is not advisable to analyze it. Refer-

[1] Pp. vii-viii.

ences are therefore made from the specific to the general in cases where most general works can be expected to contain material on the specific subject. Care should be taken not to make a reference of this kind unless justified by the works actually in the library. If the books on arts and crafts contain nothing on mosaics, a reference from Mosaics to Arts and crafts would be useless and misleading".

This argument favours Analytical Entries for a comprehensive book rather than *See Also* References from subordinate to more general subjects, for not every book in the larger class may deal with the subordinate subject in question.

The following protest of Hyde (from *Readings*[1]) is not without significance:

"Next let us take up the question of introducing *See also* references from specific to general ... The A. L. A. list is filled with references of this type as a matter of deliberate policy ... When one thinks about this, theoretically, this course seems to be reasonable, but library science has developed by the testing of the various theories in practice, and discarding theories which do not work out happily in practice. This theory when adopted as a general working principle, does not work satisfactorily ... I say, therefore, boldly but sympathetically, that the systematic inclusion of *see also* references from specific to general in the A. L. A. list is a mistake; that the next edition should not contain them as a matter of general policy;... and that the use of such references to meet special

[1] Pp. 140-141.

conditions in individual libraries should be left to the judgment of individual cataloguers in charge of the catalogues of such libraries, — not suggested in the 'refer from' column".

Collateral References

Lastly we have the *See Also* References from collateral subjects. Cutter's Rule 187 provides for these as well:

"187. Make references from general subjects (to their various subordinate subjects and also) to co-ordinate and illustrative subjects".

We find for example the following prescription in the *List*:

Libraries, Children. *Refer from* Child study; Children; Libraries and schools.

Machinery. *Refer from*

Industrial arts; Manual training.

Anthropology. *Refer from*

Archaeology; Evolution; History; Science.

Gardening. *Refer from*

Botany; Country life; Home economics; Industrial arts.

Navigation. *Refer from*

Astronomy, spherical and practical; Carriers; Commerce; Mathematics; Naval art and science; Naval history; Ocean trigonometry.

It would be a good exercise for a beginner to analyse the Headings given in the right hand

columns of the *List* under the caption *Refer from* into

Upper Link References;

Lower Link References; and

Collateral Link References.

Collateral Link References baffle the Canon of Ascertainability much more seriously than the other *See Also* References. Even the Chain Procedure which provides an objective method of determining the latter gives us no help with these. As Mann puts it "They must be made as judgment dictates". One thing still very necessary in Dictionary Cataloguing is an objective method for arriving at the Collateral Link References as definitely as Chain Procedure does in the case of Upper and Lower Link References.

It should also be investigated whether, pending discovery of an objective method, it is worth giving Collateral Link References. If it is considered a matter for incidental judgment, may we not then rather leave it to the reference staff, whose experience is far richer than the cataloguer's, to bring such collateral subjects to the notice of enquirers? Schedules like those of the Decimal and the Congress Classification also give ample hints on this subject.

15 SYNDETIC *vs.* SYSTEMATIC ARRANGEMENT

Cutter's justification of an elaborate set of *See Also* References in the teeth of the Law of Parsimony and the Canon of Ascertainability appears in the *Rules*:[1]

> "The systematic catalog undertakes to exhibit a scientific arrangement of the books in a library in the belief that it will thus best aid those who would pursue any extensive or thorough study. The dictionary catalog sets out with another object and a different method, but having attained that object — facility of reference — is at liberty to try to secure some of the advantages of classification and system in its own way. Its subject-entries, individual, general, limited, extensive, thrown together without any logical arrangement, in most absurd proximity — Abscess followed by Absenteeism and that by Absolution, Club-foot next to Clubs and Communion to Communism, while Bibliography and Literary History, Christianity and Theology, are separated by half the length of the catalogue — are a mass of utterly disconnected particles without any relation to one another, each useful in itself but only by itself. But by a well-devised network of cross-references the mob becomes an army, of which each part is capable of assisting many other parts. The effective force of the catalog is immensely increased".

[1] P. 79.

Mann[1] repeats this apologia:

"While the dictionary catalog is supposed to take no account of logic it has been developed in such a way that many of the *principles* of classification have been introduced. It is not a simple index with no consideration for the grouping of like subjects, nor is it devoid of references which tend to correlate and unify the entries. Mr. Cutter calls it a syndetic catalog, which he defines as follows:

"Syndetic, connective, applied to that kind of dictionary catalog which binds its entries together by means of cross-references so as to form a whole, the references being made from the most comprehensive subject to those of next lower degree of comprehensiveness, and from each of these to their subordinate subjects ... These cross-references correspond to and are a good substitute for the arrangement in a systematic catalog. References are also made in the syndetic catalog to illustrative and coordinate subjects".

Quinn[2] echoes the same sentiment:

"In a Dictionary catalogue the entries are, as the name implies, arranged in alphabetical order ... As the subject-entries are given by specific subject or topic, and not under classes, or the larger subjects of which they form a part, topics more or less related will be separated according to their various names.

"In a correctly compiled 'syndetic' (*i.e.* connective) catalogue, however, this separation of subjects presents no difficulty to users of the catalogue as the

---

[1] P. 175.

[2] Pp. 129-130.

> subject-entries are linked by means of references ... from general or allied subjects (the '*See also* reference' in a descending scale rarely from the lesser to the greater), in order that the whole resources of a library upon any given subject in all its aspects may be fully ascertained".

But Sharp[1] doubts the efficacy of syndesis in achieving the benefits of a systematic arrangement:

> "The dictionary catalogue depends ultimately for its success on an elaborate scheme of cross-references, which is seldom found to be complete; and even if it is, the process is likely to become wearisome, and there is the possibility of missing one or more vital headings".

DRIFTING

Quinn[2] unintentionally gives away the case for the Syndetic Arrangement when he suggests:

> "It would be possible to include a classified synopsis of the subject-headings contained in the catalogue as a preface the use of which would show the enquirer beyond doubt that he had not overlooked any portion of a whole class or subject".

Some of the items in the *List* and *Subject headings* show unconscious recognition that systematic arrangement is more effective. Geological strata like Archæan, Cambrian and Permian, for example, are to be subheadings of "Geology, Stratigraphic" instead of independent Specific Subject

---

[1] P. 130. [2] P. 130.

Headings as required by Cutter's basic Rule 161.

Note also the grouping of

Artificial light;
Developing and developers;
Enlarging;
Exposure;
Failures;
Negatives;
Plates;
Printing processes;
Retouching; and
Wastes, Recovery of,

as Subheadings under "Photography"

and the grouping of

Costume;
Curricula;
Entrance requirements;
Examination; and
Finance

as Subheadings under "Universities and Colleges".

In a syndetic arrangement all these Subheadings should appear as independent Specific Subject Headings, provision being made for their being linked by *See Also* Reference Entries with

Photography and
Universities and Colleges.

CAMOUFLAGE

Mann[1] changes the whole pattern of things. She prescribes inverted headings to secure *logical arrangement*, thus making alphabetisation a mere camouflage:

> "*Use inverted headings.* A problem arises if a term such as Pathological psychology is used, however. The general group Psychology is going to lose all

[1] Pp. 178-179.

the books which treat of this subject in its application to medicine, because the two groups will not file together. In a case of this kind the term may be changed to bring the new subject into relation with the main group to which it belongs; in other words, a term must be found which will allow the special application of the subject to alphabet with the main subject. Such headings are called 'Inverted headings'; they are adopted when it seems desirable to keep classes together and so preserve somewhat logical arrangement. In this case *Psychology, Pathological* can be used. A reference is made from *Pathological psychology* for the reader who knows this term, to the heading chosen.

"A number of very good reasons for grouping the various aspects of a question together in the dictionary catalog warrant the use of these inverted headings. Such an arrangement (1) brings all books on every phase of one subject together. (2) frequently gives a grouping different from the classification on the shelves, and (3) relieves the readers of the fatigue and the trouble of searching in several places in the catalog to find related topics".

IS IT NOT SIGNIFICANT?

This inherent tendency of the systematic to oust the syndetic arrangement cannot be considered insignificant. No doubt Quinn[1] refers to this tendency in beginners as:

"Characteristic and common mistakes which display a want of understanding, as to the real difference between classified and dictionary catalogues."

[1] P. 145.

But it persists in subtle forms even in veterans. We have already seen evidence of it even in the monumental *List* and *Subject headings*. Must we not infer from this that a systematic spectral display of subjects is more natural than their alphabetical scattering?

WHAT HAS HISTORY TO SAY?

How did this artificial scattering come into vogue? The spectral arrangement presupposes a comprehensive scheme of classification armed with a fairly hospitable notation. But even before such a scheme was invented there was already an urgent demand for the inclusion of some form of Subject Entries in the Library Catalogue. The Alphabetical Classed Catalogue was tried but from the start was obviously too cumbersome. The Canon of Ascertainability set all its weight against it.

Here is Quinn's (old)[1] analysis of its failure:

> "The late Prof. Justin Winson characterised it as 'the mongrel alphabetico-classed system, a primarily classed system with an alphabetical graft upon it is a case of confusion worse confounded'. The great difficulty both to compiler and user is to know where the subjects leave off and the classes begin — in other words, whether a subject or a class entry is likely to be the one wanted. One of the best examples of this kind of catalogue is the late Mr. Fortescue's 'Subject Index to the British

[1] Pp. 27-29.

Museum Catalogue', and he apparently experienced the difficulty of deciding, as for instance a book on the Elephant appears under Elephant, but a work upon the Elk must be looked for under 'Deer'. The usefulness of this particular catalogue cannot be gainsaid as its value is too well known, mainly because there is no other form of subject-catalogue for the library of the British Museum. Besides it has such a comprehensive series of cross-references that difficulty is largely obviated, and then again it is only meant as a subject supplement to the principal catalogue. Admirable as it is, we may see how it works out in practice. Suppose we are interested in Law. Under the heading 'Law' we find a large number of entries divided into particular kinds of law as 'Commercial', 'Criminal', Ecclesiastical', *etc.*, and these are further subdivided under the names of countries. One would suppose that the subject would be here treated in a most exhaustive manner. But that is not so, as if we require books on the Laws of England we must turn to the word 'England'. Thus we have books on English criminal law under 'Law'; a book upon English general law under 'England'; and a book say upon English election law under 'Elections, Law of'. If it is right to put books on the law of elections under Elections it might be assumed that books on criminal law would go under 'Criminal law' but there is not even a reference to say where they are to be found. Admittedly 'Law' is a large and complex subject and would fill many pages if the books upon it were brought together. As it is the searcher must take a long time to ascertain in any exhaustive manner what books upon the subject

> are contained in Mr. Fortescue's Indexes. Even if inquiry is narrowed down to say Italian law, searches must be made in many places without touching special Italian law at all. However, there is no system but has its drawbacks, though probably the alphabetico-classed has the most".

Failing a code for translation of Specific Subjects into ordinal numbers that would automatically arrange them in the proper filiatory order, arrangement of Specific Subject Entries was perforce alphabetical. But all honour is due to the pioneers who overthrew the author catalogue tradition and established the subject catalogue at least in this tentative form.

WHAT DOES PSYCHOLOGY SAY?

But why is this artificial alphabetical scattering continued after the invention of schemes of classification of the type required? According to the *C. c. code*[1] it is partly due to human nature:

> "It has been said that the revolutionaries — the tradition-breakers — of one generation themselves become the conservatives of the next generation, fondly clinging to the new tradition, which they themselves founded in the place of those that they broke down. So it is in library cataloguing. The fascination of grappling with the difficulties with which the dictionary catalogue bristles has so narrowed the vision that the immediate and next stage of evolution in the catalogue is either not perceived or resisted with bigotry".

[1] P. 4.

THE MAN-IN-THE-STREET BOGEY

The profession that has given so much thought and labour to development of the Dictionary Catalogue fondly finds many a justification for calling it the most serviceable if not the only and eternally serviceable form. The stock argument is appeal to the needs of the lowest common intelligence. Wheatley has pricked this bubble:

> "Some persons seem to think that everything is to be brought down to the comprehension of the fool; but if by doing this we make it more difficult for the intelligent person, the action is surely not politic. The consulter of a catalogue might at least take the trouble to understand the plan upon which it is compiled before using it".

But the retort is ready-made in Quinn (old):[1]

> "Mr. Wheatley's experience is not that of public librarians generally, as not one person in a thousand does take this trouble.
>
> "However this may be, there is no difficulty in attaining the happy medium whereby the ignorant (speaking, of course, comparatively) find his wants met as readily as the most learned, and with simplicity and thoroughness. It has been put in other words thus: 'The right doctrine for a public library catalogue is that it should be made not from the scientific cataloguer's point of view, with a minimum of indulgence for ignoramuses, but from the ignoramus's point of view with a minimum of indulgence for the scientific cataloguer. That the

[1] P. 20.

> person who not only does not know but does not even know *how to search* should be primarily provided for' ".

—We must be glad that "the man in the street" and the "average reader" are not legal personalities or they would have the law of torts on us!

> "The one (form) that will answer most of them with least trouble and loss of time to the user is that known as the dictionary catalogue"

with its syndetic arrangement. That is the burden of the song. The *Yearbook*[1] (1934) occasionally sounds uncomfortable notes:

> "Shall we continue to follow exactly such rules as 'refer from general to specific, but not *vice versa*' on the theory that the public looks under the general? A specialist, on being asked whether if he wanted material on Juvenile delinquency and found nothing he would need to be told to look under Crime and criminals, replied, yes, that it would never occur to him to look under Crime and criminals if he wanted the specific subject Juvenile delinquency. Yet the small boy found in a public library last summer looking dazedly at a cross-reference which said: 'Firearms, see also Pistols, Rifles, Shotguns....' when assisted said that what he wanted was rifles. 'Then why did you not look under Rifles'? brought no response".

But the fascination of the old and familiar is apparently inescapable.

---

[1] P. 91.

A PSYCHOLOGICAL DRAMA

In Sharp[1] we find material for a psychological analysis of this uncanny hold of tradition. He begins rather sarcastically:

> "The reason for this long maintained popularity is that it is so perfectly simple to use. Just as any one who can spell may use a dictionary intelligently [question] so may one use a dictionary catalogue. It is only necessary to turn up the desired name, subject or title, and there will be found, either an entry for the book if the library possesses it, or a reference to some other heading under which the entry will be found. This sounds delightfully simple ... but it is not always so simple to use if one wants to do something more than make a casual reference. True, as far as the works of an author are concerned, there should be no difficulty whatever, but when one comes to subjects, trouble may begin".

Then he puts in a positive defence for the Classified Catalogue:

> "It is often urged in favour of the dictionary catalogue that the user need have no knowledge of the classification scheme employed. But need the user of the classified catalogue have any knowledge of the classification if he doesn't want to be bothered? In nine cases out of ten users have little or none".

Follows an offensive against the Dictionary Catalogue:

---

[1] Pp. 29-30.

"A reader going to Italy will probably want to see what books the library has got on Rome, but he may be also going to Florence, Venice, and Naples; he will want to see some general guides to Italy as well. If he is using a dictionary catalogue, it will be necessary to consult all these headings — and possibly others — in widely separated parts of the catalogue before he can ascertain the library's complete resources on those places in which he is interested. The dictionary catalogue depends ultimately for its success on an elaborate scheme to cross-references, which is seldom found to be complete; and even if it is, the process is likely to become wearisome, and there is the possibility of missing one or more vital headings".

When the Dictionary Catalogue gnashes its teeth as it were at such desertion he tries to make amends:

"It should however be made clear that no form of catalogue can give a completely satisfactory collocation of subjects as it is called. People interested in Rome, for instance, will have to look in many places in a classified catalogue to find all their sources of information respecting the books they may care to read. They must look in religion for the history of the Papacy, in literature for the writings of the great classical authors, in ancient history, in modern history and in geography. The advantage is not therefore *altogether* on the side of the classified catalogue".

The Classified Catalogue, we may imagine, glares as if to reduce him to ashes for this weakness. But Sharp collects his courage and declares that he

can no longer be victim to tradition. He begins with an explanation and ends with a positive assertion:

> "Some of my readers may hold the opinion that the dictionary catalogue is being condemned as having faults that are largely imaginary. Hence the admission that no one form of catalogue is perfect, but personal experience with this particular catalogue has revealed very real and serious shortcomings. On the surface, it appears to be perfectly and delightfully simple, and for casual enquiries, as has been said, it may serve tolerably well; and it must be confessed that the majority of the public's references to our catalogues are extremely casual; so much so that instead of being an aid the catalogue becomes a snare and an innocent perverter of the truth, because readers do not grasp either its arrangement or its limitations. But for those who are concerned with a subject in all its ramifications, it is more difficult to use, slower in yielding information, and less satisfactory in its results, than the classified form".

The Dictionary Catalogue is now desperate and it sends the veteran Quinn to open fresh negotiations. Sharp is embarrassed:

> "Here we are at variance with such a justly recognised authority as J. Henry Quinn, who has had even longer experience with this type of catalogue. In Quinn and Acomb's *Manual of cataloguing and indexing*, he says speaking of the dictionary catalogue, that "In a correctly compiled syndetic (*i.e.* connective) catalogue ... as the subject entries are interlinked by means of references ... the whole

resources of a library upon any given subject in all its aspects may be fully ascertained".

But he soon recovers and concludes:

"It is exactly against this scheme of cross-referencing that our complaint is lodged. Even where it is done properly and thoroughly the process of tracing a subject through its ramifications is wearisome and confusing".

"Have you so completely turned against me?" cries the Dictionary Catalogue. What can Sharp do? He tries to console it:

"One thing, however, needs to be made clear. While it is true that the dictionary catalogue does not follow a systematic order in the same sense as the classified one, it must not be assumed that it does not follow *a* system, because it most definitely does. It *does,* for instance, group like subjects together within limits, which are governed by the incidence of the word or first word used for the heading, as in the case of Rome; and it co-ordinates the whole of a series of subject entries by a system of cross-references. A good deal can be done too by the inversion of subject words and by other means to bring about a still greater collocation of subjects. Instead of putting books on Life, Marine, Fire and other insurance under their adjectival forms, they can be grouped under the substantive word, with subdivisions as:

INSURANCE, *Fire*
— *Life*
— *Marine*".

Mann's camouflage again!. It amounts to this: "Whenever possible give up your basic principle about Specific Subject. Smuggle in as much filiatory arrangement as the alphabet will allow. In other words, become as nearly a Classified Catalogue as you can".

An Unreal Controversy

It seems to me that the roke of controversy about the merits of Dictionary and Classified Catalogues has obscured the possibility of combining the advantages of bŏth. But in fact this has already been done in the modern Classified Catalogue with Alphabetical Index. A survey of the controversial literature on the subject shows that the partisan of the Dictionary Catalogue has always in view what we have defined as the Pure Classified Catalogue. He fails to recognise that the ground has been taken from under his feet by this grafting of the Alphabetical Index (Dictionary Catalogue) on to the Pure Classified Catalogue. I am not for forcing the old respected Dictionary Catalogue to the humiliation of becoming as nearly a Classified Catalogue as possible by inversions and other camouflage. On the contrary, I would ask it to recognise the honour paid it by its junior's having virtually become a Dictionary Catalogue. For that is what a Classified Catalogue with an Alphabetical Index surely is.

EQUATE THEM

This will be realised if we see exactly how the Classified Catalogue can be derived from the Dictionary Catalogue:

1. Take out all the Specific Subject Entries of a Dictionary Catalogue. Express their Headings in terms of the more stable and definite numerical equivalents. Arrange them ordinally according to these Number-Headings. They then form Call Number Entries that fall into a sequence of their own.

(2) Convert the *See* Reference Subject Entries into Class Index Entries by substituting for the subject referred to its numerical equivalent.

(3) Insert additional Class Index Entries showing the numerical equivalents of the names originally used as Headings for Specific Subject Entries.

(4) Omit all *See Also* Subject Reference Entries.

Measure (1) would go a long way towards satisfying the Canon of Permanence.

Measures (2) and (3) would give great satisfaction to the Canon of Ascertainability and introduce an element of impartiality in dealing with synonyms.

Measure (4) would be pleasing to the Law of Parsimony. One need not shed tears over the

disappearance of *See Also's*: the function they perform very ineffectively by syndesis will be ideally fulfilled by the precise and systematic assembling of the Call Number Entries that have replaced the Specific Subject Entries. Their Headings (Call Numbers) will align them in perfect filiatory order — the order every reader wants, though he need not understand the meaning of the Call Numbers. As Sharp[1] puts it in popular language:

> "The (Call Number) Entry not only falls under the subject with which a book deals but it falls in close proximity to entries for books on related subjects, whether they be wider or more specific ones ... It is no longer necessary to look under I for books on Italy in general, under R for those on Rome, back to F for those on Florence, and on to V for those on Venice. They, with those on Assisi, Genoa, Naples, and other places, will be found together in a little group or section of their own".

In this refashioning of the Dictionary Catalogue— this adaptation, rather, of the Classified Catalogue to the useful traditions of the Dictionary Catalogue — all the Laws and Canons are better satisfied.

THE LAST TRENCH

Somebody may set up the Fourth Law to say: "I have suffered a loss. Originally a reader could see what books the library had on a Specific Subject simply by looking under that Subject. But now

[1] P. 35.

he has to look under the name of the Specific Subject for its number-equivalent and then for his books under the Class Number. This means at least double expenditure of time." But the Fourth Law cannot really be so superficial. It will surely rather say: "You can't hide from me the trouble due to Synonyms and Alternative Names in the Dictionary Catalogue. The odds in favour of a reader hitting first go upon the Specific Subject Entry and not having to reach it through a *See* Reference Entry are hardly one in ten. I don't mind the change at all".

What about Quinn's "ignoramus"? Well, he is at least expected to know the name of his Specific Subject and if he looks under that he will be directed to a certain number. Then the guide-cards or captions distributed throughout the catalogue will make it easy for him to find his way to that number without at all worrying himself to understand the whole scheme of classification, though nobody can help him if the very idea of filiatory arrangement "*does* quite definitely set in motion some sort of psychological opposition" in his mind.

Sharp[1] is very clear on this point:

> "The common criticism of the classified catalogue is that it is too complicated for the ordinary man to understand. If this is really true, it is poor complement to what is called average intelligence. It is

[1] P. 36.

not really difficult to use, and does not necessarily involve any knowledge of the classification".

Third Law Jubilant

But there is a positive advantage. Let us suppose our reader looks up "Carnivora". Under its Call Number he will find the Entries for books on the subject. And these entries will be flanked on one side by entries on specific animals like Lion and Tiger and on the other by entries on Mammals, Vertebrates *etc.* which may all interest him if they are thus incidentally brought to his notice. The Third Law will be pleased. But in the Dictionary Catalogue the entries neighbouring Carnivora may all be foreign to his interests; those that concern him will have been carried far away by their alphabetical order. Thus neither the Second nor the Third Law is satisfied.

Canons Recalled to Service

There are also certain other incidental advantages in systematic arrangement of Specific Subject Entries. There has always been a demand that the names of subjects should be clearly defined. *Readings*[1] quotes Richardson:

"Whatever names are used must be clearly defined. This is the first principle of subject cataloguing, whether the arrangement is alphabetical or systematic, that the subject word shall be so clearly defined that there is no mistaking what is to go under it. It is hard to lay too much stress on this

[1] P. 108.

> matter. It is the Alpha and Omega of subject cataloguing of every sort; besides which even uniform names and the question of arrangement are quite secondary".

Now we have demonstrated in the *Prolegomena* that if the arrangement of the Subject Entries be systematic or filiatory this definition of the subjects is in most cases made superfluous by the Canon of Enumeration and the Canon of Context. These helpful Canons become inoperative, however, if the Specific Subject Entries are scattered as the alphabet demands.

A LAST CLOUD

But even to the last Sharp's indulgence (does he call it fairness?) towards the old Dictionary Catalogue raises a cloud of confusion. As a final homage he says:[1]

> "The classified catalogue does not bring together *all* the material on a country or on any other subject; no kind of catalogue can do that satisfactorily and completely. It brings together all the books on Italian history in general, and on specific periods and cities, but for those on geography, literature, art, political economy, and so on, the enquirer must look under other heads. Some of these separated headings *are* actually brought together in the dictionary catalogue, as may be shown by two simple examples:
>
> "In the Hampstead dictionary catalogue, under Italy we get the following subdivisions:

[1] Pp. 35-36.

Description and travel	Mythology and folk-lore
Army	Religion
History	Social and political
Language	Miscellaneous
Literature	

which in a Dewey classified catalogue would be distributed among classes 2, 3, 4, 7, 8 and 9.

An even better example is provided in the British Museum *Subject Index* where, under England we get the following which in Dewey are relegated to different parts of classes, 2, 3 and 9.

England	Law
Antiquities	Navy
Army	Nonconformists
Church of England	Parliament
Churches	Politics
Colonies and Dependencies	Population
	Royal Air Force
Constitution and Government	Social Life and History
	Topography
Court	Trade; Finance; Taxation
History	
History, Ecclesiastical	

Are there really readers of such encyclopaedic interests as to warrant so conglomerate a grouping of subjects? We may recollect the indictment of the British Museum *Subject Index* by "so justly recognised an authority as J. Henry Quinn" quoted a few pages back. The *Yearbook* (1932)[1] also exposes this claim:

"We have barely touched upon the tangled and complicated question of geographical subjects. That

[1] Pp. 59-61.

is the rock on which most of the compilers have been wrecked. I have left it to the last because of its importance.

"It is important first, because the geographical entries generally are so exceedingly numerous, next only to the personal names; secondly, because problems arising from books on subjects with geographical relations and the rules that may be derived from them have a much wider application than is generally realized.

'Countries, states, cities, and other localities, regional divisions as well as other geographical units, are recognized by all those different rules, except those of Von Wyss, as individual subjects and they are treated as such.

"But the chief difficulty is that countries, states, and cities, *etc.*, are very complex, so complex, in fact, that one can really expect to find practically any or every subject treated in some relation to a geographical locality, large or small, from the philosophical systems of ancient Greece to the butterflies of Michigan, from the economic conditions in Germany after the war to the special system of paying the school teachers in Chicago.

"Some of these subjects are integrant parts of the country or city in question; some of them would hardly have any meaning without a reference to such a locality, or at least not any specific meaning, as, for instance, Economic conditions, History, description and travel, and so forth. Other subjects have a definite and specific meaning in themselves without this particular local reference. In such cases the reference to the geographical name serves

only to modify the subject or limit its scope to that particular locality.

"It is an ever-recurring problem ... when to make the entry under the geographical name, the country or city with a topical subdivision, and when to make the other subject the main entry with geographical subdivision.

"Zedler and Dolgar follow this practice, and enter almost everything with a geographical relation under the name of the country or city involved. We find thousands of entries like these:

England—Student laws

Leipzig — Textileworkers — wages

Bavaria — Game laws.

"One can easily imagine the consequence of this practice, when it is carried out consistently. The entire range of possible topical subject headings would be hidden behind geographical names, scattered through the entire alphabet.

"Schleimer seems to have found the golden mean, following most closely the Library of Congress practice in this matter. He makes specific topical subjects the main entry word and gives the country or city as subheading".

Thus in the Dictionary Catalogue, either according to Quinn *all* the separated headings are not brought together under the country or, according to the *Yearbook,* if they are it will be a hindrance rather than a help.

CUTTER'S APPROVAL FARSIGHTED

We can hardly find a better conclusion for this discussion than Cutter's appreciation of the Classified Catalogue as quoted by Quinn (old):[1]

> "One who is pursuing any general course of study finds brought together in one part of the catalogue most of the books he needs. He sees not merely books on the particular topic in which he is interested, but in immediate neighbourhood works on related topics, suggesting to him courses of investigation which he might otherwise overlook. He finds it an assistance to have all these works spread out before him, so that he can take a general survey of the ground before he chooses his route; and as he goes back, day after day, to his particular part of the catalogue he becomes familiar with it, turns to it at once, and uses it with ease. The same is true of the numerous class who are not making any investigation or pursuing any definite course of study, but are merely desultory readers. Their choice of books is usually made from certain kinds of literature or classes of subjects. Some like poetry or essays or plays; others like religious works or philosophical works, or scientific works, not caring about the particular subject of the book so much as whether it be well-written or interesting. To these persons it is a convenience that their favourite kind of reading should all be contained in one or two parts of the catalogue, and freed from the confusing admixture of titles of a different sort. An alphabetical list of specific subjects is to them little more suggestive than

[1] Pp. 23-24.

an alphabetical list of authors. It is true that by following up all the references of a dictionary catalogue under Theology, for example a man may construct for himself a list of the theological literature in the library; but to do this requires time and a mental effort, and it is the characteristic of the desultory reader that he is averse to mental effort. What is wanted by him and by the busy man when now and then he has the same object, is to find the titles from which he would select brought together within the compass of a few pages; few, that is, in comparison with the whole catalogue. It may be 500 pages, but 500 pages are better than 10,000".

PART 2

Series Entries

21 Series *vs.* Editor

22 Some details

21 SERIES *vs.* EDITOR

Let us now examine the Added Entries that can be derived from the series note. A series note may have three constituents:

(i) name of the series;

(ii) name of the editor or editors of the series; and

(iii) the serial number of the book in the series.

Nothing is to be gained by projecting the serial number into the Leading Section. Hence no Entry can be derived from the serial number. But we can derive Added Entries by projecting into the Leading Section either the name of the series or the name of the editor or editors of the series. The Entries thus derived may be called "Series Entry" and "Editor of Series Entry" respectively.

We may now discuss

(i) whether both these types of Added Entries should be given; or

(ii) if it is sufficient that one of them be given; or

(iii) if neither is necessary.

In actual practice there are several styles of catalogue that uphold the third course; there is hardly

any current style that adopts the first; the *C. c. code* prescribes the second.

The Demand of the Laws of Library Science

To understand the relative values of these differing practices we must of course examine them in the light of the Laws of Library Science. We have also to remember the claims of the Law of Parsimony, for the Laws of Library Science left to themselves would certainly plump for the first course. They would say: "Many readers may ask for a book about which they remember nothing but the name of its series or of the editor of the series. It is the duty of the catalogue to find such a reader his book. How can it fulfil this function unless we give an Added Entry under name of Series and name of Editor as well?".

The Protest of the Law of Parsimony

One can very well imagine, on the contrary, the vehemence with which the Law of Parsimony would remonstrate against such an extravagant provision for Added Entries. If allowed its own way the Law of Parsimony would tolerate Entries neither for Series nor for Editor of Series.

When such a clean-cut conflict arises between the general Law of Parsimony and the special Laws of Library Science it is not right that the latter should be sacrificed. We must explore the possibilities of a compromise and if none is possible uphold the claim of the Special Laws.

SEARCH FOR COMPROMISE

In looking for a compromise, let us compare a Series Entry with the corresponding Editor of Series Entry. In the former the Leading Section will consist of the name of the Series followed by the name of the Editor or Editors with the necessary connecting words. And the different publications of the series will appear, let us say, in numerical order in the succeeding sections. Similarly in the case of the Editor of Series Entry, the Leading Section will give the name of the Editor or Editors of the Series followed by the necessary connecting words and the name of the Series, while all the succeeding sections will be exactly like those in the Series Entry. Now the pleading of the Law of Parsimony will be: "Is it necessary to repeat exactly the same details in exactly the same order in two sets of entries? Remember, a series may contain tens of publications and the length of the entry will be proportionately great. If the catalogue is on cards such an entry may have to be continued over several; if it is in print such an entry may occupy a page or more. Why such lengthy repetitions?". No doubt the Special Laws of Library Science will grant the reasonableness of this. It is to facilitate such a *rapprochment* that we improvise a new category of Added Entries known as Cross Reference Index Entry. This directs the attention of a reader who remembers a particular Heading for a book but no other possible one, from the

Heading he remembers to that under which his books can be found.

COMPROMISE

Now the compromise will take this form: Give up either the Series Entry or the Editor of Series Entry. If the Series Entry is retained provide a Cross Reference Index Entry from the Editor of the Series. If on the other hand the Editor of Series Entry is retained provide a Cross Reference Index Entry from the Name of the Series. By this means the Law of Parsimony will have gained almost half its points and the Special Laws have lost very little. The Fourth Law may protest: "The reader will have to spend time going from one entry to another". But in a compromise there must be capitulation on both sides.

WHICH TO RETAIN

Though the compromise is now accepted in principle there is still some little difficulty in implementing it. The question is, which Heading shall be retained for the Book Index Entry and which shall be transferred to the category of Cross Reference Index Entry? If the Law of Parsimony is asked it will say: "I am perfectly indifferent. It is a matter solely for the Special Laws of Library Science". The Special Laws will perhaps press the claim of the Series Heading to be retained in the category of Book Index Entry. They will argue: "Most readers will remember the name of

the series rather than the name of its editor". But this is only an impression formed by the reference staff of the library. If it is asked for a quantitative measure of the frequency with which the name of the series or the name of the editor of the series figures in enquiries, perhaps no library could furnish figures. Statistics on this point will have to be gathered in several libraries for a fairly long time before the impression of the reference staff can be confirmed and no doubt some trouble should be spent for the collection of such statistics if there is no more summary way of deciding the issue.

SUMMARY DISPOSAL

But perhaps the application of some fundamental canons can show us one. First let us apply the Canon of Permanence. Is it likely that a series will have the same editor or editors for ever? Is not the editor subject to three kinds of mortality?— First, physiological mortality: there is surely every chance of a series outliving its editor. Again, in the business world, even if the editor continue physically alive, official mortality may sever his connection with the series — he may give place to new editors. And thirdly, there is "nominal" mortality. Is not change of name one of the points on which cataloguing codes violently differ? Even the committee responsible for the *Anglo-American code* could not come to an agreement. The *Code* could only say: "the English practice is one and

the American practice is just the opposite". In face of these difficulties the Canon of Permanence will surely hesitate to vote for retention of the name of the Editor of Series in the category of Book Index Entry.

But this is not all. The Canon of Ascertainability raises a more fundamental issue. It asks if every series has an official editor. We must confess that most series have no editors. Of course we may argue: "If there is an editor for a series the Editor of series Entry should be relegated to the category of Cross Reference Index Entry. If there is none the Series Entry may be retained in the category of Book Index Entry!" But then the Canon of Consistency will protest!

THE DECISION

In the light thrown upon the problem by these three Canons we may immediately decide in favour of retaining the Series Entry in the category of Book Index Entry and relegating the Editor of Series Entry to the category of Cross Reference Index Entry. And this is the practice set forth in the *C. c. code*.[1]

VACILLATION

The *A. A. code*[2] also rather favours this rule, though it is not for a rigid application of it in all cases. It prescribes: "Enter the series under its title unless it is universally known under the name

[1] Rule 321 (4) and Rule (4) (1). [2] Rule 128.

of the editor or publisher". The Second Law of Library Science may be pleased with this decision but the Canon of Ascertainability will ask: "How is a library to know that a series is *universally* known under the name of the editor or publisher?" But in deference to the Second Law it may suggest: "By all means give an Added Entry in such cases — a Cross Reference Index Entry from the name of the Editor or Publisher to the name of the Series, but let the Book Index Entry remain under the name of the Series". This will also satisfy the Canon of Consistency.

LONG SERIES

We may finally refer to another possible compromise between the Law of Parsimony and the Laws of Library Science. Here is typical advocacy by Sharp:[1]

> "In these days when every other book is one of a series, the practicing cataloguer will probably find it necessary to limit the number of series entries that he makes".

While the Law of Parsimony may vote for this the Canon of Consistency is surely entitled to protest. But even the *C. c. code*,[2] in spite of its respect for the Canon of Consistency, yields here to the pressure of the Law of Parsimony and says:

> "It is particularly long series like those of some governments with a number of secondary and ternary series that have made the cataloguer stand at bay".

[1] P. 104.

[2] P. 196.

> "Governmental and other series of this type have long names and they include hundreds of publications. In such cases it may be conducive to economy to replace a whole set of series-cards by a single card, directing attention to the printed list of the volumes of the series, if such a list could be found in any of their publications".

A similar economy is recommended also by Mann:[1]

> "The contents-book can be used in lieu of a series card in many cases"

In the catalogue itself there will be only one guide-card or caption: "For a full list of the volumes of the series *See* contents-books kept at the reference desk".

The *Yearbook* (1936)[2] contains a valuable suggestion on this point:

> "*A list of items in standard series.* The bulk of catalogues could be reduced to some extent by printing lists of the items in standard series. A large library could usefully substitute a printed list for the extensive entries in the card catalog, and such lists could be made available to other libraries. Especially when unit cards are used for series entries do catalogues become needlessly bulked out, as an entry like the Teachers College *Contributions to education,* for instance, takes up nearly a tray in itself. A homemade list, clipped from publishers' catalogues, photostated from standard bibliographies, or even entered in such bibliographies as the Prussian *Instructions* directs, would be a help, but

[1] P. 294.

[2] Pp. 53-54.

> a printed list available to libraries throughout the country would serve even better".

The Law of Parsimony will be immensely pleased if such economy can be effected by inter-library co-operation — which indeed need not be confined to a single country; it might well be international. The Laws of Library Science will have no objection whatever if the Law of Parsimony is accommodated by such sensible methods.

Arrangement

We have next to consider how the different Entries that have the name of a given Series as Heading should be arranged among themselves. Here the prescription of the *A. A. code*[1] shows utter disregard of the Canon of Consistency:

> "Arrange the contents numerically if the publishers have assigned numbers, otherwise alphabetically by the names of the authors or where such arrangement would be more useful, as in the case of biography, by subjects".

The Canon of Consistency asks: "Will not such various practice confuse the reader? Neither readers nor the reference staff will be able to count on any definite order among entries of such a type". As may be expected the *C. c. code*[2] prescribes a uniform numerical arrangement. It even goes to the other extreme and says:

> "If the publisher has not assigned serial numbers, the books are to be given a serial number in the order of the accession or in any other convenient arbitrary order, or if more appropriate the serial number may be replaced by a year or a year and a number or any other similar entity appropriate to the book".

---

1 Rule 128.

2 Rules 14141 and 14142.

But it may be objected: "Is it appropriate to introduce numerical order in a sphere where alphabetical arrangement reigns supreme?" Against this the *C. c. code*[1] can only weakly invoke the Law of Parsimony:

> "If the different books in a series are to be arranged in the Series Index Entry alphabetically by the name of the author the consolidation of the Series Entry ... would become impossible, if the series is in progress. On the other hand, if the volumes in a series are arranged in a serial order ... consolidation is possible and thus some saving can be effected".

Connecting Element

In the Classified Catalogue the element that has prepotence in connecting the Series Entry with the Main Entry (Call Number Entry) is the Call Number and it must therefore be given in full in the Series Entry. But as the Name of the Author and the Title are impotent in this respect they may be shortened. This accounts for the prescription of the *C. c. code*:

> "3224. If the Heading is of the Fourth kind (Name of Series) enumerated in Rule 321, the Intermediate Section is to consist, in order of
>
> 1 the Serial Number of the Book, or the entity by which it is replaced;
>
> 2 the Heading of the Main Entry of the book, with the provision that in the case of personal

[1] P. 196.

names, it is sufficient if the surname only is written;

3 a colon; and

4 short title of the book".

But in the Dictionary Catalogue the element prepotent in connecting the Series Entry with the Main Entry (Author Entry) is the name of the Author, which must therefore be written as fully and in the same way as in the Main Entry. Economy may be practised in shortening the title, but the Call Number should be written in full because it has also to serve the important purpose of showing the location of the book on the shelves.

Examples:

In the Classified Catalogue we have:

WILEY FARM SERIES, *ed.* by A. K. Getmen and C. E. Ladd.
5. Cox and Starr: Seed production and marketing. J :31 F7

But in the Dictionary Catalogue we must write:

WILEY FARM SERIES, *ed.* by A.K. Getmen and C. E. Ladd.
5. Cox (Joseph F.) and Starr (George E.). Seed production and marketing. J :31 F7

Introductory Card

Acomb[1] suggests the following economy:

"No purpose is served by repeating it (the editor's name) on each card in the series-entry, and it is sufficient, therefore, to make an introductory card"

[1] P. 95.

which simply shows the name of the series followed by the name of the editors.

Example:—

WILEY FARM SERIES.
Wiley Farm Series, *ed.* by A. K. Getmen and C. E. Ladd.

The succeeding cards showing the names of the books in the series may omit the name of the editors.

"In the event of the editorship being changed, the name or names necessary to indicate the alteration can be added to the (introductory) card after the original description".

EDITOR OF SERIES ENTRY

According to the *C. c. code*

"41. An Editor of Series Entry is to consist of the following sections, in the order given:—

(1) Heading (Leading Section);

(2) the connecting word '*See*'; and

(3) the Heading to which reference is made.

"411. There is to be an Editor of Series Entry using as Heading the name of the Editor or the names of the Joint Editors, as the case may be, that may occur in the Series Note in any of the Main Entries of the catalogue.

"4111. The Heading is to be written on the analogy of Rules 126, 127 and their subdivisions.

"413. The Heading to which reference is made is to consist of the name of the series written as indicated in Rules 3214 and 3215.

Example

LADD (C.E.) and GETMEN (A.K.). *Eds.*
See
Wiley Farm Series.

But Acomb[1] recommends the following form:

LADD (C.E.).
See,
WILEY FARM SERIES.
Wiley Farm Series, *ed.* by C. E. Ladd, *etc.*

Unless it be to satisfy tradition there appears to be no purpose in loading the Entry with such details. The Canon of Prepotence will support the Law of Parsimony and the simpler form prescribed by the *C. c. code.*

THE SERIAL NUMBER AND INTERDEPENDENT SERIES

Minor difficulties may arise about the way in which the serial number is to be indicated when it takes the form of a year or some complicated notation as in the case of the Publications of the League of Nations. Again, a book belonging to a subseries of a major series may have an independent serial number under each. An elaborate technique for dealing consistently with such minor details has been indicated in the *C. c. code.*[1]

[1] Rules, 141; 1411; 14111; 1413; 14131; 1414; 14141; 1415; 1442; 1421; 1422; 142201; 142202; 1423; 3214; 32141; 3215; 3224 and 3225. *See also* examples 3, 5, 9, 11, 12, 13 and 14 on pages 190—195.

PART 3

Analytical Entries

31 Author Analytics

32 Subject Analytics

33 Catalogue *vs.* Bibliography

31 AUTHOR ANALYTICS

Composite books raise a problem of their own in cataloguing. They have been defined as follows by the *C. c. code*:

"0841. A Book is said to be a Composite Book if it is made up of portions or parts which are distinct, independent, and co-ordinate contributions by two or more authors.

"08411. A Composite Book is said to be an Ordinary Composite Book if its constituent contributions have a common generic title page or title or a common index or any combination of these.

"08412. A Composite Book is said to be an Artificial Composite Book if it is not an Ordinary Composite Book".

The Laws of Library Science demand that each of the items in a composite Book be treated as a separate work. The Main Entry can only show the book as a single unit but its constituent parts should be given independent Analytic Entries both for Authors and for Subjects. We shall confine this chapter to the former.

Cutter's *Rules* supports the demand of the Laws of Library Science:

"193. Enter in full every work, forming a part of a set, which fills a whole volume or several volumes.

"194. Enter analytically, that is without imprint—

(*a*) Every work, forming part of a set, which has a separate title-page and paging, but forms only part of a volume of the set.

(*b*) Every work which, though not separately paged or not having a title-page has been published separately, whether before or since its publication in the work under treatment.

(*c*) Under *author* (1) every separate article or treatise over[1] pages in length; (2) treatises of noted authors; (3) noted works even if by authors otherwise obscure.

"195. Make analyticals for the second and subsequent authors of a book written (*but not conjointly*) by several authors."

Rules 241 and 275 deal with the details that the Entry should give. We notice in clauses (*b*) and (*c*) of Rule 194 an attempt to satisfy the Law of Parsimony and the slighting of the Canons of Ascertainability and Consistency that results.

The *A. A. code* gives only this laconic permission:

"170. Analytical entries: Analytic Entries under author or title may be made for distinct parts of works or collections whether with or without separate title-pages (Cutter, 193-196, 241, 275)"

It shows the style of Entry by six sample cards on pages 79-80. It is hoped that in the next edition this rule will be worked out in greater detail so as to indicate, at least in general terms, when such entries are obligatory.

[1] This limit must be determined by each library to itself, with the understanding that there may be occasional exceptions.

The *C. c. code* exempts encyclopedic works and memorial volumes from Analytical Entries. It has an elaborate set of rules for recording them in a Classified Catalogue:

"613. In the case of Ordinary Composite Books other than encyclopaedias and memorial volumes, there are to be Book Index Entries with an Eighth kind of Heading, over and above the seven kinds of Headings enumerated in Rule 321.

"6138. The Eighth kind of Index Entry is to consist of the following sections in the order given:—

(1) Heading of contribution (Leading Section);

(2) Title of contribution;

(3) The connecting words '*Forming part of*'; and

(4) Heading of the Book, omitting forenames in the case of names of persons, followed by a colon and the short title of the book and call number of the book.

"613801. For convenience of reference, an Index Entry of the Eighth kind is to be called a "Contributor Index Entry".

"61381. The name of the contributor of each distinct contribution in the book is to be used as a Heading for a Contributor Index Entry. The Heading is to be written on the analogy of Rules 121, 122 and their subdivisions.

"61382. The Title of contribution is to consist of the short title of the contribution.

"61384. The Fourth section is to be written on the analogy of Rule 3224 and the Call Number is to be taken from the Main Entry.

Just one example of Contributor Index Entry:

WEBB (Sydney Mrs.).
Diseases of organised society.
Forming part of
Adams: Modern state. W G3

The *C. c. code*[1] has similar elaborate rules for artificial composite books.

Quinn[2] prescribes the following style of writing for a Dictionary Catalogue:—

FISH, Simon
A supplication for the beggars (1529).
(*In* Ward. Tracts, *etc.*) [1927]
820·8

This overlooks the Canon of Prepotence. The prepotential element that connects this entry with the Main Entry from which it derives is the name of the Editor. The item in curved brackets should therefore take the form:

In Ward. A. C. (*Ed.*) Tracts, *etc.*

Quinn himself, on a later page[3] recognises this obligation to the Canon of Prepotence.

> "The author's name is usually given in such entries in this reversed form to serve as a guide to the Main Entry".

Quinn[4] is for liberal analytics:

> "There are books, encyclopaedic in character, that are difficult to catalogue effectively without taking up much space. A good example of this type is

[1] Rules 622; 6221; 62211; 6222; 6227; 623; 624.
[2] P. 217. [3] P. 221. [4] Pp. 218-221.

> the work edited by Dr. William Rose entitled "An Outline of Modern Knowledge". The names of the twenty-two authors are set out in two title-pages, approximately in alphabetical order, and the twenty-six subjects are also named on these title-pages. ... Each of the articles can be regarded as equivalent to a treatise on the subject, summarizing, as it does, the results of the latest knowledge and ideas. To index these contents in their entirety involves, at least fifty entries, but they are of unquestionable value and add to the usefulness of the library ... Some cataloguers might consider that simple entries under the editor and under the general subject of 'Knowledge' are sufficient to meet the case, but such entries alone are inadequate in view of the importance of the authors and the subjects of the book".

The Law of Parsimony may well lose its breath at this wholesale capitulation to the Laws of Library Science. Quinn[1] himself realises this and tries to make amends:

> "The increasing number of 'omnibus' books now published raises the question of the desirability of the analysis of their contents. Where these contents are too numerous or consist mostly of collections of short stories or excerpts of the type of 'Great Short Stories of Detection, Mystery, and Horror', edited by Dorothy L. Sayers, which contains sixty-six stories, or 'Great Sea Stories of all Nations', edited by H. M. Tomlinson, with one hundred and fifty selections it is unnecessary either to set them out in detail or to attempt to analyse them ....

[1] Pp. 221-224.

There are volumes of light essays, as for example, those of E. V. Lucas, James Agate and others, that need no analysis and, fortunately for the cataloguer, usually bear distinctive titles of which these are examples:

LUCAS, E. V.

One day and another. 1909 824·91

AGATE, James.

White horse and red lion: essays in gusto. 1924 824·91

We shall reserve for Chapter 33 another treatment of the issue raised by the Law of Parsimony.

32 SUBJECT ANALYTICS

As readers' approach to books is mostly through subjects Subject Analytics are even more vital than Author Analytics. Cutter's *Rules* prescribes:

"914. Enter analytically, that is without imprint—

* * *

"(*d*) Under *Subject* treatises important either (1) as containing the origin of a science or a controversy or developing new views, or (2) as treating the subject ably or giving important information, or (3) for length.

"Absolute uniformity is unattainable; probably no one will be able to draw the line always at the same height. It is most desirable — and fortunately easiest — to make analysis when the subject is well marked, as of biographies or histories of towns, or monographs on any subject. General treatises or vague essays are much harder to classify and much less valuable for analysis. In analyzing collections of essays original articles should be brought out in preference to reviews, which are commonly not worth touching (excepting in a very full catalogue) either under the author of the work reviewed or under its subject. Of course exception may be made for famous reviews or for good reviews of famous works. A work giving a careful literary estimate of an author may be an exception to this remark; reviews of the 'Works' of any author are most likely to contain such an estimate. Many

> reviews, like Macaulay's are important for their treatment of the subject and not worth noticing under the book reviewed, which is merely a pretext for the article".

Quinn is for generous subject analysis. Let us call upon each of the Laws of Library Science to put forward its claim in this important matter.

SECOND LAW

The Second Law would throw on the Library Staff the burden of helping the reader to find HIS MATERIALS from all possible books housed in the library. This obligation can be discharged only by making the catalogue fully analytical and giving profuse subject cross-references. It would be impossible for any individual, however gifted, to carry all such information in his head. If the cross-references are not made sufficiently full the library may have to turn away many readers unserved, while the materials they seek await them all the time on the shelves.

THIRD LAW

The Third Law will plump for Subject Analytics. It will ask that a book be cross-referred from several subjects. For example, it has been found necessary to prepare ten cross-reference cards for More's *Shelburne essays.* It will hardly find its legitimate quota of readers among students of Metaphysics if its excellent essay on *The Pragmatism of William James* is not cross-referred from "Pragmatism".

The experience of the *Essays and studies* published by the English Association gives another practical demonstration of the service that cross-reference can render to the Third Law. These volumes adorned the shelves almost undisturbed for years because the name of the "English Association" and the general appearance of the books led most students to suppose their contents too 'highbrow' for any but the severest specialist. But from the moment the individual essays were cross-referred from appropriate headings these volumes were seldom on the shelves. For example, the cross-reference from the heading "Shelley, criticism" to the essay on *Platonism in Shelley* in the fourth volume of the set began to draw to it a continuous stream of borrowers. It went out on loan on 23rd December, 2nd January, 21st January, 25th January, 4th February, 13th February, 12th March, and so on without rest. It was such a triumph for the Third Law that the Second Law was hard put to it to find this book for every reader that asked for it. In fact, the demand for the book could be met only by restricting the loan to a shorter period than usual and regulating the issue by registration in advance.

Another interesting example of the extraordinary power of subject cross-reference in finding for EVERY BOOK ITS READER is the case of the ponderous composite volumes constituting the *Complete works* of Count Rumford. A cross-reference card with

the heading "Coffee" to pages 615-660 of the fifth volume containing an essay entitled *Of the excellent qualities of Coffee and the art of making it in the highest perfection* made all the difference to the career of that volume. Instead of remaining an inert victim to the ravages of silverfish (an insect which attacks unhandled books in the tropics) it began an unending series of triumphant marches to readers' houses.

Even with books that are generally popular a careful cross-reference entry can increase their circle of readers. For example, Will Durant's *Mansions of philosophy* began to attract a new and wider circle of readers as soon as its tenth chapter, on the *Breakdown of marriage,* was cross-referenced under "Marriage".

These few instances suffice to illustrate the importance of cross-reference in increasing the use of books. The Third Law would therefore urge library authorities not to plead shortage of funds when the proposal for the staff necessary for cross-referencing comes up before them.

Fourth Law

The Fourth Law will vote wholeheartedly for Subject Analytics. If a catalogue gives only a single entry for each book and makes no attempt at analytical cross-references, the only course open to the reader is to examine every book to see if it gives any information on his subject of study.

Suppose, he is interested in critical literature dealing with Matthew Arnold. There may be about half a dozen books in the library dealing exclusively with this subject and they will be found together on the shelves. But a patient search by the reader will disclose to him that the library possesses much other material on the subject. Here are some items which he may find useful:—

Arnold (M.). Poems, pp. 4-16.

Palgrave (F. T.). Landscape in poetry, pp. 257-278.

Swinburne (A. C.). Essays and studies, pp. 123-183.

Hutton (R. H.). Literary essays, pp. 310-360.

Quiller-Couch (A.). Studies in literature, pp. 231-245.

Ker (W. P.). Art of poetry, pp. 139-160.

Drinkwater (J.). Victorian poetry, pp. 86-90; 96-100; 121-123.

Grierson (H. J. C.). Background of English literature, pp. 68-114.

Grierson (H. J. C.). Lyrical poetry from Blake to Hardy, pp. 90-121.

Squire (S. J.). Essays on poetry, pp. 88-97.

Monroe (H.). Poets and their art, pp. 175-178.

Elliott (G. H.). The cycle of modern poetry, pp. 58-63.

Paul (H. W.). Matthew Arnold, pp. 6-50; 99-105.

English Association. Essays and studies, Vol. III, pp. 71-91.

TRAILL (H. D.). The new fiction, pp. 76-103.

HUTTON (R. H.). Brief literary criticisms, pp. 256-281; 288-303.

STEPHEN (L.). Studies of a biographer, Vol. II, pp. 71-114.

COLLINS (J. C.). Posthumous essays, pp. 171-198.

HENLEY (W. E.). Views and reviews, pp. 75-82.

BIRRELL (A.). Collected essays and addresses, Vol. II, pp. 170-198.

RALEIGH (W.). Some authors, pp. 300-310.

SAINTSBURY (G.). Essays in English literature, Vol. II, pp. 265-275.

GOSSE (E.). More books on the table, pp. 381-387.

WILLIAMS (S. T.). Studies in Victorian literature, pp. 71-160.

HARRISON (F.). Selected essays, pp. 1-19.

WALKER (H.). Age of Tennyson, pp. 214-219.

ENGLISH ASSOCIATION. Essays and studies, Vol. XV, pp. 7-19.

HUTTON (R. H.). Contemporary thought and thinkers, Vol. 1, pp. 214-226.

FITCH (Joshua). Lives of Thomas and Matthew Arnold, pp. 241-274.

To discover these references for himself the reader may have to examine most of the books on the literature shelves, and of these the library may have hundreds. Even if the readers has patience for so thorough a search it will therefore take him hours and perhaps days to prepare the above list.

Consider similarly the national wastage involved if from year to year professor after professor and

student after student are to examine book after book from the perhaps large literature collection of a library in unearthing its resources on Matthew Arnold. The Fourth Law asks: "Is it not more economical from the wider point of view to introduce a division of labour here by setting apart a few persons to prepare such exhaustive lists on all possible subjects? Such work once done will be of use for ever".

Let us take another example. An eminent research worker needed to consult all available literature on the Zeeman Effect. We had only four books exclusively devoted to the subject and no others, therefore, appeared on the shelf labelled "Zeeman Effect". But our catalogue gave the following seventeen references:—

HAAS (A.). Introduction to theoretical physics, Vol. II, pp. 125-132.

KONEN (H.). Licht und Materie, pp. 360-388.

WATTS (W. M.). Study of spectrum analysis, pp. 167-173.

BALY (E. C. C.). Spectroscopy, pp. 529-558.

CAMPBELL (N. R.). Series spectra, pp. 73-78.

JOHNSON (R. C.). Spectra, pp. 27-30.

KAYSER (H.). Handbuch der Spectroscopie, B. 2, pp. 611-672.

BACK (N.). Handbuch der experimental Physik, B. 22, pp. 1-189.

VAN VLECK (J. H.). Quantum principles, pp. 230-257.

Hund (F.). Linienspectren, pp. 78-111; 201-207.

Campbell (N. R.). Modern electrical theory, pp. 83-102.

Abraham (M.). Theorie der Elektrizitat, B. 2, pp. 71-79.

Stoner (E. C.). Magnetism and atomic structure, pp. 212-244.

Sommerfeld (A.). Atomic structure and spectral lines, pp. 294-303; 384-405.

Birtwistle (C.). Quantum theory, pp. 112-118.

Baly (E. C. C.). Spectroscopy, Vol. 3, pp. 308-416.

Andrade (E. N. da C.). Structure of the atom, pp. 501-581.

When the enquirer was shown these seventeen cross-reference cards he was delighted that we had saved so much of his time.

Law of Parsimony

This brings us to the economic aspect of cross-referencing. Such analytical cross-reference cards can be prepared only if the library has an adequate technical staff with high academic qualifications and thorough professional training. Four years' experience has shown that a full-time staff of five is necessary to deal with the annual accession of a library adding 6,000 volumes a year and that on an average every volume requires six cards. This amounts, roughly, to an average cost of ten annas per volume.

The Law of Parsimony may well protest. But the Fourth Law would urge library authorities to

view it from another angle — from the national angle, so to speak. If this cross-referencing is not done, what will be the wastage entailed in highly paid research workers' spending hours of their time in search? For if the work is not done thoroughly once for all by the library staff, in the days and years to come the time of many students interested in the Zeeman Effect will be wasted in the same process of search. And this will mean wastage not only of the nation's money but also of its best brains. Research should not be allowed to degenerate into fumblings of this kind!

All the peoples of the world are competitors in research: research-workers in our country should not be unnecessarily handicapped.

33 CATALOGUE *vs.* BIBLIOGRAPHY

Caliban: "O ho, O ho! would't had been done!
Thou didst prevent me; I had peopled else
This isle with Calibans".

The Laws of Library Science remind us of Caliban. Left to themselves they would seduce Cutter, Quinn, *C. c. code* and everybody else, flooding the Library Catalogue with their new Analytical Entries till the long-recognised Author Entries and other less numerous types would be almost lost to view. But the Fifth Law might hold back. Sharp[1] thus mildly words its ultimatum:

> "One of the needs in public libraries to-day is for more analytical cataloguing, because there is increasing number of books, the value of which is partially lost by the absence of such entries: composite studies of philosophical, religious, and economic subjects, and many others. There are at least three reasons why more of this kind of work is not done in British libraries as distinct from American ones, where the value of analytical cataloguing is generally recognised. ... A second, that cataloguing has often to be done by members of the staff in between other duties, which nearly always means that the work has to be scamped and entries restricted to their minimum. A third reason is that analyticals have a way of bulking card and sheaf catalogues to an embarrassing extent, and as the

[1] P. 19.

average British library has no provision for separate catalogue enclosures, outside, but adjacent to, the space reserved for books, the number of entries has again to be severely restricted".

Even America which usually allows the first Four Laws to have their own way seems sympathetic for once to the Fifth Law. Lewis expresses it in the *Yearbook* (1934):[1]

"There should be many analytics; they are important for quick and efficient reference work and for the complete use of the many valuable sets that libraries acquired. ... But there is one danger in many analytics — the size of the catalogue is increasing much faster than the number of volumes in the library. Catalogues are becoming unwieldy and it is possible that we are defeating one of our goals, that of enabling the public to find the answers to their own questions, by frightening them with mere size. Should we move some of these analytics when a complete book or later information is published? Must we not become selective and weed out the older entries? The reference assistant immediately asks how are we going to find that older information when we need it? Could we not depend on bibliographies to record for us that which is worth while in much of the older literature? The vertical file, if it is to be a useful reference tool, must be kept weeded out. Why not the catalogue as well? Let us make more effort to have the catalogue up to date, and let the occasional question for *minor* information of past years be answered from encyclopaedias and handbooks. In addition

[1] Pp. 52-53.

> we could revise our subjects for older books and reduce the number of entries. If the cataloguer may make a suggestion to both the executive and the reference department, should we not throw out the culls, especially from the older books? It will require careful thought, but what use are libraries unless the collection is alive? Elimination of dead material is surely demanded if we are to continue our claim of usefulness".

This difference among the Five Laws is an opportunity for the Law of Parsimony, which has been sitting glum and helpless all the while. It throws in its lot with the Fifth Law. Taking a hint from Lewis it asks: "Are you not turning the Library Catalogue into a bibliography?" In the theory of Library Catalogue the relation between cataloguing and bibliography is in fact an important question. The *Yearbook* (1936)[1] records:

> "It seems very doubtful if library catalogues can ever afford to be answerable for all bibliographical purposes and there is the authority of A. W. Pollard for saying that 'the aims and ideals of the bibliographer and the cataloguer are by no means the same' ".

The first Four Laws are not deaf to this. They have no objection to cutting out Subject Analytics in all cases covered by bibliographies printed and published in book form. They agree with the Law of Parsimony that it is cheaper to buy a copy of the

[1] P. 49.

Essay and literature index and subscribe for its annual supplements than to write out some 50,000 Subject Analytical Entries for the publications they cover. They even say that their agreement to such an arrangement had long ago been indicated in the *Rules*:[1]

> "Mr. Fletcher's excellent essay index, if it is continued, will make analysis of this sort less necessary".

The Fourth Law, as anxious to save the time of the staff as that of the reader, would in fact make common cause with the Law of Parsimony in shifting the burden of Subject Analytics from individual libraries to national or even international organisations. It would press the need for publication on an international basis of bibliographical books, periodicals and abstracts like

> Essay and general literature index.
>
> Revue Semestrielle des publications mathematiques.
>
> Science abstracts.
>
> Chemical abstracts, with their cumulative indices.
>
> Bibliography of American natural history.
>
> Bibliographia Genetica.
>
> The annual bibliography of English language and literature.
>
> Orientalische Bibliographie.
>
> Religionsgeschichtliche Bibliographie.
>
> Bibliographie methodique du pragmatisme americain.

---

[1] P. 83.

Psychological abstracts.

Bibliographical bulletin of international affairs.

Bibliographie der Sozialwissenschaften.

A detailed account of such bibliographies published so as to SAVE THE TIME OF THE READER will be found in Chapters III to XI of Henry Bartlett Van Hoesen's *Bibliography, practical, enumerative, historical.*

The influence of this Fourth Law has even produced bibliographies of bibliographies like the following:

DARROW (K. K.). Classified list of published bibliographies in physics.

WEST (C. J.) and BEROLZHEIMER (D. D.). Bibliography of bibliographies in chemistry.

MATHEWS (E.B.). Catalogue of published bibliographies in geology.

PEDDIE (Robert Alexander). List of bibliographical works published since 1893.

All bibliographies should be assembled near the catalogue cabinet so that they may be used in conjunction with it. In the presence of a skilled reference librarian this combination will be capable of more intensive analysis than the Library Catalogue alone. The Law of Parsimony and the Fifth Law can thus be satisfied without violence to the other Laws of Library Science — without curtailment of service to readers.

PART 4

Periodical Publications

41 Main Entries

42 Card Technique

43 Added Entries

41 MAIN ENTRY

We have repeatedly seen that the relative merits of the Classified Catalogue and the Dictionary Catalogue ultimately depend upon choice of the Main Entry — the basic Entry in which the fullest information is given, from which all other Added Entries are derived, to which they are linked and to which they refer the reader for further information.

Arrangement (sequence of entries) is a vital factor in any Catalogue. The prepotent element of any Entry tends to be concentrated in its Leading Section. An Entry is fitted to function as Main Entry in proportion as this is so. The Entry in which prepotency can be entirely concentrated in the Leading Section so that other sections are from the point of view of arrangement impotent is ideally fitted to be the Main Entry. Further, the better the Leading Section of an Entry satisfies the Canon of Ascertainability and the Canon of Permanence also, the more suitable it is for use as Main Entry. We have seen that a Call Number Entry satisfies these tests more completely than any other. The importance of these tests becomes even greater in the cataloguing of Periodical Publications.

The Alternatives

There are four possible claimants for the Leading Section of the Main Entry of such Publication:

1. Class Number;
2. Name of Corporate Author, if any;
3. First word of title (other than an article); and
4. Name of Editors.

The last three elements are given with the Periodical itself. But the Class Number is provided by the scheme of classification in use. The Colon Classification provides a Class Number which completely individualises the Publication, *i.e.* no two Periodical Publications can receive the same Class Number. In the other schemes individualisation is not attempted.

The Choice of the Classified Catalogue

If the Colon Classification or any other individualising scheme is in use the Canon of Prepotency and its two associates will arrange the elements competing for the place of Leading Section in the following order of precedence:—

(1) Class Number
(2) Name of Corporate Author, if any
(3) First word of title
(4) Name of Editors.

Here the element "Class Number" that occupies the first rank satisfies the Canons of

Ascertainability and Permanence absolutely. The Canon of Prepotency will also be absolutely satisfied if we put the Call Number instead of the Class Number in the Leading Section. But the *C. c. code* forfeits this advantage in prescribing Rule 71:

"The main entry of a Periodical Publication ... is to consist of the following sections:—

(1) Class Number (Leading Section);
(2) Heading;
(3) Title-portion;
(4) Series note, if any; and
(5) Volume periodicity note".

Why Class Number and not Call Number?

Why does it thus deliberately court diffusion of prepotency in the case of Periodical Publications while it eliminates diffusion in the case of ordinary books? It is out of deference to the Law of Parsimony. If the Book Number that individualises each volume of the Periodical Publication is added in the Leading Section there will be as many Entries as there are volumes or at least all the Book Numbers must be written out in one Entry which will thus be disfigured by overcrowding.

But even as it is there is no serious loss: the given prescription will see to it that the Entries of all volumes of a Publication are brought together in the arrangement even though there be changes in the Heading or Title. Each of such changes will no doubt involve an extra Entry but all such

extra Entries will be automatically kept together as provided by the following rules of the *C. c. code*:

"831. In the case of complexity of kind 31 enumerated in Rule 8 (Change of title or of name used as heading or both) a separate Main Card is to be made for each different title and heading.

"8311. The Class Number in each such card being the same, the cards are to be treated as a set of 'continued cards' as per Rule 0381.

"8312. The entry in all but the last card of the set is to be 'closed for publication' as provided in Rule 71422".

Suppose a Periodical Publication has 500 volumes and has changed its title 10 times. The writing of the Class Number in the Leading Section will involve 10 Entries only whereas the writing of the Call Number will involve 500. Thus the prescription of the *C. c. code* fully satisfies the Law of Parsimony without violence to any of the Laws of Library Science, indeed with special respect to the Fifth Law.

Here, as an example, are the Main Entries[1] for a periodical that has seen changes in its own name as well as in that of its learned godfather:

1.

L:4:7*m*73:M88
NATIONAL ASSOCIATION OF RAILWAY SURGEONS.
United States
Transactions. 1891—1893.

[1 V. per year. 1891—1893]

continued in the next card.

[1] *C. c. code* P. 255.

2.

L:4:7*m*73:M88 *continued* 1.
NATIONAL ASSOCIATION OF RAILWAY SURGEONS.
United States.
Railway surgeon. V. 1-4. 1894—1897.

[1 V. per year. 1894—1897]

continued in the next card.

3.

L:4:7*m*73:M88 *continued* 2.
INTERNATIONAL ASSOCIATION OF RAILWAY.
SURGEONS. *America.*
Railway surgeon V. 5-10. 1898—1903.

[1 V. per year. 1898--1903]

continued in the next card.

4.

L:4:7*m*73:M88 *continued* 3.
AMERICAN ASSOCIATION OF RAILWAY SURGEONS.
Railway surgical journal V. 11-27. 1904—1920.

[1 V. per year 1904—1920]

continued in the next card.

5.

L:4:7*m*73:M88 *continued* 4.
AMERICAN ASSOCIATION OF RAILWAY SURGEONS.
Surgical journal. V. 28—. 1921—.

[1 V. per year 1921—]

Instead of 48 Main Entries we have managed with 5 and can continue to do so indefinitely provided no further change occurs in the title or name.

THE DICTIONARY CATALOGUE'S CHOICE

If the scheme of Classification in use does not give a unique Class Number to every Periodical Publication the Canon of Prepotency will arrange the elements competing for the Leading Section of the Main Entry in the following order of precedence, sending the Class Number to the last place:--

1. Name of Corporate Author, if any;
2. First word of title;
3. Names of Editors; and
4. Class Number.

In the order given by an individualising scheme the prepotency of the Class Number is so great that the next three elements are impotent. But in the above sequence the prepotency of the first two elements is nearly equal and their order might therefore be reversed. This leads one to expect differences in practice and even danger to the Canon of Consistency and the Canon of Ascertainability. And so in fact it is. The *A. A. code* is the first to show disrespect to these two Canons. In Rule 121 it prescribes:

> "A regular periodical issued by a society or an institution is ordinarily to be entered under its title, especially if this is distinctive in character. When, however, the successive parts appear at long intervals annually, biennially, *etc.*, — or when the publication contains only the regular proceedings, transactions and annual reports of the society, it is to be entered under the name of the latter, with added entry or reference under the title if it is distinctive. In doubtful cases entry under the society is to be preferred".

This involved drafting, with the pitfall "ordinarily", shows that the *A. A. code* has been divided in its mind by the virtual equality in prepotence of "title" and "name of society".

Quinn[1] cleverly turns the last sentence of the above rule to good account:

> "The rule laid down in the *A. A. code* is that the title of the journal shall be used as the heading, except in certain cases (Rule 121, p. 36). The exceptions are likely to be very numerous, however, and to avoid confusion, the practice suggested here will be that 'Society' publications shall be put under the name of the society issuing them, but the ordinary journals shall go under the title of the journal concerned".

DISCRETIONARY INCONSISTENCY

In its Appendix on transliteration the *A. A. code* justifies discretionary violation of the Canon of Consistency by means of the following principle:

> "A catalogue is not a learned treatise intended for special scholars, and bound to an erudite consistency at whatever cost of convenience. It is simply a key to open the doors of knowledge to a partly ignorant and partly learned public, and it is very important that such a key should turn easily. A good catalogue, therefore, will be a compromise between the claims of learning and logic on the one hand, and of ignorance, error and custom on the other."

Quinn's prescription amounts to saying that in Rule 121 the key has been left too much in the hands of "error and custom". Sharp[2] is more explicit:

> "It is easy to see from this that unless the enquirer is familiar both with the provisions of the rule and

---

[1] Pp. 118-119. [2] P. 316.

with the nature of the periodical, he is at a loss to know what head to look under; he would, in fact, be utterly at sea if it were not for the added entry or reference".

The *Guide* fails equally in the eyes of the Canon of Consistency:

"74. Title (*Main entry*). Main entry is to be made under the title of a society publication rather than under the name of the society when such title forms an independent phrase".

Examples:

JOURNAL *First word.*
Journal of Hellenic studies.

and not

SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES.
Journal of Hellenic studies.

Cutter is quite definite:

"60. Societies are authors of journals, memoirs, proceedings, transactions and other publications".

"133. PERIODICALS are to be treated as anonymous and entered under the first word, not an article or serial number".

In his commentary on the latter rule, Cutter again excludes from the term Periodicals the cases covered by Rule 60. His remarks under the former rule are significant:

"When to enter under societies is the most difficult problem in cataloguing, so difficult that the Ger-

> mans evade it, not entering them at all, and the British Museum solves it by putting them in a separate catalogue''. [!]

The difficulty is illustrated by his commentary on Rule 133:

> ''There are, however, some 'journals' published by or 'under the auspices of', societies which are really periodicals and should be so treated in entry, the society being not the author but the editor. Again, there are works which occupy the border line between the two classes, in regard to which the puzzled cataloguer should remember that it is not of much importance which way he decides, provided he is careful to make all necessary references. Examples of such doubtful case are 'Alpine journal; a record of mountain adventure and scientific observation. By members of the Alpine club '; which contains nothing of or about the Club itself; — ' Journal of the American Institute, a monthly publication devoted to the interest of agriculture, commerce, *etc.* Edited by a Committee, members of the Institute', and 'Journal of the Society of Arts and of the Institutions in Union', both of which are journals both in the sense of record of proceedings and of periodical publications''.

The trouble is due to giving the position of prepotence (in arrangement) to an element that flouts the Canon of Ascertainability. The Classified Catalogue escapes this difficulty by making the Class Number prepotential and thus reducing the title as well as the name of society to impotence.

Earlier or Later Name

Let us now examine the difficulties that result in a Dictionary Catalogue from violation of the Canon of Permanence when the title or name of a society occupies the Leading Section. It is imperative that all the volumes of a set should appear together. In the Classified Catalogue, where the Leading Section is occupied by the unchanging Class Number, we can write different Entries for the different names and titles and they will still hang together. But in a Dictionary Catalogue one must show all the volumes under any one Heading and simply record the changes in a note.

Which name is to be used as the Heading? Here, as recorded in Rule 121 of the *A. A. code,* is a parting of the ways:

> "(American Library Association). If a periodical has changed its name, enter under the latest form.
>
> "(British) Library Association Rule calls for entry of periodicals which have changed their names under the earliest form with brief entries under later forms".
>
> "Library of Congress Practice
>
> "Main Entry is under the latest form of names".

In a commentary on Rule 133 Cutter recommends:

> "When a periodical *changes its title* the whole may be catalogued under the original, with an explanatory note there and a reference from the new title to the old; or each part may be catalogued under its

own title with references, 'for a continuation, *see*', 'For the previous volumes, *see*' ''

Cutter's second alternative would scatter a set and is therefore ruled out. The Canon of Permanence and the Law of Parsimony would no doubt prefer his first alternative to which the rule of the (British) Library Association also conforms.

Rule 55 of the *Guide* shows that the overlooking of the Canon of Permanence involved in the prescription of the American Library Association and the Library of Congress has brought upon them a challenge from the Canon of Ascertainability as well. The rule in question cannot be said to have met the situation fully. It says:

"In case of subsequent changes of name, all entries and references are to be revised to conform to the new name, *after it may be assumed to have become fixed.* These changes are usually not made on the cards until a year after the new name has appeared on the publications, as experience has shown that the Societies themselves often find the change inexpedient, and continue to experiment until a satisfactory form is evolved. Temporary references are made from the latest name, to serve in the interim''.

Why this makeshift?; what advantage is to be gained by courting so much trouble? Remember the reported case of a society changing its name 41 times in 14 years!

The Fifth and Second Laws would combine to say that but for this makeshift serious harm will result.

A library is a growing organism whose span of life extends to many generations of readers. The term *Every* in "Every reader his book" covers all future generations. The Library Catalogue cannot therefore be prepared once for all; it must adapt itself to the requirements of new generations of readers as they come into existence.

Let us take the case of what is now known as the Indian Mathematical Society. It was originally known for a short time as the Analytic Club, then later as the Indian Mathematical Club. According to Cutter's rule and that of the British Library Association, its journal should be catalogued under the Heading

ANALYTICAL CLUB. *India.*

The Laws of Library Science might well exclaim "What an anachronism! Hardly a single mathematical reader is left to-day of the generation that knew the 'Analytical Club'. Surely the Library Catalogue should not take shelter under the Law of Parsimony and refuse to make the entry recognisable to the present generation of readers. If this involves pestering routine, it is only the natural penalty for having ignored the Canon of Permanence in filling up the Leading Section of the Main Entry".

Many Complexities

The complexities that arise in the cataloguing of Periodical Publications are not due solely to change of titles or names. The *C. c. code* has isolated 18 types:

"Periodical Publications may present one or more of the following primary kinds of complexities:

11. Change in volume-periodicity.

12. Volumes being numbered in two or more sequences, the sequences being termed New Series, First Series, Second Series, *etc.*, or by similar names.

13. Volumes being numbered simultaneously in two or more sequences.

21. Non-publication of volumes in certain periods, but the sequence of volume numbers being continuous.

22. Break in the sequence or irregularity in the numbering of volumes due to non-publication or other causes.

23. Two or more volumes issued as a single volume or bound as a single volume.

31. Change of title or of name used as heading or both, but the numbering of the volumes being continued in the original sequence.

32. Change of title or in name used as heading or both, with change in the sequence of volume numbers.

41. Amalgamation of two or more Periodical Publications under the title of one of the amalgamated Publications, and the numbering of the volumes continued in its original sequence.

42. Amalgamation of two or more Periodical Publications under the title of one of the amalgamated Publications but with change in the sequence of volume numbers.

43. Amalgamation of two or more Periodical Publications under a new title with its Class Number the same as that of one of the Publications amalgamated.

44. Amalgamation of two or more Periodical Publications under a new title and with change in the Class Number.

51. Splitting up into two or more Periodical Publications with one of them having the original Class Number.

52. Splitting up into two or more Periodical Publications, the original Class Number not being borne by any of them.

61. Having monograph supplements or book supplements without separate pagination and titlepage.

62. Having monograph supplements or book supplements with separate pagination and titlepage.

63. Having a sequence of supplementary or extra volumes having separate pagination and title-page, and capable of being regarded as a Periodical Publication by itself.

64. The supplements of the kinds 62 and 63 being covered by the cumulative indexes of the Main Periodical Publications.

Technique for the Classified Catalogue

The *C. c. code* gives profuse illustrations of all such complexities and precise rules in Card Technique for dealing with every possible combination of them in a Classified Catalogue. Some of these indications are reproduced below:

"7132. If the Periodical Publication is current in the library, the last volume number if the volume numbers are given and the last year number are to be in pencil.

In such a case the entry is said to be 'open for the library' ".

The latest volume number and the latest year number are written in pencil so that they may be changed as each volume is completed and accessioned. Some libraries do not write these numbers at all. But in view of the notorious impunctuality of Periodical Publications it is seldom possible to guess the number and year of the last completed volume. The simple device suggested in this rule has proved a source of great relief both to reference staff and readers.

"7133. If the Periodical Publication is discontinued in the library, the last volume number, if volume

numbers are given, and the last year number are to be inked.

In such a case, the entry is said to be 'closed for the library' ".

"714. The Series note, if any, is to be enclosed in circular brackets and is to be constructed in accordance with Rule 141 and its subdivisions, except that the series numbers of all the volumes of the Periodical Publication are to be given in succession at the end of the note. Further, if the first volume of the set does not belong to the series, the volume number or in its absence the year number of the earliest volume of the set which belongs to the series is to be written as the denominator under its corresponding serial number. If any of the later volumes of the set happen to go off the series, the volume number or in its absence the year of the next earliest volume that belongs to the series is to be written as a denominator under its corresponding serial number and so on.

715. The Volume Periodicity note is to be enclosed in square brackets and is to mention the number of volumes normally published in a year and the number of separately bound parts constituting each volume, if the volume is bound in more than one part. If more than a year is taken for a volume to be completed, the approximate number of years in which a volume is completed is to be given in this section.

71501. In the former case the note is to consist of the following, in succession,

1. the number indicating the number of volumes per year;

2. the words "V. per year";
3. a semi-colon;
4. the number of separately bound parts in a volume;
5. the words "parts per volume";
6. a full stop;
7. the year of commencement; and
8. a dash;

with the provision that (3), (4) and (5) are to be omitted if each volume is bound as one part.

71502. In the latter case, the note is to consist of the following, in succession,

1. the words "I V. for";
2. the number indicating the number of years;
3. the word "years";
4. a semi-colon; and
5. 6 7, 8 and 9 same as 4, 5, 6, 7 and 8 respectively in Rule 71501;

with the provision that 4, 5 and 6 are to be omitted if each volume is bound as one part.

71503. If the publication is irregular, the note in square brackets is to commence with the word "irregular".

7151. If the Periodical Publication continues to be published whether taken in the library or not, no figure is to be added after the final dash, mentioned in Rues 71501 and 71502. In such a case, the entry is said to be "open for publication".

7152. If the Periodical Publication has ceased to be published, the year of the last published volume is to be inserted after the dash mentioned in Rules 71501 and 71502.

In such a case, the entry is said to be "closed for publication".

Information for this Volume Periodicity note may have to be sought outside the publication itself. That is why it is to be enclosed in square brackets. It may not be possible to discover in what year a periodical publication was begun. But the cataloguer should spare no pains in hunting for the information in all possible bibliographical sources and should not rest till he has found it. The chapter entitled "Bibliographical suggestions" in the *Guide* maps out the regions where this information should be sought. No doubt this process may often take an indefinitely long time. But this does not mean that the cataloguing should be postponed and the periodical held up in the cataloguer's heap till the required information is obtained. Such a procedure would contradict the whole spirit of Library Science. The space within square brackets in the catalogue card should be left blank and the publication released for public use. A list of such incomplete cards should be maintained so that they may not be forgotten. The blank space is to be filled as soon as the necessary information has been obtained.

Examples of the Technique

Note:—In the following examples numbers to be written in pencil as per Rule 7131 are shown in antique type.

1.

473:N02r
CARNEGIE INSTITUTION OF WASHINGTON.
Year book. V. 1—37. 1902—1938.

[1 V. per year. 1902—]

This entry implies that an unbroken set of this Serial is current in the library.

2.

502:2:M72
INDIAN. *First word.*
Indian antiquary, etc. V. 3-62. 1874—1933.

[1 V. per year. 1872—1933]

This publication is evidently "closed" both for the library and for publication.

The words represented by "etc." are "A journal of oriental research in archaeology, epigraphy, ethnology, geography, history, folklore, languages, literature, numismatics, philosophy, religion, *etc., etc.*"

3.

773:M99
WHO'S. *First word.*
Who's who in America, etc, V. 16. 1930/1931.

[1 V. for 2 years. 1899/1900—]

This entry shows that the library has only one volume of this Serial which however still continues to be issued. In this case the entry is "closed for the library" but "open for publication".

The "etc." represents "a biographical dictionary of notable living men and women of the United States".

4.

81:M64
STATESMAN'S. *First word.*
Statesman's year book, etc. V. 1—21; 24-30; 65-75. 1864—1884; 1887—1893; 1928—1938.

[1 V. per year 1864—]

This entry implies that a broken set of this Serial is current in the library.

The "etc." represents "statistical and historical annual of the states of the world".

5.

I*m*3 :M87
ANNALS. *First word.*
Annals of botany. V. 1—52. 1887—1938.

[1 V. per year. 1887—]

This entry implies that an unbroken set of this Periodical is current in the library.

6.

T4*h*21 :M41*n*
PRESIDENCY COLLEGE. *Madras. City.*
Calendar. 1926/1927—1933/1934.

[1 V. per year.]

In this case the volumes of the Serial are not consecutively numbered. The "year of the volume" is the only factor that distinguishes one volume from another. As the year of commencement has not yet been discovered a space for it is temporarily left blank within the square brackets.

7.

W :26*m*2 :N29
MADRAS CHAMBER OF LOCAL BOARDS.
Local self-government quarterly. V. 1-2. 1931/1932—1932/1933.

[1 V. per year. 1931/1932—]

It is to be noted here as well as in example (6) that the "year of the volume" is an artificial one spreading over two calendar years. But in example (3) a similar notation stands for two full calendar years.

8.

Z*r*438
BURMA. HIGH COURT.
Indian law reports, Rangoon series, etc. V. 1-11. 1923—1933.

[1 V. per year 1923—]

The circular brackets are reserved for Series Note and the square ones for Periodicity Note. Complexities 21 to 23 are to be given as notes in crooked brackets, while numbers 41 to 64 give rise to notes in inverted commas. For convenience of reference these four types may be called notes of the first, second, third and fourth species respectively.

TECHNIQUE FOR COMBINATION OF COMPLEXITIES

The *C. c. code* prescribes:

"If either two or more species of notes or two or more notes of the same species occur in the same Main Card the following rules are to be observed in writing the Main Card.

"891. Notes of the same species are to be put in a single section and are to be deemed to be separate sentences.

"892. Notes of different species are to be put in different sections.

"893. Sections formed of the different species of notes are to be arranged among themselves in the order of the numeral epithets of the species".

To state the whole technique in detail would simply reproduce chapter 8 of the *C. c. code*. The following examples must suffice:

EXAMPLES OF THE TECHNIQUE

First Example

1.1 Am3:K601
ROYAL SOCIETY OF LONDON.
Abstracts of the papers printed in the philosophical transactions.
V. 1-4. 1800/1814—1837/1843.
[Irregular. 1800/1814—1837/1843]
Continued on the next card.

1.2

Am3:K601 *Continued* 1.
ROYAL SOCIETY OF LONDON.
Abstracts of the papers. V. 5-6. 1843/1850—1850/1854.

[Irregular. 1843/1850—1850/1854]
Continued on the next card.

1.3

Am3:K601 *Continued* 2.
ROYAL SOCIETY OF LONDON.
Proceedings. V. 8-53. 1856/1857—1893.

[Irregular. 1855/1856—1904/1905]
"*Split partially into* Gm3: K601 Royal Society of London Proceedings. Series B", etc.
continued on the next card.

1.4

Am3:K601 *Continued* 3.
ROYAL SOCIETY OF LONDON.
Proceedings. Series A, etc. V. 115-142. 1927—1933.

[Irregular. V. 76- . 1905—]

1.5

Gm3;K601
ROYAL SOCIETY OF LONDON.
Proceedings. Series B, etc. V. 76-95; 101-113; 1905/1906—1923; 1927—1933.

[Irregular V. 76- . 1905—]
"*Split partially from* Am3:K601 Royal Society of London Proceedings."

Second Example

2.1

Bm2:N07
INDIAN MATHEMATICAL CLUB.
Journal. V. 1-2. 1908—1910.

[1 V. per year. 1908—1910]
{ No. V. for 1909. } { Bound together. V. 1-2 }
continued on the next card.

2.2

Bm2:N07 *Continued* 1.
INDIAN MATHEMATICAL SOCIETY.
Journal. V. 3—14. 1911—1922.

[1 V. per year. 1912—1922]
{ Bound together. V. 3-4; 5-6; 7-8; 9-10; 11-12; 13-14 }

Continued on the next card.

2.3

Bm2:N07 *Continued* 2
INDIAN MATHEMATICAL SOCIETY.
Journal. V. 15-19. 1923/1924—1931/1932.

[1 V. for two years. 1923/1924—1931/1932]
"Each V. from V. 16 has as supplement Bp2:N16 Indian Mathematical Society, conference, report."
"*Split partially into* Bm2:N071 Indian Mathematical Society. Mathematics student."

2.4

Bm2:N071
INDIAN MATHEMATICAL SOCIETY.
Mathematics student. V. 1-6. 1933—1938.

[1 V. per year. 1933—]
"*Split partially from* Bm2:N07 Indian Mathematical Society. Journal."

2.5

Bp2:N16
INDIAN MATHEMATICAL SOCIETY. CONFERENCE.
Report V. 4-7. 1924—1931.

[1 V. for two years. 1924—]
{ V. 4 and 5 bound with Bm2:N07 Indian Mathematical Society. Journal, V. 15 and 16 respectively. } { V. 1-4 not separately published, but included in Bm2:N07 Indian Mathematical Society. Journal, V. 9, 11, 13 and 15. }
"Supplement to Bm2:N07 Indian Mathematical Society. Journal."

Third Example

3.1

Cm55:I.99
ANNALEN. *First word.*
Annalen der Physik. B. 1-30; 31-60 (=New Folge B. 1-30). 1799—1819.

[3 B. per year. 1799—1819]

Continued on the next card.

3.2. Cm55:L99 *Continued* 1.
ANNALEN. *First word.*
Annalen der Physik und der physikalischen Chemie. B. 61-76
(= Neueste Folge B. 1-16). 1819—1824.

[3 B. per year. 1819—1824]

Continued on the next card.

3.3. Cm55: L99 *Continued* 2
ANNALEN. *First word.*
Annalen der Physik und Chemie. B. 1-11
(= Ganzen Folge 77-87). 1824—1827.

[3 B. per year. 1824—1827]

{ Each of the V. has an alternative title-page giving the title as Annalen der Physik. }

Continued on the next card.

3.4. Cm55:L99 *Continued* 3
ANNALEN. *First word.*
Annalen der Physik und Chemie. B. 12-30
(= Ganzen Folge 88-106). 1828—1833.

[3 B. per year. 1828—1833]

Continued on the next card.

3.5. Cm55:L99 *Continued* 4.
ANNALEN. *First word.*
Annalen der Physik und Chemie. B. 31-60
(= Reihe 2, B. 1-30 = Ganzen Folge 107-136). 1834—1843.

[3 B. per year 1834—1843]
"*Has as supplement* Cm55:L991 Annalen der Physik und Chemie, Ergänzungsband."

Continued on the next card.

3.6. Cm55:L99 *Continued* 5.
ANNALEN. *First word.*
Annalen der Physik und Chemie. B. 61-90
(= Reihe 3, B. 1—30 = Ganzen Folge 137-166). 1844—1853.

(3 B. per year. 1844—1853).
"*Has as supplement* Cm55:L991 Annalen der Physik und Chemie, Ergänzungsband."

Continued on the next card.

3.7. Cm55:L99 *Continued* 6.
ANNALEN. *First word.*
Annalen der Physik und Chemie. B. 91-120,
(=Reihe 4, B. 1-30=Ganzen Folge 167-196). 1854—1863.

(3 B. per year. 1854—1863).
"*Has as supplement* Cm55:L991 Annalen der Physik und Chemie, Ergänzungsband."
Continued on the next card.

3.8. Cm55:L99 *Continued* 7.
ANNALEN. *First word.*
Annalen der Physik und Chemie. B. 121-150
(=Reihe 5, B. 1-30=Ganzen Folge 197-226). 1864—1873.

[3 B. per year. 1864—1873]
Has as supplement Cm55:L991 Annalen der Physik und Chemie, Ergänzungsband."
Continued on the next card.

3.9. Cm55:L99 *Continued* 8.
ANNALEN. *First word.*
Annalen der Physik und Chemie. B. 151-160
(=Reihe 6, B. 1-30=Ganzen Folge 227-236). 1874—1877.

[3 B. per year. 1874—1877]
"*Has as supplement* Cm55:L991 Annalen der Physik und Chemie, Ergänzungsband". *Has as supplement* C/L96 A"
Continued on the next card.

3.10. Cm55:L99 *Continued* 9.
ANNALEN. *First word.*
Annalen der Physik und Chemie. Neue Folge. B. 1-69 (= Ganzen Folge 237-305). 1877—1899.

[3 B. per year. 1877—1899]
"*Has as supplement* Cm55:L991 Annalen der Physik und Chemie. Ergänzungsband".
Continued on the next card.

3.11. Cm55:L99 *Continued* 10.
ANNALEN. *First word.*
Annalen der Physik. Folge 4. B. 1—87 (=Ganzen Reihe 306-392). 1900—1928.

[3 B. per year. 1900—1928].
Continued on the next card.

3.12

Cm55:L99 *Continued* 11.
ANNALEN. *First word.*
Annalen der Physik. Folge 5. B. 1-3 (=Ganzen Reihe 392-395). 1929.

[3 B. per year. 1929].
Continued on the next card.

3.13

Cm55:L99 *Continued* 12.
ANNALEN. *First word.*
Annalen der Physik. Folge 5. B. 4-15 (=Ganzen Reihe 396-407). 1930—1932.

[4 B. per year. 1930—1932]
Continued on the next card.

3.14.

Cm55:L99 *Continued* 13.
ANNALEN. *First word.*
Annalen der Physik. Folge 5. B. 16-32 (=Ganzen Reihe 408-424). 1933—1938.

[3 B. per year. 1933—]

3.15.

Cm55:L991
ANNALEN. *First word.*
Annalen der Physik und Chemie, Ergänzungsband. B. 1-8. 1842—1878.

[Irregular. 1842—1878]
" *Supplement to* Cm55. L99 Annalen der Physik und Chemie."

3.16.

C/L96 A
POGGENDORFF (Johann Christian). *Ded.*
Annalen der Physik und Chemie, Jubelband.

TECHNIQUE FOR THE DICTIONARY CATALOGUE

The card technique for the Dictionary Catalogue as prescribed by the Library of Congress is given in the *Guide*:

"For current periodicals the following order is prescribed:

1. For title, followed by a blank line; imprint; collation; frequency of publication. (When the

first volume is in the library, the volume number and the date of first publication are included in the title).

2. Beginning a new card, a note giving the various titles under which the periodical has been published.
3. Note giving successive editions.
4. Notes giving changes in place of publications and publishers, when important.

(2, 3 and 4 may be combined if changes of title, editor and imprint occur simultaneously)

Sufficient space is left to permit insertion of information regarding earlier or later volumes which come to hand.

5. Specification on a new card of the volumes in the library, introduced by the phrase "Library has"

6. A separate concise entry for each series which bears a different title with notes "preceded by". "continued as" or a direct reference to the current name.

7. Added entries under the name of editors, subjects, *etc.*

"When a periodical ceases to be published, the information contained on the card specified under 5 is transferred to the blank line provided for that purpose on card 1, the former card being cancelled. On the other hand, if a periodical continues under a new name, the cards containing bibliographical notes and statement of what is in the library are placed after the new title. Under the old title there remain the usual brief entries, referring for continuation to the new name. In current titles

the last date and statement of the number of volumes are written in pencil".

"64. *Order of notes.* The order of notes is in general the same as that observed in periodicals:

Frequency of publication.

Volume numbers irregular...

Notes of connection with other publications.

Title varies.

Editors.

Imprint varies.

No more published.

Notes concerning contents.

(The order of notes varies considerably according to the length of the entry).

Matter to be noted. While no definite rule can be made as to what should be noted in addition to the above items, there are certain types of material which are usually selected for special mention.

Indexes (not separately paged).

Bibliographies.

Monographs with special titles (except when the whole set is monographic).

Historical notices of the society.

Lists of publications of the society.

Lists of members of the society.

Supplements and appendixes (not separately paged).

Card Technique

First Example

Academie nationale des sciences, belles-lettres et arts de Bordeaux —.
Actes.
Bordeaux (etc.) 1839—
v. illus., plates (part col.) ports, maps, plans, facisms, tables diagrs. 20½-32½.
Vols.—15—have imprint: Bordeaux, Paris; v. 16—Paris.
Title varies: 1839-47, Actes de l'Academie royale des sciences, belles-lettres et arts de Bordeaux.

1848-59. Recueil des actes de l'Academie des sciences, belles lettres et arts de Bordeaux (1854-59, Academie imperiale...)

1860-70. Actes de l'Academie imperiale ... 3. serie. (Half-title: Recueil des actes...)

1871-72. Actes de l'Academie nationale ... (Half-title: Recueil...)

The first series of proceedings was published under the title "Seance publique"; the second series comprises v. 1-21 of the present publication, 1839-59; the third series. v. 22 — 1860—

Vols. 39-40 issued in 1 v.; also 44-45, 49-50.

"Compte rendu des seances", appended to each volume, beginning with v. 18, 1856.

List of members in each volume.

A supplementary volume was issued with v. 40; Sur les observations pluviometriques faites dans l'est de la France ... de 1688 a 1870 par V. Raulin. 1887. (xv. 860. p.)

Appended to v. 44-45: Algebre de l'harmonie, par Anatole Loquin.

"Les laureats de l'Academie (1713-1893) par Aurelien Vivie" v. 55, p. 423-491.

"Table methodique des publications de l'Academie de Bordeaux" by L. de Lamothe: v. 9, 1847, p. 751-795.

"Table methodique ... 1848 inclusivement jusqu'a 1860 exclusivement, par Jules de Geres": v. 22, 1860, p. 259-286.

AS162.B81 14.21708

Second Example

American iron and steel association.
The bulletin of the American iron and steel association. v. 1-46; Sept. 1866—Dec. 1912. Philadelphia, 1866—1912.
46v. in 26. illus., plates, tables, 27½-37½ cm.

Weekly, Sept. 1866-Feb. 1895; 3 no. a month, Mar. 1895-Dec. 1897; semimonthly (irregular) Jan. 1898-Dec. 1907; monthly (irregular) Jan. 1898-Dec. 1912.

An earlier series of bulletins was issued by the association under title "Bulletin of the American iron association, 1857—1858.

Editor: May 21, 1879-Dec. 1912, James M. Swank. (Mr. Swank was secretary of the association from Jan. 1, 1873; he is mentioned as editor of this publication, however, until May 21, 1879.)

The work of the association was taken over by the American iron and steel institute Jan. 1913, and the Bulletin was continued as Monthly bulletin of the American iron and steel institute.

1. Iron industry and trade — Societies. 2. Steel industry and trade — Societies. I. Swank, James Moore, 1832-1914, ed. II Title.

TS300.A45 8-21176

American iron and steel institute, New York.
Bulletin of the American iron and steel institute. v. 1— Jan. 1913— New York, American iron and steel institute, 1913—
v. illus., plates (part col.) 25½ cm.

Monthly, Jan. 1913-Feb., 1917 (title reads Monthly bulletin); bimonthly, Mar.-Apr. 1917 — (title reads Bimonthly bulletin).

Supersedes the Bulletin of the American iron and steel association published, 1866-1912.

Contains articles on iron and steel statistics, on the improvement of methods of producing iron and steel and on the promotion of health and safety among employees.

1. Iron industry and trade — Societies. 2. Steel industry and trade — Societies. I Title. II Title: Monthly Bulletin. III Title: Bi-monthly bulletin.

TS300.A46 15-20068

43 ADDED ENTRIES

Subject Entries

In the Classified Catalogue the Main Entry (Class Number Entry) forms the Subject Entry. There is thus no need for an Added Subject Entry. In the Dictionary Catalogue Added Entries should appear under the name of the subject of the Periodical Publication as Main Heading with an appropriate Form Subheading. The following is the prescription of the *Guide*:

"73. *Added Entries*

* * * *

"2. Subject headings: Collections, memoirs, reports, transactions, *etc.*, of societies or institutions are to be entered under the name of the subject or subjects of which they treat, with subdivision *Societies;* for publications of universities, museums, and other institutions, and of certain commissions, which are not societies in the ordinary acceptation of the word, the form *Societies, etc.*, is to be used, the "etc." to be disregarded in filing.

"(The charter, constitution, by-laws, lists of members, and similar publications which contain as a rule little or no matter dealing with those subjects and relate almost exclusively to the organization or management of a society, are not to be entered under subject.)".

ALTERNATIVE NAME ENTRIES

The Second Law and the Law of Parsimony would suggest as a compromise that there should be

(1) in the Classified Catalogue, a Class Index Entry under every conceivable alternative name of a Periodical Publication and similarly

(2) in the Dictionary Catalogue, a corresponding number of equivalent *See* Reference Entries.

Examples for Classified Catalogue:

Set 1

1.1. JOURNAL. *First word.*

Journal fur die reine und angewandte Mathematik.
Bm55:M26

1.2 CRELLE'S. *First word.*

Crelle's Journal.
Bm55:M26

Set 2

2.1. DEUTSCHEN MORGENLANDISCHEN GESELLSCHAFT.

Zeitschrift.
504:55:M45

2.2 ZEITSCHRIFT. *First word.*

Zeitschrift der deutschen morgenlandischen Gesellschaft.
504:55:M45

2.3. Z. *First word.*

Z.D.M.G. 504:55:M45

Set 3

3.1 INDIAN MATHEMATICAL CLUB.

Journal. Bm2:N07

3.2. INDIAN MATHEMATICAL SOCIETY.

Journal. Bm2:N07

3.3. JOURNAL. *First word.*

Journal of the Indian Mathematical Club. Bm2:N07

3.4. JOURNAL. *First word.*

Journal of the Indian Mathematical Society. Bm2:N07

Set 4

4.1. BURMA.
HIGH COURT.

Indian law reports, Rangoon series. Zr438

4.2 BURMA.
HIGH COURT.

Rangoon law reports. Zr438

4.3. INDIAN. *First word.*

Indian law reports, Rangoon series. Zr438

4.4. RANGOON. *First word.*

Rangoon law reports. Zr438

.5 BURMA. *First word.*

Burma law reports. Zr438

Corresponding examples for the Dictionary Catalogue may be constructed on the following model:

CRELLE'S. *First word*,
Crelle's Journal.
See
JOURNAL. *First word*.
Journal fur die reine und angewandte Mathematik.

The *Guide* prescribes Added Entries from other types of Headings as well:

"72. *Added entries.* Make added entries for editors (if important) compilers of indexes, societies whose proceedings are included in the publication, title, *etc.*"

But the *C. c. code* deliberately recommends omission of such Editor Entries for Periodical Publications. Entries for societies whose proceedings are included in them, however, come under the category of Analytical Entries which should of course be given.

ANALYTICALS

But as for regular Author and Subject Analyticals for Periodical Publications, no! The Law of Parsimony will fly into a rage at the very thought of them, and rightly so.

The number of periodicals in the world runs to thousands (60,000 is one of the estimates). Even the Madras University Library receives about 1,400 of them. The Yale University Library receives as many as 11,500. In many of them the

articles on any one topic are widely scattered. Much time will be required for collecting them in lists and it is not proper for every individual library to attempt it: it is eminently a problem for international effort. Abstracting and analysis of Periodical Publications on an international basis is in fact far more advanced than that of books.

CROSS REFERENCE INDEX ENTRIES

This Class of Added Entries gives rise to no difference between the Dictionary Catalogue and the Classified Catalogue.

According to the *C. c. code*:

"74. A Periodical Publication is to be given Cross Reference Index Entries of the Fourth kind *viz.*, Label Index Entries and no other kind".

"741. The Label Headings to be used are "Periodicals" and "Serials".

The terms "Periodicals" and "Serials" are defined in Rule 08 of the *C. c. code*. Roughly speaking, if the Colon Classification is in use, *m* in the Class Number will indicate "periodical". Other Periodical Publications may as a rule be considered serials.

In examples illustrating these rules the *C. c. code* directs that a Label Entry, say under Periodicals, is to be given for every possible alternative name of a publication. But this is an unnecessary flouting of the Law of Parsimony. It was evidently recommended under a mistaken deference to the

Second Law, whose requirements, in fact, are amply provided for by the Alternative Name Entries already dealt with.

We have found from later experience that the Fourth Law would be better satisfied if the Class Number of the Periodical is added at the end of each Label Entry.

The *Guide* prescribes some additional Label Entries:

"73. Added entries (*Form headings,* etc.)

1. Form Headings: All the publications of a society are to have added entry under the form headings

   (*a*) Societies.

   (*b*) Learned institutions and societies.

   (The latter a subheading under name of country or place where the society's headquarters are located").

The Law of Parsimony perhaps demands that the latter, deriving from the practice of the British Museum, should be given up.

PART 5

Name Entries

51 Personal Names

52 Corporate Names

53 Substitutes for Names

54 Who is the Author?

51 PERSONAL NAMES

Name Entry

By Name Entries is meant Entries that have as their Headings names of persons or of Corporate Bodies, or of certain prescribed substitutes for them in exceptional circumstances.

In the catalogue of the "One Book, One Entry" type, all the Entries are Name Entries.

In the Library Catalogue, on the other hand, it is not so; there are, for example, the Subject Entries. Whether their Headings be Numbers, as in the Main part of the Classified Catalogue or names of subjects, as in the Dictionary Catalogue and the Index Part of the Classified Catalogue, they are not in general Name Entries in the sense in which this phrase has been defined. But some Subject Entries may also be Name Entries. They will be so if a person forms the subject of study, as in Chesterton's *Browning,* Bradley's *Shakespeare* and Ludwig's *Napoleon.*

Again a Series Entry will not ordinarily belong to the category of Name Entries; but it may become a Name Entry if for individualisation the name of the Series has to begin with the name of a Corporate Authority as in

United States. Agriculture (Department of—). Bulletin Series.

On the whole, it may be stated that Name Entries are the most numerous in a Library Catalogue. This is one reason why more attention has been paid to them than to Subject Entries.

There is also another and perhaps more important reason. In all forms of catalogue except the Classified one, the Main Entry has been invariably an Author Entry *i.e.* Name Entry. The result is that the Canon of Prepotence has obliged cataloguers to pay the fullest possible attention to names — their choice and their representation in the Heading.

It may also be mentioned that even in the Classified Catalogue though the name of the author or any collaborator is impotent in the Main Entry, the Canon of Prepotence invests it with full importance in the Author and Collaborator Entries appearing in the Index Part.

Language and Spelling

The writing of Personal Names may appear a simple matter, but actually it is full of difficulties. First there is the question of language and its developmental stage and spelling discussed already in Chapter 12 in connection with names of subjects.

The Canon of Ascertainability would make us copy the name as it occurs on the title page. This may be done (the *C. c. code* prescribes it) in the

Main Entry of a Classified Catalogue, since the name of the person is impotent for purposes of arrangement. But in the Name Entries of the Index Part of such a catalogue and in all the Name Entries of the Dictionary Catalogue, the names are prepotent. If a person's name occurs in different languages or in different stages of a language or with different spellings in different books, obedience to the Canon of Ascertainability will prevent assembly of all the books under one Name Heading. However, the *C. c. code* prefers to stand by this Canon even in its Index part and would compensate for consequent scattering by providing Cross Reference Index Entries linking up equivalent name-forms.

Perhaps the *C. c. code* claims to satisfy the Canon of Consistency also by such a prescription.

Cutter gives up the Canon of Ascertainability and propounds the following rules:

"32. Give the names, both family and Christian in the VERNACULAR form if any instance occurs of the use of that form in the printed publications of the author.

"*Except* that the following go under the Latin form: (*a*) ancient Greek authors, (*b*) certain medieval names and several from the renaissance and Reformation periods, (*c*) popes.

"33. If an author has written in *several modern languages*, choose that in which he has written most.

"35. When an author's name is VARIOUSLY SPELLED, select the best authorized form as heading add the variants in parentheses, and make references from them to the form adopted.

"Of course, great care must be taken not to enter separately works in which an author spells his name differently, as Briant and Bryant, Easterrbrooks and Eastabrook, Erdmann and Erdtmann. On the other hand, different people who spell their names differently should be separated, as Hofmann and Hoffmann, Maier, Mair, Majer, Mayer, Mayr, Meier, Meir, Mejer, Meyer, Meyr, Schmid, Schmidt, Schmeid, Schmiedt, Schmit, Schmitt. (On the arrangement of such names in a card catalogue see § 303).

"In German Christian names there is a want of uniformity in the use of C and K (Carl, Conrad, Karl, Konrad) and f and ph (Adolf, Adolph). Occasionally an author uses both forms in different books, or writing only in latin (Carolus, Rudolphus) does not show which form he prefers. Where the author thus leaves the point undecided, K and f should be preferred to C and ph (except in Christoph). Swedish f is to be preferred to v, as Gustaf, not Gustav".

But Cutter respects the Canon of Ascertainability in the next, and in a later rule:

"36. When family names are written differently by different members, follow the spelling adopted by each, even though it should separate father and son.

"41. FORENAMES are to be used in the form employed by their owners, however unusual, as Will Carleton, Sally (Pratt) McLean, Hans Droysen, Fritz Reuter".

The *A. A. code* is divided in its loyalty to the Canon of Ascertainability and has therefore several rules on the subject:

"42. Variations due to language, transliteration, etc. When a person regularly uses a foreign form of his name, enter under this form.

Leschetizky, Theodor, *not* Leszetycki, Teodor.
Tschermak, Gustav, *not* Cermak

"This practice applies to authors whose works have originally appeared in a foreign or adopted tongue, and whose names may therefore be given in the form thus adopted by them.

"Follow this practice also in the case of transliterated names, if the author has himself consistently used a particular form when among foreigners, or is always known by a transliteration differing from the one provided for in these rules.

Rangabe *not* Rankabes
Vlachos, *not* Blachos

"43. Writers of middle ages and the renaissance and reformation periods. Authors of middle ages and the renaissance and reformation periods who have translated their names into one of the classic languages, or who, with or without reference to the original, have adopted a name Greek or Latin in form, are to be entered under the adopted form.

Agricola, Rudolf, *not* Bauer.
Xylander, Wilhelm, *not* Holtzmann.
Melanchthon, Philipp, *not* Schwarzerd.
Oecolampadius, Johannes, *not* Hausschein.

"On the other hand, enter under the original name when it has become firmly established, through the author's own usage or otherwise, so that he is known by that rather than by the adopted name.

Reuchlin, Johann, *not* Capnion.

"In either case refer from the form of name not adopted as entry word.

"44. Post-reformation and modern writers known under a Latin form. Post-reformation and modern writers whose names are found both in Latin form and in the vernacular are to be entered under the Latin form whenever this is decidedly better known. Reference is to be made from the vernacular.

Grotius, Hugo, with reference from Groot, Hugo van.

but

Ritschl, Friedrich Wilhelm, *not* Ritschelius, Fridericus.

"45. Popes. Give names of popes in Latin and refer from the vernacular form of the forename and from the family name.

Pius II, *pope,* with reference from Pio and from Piccolomini, Enea Silvio.

"46. Sovereigns. Give names of sovereigns in the vernacular and refer from the English form.

Franz Joseph I, *emperor of Austria.*
Friedrick I, *Barbarossa, emperor of Germany.*
Wilhelm II, *German emperor.*

Henri IV, *king of France.*

Umberto I, *king of Italy.*

"47. Bible characters. Give names of Bible characters in English, and as far as possible in the form in which they appear in the authorized version.

James, *Saint, apostle.*

"48. Saints. Give names of saints other than Bible characters in Latin, unless they are decidedly better known under the vernacular or some other form.

Latin form—

Benedictus, *Saint, abbot of Monte Cassino.*

Gregorius, *Saint, bp. of Tours.*

Joannes, *Eleemosynarius, Saint, patriarch of Alexandria.*

Zeno, *Saint, bp. of Verona.*

Vincentius *Lerinensis, Saint.*

Vernacular form—

Birgitta, *Saint, of Sweden.*

Bernard *de Clairvaux, Saint.*

Genevieve, *Saint, of Paris.*

English form—

Patrick, *Saint.*

Augustine, Saint, abp. of Canterbury."

It is for consideration whether so many special rules may not be avoided, by following the Canon of Ascertainability and leaving all possible variant forms of names, however popular, to be used as

Headings of Cross Reference Index Entries and to be linked up in that way.

Some authors complicate the problem still further by giving their names in two different languages either on the title-page or in two different parts of the book — say on the cover and on the title-page. The Canon of Ascertainability will make us adopt the former for a Cross Reference Index Entry and the latter for the regular one. In the British Museum Library, I came across a curious case of this kind which had considerably delayed the cataloguing of a certain book. The cover and the title-page had respectively the names *Srisaila Tatachari* and *Tirumalai Tattachari.* The difficulty was at once cleared when it was pointed out that the first was the Sanskrit and the second the Tamil form of the same name.

Transliteration

Transliteration of names occurring in scripts other than that officially adopted by the library is another source of trouble.

If the authors do not provide their own transliteration the library can adopt the standard one; but many authors give their own transliteration which is often different.

The title-page of this very book mentions two persons of the same name. But the second uses *u* and *dh* where the first has *a* and *th.* The second

transliteration was fixed more than fifty years ago, I gather, when no system was yet generally observed. But except for the absence of diacritical marks the first name agrees with the standard code approved by the International Congress of Orientalists. As a result of this difference the two names cannot be filed together. The *C. c. code* will copy the names as they appear on the title-page and will make up for the resulting dispersal by linking the standard form of the second name to that given on the title-page by a Cross Reference Index Entry. The *C. c. code* would defend such strict conformity to the Canon of Ascertainability as follows:

> "The cataloguer has no business to question the right of authors to [transliterate or even] mutilate their own names as they please. Any attempt to reconstruct the names of the authors so as to bring them into conformity with tradition or [standard codes] or philology or even semantics will be wronging the authors and will amount, in the long run, to courting chaos. Hence whatever the title-page gives as the name of the author must be faithfully followed in accordance with the rule."

Here are some examples not only of deviation from the standard form but of utter lack of consistency. Here the same name occurs in three different forms in as many books:

In the *Siddhanta-kaumudi* (1904) the name of one of the editors occurs as

Vâsudev Lakshman Shâstrî Pansîkar

But in the *Pandava charita* (1911) it occurs as

Wâsudeva Laxmana Shâstrî Panashîkar

And in the *Bhattikavya* (1928) as:

Wâsudev Lakshman Shâstrî Panśîkar

Cases like this no doubt make the *C. c. code's* unflinching loyalty to the Canon of Ascertainability appear most irritating.

Cutter provides two rules for meeting difficulties of this kind both of which slight the Canon of Ascertainability.

"38. When an author living in a foreign country has transliterated his name according to the practice of that country and always uses it in that form, take that as the heading, referring from the form which the name would have under Rule 37; but if he has written much in his own language, use the English transliterated form.

Ex. **Bikelas** Demetrius, with reference from **Vikelas,** Dmitri.

"39. If a name which would properly be spelled by the English alphabet has been transliterated into a foreign alphabet, refer from the foreign form.

Ex. **Sifner,** *See* **Schiefner."**

In its *Report* (1934)[1] the Library of Congress states:

"Since English is the only official language common throughout India, use of the individual transliterа-

1. P. 187.

> tions of personal names as favoured by the persons themselves seems legitimate for the modern East Indian writers, particularly for those writing in English or other Western languages."

This satisfies the Canon of Ascertainability by its conclusion while denying it by its method.

Surnames vs. *Forenames*

The name of a person seldom consists of a single word. In European names a combination of surname and forenames (Christian names) has been long established and except for occasional omission or contraction of forenames a consistent convention seems to be followed. Muslim names are of all the most profuse and difficult to manage: the *C. c. code*[1] isolates nine possible constituents. Other names come midway between modern European names and Muslim names in the problems they present to the cataloguer.

European Names

In Europe there is at present no struggle between surname and forenames. But the Canon of Prepotence was not so favoured in earlier centuries. In the early sixteenth century for example (when alphabetical arrangement first came into vogue) the entries in catalogues like those issued by the

---

1. Pp. 71-72.

Sorbonne were "arranged in alphabetical order of authors' Christian names". Again, Conrad Gesner, born at Zurich in 1516 and reputed to be the first universal bibliographer, arranged the entries in his *Bibliotheca universalis* alphabetically by Christian names of authors. But he seems to have vaguely sensed the Canon of Prepotence, for he also added a summary list of authors in which the names were inverted — a kind of cross-reference index.

So also Antonio Franceseo Doni's *La liburia* (1550) gave in its first part a list of Italian authors alphabetically arranged by their Christian names. The same was the case with the national bibliographies of France of that period. In Francois Grude de la Croix du Maine's *Premier volume de la bibliotheque* (1584) the entries were alphabetically arranged by the Christian names of authors but they were accompanied by an index of surnames.

The first catalogue to recognise the insistence of the Canon of Prepotence, that the word first written in a Name Entry should be that which occurs least frequently, *viz.*, surname, was Andrew Maunsell's *Catalogue of English printed books* (1595). This draper turned bookseller did not hesitate, though with all modesty, to throw overboard the system of "the learned men that have written Latin Catalogues". "They make their Alphabet by the Christian name", he writes, "I by the Sir name".

Thus forenames alone first held the field; then surnames came to be recognised as possible rivals and were accommodated in special indexes though not in the entries themselves; finally from the seventeenth century onwards, surnames ousted forenames everywhere except in the names of sovereigns and popes (vide *A. A. code* Rules 24, 31 and 32).

The Canon of Prepotence is justified in having secured this inversion of words in personal names in spite of the anomaly that the Library Catalogue thus reverses the order obtaining on title-pages and in general usage both in books and conversation. For its duty is to prevent diffusion of prepotence and have it concentrated in the Leading Section and even there in as few words as possible.

This does not however solve all difficulties connected with European names. Compound surnames, surnames with prefixes, compound forenames, unused forenames, and variation in the number of forenames are other complications.

Is it to be

(1) Carmichael (Amy Wilson—)
or Wilson-Carmichael (Amy)?

(2) Terra (Hellmut De)
or De Terra (Hellmut)?

(3) Martini (Giovanni Battisa)
or Martini (Giambattista)?

(4) Shaw (George Bernard)
or Shaw (Bernard)?

The *C. c. code* would leave all such problems to the Canon of Ascertainability, *i.e.* would follow the title-page and give Cross Reference Index Entries to make up for the resulting scattering of books by the same person. The *A. A. code* and Cutter give varying rules: they would follow the will-o'-the-wisp of usage, best known form and so forth in preference to the Canon of Ascertainability.

Names with Prefixes

We hope that the revised *A. A. code* will be able to offer greater respect to the Canon of Consistency and greater clarity in treatment of surnames with prefixes. For lack of local knowledge the *C. c. code* has virtually repeated the rules of the *A. A. code.*

Non-European Names

As modern cataloguing rules were all framed in Europe and America the "Surname tradition" has influenced treatment of non-European names as well. This has sometimes led to curious results. For example the *Catalogue* (1936) of the Library of the India Office uses such unnatural inversions as:

Aiyangar (Krishnaswamy S.)
Aiyangar (Ramaswami M. S.)

Aiyangar (Srinivasa V. V.)
Aiyar (N. Sankara)
Aiyar (Ramaswami, M. S.)
Aiyar (Ramanatha P. and Raghava P.)
Aiyer (Ramanatha P. and Ranganatha N. S.)
Mudaliar (Lakshmanaswamy A.)
Mudaliyar (Ramaswamy A.)
Sastri (Ramaswamy K. S.)
Sastriar (Ramaswamy K. S.)
Sastry (K. R. R.)

Any South Indian will see how wantonly the Canon of Prepotence has been overridden. Since in European names the last word is the prepotential one, the last words of other names also are without investigation taken to be prepotential.

Western cataloguers are confirmed in their mistake when an author like the last-mentioned K. R. R. Sastry on his title-page contracts the prepotential word of his name into an initial and favours the less potent patronymic 'Sastry', perhaps in imitation of what is apparent in European names.

The draft revised rules of the *A. A. code* kindly supplied to me by Mr. R. H. Gjelsnesa show the enormous amount of research that is being devoted to these questions. But local usage has a wide range of variation. Comparison of the discussion of Hindu and Muslim names in the *C. c. code*[1]

[1] Pp. 61-79.

with that given in the 1934 *Report*[1] of the Library of Congress will show how easily the real aspects of the case will be missed if local investigation is not made by joint committees of expert cataloguers and experts in cultural history and usage.

Perhaps the appeal of the *C. c. code*[2] may be quoted here:

> "It has been seen how the value and significance of the different words in a Hindu name varies in the different parts of India. It may not be easy for one, not acquainted intimately with Hindu culture, to evaluate them correctly. To secure uniformity of practice in cataloguing, a dictionary of names — personal names, caste names, house names, and all other kinds of patronymic names — is a great desideratum. It does not seem to have been yet attempted seriously. Perhaps, instead of one dictionary for the whole of India, it would be more convenient to have different dictionaries for the different linguistic areas, as the practices in different linguistic areas are different. Preparation of such a dictionary will be one of the most valuable pieces of work to be undertaken by the different provincial library associations. Perhaps the Indian Library Association...may take the initiative in the matter and induce the different provincial associations to proceed with the work along some standard lines. In this work the library associations may have to seek the help of other learned bodies interested in philological, historical and anthropological

[1] Pp. 186-187.

[2] Pp. 67-68 and 75.

studies. Perhaps, it may take long before the library associations of India attain sufficient maturity to take up that work. But there is one other agency which may interest itself in this. During the last ten years or so, increasing numbers of young men engage themselves in research work and prepare Doctorate Theses in the different Indian Universities. It would be quite fitting if those who guide such research work, start some young men on this problem. The work will require not only a systematic investigation of the records, printed books and manuscripts of the past but also a large amount of field work and personal enquiry. Universities will be making no inconsiderable contribution to scholarship and to efficient and uniform style of cataloguing if they direct their attention to this difficult piece of work.

"I have made out a case in the commentary to Rule 1212 for the need for research in Hindu names. I think there is even a greater scope for research in Muslim names. In addition to the intrinsic complexity of such names, there seem to be also some special features characterising Muslim names of different nationalities such as Spanish, Moorish, Turkish, Egyptian, Arabic, Persian, Afghan and Indian. The whole problem is bristling with difficulties and uncertainties. The present practice in libraries can at best be described as 'drifting'. The Osmania University and the Aligarh University will be doing a great service if they would set some young men on the investigation and systematisation of this problem and publish an authoritative dictionary of Muslim names."

Library Associations throughout the world should put their heads together and arrive at an agreed set of rules for the treatment of personal names. Such an international code is very necessary now-a-days when the libraries of almost every country have books by authors belonging to almost every one of the others. The co-operation instituted between Britain and America at the beginning of the present century should be made world-wide. There is ample evidence indeed that doing all it can, the *A. A. code* Revision Committee is to make its work cover every nationality. But I doubt if the task of finding the prepotential element in every kind of name can be accomplished without internationally co-ordinated local research along the lines outlined above.

Homonyms

Homonyms are a source of trouble in Name Entries. In the case of entries that have homonyms as headings, the Canon of Prepotence demands that the Heading be augmented so as to exhaust potency within itself. The revised form of Rule 37 of the *A. A. code* provides for this augmentation as follows:

> "40. *Dates and Designations.* Add dates of birth and death in the heading when they can be discovered with a reasonable amount of search.
>
> "41. Distinguish persons of the same name whose dates are not known by descriptive designations denoting profession, occupation *etc.*"

The *C. c. code* has virtually adopted this mode of individualisation, with the exception that the augmentation is to be made only if the catalogue actually presents homonyms. But the *A. A. code* has borne the Fifth Law in mind and made it obligatory to add these augmentations even in anticipation. In the 1908 edition this is made clear by the words

> "they should be added in the heading even if not necessary at the time for distinguishing persons of the same name".

Libraries that grow only slowly at a rate of, say, a few thousand accessions a year can have no idea of the rigour of the Fifth Law. They may feel that they can get on without propitiation of the Canon of Prepotence. But experience of the colossal rate of growth in some national, central and university libraries forces one to realise the prudence of following it even in anticipation.

Hindu Homonyms

A much more formidable legacy has fallen to the share of the Indian librarian. It is at once the prize and the penalty he has for the unique antiquity of his national culture, and for the extraordinary and unexampled productivity of his authorial ancestors even at the distant time, to which few other nations are able to trace their literary remains.

In a learned note on *Authorial polyonymy* and *homonymy in Sanskrit literature* contributed to the *C. c. code*[1] my esteemed friend Prof. S. Kuppuswami Sastri, perhaps the greatest living authority on Sanskrit bibliography, states:

> "One golden rule, however, which a librarian, who is concerned with the classification and cataloguing of any considerable collection of Sanskrit books, can easily remember and follow is — "*Refuse to be guided by mere names.*"
>
> "Polyonymous *aliases* and homonymous parallels are bound to cause even greater trouble and confusion in the sphere of library classification and cataloguing than in the investigation of crimes and settlement of legal claims. Longstanding usage established by reliable evidence is certainly useful to a considerable extent in helping one out of the difficulties in the former as in the latter. ... It would be certainly worthwhile for any institution intended for the promotion of culture to undertake the preparation of a concordance to authorial Polyonymy and Homonymy in Indian literature; and this would afford ample scope for intelligent, interesting and useful research for a number of scholars, for a number of years."

It is a matter for gratification that this suggestion is now being fulfilled largely by the University of Madras in its work on the revision of the *Catalogus catalogorum of Sanskrit works* and it is

[1] Pp. 118-112.

gratifying to find that this work is done under the direction of the learned professor himself.

Change of Name

Another vexatious factor in the choice of personal names is *change of name.* This factor accounts for two[1] of the six rules of *A. A. code* on which the American Library Association and the (British) Library Association could come to no agreement. As already shown in Chapter 41, another[2] of these six rules also relates to names, though of another kind.

Change of name is a fact external to the cataloguer; he has no control over it and can only face it. Meanwhile, rules that do not consciously recognise the canons can only divide these principles against themselves.

We might get over the difficulty by giving a regular entry under each of the names denoting the author. But this course is ruled out by the Law of Parsimony which will allow Regular Entry for one name only, the rest being related with it by Cross Reference Index Entries.

In choosing between several alternative names the *C. c. code,* as usual, gives the greatest weight to the Canon of Ascertainability. But the usual result also follows: scattering under different Headings of books by the same person.

---

[1] Rules 33 and 41. [2] Rule 121.

The *A. A. code* neglects the Canon of Ascertainability and seeks to assemble all books by the same person under one Heading. In choosing the name for this Heading the British practice is, as usual, to uphold the Canon of Permanence. And so the prescription is "Enter all books under the earliest name".

The American Library Association abandons even the Canon of Permanence and prescribes "Enter all books under the latest name". This may involve rewriting all old entries whenever an author changes his name. "Yes", says the American Library Association, "We know that is the penalty for flouting both the Canon of Permanence and the Canon of Ascertainability. But even at this cost we ought to give satisfaction to the Laws of Library Science!"

The results of these three different practices may be shown by an example. We have the following entries in the 1936 *Catalogue* of the India Office:

1. DUNDAS (Lawrence John Lumley) *1st Baron Ronaldshay*. India, a bird's eye view. 1924.
2. DUNDAS (Lawrence John Lumley) *2nd Marquess of Zetland*. Steps towards Indian Home Rule. 1935
3. RONALDSHAY (Lawrence John Lumley Dundas) *1st Baron. See* DUNDAS (L. J. L.) 1st Baron Ronaldshay.
4. ZETLAND (Lawrence John Lumley Dundas) *2nd Marquess of. See* DUNDAS. (L.J.L.) 2nd Marquess Zetland.

These entries conform to the British practice. According to the American practice both books will appear under Zetland and there will be one *See* Reference from Ronaldshay to Zetland. As he has not written any book under the name Dundas, no Cross Reference may be necessary from that name. According to the *C. c. code* the first book will appear under Ronaldshay and the second under Zetland and *See also* References will be provided from Ronaldshay to Zetland and *vice versa*.

To judge between these three practices (they are the only possible ones) we must invoke the aid of the Laws of Library Science. A reader is usually introduced to a book by a reference to it in conversation or print. The first book will usually be referred to as Ronaldshay's and the second as Zetland's. The Second and the Fourth Laws therefore favour the practice of the *C. c. code*. But the Third Law would prefer the American method. It might equally have approved the British practice if it were not that from the reader's point of view Dundas is 'unheard of'. But the Fourth Law would say: "Why should a reader seeking the first book and looking up 'Ronaldshay' have to spend time following a direction to Zetland? Even if but little actual time is wasted the psychological effect is adverse. Saving the time of the reader very largely means securing for him the most favourable psychological tempo".

The Third Law may ask "But how is a reader seeking the first book to be informed of the second?" The Fourth Law will say "The next entry will direct him to 'Zetland' for other books by the same author". But the Third Law may retort: "Is not this direction also a failure of psychological economy?". "Yes, perhaps it is. But in face of the Law of Parsimony we can't have it both ways. We must choose the lesser evil. If you prevail there is every chance of the reader's going away in disgust without having taken even the first book. But by the procedure of the *C. c. code* which satisfies both the Second Law and myself he is sure to arrive at the book he deliberately seeks and there is always the chance of his being a reader of the second book as well. Anyway, a bird in the hand is worth two in the bush".

52 CORPORATE NAMES

All the difficulties due to language, spelling, homonyms and change of name arise also in the case of Corporate Names and solutions of them are similar in the various codes.

A Classified Catalogue has the advantage in this matter. Its unflinching loyalty to the Canon of Ascertainability and strict adherence to the title-page does lead to less scattering of entries here than in the case of personal names. This is because most of the publications of Corporate Bodies are periodicals or serials which in the alphabetical part of the catalogue are given Epochal Class Index Entries and not Book Index Entries. This means that the Corporate Name Entries correspond with the *See* Reference Entries and not with the Author Entries of the Dictionary Catalogue. Each alternative name of a Corporate Body (whether due to linguistic causes or change of name) is thus treated in the same way; we avoid Dictionary Catalogue's need of singling out one of them for special treatment.

Moreover, as the Main Entry is a Class Number Entry in which the name of the author is impotent and as the Class Number of a publication is usually unaffected by changes in the name of the Corporate

Author, the Classified Catalogue is able completely to fulfil the Canon of Ascertainability by simply inserting a new *Continued Entry* for every change of name of the Corporate Author, as has been explained and fully illustrated in Part 4.

As the Main Entry in a Dictionary Catalogue is an Author Entry and since it is imperative that all volumes of a Periodical Publication be entered together, the Canon of Ascertainability has to be disregarded: one of the alternative names has to be singled out, however embarrassing it may be, for use in the Main Entry, the rest being relegated to *See* Reference Entries. This also has been explained and illustrated in Part 4.

Construction of the Name

We shall next deal with a fundamental difference between a personal and a corporate author. The former has a name of his own and the title-page gives it definitely. But the name of the latter may very often have to be constructed by the cataloguer.

Rule 123 of the *C. c. code* divides Corporate Bodies into four classes:

1. *Government*: A Government or a Local Authority or any of their parts;
2. *Institution*: Any other type of Corporate Body having continued existence and having functions beyond that of convening and holding periodic conferences;

3. *Conference*: Not of the members of any single Corporate Body of the first or second or fourth type, convened and held by a Body, which has no existence beyond the conference convened and held by it or whose primary function is only that of convening and holding such conferences periodically; and

4. *Dependent Body*: A Body including a Conference, constituent or subordinate to or created by or dependent on any Body of the first three types and whose existence is contingent on that of the parent Body.

Governments

Practically all the codes agree in regard to the first word in the name of a Government or any of its parts or departments. They all prescribe the name of the geographical area whose affairs are governed or administered by it. The *A. A. code* elaborates this fundamental idea in twelve rules and the *C. c. code* in sixteen. The specifications of the latter are more precise in several details. There is one point on which these codes differ. In writing the name of a department as sub-heading, the *A. A. code* recommends the writing of its words in the natural order; but the *C. c. code* recommends inversion:

"123142. The word or group of words in the name of the specific body indicating its sphere of work is to be written first and the other words in the name are to be added thereafter.

The following ten examples illustrate the selection of the prepotential word for inversion to satisfy this rule. Incidentally they will also show the detailed way in which this *Code* has dealt with this subject.

"*Examples*:

Madras. Instruction (Department of Public —).

United States. Education (Bureau of —).

Madras. Town-Planning (Director of —).

Madras. Educational (District — Officer). *Tanjore.*

Madras. Instruction (Deputy Director of Public —). *Finance.*

Madras. Instruction (Deputy Director of Public —). *Elementary Education.*

Madras. Girls' Schools (Inspectress of —). *First circle.*

Great Britain. Scottish Education (— department).

Manchuria. Finance (Department of —). General affairs. (Bureau of —).

Manchuria. Industry (Department of —). General affairs. (Bureau of —)."

It must be stated that the *A. A. code* records the adoption of the inverted form by many libraries and in the revised draft the use of such inverted forms for Reference Entry is indicated.

SOCIETIES AND INSTITUTIONS

The *C. c. code* designates them by the Common name *Institutions* and treats them alike. Its rules on the subject are:

"1232. If the Corporate Author is an Institution, the Heading is to consist of the name of the Institution in the shortest form found on the title-page, half-title-page, or any other part of the book and omitting honorific words and 'puffs' if any, at the end or beginning. If the Corporate Author is a department, division or subdivision of an Institution, the above Heading is to be used as the Main Heading.

"*Examples*:

INTERNATIONAL MARITIME ASSOCIATION.

LEAGUE OF NATIONS.

INDIAN MATHEMATICAL SOCIETY.

MADRAS MAHAJANA SABHA.

ASIATIC SOCIETY OF BENGAL.

SOUTH INDIA TEACHERS' UNION.

CAMBRIDGE PHILOSOPHICAL SOCIETY.

ROYAL SOCIETY OF LONDON.

REALE ACCADEMIA NAZIONALE DEI LINCEI.

MOUNT WILSON OBSERVATORY.

SAINT BARTHOLOMEW'S HOSPITAL.

TANJORE CO-OPERATIVE BANK.

EGYPT EXPLORATION FUND.

CARNEGIE INSTITUTION OF WASHINGTON.

UNIVERSITY OF MADRAS.

ANDHRA UNIVERSITY.

JOHNS HOPKINS UNIVERSITY.

MADRAS CHRISTIAN COLLEGE.

CHURCH OF ENGLAND.

BODLEIAN LIBRARY.

SARASWATI MAHAL LIBRARY.

RAMANUJAN MEMORIAL COMMITTEE.

SRINIVASA SASTRI ENTERTAINMENT COMMITTEE.

EUROPEAN COMMISSION OF THE DANUBE.

"123201. If the name of the Institution does not individualise it, the Heading is to be augmented by an individualising word or group of words added as a separate sentence and underlined. This is to consist of—

1. The name of its place if it is a localised institution; or
2. The name of the country to which the institution belongs, if it is a national body; or
3. The name of the province, district, taluk, state, country, or any such division of a country, if it is a provincial, etc., body; or
4. The name of its headquarters, if it cannot be individualised conveniently by 1., 2., or 3., above

"*Examples*:

INTER-PARLIAMENTARY UNION. *Geneva.*

PRESIDENCY COLLEGE. *Calcutta.*

PRESIDENCY COLLEGE. *Madras.*

HINDU HIGH SCHOOL. *Shiyali.*

HINDU HIGH SCHOOL. *Triplicane.*

UNIVERSITY COLLEGE. *London.*

YOUNG MEN'S CHRISTIAN ASSOCIATION. *Tanjore.*

National Gallery. *London.*

Chemical Society. *London.*

Dante Society. *Cambridge.* (*Massachusetts*)

Royal Observatory. *Greenwich.*

General Hospital. *Madras.*

Imperial Bank of India. *Calcutta.*

Theosophical Society. *Tanjore.*

but simply

Theosophical Society, *if the parent society is meant.*

National Research Council. *Japan.*

National Research Council. *United States.*

Democratic Party. *United States.*

Provincial Congress Committee. *Madras.*

Provincial Congress Committee. *Sindh.*

Justice Party. *Madras.*

International Association of Public Employment Services. *United States and Canada.*

Teachers' Guild. *Tanjore.*

Teachers' Guild. *Madras. City.*

Landholders Association. *Madras.*

Landholders Association. *Tanjore.*

Landholders Association. *Tanjore. Taluk.*

Ratepayers Association. *Mylapore.*

Ratepayers Association. *Triplicane.*

Inter-University Board. *India.*

Imperial Library. *India.*

Imperial Library. *Japan.*

Great Western Railway. *Great Britain.*

Great Western Railway. *United States.*

Stock Exchange. *Washington. D. C.*

Stock Exchange. *Montreal.*

Linnean Society. *London.*

Linnean Society. *New South Wales.*

Linnean Society. *New York.*

South India Association. *Calcutta.*

"123202. If individualisation is not attained by Rule 123201, the year of foundation may be given as a further individualising term written as separate sentence.

"*Examples*:

State Agricultural Society. *South Carolina.* 1839.

State Agricultural Society. *South Carolina.* 1855."

But the *A. A. code* distinguishes between *Societies* and *Institutions* as follows:

Societies

"Definition. A society is an organization of persons associated together for the promotion of common purposes or objects, such as research, business, recreation, *etc.* An academy is a learned society devoted to the cultivation and promotion of literature, of arts and sciences, or of some particular art or science.

"Specification. This section includes academies, associations, and societies of all kinds, scientific, technical, educational, benevolent, moral, *etc.*, even when strictly local or named from a country, state, province, or city; also clubs, gilds, orders of

knighthood, secret societies, Greek letter fraternities, Young men's and Young women's Christian associations, affiliated societies, political parties, religious sects, *etc.*, as distinguished from institutions (establishments).

INSTITUTIONS (ESTABLISHMENTS)

"DEFINITION. Institutions (establishments) are entities whose functions require a plant with buildings, apparatus, *etc.* as distinguished from bodies, organized groups of persons such as societies, associations, *etc.*, whose duties may be performed equally well in one place or another. The necessity of having a permanent material equipment tends to identify the institution with a locality.

"SPECIFICATION. This section includes colleges, universities, schools, libraries, museums, gallaries, observatories, laboratories, churches, cemeteries. monasteries, convents, hospitals, asylums. prisons, theaters, botanical and zoological gardens, buildings, *etc.*

"The designations academy, athenaeum, college, institute, lyceum, museum, *etc.*, and similar terms in other languages are used interchangeably for cultural associations and educational institutions; these are to be entered as societies or institutions according to the nature of their organization."

The basic rules for dealing with them are as follows in the revised draft of the *A. A. code*:

"3. GENERAL RULE. Enter a society under the first word (not an article) of its latest corporate name, with reference from any other name by which it

is known, and from the name of the place where its headquarters are established.

"If the name of the place does not appear in the corporate name, it is to be added in the English form and is to be printed in italics.

Academy of natural sciences of Philadelphia.
with reference from
Philadelphia. Academy of natural sciences.

Ateneo de Honduras, *Tegucigalpa.*
with reference from
Tegucigalpa. Ateneo de Honduras.

American academy of arts and sciences, *Boston.*
with reference from
Boston. American academy of arts and sciences.

College of physicians of Philadelphia.
with reference from
Philadelphia. College of physicians.

Royal college of veterinary surgeons, *London.*
with reference from
London. Royal college of veterinary surgeons.

Colegio de abogados de Lima.
with reference from
Lima. Colegio de abogados.

"35. GENERAL RULE. Enter an institution (using its latest name) under the name of the place in which it is located.

Boston. Public library.

Manila. Ateneo.
with reference from
Ateneo de Manila.

Philadelphia. Children's hospital.
with reference from
Children's hospital of Philadelphia.

Boston. Gwynne temporary home for children.
with reference from
Gwynne temporary home for children, *Boston.*

Gratz. Anna-kinderspital.
with reference from
Anna-kinderspital, *Gratz.*

London. St. Bartholomew's hospital.
with reference from
St. Bartholomew's hospital, *London.*

Paris. Musee national du Louvre.
with reference from
Musee national du Louvre, *Paris.*

Louvre, Musee national du, *Paris.*

Hamburg. Institut fur allgemeine botanik.
with reference from
Institut fur allegemeine botanik, *Hamburg.*

Louvain. Universite catholique.
with reference from
Universite catholique, *Louvain.*

Greenwich, Eng. Royal observatory.
with reference from
Royal observatory, *Greenwich.*

Kalocsa, Hungary, Haynald observatorium.
with reference from
Haynald observatorium, *Kalocsa, Hungary.*

"36. NAMES BEGINNING WITH A PROPER NOUN OR PROPER ADJECTIVE. Enter an institution of the United States or of the British empire whose name begins

with a proper noun or a proper adjective under the first word of its name and refer from the place where it is located. For other countries follow the general rule of entry under place.

"This exception has not been applied to hospitals and benevolent institutions nor to Carnegie, Passmore-Edwards, and similar public libraries which because of their number as well as the nature of their grants and endowments, tend to become better known, at least outside of their immediate neighbourhood, by the name of the city in which they are located than by their own name. Where only the building is a private donation, the library being otherwise endowed and supported by public taxation, the presumption is particularly strong in favour of entry under the place.

Harvard university.
with reference from
Cambridge, Mass. Harvard university.

Corcoran gallery of art, *Washington. D.C.*
with reference from
Washington, D. C. Corcoran gallery of art.

Smithsonian institution.
with reference from
Washington D. C. Smithsonian institution.

British Museum.
with reference from
London. British museum.

Carnegie institution of Washington.
with reference from
Washington D. C. Carnegie institution of Washington.

"Initials of personal names occurring at the beginning of the name of an institution are omitted, but forenames when given in full are included.

Smiley public library, *Redlands, Calif.*
with reference from
A. K. Smiley public library, *Redlands, Calif.*

Redlands, Calif. A. K. Smiley public library.

Redlands, Calif. Smiley public library.

Enoch Pratt free library, *Baltimore.*
with reference from
Pratt free library, *Baltimore.*

Baltimore. Enoch Pratt free library.

Brigham Young university, *Provo, Utah.*
with reference from
Provo, Utah, Brigham Young university.

"*Alternative.* Omit forenames when the name of an institution begins with a personal name.

Pratt free library, Baltimore.
with reference from
Enoch Pratt free library, *Baltimore.*

Baltimore. Pratt free library."

Is the Distinction necessary?

In the first place, the distinction is in many cases very difficult to recognise. A comparison of the definitions in Rules 1 and 33 quoted above will show that no difference is recognised in the *object* of

societies and institutions. The only distinguishing factor is stated to be:

> "The necessity for having a permanent material equipment tends to identify the institution with a locality".

But this tendency is overcome in many cases. Witness the transfer of the Agricultural College from Madras to Coimbatore; the Madras Christian College from Madras to Tambaram; the Engineering College from Madras to Guindy; and several institutions from Calcutta to Delhi. Again according to Rule 36 quoted above even this subtle factor of material equipment is to be overlooked and an Institution treated like a Society if its name begins with a proper name or an adjective derived from one. The second paragraph of Rule 35 is also significant. It appears from all this that the real factor behind the distinction is not 'material equipment' (which, by the way, a Society too must use to however small an extent), but the fact that many common institutions — like museums, churches, hospitals, zoological gardens — have no distinctive names. If this is recognised a simple solution in conformity with the treatment of Societies is ready to hand. These common institutions, at least in their locality, are simply called 'the Museum', 'the Church', 'the Hospital'. These names are sufficiently distinctive for their patrons. Then why not use them as the first words of their respective headings? Then like in all other homonyms

they may be augmented by individualising subheadings. The individualising element will evidently be the name of the appropriate geographical area and if that proves insufficient the date of foundation may contribute to an additional subheading. Thus the name of the locality will follow and not precede the name of the Institution. The value of this solution is recognised in the provision of Added Entries in the examples given under Rule 35 above.

It must next be asked "Is it necessary to use Place Name Entries even for Added Entries? Why should the contagion of Place Name Added Entries be allowed to infect even the case of Societies?". Is there really any substantial reason why this uniform treatment should not be adopted since it saves all the trouble and waste arising from a difference without a distinction and relieves the catalogue of quite a number of Added Entries? Of course there is the sentimental fascination of the old and familiar which would fain keep Cataloguers for ever under the spell of the tradition originated by the Italian who was made keeper of printed books in the British Museum Library in 1837. But surely a century of respect will suffice. Already even the British Museum is giving up Panizzi's hold-all "Academies". It requires only one additional step in the same right direction to strike out the name of the locality as well.

The wholesome reform in the cataloguing rules outlined above will lead to another benefit. We have already seen that all codes agree in making the name of the geographical area the prepotential (first) element in the name of a governmental author. It will surely be convenient if no other corporate body is allowed to compete with a government in being designated in this way.

53 SUBSTITUTES FOR NAMES

In the last chapter we saw how the name of the corporate author is to be improvised even though it is not explicitly given on the title-page. There may be books whose title-pages neither carry the name of a personal author nor permit improvisation of a corporate author. In such cases what should be the Heading for the Main Entry? Three possibilities may be distinguished.

Pseudonyms

Let us first consider the case when the title-page gives a pseudonym. In accordance with the Canon of Ascertainability the *C. c. code* prescribes adoption of the pseudonym for the Heading of the Main Entry and for the Author Index Entry. If the real name is known, it may be added within suitable enclosures in the Main Entry after the Pseudonym. It may also be used for Cross Reference Index Entry in the alphabetical part. The Pseudonym is to be the favoured name throughout.

But the *A. A. code* deliberately flouts the Canon of Ascertainability and degrades the pseudonym by making it change position with the real name wherever it is known. But it concedes retention of the pseudonym's privileged position "When the

writer habitually uses his pseudonym or is generally known by it" as in the case of George Elliot, thus flouting the Canon of Consistency as well.

All arguments used in discussing change of names apply here too. The *A. A. code* and the *C. c. code* differ about the relative priority of pseudonym and real name. But on the cataloguer's duty of unmasking the real name both *codes* are at one. The long twelve page commentary on the subject is proof of the earnestness of the *C. c. code*[1] in this matter.

Collaborator

If the title-page mentions neither personal name nor corporate author nor pseudonym, the *C. c. code* shows an unusual fondness for some personal name being used as the Heading and pleads for the name of any collaborator mentioned on the title-page to be allowed to function as Heading, qualified of course by an appropriate descriptive word. It is not easy to find a justification for this prescription either from fundamental principles or from tradition.

First Word of Title

Equally difficult to justify is the prescription of the *C. c. code* for cyclopaedias that the first word of their title is to be used as the Heading only for those that belong to the class Generalia or Science

[1] Pp. 106-118.

General or Useful Arts or Social Sciences. The *A. A. code* rightly prescribes uniform treatment for all cyclopaedias and dictionaries.

If even the name of a collaborator does not occur on the title-page of a book, the *C. c. code* prescribes entry under the first word of the title other than an article or an honorific. The *A. A. code* would adopt this procedure even in cases where the *C. c. code* prefers entry under a collaborator's name. When the name of the author can be discovered, because of their differing attitude to the Canon of Ascertainability the two *Codes* again part company, as in the case of pseudonyms, on the position of relative priority of this name over the first word of title.

But the advantage of using the first word of title as Heading is doubtful. It often happens that this first word is not the prepotential element in the title and is therefore not remembered by readers. Then the first word entry fulfils none of the Laws of Library Science. Why then should it be given? Is it merely for technical satisfaction of the cataloguer's conscience? There is evidence that Cutter sensed this. For at least he enunciates:

> "121. For Anonymous Biographies if the title mentions the subject of life, omit the title-entry leaving only the subject entry.
>
> "The word *subject* in italics should be added to the heading to show why the entry is made under it.

'The A.L.A. rules do not except anonymous biographies from the first word entry.

"On the other hand small catalogs have been in the habit of excepting 'anonymous works relating to a person, city, or other subject distinctly mentioned in the title, which are to be put under the name of the person, city or subject'. In the catalog of a larger library where more exactness ('red tape,' 'pedantry') is indispensable biography should be the only exception, the place of entry under subject and under large cities being too doubtful."

As if in deference to 'pedantry' Cutter allows first word entry but asks for a reference from some other word of the title:

"152. Make a subject-word reference—

For all anonymous works which admit of it to the first word.

"150. Make a catch-word reference or references — for all anonymous works which admit of it, if their subject does not appear distinctly from the title.

"Ex. Scarlet gowns, True and exact account of the. *See* True ...

"It is not easy to decide when to make such entries nor how many to make. 'An account to the baronial mansions of England in the olden time' may be asked for as 'Baronial Halls' or as 'English baronial halls' or perhaps 'Mansions of the olden time'. If references are made from all possible headings which might occur to an inaccurate memory, there will be no end to the catalog."

This commentary shows the difficulty of satisfying the Second Law when the title of an anonymous work is not distinctive. Perhaps it is only open access and classified arrangement that can help us here.

The apparently insoluble difficulty of anonymous works with merely descriptive titles has to some extent been responsible for the Cataloguer's need to erect an author image if the real man cannot be discovered. This accounts for the indefatigable energy put forth to find him out somehow and to compile dictionaries of anonyms; the conception of Corporate Author also to a great extent derives from this difficulty; it has also no doubt influenced the *C. c. code* to put up the name of collaborator or dedicatee as a candidate for Heading. But our German colleagues apparently get on quite happily without the help of corporate authors, in spite of Cutter's[1] bill of indictment:

> "If you want to find in Kayser's list of the books published in Germany in the last five years all the publications of a German learned body, you must look under Abhandlungen, Almanach, Annalen, Arbeiten, Archiv, Aufsatze, Beitrage, Bericht, Bibliothek, Bulletin, Centralblatt, Correspondenzblatt, Ephemeriden, Erlauterungen, Jahrbuch, Jahresbericht, Journal, Kalender, Magazin, Memoiren, Mittheilungen, Monatsblatt, Nachrichten, Preisschrift, Programm, Publicationen, Repertorium,

[1] P. 40.

Resultate, Sammlung, Schriften, Sitzungsbericht, Studien, Tageblatt, Tagebuch, Uebersicht, Verzeichniss, Versammlungen, Vierteljahrschrift, Vorlesungen, and Zeitschrift, because the works may be under any one of these; and if by racking your brain you remember all of them and have patience to look them all up you yet are not sure that there is not something important hidden away under some other word which you may think of when it is too late — Verhandlungen, for instance."

54 WHO IS THE AUTHOR?

This is usually taken as a primary question in cataloguing. Still we deal with it last in order to emphasise among other things that except in the case of classics and literature (where in any good scheme of classification each author is converted into a Class (subject) by himself) the subject is usually the prepotent factor in the reader's approach to a book.

According to Cutter[1] (and the *A. A. code* closely follows him):

> "*Author,* in the narrower sense, is the person who writes a book; in a wider sense it may be applied to him who is the cause of the book's existence by putting together the writings of several authors (usually called the *editor,* more properly to be called the *collector*). Bodies of men (societies, cities, legislative bodies, countries) are to be considered the authors of their memoirs, transactions, journals, debates, reports, etc."

The *C. c. code*[2] splits this definition into two parts:

> "Personal author.— A composer or writer of a book, the responsibility for its contents resting solely on him in his private capacity and not essentially on a corporate body or on his official capacity."

---

[1] P. 14. [2] Pp. 47 and 45.

"Corporate author.— A work is said to be of corporate authorship if the responsibility for its contents does not rest solely on a personal author or authors in their private capacity but rests essentially on a corporate body. The mere fact that a work is published or aided financially or approved or authorised by a corporate body is not sufficient reason to deem it to be of corporate authorship."

In the *Yearbook* (1938)[1] Wright says:

"It is the intellectual unit, the responsibility for which determines authorship. So long as the intellectual unit remains the same, all editions go under the original author. When the intellectual content suffers serious change a new entry is called for. When Shakespeare worked over a tale from Holinshed, he created a new intellectual unit. So does the person who takes the words actually used by Shakespeare and so rearranges them as to create a concordance. This search for responsible authorship explains the complexities of that nightmare of cataloguers, the rule covering the entry for European dissertations."

CONCORDANCES

On account of such an import of the term 'Author', and the clear basic rule for Author Entry as laid down by the *A. A. code*:

"1. *Author entry.* Enter a work under the name of its author whether individual or corporate,"

the Canon of Consistency naturally upholds the view of the American Library Association against

[1] P. 29.

that of the British Library Association embodied in Rule 16:

> "16. *Concordances.* Enter a concordance under its compiler with added entry under the author concordanced.
>
> Furness, Helen Kate (Rogers) 'Mrs. H. H. Furness.' A concordance to Shakespeare's poems: an index to every word therein contained by Mrs. Horace Howard Furness.
>
> Added Entry: Shakespeare, William — Concordances.
>
> "(British) Library Association Rule:—Enter a concordance under the author concordanced with added entry under the compiler."

Here, is the 'author' the writer whose works are concordanced or the "composer or writer" of the concordance? Does the "intellectual content" of the works of the author concordanced remain unchanged in the concordance? The intellectual content is surely inseparable from the arrangement of the words and ideas in a unique order so as to produce a desired effect. While the concordance may contain all these words it has permuted them beyond recognition; they have been completely dislocated from the emotional and / or intellectual organisation on which their force depends. Since this new arrangement produces an entirely different effect from that of the original one, it constitutes a new intellectual unit. The British Library

Association surely does not hold that the intellectual unity of the original persists in the concordance. If that were so the Canon of Consistency would be right in saying that the basic rule had been violated. Perhaps the whole thing is really a result of conflict between Author Entry and Subject Entry and of the anxiety to make the Entry function in place of classification (making it assemble not only the different forms of a literary unit but also all other distinct units depending on, derived from or related to it). If it is said that there was no intention to make it a Subject Entry the presence in the Heading of the name of the author concordanced is irrelevant and the Canon of Relevance stands violated.

The protest of the Canons of Consistency and Relevance will seem more justifiable if we examine the question from the point of view of the Classified Catalogue and this will also show more clearly how the functions of catalogue and classification have been confused. It will be realised that the principle that the literary unit rather than the individual book should determine the Heading has over-reached itself in this rule.

Personal vs. *Corporate Author*

The differences between Personal Author and Corporate Author are perhaps more clearly defined by the *C. c. code.* Nevertheless many ambiguous cases can still lurk between its two definitions. The

Canon of Ascertainability is put to great strain and fails first. The Canon of Consistency therefore also suffers.

A treatise by a full-timed salaried professor of a university is of Personal Authorship, although he produces it in his official time and as his sole official duty and the university publishes it at its own cost. But a report on the work of the Professor by a Review Committee appointed by the University is of Corporate Authorship. Even a report by the professor on the work of a research fellow of the university is of Corporate Authorship. Again, the annual report of the Director of an Archaeological Survey is of Corporate Authorship but a memoir by him on a particular find is of personal authorship though he produced both in his official time and as a salaried officer.

May we say that a work whose primary function is extension of the sphere of knowledge should be taken to be of Personal Authorship while a work limited by its administrative purpose, function and outlook is of Corporate Authorship? This certainly provides a sharper test. But cases may still arise which will evade it. For example in a speech delivered by a Prime Minister before a learned body the official administrative element and the element of personal research may be inextricably interfused. The annual presidential addresses of many learned societies are in fact of this baffling type.

While recognising the possibility of such insoluble cases we cannot call a Main Entry, an Author Entry at all, when it places my *Five laws of library science* under the Heading 'Madras Library Association'. Yet that is what one finds in the *Catalogue* (1936) of the India Office Library. Is the Heading the name of a Corporate Author? If not, what is it?

In the *Yearbook*[1] (1932) Hanson recommends preference of personal author in all doubtful cases and gives the following illustrations:

> "Mr. Hastings some months ago referred to me an entry which had been duplicated in printing because one issue emanating from the Library of Congress appeared under personal author, the second from the Geological Survey, being under the institution. It was quite obvious that this was a study to which the author, Lang, had given a great deal of his personal time. It was also clear from the character of the book and from the wording of the title that it would be referred to ninety-nine times under his name where it might be referred to once under the British Museum; therefore, we agreed that it should be reprinted under 'Lang' with added entry under the institution.
>
> "Mr. Hastings cites, also, the following case: Mr. Childs then Chief of the Documents Division, now

---

[1] Pp. 12-13.

of the Catalog Division, had compiled a publication on South American documents, the entry for which was made under his name and a card so printed. Leland Stanford Library thought it ought to be reprinted because it was clearly a Library of Congress publication. It was accordingly reprinted with the Documents Division as main heading. Later Mr. Childs on becoming Chief of the Catalog Division, noticed the entry and protested, saying it was in no sense an official publication. It was accordingly reprinted once more under the name of the personal author.

"A number of excellent illustrations can be found by cataloguers who have access to a set of the *Bulletin of the National Research Council.* Here the Library of Congress enters, under the person, scientific researches by individuals; under the National Research Council, with proper subdivisions, the reports and publications of its many committees, boards, or services."

Government vs. *Institution*

In what follows 'Institution' is taken in the sense defined in *C. c. code* and quoted in Chapter 52. It includes both 'Societies' and 'Institutions' as designated by the *A. A. code.* The conflict between Government authorship and Institution authorship is becoming more and more widespread and acute following the ever-increasing extension of the functions of the State. We find an extreme example in the U. S. S. R. Here, apparently all institutions are departments of Government and

there can be no corporate authorship that is not Governmental. Almost all Corporate Author Entries for the Russian books of a library will be at the Heading U. S. S. R. This Heading may therefore just as well be taken as understood. In other words it will be impotent and a mockery of the Canon of Prepotence.

In other countries also the State at least owns railways, banks, factories, marketing departments, power stations, museums, colleges, universities, research institutes and so on — a list as profuse as that of its own divisions (crown, executive, legislature, judiciary and various administrative departments).

The rules and examples of the *C. c. code* partly reproduced in Chapter 52 attempt to distinguish between divisions of Government and State-owned Institutions, the latter to be treated as Institutional and not Governmental Authors.

All this practice implies that bodies created by the State for the direct performance of its primary duties in newly appropriated spheres like education, research, religion, public utilities, commerce and industry are to be treated as institutions; while all the divisions of the State and bodies created by it whose function is mainly coordination, deliberation, legislation, adjudication and / or administration are to be treated as parts, departments, and dependent bodies of the Government.

The Revised Draft of the *A. A. code* has several rules explicitly implementing this practice:

"63. *Special local government districts.* Enter special local government districts for harbour control and development, power development and distribution, sanitation, irrigation, etc., under their own name rather than under the government creating them. (*cf.* Childs, pp. 108, 109).

Huston independent school district.

East Bay municipal utility district.

Mancomunidad hidrografica del Guadalquiver.

Chicago (Sanitary district).

"In cases where districts are generally known by the name of the authority or board in charge of them than by their own official designation, prefer entry under the governing body.

California toll bridge authority.

Port of New York authority *not* Port of New York district.

Dundee harbour trust *not* Harbour district of Dundee.

Junta de las obras del puerto de Santander.

Tennessee Valley authority.

"64. *Companies, etc.* Enter business corporations, etc., including those owned by governments under their names (*cf.* Societies, etc., 67) (Childs. p. 127)

British broadcasting corporation.

Home owners' loan corporation.

Canadian national railway company.

The implication of the *C. c. code* is explicitly stated by Childs[1]

> "In short, we may state that certain classes of institutions and bodies, maintained, controlled or owned by governments and not part of an administrative department or service, are ordinarily not to be entered under the name of governments as departmental subheadings. Rather these are to be treated according to the rules governing institutions and bodies. The following classes may be mentioned specifically:
>
> "Universities, colleges, schools, libraries, museums, galleries, observatories, agricultural experiment stations, hospitals, asylums, prisons, theaters, chambers of commerce, botanical and zoological gardens, banks, business corporations, churches, societies, etc.
>
> "On the other hand, legislative bodies, courts, executive departments, bureaus, boards, committees, etc., which are direct agencies of governments are to be entered under the names of governments as subheadings in the latest form and in the vernacular."

Here we fall back upon the primitive method of definition by enumeration, which will always be helpless to meet new situations effectively on their own terms. If they are to be met at all our definition must be a touchstone which applied to any corporate body old or new will at once determine whether it is government or institution. The profession must concentrate its attention on the search

[1] Pp. 106-107.

for such a dynamic definition. Without it the Library Catalogue cannot but tend in the long run to become a hotch-potch.

DEVIATIONS OF THE *A. A. code*

Charters

We saw in the *A. A. code* a case of deviation from the basic rule in the case of personal authors as applied to concordances. Such deviations occur in the use of corporate authors too. The *A. A code* says:

> "70. Charters.—Enter charters under the name of the country, state, city, or corporate body for whose benefit they are granted, with subheading *Charters*, and make added entry under the name of the sovereign power granting them.
>
> BALTIMORE. *Charters.* The new charter of Baltimore city. Published under resolution of the City council of Baltimore city, adopted April 25, 1898.
>
> Added entry: MARYLAND. *Statutes.*

Here too, as in the case of concordances, the deviation is due to conflict between Author Entry and Subject Entry. Either this charge or that of a violation of the Canon of Relevance will have to be faced by this rule. The author of the charter is certainly the Government of Maryland; Baltimore

merely forms the *subject* of the *charter.* The Author Entry must therefore be:

MARYLAND. The charter of Baltimore city.

and the Subject Entry must have the Heading

BALTIMORE. *Charters,*

if the Decimal Chain is used;

CHARTERS. *Baltimore,*

if the Colon Chain is used.

We may point out in digression here that according to the Decimal Classification all the Charters will be together on the shelves and arranged among themselves by cities. But the Subject Entry will scatter the charters by grouping together all entries (including charters) that concern a city. In the Colon Classification the result will be just the opposite: in either case shelf-arrangement and Subject Entries will be complimentary.

EXPEDITIONS

Prescription of the name of the vessel as a possible Heading for the Author Entry (*vide* Rule 111 (*b*) 4 of the *A. A. code*) is a deviation. Can a vessel be taken as a Corporate Body? No doubt an expedition may come to be known by the name of the vessel (as in the "Challenger Expedition"). The expedition being a corporate body its name can be used as a Heading but then the name of the vessel will appear not by itself as

CHALLENGER.

but in the setting

CHALLENGER EXPEDITION,

merely as an individualising adjective.

CIVIL ACTIONS AND CRIMINAL TRIALS

The *A. A. code*[1] provides for their being entered under the name of the party. In what sense is the party the author? Is it not more appropriate to regard the Court as the author? Here again the anomaly is due to conflict between Subject Entry and Author Entry and amounts to an offence against the Canons of Consistency and Relevance.

OTHER INSTANCES

The Revised Draft of the *A. A. code* offers further rules leading to such a dilemma. Revised Draft Rule 58 on Impeachment Trials, 59 on Court-martial and Courts of Enquiry and 60 on Admiralty Proceedings (relating to Government publications) are of this kind. Again we have:

> '29. *Laws of territories, dependencies, etc.* Enter the laws of states and territories, including dependencies, with or without a degree of autonomy, under the name of the jurisdiction or territory to which they apply, rather than under the name of the country or countries to whose sovereignty or suzerainty they have been successively subject and whose law-making or executive powers have pro-

[1] Rules 132 and 133.

mulgated the laws. Make added entry for the latter. (Childs. 119).

French Guiana. *Laws, statutes, etc.*

Ordonnance du roi, portant application du Code d'instruction criminelle a la Guiane francaise, Imprimerie royale, 1829. 32-16760.

1. France. *Laws, statutes, etc.*

This rule gives surely Subject Entry. The Author Entry should have at the Heading "the name of the country" whose law-making or executive powers have promulgated the laws." This unconscious conflict between Author Heading and Subject Heading that leads in any code of rules for Author Entries to violation of the Canons of Consistency and Relevance affects the case of Subheadings also. For example, Rule 62 of the *A. A. code* which deals with 'Laws' has this note:

"Headings are to follow the form prescribed in A. R. Hasse's 'U. S. government publications' *e.g.* U. S. *Statutes* rather than U.S.*Congress.*"

This is a definite regression from the correct style of Author Entry to that of Subject Entry. The wording of the Revised Draft confirms this in an outspoken way.

26. *Laws, statutes, etc.* Enter laws, decrees and other acts having the force of law under the country, state or other jurisdiction with the form subheading Laws, statutes, etc. (A.L.A. 1908. Childs 62.)"

The legitimate Author Heading is thus ousted by a Subject Heading. As a compensation for this, as it were, the next ruling is

> "Make general references from legislative bodies to the subheading *Laws, statutes, etc.*"

The 1908 edition of the *A. A. code* seeks to justify this deviation from the Canons of Consistency and Relevance in the following way:

> "Cutter, ... enters acts, laws, etc., under country or state, but with the name of the legislative body as subdivision, *e.g.* U. S. *Congress*; Great Britain. *Parliament;* Massachusetts. *General court.*
>
> "The latter plan offers an alternative which may be preferred by those who object to the subdivisions suggested under the main rule on the ground that they introduce form or subject entries into the author catalog. Libraries which have extensive collections of laws, particularly of foreign laws, will, however, find it simpler to follow the main rule. Attempts to arrange all legislative enactments of a country under the name of the legislative body or the ruling power, the names of which are in some countries subject to frequent changes, are likely to prove perplexing and unsatisfactory."

This preferred loyalty to nebulous principles like "simpler to follow" "more popular" etc. and the flouting of the Canons has been responsible not a little for the tendency in Library Catalogues to become in the long run a hotch-potch.

Another example of the invasion of Subject Entries into the Subheading region of Author Entries also comes from the *A. A. code*:

"68. Enter constitutions under the name of the country or state with subheading *Constitution.*"

Child's contribution is to remove all disguise from this capitulation of Author Entry to Subject Entry. The revised draft of this rule reads:

"35. *Constitutions.* Enter constitutions under the name of the country or state with the form subheading *Constitution.* Refer from country with subheading in the vernacular (L. A. 1908. Childs. 68).

South Africa. *Constitution.*
with reference from

South Africa act. 1909.

Gr. Brit. Laws, statutes, etc."

Now if the Chain Procedure is applied to find out the Specific Subject of the work under consideration the Decimal Chain will give for the Heading of the Specific Subject Entry just the very term

South Africa. Constitution.

If this is defended on the usual nebulous grounds the Canon of Relevance will have every right to protest: "An Author Entry is an Entry that has the name of the Author or at least no term not relevant to the specification of author as its Heading. 'Great Britain. Parliament' is by convention the

name of a Corporate Body functioning as Author. But what stretch of imagination or conventionality can look upon 'South Africa. *Constitution.*' as the name of a Corporate Body or Author?" The Canon of Consistency may well add with grim humour: "If you have made up your mind to have it that way, by all means have it. Only, don't call it a Rule for Author Entry. Call it by its right name — Rule for Subject Entry. Then I shall have no quarrel with it, nor will the Canon of Relevance."

PART 6

Odds and Ends

61 Physical Form

62 Co-operative cataloguing

63 Annotations

64 Alphabetisation and Gestalt Value

65 Summary and conclusion

61 PHYSICAL FORM

The book form of the Library Catalogue whether printed or manuscript has been made an anachronism by the Fifth Law.

Nearly a century ago Jewett wrote the epitaph of the printed catalogue in his address to a conference of librarians held at New York City:

> "While the catalogue of a large library is passing through the press, new books are received, the titles of which it is impossible in the ordinary manner of printing, to incorporate with the body of the work. Recourse must then be had to a supplement. In no other way can the acquisitions of the library be made known to the public. If the number of supplements be multiplied as they have been in the Library of Congress, the student may be obliged to grope his weary way through ten catalogues, instead of one, in order to ascertain whether the book which he seeks be in the library. He cannot be certain, even then, that the book is not in the collection, for it may have been received since the last appendix was printed. Supplements soon become intolerable. The whole catalogue must then be rearranged and re-printed. The expense of this process may be borne so long as the library is small, but it soon becomes burdensome, and, ere long, insupportable, even to national establishments.

> "There is but one course left — not to print at all. To this no scholar consents, except from necessity. But to this alternative, grievous as it is, nearly all the large libraries of Europe have been reluctantly driven."

India is now reputed to be the dumping ground for practices discarded elsewhere. Long experience in this direction has developed a special fascination for the antediluvian so that it is welcomed and fondled when it might otherwise have died a peaceful death. The printed library catalogue evidently belongs to this class. There may not be enough money to buy books, to maintain an adequate staff, to get the books better circulated and used, to extend the hours of the library or to light or furnish it attractively, but money is found, or rather whatever money there may be is diverted, to print or reprint the catalogue. Let us hope this will not continue for ever even in India.

The *Five laws* traces the evolution of the physical form of the Library Catalogue from the closely written bound book, through the interspaced and interleaved one, through paste-down form and the sheaf form to the present card form.

The pressure of the Fifth Law is not yet felt anywhere in India to the same extent as in Europe and America. Thus while most libraries still maintain their catalogues in the primitive book form and some even conspire to degrade more forward ones from the card stage they have

reached, even in the libraries that have adopted the modern form the rate of growth is by no means of the order that has become common in the West. The card catalogue is thus believed to be the last word in the physical form of the catalogue.

But several innovations are being attempted to improve the service (*e.g.*, visible index system like the Kardex) and here is a speculation bordering on realisation from the American *Yearbook* (1938)[1]:

> "Our largest libraries are experiencing trouble with card catalogues. The almost insoluble difficulties of filing five or ten million cards, and the ever-present threat of the wearing out of the cards in a catalogue of that size, are drawing attention again to the advantages of a printed book catalogue.... At present, however, the advances in the application of microphotography have made it possible that the complete catalogues of some of the big libraries may be reproduced on film and a card catalogue kept up for public use only for the most important works and recent accessions. Such a catalogue on film, since it depends on a master card catalogue, which would have to be kept up for future editions, would probably continue the present cataloguing tradition."

[1] Pp. 393-396.

62 CO-OPERATIVE CATALOGUING

As soon as a book comes out thousands of copies are distributed to as many libraries. Thousands of classifiers and cataloguers independently but simultaneously read, classify and catalogue it, solving all the incidental problems and wasting an equal amount of time and labour if the book is a refractory one. Taking the nation as a whole (not to speak of humanity as a whole!) what is the advantage in this multiplication of labour. The Law of Parsimony reminds the Canon of Consistency of the thousands of factors that tend to make a Library Catalogue a hotch-potch and asks whether uniformity will not be better secured by central cataloguing. America and Russia have long ago left the stage of speculation and have made co-operative cataloguing an accomplished fact. For most books they supply handsome printed catalogue cards at the very low prices possible only to large scale production.

But the task (and the cost) of indenting for these cards, rather modifies their advantage for the Law of Parsimony. It has been suggested that an extra copy of the order might be sent to the central agency. But very often all the books of an order are not available. Even those that are do not

arrive at the library simultaneously. And there are gift books.

There is no doubt that what has been achieved is a great improvement over what was proposed a century ago by Jewett, when the card form had not been conceived or was at least not widely adopted. In his paper *The Smithsonian Institution and its plan of cataloguing* read before a conference and published in *Library convention* in 1853 he said:

> "It is proposed to stereotype the titles separately, and to preserve the plates or blocks in alphabetical order of the titles, so as to be able readily to insert additional titles, in their proper places, and then to reprint the whole catalogue. By these means, the chief cost of republication (that of composition) together with the trouble of revision and correction of the press, would, except for new titles, be avoided. Some of the great difficulties which have so long oppressed and discouraged librarians, and involved libraries in enormous expenses, may thus be overcome."

His paper contained very detailed suggestions as to the part each participating library was to play and as to what the central agency should do. Unfortunately it was found impracticable. But the spirit behind it had been kept alive in America. As soon as the card catalogue had outlived the initial fear of loss and suspicion of pilferage by criminally minded librarians the Library of Congress made Jewett's dream a reality.

We in India have no practical experience of co-operative cataloguing. But I am unable to see what difficulty stands in the way of the Law of Parsimony being given the fullest benefit of the system in countries where it is practised by a scheme like the following:

(1) The publisher to send an advance copy of the proof of the book to the agency for central cataloguing;

(2) that agency to classify and catalogue the book;

(3) The agency itself to print the card and fix the number of cards that each book should have for what Cutter calls "Full", "Medium" and "Short" styles of cataloguing and stock the cards with the publishers;

(4) the cost of the cards to be included in the cost of the book if the buyer is a library; and

(5) the distribution of printed cards thus to be made automatic.

If such a co-operative system were adopted in each country we should automatically have achieved co-operative cataloguing for the whole world! Of course there is the conflict of Classification schemes and of Catalogue Codes. But any system of co-operative cataloguing presupposes agreement

here. The area covered by co-operation will therefore be automatically restricted by the progress of such agreement.

Once the Law of Parsimony had achieved such co-operative effort it would revise some of the practices it enforced in the days of manuscript and type-written catalogues. It may be remembered that in the first chapter out of deference to the old standard of economy an Added Entry was described as a briefer Entry. But if the card is to be printed, it will be more economical to make extra copies of the Main Entry for use as Added Entry. This can be done either by adding the appropriate Heading or simply by underlining the relevant word or words in the body of a copy of the Main Entry and they may then, for all purposes of arrangement, be deemed to have been projected to the Leading Section.

In the latter case the Canon of Prepotence will no longer be able to say that Potency is greatest in the first word. The word or words underlined will now have become most potent.

Of course the Canon of Currency will demur. But it can be satisfied by the central agency. Cards must be reprinted with the newly current terms and supplied to the libraries concerned or libraries must at least be advised of the changes to be made in their Entries. Otherwise the Canon of Consistency also will be violated.

The programme of co-operative cataloguing will thus involve maintenance by the Central Agency of a register of all participating libraries showing what books each library has or showing each book in a register of books with the names of the libraries that possess it — a union catalogue. But if they fulfil the Laws of Library Science effectively even apart from loss through fire, water, vermin and the book-thief, books cannot be permanent. When they are worn out they must be withdrawn. The central agency must be advised of such withdrawals and its registers corrected accordingly. There may be other similar extra routine. On this ground also central cataloguing is not a thing that can be introduced with a light heart.

63 ANNOTATIONS

When the title does not give an adequate or correct idea of a book a note of explanation becomes essential. In the Classified Catalogue the Class Number and the name of the subject or at least its prepotent part appears in guide-cards or in the corresponding caption of the printed catalogue. The need for annotation will therefore be far less than in a Dictionary Catalogue.

The size of the catalogue card which calls for economy of space, the cost of printing the catalogue which enforces the cutting down of words, the difficulty libraries have in finding staff-time to do the annotation consistently in all cases that warrant it and the open access system that turns away from the catalogue just the kind of people for whose benefit it is intended, militate against annotation in Library Catalogues. Annotation was probably the invention of the "salesmanship" phase in which the library profession, eager to perform this newly discovered third function, was however not yet able to remove the barrier between the reader and the stack room. If this is so, it is no wonder that annotation is slowly disappearing from the modern Library Catalogue, as open access advances.

But precisely this spirit of 'salesmanship' supports and practises annotation very freely in another place as one of the means of fulfilling the Third Law. That place is the periodical bulletins of new additions and the occasional bibliographical bulletins or special reading lists either in connection with some topic of the day or as guides to a course of reading in association with some extension activity such as lectures, study-groups or adult classes.

If the purpose is to popularise the library or "push" the use of books among children and adults who just emerge from illiteracy, pictorial annotations will be more effective than verbal ones. This would add artistic flair and skill to the many other qualities that the *Five laws* demand of an aspirant to a position in the Library.

Confining ourselves to verbal annotation, here are some don'ts:

(1) Don't merely paraphrase the title. It is redundant and in the long run brings annotation into disrepute;

(2) Don't multiply words. A lengthy annotation runs the risk of being left unread.

(3) Don't record your personal or critical opinion. Remember the *Prolegomena's* Canon of Reticence.

On the positive side what is to be expected in the annotation will depend on the nature of the library

i.e., on the qualifications of its patrons, apart from the general requirement that an oblique or fanciful title will have to be unmasked.

In a research library extracts from the conclusion or summary of a monograph will be useful. The extent of the bibliography embodied in the book, the line of approach if it is novel, the qualifications of the author if he is new will also be in place.

In a business library the number and quality of illustrations and diagrams, the extent of statistical information and the date to which it is brought and the amount of specialised knowledge (*e.g.* mathematical) that is presupposed will be of help.

A children's library calls for mention of the number of illustrations and particularly of full-page coloured ones, a stimulating statement of the theme of the book in a single short and simple sentence, the names of other books of the same author that are popular with children and, as already indicated, an arresting sketch.

In a public library an evaluation showing the scope of the book, the nature of its treatment (elementary or advanced, technical or popular), the position and repute of the author, the special features of the particular edition in the case of classics ancient or modern, backed by an extract from some authoritative review may help to find the book its reader.

64 ALPHABETISATION AND GESTALT VALUE

Arrangement is the very essence of a catalogue. In the alphabetical part of the Classified Catalogue and the entire Dictionary Catalogue it is largely a matter of alphabetisation. This would indeed seem as simple as a b c but it is not really so.

Trouble may arise even in the Entry word: as in

(1) Scottish names beginning with *Mac* and its abbreviated forms *Mc* and *M.* In the arrangement the abbreviated forms are treated as if written in full;

(2) Names beginning with *Saint* and its abbreviated forms *S. St.* and *Ste.* Here the latter forms are treated as 'Saint'; and

(3) Irish names with initial *O'* or other prefixes. Here prefixes are merged with the names.

Again there are German words spelt with *a, o* and *u* umlaut where the convention is to arrange them as if they were spelt *ae oe* and *ue.*

Sometimes the entire first word may have to be ignored, *e.g.* when it is a definite article or an

honorific like the '*Sri*' in Indian usage. It must be remembered however, that titles like *Sribhashyam* the well known philosophical classic are exceptions.

When we pass beyond the Entry Word, many difficulties are still in store. For definiteness let us concentrate on a particular Entry Word, say MADRAS and follow the prescription of the *C. c. code* with a few modifications rendered necessary by the following analysis:

(1) The Leading Section will not contain any other word if it represents the name of the Government of Madras as a Corporate Author.

(2) But it will be followed by

(*a*) the conjunction '&' if it is the name of a Joint Governmental Author;

(*b*) the name of a constitutional limb like 'Governor' 'Legislative Assembly', 'High Court' written in block letters as a separate sentence if it represents that limb as Corporate Author;

(*c*) the word *City* in italics written as a separate sentence, if it represents the Municipal Corporation of Madras as Corporate Author;

(*d*) the forename in circular brackets *e.g.*, (Henry) if it is the name of a person;

(*e*) some individualising number or term or both written in italics after a comma if it is the name of a monarch or pope or saint;

(*f*) the name of a subject written as a separate sentence in block letter italics (*e.g.* MADRAS. *HISTORY*) if it is used as a Specific Subject Heading with an Individualising Subheading;

(*g*) the name of a common subdivision written as a separate sentence in ordinary hand if it is used as a Specific Subject Heading with a Common Subdivision Subheading;

(*h*) the word (*First word*) or (*Pseud.*) written in italics and enclosed in brackets after a comma if it is a First-word-of-title Heading or Pseudonym Heading;

(*i*) some other word in block letters if it is the first word in the name of an institution or conference functioning as Corporate Author;

(*j*) some other word written in block letters if it is used as a Specific Subject Heading representing a subject whose name begins with 'Madras' (*e.g.*, 'Madras terrace' recognised in engineering as a special kind of roof. Again 'Madras handkerchief'); and

(*k*) some other word in block letters if it is the first word of the name of a Series.

(3) Again in case it is the name of a person there will be no other word beyond the forename in the Leading Section if it is the name of a Personal Author with competing homonym.

(4) But it will be followed by

(*a*) some individualising number (say dates of birth and death) or individualising term written within brackets as a separate sentence if it is a homonym;

(*b*) by some descriptive word like *Ed.*, *Tr.* and *Comp.* written in italics as a separate sentence, if it is the name of a Collaborator;

(*c*) by the conjunction '&' if it is the name of a Joint Personal Author without homonym;

(*d*) by the name of a common subdivision written as a separate sentence in ordinary hand if it is used as a Specific Subject Heading with a Common Subdivision Subheading.

Along with these varieties, we should also consider

(*a*) words whose first six letters are 'Madras' (*e.g.*, 'Madraspatam')

(*b*) a compound word (hyphenated or not) whose first constituent is 'Madras' (*e.g.*, Madras-eye).

How are all the entries with the same entry word to be arranged among themselves? We may distinguish two phases in this problem:

(1) Deciding the result to be achieved *i.e.* the particular order that will be most helpful to users of the catalogue. This may be called the *legislative phase*; and

(2) The actual filing work automatically producing the result decided upon. This may be called the *executive phase.*

Let us consider the eighteen Entries indicated above. Here they are:

1. MADRAS.
2. MADRAS & MYSORE.
3. MADRAS. HIGH COURT.
4. MADRAS. *HISTORY.*
5. MADRAS. Bibliography.
6. MADRAS. *City.*
7. MADRAS. (*Pseud.*)
8. MADRAS. *Saint.*
9. MADRAS (Henry).
10. MADRAS (Henry) & SMITH (John).
11. MADRAS (Henry). Biography.
12. MADRAS (Henry). *Ed.*

13. MADRAS (Henry), (1800-1900).
14. MADRAS CHRISTIAN COLLEGE.
15. MADRAS EDUCATIONAL SERIES.
16. MADRAS TERRACE.
17. MADRAS-EYE.
18. MADRASPATAM.

SOME POSSIBLE ARRANGEMENTS

Several possible results may be arrived at in arranging these eighteen Entries.

For example:

(1) All the Entries may be arranged strictly by the alphabet ('All through' arrangement) ignoring

(*a*) Spaces between words, sentences or paragraphs;

(*b*) Style of writing whether it be ordinary hand, italics, block letters, or block letter italics;

(*c*) Punctuation marks.

(*d*) Other signs like hyphens and brackets.

In this case the filing clerk needs no special instructions; the brackets and variation in style of writing mentioned above may in fact be omitted altogether from the Entries themselves.

Filing may indeed be easy; the resulting arrangement will, however, be a most revolting hotch-potch. Perhaps there is no cataloguing code that has prescribed such an arrangement.

(2) Whe have at the other extreme the overdoing of systematic arrangement so as to make it a regular classified arrangement. For example, Sharp[1] would have

CHEMISTRY. General. *precede*
CHEMISTRY. *Analysis.*

Cutter would give up alphabetisation in arranging the titles under a given author but would have the order:

"326 (1) Complete (or nearly complete) collections;
(2) Extracts from the complete collections;
(3) Single works, whether by him alone or written in conjunction with another; and
(4) Works about him."

(3) Almost all codes favour a middle course—a less severe systematic arrangement. The Entries may be arranged, for example, so as to group together

(*a*) Names of governments;
(*b*) Names of institutions;
(*c*) Personal names;
(*d*) Names of subjects; and
(*e*) Names beginning with 'Madras' but continuing beyond these six letters.

CANON OF CONSISTENCY

Filing work is usually given to beginners or even non-professional clerks. Even if an abler man is

[1] P. 154.

put in charge of this mechanical work the Canon of Consistency may well feel alarmed if he is obliged to read through every entry to find the category to which it belongs. The task will be as exacting, wasteful and impracticable as that of arranging books in a classified subject order when they are assigned no Class Numbers. We have stated elsewhere that progress in profitably applying classification to books was made possible only after Dewey had introduced the use of ordinal numbers to represent classes. I believe that the question of alphabetisation also can be satisfactorily settled only if the concept of 'ordinal values' is applied to it. I give here a tentative solution using such a concept.

LEGISLATIVE PHASE

In the legislative phase of the problem we decide exactly what we require and devise the necessary symbols and styles of writing that the desired order may be automatically produced by mechanical arrangement according to the prescribed values of the symbols and styles.

The construction of Class Numbers in Classification work has made us familiar with the distinction between the absolute value and the place value of symbols. Indeed the genius of Dewey consisted in harnessing the decimal place values of numbers to the service of classification.

But the needs of classification are satisfied with the place values of symbols and do not need to ex-

plore the new values obtainable by variation in the styles of writing.

USE OF GESTALT VALUE

In cataloguing the writing itself is predominantly important. Since variation in style of writing is so commonly recognised, one is led to examine why it should not be exploited — why we should not vary the value of combinations of letters and of words according to the style of writing and perhaps also according to the way in which they are combined. It would be well to have a distinctive name for the value thus obtained. We may perhaps call it the *Gestalt Value,* since it depends upon the pattern that an entry presents.

ITEMS TO BE GIVEN VALUE

In such a scheme we would recognise value in the space left blank between

(*a*) words;

(*b*) words separated by a comma;

(*c*) sentences; and

(*d*) paragraphs.

Using the terminology of printers and typists we may call them respectively

(*a*) word space;

(*b*) comma space;

(*c*) sentence space; and

(*d*) paragraph space.

The solution that I am working out as a tentative model next requires that the conjunction 'and' should be treated not as a word but as a symbol. This will be facilitated by representing it by the usual symbol '&'. Further the space before and after it should be ignored.

Hyphenated words are to be treated as if written continuously.

Further six styles of writing are needed:

(1) Block letters;

(2) Block letter italics;

(3) Ordinary small letters, including only the capitals required by prose usage. This will hereafter be called *Ordinary Hand;*

(4) Italics;

(5) Ordinary hand in brackets; and

(6) Italics in brackets.

A SPECIMEN ARRANGEMENT

The eighteen specimen Entries already collected present all these features in the style of writing. Suppose we want them to remain in the order already given. The chief features of that order are that the following groups are formed and arranged as follows:

(1) Government Corporate Entries;

(2) Specific Subject Entries involving the whole Province Madras;

(3) Municipality Entries;

(4) Forename Entries;

(5) Surname Entries;

(6) Other Entries where the name begins with the word 'Madras' whether they be names of Corporate bodies or series or subjects; and lastly

(7) Words which merely contain M, a, d, r, a, s as their first six letters.

SCALE OF GESTALT VALUES

Gestalt Values arranged in an ascending scale give the following sequence:

(1) Paragraph space;

(2) '&';

(3) Sentence space;

(4) Comma space;

(5) Word space;

(6) Word in ordinary hand in brackets;

(7) Word in italics in brackets;

(8) Word in block letters;

(9) Word in block letter italics;

(10) Word in ordinary hand; and

(11) Word in italics.

1, 3 and 5 represent the 'nothing before something rule and the principles of 'paragraph before word' and 'section before paragraph' of the *C. c. code.*

The usual rule about the homonymous words and phrases, which is so difficult to apply, has here become unnecessary.

EXECUTIVE PHASE

This scale of Gestalt Values read with the eighteen examples will easily give the required rules for style of writing. If these rules are carefully framed and if the cataloguer follows them the work of filing the catalogue cards or arranging the catalogue entries (the executive phase of the problem) will have become fool-proof. Of course the public must get accustomed to this scale of Gestalt Values. But this is true for every method for arrangement. For there can be no such thing as natural order among entries.

MISSING LINK

I do not offer this as the only solution or a final solution. My object is only to indicate an effective method of handling the problem — of providing the missing link between its legislative and executive phases. If the aim is to get the Entries grouped in any other way and the groups themselves arranged in any other order this can be fulfilled by another suitable set of symbols and styles of writing with an appropriate scale of Gestalt Values. Now alphabetisation is not the concern of cataloguers only. The very public that uses the catalogue has also to use alphabetical arrangement in dictionaries, cyclopaedias, directories, year books,

indexes of books and so on. No doubt much will be gained if we can arrive at a common solution of the problem of alphabetisation applicable to all such cases. The Committee engaged in revising the *A. A. code* has often been appealed to face this problem and give a ruling. As a tool that will lead to a helpful division of labour between the legislative and the executive phases of the problem and thus make alphabetisation more uniform, more efficient and less prone to lead to a hotch-potch, I commend to that Committee the concept of Gestalt Value.

65 SUMMARY AND CONCLUSION

1. A Library Catalogue is essentially a tool. In form and detail it should be designed for efficiency. Its function is to help exploitation of the resources of the library in conformity with the Laws of Library Science. This implies that it must be of the 'One Book, Many Entries' type. In order to humanise the catalogue several types of entries have to be evolved. This in the long run tends to make the catalogue a hotch-potch. These matters are dealt with in the first four chapters (01-04).

2. To resist this tendency towards inconsistency a library should faithfully follow an adopted code and cataloguing codes themselves should conform to certain fundamental principles.

These are:

1-5. The Five Laws of Library Science;
6. The Law of Parsimony;
7. The Canon of Consistency;
8. The Canon of Relevance;
9. The Canon of Ascertainability;
10. The Canon of Permanence;
11. The Canon of Currency; and
12. The Canon of Prepotence.

These have been enunciated in Chapter 05 and used throughout the book in developing theory and examining existing codes.

A PSEUDO-PRINCIPLE

It must be stated however that a hypothetical 'man in the street' has been long preventing the catalogue from following sound principles. This must be resisted. It must be remembered that books are not natural objects, but altogether artificial. The Library Catalogue that is chiefly concerned with them, and the arrangement of their entries, cannot but be artificial. No one therefore need expect to understand their arrangement without initiation.

Over half a century ago Cutter warned the library profession against the evils of capitulation to the man in the street:

> "The objections to certain features of the catalogue entry are not real, but fanciful. The reader is at first frightened by the appearance of a system to be learned, and perversely regards it as a hindrance instead of an assistance. But if any one has a rooted aversion to certain items and features of the catalogue, let him disregard them altogether and read the entry as if they were not there, leaving them to be of service to wiser men."

If Hanson and Mudge feel the need for repeating this even to-day it is evidently because the Library Catalogue is not yet fully emancipated from this

corrupting pseudo-principle. The *Yearbook* (1932)[1] gives their appeal:

> "I hope — we reference librarians hope — that there will be no compromise or let-down in the direction of popularization of entries with a view point of getting some appeal over to persons who do not know how to use the catalogue. Catalogues have to be technical. People have to learn to use them. Why spoil headings and make them less logical and systematic so that somebody will not have to use his brain? Right headings are not thought of naturally".

The man in the street is concerned only with the result, he does not and need not know how it is arrived at. It is for the person who knows, whose technical province it is, to show him how to use it. The man in the street is not consulted in the construction of a train though it is entirely designed for his use and convenience.

HOLISTIC PRINCIPLE

It should also be remembered that there is now-a-days division of function between Classification, Catalogue, Reference Service, Stack-room Guides and Open Access. The Library Catalogue need no longer delude itself that it alone is solicitous for the man in the street. It must be prepared to share its solicitude with the other factors of the library. Thus its own efficiency and the very justification of its individuality depend upon flexi-

[1] P. 19.

ble co-operation with them and a holistic view of library organisation.

Sharpen the Definitions

3. Another cause of inconsistency is lack of sharp definitions. Although we may first define tentatively by enumeration only definitions embodying dynamic principles can maintain consistent coherence. It is terms that may occupy the Leading Section of entries that are in need of attention. They are:

1. Specific Subject;
2. Collateral Subject;
3. Author;
4. Personal Author;
5. Corporate Author;
6. Government;
7. Institution;
8. Conference; and
9. Dependent body.

1 and 2 have been defined in Chapter 11, 3 to 9 in Chapter 52. Accepted definitions should be strictly adhered to.

Chain Procedure

4. A case has been made out in Chapter 11 for the need for invoking the aid of a scheme of classification in determining the Specific Subject of a book.

For this purpose a Chain Procedure has been indicated and a model code of rules for it has been given. Use of the same procedure for the determination of *See Also* Reference Entries has been explained in Chapter 14. The Discovery of a similar objective procedure is still to be made in the case of Collateral *See Also* Reference Entries.

5. The long drawn out controversy between Dictionary Catalogue and Classified Catalogue is largely due to the false position given to the man in the street. Chapter 15 concludes that the difference between the two kinds of catalogue is not so great as this false issue would make it appear.

Illustrative Application

6. By way of illustration the twelve fundamental principles are applied in Parts 2 and 3 to the simple problems of Series Entries and Analytical Entries and in Part 4 these principles are applied to a comparative study of different codes of cataloguing rules for Periodical Publications.

Study of the *A. A. code*

7. Critical study of some of the controversial rules of the *A. A. code* is the chief aim of Part 5. The merging of 'Societies' and 'Institutions' is advocated. The need is pointed out for further research for discovery of a dynamic definition for Corporate Authors. Certain rules are shown to lead to Subject Entries instead of Author Entries, quite against the avowed purpose of the *Code*.

Gestalt Value & Alphabetisation

8. Chapter 64 of this Part develops the concept of the Gestalt Value of items in an Entry. This is shown to help in the linking up of the legislative and the executive phases of alphabetisation and towards securing a closer observance of the Canon of Consistency.

Classified *vs.* Dictionary Catalogue

9. (*a*) It is shown that the Classified Catalogue is in effect the Dictionary Catalogue with a single but very helpful modification.

(*b*) The advantage of the Classified Catalogue is due to its superior capacity for satisfying all the fundamental principles:

(i) Its Main Entry being a Call Number Entry satisfies the Canon of Prepotence so thoroughly that in the matter of arrangement all other parts of the Entry become absolutely impotent.

(ii) This result makes it possible for its Main Entry to observe the Canon of Ascertainability to the fullest possible extent.

(iii) Periodical publications and anonymous classics whose Author-headings are subject to change are assembled together automatically by the occupation of the Leading Section of the Main Entry by the more stable Call Number, with the

least violence to the Canons of Consistency, Ascertainability, Permanence and Currency.

(iv) The Card Technique for Periodical Publications is much simpler and satisfies the Law of Parsimony and the Canon of Permanence more completely than that of the Dictionary Catalogue.

(v) It has been said that a vital desideratum in cataloguing is that the literary unit rather than the individual book should determine the Main Entry. In other words the Library Catalogue should be armed with a device by which the Main Entries for all forms and variants of a literary unit and for all other literary units depending on, derived from or related to it may cluster round the Main Entry of the literary unit itself in a helpful filiatory order. A kind of Gestalt treatment is demanded for each literary unit. In the present state of our knowledge there is no Entry other than the Call Number Entry that can effect this without violence to the Canons of Consistency, Relevance, Ascertainability, Permanence, and Currency, and the accepted definitions of different kinds of Entries. And Call Number Entries belong to the Classified form of Catalogue.

(vi) It exploits the very sequence of Main Entries without the need for any Additional Entries to fulfil the functions of the *See Also* Reference of the Dictionary Catalogue more neatly

and effectively. This again more completely satisfies the Law of Parsimony.

(vii) It escapes the Dictionary Catalogue's embarrassing task of singling out one of many alternative names of authors and subjects for special treatment; and treating them all alike, it more completely satisfies the Canon of Consistency.

(viii) The irresistible tendency visible

even in the most authoritative Lists of Subject Headings for a Dictionary Catalogue to introduce systematic arrangement of headings in preference to the strictly alphabetical one which is their badge

and even in the most authoritative code for Author-entries to introduce Subject Headings to the exclusion of Author Headings,

gives unmistakable evidence of the fact that the rational mind prefers systematic arrangement of the Main Entries to their alphabetical dispersal. In other words, the Classified Catalogue is the norm towards which there is a natural pull. This tendency is supported by the Laws of Library Science.

(ix) Printing of the catalogue in book form in defiance of the Fifth Law misdirects funds that are needed to increase the stock of books. By its very nature the Library Catalogue is out of date even before it issues from the press. Demand for it depends only on a habit formed before the First and the Fifth Laws of Library Science were recognised and which should be corrected in the reader's

interest. — If in spite of all this a printed catalogue is enforced *ex cathedra* the Classified Catalogue will minimise though it does not eliminate its evils, whereas the Dictionary Catalogue may even aggravate them.

A Historical Accident

(*c*) Then why is the Dictionary Catalogue tolerated, adopted, advocated and (by some even) enforced and perpetuated? Because it has on its side all the advantages of temporal seniority. Before Dewey's invention and popularisation of a hospitable notation systematic arrangement usually wrecked itself like a rudderless vessel. Alphabetical dispersion seemed preferable to such a wreckage. When the Dictionary Catalogue therefore established itself the giant libraries of to-day were only pigmies and our present innumerable pigmies were yet unborn. At that time, for example, the Congress Library, which though perhaps only second largest in size is now most potent in its influence on library practice in the world, had but a few thousand volumes. Even the British Museum did not yet possess its great rotunda and forty-nine of its fifty miles of books were yet to be added. The Dictionary Catalogue had become a settled fact before these vast libraries had grown to serious dimensions. And they had become giants before the invention of a safe, stable and workable method of systematic arrangement

had definitely established the possibility of a Classified Catalogue. Meanwhile Public Habits had been formed by the Dictionary Catalogue. Thus psychological factors (even among members of the profession), financial difficulties, the prohibitive labour involved and deluded consideration of the man in the street stand four square against attempts to change over to the classified form from the settled fact of the dictionary form.

REFORM

But optimism is the keynote of modern librarianship. And unsettlement of settled facts is the outstanding phenomenon in history. This should fill it with hope, courage, strength and will to go ahead with the reform of the Library Catalogue.

By changing it rests.

Heraclitus

Ever becoming, ever new.

Rgveda

नवो नवो भवति जायमानः ।

ऋग्वेदः

INDEX.

i.r.t. = in relation to
q.i.r.t. = quoted in relation to
r.i.r.t. = referred in relation to

A. A. Code—*See* American Library Association & (British) Library Association. *Catalog rules, author and title entries.*

Added entries—Defined, 19. Elements for the leading section, 32. Illustrated, 37-41. Periodical publications, 269-274. Series entries, 207.

Adjective *vs.* noun—*i.r.t.* Specific subject entries, 134-137.

'All through' alphabetisation, 359.

Alphabetical catalogue—Defined, 32. Nature of main entry, 43.

Alphabetico-classed catalogue—Defined, 33. Discussed, 179-181.

Alphabetico subject catalogue—Defined, 32.

Alphabetisation and gestalt value, 354-366.

Alternative names of subjects—Formula, 141, 142. *i.r.t.* Subject entries, 138-143.

American Library Association—*i.r.t.* Canons of currency and permanence, 68. Change of name, 297-298. Concordances, 324.

—— *List of subject headings for use in dictionary catalogues*—
q.i.r.t. Collateral references, 172. Common sub-division headings, 104. Compound subject names, 137. Compound words, 132. Conflict of spellings, 131-132. Lower link references, 170-171. Singular *vs.* plural, 133-134. Subject *vs.* place, 84. Sub-headings for local collections, 150-152. Upper link references, 162-163.
r.i.r.t. Camouflage in syndetic arrangement, 179. Combined terms, 138. *See also* references, 173. Syndetic *vs.* systematic arrangement, 176-177. Synonyms, 138-139.

—— & (British) Library Association.—*Catalog rules, author and title entries.*—
q.i.r.t. Arrangement of series entries, 210. Author entries, 324. Canon of ascertainability, 63-67. Charters, 333. Composite books, 218. Concordances, 325. Conflict of place-names, 128. Constitutions, 338. Expeditions, 334. Governments *vs.* institutions, 329, 331. Homonyms, 294, 295. Language and spelling of names, 281-283. Laws of territories and dependencies, 335-337. Series entry *vs.* editor of series entry, 206-207. Societies and institutions as corporate authors, 308-314.

American Library Association & (British) Library Association.—*Catalog rules, author and title entries. Contd.*—
r.i.r.t. Change of names, 297, 298. Compound surnames, 290. Corporate names, 303, 304. Court martial, 335. Courts of enquiry, 335. Definition of author, 323. First-word-of-title entry, 319. Impeachment trials, 335. Names with prefixes, 290. Non-European names, 291. Pseudonyms, 317, 318. Series entry *vs.* editor-of-series entry, 205. Surnames *vs.* forenames, 289.
—— Revision Committee—Appealed to *i.r.t.* Gestalt value in alphabetisation, 365-366.
Amplifying subheading in specific subject entries defined by colon chain, 118.
Analytical approach to names of entries, 41-53.
Analytical entries—Defined, 44. Discussed, 217-236. *i.r.t.* Periodical publications, 272-273. Illustrated, 39, 220, 222.
—— *vs.* lower link references, 171.
Anglo-American code—See American Library Association & (British) Library Association. *Catalog rules, author and title entries.*
Annotations, 351-353.
—— *See also* Pictorial annotations.
Anonyms, Dictionaries of—, 321.
Arnett (L.D.) & Arnett (E.T.). *Readings in library methods.*—*q.i.r.t.* Definition of subjects in library catalogues, 192-193. Lower link references, 171-172. Selective cataloguing, 57-58.
Arrangement of series entries, 210-211.
Ascertainability, Canon of—*See* Canon of ascertainability.
Author—Defined, 323-324.
Author analytical entries—Discussed, 217-222. Illustrated, 39, 220, 222.
Author catalogue—Defined, 33.
Author entries—Defined, 46. Illustrated, 37, 39.
Author entries *vs.* subject entries.—
i.r.t. Charters, 333. Civil actions and criminal trials, 335. Concordances, 326. Constitutions, 337-338. Laws of territories and dependencies, 335-337.
Author entry for Government publications—See Childs (James B.). *Author entry for Government publications.*
Authorial polyonomy and homonymy in Sanskrit literature—*q.i.r.t.* Hindu homonyms, 296.

Basic phase, 115.
Bias phase, 115.
Biassed chain, 115.
Bibliographical catalogue—*See* Descriptive catalogue.

Bibliographical records—*i.r.t.* Shortening of main entry, 27.
Bibliographies— *i.r.t.* Pitfall in choice of subject headings, 107.
Bibliography, practical, enumerative, historical— r.i.r.t Catalogue *vs.* bibliography, 236.
Bibliography *vs.* catalogue—Discussed, 232-236.
Bibliophile's load—*i.r.t.* Library catalogue, 27.
Bibliotheca universalis—r.i.r.t. Name entries, 288.
Biographies—*i.r.t.* Pitfall in choice of subject headings, 107-108.
Book *vs.* literary unit, 325-326.
Book entries—Defined, 49. Illustrated, 40.
Book index entries—Defined, 46-47. Illustrated, 37-39.
British Library Association—
r.i.r.t. Canon of permanence, 68. Change of names, 297-298. Definition of library, 26. Concordances, 325.
British Museum catalogue—i.r.t. Conflict of languages, 126.
British Museum Library—*r.i.r.t.* Names of societies and institutions, 315.
—— *Subject index—r.i.r.* Alphabetico-classed catalogue, 179-180.
Brown (James Duff)—*q.i.r.t.* Local collections, 153.
Brown university library—*r.i.r.t.* Selective cataloguing, 59.
Business libraries—*i.r.t.* Annotations, 353.

C. C. Code—See Ranganathan (S.R.), *Classified catalogue code.*
Caliban, 232.
Call number entries—Defined, 43.
i.r.t. Gestalt treatment of main entries of literary units, 373. Illustrated, 37. Subject entries, 154-155.
Camouflage—In dictionary catalogue, 188. In syndetic arrangement, 177-179.
Canon of—
Ascertainability—Discussed, 62-67.
i.r.t. Alphabetical-classed catalogue, 179. Alternative names, 143. Change of name, 297-298. Collateral link references, 173. Composite books, 218. Compound surnames, 290. Conflict of place-names, 128. Corporate name entries, 301, 302. Deriving classified catalogue from dictionary catalogue, 189. Language and spelling of name entries, 278-287. Lower link references, 169, 170. Main entries of classified catalogue, 372, 373. Person *vs.* place, 91. Personal *vs.* corporate author, 327. Pseudonyms, 317. Series entry *vs.* editor-of-series entry, 207. Singular *vs.* plural, 133-134. Subject *vs.* place, 82-83. Synonyms, 145. Transliteration of personal names, 284-287.
Common sub-divisions—*i.r.t.* Form headings *vs.* divisions, 101.

Canon of—(*Continued*).
Consistency—Discussed, 60, 61.
i.r.t.—Alphabetisation, 361. Alternative names of subjects, 143. Arrangement of series entries, 210. Author entries *vs.* subject entries, 339. Composite books, 218. Concordances, 325-326. Constitutions, 339. Co-operative cataloguing, 346-349. Doublets, 141. Events *vs.* place, 93. Main entries of classified catalogue, 372-373. Person *vs.* place, 91. Personal *vs.* corporate author, 327. Place-names, 127-128. Pseudonyms, 318. *See* reference entries, 124. Series entry *vs.* editor-of-series entry, 207. Singular *vs.* plural, 133. Subject *vs.* place, 83. Synonyms, 145-146.
Context—*i.r.t.* Definition of subjects in library catalogues, 193. Form headings *vs.* form divisions, 100.
Currency—Discussed, 68-70.
i.r.t. Co-operative cataloguing, 349. Main entries of classified catalogue, 372. Stages of language, 129.
Distinctiveness—*i.r.t.* Form headings *vs.* form divisions, 102.
Enumeration—*i.r.t.* Definition of subjects in catalogues, 193.
Permanence—Discussed, 67-68.
i.r.t. Alternative names of subjects, 143. Card technique for periodical publications, 372, 373. Change of name, 298. Deriving classified catalogue, 189. Main entries of classified catalogue, 372, 373. Series entry *vs.* editor-of-series entry, 205. Synonyms, 145.
Prepotence—Defined, 75. Discussed, 70-75.
i.r.t. Author analytics, 220. Call number entries, 372. Classified catalogue *vs.* dictionary catalogue, 372. Connecting element in series entries, 211-213. Co-operative cataloguing, 349. Editor-of-series entry, 214. Governments *vs.* institutions, 330. Hindu names, 291. Homonyms, 295. Main entries of periodical publications, 239, 240, 241. Name entries, 278. Name entries with European names, 287-289.
Relevance—Discussed, 61-62.
i.r.t. Author entries *vs.* subject entries, 338, 339. Call number entries, 373. Charters, 333. Concordances, 326. Constitutions, 338, 339. Main entries, 373.
Reticence—*i.r.t.* Annotations, 352.
Card technique for periodical publications—251-268, 372.
Catalogers' and classifiers' yearbook—
1932—*q.i.r.t.* Classified catalogue *vs.* dictionary catalogue, 194-196. 'Man in the street' bogey, 369. Personal *vs.* corporate author, 328-329.
1934—*q.i.r.t.* Analytical entries, 233, 234. Classified catalogue *vs.* dictionary catalogue, 183. Law of parsimony, 55-56. Shortening of main entries, 27-28.

Catalogers' and classifiers' yearbook. Contd.—
r.i.r.t. Canon of currency, 70. Local collections, 153.
1936—*q.i.r.t.* Catalogue *vs.* bibliography, 234. Omission of series entries, 208,209.
1938—*q.i.r.t.* Definition of author, 234. Physical form of library catalogue, 345. Shortening of main entries, 28.
r.i.r.t. Subject entries, 79.
Catalogue—Defined, 19.
See also Alphabetical catalogue. Alphabetico-classed catalogue. Alphabetico-subject catalogue. Author catalogue. Bibliographical catalogue. Classified catalogue. Descriptive catalogue. Dictionary catalogue. Inventory catalogue. Library catalogue. Name catalogue. Personal catalogue. Pure classified catalogue. Types of catalogue.
—— *vs.* bibliography, 232-236.
Catalogue of English printed books—q.i.r.t. Name entries, 288-289.
Catalogue of the Library of the India Office—*See* India Office Library. *Catalogue.*
Cataloguing, a text book for use in libraries—See Sharp (Henry A.). *Calaloguing.*
Catalogus catalogorum of Sanskrit works—r.i.r.t. Hindu homonyms, 296.
Chain procedure—Defined, 86, 114-118, 165.
i.r.t. Author entries *vs.* subject entries, 338. Common subdivision headings, 103-106, 114-118. Event *vs.* place, 93. Lower link references, 169. Noun *vs.* adjective, 135-136. Person *vs.* place, 87-90. Subject *vs.* place, 95-97. Upper link references, 164-165.
Independent of language, 148-149.
Mentioned, 370.
Special rules for colon chain, 114-118, 165.
Change of name—
i.r.t. Name entries, 297-300. Series entry *vs.* editor-of-series entry, 205.
Characteristic division entries—Discussed, 155-161. Illustrated, 37-38.
Charters, 333-334.
Children's libraries—*i.r.t.* Annotations, 353.
Childs (James B.). *Author entry for government publications—q.i.r.t.* Constitutions, 338. Government *vs.* Institutions, 332.
Constitutions, 338.
Class index entries—Created by law of parsimony, 55.
i.r.t. function, 155. *See* reference entries, 155.
Illustrated, 37-39.
Classic phase, 115.
Classification—*i.r.t.* Dictionary catalogue, 122.

Classified catalogue—Defined, 34. Entries illustrated, 36-39. Equated with dictionary catalogue, 189-190.
i.r.t. Canon of prepotence, 74. Corporate name entries, 301-302. Gestalt treatment of main entries, 373. Kind of main entry, 43. Language and spelling of name entries, 278-279. Periodical publications, 239-243. *See also* reference entries, 373. Subject entries, 154-161.
—— *vs.* dictionary catalogue—Discussed, 174-198. Summarised, 372-376.
i.r.t. Annotations, 351. Financial difficulties, 375. Historical setting, 375. Labour of changing over, 375. 'Man in the street' bogey, 182-183, 369-371. Melvil Dewey, 375. Number and functions of entries, 52-53. Periodical publications, 247-250. Printed catalogue, 374. Psychological factors, 375. Public habits, 375.
Classified catalogue code—*See* Ranganathan (S.R.). *Classified catalogue code.*
Cloud, last—*See* last cloud.
Collaborator—*i.r.t.* Name entries, 318.
Collaborator entries—Defined, 46.
Collateral link reference entries—Defined, 51. Discussed, 172-173.
Colon chain—*i.r.t.* Charters, 334. Common subdivision headings, 105. Literary criticism, 120. Upper link references, 165. Special rules for—, 114-118, 165.
Columbia university—*i.r.t.* Law of parsimony, 55-56.
Combined terms—*i.r.t.* Specific subject entries, 138.
Common subdivision subheading in specific subject entry defined by colon chain, 118.
Common subdivisions, as the equivalent of form divisions—102.
Complex chain, 114.
Composite book defined, 217.
Compound chain, 114.
Compound subject names—*i.r.t.* Specific subject entries, 136-137.
Compound surnames—*i.r.t.* Name entries, 289.
Compound words—*i.r.t.* Specific subject entries, 132-133.
Concordances, Headings for,— 325-326.
Conflict of—Alternative names, 138-149. Headings, 123-153. Languages, 124-128. Noun and adjective, 134-137. Singular and plural, 133-134. Spellings, 130-133. Stages in the same language, 128-130. Synonyms, 138-140.
Confucius—*q.i.r.t.* Introduction, 12.
Congress classification—*i.r.t.* Collateral link references, 173.
Congresses—*i.r.t.* Pitfall in choice of subject headings, 107-108.
Connecting element in series entries, 211-213.
Consistency, Canon of—*See* Canon of consistency.
Contributor entries—Illustrated, 39.
Co-operative cataloguing, 346-350.
Corporate author—Defined, 324.

Corporate author *vs.* personal author, 326-329.
Corporate authorship, origin of—, 321.
Corporate names—*i.r.t.* Name entries, 301-316.
Court-martial, 335.
Courts of enquiry, 335.
Cranshaw (J.). *q.i.r.t.* Selective cataloguing, 58-59.
Cross reference entries—Illustrated 39-40.
Cross reference index entries—Created by law of parsimony, 55.
Described, 47-48. Illustrated, 38.
Currency, Canon of—*See* Canon of Currency.
Cutter (Charles A.)—
q.i.r.t. Alphabetisation, 360. Dictionary catalogue *vs.* classified catalogue, 197-198. 'Man in the street' bogey, 368.
Cutter (Charles A.).—*Rules for a dictionary catalog*—
q.i.r.t. Alternative names of subjects, 143. Canon of ascertainability, 63. Canon of consistency, 60. Catalogue *vs.* bibliography, 235. Collateral link references, 172. Common subdivision sub-headings, 103. Composite books, 217-218. Compound subject names, 136. Conflict of languages, 127-128. Conflict of place-names 127-128. Definition of author, 323. Event *vs.* place, 91. First-word-of-title entry, 319-320. German treatment of anonymous books, 321-322. Kinds of alphabetical catalogue, 32-33. Language and spelling of name entries, 279-281. Lower link references, 169-170. Person *vs.* place, 88-89. Popular *vs.* technical terms, 147-148. Shortening of main entries, 28-29. Specific subject, 85. Specific subject entries, 87. Stages in language and place-names, 130. Subject analytics, 223-224. Subject *vs.* place, 81, 93-94, 95. Syndetic arrangement, 168-169. Syndetic *vs.* systematic arrangement, 174. Synonyms, 144,145, 146. Transliteration of names, 286. Upper link references, 162.
r.i.r.t. Compound surnames, 290. Doublets, 140-141. Noun *vs.* adjective, 135. Pyramid of references, 166. Syndetic arrangement, 167.

Deceptive title—*i.r.t.* Pitfall in choice of subject headings, 108-109.
Decimal chain—
i.r.t. Charters, 334. Event *vs.* place, 93. Person *vs.* place, 87. Subject *vs.* place, 95-97.
Decimal classification—*i.r.t.* Collateral link references, 173.
Degenerate chain, 114.
Definitions—*i.r.t.* Library catalogue, 370.
Dependencies, Laws of—*See* Laws of territories and dependencies.
Derived composite terms *vs.* fundamental constituent terms, 157-158.

Descriptive catalogue—Defined, 20. Entry described, 21-23. Ghost of—, 27. Origin of—, 24.
Details of main entry—*See* Main entry, shortening of—.
Dewey (Melvil) *i.r.t.* Classified catalogue *vs.* dictionary catalogue, 375. Ordinal value in arrangement, 361.
Dictionary catalogue—Defined, 33. Entries illustrated, 39-41. Equated with classified catalogue, 189-190.
i.r.t. Canon of prepotence, 74. Classification scheme, 122. Corporate name entries, 301-302. Language and spelling of names, 278-279. Main entries, 43. Periodical publications, 243-250.
—— *vs.* Classified catalogue. *See* Classified catalogue *vs.* dictionary catalogue.
Doni (Antonio Francesco). *La liberia. r.i.r.t.* Name entries, 288.
Doublets—*i.r.t.* Specific subject entries, 141-143.

Editor entry *vs.* series entry, 201-209.
Editor-of-series entry—Defined, 47-48. Discussed, 213-214. Illustrated, 38-40.
Encyclopedias—*i.r.t.* Pitfall in choice of subject headings, 107-108.
Entries—Defined, 19.
—— *See also* Added entries. Analytical entries. Author analytical entries, Author entries. Book entries. Book index entries. Call number entries. Characteristic division entries. Class index entries. Collaborator entries. Collateral link reference entries. Contributor entries. Cross reference entries. Epochal entries. First-word-of-title entries. Index entries. Label entries. Lower link reference entries. Main class entries. Main entries. Name entries. Names of entries. *See also* reference entries. *See* reference entries. Series entries. Specific subject entries. Subject analytical entries. Subject entries. Subject reference entries. Translator entries. Upper link reference entries.
Epochal entries—Illustrated, 38.
Epochal phase, 115.
European names—*i.r.t.* Name entries, 287-290.
Event *vs.* place—*i.r.t.* Specific subject entry, 91-93.
Executive phase of alphabetisation—Defined, 358.
Expeditions, 334-335.

False link, 115.
Favoured language—*i.r.t.* Conflict of languages, 125.
Fifth law of library science—As a guiding principle, 54.
i.r.t. Analytical entries, 232-234. Homonyms, 295. Printed catalogues, 343, 374. Physical form of library catalogues, 344-345.
First law of library science—As a guiding principle, 54.
i.r.t. Printed catalogue, 374.

First-word-of-title entries—*i.r.t.* Name entries, 318.
Five laws of library science—See Ranganathan (S.R.). *Five laws of library science.*

Forenames *vs.* surnames— *i.r.t.* Name entries, 287-294.
Form headings *vs.* form divisions, 98-106.
Form phase, 114.
Formula for alternative names of subjects, 141-142.
Fortesque (G.K.).—*r.i.r.t.* Alphabetico-classed catalogue, 179-180.
Fourth law of library science—As a guiding principle, 54.
i.r.t. Catalogue *vs.* bibliography, 235-236. Change of name, 299-300. Deriving classified catalogue from dictionary catalogue, 190-191. Label entries, 274. Person *vs.* place, 90. Subject analytics, 226-230.
Fundamental constituent terms *vs.* derived composite terms, 157-158.

German words—*i.r.t.* Alphabetisation, 354.
Gesner (Conrad). *Bibliotheca universalis—r.i.r.t.* Name entries, 288.
Gestalt treatment of main entries of literary units, 373.
Gestalt value of the items in entries—Defined, 362.
i.r.t. Alphabetisation, 354-366. Introduction, 15. Ordinal scale, 364.
Governments—*i.r.t.* Name entries, 303-304.
—— *vs.* Institutions, 329-333.
—— *vs.* Societies and institutions, 316.
Grude (Francois), *Premier volume de la bibliotheque—r.i.r.t.* Name entries, 288.
Guide to Kulchur—r.i.r.t. Introduction, 12.
Guide to the cataloguing of the serial publications of societies and institutions. See Pierson (Herriet Wheeler).
Guiding principles—Discussed, 54-75. Summarised, 367.

Hanson (J.C.M.).—*q.i.r.t.* 'The man in the street' bogey, 369.
Harvard University Library—*r.i.r.t.* Selective cataloguing, 57.
Heading of specific subject entry—Defined by colon chain, 117. Discussed, 123-153.
Heraclitus—*q.i.r.t.* Reform of library catalogue, 376.
Hindu homonyms—*i.r.t.* Name entries, 295-297.
History—*i.r.t.* Pitfall in choice of subject headings, 106-107.
Holistic view—*i.r.t.* Classified catalogue, 160-161. Library organisation and library catalogue, 368.
Homonyms—*i.r.t.* Name entries, 294-297.
Horace—*q.i.r.t.* Humanising the library catalogue, 24.
Hyde (Mary E.).—*q.i.r.t.* Lower link references, 171-172.

Impeachment trials, 335.
Index entries—Illustrated, 37-39.
India—*i.r.t.* Printed catalogues, 344.
India Office Library. *Catalogue—q.i.r.t.* Non-European names, 290-291.
r.i.r.t. Author heading, 328.
Individualising subheading defined by colon chain, 117, 118.
Initial articles and honorific words—*i.r.t.* Alphabetisation, 354.
Institutions *vs.* Governments, 329-333.
Introduction to cataloguing and the classification of books—*See* Mann (Margaret). *Introduction to cataloguing and the classification of books.*
Inventory catalogue—Defined, 20. Entry described, 21-23. Origin of—, 25.
Inventory outlook—*i.r.t.* Selective cataloguing, 59.
Inverted headings—*i.r.t.* Camouflage in a dictionary catalogue, 177-179, 188. Compound subject names, 136-137.
Irish names—*i.r.t.* Alphabetisation, 354.

Jewett (C.C.).—*q.i.r.t.* Printed catalogues, 343-344.
—— *The Smithsonian Institution and its plan of cataloguing*—*q.i.r.t.* Co-operative cataloguing, 347.

Kardex, 345.
Kinds of library catalogue—*See* Library catalogue, Kinds of—
Kuppuswami Sastri (S.). *Authorial polyonomy and homonymy in Sanskrit literature*—*q.i.r.t.* Hindu homonyms, 296.

La liburia—*r.i.r.t.* Name entries, 288.
Label entries—Defined, 48. *i.r.t.* Periodical publications, 273.
Language—*i.r.t.* Name entries, 278. Subject entries, 124-128.
Language of subject headings—*i.r.t.* Chain procedure, 148-149.
Last cloud in dictionary catalogue *vs.* classified catalogue, 193-196.
Last effective link, 117.
Last rule of interpretation—*i.r.t.* Specific subject entry, 95.
Law of Parsimony—Discussed, 54-59.
i.r.t. Alternative names of subjects, 142, 143. Arrangement of series entries, 211. Author analytics, 221. Card technique for periodical publications, 372, 373. Catalogue *vs.* bibliography, 234-236. Change of name, 297. Characteristic division entry, 156-157. Composite books, 218. Co-operative cataloguing, 346, 348-349. Deriving classified catalogue from dictionary catalogue, 189. Editor-of-series entries, 214. Label entries for periodical publications, 273-274. Local collections, 153. Lower link references, 169-170. Noun *vs.* adjective, 134. Omission of series entries, 207-209. Person *vs.* place, 88, 89, 90, 91. *See also* references 162-163. *See* reference entries, 124.

Series entries, 202-205. Sequence of main entries in classified catalogue, 373. Subject analytics, 230-231. Subject *vs.* place, 81, 94. Syndetic arrangement, 167-168. Synonyms, 144-147. Upper link references, 166-167.

Laws of library science—Enunciated, 54.
i.r.t. Change of name, 298-299. Composite books, 217. Co-operative cataloguing, 350. First-word-of-title entries, 319. Omission of series entries, 207-209. Selective cataloguing, 59. Series entries, 202-205. Subject analytics, 224-231. Systematic arrangement, 374. Upper link references, 163.
See also First, Second, Third, Fourth and Fifth laws.

Laws of territories and dependencies, 336-337.
Leading section—Defined, 31. Added entries, 32. Of main entries, 31. Of main entries of periodical publications, 239-250.
Legislative phase of alphabetisation,—Defined, 358. Discussed, 361.
Library—Defined, 25-26. To be humanised, 25-26.
—— *See also* Business libraries. Children's libraries. Manuscript libraries, Public libraries. Research libraries.

Library catalogue—Defined, 21. Kinds of—, 31-34.
i.r.t. Annotations, 351-353. Bibliophile's load, 27. Co-operative cataloguing, 346-350. Function, 367. Holistic view of library organisation, 160-161, 368. Main entries described, 21-23. 'Man in the street' bogey, 368-369. Nature discussed, 19-26. Origin, 25-26. Physical form, 343-345. Salesmanship phase, 351. Sharp definitions, 370. To be humanised, 24-26. Types of—, 20. Varieties and style, 23-24. Victorian sense of value, 26.
—— Reform of—, 376.
Library convention—q.i.r.t. Co-operative cataloguing, 347.
Library journal—q.i.r.t. Selective cataloguing, 57-58.
Library of Congress—*i.r.t.* Co-operative cataloguing, 347. Rule about title page, 65-67.
—— *Report—q.i.r.t.* Transliteration of name entries, 287.
r.i.r.t. Hindu and Muslim names, 292.
—— *Subject headings—*
q.i.r.t. Compound subject names, 137.
r.i.r.t. Camouflage in syndetic arrangement, 179. Combined terms, 138. Syndetic *vs.* systematic arrangement, 176-177.

Library of the India office. *Catalogue—See* India Office Library. *Catalogue.*
List of subject headings for use in dictionary catalogs—See American Library Association. *List of subject headings for use in dictionary catalogs.*
Literary unit *vs.* individual book, 325-326.

Local collections—Defined, 150. Discussed, 149-153.
Lower link reference entries—Defined, 51. Discussed, 169-172.

Main class entries—Illustrated, 38.
Main entries—Defined, 19. Elements for the leading section, 31. Illustrated, 36, 37, 39. Kinds of—, 41, 43. Shortening of—, 27-30. Varieties of style, 23.
'Man in the street' bogey—*i.r.t.* Classified *vs.* dictionary catalogue, 182-183. Library catalogue, 369-371.
Mann (Margaret). *Introduction to cataloguing and the classification of books.*
q.i.r.t. Collateral link references, 173. Combined terms, 138. Form headings *vs.* form divisions, 98-99. Omission of series entries, 208. Singular *vs.* plural, 133. Subdivision of headings, 119-120. Subject *vs.* place, 82, 96. Synoptic *vs.* systematic arrangement, 175, 177-178. Upper link references, 163-164.
r.i.r.t. Alternative names of subjects, 139. Inverted headings, 136.
Manuscript libraries—*i.r.t.* Descriptive catalogue, 24.
Maunsell (Andrew). *Catalogue of English printed books*—*q.i.r.t.* Name entries, 288-289.
Missing link in alphabetisation, 365.
Monumenta Asiae Maioris antiqua—*r.i.r.t.* Subject *vs.* place, 82.
Mudge (I.G.). *q.i.r.t.* 'Man in the street' bogey, 369.
Murray (C.A.). *r.i.r.t.* Local collections, 153.
Muslim names—*i.r.t.* Name entries, 287.

Name catalogue—Defined, 33.
Name entries—Defined, 277. Discussed, 277-337.
i.r.t. Canon of permanence, 67-68.
Names of entries, 35-53.
New English dictionary—*q.i.r.t.* Definition of catalogue, 19. Library, 25-26.
New York Regional Catalogue Group—*r.i.r.t.* Canon of currency, 70.
Non-European names—*i.r.t.* Name entries, 290-294.
'Nothing before something' rule—*i.r.t.* Gestalt value, 364.
Noun *vs.* adjective—*i.r.t.* Specific subject entries, 134-137.
Number and function of entries, 52-53.

Oblique intention or title—*i.r.t.* Pitfall in choice of subject headings, 109, 111, 112.
Occam *q.i.r.t.* Law of Parsimony, 54.
Open access—*i.r.t.* Shortening of main entries, 27. Library catalogue, 160, 368.
Ordinal values—*r.i.r.t.* Alphabetisation, 361.
Ormerod (J.)—*r.i.r.t.* Local collections, 153.

Panizzi (Anthony) *r.i.r.t.* Names of societies and institutions, 315.
'Paragraph before word' rule—*i.r.t.* Gestalt value, 364.
Parsimony, law of— *See* Law of Parsimony.
Partial comprehension—*i.r.t.* Pitfall in choice of subject headings, 112.
Periodical publications, 239-274.
Periodicals—*i.r.t.* Pitfall in choice of subject headings, 107.
Permanence, Canon of—*See* Canon of permanence.
Person *vs.* place—*i.r.t.* Specific subject entry, 87-91.
Personal author—Defined, 323.
Personal catalogue—Defined, 33.
Personal names—*i.r.t.* Name entries, 277-300.
Personal *vs.* corporate author, 326-329.
Physical form of library catalogue, 343-345.
Pictorial annotations, 352-353.
Pierson (Harriet Wheeler). *Guide to the cataloguing of the serial publications of societies and institutions*—*q.i.r.t.* Card technique for periodical publications, 264-268. Label entries of periodical publications, 274. Main entries of periodical publications, 246.
Pitfalls in choice of subject headings, 106-113.
Place *vs.* event,—*i.r.t.* Subject entries, 91-93.
—— *vs.* person,—*i.r.t.* Subject entries, 87-91.
—— *vs.* subject,—*i.r.t.* Subject entries, 80-84, 93-99.
Place names—*i.r.t.* Conflict of languages, 127.
Plural *vs.* singular—*i.r.t.* Specific subject entries, 133-134.
Pollard (A.W.)—*q.i.r.t.* Catalogue *vs.* bibliography, 234.
Popular *vs.* technical terms—*i.r.t.* Subject entries, 146-148.
Pound (Ezra). *Guide to Kulchur*—*r.i.r.t.* Introduction, 12.
Prefixes in surnames—*i.r.t.* Name entries, 289.
Premier volume de la bibliotheque—*r.i.r.t.* Name entries, 288.
Principles, guiding—, 54-75.
Printed catalogue, 343-344, 374.
—— *i.r.t.* Classified catalogue *vs.* dictionary catalogue, 374.
Prolegomena to library classification—*See* Ranganathan (S.R.). *Prolegomena to library classification.*
Pseudonyms—*i.r.t.* Name entries, 317-318.
Public libraries—*i.r.t.* Annotations, 353.
Pure classified catalogue—Defined, 33-34. *r.i.r.t.* Dictionary catalogue *vs.* classified catalogue, 188.
Pyramid of references, 166.

Quinn (Henry A.). *Library cataloguing*—
q.i.r.t. Alphabetical classed catalogue, 179-181. Classified catalogue *vs.* dictionary catalogue, 182-183. Cutter's opinion about classified catalogue *vs.* dictionary catalogue, 197-198.

Quinn (Henry A.) and Acomb (H.W.). *A manual of cataloguing and indexing.*—
q.i.r.t. Author analytics, 220-221, 221-222. Canon of consistency, 60-61. Doublets, 141. Economy in series entries, 212-213. Editor-of-series entries, 214. Introduction, 12. Subject *vs.* place, 84. Syndetic *vs.* systematic arrangement, 175-176.
r.i.r.t. Subject analytics, 224.

Ranganathan (S.R.). *Classified catalogue code*—
q.i.r.t. Alternative names of subjects, 139-140. Arrangement of series entries, 210, 211. Author analytics, 219-220. Canon of currency, 69. Connecting element in series entries, 211-212. Corporate name entries, 302-303, 305-308. Cross reference index entries of periodical publications, 273. Definition of author, 323-324. Definition of composite books, 217. Editor of series entry, 213-214. Hindu homonyms, 296. Hindu names, 292-293. Muslim names, 293. Omission of series entries, 207-208. Shortening of main entries, 29-30. Stages of a language, 129. Syndetic *vs.* systematic arrangement, 181. Transliteration of names, 285.
r.i.r.t. Alphabetisation, 355. Alternative names of subjects, 143, 155. Anonymous books, 321. Change of name, 297, 300. Class index entry, 45. Collateral name entries, 318. Compound surnames, 290. Definition of leading line and leading section 31. First-word-of-title entries, 318, 319. Gestalt value, 364. Government *vs.* institutions, 329, 330, 332. Homonyms, 295. Label entries, 48. Language and spelling of name entries, 278-279. Muslim names, 287. Names with prefixes, 290. Personal *vs.* corporate author, 326. Pseudonyms, 317-318. Series entry *vs.* editor-of-series entry, 206. Subject analytics, 44. Technique for series entries, 214. Transliteration of names, 286.
—— *Colon classification*—*q.i.r.t.* Conflict of languages, 125.
r.i.r.t. Subject *vs.* place, 97. Ultimate class, 86.
—— *Five laws of library science*—
r.i.r.t.—Annotations, 352. Guiding principles, 54. Introduction, 12. Physical form of the library catalogue, 344.
—— *Library administration*, 15.
—— *Prolegomena to library classification*—
q.i.r.t. Canon of currency, 69. Form headings *vs.* form divisions, 100-102. Popular *vs.* technical terms, 146-147. Specific subject, 85. Ultimate class, 86.
r.i.r.t. Annotations. 352. Canons of cataloguing, 70. Common subdivision subheadings, 104. Definition of subjects in library catalogues, 193. Form headings *vs.* form divi-

sions, 99. Introduction, 12. Subject *vs.* place, 97. Syndetic arrangement, 167.
Readings in library methods—*See* Arnett (L.D.) and Arnett (E.T.). *Readings in library methods.*
Reference books—*i.r.t.* Alphabetisation, 365.
Reference staff—*i.r.t.* Catalogue *vs.* bibliography, 236. Collateral link references, 173.
Reform of library catalogue, 376.
Relevance, canon of—*See* Canon of relevance.
Report of the Brown University Library—*r.i.r.t.* Selective cataloguing, 59.
—— of the Library of congress—*See* Library of congress. *Report.*
Research libraries—*i.r.t.* Annotations, 353.
Rgveda—*q.i.r.t.* Reform of library catalogue, 376.
Richardson (E.C.). *q.i.r.t.* Dictionary catalogue *vs.* classified catalogue, 192-193.
Rules for a dictionary catalog—*See* Cutter (Charles Ammi). *Rules for a dictionary catalog.*
Rules for chain procedure, 114-118, 165.

Saint—*i.r.t.* Alphabetisation, 354.
Salesmanship phase—*i.r.t.* Annotations, 351-352. Humanising of library catalogues, 25.
Satyagraha—*i.r.t.* Conflict of languages, 127.
Scottish names—*i.r.t.* Alphabetisation, 354.
Second law of library science—As a guiding principle, 54.
i.r.t.—Alternative names of subjects, 138. Anonymous books, 321. Change of name, 299, 300. Classified catalogue *vs.* dictionary catalogue, 192. Person *vs.* place, 88, 89, 90. *See* reference entries, 124. Series entry *vs.* editor of series entries, 207. Subject analytics, 224. Subject *vs.* place, 93. Synonyms, 144.
'Section before paragraph' rule—*i.r.t.* Gestalt value, 364.
See also reference entries—Created by the law of parsimony, 55. Defined, 51. Discussed, 162-173. Illustrated, 41. *i.r.t.* Classified catalogue, 373.
See reference entries—Created by the law of parsimony, 55. Defined, 50-51. Discussed, 123-153. Illustrated, 40.
i.r.t. Compound subject names, 137. Conflict of languages, 124-128. Conflict of stages in language, 128-130. Singular *vs.* plural, 134. Synonyms, 144.
Selective cataloguing—Discussed, 56-59.
Selective cataloguing—*r.i.r.t.* Law of Parsimony, 56.
Series entries—Defined, 46-47. Discussed, 201-214. Illustrated, 37, 40.
Series entry *vs.* editor entry, 201-209.
Shakespeare (William). *q.i.r.t.* Analytical entries, 232.

Sharp (Henry A). *Cataloguing*—
q.i.r.t. Alphabetisation, 360. Analytical entries, 232-233. Classified catalogue *vs.* dictionary catalogue, 184-187. Deriving classified catalogue from dictionary catalogue, 190, 191-192, 193-194. Introduction, 12. Selective cataloguing, 58, 59. Singular *vs.* plural, 133. Specific subject, 85. Subject *vs.* place, 81-82. Syndetic arrangement, 168. Syndetic *vs.* systematic arrangement, 176. Synonyms, 146. Upper link references, 164.
Shortening of main entries, 27-30.
Singular *vs.* plural—*i.r.t.* Specific subject entries, 133-134.
The Smithsonian Institution and its plan of cataloguing—*q.i.r.t.* Co-operative cataloguing, 347.
Societies—*i.r.t.* Pitfall in choice of subject headings, 107-108.
Societies and institutions—*i.r.t.* Name entries, 305-306.
Solvitur ambulando, 160.
Specific subject—Discussed, 79-153. *i.r.t.* Ultimate class, 86.
Specific subject entries—Discussed, 79-153.
Specific subject headings—Defined by colon chain, 117-118. Discussed, 79-153.
Spelling—*i.r.t.* Name entries, 278. Subject entries, 130-133.
Sri—*i.r.t.* Alphabetisation, 355.
Styles of main entry, 23.
Styles of writing—*i.r.t.* Gestalt value of the items in entries, 363.
Subheadings—Conflict with subject headings, 106-109. For local collections, 150-153.
Subject analytical entries—Discussed, 223-231. Illustrated, 39.
Subject entries—Discussed, 79-198. Illustrated, 40-41.
—— *i.r.t.* classified catalogue, 154-161.
—— *vs.* author entries—*See* Author entries *vs.* subject entries.
Subject headings—Conflict with subheadings, 106-109.
Subject index to British Museum catalogues—*r.i.r.t.* Alphabetico-classed catalogue, 179-180.
Subject phase, 114.
Subject reference entries—Defined, 50. Discussed, 123-198. Illustrated, 40-41.
Subject *vs.* place—*i.r.t.* Specific subject entries, 80-84, 93-98.
Substitutes for names—Discussed, 317-322.
Summary and conclusion, 367-376.
Surname tradition—*i.r.t.* Non-European names, 290.
Surnames *vs.* forenames—*i.r.t.* Name entries, 287-294.
Surnames with prefixes—*i.r.t.* Name entries, 289.
Syndetic arrangement—Defined, 175-176. *i.r.t.* *See also* references, 166-169.
Syndetic *vs.* systematic arrangement, 174-198.
Synonyms—*i.r.t.* Subject entries, 143-146.
Syntax—*i.r.t.* Noun *vs.* adjective, 135.

Systematic arrangement *vs.* alphabetical dispersal, 373-374.
—— *vs.* Syndetic arrangement, 174-198.

Technical *vs.* popular terms—*i.r.t.* Subject entries, 146-148.
Territories, Laws of—*See* Laws of territories and dependencies.
Third law of library science—As a guiding principle, 54.
i.r.t. Alternative names of subjects, 138. Annotations, 352. Change of name, 299, 300. Classified catalogue *vs.* dictionary catalogue, 192. Subject analytics, 224-226.
Title-page—*i.r.t.* Canon of ascertainability, 62-67.
Translator entries—Defined, 46. Illustrated, 37-40.
Transliteration—*i.r.t.* Name entries, 284-287.
Triplets—*i.r.t.* Specific subject entries. 142.
Types of catalogue, 20.
Ultimate class—*i.r.t.* Specific subject, 86.
University of Madras—*r.i.r.t.* Hindu homonyms, 296.
Upper link reference entries—Defined, 51, Discussed, 162-169. Illustrated, 41.

Van Hoesen (Henry Bartlett)—*q.i.r.t.* Law of parsimony, 56.
—— *Bibliography, practical enumerative, historical—r.i.r.t.* Catalogue *vs.* bibliography, 236.
Victorian outlook—*i.r.t.* Selective cataloguing, 59.
Victorian value and library catalogue, 26.
Visible index system, 345.

What is specific subject?, 79-153.
Wheatley (B.R.)—*q.i.r.t.* Dictionary catalogue *vs.* classified catalogue, 182.
Who is the author—, 323-339.
William of Occam—*q.i.r.t.* Law of parsimony, 54.
Wilson & Co.—*r.i.r.t.* Selective cataloguing, 56.
World co-operation in cataloguing, 348.

Yearbook—See *Catalogers' and classifiers' yearbook.*
Yearbooks—*i.r.t.* Pitfall in choice of subject headings, 107-108.

MADRAS LIBRARY ASSOCIATION

Publication Series, 2

The Five Laws of Library Science

BY

S. R. RANGANATHAN, M.A., L.T., F.L.A.

SOME OPINIONS.

The book is lovely, the author's enthusiasm for his vocation is infectious.—*Library Association Record.*

Would recommend this book to all librarians, who will find many valuable hints to the proper administration of a library, to library committee men.—*The Librarian and Book World.*

He is to be congratulated on his most interesting book. It is the work of an educationist as well as of a librarian.—*Times Literary Supplement.*

He has exhibited a wealth of learning, a mastery of detail, a fine sense of humour and a polished style.—*Journal of Oriental Research.*

A volume which to the book-lover is more interesting than a thriller, more enlightening than a text-book.—*The Madras Mail.*

The work ... contains a seventy-page rapid survey of library conditions all over the world.—*American Library Association.*

The Madras Library Association is rendering yeoman's service to the library cause by the institution of a series of books on library service.—*The Librarian.*

The book is written in an exceptionally fascinating and lucid style ... from the beginning to the end very stimulating and straightforward ... the book is quite accurate in fact.—*The Modern Librarian.*

In his book which seeks to reduce and relate all the principles and practice of library work to a few fundamental laws, we are glad to recognise a magnificent achievement which ranks as a landmark in the development of librarianship in this country.—*The Presidency College Magazine.*

It is presented from so fresh a point of view, and with so lively an enthusiasm, that it may well lead to a reconsideration of many problems.—*The Year's Work in Librarianship.*

MADRAS LIBRARY ASSOCIATION

Publication Series, 3.

The Colon Classification

BY

S. R. RANGANATHAN, M.A., L.T., F.L.A.

SOME OPINIONS.

All who are interested in synthetic classification will find this the best recent exercise in it. It has an admirable scheme for arranging the Indian literatures, the fullest I know.—*The Year's Work in Librarianship.*

It is universally interesting as a study of an original kind in classification method ... Certainly the colon scheme is remarkable for its analysis of the many relations of subjects, and students should be acquainted with this new and interesting general classification.—In the *Introduction to Library Classification,* 1935, by W.C.Berwic Sayers.

It is an extremely clever scheme ... The result is almost perfect.—*Library Association Record.*

The scheme is both elastic and comprehensive, while at the same time providing for sensible variations to meet local circumstances.—*Nature.*

One of the main features which will strike even a casual reader is the very great minuteness of classification in most of the subjects treated, especially topics in Indology, which will be of immense use to librarians both in the East and in the West. The author deserves to be congratulated on his excellent performance. The book ought to find a place in every library, however small.—*Current Science.*

The basis of the work is relation—the bearing of one topic on another, the aspects of a subject, the forms and modes of presentation of subject-matter ... Precise and well-worded rules are given regarding the formation of class numbers ... Many works of Sanskrit literature and others in the fields of Hindu Philosophy and Religion are listed in a systematic order, thus illustrating both the correct titles of these works and their relationship to one another. —*The Library Journal.*

Recommended for purchase in all schools and colleges by the Director of Public Instruction, Madras, in his Proceedings No. 789-G. of 1933, *dated 15th May,* 1933.

MADRAS LIBRARY ASSOCIATION

Publication Series, 4.

The Classified Catalogue Code

BY

S. R. RANGANATHAN, M.A., L.T., F.L.A.

SOME OPINIONS.

Recommended for purchase in all schools and colleges by the Director of Public Instruction, Madras, in his Proceedings No. 613-G. 34, dated 6th April, 1934.

It is a book of considerable value ... The method of handling various types of books is elaborately dealt with ... Card technique is fully dealt with and considerable value attaches to the chapters on oriental transliteration and the rendering of Hindu and Muhammadan names.—*Library Association Record.*

This book will take a very high rank among publications dealing with the technical and practical aspects of library work. For the first time, we believe, does such a work come from the pen of an Indian.—*United India and Indian States.*

The *Classified Catalogue Code,* by Mr. S. R. Ranganathan, is the fourth of a useful series of publications of the Madras Library Association. The rules for the indexing of books and periodicals have been dealt with in detail.—*Current Science.*

The transliteration codes for Indian languages and the rules for the indexing of Indian names will both be of considerable service. Then again the rules for dealing with the cases in Sanskrit literature of authors writing under different names, and the opposite trouble of different writers using the same name will help librarians who will have to deal with this class of literature.—*Library World.*

Another strong feature of the book is the section dealing with periodical publications.—*The Madras Mail.*

You too have brought your classification in relationship with your system for your classified catalogue. The classified form of subject-catalogue seems likely to have a new development. I regard the dictionary-catalogue as a blunder in the development of the economics of libraries.—*H. E. Bliss.*

This book embodies the very wide experience of Mr. Ranganathan and is a notable contribution to the technique of...library training.—*W. Erlam Smith.*

MADRAS LIBRARY ASSOCIATION

Publication Series, 5.

Library Administration

BY

S. R. RANGANATHAN, M.A., L.T., F.L.A.

SOME OPINIONS.

The abundant industry, learning and initiative which Mr. Ranganathan has given in the past ten years to librarianship in India must have been of the greatest interest to the British librarian .... If Ranganathan completes the series he will have been the world's most prolific writer on librarianship ... The book may be commended as a remarkable example of the collecting, arranging and exposition of routine detail, in which sight is not lost of the larger issues.—*Library Association Record.*

The whole forms an extremely comprehensive and careful work and ... English librarians will find the book of real interest and assistance to them.—*Library World.*

It should be of real use to Indian librarians who wish to bring their libraries up to the best modern standards of management.—*Times Literary Supplement.*

It makes an important contribution to the study of administration in general ... It is not difficult to appreciate the fact that Mr. Ranganathan has here devised a simple but powerful method of constructive analysis which will leave no corner of a subject unexplored ... He offers many shrewd observations of general interest and he is not afraid to hit straight from the shoulder ... This is certainly not a book for popular consumption but is one which the administrator should have constantly at his elbow, for it is a mine of ideas which should help him in his exalted calling.—*The Madras Mail.*

The book is a masterly analysis of the librarian's craft.—*The Hindu.*

The well-known author presents the subject with a thorough mastery of detail and a judicious combination of the fruits of his extensive studies and valuable experience in the field which he has made his own.—*Mysore Economic Journal.*

If the methods described in this book are scrupulously followed out libraries will save lot of labour and money which has been and is being wasted on account of most unsystematic and unscientific work.—*The Mahratta.*

Recommended for purchase in all schools and colleges by the Director of Public Instruction, Madras, in his Proceedings Dis. 4836/35, dated 8th November, 1935.

MADRAS LIBRARY ASSOCIATION

Publication Series, 6.

Prolegomena to Library Classification

BY

S. R. RANGANATHAN, M.A., L.T., F.L.A.

SOME OPINIONS.

Constitutes perhaps the most comprehensive statement of principles yet published ... Altogether a book to be pondered carefully by all those classifiers who have already safely crossed Jordan's swelling flood.—*The Library Association Record.*

The book is the philosophical dissertation of a mathematician and scholar ... The refreshing and lucid style and the lively enthusiasm of the man himself make the book most readable..... The book is a definite contribution to the literature of the field. The School of Library Science of Madras University teaches a great deal more of the pure theory of classification than any school in the United States.—*The Library Journal.*

In many respects it is original. The author combines the culture of India with the scholarship of England .... There is much of value to the student in Ranganathan's penetrating and intelligent discussion ... In some post graduate course a degree might well be earned by a reconstructive study of these canons.—*The Library Quarterly.*

A quite substantial treatise. ... Is a valiant attempt at a re-statement of theory and practice ... Mr. Ranganathan has made his contemporaries breathless in their effort to keep pace with his industry and ingenuity. His "Five Laws of Library Science" and his now well-known "Colon Classification" would seem enough work for one man to have done, but, upon the principles enumerated in the first of these, he has proceeded, single-handed, to re-write library administration, cataloguing and now classification ... His canons occupy 62 reasoned pages in their enunciation and there are 28 of them ... The remainder of this most interesting work is a comparative study of classification schemes, done quite fairly.—*Years' Work in Librarianship,* 1937.

The first part of this book expounds the general theory of classification. ... Then follows an analysis of the principles of knowledge classification, exhibiting its special canons. Next comes the theory of classification as applied to books and finally a critical comparison of the colon and other systems of library classification ... The book is a valuable contribution to a study which lies at the root of all scientific arrangement and the principles elucidated therein could be developed and applied to every phase of thought.—*The Hindu.*

. Recommended for purchase in all Colleges and public libraries by the Director of Public Instruction, Madras, in his Proceedings R.C.No.2755-G, 37 dated 20th January, 1938.