

Madras Library Association

Publication Series, 6

PROLEGOMENA TO LIBRARY CLASSIFICATION.

Madras Library Association

PUBLICATION SERIES

1. **LIBRARY MOVEMENT.**—A Collection of Essays by Divers Hands, with 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. Sivaswami 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. 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, 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. Demy 8vo. 1937.
7. **SCHOOL AND COLLEGE LIBRARY**, by S. R. Ranganathan. *Ready for the press.*
8. **COLON CLASSIFICATION**, by S. R. Ranganathan. Second revised edition. *In preparation.*
9. **REFERENCE WORK**, by S. R. Ranganathan. *In preparation.*

Copies can be had at

1. The Madras Library Association,
Triplicane, Madras.
2. Edward Goldston, Ltd.,
25, Museum Street, London, W.C.1.

**PROLEGOMENA
TO
LIBRARY CLASSIFICATION**

BY

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

Librarian, Madras University Library

Secretary, Madras Library Association

Vice-President, Indian Library Association



**MADRAS
THE MADRAS LIBRARY ASSOCIATION
LONDON : EDWARD GOLDSTON, LTD.
1937**

251
G7

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

To
CHIRANJEEVI
T. R. YOGESWARAN

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 twelve years in organising the Madras University Library and teaching the subject to the students of the School of Library Science;

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;

To Mr. V. Jagannathan, B.A., for reading the 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 has been carried out.

CONTENTS

Preface	..	x
Introduction	..	xii-xvi

PART I Theory

CHAP.		PAGES
1-3.	General Theory ..	1-92
1.	What is a Scheme of Classification? ..	1-29
	Diagrammatic approach, 1-7.	
	Analytical approach, 8-29.	
	Entity and Attribute, 8. Characteristic, 9. Complete Division, 10-11. Complete Assortment, 12-18. Pseudo-entity, 19. Filiatory Arrangement, 20-25. Scheme of Classification, 26-28. Classifying, 29.	
2-3.	Canons of Classification ..	30-92
2.	Characteristics, Arrays and Chains ..	30-61
	Differentiation, 31. Concomitance, 31. Relevance, 31-32. Ascertainability, 33. Permanence, 34-36. Relevant Sequence, 37-38. Consistency, 39. Exhaustiveness, 40. Exclusiveness, 41. Helpful Order, 42-45. Consistent Order, 46-58. Intension, 59-60. Modulation, 61.	
3.	Terminology and Notation ..	62-92
	Currency, 64-67. Reticence, 68. Enumeration, 69-71. Context, 71-72. Varieties of Notation, 73-77. Purity, 78. Long u Short, 79-89. Relativity, 90-92.	
4.	Theory of Knowledge Classification ..	93-141
	Universe of Knowledge, 93-98. Hospitality in array, 99-106. Hospitality in Chain, 106-119. Mnemonics, 120-139.	

CHAP.		PAGES
5.	Theory of Book Classification ..	142-181
	Universe of Books, 142-143. Partial Comprehension, 143-148. Artificial Composite Book, 148-149. Local Va- riation, 149-153. Viewpoint, 153-157. Classics, 157-163. Common subdivi- sions and Distinctiveness, 163-175. Individualisation, 175-181.	
PART II Comparative Study		
6.	Lay-out ..	184-210
	Decimal Classification, 184-187. Expansive Classification, 188-189. Congress Classification, 189-190. Subject Classification, 190-191. Colon Classification, 191-195. Comparison of lay-out, 196-210.	
7.	Mathematics ..	211-235
8.	Economics ..	236-267
9.	Some hints, summary and conclusion ..	268-282
	Some hints and stages of classification, 268-279. Summary and Conclusion, 280-282.	
	Index ..	283-305

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, the Madras Library Association inaugurated its Publication Series in 1929. The first volume, *The Library movement*, a collection of essays by Divers Hands, was widely circulated throughout the country. The second volume, *The five laws of library science*, by S. R. Ranganathan, which came out in 1931, sought to expound the principles of library organisation and management in a systematic form. The preface to that book contained the announcement "With the present volume on the *Five laws of library science* . . . the Madras Library Association commences the publication of a series of books on the technical and practical aspects of library work."

In partial fulfilment of this announcement, the Association has already published the *Colon classification* in 1933, the *Classified catalogue code* in 1934 and the *Library administration* in 1935, all by S. R. Ranganathan. All these volumes have experienced a good circulation, both in India and abroad.

As another instalment of the Publication Series, the Association is publishing the present

volume entitled *Prolegomena to library classification*, the manuscript of which Mr. S. R. Ranganathan had been good enough to place at the disposal of the Association.

The Association hopes that this volume will get as widely circulated as its predecessors and enable the libraries in India and elsewhere to organise their work in an efficient, scientific and serviceable manner.

INTRODUCTION

It has been my experience—one doubtless shared by many others—that, when one is engaged on a problem, the most useful ideas occur suddenly, seeming at once to cast a flood of light over murky tracts of half-formed thought and promising reward to further exploitation. These inspirations, which present themselves as ready-made wholes, come, as we all know, at the oddest moments. They seldom come if they are sought, and they delight in choosing moments when pen and paper cannot be used to impede their flight. They come and whisper in our ears as we lie sleepily after dinner or as we mechanically repeat a long-drawn-out hymn as part of the daily routine of worship. To sit at the study table, with note-book and pencil, with the intention of meditating on one's problem invariably produces nothing but sleep.

It is a feature of these ideas that they always seem at first inspired, and we think them quite original—as in fact they are. But before long, and usually before our first notes have been developed, there comes awakening. Somebody else, we find, has thought of the same thing before, and has expressed it all in some well-known work. One's feelings at this discovery are mixed. First there is dismay at being deprived—nay robbed—of well-deserved priority. Then there is relief that one is spared the labour of cudgelling one's brains over the pioneer work involved, and further there is satis-

faction in the thought that if others, and cleverer men, have trodden this way before, then one is probably on the right path, and not wandering hopelessly in the wilderness.

Finally one is buoyed up by the hope that if one continues long enough in this way, one will in the end have climbed the crests of the known and be looking forward to undiscovered country. Would that it were possible that in this book the distant peaks should be visible through the wreaths of mist! One can hope for no more than this, and yet one is conscious of a thoroughly enjoyable journey, which has recalled again and again the sentiments expressed by R. L. Stevenson, "To travel hopefully is a better thing than to arrive".

This book is one result of twelve years' work at forging and polishing the Colon Classification and of nine years' work of teaching the principles of classification to mixed classes composed of some highly-disciplined minds and a few bewildered but willing ones that needed to be led step by step with explanations and illustrations even of the obvious. In teaching such classes, the exposition given in existing text-books were sometimes found inadequate.

It is now five years since the manuscript of the first edition of the Colon Classification was put into the hands of the printer. During this period, the scheme has been applied to 50,000 additional volumes of which 25,000 covered the wave-front of nascent thought on all the most important subjects. It afforded a good test. The test disclosed hidden potentialities in the scheme, which had not been consciously sensed at the time of invention.

It also disclosed some minor maladjustments which could have been avoided no doubt if I had been working on the basis of a well-tested theory of classification. But the process was reversed in my case. My theory had to be developed later to discover the cause of such maladjustments and to set them right. The first edition of the *Colon classification* being almost exhausted, I decided that it would be advantageous to work out the theory of classification before preparing the second.

Thus, it became a personal necessity and seemed not a useless labour to collect my thoughts which bore upon the theory of classification and record them in exact terms. These thoughts had been incubating in extra-conscious regions of the mind during the last twelve years in a way which seems to me exactly expressed in the following passage of John Drinkwater's *Loyalties*:—

Haunting the lucidities of life
That are my daily beauty, moves a theme
Beating along my undiscovered mind.

These were the general pre-disposing causes. But the book was actually precipitated last June in an attempt to expound to my class the full import of the principle of hospitality in reference to Book Classification. The experience in the class room had stirred the latent thought-mass at all levels. When I came home I found sleep impossible. Seeing my restlessness and probably disturbed by it, a relation who was sleeping in my room gave an innocent piece of advice. "Why don't you take up a book and read for a while?" he said, "That will bring you sleep". No doubt he was not aware of

Schopenhauer's observation "To put away one's own original thoughts in order to take up a book is to sin against the Holy Ghost". However, this suggestion recalled two books which I had set aside for later study, when at the first attempt I had found them unmanageable. They were the books of Bliss¹ on Classification.

My mind was by this time so saturated with the theory of classification that so far from these two books proving difficult and causing sleep, before midnight, in a single movement, I had forged through their entire range of 740 pages. My mind was pressed through these pages in so intimate and critical a way that my own book emerged clear cut as from a mould. All that remained was to fill in details and provide illustrations.

The First Part expounds the theory of classification. After the first seven pages, the first chapter, which seeks to build up the necessary scaffolding of terminology, may prove to be stiff reading for beginners. But they may skip over that portion in the first reading and refer to it whenever need is felt for definition of technical terms.

The second and third chapters develop the canons of classification that belong to the general theory. It is believed that these two chapters carry the analysis further than existing books on the subject. The treatment of Terminology and Notation may be found to be new.

The fourth chapter which deals with the special theory of Knowledge Classification, shows the ad-

¹ Bliss (Henry Evelyn): *Organisation of knowledge*. 1929.
 " *Organisation of knowledge in libraries*. 1934.

It also disclosed some minor maladjustments which could have been avoided no doubt if I had been working on the basis of a well-tested theory of classification. But the process was reversed in my case. My theory had to be developed later to discover the cause of such maladjustments and to set them right. The first edition of the *Colon classification* being almost exhausted, I decided that it would be advantageous to work out the theory of classification before preparing the second.

Thus, it became a personal necessity and seemed not a useless labour to collect my thoughts which bore upon the theory of classification and record them in exact terms. These thoughts had been incubating in extra-conscious regions of the mind during the last twelve years in a way which seems to me exactly expressed in the following passage of John Drinkwater's *Loyalties*:—

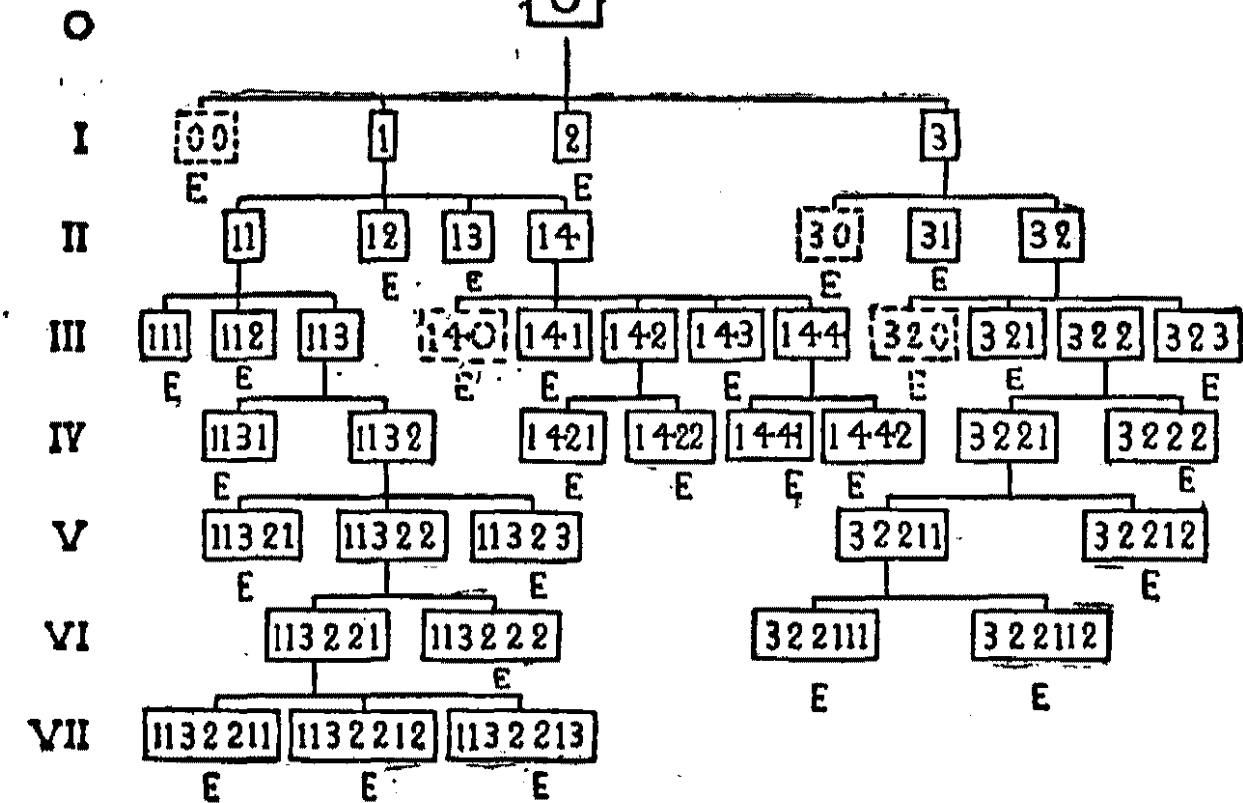
Haunting the lucidities of life
That are my daily beauty, moves a theme
Beating along my undiscovered mind.

These were the general pre-disposing causes. But the book was actually precipitated last June in an attempt to expound to my class the full import of the principle of hospitality in reference to Book Classification. The experience in the class room had stirred the latent thought-mass at all levels. When I came home I found sleep impossible. Seeing my restlessness and probably disturbed by it, a relation who was sleeping in my room gave an innocent piece of advice. "Why don't you take up a book and read for a while?" he said, "That will bring you sleep". No doubt he was not aware of

PART I
THEORY

Diagram showing Original Universe, Classes, Arrays, Collateral classes, Chains, Subordinate classes, Pseudo-classes, Order of classes and arrays, Division, Assortment and Filiatory arrangement

ORDER



INDEX

- a.t.* = applied to
i.r.t. = in relation to
q.i.r.t. = quoted in relation to
r.i.r.t. = referred in relation to

- Absolute values of digits, 75.
Accidents *i.r.t.* canon of context, 72.
Adjustable classification *i.r.t.* importance of notation, 98.
Adjustable classification, Publication of, 191.
Agricultural economics, Provision in Decimal Classification for, 247.
All India Library Conference, Second: *Proceedings*, *r.i.r.t.* canon of mnemonics, 130.
Alphabetic device *i.r.t.* canon of hospitality in—
 Array, 104. Chain, 118-119.
Alphabetic index, Function of, 28.
Ambiguity in terminology, 62-63.
American Electrotherapeutic Association *i.r.t.* canon of permanence, 34.
American Library Association, Foundation, 185.
— *i.r.t.* canon of currency, 65.
— Catalog Section. *comp.*: *Cataloguers' & classifiers' yearbook*, 6, *q.i.r.t.*—
 Canon of currency, 66. Neglect of mnemonics, 124-125.
Amplified class, Defined, 19.
Analysis, 216.
Analytical approach to general theory, 8-92.
Anterior divisions in Colon Classification, 76.
Anterior divisions *see* Common subdivisions.
Anterior positions for common subdivision classes, 173-174.
Anthropology *i.r.t.* canon of currency, 67.
Applied mathematics, Connotation of, Compared, 216.
Arabic or Indian notation, Recommended, 185.
Arithmetic *i.r.t.* canon of enumeration, 69.
Arrangement, Fillatory—
 Contrasted with complete assortment, 20. Defined, 20. Illustrated, 6, 20-24.
Array—
 A concept involved in a scheme of classification, 26. Defined, 13. Illustrated, 5.
—, Canons for, Defined and illustrated, 40-58.
—, Closed, Defined and illustrated, 105-106.
—, Collateral, Defined, 14.
— in five dimensions in economics in Colon Classification, 241.

Array of—Contd.

Eighth order in mathematics in Colon Classification, 228-229. Fifth order in mathematics, compared, 223-227. First order, compared, 197-210. Fourth order in economics, compared, 252-256. Fourth order in mathematics, compared, 218-223. Second order containing mathematics, compared, 211-213. Second order in social sciences, compared, 236-240. Seventh order in mathematics in Colon Classification, 228. Sixth order in mathematics in Colon Classification, 228. Third order in economics, compared, 240-252. Third order in mathematics, compared, 213-218.

—, Open—

Defined and illustrated, 105-106. *r.i.r.t.* canon of exhaustiveness, 40.

Artificial composite book, 148.

Ascertainability, canon of, *see* Canon of ascertainability.

Associated complete assortment—

Defined, 17. Illustrated, 17-18.

Associated scheme of assortment, Defined, 17.

Association of Special Libraries: *Report and proceedings of the third conference, q.i.r.t.* length of notation, 88.

Assortment—

Defined, 12.

—, Associated scheme of, Defined, 17. Characteristic, Defined, 12.

—, Complete—

and associated scheme of classification, 25. Contrasted with filiiary arrangement, 20. Defined, 13, 16. Illustrated, 4.

Scheme of, Defined, 17.

Astronomy, 216.

Attribute—

Defined, 8. Illustrated, 8-9.

Author mark, 177.

Author number, 178.

Auto-bias device—

Defined and illustrated, 114-116. When first conceived, 194.

Banks, Types of, *i.r.t.* canon of mnemonics, 133.

Bhakti-ntras *i.r.t.* canon of mnemonics, 133.

Bias number device *i.r.t.* canon of—

Consistent order, 51. Mnemonics, 128. Viewpoint, 155.

Bias-numbering, 272-273.

Bibliographic classification *i.r.t.* minuteness of classification, 268.

Biochemistry in Decimal Classification, 201.

Biography *i.r.t.* pitfalls in first stage classification, 274-275.

Biscoe numbers, 179.

Bliss (Henry Evelyn) *r.i.r.t.* economic length in notation, 268.

a.t. = applied to.

i.r.t. = in relation to.

- Bliss, *Organisation of knowledge in libraries* q.i.r.t. canon of—
 Helpful order in lay-out of—
 Congress Classification, 208. Decimal Classification, 204.
 Subject Classification, 207-208.
 Individualisation, 177. Mnemonics, 120-121.
- q.i.r.t. subject-index illusion, 135.
- r.i.r.t. canon of purity, 78.
- *System of bibliographic classification*, q.i.r.t.—Anterior position to common subdivisions, 173-174. Canon of local variation, 150.
- Bodley r.i.r.t. canon of reticence, 68.
- Book-classification, Special theory of, 142-181.
- Book-keeping, 216.
- Book-number—
 i.r.t. canon of individualisation, 176. i.r.t. third stage classification, 176. Of the Colon Scheme, 179-180.
- Book-numbering, 270.
- Books, Universe of, Peculiarities of, 142-143.
- Borden (Wm. Alanson) i.r.t. canon of local variation, 153.
- Box—
 Related, defined, 22. Stranger, defined, 22.
- Bragg's work on crystals i.r.t. canon of mnemonics, 131.
- British Library Association, founded, 185.
- Brown (James Duff), Biography of, 190-191.
- Subject classification*, q.i.r.t.—
 Biscoe numbers, 179. Canon of consistent order, 46. Canon of hospitality in array, 104. Canon of individualisation, 176-177.
- , r.i.r.t. canon of helpful order applied to array of third order in economics, 251.
- and Sayers (W. C. Berwick): *Manual of library economy*, r.i.r.t. biography of Brown, 190.
- Calculus, 216.
- Canon of—
 Ascertainability—
 Defined, 33. Illustrated, 33.
- Classics—
 Defined, 157-158. Illustrated, 158-160.
- Common subdivisions—
 Defined, 163. Illustrated, 164-175.
- Concomitance, Defined, 31.
- Consistency—
 Defined, 39. Illustrated, 39.
- Consistent order—
 Defined, 46. Illustrated, 46-58.

q.i.r.t. = quoted in relation to. r.i.r.t. = referred in relation to.

Canon of—Contd.**Context—**

a.t. array of third order in mathematics, 218. Defined, 71. Illustrated, 72. *i.r.t.* pitfalls in first stage classification, 278.

Currency—

a.t. lay-outs, 197-199. Defined, 64. Illustrated, 64-67.

Differentiation, Defined, 31.

Distinctiveness, Defined, 163.

Enumeration—*a.t.* array of—

Second order in sciences, 212-213. Second order in social sciences, 237-238. Third order in economics, 244-246. Third order in mathematics, 215-216.

a.t. lay-outs, 197-199. Defined, 69. Illustrated, 69-71.

i.r.t. pitfalls in first stage classification, 278.

Exclusiveness—*a.t.* array of—

Fourth order in economics, 254-255. Fourth order in mathematics, 221-223. Third order in mathematics, 217-218.

a.t. lay-outs, 203. Defined, 41. Illustrated, 41.

Exhaustiveness—*a.t.* array of—

Fourth order in economics, 254. Fourth order in mathematics, 220-221. Second order in sciences, 213. Third order in economics, 246-248. Third order in mathematics, 216-217.

a.t. lay-outs, 200-202. Defined, 40. Illustrated, 40.

Helpful order—*a.t.* array of—

Fourth order in economics, 255-256. Fourth order in mathematics, 223. Second order in sciences, 213. Second order in social sciences, 239-240. Third order in economics, 248-252. Third order in mathematics, 218.

a.t. lay-outs, 203-210. Defined, 42. Illustrated, 42-45.

Hospitality in array—*a.t.* array of—

Fourth order in economics, 254. Fourth order in mathematics, 220-221. Second order in sciences, 213. Second order in social sciences, 238-239. Third order in economics, 246-248. Third order in mathematics, 216-217.

Defined, 99. Illustrated, 99-105.

Hospitality in chain—

a.t. chain in two dimensions in economics, 262. *a.t.* mathematics, 230-231. Defined, 106. Illustrated, 106-119.

Individualisation—

Defined, 176. Illustrated, 176-180.

a.t. = applied to.

i.r.t. = in relation to.

Canon of—*Contd.***Intension—**

Defined, 59. Illustrated, 60.

Local variation—

Defined, 149. Illustrated, 150-153.

Mnemonics—

Defined, 120. Illustrated, 121-141.

Modulation—*a.t.* array of fourth order in economics, 256. Defined and illustrated, 61.**Partial comprehension—**Defined, 143-144. Illustrated, 144-148. *i.r.t.* pitfalls in first stage classification, 278.**Permanence—**

Defined, 34. Illustrated, 34-36.

Purity, 78.**Relativity—*****a.t.* chain in—**

Four dimensions in economics, 262-263. One dimension in economics, 259-260. Two dimensions in economics, 260-262.

a.t. mathematics, 231-233. Defined, 90. Illustrated, 90-92.**Relevance—**

Defined, 31. Illustrated, 31-32.

Relevant sequence—*a.t.* array of fourth order in mathematics in Decimal Classification, 222. Defined, 37. Illustrated, 37-38.**Retinence—**

Defined, 68. Illustrated, 68.

Viewpoint—

Defined, 153-154. Illustrated, 154-157.

Canonical order, Illustrated, 44-45.

Canons for—

Arrays, Defined and illustrated, 40-58. Chains, Defined and illustrated, 59-61. Characteristics, Defined and illustrated, 31-39. Notation, 73-92. Terminology, 63-72. Universe of books, 142-181. Universe of knowledge, 93-141.

Canons of library classification, Tabulated, 282.

Card catalogue *i.r.t.* canon of currency, 67.**Catalogue, *i.r.t.* canon of—**

Currency, 66-67. Partial comprehension, 146-148.

Cataloguers' & classifiers' yearbook, 6, *q.i.r.t.*—

Canon of currency, 66. Neglect of mnemonics, 124-125.

Categorical table, *i.r.t.* canon of—

Consistent order, 46. Hospitality in chain, 117.

Chain—

Defined and illustrated, 15.

—, Canons for, Defined and illustrated, 59-61.

q.i.r.t. = quoted in relation to. *r.i.r.t.* = referred in relation to.

Chain—Contd.

- , Complete—
 - Defined, 15. Illustrated, 7, 15.
 - in economics, Compared, 257-263.
 - in mathematics, Compared, 229-233.
- , Incomplete, In the universe of knowledge, 96.
- , Loose, Defined and illustrated, 15.
- of classes—
 - A concept involved in a scheme of classification, 26. Illustrated, 7. In the universe of knowledge, 95-96.
- , Primary—
 - Defined, 15. Illustrated, 7, 15.

Characteristic—

- A concept involved in a scheme of classification, 26. Defined, and illustrated, 9.
- , Assortment, Defined, 12.
- , Canons for, Defined and illustrated, 31-39.
- , Concomitant, Effect on division, 10.
- , Division, Defined and illustrated, 10.
- , Independent, Effect on division, 10.
- Characteristics, Train of, Illustrated, 106-110.
- Charles Ammi Cutter* referred to, 188.
- Chimerical notion about length of notation, 83.
- Chronological Device *i.r.t.* canon of—
 - Consistent order, 49. Helpful order *a.t.* array of third order in economics, 249. Hospitality *in* array, 102-103. Local variation, 152. Mnemonics, 128.
 - *i.r.t.* pitfalls in second stage classification, 271-272.

Class—

- Creation of new, 268. Defined, 13. Illustrated, 4.
- , Collateral, Defined, 14.
- Index Entry *i.r.t.* canon of currency, 67.
- , Multiple—
 - Defined, 13. Illustrated, 5.
- Number, Defined, 28.
- , Subordinate, Defined, 14.
- , Unitary—
 - Defined, 13. Illustrated, 3.

Classes—

- Array of: A concept involved in a scheme of classification, 26.
- , Chain of—
 - A concept involved in a scheme of classification, 26. Illustrated, 7.
- Classic Device *i.r.t.* canon of classics, 161-163.
- Classics, Canon of, *see* Canon of classics.
- Classification Decimale *i.r.t.* notation, 77.

a.t. = applied to.

i.r.t. = in relation to.

Classification—

- of economics, Compared, 236-267.
- of mathematics, Compared, 211-235.
- , Scheme of—
 - And associated complete assortment, 25. Defined, 26.
 - Fundamental categories of, 30. Illustrated, 7. Implications of, 26. Necessary aids in, 28.
- , Synthetic *see* Synthetic classification.
- , Theory (General), 1-181.

Classified catalogue code—

- q.i.r.t.* canon of currency, 67.
- r.i.r.t.* canon of partial comprehension, 147. Canon of permanence, 34. Classification of artificial composite books, 148-149.

Classifying,—Defined, 29. Described, 268-279.

Closed array, Defined and illustrated, 105-106.

Code for classifiers r.i.r.t. to first stage classification, 273.

Collateral array, Defined, 14.

Collateral class, Defined, 14.

Colon—

- Invented as an ordinal number, 192. Value of, 192.

Colon Classification—

Arrays in five dimensions in economics, 241. Genesis, 192.

i.r.t. anterior divisions, 76.

i.r.t. anterior position for common subdivisions, 174.

— *i.r.t.* canon of—

Classics, 158-163. Consistency, 39. Consistent order, 47-52.

Currency *a.t.* lay-out, 198-199.

Enumeration *a.t.*—

Array of third order in economics, 245. Lay-out, 198-199.

• Exclusiveness *a.t.* array of—

Fourth order in economics, 254. Third order in mathematics, 218.

Exhaustiveness, 40.

Helpful order, 42-45.

— *a.t.* array of—

Fourth order in economics, 256. Fourth order in mathematics, 223. Third order in economics, 249. Third order in mathematics, 218.

— *a.t.* lay-out, 204-206.

Hospitality in array, 100-104.

— *a.t.* array of—

Fourth order in economics, 254. Fourth order in mathematics, 221. Third order in economics, 247-248. Third order in mathematics, 217.

Hospitality in chain, 108-116.

q.i.r.t. = quoted in relation to. *r.i.r.t.* = referred in relation to.

Colon Classification—Contd.*i.r.t.* canon of—*contd.*Hospitality *a.t.*—

Chain in two dimensions in economics, 262. Economics, 257-263. Mathematics, 229-230.

Individualisation, 179-180. Local variation, 150-152. Mnemonics, 123-141. Relativity, 90-92.

Relevant sequence, 37-38. *a.t.* mathematics, 223.

Viewpoint, 154-157.

— *i.r.t.* chain in four dimensions in economics, 262-263. Creation of new class numbers, 141. Importance of notation, 98. Mathematical functions, 226-229. Non-scheduled mnemonics, 129-133. Notation, 75-76. Parallel order, 55-57. Terminology in lay-out, 198-199. Theory of functions, 227-229.

—, Lay-out, 196.

— *vs.* Decimal Classification *i.r.t.* canon of common subdivisions, 170.

Colon Classification—

— *q.i.r.t.* anterior position for common subdivisions, 174.

— *q.i.r.t.* canon of—

Classics, 161-163. Common subdivisions, 166-167. Consistent order, 48, 50. Local variation, 151. Relevant sequence, 223. Viewpoint, 155.

— *r.i.r.t.* canon of—

Consistency, 39. Consistent order, 49, 51. Enumeration, 71. Hospitality in chain, 110. Relevant sequence, 38. Individualisation, 176.

— *r.i.r.t.* comparison of array of third order in economics, 241.

Colon curve, 86.

Colon device *i.r.t.* canon of—

Consistent order, 49-50. Hospitality in chain, 108-110 and 112-114. Mnemonics, 127.

Colon scheme book numbers, 179-180.

Colon *vs.* Decimal Classification, *a statistical study of their notation*, *q.i.r.t.* length of notation, 83-89.

Commerce in Decimal Classification and Subject Classification, 245.

Committee on Decimal Classification, 65.

Common subdivision numbering, 270-272.

Common subdivisions, Canon of, *see* Canon of common subdivisions.

— *i.r.t.* canon of consistent order, 46-48. Schedules of, 164-165.

Communism in Decimal Classification, 245.

Complete assortment—

And associated scheme of classification, 25. Contrasted with filiatory arrangement, 20. Defined, 13, 16. Illustrated, 4.

—, Associated—

Defined, 17. Illustrated, 17-18.

a.t. = applied to.

i.r.t. = in relation to.

- Complete chain—**
 Defined, 15. Illustrated, 7, 15.
- Complete division, Defined and illustrated, 11.**
- Complete pseudo-chain, Defined, 19.**
- Completely amplified class, Defined, 19.**
- Completely amplified original universe, Defined, 19.**
- Composite terms, Derived, 137-139.**
- Concomitance, Canon of, *see* Canon of concomitance.**
- Concomitant characteristic, Effect on division of, 10.**
- Congress cards, Decimal Classification numbers on, 65.**
- Congress Classification—**
 Genesis, 189-190. *i.r.t.* anterior position for common subdivisions, 174-175.
- *i.r.t.* canon of—
- Consistent order, 52-55. Currency, 64. Currency *a.t.* lay-out, 199.**
- Enumeration *a.t.* array of—**
 Second order in sciences, 213. Second order in social sciences, 238. Third order in economics, 246.
- *a.t.* lay-out, 199.
- Exclusiveness *a.t.* array of fourth order in economics, 255.**
- Helpful order, 42-44.**
- *a.t.* array of—
- Fourth order in economics, 256. Fourth order in mathematics, 223. Second order in sciences, 213. Second order in social sciences, 240. Third order in economics, 251-252. Third order in mathematics, 218.**
- *a.t.* lay-out, 208-209.
- Hospitality in array, 105.**
- *a.t.* array of—
- Fourth order in economics, 254. Fourth order in mathematics, 221. Second order in sciences, 213. Second order in social sciences, 238-239. Third order in economics, 248. Third order in mathematics, 217.**
- Hospitality in chain, 118-119.**
- *a.t.*—
- Chain in two dimensions in economics, 262. Economics, 257-263. Mathematics, 229-230.**
- Mnemonics, 134. Modulation in array of fourth order in economics, 256. Relativity, 90-92. Viewpoint, 157.**
- *i.r.t.*—
- Chain in four dimensions in economics, 262-263. Mathematical functions, 225-227. Notation, 76-77. Parallel order, 58.**
- Terminology in lay-out, 199. Theory of functions, 226-227.**
- Lay-out, 197.
- Consistency, Canon of, *see* Canon of consistency.**

q.i.r.t. = quoted in relation to. *r.i.r.t.* = referred in relation to.

- Consistent order, Canon of, *see* Canon of consistent order.
 Constituent terms, Fundamental, 137-139.
 Context, Canon of, *see* Canon of context.
 Continuous groups, 221.
 Correlation coefficient of Colon Classification and Decimal Classification, 88.
 Correlation table, 84.
 Creation of new class, 268.
 Cross reference entry and canon of partial comprehension, 147-148.
 Crystals *i.r.t.* canon of mnemonics, 131-132.
 Currency, Canon of, *see* Canon of currency.
 Cutter (Charles Ammi)—
 Biography, 188-189. *i.r.t.* Congress Classification, 190. *i.r.t.* Decimal Classification, 188.
 Cutter (William Parker)—
 i.r.t. Congress Classification, 190.
 — *Charles Ammi Cutter*, Referred to, 188.
 Cutter numbers, 178.
 Cyclopaedias *i.r.t.* pitfalls in first stage classification, 274-275.
- Dawe (Grosvenor). *Comp.: Melvil Dewey, seer, inspirer, doer.*—
q.i.r.t. canon of local variation, 153. *r.i.r.t.* Dewey's biography, 184.
- Deceptive title *i.r.t.* pitfalls in first stage classification, 276-277.
- Decimal Classification—
 Committee on, 65. Genesis, 186-187. *i.r.t.* anterior position for common subdivisions, 174. *i.r.t.* array of fifth order in mathematics, 223-226.
 — *i.r.t.* canon of—
 Consistency, 39. Consistent order, 47. Currency, 64-66.
 Currency *a.t.* lay-out, 197-199.
 Enumeration *a.t.* array of—
 Second order in sciences, 212. Second order in social sciences; 237. Third order in economics, 245.
 — *a.t.* lay-out, 197-199.
 Exclusiveness *a.t.* array of—
 Fourth or higher order, 222. Fourth order in economics, 254-255. Third order in mathematics, 218.
 Exhaustiveness, 40.
 — *a.t.* array of second order in sciences, 213.
 Helpful order, 42-45.
 — *a.t.* array of—
 Fourth order in economics, 255-256. Fourth order in mathematics, 223. Second order in sciences, 213. Second order in social sciences, 239. Third order in economics, 248-249. Third order in mathematics, 218.

Decimal Classification—Contd.

— *i.r.t.* canon of—*contd.*

Helpful order *a.t.* lay-out, 203-204.

Hospitality in array, 99-100.

— *a.t.* array of—

Fourth order in economics, 254. Fourth order in mathematics, 220-221. Second order in sciences, 213. Second order in social sciences, 238. Third order in economics, 246-247.

Third order in mathematics, 217.

Hospitality in chain, 106-108.

— *a.t.*—

Chain in two dimensions in economics, 262. Economics, 257-263. Mathematics, 229-230.

Local variation, 152-153. Relativity, 90-92. Relevant sequence, 36. Relevant sequence *a.t.* mathematics, 222.

Viewpoint, 154, 157.

— *i.r.t.*—

Commerce, 245. Importance of notation, 98. Insurance, 245.

Mathematical functions, 235. Notation, 75. Parallel order, 58.

Scheduled mnemonics, 121-126. Socialism and communism, 245.

Sociology, 239. Terminology in array of fourth order in economics, 253. Terminology in lay-out, 197-199.

— Lay-out, 196. Mutilation of, 192. Proposed, 185.

— numbers on Congress cards, 65.

vs. Colon Classification *i.r.t.* canon of common subdivisions, 170.

Decimal classification, Editions of, 187.

Decimal classification and relative index q.i.r.t.—

Author numbers, 178. Canon of hospitality in array, 99. Canon of viewpoint, 154. Minute classification, 111-112.

Decimal curve, 86.

Decimal notation, 74-75. *i.r.t.* canon of hospitality in chain, 116.

Derived composite terms, 137-138.

Developmental order, Illustrated, 42-43.

Dewey (Melvil), Biography, 184-187.

— *i.r.t.*—

Colon Classification, 192-193. Congress Classification, 190.

— Putnam's estimate of, 185-186.

— *q.i.r.t.*—

Canon of local variation, 153. Colon Classification, 194.

— *v.i.r.t.* Canon of currency, 64.

—: *Decimal classification and relative index, q.i.r.t.*—

Author numbers, 178. Canon of hospitality in array, 99. Canon of viewpoint, 154. Minute classification, 111-112.

Diagrammatic approach to general theory, 2-7.

Dictionaries *i.r.t.* pitfalls in first stage classification, 274-275.

Differentiation, Canon of, see Canon of differentiation.

Digit, 73.

q.i.r.t. = quoted in relation to. *v.i.r.t.* = referred in relation to.

- Distinctiveness, Canon of, *see* Canon of distinctiveness.
 Division characteristic, Defined, 10.
 Division, Complete, Defined and illustrated, 11.
 Division, Defined and illustrated, 10.
 Dunoyer's work on molecular rays *i.r.t.* canon of mnemonics, 132.
- Eaton (John) *i.r.t.* Decimal Classification, 187.
 Economic length in notation, 268-269.
 Economic limit in length of class number in mathematics, 232.
 Economics—
 Comparative study of, 236-267. Of specific industries, Provision in Decimal Classification for, 247.
 Eighth order array in mathematics in colon classification, 228-229.
 Elasticity, 216.
 Embodied knowledge, 142.
 Empty box, And pseudo-entity, 25.
 Encyclopaedias *i.r.t.* pitfalls in first stage classification, 274-275.
 Entity—
 Defined and illustrated, 8. Related, Defined, 22. Stranger, Defined, 22.
 Enumeration, Canon of, *see* Canon of enumeration.
Essays offered to Herbert Putnam by his colleagues and friends on his thirtieth anniversary as librarian of Congress r.i.r.t. canon of helpful order *a.t.* lay-out of Congress Classification, 206.
 Evasion in terminology and synthetic classification, 135-139.
 Exclusiveness, Canon of, *see* Canon of exclusiveness.
 — in common subdivisions, 171.
 Exhaustiveness, Canon of, *see* Canon of exhaustiveness.
 — in common sub-divisions, 168.
 Expansive Classification, Genesis of, 188-189.
 — *i.r.t.* canon of—
 Consistent order, 46. Currency *a.t.* lay-out, 199. Enumeration *a.t.* lay-out, 199. Helpful order *a.t.* lay-out, 209.
 — *i.r.t.* importance of notation, 98. Notation, 77. Terminology in lay-out, 199.
 —, Lay-out, 197.
 Extension and intension, Defined and illustrated, 59-60.
- Family of *Siddhas* as an illustration of complete assortment, 20.
 Favoured country *i.r.t.* canon of local variation, 151.
 Favoured language *i.r.t.* canon of local variation, 151.
 Fifth order array in mathematics, Compared, 223-226.
 Filial arrangement—
 Contrasted with complete assortment, 20. Defined, 20. Illustrated, 6, 20-24.

First link—

Defined, 15. Illustrated, 7, 15.

First order arrays, Compared, 197-210.

First stage classification, Hints for, 272-279.

First substage in first stage classification, Hints for, 273-279.

Five laws of library science r.i.r.t.—

Genesis of Colon Classification, 192. Library classification, 93.

Forestry in Decimal Classification, 201.

Form and style in poetry q.i.r.t. canon of permanence, 35-36.

Form division of poetry, i.r.t. canon of permanence, 35-36.

Form-headings *see* Common subdivisions.

Foundation i.r.t. canon of context, 72.

Four dimension chain in economics, Compared, 262-263.

Fourth order array in—

Economics, Compared, 252-256. Mathematics, Compared, 218-223.

Fourth stage classification—

Hints for, 269-270. Need for, 173.

Fraser (Ronald G.J.): *Molecular rays*, q.i.r.t. and r.i.r.t. canon of mnemonics, 132.

Frequency curves, 86.

Functions of real variables, 227.

Function-space i.r.t. canon of mnemonics, 130-131.

Fundamental constituent terms, 137-139.

General theory—

Analytically approached, 8-93. Diagrammatically approached, 2-7.

Generalia i.r.t. pitfalls in first stage classification, 274-275.

Geographical device i.r.t. canon of—

Consistent order, 48. Hospitality in array, 103-104. Local variation, 152. Mnemonics, 128.

— i.r.t. pitfalls in second stage classification, 272. i.r.t. scheduled mnemonics, 121-122.

Geometry—

In Decimal Classification, 217. i.r.t. canon of enumeration, 69.

Group—

Defined, 11. Multiple, Defined, 11. Unitary, Defined, 11.

Handbuch der experimental physik r.i.r.t. canon of mnemonics, 132.

Helpful order, Canon of, *see* Canon of helpful order.

— in common subdivisions, 168.

Hilbert space i.r.t. canon of mnemonics, 130.

History i.r.t. pitfalls in first stage classification, 274.

Hospitality in array, Canon of, *see* Canon of hospitality in array.

Hospitality in chain, Canon of, *see* Canon of hospitality in chain.

q.i.r.t. = quoted in relation to. r.i.r.t. = referred in relation to.

- Hospitality in common subdivisions, 168.
 Humbugs, 68.
- Immediate universe, Defined, 14.
 Incomplete chain in universe of knowledge, 96.
 Independent characteristic, Effect on division of, 10.
 Indian Botanical Society *r.i.r.t.* canon of permanence, 34.
 Indian notation recommended, 185.
 Individualisation, Canon of, *see* Canon of individualisation.
 — in common subdivisions, 168-169.
 'Individualise', Defined, 16.
 Infinite series, 221.
 Institut International de Bibliographie *i.r.t.* canon of currency, 65.
 Insurance in Decimal Classification, 245.
 Integral equations, 221.
 Integral notation, 74. *i.r.t.* canon of hospitality in chain, 116.
 Intension and extension, Defined and illustrated, 59-60.
 Intension, Canon of, *see* Canon of intension.
 Intention of author, Oblique, *i.r.t.* pitfalls in first stage classification, 276, 278.
 Internal repair of catalogue, 67.
 International Institute of Bibliography *i.r.t.* notation, 77.
 Introduction to library classification *q.i.r.t.*—
 Author marks, 177. Canon of intension, 59-60. Cutter numbers, 178. Importance of notation, 97. Merrill numbers, 178.
 — *r.i.r.t.* canon of purity, 78.
- Johnsonian definition of oats, 68.
Journal of Indian botany r.i.r.t. canon of permanence, 34.
- Ker (W.P.): *Form and style in poetry q.i.r.t.* canon of permanence, 35.
 Kinship, Lineal, In chain, 22.
 Knowledge classification—
 Importance of notation in, 97-98. Special theory of, 93-141.
 Knowledge, Defined, 93.
 Knowledge, Future, Inaccessible or Potential, 94.
 Knowledge, Universe of—
 As a completely amplified universe, 25. Defined, 95. Peculiarities of, 95-96.
- Lake Placid Club Education Foundation *i.r.t.* canon of currency, 64.
 Last link—
 Defined, 15. Illustrated, 7, 15. In the universe of knowledge, 96.
 Law of Parsimony *i.r.t.* synthetic classification, 137-138.
 Laws of Library Science *i.r.t.* minute classification, 269.

a.t. = applied to.

i.r.t. = in relation to.

Lay-out—

Compared, 197-210. Tabulation of, 196-197. Unimportance of order in, 209-210.

Learned societies and periodicals *i.r.t.* canon of permanence, 34-35.

Left-handed notation, 74.

Length of notation, 79-92.

— Compared in mathematics, 231-233. Discussed, -92. *i.r.t.* chain in four dimensions in economics, 262-263. *i.r.t.* chain in two dimensions in economics, 261-262.

Library administration *r.i.r.t.*—

Creation of new classes, 269. Fourth stage classification, 173, 269. Principles of parallel movement, 180.

Library Association record *q.i.r.t.*—

Canon of common subdivisions, 170. Canon of local variation, 152. Creation of class numbers, 141.

Library Bureau founded, 185.

Library classification—

Basis for, 93. *i.r.t.* knowledge classification, 93.

Library journal—

Founded, 185. *q.i.r.t.* genesis of Decimal Classification, 186.

Library of Congress: *Classification. Class D. Universal and old world history r.i.r.t.* canon of partial comprehension, 146.

Library of Congress classification—

q.i.r.t. Canon of hospitality in array, 105. *r.i.r.t.* canon of helpful order *a.t.* lay-out of Congress Classification, 208.

Library School of Madras *i.r.t.* Colon Classification, 194.

Library world—

Founded, 190. *q.i.r.t.* canon of common subdivisions, 165-166.

Like, Defined and illustrated, 9.

Lineal kinship, in chain, 22.

Linear notation, 74.

Linear transformations in Hilbert Space and their application to analysis q.i.r.t. canon of mnemonics, 130-131.

Link, First—

Defined, 15. Illustrated, 7, 15.

—, Last—

Defined, 15. Illustrated, 7, 15. In the universe of knowledge, 96.

Local list *i.r.t.* canon of consistent order, 46.

Local variation, Canon of, *see* Canon of local variation.

Long—

Notation, 79-92. Class numbers, Justified, 156. *vs.* short notation, 79-92.

Loose chain—

Defined, 15. Illustrated, 7, 15.

q.i.r.t. = quoted in relation to. *r.i.r.t.* = referred in relation to.

- Madras University Library—
i.r.t. Colon Classification, 193. *r.i.r.t.* canon of permanence, 35.
- Manual of classification q.i.r.t.* canon of—
 Helpful order in lay-out of—
 Decimal Classification, 203. Expansive Classification, 209.
 Mnemonics, 120.
- *q.i.r.t.* importance of notation, 98.
 — *r.i.r.t.* canon of purity, 78.
- Manual of library economy*—
 Publication, 191. *r.i.r.t.* biography of Brown, 190.
- Martel (Charles) *i.r.t.* Congress Classification, 189-190.
 —: *Library of Congress classification r.i.r.t.* canon of helpful order
 in lay-out of Congress classification, 208.
- Mathematics, Comparative study of, 211-235.
- Means of Colon Classification and Decimal Classification, Compared,
 87.
- Medians of Colon Classification and Decimal Classification, Com-
 pared, 85.
- Medicine, Systems of, *i.r.t.* canon of local variation, 152.
- Medical library r.i.r.t.* canon of permanence, 34.
- Melvil Dewey: seer, inspirer, doer, q.i.r.t.* canon of local variation,
 153. *r.i.r.t.* Dewey's biography, 184.
- Merrill (William Stetson): *Code for classifiers r.i.r.t.* first stage
 classification, 273.
- Merrill numbers, 178.
- Metric Bureau, 185.
- Minor authors *i.r.t.* canon of reticence, 68.
- Minute classification, Dewey's defence of, 111-112.
- , Need of, In—
 Bibliographic classification, 268. Knowledge classification, 93.
 Library classification, 268-269. Pamphlet classification, 269.
- Mixed notation, 73.
- Mnemonics, Canon of, *see* Canon of mnemonics.
 — In common subdivisions, 168.
 —, Non-scheduled—Defined, 121. Result of neglect of, 124-126.
 —, Scheduled—
 Defined, 121. Illustrated, 121-128.
- Modern librarian q.i.r.t.*—
 Artificial composite books, 149. Length of notation, 83-89.
- Modes of Colon Classification and Decimal Classification, Compared,
 85.
- Modulation, Canon of, *see* Canon of Modulation.
- Molecular rays *i.r.t.* canon of mnemonics, 132.
- Molecular rays q.i.r.t.* and *r.i.r.t.* canon of mnemonics, 132.
- Morphology *i.r.t.* canon of context, 72.
- Mother country *i.r.t.* canon of local variation, 151.

Multiple class—

Defined, 13. Illustrated, 5.

Multiple group, Defined, 11.

Narada: *Bhaktisutras* i.r.t. canon of mnemonics, 133.

Naturajan (K.): *Vagaries in Indian book production*, Quoted, 149.

Neglect of mnemonics, Result of, 124-126.

New class, Creation of, 268.

New English dictionary r.i.r.t. terminology, 63.

New placings in Colon Classification, Some, q.i.r.t. canon of mnemonics, 130-134.

Non-scheduled mnemonics—

Defined, 121. Illustrated, 129-133.

Notation—

Canons for, 73-92. Defined, 28. Importance in knowledge classification, 97-98. Length of, 79-92.

Nunc Dimittis, 65.

Oats, Johnsonian definition of, 68.

Oblique intention of author i.r.t. pitfalls in first stage classification, 276, 278.

Octave notation r.i.r.t. canon of exhaustiveness, 40.

Octave principle a.t. array of—

Fourth order in mathematics, 221. Third order in economics, 247-248. Third order in mathematics, 217.

— Defined and illustrated, 100-101. i.r.t. canon of hospitality in array a.t. array of fourth order in economics, 254.

One dimension chain in economics, Compared, 257-260.

Open array—

Defined and illustrated, 105-106. i.r.t. canon of exhaustiveness, 40.

Order—

Defined, 14. Illustrated, 5, 6, 13.

Organisation of knowledge in libraries q.i.r.t. canon of—

Helpful order in lay-out of—

Congress Classification, 208. Decimal Classification, 204.

Subject Classification, 207-208.

Individualisation, 177. Mnemonics, 120-121.

— q.i.r.t. subject index illusion, 135.

— r.i.r.t. canon of purity, 78.

Original universe, Illustrated, 3.

—, Completely amplified, Defined, 19.

"Other" device—

Defined, 99. Illustrated, 99-100.

q.i.r.t. = quoted in relation to. r.i.r.t. = referred in relation to.

"Other" principle, Extended, 100-101.

- Pamphlets *i.r.t.* minute classification, 269.
 Parallel order of similar classes, Illustrated, 55-58.
 Parsimony, Law of, and synthetic classification, 137-138.
 Partial comprehension, Canon of, *see* Canon of partial comprehension.
 Periodicals *i.r.t.* pitfalls in first stage classification, 274-275.
 Periodicals and Learned Societies *i.r.t.* canon of permanence, 34-35.
 Periodogram analysis and canon of mnemonics, 131.
 Permanence, Canon of, *see* Canon of permanence.
 — in common subdivisions, 171.
 Philology *i.r.t.* canon of currency, 67.
 Philosophical systems *i.r.t.* canon of local variation, 151-152.
 Philosophy *i.r.t.* canon of—
 Currency, 67. Enumeration, 71.
 Physical review *i.r.t.* canon of permanence, 35.
 Physical Society *i.r.t.* canon of permanence, 35.
 Pitfalls in—
 First substage classification, 273-279. Second stage classification, 271-272.
 Plane notation, 74.
 Poetry, Form division of, *i.r.t.* canon of permanence, 35-36.
 Politics *i.r.t.* canon of enumeration, 71.
 Potentials, 216.
 Pressy (J.C.) *q.i.r.t.* canon of currency, 66.
 Principle of parallel movement, 180.
 Primary chain—
 Defined, 15. Illustrated, 7, 15.
 Probabilities in Decimal Classification, 217.
 Problems in calculus in Decimal Classification, 221.
 Proceedings of the Second All India Library Conference *r.i.r.t.* canon of mnemonics, 130.
 Pseudo-chain, Defined, 19.
 —, Complete, Defined, 19.
 Pseudo-class, Defined, 19.
 —, Rank of, Defined, 19.
 Pseudo-entity—
 And empty box, 25. Defined, 19. In the universe of knowledge, 95.
 Public libraries in the United States *r.i.r.t.* genesis of Decimal Classification, 187.
 Pure mathematics, Connotation of, Compared, 215.
 Pure notation, 73-74.
 Purity, Canon of, *see* canon of purity.
 Putnam (Herbert) *i.r.t.* Congress Classification, 189-190.

a.t. = applied to.

i.r.t. = in relation to.

- Putnam, *Ded.*: *Essays offered by his colleagues and friends on his thirtieth anniversary as librarian of Congress*, *r.i.r.t.* canon of helpful order in lay-out of Congress Classification, 208.
- Putnam's estimate of Dewey, 185-186.
- Quantitative order, Illustrated, 42.
- Quartos of Shakespeare *i.r.t.* canon of reticence, 68.
- Quaternions in Subject Classification, 223.
- Quinn (John Henry) *i.r.t.* Adjustable Classification, 191.
- Radiation *i.r.t.* canon of enumeration, 70.
- Radium, *Le*, *r.i.r.t.* canon of mnemonics, 132.
- Raman's work on ultra-sound *i.r.t.* canon of mnemonics, 133.
- Ranganathan (S. R.): *Classified catalogue code*—
r.i.r.t. canon of—
 Currency, 67. Partial comprehension, 147. Permanence, 34.
r.i.r.t. classification of artificial composite books, 148-149.
- : *Colon classification*—
q.i.r.t. anterior positions for common subdivisions, 174.
q.i.r.t. canon of—
 Classics, 161-163. Common subdivisions, 166-167. Consistent order, 48, 50. Local variation, 151. Relevant sequence in mathematics, 223. Viewpoint, 155.
- r.i.r.t.* canon of—
 Consistency, 39. Consistent order, 49, 51. Enumeration, 71. Hospitality in chain, 110. Individualisation, 176. Relevant sequence, 38.
- r.i.r.t.* comparison of arrays of third order in economics, 241.
- : *Five laws of library science* *r.i.r.t.* Genesis of Colon Classification, 192. Library classification, 93.
- : *Library administration* *r.i.r.t.*—
 Creation of new classes, 269. Fourth stage classification, 173, 269. Principle of parallel movement, 180.
- : *Some new placings in colon classification* *q.i.r.t.* canon of mnemonics, 130-134.
- Rank, Defined, 16.
- of pseudo-class, Defined, 19.
- "Ranked," Illustrated, 4.
- Rays, Molecular, *i.r.t.* canon of mnemonics, 132.
- Readers and Writers company, Founded, 185.
- Related box, Defined, 22.
- Related entity, Defined, 22.
- Relation sign and canon of viewpoint, 154.
- Relational order, Illustrated, 43-44.
- Relativity, Canon of, *see* Canon of relativity.
- Relevance, Canon of, *see* Canon of relevance.

q.i.r.t. = quoted in relation to. *r.i.r.t.* = referred in relation to.

- Relevant sequence, Canon of, *see* Canon of relevant sequence.
- Reports *r.t.* pitfalls in second stage classification, 271.
- Reticence, Canon of, *see* Canon of reticence.
- in common subdivisions, 172-173.
- Right-handed notation, 74.
- Roman notation attacked by Melvil Dewey, 184.
- Rules for a dictionary catalogue*, mentioned, 188.
- Saving in terminology in synthetic classification, 135-139.
- Sayers (W. C. Berwick)—
- And the phrase "canons of classification", 30. *r.t.* Colon Classification, 193. Reviser of *Manual of library economy*, 191.
- and Brown (James Duff): *Manual of library economy r.t.* biography of Brown, 190.
- : *Introduction to library classification q.r.t.*—
- Author marks, 177. Canon of intension, 59-60. Cutter numbers, 178. Importance of notation, 97-98. Merrill numbers, 178.
- *r.t.* canon of purity, 78.
- : *Manual of classification q.r.t.* canon of—
- Helpful order in lay-out of—
- Decimal Classification, 203. Expansive Classification, 209. Mnemonics, 120.
- *r.t.* canon of purity, 78.
- : *Systems of classification with particular reference to those used in special libraries q.r.t.* length of notation, 88.
- Scheduled mnemonics—
- Defined, 121. Illustrated, 121-128.
- Schedules of common subdivisions, 164-165.
- Scheme, Associated, Defined, 17.
- Scheme of assortment, Defined, 17.
- Scheme of classification—
- And associated complete assortment, 25. Defined, 26. For a universe of knowledge and its special requirements, 97. Fundamental categories of, 30. Illustrated, 7. Implications of, 26. Necessary aids in, 28.
- Schwingungs und Wellenlehre Ultraschallwellen r.t.* canon of mnemonics, 132.
- Second All India Library Conference: *Proceedings r.t.* canon of mnemonics, 130.
- Second order array in—
- Mathematics, compared, 211-213. Social sciences, compared, 236-240.
- Second stage classification—
- Hints for, 270-272. Need for, 186.

- Second substage in first stage classification, Hints for, 272-273.
 Sequence-marking, 269.
 Seventh order array in mathematics in Colon Classification, 228.
 Sixth order array in mathematics in Colon Classification, 228.
 Shakespeare *i.r.t.* canon of reticence, 68.
 Short vs. long notation, 79-82.
 Shortness of notation *see* Length of notation.
 Siddhas, Family of, As an illustration of filistery arrangement, 20.
 Similar classes, Parallel order of, Illustrated, 55-58.
 Sivaraman (K. M.): *Colon vs. Decimal classification, a statistical study of their notation* quoted, 83-89.
 Socialism in Decimal Classification, 245.
 Societies *i.r.t.* pitfalls in first stage classification, 274-275.
 Sociology in Decimal Classification, 200-201, 239.
 Sociology *i.r.t.* canon of currency, 67.
 Solid notation, 74.
 Some new placings in Colon classification *q.i.r.t.* canon of mnemonics, 130-134.
 South Indian teacher *q.i.r.t.* length of notation, 83-89.
 Spatial order, Illustrated, 43-44.
 Species, 78.
 Spelling Reform Association, 185.
 Spofford (Ainsworth Rand) *i.r.t.* Congress Classification, 190.
 —, Librarian of the Congress, 189.
 Stages of classification, 269-279.
 Standard deviations of Colon Classification and Decimal Classification, Compared, 87.
 Statistics, 216, 237.
 Stewart (James Douglas) *i.r.t.* Subject classification, 191.
 Stone *i.r.t.* canon of context, 72.
 Stone (Marshal Harvey): *Linear transformations in Hilbert Space and their applications to analysis q.i.r.t. and r.i.r.t. canon of mnemonics*, 130-131.
 Stranger box, Defined, 22.
 Stranger entity, Defined, 22.
 Subject Classification—
 Fifth order array absent in mathematics, 224. Genesis, 191.
 i.r.t. anterior position for common subdivisions, 174.
 i.r.t. canon of—
 Consistent order, 46. Currency in lay-out, 198-199.
 Enumeration *a.t.* array of—
 Second order in sciences, 213. Second order in social sciences, 237. Third order in economics, 245-246.
 — *a.t.* lay-out, 198-199.
 Exclusiveness *a.t.* array of fourth order in economics, 254.

q.i.r.t. = quoted in relation to. *r.i.r.t.* = referred in relation to.

- Subject Classification—Contd.**
i.r.t. canon of—*contd.*
 Helpful order *a.t.* array of—
 Fourth order in economics, 256. Fourth order in mathematics, 223. Second order in social sciences, 239-240. Third order in economics, 251. Third order in mathematics, 218.
 —*a.t.* lay-out, 206-208.
 Hospitality in array, 104-105.
 —*a.t.* array of—
 Fourth order in economics, 254. Fourth order in mathematics, 221. Second order in sciences, 213. Second order in social sciences, 238. Third order in economics, 248. Third order in mathematics, 217.
 Hospitality in chain, 117.
 —*a.t.* chain in two dimensions in economics, 262.
 Mnemonics, 134. Relativity, 90-92. Viewpoint, 156.
 — *i.r.t.* notation, 76. Terminology in lay-out, 198-199.
 — Lay-out, 196.
Subject classification q.i.r.t.—
 Biscoe numbers, 179. Canon of hospitality in array, 104. Canon of individualisation, 176-177.
r.i.r.t. canon of helpful order *a.t.* array of third order in economics, 251.
 Subject Devices *i.r.t.* canon of—
 Consistent order, 50-51. Helpful order *a.t.* array of third order in economics, 250. Hospitality in array, 101-102. Mnemonics, 128.
 i.r.t. scheduled mnemonics, 122.
 Subject-index illusion, 134-135.
 Subordinate class, Defined, 14.
 Synthetic classification *i.r.t.*—
 Canon of local variation, 152. Evasion in terminology, 135-139. Law of parsimony, 137-138. Pitfalls in first stage classification, 279.
System of bibliographic classification q.i.r.t.—
 Anterior position to common subdivisions, 173-174. Canon of local variation, 150.
Systems of classification with particular reference to those used in Special Libraries q.i.r.t. length of notation, 88.
 Systems of medicine *i.r.t.* canon of variation, 152.
- Terminology—**
 Defined, 28. In array of fourth order in economics, 253. In array of fourth order in mathematics, 220. In synthetic classification, 135-139. Of lay-out compared, 197-199.
 —, Canons for, 63-72.
- Terms—**
 Derived composite, 137-139. Fundamental constituent, 137-139.

a.t. = applied to.

i.r.t. = in relation to.

- Testing laboratory, 66.
 Theory, General, 2-29.
 Third order array in—
 Economics, compared, 240-252. Mathematics, compared, 218-218.
 Third stage classification—
 Hints for, 270. Need for, 178.
 Time order, Illustrated, 43-44.
 Title, Deceptive, *s.r.t.* pitfalls in first stage classification, 276-277.
 Trains of characteristics, Illustrated, 105-110.
 Two dimension chain in economics, Compared, 260-262.
 Types of banks and canon of mnemonics, 133.
 Types of economic organisation, Provision in—
 Colon classification, 247. Decimal Classification, 247.
 Ultimate class, Defined, 176.
 Ultra-sound and canon of mnemonics, 132-133.
 Uniformity in length of notation, 90.
 Unitary class—
 Defined, 13. Illustrated, 3.
 Unitary group, Defined, 11.
 United States, Government of, *s.r.t.* canon of currency, 64.
 Universe—
 Defined and illustrated, 10. Immediate, Defined, 14.
 — of books—
 Peculiarities of, 142-143. Special theory of classification of, 142-181.
 — of knowledge—
 A completely amplified universe, 25. Defined, 95. Peculiarities of, 95-96. Special theory of classification of, 93-141.
 —, Original, Illustrated, 3.
 University of Madras *s.r.t.* Colon Classification, 194.
 University of the State of New York, 64.
 Unlike, Defined and illustrated, 9.
 Vagaries in Indian book production quoted, 149.
 Vagueness in terminology, 62-63.
 Values of digits, 75.
 Viewpoint, Canon of, *see* Canon of viewpoint.
 Weights and measures, 215.
 Wright (W.F.) *q.s.r.t.* canon of common subdivisions, 165-165.
 Yearbooks *s.r.t.* pitfalls in first stage classification, 274-275.

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 practices 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. Berwick 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. E. 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. 84, 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. E. 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*.

"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*.

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 Makratta*.

Recommended for purchase in all schools and colleges by the Director of Public Instruction, Madras, in his Proceedings Dia. 4836/35, dated 8th November, 1935.

SERVANTS OF INDIA SOCIETY'S LIBRARY

POONA 4.

Books drawn from the library may not be retained for longer than a fortnight.

Borrowers will be held strictly responsible for any damage done to books while they are in their possession.