CHAPTER II

BRIEF HISTORY OF CATALOGUING
CHAPTER II

BRIEF HISTORY OF CATALOGUING

We all use catalogues daily, but we never pause to think how they became what they are. Library catalogue has come a long way to achieve its present stage.

Miss Dorothy Norris in her book entitled "History of cataloguing and cataloguing methods" divides the source of information about the cataloguing practices prevailing up to 1700 into the following three groups:

1) Ancient catalogues of the period ending with 100 AD.
2) Medieval Monastic catalogues of the period between 100 AD and 1400 AD; and
3) Collegiate catalogues of the period between 1400 AD and 1700 AD.

It is an established fact that library catalogue did exist in the past. Catalogue is as old as the libraries themselves. The Babylonians were the first people to found libraries, their books, of course, being in the form of clay tablets. The oldest library catalogue that ever seems to have been discovered is that of the library of Edfu in upper Egypt. This catalogue was engraved on the walls of the library itself, and was in all probability just a bare list of books.
Certain things which present day cataloguers take for granted were not evident in early catalogues, and one of the historical study of cataloguing is to see the compilers groping towards a system. The need to give locations of books, for example, was not appreciated until the 14th century, and various cumbersome methods were used to deal with independent works, which were bound together in one volume. The use of alphabetical order in author catalogue did not become common until the 16th century.

Since early catalogues were mainly "inventories" of stock rather than bibliographical tools or systematic guides for readers, it is not surprising that codes of rules were few. In the 16th century however, there were three notable attempts at such codes. They are Conrad Gesner's cataloguing methods of 1548, suggesting a basic catalogue of books in the order in which they stood on the shelves with an alphabetical index and the possible use of his Bibliotheca Universalis (1545), and its supplement, the Pandectarium (1548-49) as catalogues; the cataloguing methods of Florians Treflerus (1560), a Benedictine monk who wrote perhaps the first manual of library economy; and the cataloguing methods of Andrew Maunsell, a London book seller, outlined in part I of his catalogue of 1595.

The 17th century saw further developments in the making of catalogue codes with the beginnings of Bodleian
library catalogues and cataloguing methods of John Durie, and Frederic de Rostgaard, a Danish Scholar.

By the 18th Century catalogues had become finding lists rather than mere inventories. There are some examples of early library catalogues which were arranged chronologically, or by authors, while a few were roughly classified.

A glance at the history of catalogues maintained in the libraries until the middle of the 19th century reveals that there was no uniform system for compilation of catalogues, nor were the catalogues of any library prepared on the basis of some sets of rules and plan.

Early catalogues dealt with small collections and they were compiled largely by people, working more or less independently. The cataloguer of each collection set up his own code unless of course he was content to follow the vague rules already in use in some other libraries. This procedure was generally followed down to the middle of the 19th century.

BEGINNING OF THE MODERN PERIOD:

For the first time the British Museum published its catalogue of holdings in two volumes in 1787. The
principles followed in preparing this catalogue are not explicitly stated. A new edition appeared in 7 volumes brought out between 1813 and 1819. This catalogue is considered as a basis for study and research in cataloguing. It is therefore, believed that the last quarter of 18th century is the beginning of the modern period of cataloguing.

BABER'S RULES (1834):

In 1834, the Trustees of the British Museum decided to produce one complete alphabetical catalogue of its entire collection. Henry Baber was the then keeper of the printed books. Upon the request by the Trustees, Baber himself formulated his "Sixteen Rules" as guidance to the new cataloguing work. However, Baber suggested that Antonio Genesio Mario Panizzi as the proper person to do this job.

After analysing the Baber's Rule Mr. G. Bhattacharya has systematically arranged the specific prescriptions embodied in the Rules, as follows.

1) Source of information for the Main Entry;

2) Elements to be included in the Main Entry and their sequence;

3) Choice of Heading of the Main Entry for
   a) a book mentioning the name of its author;
   b) a Pseudonymous book;
c) a dependent book, a translation, a commentary etc.;
d) an anonymous book; and
e) a composite book.

4) Rendering of each element in the Main Entry, such as Heading and Title etc.;

5) Addition of an individualising element to the Heading to resolve homonym, if any;

6) Addition of compulsory notes to the Main Entry;

7) Style of writing each element in the Main Entry;

8) Arrangement of entries; and

9) Specification of the slips to be used for writing the Main Entry.

This body of rules may be regarded as one of the earliest catalogue codes. This was framed on the personal experience of Baber himself.

PANIZZI'S RULES (1841):

That a good amount of cataloguing work was done earlier than Sir Panizzi is quite obvious. But the credit for the pioneering work in the formulation of individual rules to guide the day-to-day cataloguing work goes to Panizzi. Panizzi formulated his 91 Rules in collaboration with his colleagues Winter Jones, Edwards, and John Humffreys Parry. When these Rules were published in 1941, they
aroused great controversies amongst both the British Museum Trustees and the public. The 91 Rules covering Author and Title heading and description were said to be too complex. Stress was specially on the degree of details to be included in the author heading, which if lengthy, took a longer time and delayed the progress in cataloguing. Panizzi had to face and defend his Rules before the Commissioners appointed by the Govt. to enquire into the constitution and government of the British Museum in 1850. From the evidence in his own words incorporated in the Report submitted by the above commission, Panizzi's objectives of 91 Rules may be stated below: "A Catalogue of a library is intended principally to give an accurate inventory of the books which it comprises; and is in general consulted either to ascertain whether a particular book is in the collection or to find what works it contains on a given subject".

The British Museum adapted Panizzi's code of Rules, and even today it forms the basis on which the British Museum Catalogue is being compiled. After 1887, there have been many revised editions, 1936 being the latest edition. This code is known as the British Museum Code.
British Museum code has had a great influence directly or indirectly on all subsequent codes, because of some of its remarkable feature such as:

i) It states two main objectives of a catalogue
a) to reveal what a library has by a particular author, title, editions or translation of a work and b) whether the library has a particular work asked by a reader.

ii) It is designed for a single large library. In such libraries change in the catalogue is expensive and choice of heading is affected by this practical consideration. For example, in change of name, specific entry under earliest name used as author obviates change in entries.

iii) The concept of "corporate authorship" first formulated in this code has been adopted by all subsequent English codes. The corporate authorship is entered under the "place".

iv) This code also introduced a type of classed element by using "form terms" as entry elements, for example, Congress, Dictionary, Encyclopaedias, even for a work where title begins with a proper name, eg., Cassell's Modern Encyclopaedia, and even for an anonymous work, e.g. the first part of a dictionary of chemistry. Other form headings include Ephemendes, Directions, Catalogues etc.
Since British Museum Code is the first code of its type, and because of its policy of issuing printed catalogues, it is probably true to say that the British Museum code has had a considerable influence. However, it should be emphasized here, that the staff of the British Museum itself are the first to acknowledge that the code is now out dated. Perhaps Panizzi's rules pointed the direction in which the future practice governing the author and title entries was to be formulated.

ANDREA CRESTADORO'S CODE (1856):

There was a controversy over Panizzi's 91 rules. In 1850 the Libraries Act was to be passed in Great Britain. Andrea Crestadoro realised the need for a popular code to guide the cataloguing work of the Public Libraries to be established under the Act. Andrea Crestadoro, when he was a reader in the British Museum, brought out a pamphlet entitled "The art of making catalogues of libraries", in 1856. This code had the following features- (i) More stress was laid on the title's entry in full, leading off with the author's names. (ii) Arrangement was done according to the accession numbers rather than any precise order. (iii) The subject was to be taken from the title of the book. (iv) The code did not indicate the provision
of cross-reference entry for other composite and related subjects dealt within the book.

Later on, Crestadoro became the librarian of the Manchester Public Library where he adopted these rules in compiling the catalogue of that library.

So far the rules propounded by the British Museum remained as the soundest code of rules for the making of author entries. But slowly there appeared a group of readers who wanted books about specific subjects just as much as they did by specific authors. This directed attention to the question of subject cataloguing.

CHARLES JEWETT'S CODE (1852):

Prof. Charles C. Jewett was an American and was greatly influenced by Panizzi's code. Just after the publication of British Museum Code, library cataloguing began to receive attention in America. And it was Jewett, Librarian of the Smithsonian Institution, who took initiative and published a code of 39 rules in 1852, on 5th lines of Panizzi's code under the title—"On the construction of catalogues of libraries and their publication by means of separate stereotyped titles, with rules and examples". His work was based on his experience in compiling the
catalogues of the Brown University. According to Julia Pettee, Jewett was the author of the first American Code.

Jewett formed rules for author entries. He also included in his code examples and a model subject index. The principles of corporate authorship were expanded in Jewett's code. He established the practice of entry of pseudonymous work under the real name of the author and anonymous work under the first word of the title and then the catch word.

**CUTTER'S RULES (1876):**

Cutter, having extensively studied the then existing practices and codes, concluded "For a dictionary catalogue as a whole, and for most of its parts, there is no manual whatever. Nor have any of the ...... works attempted to set forth the rules in a systematic way or to investigate what might be called the first principles of cataloguing". Thus he formulated each individual rule based on some "principles" of cataloguing and all the rules thus obtained, would be arranged in a helpful sequence. He actually compiled the catalogue of Boston Athenaeum according to his own ideas. This catalogue was published in five volumes between 1874 and 1882.

The year 1876 is said to be an epoch making year in the history of cataloguing, for it was the publication
of the first edition of Charles Cutter's Rules for a Dictionary Catalogue. This code comprising of 205 rules was the first code of complete cataloguing practice for every kind of entry needed in a dictionary catalogue. The fourth edition of this code came in 1904 after Cutter's death in 1893. In this edition the number of rules increased to 369, covering rules for author, title entry, form entry & alphabetical subject entry.

The guiding principles in the Cutter's Code (RDC) are recorded as follows:

**Objects:**

1. To enable a person to find a book of which either
   a) the Author
   b) the Title
   c) the Subject ..... is known

2. To show what the library has
   d) by a given author
   e) on a given subject
   f) in a given kind of literature

3. To assist in the choice of a book
   g) as to its edition (bibliographically)
   h) as to its character (literary or topical)

**Means:**

1. Author entry with the necessary references (for a and d)
2) Title entry or title - references (for b)
3) Subject entry, cross references and classed subject table (for c and e)
4) Form entry and language entry (for f)
5) Giving edition and reprint, with notes when necessary (for g)
6) Notes (for h)

**Reason for this choice:**

Among the several possible methods of attaining the OBJECTS, other things being equal, choose that entry

1) That will probably be the first looked under by the class of people who use the library.
2) That is consistent with other entries, so that one principle can cover all;
3) That will mass entries least in place where it is difficult to so arrange them that they can be readily found, as under names of nation and cities".

On the basis of these principles Cutter formulated the individual rule for his code (RDC-1876).

This code has the following distinctive parts

1) Author - catalogue
2) Title - catalogue
3) Subject - catalogue; and
4) Form - catalogue.
The code prescribes Rules for Choice, Rendering and Recording of each section of the above entries.

Dr. S. R. Ranganathan has paid appreciating tribute to Cutter for his pioneering contribution. Ranganathan said "None of the (earlier) drafts set forth cataloguing Rules in a systematic or exhaustive way. Nor was there much evidence of their roots stemming from some kind of first principles. Nor again was any one of them a general code not particularly conditioned by the practice of a single library. RDC was the first code to reach beyond these limitations. Its limitation was only in the linguistic context. The library profession has been fortunate in the author of this code. He was a genius. This is seen in the ring of certitude and the profoundness of penetration found in the rules and commentaries of RDC. They are like the eternal epigrams of a sage. RDC is indeed a classic. It is immortal. Its influence has been overpowering. It inhabits free thinking even today. It appears to have been the chief source of later codes in the English language. Being a one man's creation, it has been largely apprehended intuitively. It has been later chiselled to a slight degree. That is why, RDC is whole as an egg".
THE PRUSSIAN INSTRUCTIONS (1899) (PIN):

A significant contribution to cataloguing rules, after Cutter, is found in the Prussian Instructions. This code was not available in English until 1938, when the Australian librarian Dr. Osborn translated it and added a long Introduction to it. These are the rules for alphabetical catalogue of the Prussian Libraries. According to Dr. Ranganathan "PIN may be taken to be the second important code of a nonlocal nature".

CORPORATE WORKS:

The most outstanding feature of PIN is that it does not recognize the concept of corporate authorship. Such works are treated either (a) as of personal authorship, e.g., entered under editor or the personal element of a firm's name, or (b) as anonymous works.

ANGLO-AMERICAN CODE (1908):

This is a joint venture by the American Library Association and the British Library Association. Both the Associations had their own independent sets of cataloguing rules. Dr. Melvil Dewey made a practical suggestion that in order to secure greater uniformity in the cataloguing practices among the English speaking people, both the
Associations could jointly produce a code. Finally, it came into being in 1908, under the title "Cataloguing Rules: author and title entries".

This was the first attempt to achieve international co-operation in the field of cataloguing. The aim of the compilers of this code was for the libraries somewhat larger than the British Museum. There are 174 rules related to the entries concerning author and title headings and description. There are rules for personal authorship and corporate authorship anonymous work etc.

Anglo-American code has its limitations in incomplete analysis, inadequate definitions and many examples are in German or Latin. By the 1920's this code was under criticism and the need for revision was repeatedly expressed.

Dr.A.D.Osborn's remarks over these rules are-

a) Rules for cataloguing would be relatively few and simple, partly because they would not attempt to cover exceptional and unusual cases.

b) Non-essential cases would be given little attention or passed over.

c) Cataloguers would be trained to use their judgement not to expect a rule or a precedent to guide them at all turns.
Unlike RDC, AA (1908) lacked a statement of principles but its aims were stated to be "the requirements of larger libraries of a scholarly character". This code showed the influence of all the previous codes, notably the L.C., B.M., R.D.C. and Libderfelt's Electic Rules, which are frequently quoted in the text.

One or two important features of this code may be interesting to note. The Rules were pedantic in the extreme; as for example, authors were to be entered under their surnames followed by their full names even if they habitually used initials; pseudonymous authors were always to be entered under their real names even if the reader was not likely to know it, and the information was not found on the title page and an excessive amount of details were called for in the description including all places of publications, and publishers if there were more than one, the full name of each publishers including & sons, company, Ltd., Inc, etc; the division of illustrations into ten arbitrary groups and their listing in a lot not very meaningful order; and the statement of the height to the nearest half-centimeter. Another worst example was the separation of joint authors and collections which caused considerable confusion over the years. Throughout the rules for choice of heading and structure of entry were confused.
VATICAN CODE (1931) :

The Vatican Library authority decided in 1927 to establish a new dictionary catalogue. There had been an Italian code of 1911 in practice, and this code was merged to form AA 1908. With the help of some American librarians the code was revised, consolidated and published in 1931. Translated version in English was never published.

Its important features are:

i) It is a complete code in one volume for printed books. It consists of 500 rules.

ii) It includes (a) Author/Title entry (b) Description (c) Subject entry (d) Filing and (e) Appendices dealing with printed books, abbreviations, glossary, translation and sample cards.

The Vatican code was not put into use in English speaking countries. It may be due to the fact that most of the rules correspond approximately with A L A 1949.

A L A Rules (1949) :

The influence of A A (1908) ran parallel, especially in the United States with the influence of the Library of Congress, whose printed cards were being widely accepted by American Libraries.
A L A appointed "Cataloguing code Revision Committee", the terms of reference of which were to make necessary revisions to the A L A catalogue Rules with authority to co-operate with the Library Associations of Great Britain and such other bodies as it may think appropriate".

The preliminary edition of 1941 expanded rules from A A 1908, was immediately criticised as being over-laborate and likely to make cataloguing unduly expensive. Again in 1944 it was ammended. Finally A L A code was published in 1949. According to the introduction in the Code it attempted to codify experience aiming to represent "the best or the most general current practice in cataloguing of the libraries of the United States". It contains more Rules than A A 1908.

The arrangement of Rules in A L A 1949 was more satisfactory than that of A A 1908 in number of ways. For example, Added entries and references were dealt with in a single section, the rules for style were in an appendix and throughout the code the basic rules were emphasised with amplifications clearly subordinated.

But A L A 1949 was also criticised as pedantic in its approach and likely to result in a bibliographical
tool rather than an efficient location and retrieval
tool. It continued to insist on full names of authors
in every case, even through it was not available on the
title page. It also called for dates of birth and death
to be added to all headings when they could easily be
established (Rules 37 & 42).

THE LUBETZKY REPORT :

The various problems regarding the codes - their
difficult terminology etc., - have becomes the drawbacks
of the cataloguing codes. Seymour Lubetzky seemed to
have appreciated this problem. In his 'Cataloguing rules
and principles' he asked three main questions about each
rule in the light of which their soundness could be judged.

i) Is it necessary ?

ii) Is it properly related to the other rules in
the code ?

iii) Is it consistent in purpose and principle with
the other rules ?

The publication of Seymour Lubetzky's "Cataloguing
Rules and Principles" was perhaps the most important
landmark in the cataloguing events in the 20th century.
His report was the penetrating analysis which was to
revolutionise methods of code compilation.
Lubetzky argued that ALA 1949 was made too long and confusing by duplication of rules to meet an identical condition, unreal distinction such as those between "Societies" and "Institutions" and dispersal of related materials. Too often the rules had been drawn up arbitrarily. Like most previous Codes ALA 1949 was enumerative, attempting to provide for every type of work likely to be met with by a cataloguer. Lubetzky wanted a Code based on conditions of authorship rather than type of work.

It may be interesting to know here that Lubetzky's comments and criticism on the cataloguing Code followed in Western countries especially ALA 1949 were influenced by Ranganathan's ideas on cataloguing. Lubetzky himself said "I met Dr. Ranganathan in spirit, shortly after I left the library school and have followed him since as one of my teachers and guides - when I read Dr. Ranganathan's criticism of our rules, I began to realise that - it would sometime be necessary to reconstitute our rules. - And for this guidance, among others, I am indebted to Dr. Ranganathan."
INTERNATIONAL CONFERENCE ON CATALOGUING PRINCIPLES (ICCP)(1961):

The International Conference on Cataloguing Principles, held in Paris in 1961 with the encouragement and support of the council on Library Resources, marked a major accomplishment in international cooperation in the field of cataloguing. Its discussions were based on a "Statement of Principles" that had been drafted along lines closely parallel to the draft rules prepared by Lubetzky for the cataloguing code revision committee appointed by the A L A. There was very substantial agreement among the representatives of the various countries on the proper rules for making entries in cataloguing. The Principles of corporate authorship was accepted by all the countries.

ANGLO AMERICAN CATALOGUING RULE(AACR)(1967):

It is stated in the introduction of the AACR (1967) that "In a very real sense the present work represents the result of thirtyfive years of activity in the codification of cataloguing rules for American and British Libraries."

After submission of the preliminary report of
Lubetzky, criticising the ALA 1949 code, it was felt necessary to revise the code along such lines.

By the joint efforts of the ALA, the Library of Congress, the British Library Association and the Canadian Library Association, the code was published in 1967.

The four "General Principles" guiding the formulation of the code are:

1) Entry should be under author or principal author when one can be determined.

2) Entry should be under editor when there is no author or principal author and when the editor is primarily responsible for the existence of the work.

3) Entry should be under a compiler named on the title page in the case of collections of works by various authors.

4) Entry should be under the title in the case of other works—whose authorship is diffuse, indeterminate or unknown.

As mentioned earlier this is the further modification of the ALA 1949 code.

The arrangement of AACR is much more logical than
that of previous codes. The rules are mostly consistent and comprehensive. They cater for both the needs of practicing cataloguers and library education (comparing with those of AA 1908 and ALA 1949).

Attempts are made to include rules for the compilation of catalogues, other than layouts of entry headings, added entry headings and see also references, uniform titles for both author and title entries, and important inclusion in the methods and principles of descriptive cataloguing. This descriptive cataloguing is the modification of the "Rules for Descriptive cataloguing in the Library of Congress". There are special rules for works with authorship of mixed character, legal publications, religious publications, geographical names, government bodies and officials conference, radio and T.V. stations, Bibles, serial publications, incunabula, photographic and other reproductions, manuscripts, maps, atlases etc., motion pictures and films-trips, music, phonorecords, picture designs and other two dimentioned representations.

It exhibits a systematic structure rather like a classification schedule, working from the general to the particular. So it names cataloguing 'conditions', defines them and then exemplifies them with 'cases'. In addition,
more attention is paid to matters of 'Principles'. It can be seen in the general structure of the rules. This feature represents a marked advance over earlier formulations.

The number of its rules is less. It is probably easier to operate than previous codes.

Although the code is designed primarily to meet the needs of research libraries, other kinds of libraries have not been forgotten and in some cases alternative rules are provided. In a broader sense, AACR is a code meant for guiding the designing of a document finding system taking the form of a catalogue. It is necessary to determine the functional characteristics of the document finding system envisaged by AACR, which may be summarised as follows:

1) To respond to a query about documents using specific sought headings; and

2) To assist the choice of a particular document.

There are, however, some exceptions to the general principles. Notable exceptions as pointed out in the code itself are: entry in certain cases under special headings usually denoting type or form of work (e.g. 20,22-25,29)
and entry of serial works of diffuse authorship under
corporate body is named in the title. Not even the most
ardent admirers of AACR or indeed its makers would claim
that it is a perfect code. It appears in two texts which
has lessened its importance for being considered as an
international code. It often shows the sign of having
moved away from Lubetzky's ideals, with unnecessary details
and some repetitions. There are some unsatisfactory rules.
To quote a few, 6 (serials) 33 (Added entries) 43 (full name)
and 78 (Govt. Publications) and 42 (Pseudonymous authors).

One of the main objectives of AACR2, attained by
its publication in 1978, was to bring together North American
and British texts; and another was to reorganize and express
the rules in a simpler and more direct way. So most of
the earlier work on the abridgement was nugatory or, rather,
it was used in other ways than originally planned, in
AACR2 itself. However, the Joint Steering Committee soon
perceived that the potential was even greater than had
previously been estimated for a version of AACR2 that
would meet the needs of the many practitioners and students
in our own countries, as well as elsewhere in the world,
to whom the full and comprehensive text of AACR2 tells
more than they need to know, or wish to hear, about standards
and procedures for catalogue making and the organization
of bibliographic records at a particular time in the development of their own libraries, of their own bibliographic services or of their own studies.

The starting point for this new edition is indeed the very clear success of the 1967 texts in meeting the needs of large numbers of libraries. The tripartite meeting consisted of a delegate from each of the three "Anglo-American countries, to draw up a new memorandum of agreement and to complete the planning of the project for a second edition of AACR. The guidelines stated in the project may be summarized as follows:

1) Maintenance of general conformity with the Paris Principles of 1961, as manifested in the first edition.

2) Particular attention to developments in the machine processing of bibliographic records.

3) Continuance of conformity with the ISBD(M) as a basis for the bibliographic description of monographs, and commitment to the principle of standardization in the bibliographic description of all types of materials.

4) Determination of the treatment of nonbook materials primarily from a consideration of the published cataloguing rules of the Canadian Library Association, the Library Association and the Association
for Educational Communications and Technology and of the ALA revision of chapter 12 of the 1967 text.

With regards to the first of the guidelines, the second edition continues to reflect the tendency to closer conformity with the Paris Principles that was already emboided in amendments to the 1967 texts promulgated before work on the edition began, specially the abandonment of entry under the name of a place of certain institutional bodies, as related to section 9.4 of the Paris Principles; and some other shortfalls in conformity have been made good during the course of approving new proposals, notably by the substitution of uniform title for form subheadings in relation to section 9.5.

With regard to the second guideline, the single most important contribution of this edition to meeting the needs of machine processing resides, in the submission of the authors in the achievement of an integrated and standardized framework for the systematic description of all library materials, as presented by Part I. This achievement, being also the first such comprehensive systematization to be related to the goals of international standardization, is also presented by the authors as the principal fulfilment of the undertaking (in objective
4 above) to make a contribution to the development of an international cataloguing code, and as a major development in its own right.

It is also the principal means by which the third and fourth guidelines have been sustained and by which resolution has been achieved of the conflict that was soon apparent between them and the programme initiated by IFLA, under the general heading of Universal Bibliographical Control (UBC), for the development of separate ISBDs for such materials as serials, maps and nonbook materials.

CLASSIFIED CATALOGUE CODE (1934):

Turning to India, the desire for designing an efficient catalogue code on scientific lines originated in the mind of Dr. S. R. Ranganathan as early as in 1924-25. The genesis, thus, of the classified catalogue may be stated in the words of Ranganathan himself "The CCC owes itself to the sense of revolt induced in the mind while learning cataloguing in 1924-25, in the school of Librarian-ship of the University College of London. The first cause of revolt was the method of teaching used. Each rule of AA code was taken by itself, to be put into rote memory as it were, no attempt to present the rules as a system,
no attempt at studying an alternative code and comparing their relative merits. The second cause was the nature of the code taught. It was A A code (1908). Its skeleton nature, its mixing up the author entry and the subject entry, lack of unity of its rules, all these added to the result. There was also a third cause. The volumes of the classified catalogue of the Carnegie Library of Pittsburgh and of the Michel Library of Glasgow were fascinating. Copies of these were available in the Library of the School of Librarianship. But not a word was said in the class either about classified catalogue or about the essential difference between it and Dictionary catalogue.

Having given the full responsibility and freedom of reorganising the Madras University Library, Dr. Ranganathan intuitively seized the Five Laws of Library Science, with the help of which he summarised the essential functional attributes of a library catalogue as follows:

"A library catalogue should be so designed as;

1. to disclose to every reader his or her book;
2. to secure for every book its reader;
3. to save the time of the reader and
4. for this purpose, to save the time of the staff".
Upon the extensive survey of catalogues and cataloguing codes, Dr. Ranganathan concluded "The author catalogue, the dictionary catalogue and the classified catalogue represent three successive stages in the order of evolution of the internal form of catalogue the classified form being the latest to evolve. It is strikingly so in the case of the systematic code of rules for cataloguing".

It may not be out of place if it is mentioned that Ranganathan is not the inventor of the classified catalogue. There are references available to the effect that it was Callimachus the poet and Librarian of Alexandria who prepared a classified catalogue, which was arranged in 120 classes. The catalogue was actually made on slips of papyrus called Penakes, and on each slip was written a short title, which actually corresponded with the label on the appropriate papyrus roll. He did not stop at the work itself, and in each case he gave a biographical note of the author. The year 240 B.C. then can give us a work which was a classified catalogue, a bibliography and a biographical dictionary all in one. But the entire credit goes to Dr. Ranganathan for its nomenclature as classified catalogue and for the creation of the systematic, and scientific code for classified catalogue.

Ranganathan further deduced the physical form
of the catalogue that would be most suitable to satisfy the Five Laws. His findings in his own words are "The choice of form has to be made in the light of the Five Laws of Library Science. The main concern of the Fifth of the Laws is to give full weight to the --- factor-viz., the need for casual repairs and frequent additions of details even while the catalogue continues to be in use. The days of time honoured bound book form are gone for ever never to return-atleast in the case of a growing vital library. The loose leaf form and the card form are so much alike, that they admit of nearly the same style of making the entries--the card form marks a later stage of evolution--it is rightly more popular-----".

Nearly eight years of extensive study and practice by Ranganathan, brought the CCC to the conscious level and was published in 1934. It is an unique contribution aiming at becoming an universal code.

CCC (1934) is the first complete, comprehensive code of rules for the classified catalogue. Its original and developmental contributions may be noted as follows:

1. It deduced the essential functional attributes of a library catalogue by summarising the implications of the Five Laws of Library Science on cataloguing.
2. It deduced the most suitable internal form of catalogue that would satisfy the Five Laws.

3. It deduced the most suitable physical form of catalogue that would satisfy the Five Laws.

4. It developed the technical terminology of cataloguing to a great extent.

5. It distinguished each and every type of entry that would occur in a classified catalogue.

6. It systematised and added to the principles of alphabetization.

7. It grouped the major problems in cataloguing in a new and helpful way as follows:
   1. Single volumed, simple book;
   2. Composite book;
   3. Multivolumed book; and

8. In formulating the individual rules, it took note of the unit operations involved in cataloguing work viz, choice, rendering, and recording; and in drafting them, it followed the Sutra(epigram) style as much as English language allowed it. This invested the rules with resilience. This style further helped it to implement the Principle of Unity of Idea, in drafting each rule.

9. While the drafting of the earlier codes had been severally empirical and based on tradition, CCC had the benefit of being guided by the normative
principles which had been enunciated as the Five Laws of Library Science.

10. It dealt with the structure and rendering of Hindu and Muslim names more elaborately than any of the earlier codes.

11. It recognised for the first time that the work of determining the subject heading should be based on a scheme for classification; and it furnished a definite procedure to derive it from class number. The procedure with certain modifications was later on denoted by the term 'Chain Procedure'. This was a revolutionary novel idea.

12. Its dealing with periodical publications was a sound novel feature. It resulted from a very thorough and extensive research. On the basis of an extensive pragmatic research, it distinguished eighteen elemental types of complexities, falling into six groups, in relation to the cataloguing problems of periodical publications. On the basis of an experiment, it concluded that these complexities could be dealt with more economically by a classified catalogue than by a dictionary catalogue. It included an elaborate system of rules to construct a classified catalogue for periodical publications.

13. It furnished an ideal example of the layout of a catalogue code, far more developed than in any other earlier code.

14. It indicated the different areas in cataloguing calling for immediate further research.
15. It advocates "simplicity" in preparing the entries.

Normative principles:

The set of normative principles of Ranganathan is one of the outstanding and original contributions. The potentiality and the versatility of these principles have not yet been fully realised by the library profession at large. When these normative principles were first enunciated they were ahead of time. Their helpfulness and importance will be realised in due course. Since it is beyond the scope of this paper to discuss them in detail the latest versions of those principles are just mentioned below:

I. General Laws:
   Law of Parsimony
   Law of Interpretation
   Law of Impartiality
   Law of Symmetry

II. Laws of Library Science
   Documents are for use
   Every Reader his/herr document
   Every document its reader
   Save the time of the reader
   A Library is a growing organism

III. Canons of cataloguing:
    (derived from Laws of Library Science for immediate applications)
Canon of Ascertainability
Canon of Prepotence
Canon of Individualisations
Canon of Sought-Heading
Canon of Context
Canon of Permanence
Canon of Currency
Canon of Consistency
Canon of Recall Value

IV. Principle of Local Variation:

V. Principle of Osmosis:

These normative principles guide every problem in cataloguing that is:

1. Drafting of a catalogue code including the formulation of each Rule;

2. Interpretation of the Rules to meet new situations brought up by a particular document or by changes in the practice of book production;

3. Provision of suitable guidance for cataloguing work, so as if to remind users of the code that its Rules are not ad-hoc ones, but are those derived from Fundamental Laws, and as if to facilitate the basing of the interpretation of the Rules on Normative Principles.

4. A critical examination of a catalogue code can be made with the aid of the Normative Principles. A comparative study of several codes, can also be made. Lastly, any catalogue code can be improved in their light.
Another novel technique of deriving subject headings i.e. chain procedure is also an invention of Ranganathan. The choice and rendering of subject headings are common to both the Dictionary and Classified Catalogues. The method of chain procedure can be applied to both. In a review of the BNB, B C Vickery remarked "The effect of this method (chain procedure) is that the whole chain of classes is displayed in the index, and even if the user looks up an entry not corresponding exactly to the subject he seeks, he is led into the right region of classification. The "feature word" he is after, can then quickly catch his eyes. The second useful aspect of this procedure is that it displays relation not displayed by the classified list itself".

After going into this detail, it is surmised that the entry element plays an important role, which is seen from the Inventory Cataloguing to Specific Cataloguing by which the reader is able to locate his information.

All the scientists of cataloguing tried to design their Cataloguing Codes mainly in view of the reader. In the heading, they have toiled and moiled to find out the proper choice of the heading of the author and the way of rendering the same. Therefore they tried to cover all the races throughout the world. Some pockets like North East region of India were neglected. Some such
areas might still be awaiting for study. This thesis confines to North East region of India to complete the study of names of authors and their kinds as far as India is concerned. Dr. R. S. Ranganathan has already covered the whole of India, except North East region.
REFERENCES


