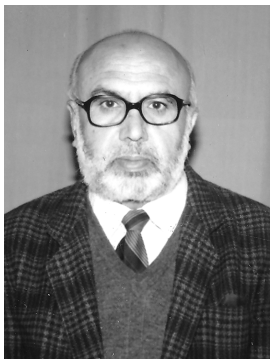
Library Classification: An Essay in Terminology

Mohinder P. Satija

Guru Nanak Dev University



Dr. Mohinder Partap Satija is head of the Department of Library and Information Science at Guru Nanak Dev University, Amritsar, India. He has authored 20 books, 60 papers and over 100 book reviews. He is associated with many library journals. In 1990 he did his Ph.D. dissertation on Ranganathan studies.

Satija, M.P. (2000). **Library Classification: An Essay in Terminology.** *Knowledge Organization, 27(4).* 221-229. 16 refs.

ABSTRACT: Arguing that an established technical terminology is crucial to the development of a discipline, and that classification terminology is neither well settled nor widely used by its exponents, this paper provides an explanation of some of the concepts generally accepted by classification theorists. In particular, the elaborate terminology generated by S.R. Ranganathan is examined. Definitions are provided for numerous concepts, including "classification"; "characteristics" and "attributes"; the genus-species relationship; the types of classes (canonical, systems, special, and environmental main classes); the kinds of subject (basic, compound, complex); as well as concepts such as facets, isolates, arrays, and chains. Comparisons between different classification systems, specifically the Dewey Decimal Classification, Colon Classification, and Library of Congress Classification, are also made.

1. Importance of Terminology

In scientific, academic and legal communication precise terminology is not only important, but it is most essential. Effective communication cannot take place unless concepts and words denoting them are precisely predefined. Predefined words are known as **technical terminology.** Paradoxically, the ordinary language that a person commonly speaks is both rich and poor. It is full of homonyms; that is, one word may denote more than one concept or entity. For example, "bridge" and "cricket" have at least two meanings each. The word "order" has more than 200 meanings in the *Oxford English Dictionary.* Language is full of synonyms too; that is, a concept may be denoted by more than one word in the same language. For example "wages", "salary" and "pay" denote almost the same concept. A word may connote different meanings in different contexts. A line of poetry has different meanings for different people. Thus ordinary language is not a perfect tool of communication. If this inexactness is allowed to occur in a scientific discipline, it will hinder the discipline's development. A Tower of Babel will only lead to chaos and confusion instead of communication and understanding. The only solution is to have a precisely defined terminology. No discipline can progress without its technical terminology, and research is impossible without it.

S.R. Ranganathan (1892-1972) was of the considered view that scientific terminology is of double importance to librarians. Firstly, librarians and information scientists have to understand the terminology of their own discipline in order to discuss technical matters with colleagues for purposes of research and academic development in their discipline and profession. Secondly, it is important to understand the technical terminology of other disciplines in order to organize knowledge and to communicate effectively with the experts in that field.

2. Evolution of Classification Terminology

Library classification as an academic discipline is only a century and a quarter old. Its teaching and research has slowly gained momentum. Since the 1950s it has quickened its pace of research and development

and in the process has evolved a terminology of its own. However, it must be admitted that its terminology is neither well settled nor widely used by its exponents. S.R. Ranganathan did generate a very elaborate terminology that still seems too advanced for the time. He was a great exponent of terminology, but librarians are afraid of using his terms. Concepts used by other theorists of classification, such as H.E. Bliss (1870-1955), W.C.B. Sayers (1881-1960) and the Classification Research Group in London (established in 1952), who have their own terminologies, usually differ from one another. However, some of Ranganathan's terms and those of others are accepted universally. This paper endeavours to explain terms in a descriptive essay.

3. Classification Terminology

Classification pertains to the discipline of logic and pervades every small activity of life. Classification means to divide objects/entities (both abstract and concrete) on the basis of their differences or, conversely, the grouping of entities on the basis of their similarities. **Classification** is any process of dividing, sorting, grouping, arranging, ordering, ranking, mapping and correlating.

3.1 Characteristics and Attributes

This grouping, division, or ranking of entities is done on the basis of criteria called **characteristics.** Thus characteristics are the bases for the division of a group. For example, a class divided on the basis of "gender" produces three groups - male, female and hermaphrodite and "sex" is the characteristic of division here. On the other hand, **attribute** is any quality, parameter, or factor possessed by, or inherent in, an entity. For example, a group of human beings may have many attributes such as gender, religion, race, nationality, social status, and income level, as well as physical attributes such as height, colour, weight and many more. **An attribute which creates at least one division in a group is called a characteristic.** For example, in a class of "women" being female is one attribute possessed by all the members. However, it is not a characteristic as it cannot produce any division in the group. Thus a characteristic is a non-common attribute used to divide a class.

3.2 Genus-species

The first group to be divided into smaller groups is called a **genus** and its divisions are termed to be **species.** For example, furniture is a genus and its species are tables, chairs, beds, etc. Now let us take "table" as a genus, then its species (produced on the characteristic of function) are: office table, study table, dining table, etc. In other words, **a characteristic when added to a genus produces species (genus + characteristic = species).** Hence genus and species are as relative as the upper and lower links in a chain. An entity could be a species as well as a genus, as a person can be both a son and a father at the same time.

4. Knowledge Classification

Classification includes both abstract and concrete entities. When the entity to be divided or organized is knowledge it is called **knowledge classification. Knowledge** has been defined as the sum total of ideas, facts, experiences, recorded emotions, fiction and myth conserved by human society. Knowledge is infinite and ever expanding. Books and other documents are **recorded knowledge.**

5. Kinds of Library Classification

When entities are books and other such items of information, their classification is called **library classification.** Library classification has also been defined as classification of knowledge as contained in books and other reading materials. It can be defined as the arrangement of informational material in a library/ information centre in a way that is most helpful for browsing, locating and organizing the contents. Library classification is ostensibly utilitarian in the sense that it has an important purpose. Library classification has many names and aims. It is **book classification** when it is used to arrange books and other macro-documents on the library shelves. When it is used to arrange the records that represent the books (i.e. surrogates such as entries in catalogues or bibliographies) it is called **bibliographic classification.** The *Dewey Decimal Classification (DDC)* was designed to be a book classification, whereas the *Universal Decimal Classification (UDC)* was designed to be a bibliographic classification. The term bibliographic classification is also used to describe depth or detailed classification. (Incidently, bibliographic classification is also the name of a classification system designed by H.E. Bliss). Detailed classification required for micro-documents is described as **depth classification** by Ranganathan. Compared with other systems, the *Library of Congress Classification* is, relatively speaking, a depth classification. A classification that is not too detailed and meets the requirements of small libraries is called a **broad classification.** *Rider's International*

Classification (Rider 1961) and early editions of the *DDC* are examples of broad classification.

Classification for a specific area of knowledge, for example economics, occupational safety, environmental engineering, women's studies, leather technology, etc. is known as **special classification.** Special classifications are inevitably depth classifications. A classification of the entire universe of knowledge is known as a **general classification.** Some call such a system a **universal classification**.

Library classification, whatever be its kinds, has been defined comprehensively by Rita Marcella and Robert Newton (1994, p.1) as:

> The systematic arrangement by subject of books and other learning resources and/or the similar systematic arrangement of catalogue or index entries, in the manner most useful to those who are seeking *either* a definite piece of information *or* a display of the most likely sources for the effective investigation of the subject of their choice.
>
> The purpose of classification is to facilitate the optimum use of library resources. It is a tool for information organization and retrieval both in manual and automated retrieval systems.

A true and comprehensive definition of classification in general with reference to documentary classification was formulated by FID/CR in 1964 (Atherton 1965, p.544):

> By "classification" is meant any method creating relations, generic or other, between individual semantic units, regardless of the degree in hierarchy contained in the systems and of whether those systems would be applied in connection with traditional or more or less mechanized methods of document searching.

6. Disciplines and Basic Subjects

In a modern library the arrangement of documents is usually by subject. Thus a subject is the characteristic of division for the arrangement of documents. A **subject** is a systematized homogeneous and cohesive group of ideas or a chunk of knowledge whose depth (intension) and breadth (extension) are comfortably within the intellectual competence and the field of specialization of a normal intellectual person. However, in library classification we are mostly concerned with what are known as specific subjects. A specific subject is always determined within the context of a document. The **specific subject** of a document is defined as the subject of the document whose extension (scope/breadth) and intension (depth/specificity) are equal to the thought contents of a document.

The totality of ideas or subjects is known as the universe of knowledge and has been divided into major areas called disciplines. A **discipline** is a major contiguous area of knowledge formed on the basis of either similarity of the objects of study (i.e. whether natural objects or social issues); or obtained by a similar mode of study or method of acquiring knowledge (i.e. whether imaginative or empirical). Classically speaking, there are three major disciplines of the universe of knowledge:

- Sciences (study of natural objects)
- Social sciences (problems of society)
- Humanities (imagination, apperception)

However, connotations of a discipline vary from time to time. Modern classification systems are divided by discipline - a breakthrough made by Melvil Dewey (1851-1931). A subject may fall under various disciplines.

Disciplines are further divided into **partially comprehensive main classes,** a generic name for continuous groups of main classes such as Mathematical sciences, Physical sciences, Plant sciences, Earth sciences, etc. Further division is into main classes. A **main class** is a conventional, but very cohesive, area of knowledge. "Main class" is a social phenomena. The scope and total number of main classes varies with the growth and obsolescence of knowledge. The number of main classes in a classification system is usually dictated by the kinds of symbols used by a particular system. A traditional subdivision of an old main class is known as a **canonical class.** For example, Heat, Light, Magnetism and Electricity are canonical classes of the main class Physics. Similarly, Algebra, Geometry, and Analysis are canonical classes of the main class Mathematics. A new main class such as Library science, Journalism, Computer science, etc. does not have canonical classes. Main classes expounded from a school of thought, as exemplified by Marxian economics, Newtonian physics and Homeopathic medicine, are known as **systems main classes.** A main class studied from a specialized viewpoint, such as Aviation medicine, Paediatrics, Sports medicine or Small scale economy, is known as a **special main class.** When a subject is studied only in a given environment (social or physical) , it is an environmental basic subject. War economy, High altitude engineering and Tropical medicine are examples of **environmental main**

classes. Main classes as such (canonical classes, systems, special and environmental main classes) when taken together, are generally known as **basic classes.**

6.1 Kinds of Subjects

Ranganathan postulates that there are three kinds of subjects: basic subjects, compound subjects and complex subjects.

A basic subject is a generalized treatment of a subject without a focus or an aspect. Such subjects are always postulated by the classificationist. Library science, Physics, Mathematics, Algebra, Medicine, Ayurvedic medicine, Marxian economics, High temperature physics, and Psychoanalysis are some of the basic subjects postulated in Ranganathan's *Colon Classification (CC).* The concept of a basic subject is social. The total number and the connotations of basic subjects vary from age to age and also from society to society. For example, the number of basic subjects in the sixth edition (1960) of *CC* was about 150, but by the seventh edition (1987) it had risen to more than 750.

A **compound subject** is a basic subject when it has a least one focus, or has at least one aspect. Agriculture is a basic subject, while the agriculture of wheat or the diseases of wheat plants are compound subjects. Psychology is a basic subject, but Child psychology and Personality disorders are compound subjects. The number of compound subjects in the universe is virtually infinite.

A **complex subject** is a loose assemblage of two or more subjects, such as the Psychology for Nurses, the comparative study of the Indian and British constitutions, the influence of Geography on History, the relations between Anatomy and Physiology and the relations between Cataloguing and Classification. Such subjects are usually interdisciplinary. Each component in a complex subject is called a **phase.** The process of analyzing a complex subject into its constituent phases is known as **phase analysis.**

Ranganathan has identified six kinds of phase relations, namely general, bias, comparison, difference, tool and influence. These may occur at any of the three levels, namely between inter-main classes and their isolates (inter-subject), between two facets in the same category of a main class (inter-facet), and between isolates in the same array (intra-array). Thus, in all there are eighteen phase relations. In other words, there are eighteen types of complex classes.

7. Categories, Facets and Isolates

A solitary, unattached idea that cannot be further subdivided, and by itself cannot form a subject is called an **isolate.** For example, the terms wheat, child and India are isolates, as by themselves they are vague. These have meanings only in the context of a basic class. For example, Wheat diseases, Child psychology and Indian history have meanings. An isolate is the ultimate division of knowledge. It cannot be further subdivided. Going back a little, Ranganathan defines a **compound subject** as a basic subject having one or more isolates. Thus, one or more isolates in the context of a basic subject form a compound subject, while a **basic subject** is a subject without an isolate idea.

Isolates are grouped on the basis of common characteristics into what are called **facets**.

A **facet** is thus a totality of the isolates obtained on the basis of a single train of characteristics applied to a given entity. In a main class there may be a number of facets. For example in Education, types of educands is one facet; another facet may be teachers, yet another would be teaching techniques; and curriculum is yet another. All the isolates under teaching techniques form one facet. In the main class Literature, there are four facets belonging to the Personality category, namely language, form, author, and name of the literary work. A particular entity in a facet is a **focus**, or foci in the plural. If language is a facet then English language is a **focus** of that facet.

The totality of the facets, having a very broad or pervasive common characteristic, form a **category**. For example, in Library science all the facets pertaining to the kind of library (i.e. academic, public, special, etc.) form a category named the **Personality** category. Yet another category is the library activity category (i.e. acquisitions, processing, services and preservation) called the **Energy** category in this case. **A category is a highly generalized division of knowledge.** Ranganathan postulates that a subject constitutes, at the most, **five fundamental categories**, namely **Personality, Matter, Energy, Space** and **Time**. These are the five, and only five, fundamental categories he postulated. In other words, any concept of the universe of knowledge could be assigned to only one of the five fundamental categories. J. Kaiser (1911) and Barbara Kyle (1962) presumed two categories. Some classification theorists take "facet" and "category" to be synonymous terms. However, in Ranganathan's theory a category may have many facets occurring in **Rounds** and **Levels** of that category. As already stated, the Personality category in "O Lit-

erature" (in *CC*) has four facets known as Levels of Personality.

7.1 Arrays and Chains

Facets and isolates are arranged in what are called arrays and chains. An **array** is a sequence of coordinate (equally ranked) classes arranged in some definite order. For example, all the sons and daughters of the same parents form an array. All the geographical continents of the earth form an array, and all the countries of the world, when arranged in some order, form another array. Systematic or utilitarian arrangement of members of an array is called a **helpful sequence**. There are many principles by which to achieve a helpful sequence; these include chronological, geographical, complexity, evolutionary, alphabetical, and other such predictable or formulated order of closely related classes. The order of main classes in J.D. Brown's *Subject Classification* (1908) is the cosmic evolutionary order of matter-force-life-mind-record. In the Bliss *Bibliographic Classification (BC)* the order of main classes is by educational and scientific consensus. In Ranganathan's *Colon Classification* the overall arrangement of the sciences is from abstract to concrete; within this sequence the further arrangement is by principle of dependency where practice follows theory.

A **chain** is a sequence of classes in successive subordination. That is, all of the members are of unequal rank and are arranged in the order of constantly decreasing extension and increasing intension. The order in a chain is from general to specific or in the reverse order of specific to general. For example, World, Asia, India, Maharashtra and Mumbai form a chain of classes in this or the reverse order. Similarly, Social Sciences, Economics, Finance, Money and Banks form another chain of classes. The arrangement of entities in a chain is always **hierarchical** and linear. It expresses only the genus-species and the whole-part relationships.

8. Classification Schedules

Library classification invariably requires written lists of classes and their subdivisions arranged in a systematic way along with the corresponding symbols denoting them. This systematic elaborate and tabulated list of classes is known as a **schedule.** A schedule, along with an alphabetical index of classes referring to its symbols, and with some auxiliary concepts called common subdivisions, is known as a **classification system**. There are various systems of classification, for example the *Dewey Decimal Classification*, Ranganathan's *Colon Classification* and the *Library of Congress Classification.* There are about half a dozen living general classification systems. An index is an alphabetical approach to the systematic schedules and auxiliary tables. Topics that are scattered by discipline in the schedules are collocated in the index, thus showing the relationships among them. The **relative index** is a significant contribution of Melvil Dewey which has been adopted by other classifications.

In addition to the schedules that are the *terra firma* of a classification system, there are auxiliary tables of recurring concepts, for example geographic isolates, time isolates, language isolates, forms of presentation of documents such as a dictionaries, conference proceedings, data tables or physical formats (e.g. book, journal, floppy disk, map, CD-ROM, or videotape). These usually represent the various non-subject aspects of documents or some peripheral but recurring subordinated subject aspects. These recurring concepts, along with their symbols, are listed once and for all and are usually given preceding the schedules. These auxiliary concepts, given in seven tables in *DDC,* are known as **common isolates** in *CC* and as **common auxiliaries** in the *UDC.*

The schedules may be in either printed or electronic form (i.e. on a floppy disk or CD-ROM). The *DDC* 21st edition (1996) is available in a CD-ROM form entitled *Dewey for Windows*, whereas the *Broad System of Ordering (BSO)* is now only available on floppy disk. A designer of a classification system is known as a **classificationist**. S.R. Ranganathan, Melvil Dewey, H.E. Bliss, C.A. Cutter, and Jack Mills are some of the outstanding names among classificationists. A person who operates these systems is known as a **classifier** or a classification practitioner. The majority of the librarians who work with classification are classifiers. In between the two are **classification theorists,** those engaged in the theory and research of classification.

There are, broadly speaking, two species of library classification systems. **Enumerative classification** is classification in which all classes of the past, present and the near future are enumerated systematically along with their corresponding symbols. In other words, the symbols or series of symbols for a class are available ready-made and the classifiers do not have any need or authority to construct a notation. The *Library of Congress Classification, Rider's International Classification* and the *Dewey Decimal Classification* are

examples of enumerative classification systems. In fact, at present no general classification system is purely or absolutely enumerative. Enumerative classification systems are sometimes contemptuously described as **mark and park systems, not based on any theory**.

The other species of classification is known as **faceted classification.** In faceted classification, concepts called isolates are enumerated under various categories and facets of each main class; and the system provides rules for combining these isolates in a coordinated way. The sequence in which these isolates are combined to form the complete number for a subject is called a **facet formula.** In simple words, it is the **citation order** of facets and their isolates. Generally the order of facets is from concrete to abstract or from specific to general. Ranganathan formulated two important principles of facet sequence, namely the **wall-picture principle** and the **whole-part principle**. The standard citation order as given by the Classification Research Group (UK) is: **Things-kinds-parts-materials-properties-processes-operations-agents,**
but the ordering of documents on the shelves or their surrogates in a file is from the general to the specific. It is the reverse of the citation order and is called the **principle of inversion.** It is achieved by appropriately fixing the ordinal value of digits in the notation in the classification system. No subject, except a basic subject, is given a ready made number in such a classification. The *Colon Classification* and the *Bibliographic Classification*, 2nd edition *(BC2)* are two outstanding examples of faceted classification systems. S.R. Ranganathan, in his characteristic manner, lists five species of classification: a) enumerative, b) almost enumerative, c) almost faceted, d) rigidly faceted and e) freely faceted. *UDC* has been described as an "almost faceted" classification. Rigidly and freely faceted are the earliest and latest states of the *Colon Classification.* Such a classification invariably involves what is known as **facet analysis** which is to break a subject into its various facets according to its postulates and principles. Actually, facet analysis is preceded by subject analysis, i.e. the determination of the specific subject of the document. In other words, this process is the determination as to what is fashionably known as **aboutness**. Aboutness can be decided upon by reading the title, table of contents, blurb, preface, and other parts of the document, and is determined in the context of users' needs. This analysis is followed by synthesis of the concepts using an analytico-synthetic classification. Various facets have to be pre-coordinated by the classifier according to what is known as the **facet formula**. Facet analysis and the naming of general categories of facets are prerequisites to a facet formula. If the design of a faceted classification is guided by a pre-formulated set of postulates and principles then it is called an **analytico-synthetic** classification. Although the *UDC* is a faceted classification it is not an analytico-synthetic system. The *CC* is both faceted and analytico-synthetic. *BC2* can safely be described as an analytico-synthetic system.

9. Notation and Class Number

So far we have been deliberately using the vague term "symbol" as a code to denote a class. Preferably, we should have used the term "notation". A **notation** is a series of brief symbols denoting subjects and their aspects, as for example, B for Mathematics in *CC* and 954 for History of India in *DDC.* Every discrete symbol in the notation is called a **digit.** For example, 954 has three digits and L2.4 has four digits.

These symbols may be numerals, letters, mathematical symbols and punctuation signs. Bibliographical classifications, of necessity, have to use punctuation marks such as **, : ; - &** or some mathematical signs such as + / ± ( ) to precede or envelop facets. These function as signposts or **indicator digits**. For example in *CC*, in L:3, the colon preceding the digit 3 indicates that the facet "3" belongs to the Energy category, as ": " is an indicator digit for the energy facet. Similarly in *UDC,* in 5(05) Science serials, the (05) indicates serials/journals, as the (0...) is an indicator for forms of documents while (1/9)indicates geographical areas in the *UDC*. In *CC* the indicator digits were formerly known as **connecting symbols**. A **notational system** consisting of only one species of digits is called **pure notation**. *Rider's International Classification* used pure notation of Roman capitals. Ranganathan's system uses a highly **mixed notation** comprised of capital and small letters of the Roman alphabet, decimal numerals and punctuation marks. Notational digits are organized into a system to form a sort of language with defined rules and procedures to represent and combine different subjects and their aspects. Ranganathan ambitiously describes notation as an **artificial language of ordinal numbers.** Being a language, it is also known as a notational system. These numbers have only **ordinal value.** That is, they only determine the sequence of digits and are not a measure of any quality or cardinal value**.** Therefore, for example the digits "A,b,9" have only ordinal value. On the shelves the order of these notational

symbols will be, for example, "b, 9, A" or any other order prescribed by that particular system. The ordinal value of the digits has to be pre-fixed by the classificationists to have a desired arrangement of documents on the shelves. The usual arrangement is from the general to the specific, which is pedagogic in nature and considered helpful for self learners. Such an order is helpful for **browsing** the shelves. The state of a notation that is short, or less lengthy, and less mixed is known as **simplicity of notation** and is a desirable quality in notation. The notation of *DDC* is pure and, for the most part simple, although at times it can be quite lengthy. A notation with pronounceable notation, such as Fab, God, Jop, Mob, and Tim, is exemplified in D.J. Foskett's *London Education Classification.* The facility and ability of a notational system to accommodate new subjects at proper and logical places in the scheme is known as the **hospitality of notation**. This is an essential quality of a notational system. Another desirable quality of notation is mnemonicity. A **mnemonic notation** is one in which a concept/isolate recurring in the schedules is denoted by the same notational digit. For example, in *DDC:*

954	History of India
915.4	Geography of India
315.4	Statistics of India

Also

420	English language
820	English literature

In this list -54 stands for India and -20 stands for English. In *CC* ":3" denotes physiology, for example:

G:3	General physiology
I:3	Plant physiology
K:3	Animal physiology
L:3	Human physiology

In some systems P may stand for Philosophy and T for Technology; these are **literal or alphabetical mnemonics**. Mnemonics are simply aids to memory and are desirable in a notational system but are far from essential if they conflict with the logical order or other essential functions of notation. Ranganathan also advocated **seminal mnemonics** to denote concepts with their inherent/spiritual numbers, as exemplified in 1 for God, or World, and 2 for Constitution or Structure. Not only this, but Ranganathan would assign Functions, or Physiology the same notation 3. To denote the 1st order by 1, 2nd order by 2 and 3rd order by 3 is a weak or obvious form of mnemonic notation.

9.1 Class Number, Book Number, Call Number

The subject of a document when transformed into notational form is known as a **class number.** For example, 954 is a class number for "History of India" and the class number 954.025 means History of Moughal India in the *DDC;* and L185:2 denotes the "Anatomy of the Human Eye" in *CC.* A class number is thus a translation of the specific subject of the document into an artificial language of ordinal numbers called notation. Although it exaggerates the role and power of classification, Ranganathan equates classification with translation. The act of designing classification systems, or of assigning appropriate class numbers from a classification system to a document is also known as **library classification.**

However, a class number alone is not sufficient for precise and ultimate arrangement of documents on shelves or the arrangement of their surrogates in files. For example, there may be a dozen or more books on the "History of Moughal India" in a library having the same class number (e.g. 954.025). The problem arises as to how to further arrange (i.e. subarrange) all of these books on shelves. Any device for subarrangement of documents having the same class number is called a **book number**. There are two major categories of book numbers: a) **chronological** system and b) **author marks.** In the chronological system, book numbers subarrange books by the year of publication of the book. This method was invented by W.S. Biscoe (1853-1933) of the USA and further refined and perfected by S.R. Ranganathan in his Colon Book Number. With respect to the second system, **author marks** are used to arrange books alphabetically by author, or by title in cases where there is no author. This system is largely associated with the name of C.A. Cutter (1837-1903), who, in association with Kate E. Sanborn, devised a long table to convert the names of authors into alphanumeric notations. There are also a few other such author tables for the purpose. So such numbers are also called **author numbers.** Sometimes author numbers are understood as being synonymous with book numbers. Author numbers are also known as **author marks**. Book numbers may also take into account such attributes as language, edition, accession number, title and volume of a book. **A book number is a satellite of a class number.**

For the convenience of administration and ease of use, entire library collections are broken into parallel collections, for example Reference Books, Textbooks, Rare Books and Serial Publications; each having its

separate section. Within each section the documents are arranged by class and book numbers. Therefore, along with the classification and book number there should be a symbol to indicate the section in which a book is placed. These symbols, called **collection numbers**, may be alphabetical or even arbitrary. For example, TX for Textbooks, RB for Rare Books, R for Reference books and MS for Manuscripts are collection numbers. The combination of collection number, class number and book number, taken in this order, is termed a **call number.** A call number uniquely specifies the location of the document in the library and is designed to be unique for each document in a library. The term call number originated from the fact that in the days of closed stacks the books used to be called out from the library stacks by these numbers. In open access libraries the readers have free access to stacks and the books are no longer called out by these numbers; yet the old term lingers and is in vogue in the standard terminology of library classification.

10. Alphabetical List of Terms Explained

Aboutness
Alphabetical mnemonics
Analytico-synthetic classification
Array
Artificial language
Attribute
Author marks
Basic class
Basic subject
Bibliographic classification
Book number
Book classification
Broad classification
Browsing
Call number
Canonical class
Category
Chain
Characteristics
Characteristics
Chronological book number
Chronological book number
Citation order
Class number
Classification
Classification theorist
Classification system
Classificationist
Classifier
Collection numbers
Common auxiliaries
Common isolates
Complex subject
Compound subject
Connecting symbols
Cutter author table
Decimal notation
Depth classification
Digit
Discipline
Enumerative classification
Environmental main class
Facet analysis
Facet
Facet formula
Faceted classification
Focus
Fundamental category
General classification
Genus
Helpful sequence
Hierarchy
Hospitality of notation
Indicator digit
Isolate
Knowledge
Knowledge classification
Levels
Library classification
Main class
Mixed notation
Mnemonic notation
Notation
Notational system
Ordinal value
Partially comprehensive main class
Phase analysis
Phase
Principle of inversion
Pure notation
Recorded knowledge
Relative index
Rounds
Schedules

Seminal mnemonics
Special classification
Special basic subject
Special main class
Species
Specific subject
Subject analysis
Subject
Systems basic subject
Systems main class
Universal classification
Wall-picture principle
Whole-part principle

References

Atherton, Pauline, ed. (1965). *Classification research: Proceedings of the second International Study Conference held at Hotel Prins Hamlet, Elsinore, Denmark, 14th to 18th Sept., 1964.* Copenhagen: Munksgaard

Brown, James Duff. (1908). *Subject classification, with tables, indexes, etc. for the subdivision of subjects.* London: Library Supply.

Buchanan, Brian**.** **(***1976). A glossary of indexing terms*. London: Bingley.

Indian Indian Standards Institution. Documentation Sectional Committee. (1964). *Indian standard glossary of classification terms.* New Delhi: The Instiution. (IS:2550:963).

Kaiser, J. (1911). *Systematic indexing.* London: Pitman.

Kyle, Barbara. (1958). Toward a classification for social science literature. *American Documentation*, 9 (3): 168-183.

Marcella, Rita and Newton, Robert. (1994). *A new manual of classification.* Aldershot, England: Gower.

Prytherch, Ray, comp. (1995). *Harrod's librarian's glossary.* 8th ed. Aldershot, England: Gower.

Ranganathan, S.R. (1960). *Colon classification.* 6th ed. Bombay: Asia Publishing House.

Ranganathan, S.R. (1962). *Elements of library classification.* 3rd ed. Bombay: Asia Publishing House.

Ranganathan, S.R. (1967). *Prolegomena to library classification.* 3rd ed. New York:

Asia Publishing House. (Ranganathan series in library science; 20)

Ranganathan, S.R. (1987). *Colon classification. 7th ed.* Bangalore: Sarada Ranganathan Endowment for Library Science.

Rider, Fremont. (1961). *Rider's international classification for the arrangement of books on the shelves of general libraries.* Middletown, Conn.: The Author.

Satija, M.P. (1998). Classification: Some fundamentals, some myths. *Knowledge Organization,* 25 (1/.2): 32-35.

Venkatappaiah, Velaga and Kumar, P.S.G., eds. (1994). *Ranganathan dictionary: Indian terminology on library and information science.* Delhi: B.R. Publishing.

Acknowledgements

This work was compiled during a Visiting Fellowship granted by the Maastricht McLuhan Institute, in the Netherlands for three months in 1999. The encouragement given by Dr. Kim H. Veltmann and Dr. Ingetraut Dahlberg is gratefully acknowledged.