UNIT 8  INTRODUCTION, STRUCTURE AND ORGANISATION

Structure
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8.0  OBJECTIVES

A number of classification schemes have been developed over the years for use in libraries. The colon classification developed by S.R. Ranganathan is one such scheme evolved on the basis of general theory of classification developed by him.

After reading this Unit, you will be able to:

- get an overview of Colon Classification;
- explain the analytico-synthetic process of Colon Classification;
- enumerate the notation used in CC;
- describe the basic plan of the scheme; and
- use the Index of CC.

8.1  INTRODUCTION

Colon Classification (CC) was devised by the late S.R. Ranganathan. The first edition of the scheme was brought out in 1933. So far, seven editions of the scheme have been published. The 7th edition does not have an index as yet. So, construction of Class Numbers with the help of this edition becomes difficult for a learner. For this reason, we will use the 6th edition of CC. The sixth edition was first published in 1960 and then reprinted in 1963, 1964, 1969, 1976, 1989 and 1990. Its bibliographic details are as follows:


To get better understanding of the scheme, it is necessary to have this edition in hand while studying the scheme.

8.2  BACKGROUND OF CC

The idea behind the Colon Classification took its root in 1924 when Ranganathan saw the demonstration of a meccano set in a toyshop in London. The meccano set consisted of several slotted strips, rods, wheel screws, and nuts and bolts with which several different models could be made. The same principle was applied by Ranganathan in his Colon Classification scheme where the standard units resembled the strips of a meccano set and the connecting symbols
were like the screws and bolts. The standard units constituted the schedules and colon was used initially as the connecting symbol for constructing class numbers.

First Edition (1933)
The first edition of CC was published in 1933. It had three parts: Part 1 contained Rules explaining the underlying principles; Part 2 had the Schedules and Part 3 was the Index. Mixed notation was used comprising 26 Roman capital letters denoting main classes, Indo-Arabic numerals and Roman lower case letters. Each main class was provided with a facet formula. Colon was used as connecting symbol for joining different facets.

Second Edition (1939)
The second edition was published in 1939. In this edition, two new concepts of octave principles and auto-bias device were introduced. A new Main Class - Spiritual Experience and Mysticism was added. Apart from the earlier three parts, a fourth part was added which contained about 3,000 examples illustrative of the rules given in the first part.

Third Edition (1959)
Third edition appeared in 1959, which was based on Dynamic Theory of Library Classification. It was based on the postulate of five Fundamental Categories, - Personality [P], Matter [M], Energy [E], Space [S] and Time [T]. Each fundamental Category was assigned an Indicator Digit (Connecting Symbol): comma (,) for Personality; semicolon (;) for Matter, colon (:) for Energy; and dot (.) for Space and Time.

Fourth Edition (1952)
In the fourth edition (1952), the indicator digit for Time was changed into single inverted comma (‘). Ordinal value for the indicator digits was also determined in this edition. Many Greek letters were added in this edition to expand the base of the Main Classes.

Fifth Edition (1957)
Fifth edition published in 1957 made many changes both in the rules as well as in the schedules. Empty and emptying digits replaced the Greek letters introduced in the fourth edition. The second level of space and time facet was also introduced.

Sixth Edition (1960)
The sixth edition of CC was published in 1960. The chapters of the Part ‘Rules’, was rearranged and partly rewritten in this edition. Chapter 6 on contractions, Chapter 7 on Classification and Chapter 8 on Principles and Postulates were added. In the Schedule Part, schedules for Phase, Intra-facet and Intra-array relations were added. Changes were also made in some of the schedules of main classes. Sixth edition was reprinted in 1963, which added Annexeure before the rules section.

The seventh edition of Colon Classification was published in 1987, long after the death of Ranganathan in 1972, substantial changes were made in this edition. However, the index for this edition has not been brought out so far and hence it is difficult to use.

Theory behind CC
Ranganathan was the first classificationist to give a detailed account of the theory behind a scheme of classification. The theories are described in his book “Prolegomena to Library Classification” first published in 1937. The ‘Prolegomena’ has undergone three major revisions. The 3rd edition was published in 1967. Ranganathan developed Colon Classification scheme on the basis of Canons, Principles and Postulates propounded by him. The canons of classification are provided in the ‘Prolegomena’ and the principles of helpful sequence are given in the ‘Prolegomena’ and in his book, “Elements of Library Classification”. The postulate of fundamental category, which forms the basis of Colon Classification, is a result of his dynamic theory of classification.

Self Check Exercise
1) Enumerate the major changes made in the 6th edition of CC.

Note: i) Write your answer in the space given below.
ii) Check your answer with the answers given at the end of this Unit.
The earlier versions of CC (edition 1 to 3), though fully faceted, were severely rigid. From the fourth edition onwards, the application of indicator digits for different facets and the concept of Rounds and Levels made the scheme Almost Freely Faceted. In the 7th edition of CC, the use of sector notation has removed the rigidity regarding the number of facets and their sequence in a round making it a Freely Faceted scheme of classification.

### 8.3 ANALYTICO - SYNTHETIC SCHEME

Colon Classification (CC) is an analytico-synthetic scheme and in this respect is different from the enumerative schemes of classifications like the Dewey Decimal Classification or the Library of Congress Classification schemes. In CC, ready-made class numbers are not given to the subjects. The schedule of CC consists of certain standard unit schedules. By combining the numbers in different unit schedules on the basis of the rules and principles, class number for all possible subjects can be constructed. The process is akin to the use of meccano set. The number building in CC involves two major steps:

1) Analysis of the subjects into facets and transforming them into five Fundamental Categories; and
2) Synthesis of the facets.

The process of analysis and synthesis for construction of class numbers in CC can be explained with the help of the following example:

#### Example

**Title:** Circulation of periodicals in college libraries in India in 1996.

It is clear from the above title that the book belongs to the Main Class 'Library Science'. Thus, M.C. = Library Science. Further analysis reveals the different facets of the title, which are:

- i) Circulation
- ii) Periodicals
- iii) College Libraries
- iv) India
- v) 1996

Each of the above facets constitutes different fundamental categories. Circulation is a process, therefore, it constitutes the Energy facet [E]. Periodicals being a material will come under the category of Matter facet [M]. College Libraries constitutes the Personality facet [P]. India is the Space facet [S] and 1996 is the Time facet [T]. Thus, by arranging the facets in the decreasing sequence of concreteness, i.e., PMEST we have:

Library Science (M.C.), College Libraries [P], Periodicals [M], Circulation [E], India [S] and 1996 [T]. Now the next step would be the identification of the notations denoting the different facets.

<table>
<thead>
<tr>
<th>Library Science</th>
<th>(M.C.)</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Libraries</td>
<td>[P]</td>
<td>33</td>
</tr>
<tr>
<td>Periodicals</td>
<td>[M]</td>
<td>46 (Taken from Main Class Generalia Bibliography)</td>
</tr>
<tr>
<td>Circulation</td>
<td>[E]</td>
<td>6</td>
</tr>
<tr>
<td>India</td>
<td>[S]</td>
<td>44 (Taken from Space Isolate Schedule page 2.8 to 2.17)</td>
</tr>
<tr>
<td>1996</td>
<td>[T]</td>
<td>N96 (Taken from Time Isolate Schedule in page 2.7)</td>
</tr>
</tbody>
</table>
By synthesising the different facets with the help of indicator digits, we get the class number for the above title as:

$$2 \text{ (M.C.) } 33[P]; 46[M]; 6[E].44[S] \ 'N96 \ [T]$$

$$= 233, 46: 6.44 'N96$$

**Note:** You will notice in the above class number that before the personality facet the indicator digit comma has not been used.

This has been done according to the facet formula (2 [P]; [M]; [E] [2P]) given in the Main Class '2 Library Science'. Thus, we see that the analysis of a given subject results in facetisation of the subject of a document on the basis of the five fundamental categories and the synthesis brings together the facets in a subject to represent the thought content of the document as far as possible.

**Self Check Exercise**

2) Find the Class Numbers for the following titles:
   
   
   
   **Note:**
   
   i) Write your answers in the space given below.
   
   ii) Check your answers with the answers given at the end of this Unit.

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### 8.4 NOTATION IN CC

Notation means the symbols used in the scheme to represent classes in a scheme of classification. Before we learn to use the scheme, it is necessary to understand the notational symbols used in this scheme.

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Types of digits used</th>
<th>No. of digits used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Indo-Arabic numerals(1-9)</td>
<td>9</td>
</tr>
<tr>
<td>2)</td>
<td>Roman alphabet (Capital letters A-Z)</td>
<td>26</td>
</tr>
<tr>
<td>3)</td>
<td>Roman alphabet (small letters a-z excluding i, l and o)</td>
<td>23</td>
</tr>
<tr>
<td>4)</td>
<td>Greek letters $\Delta$(delta) and $\Sigma$(sigma)</td>
<td>2</td>
</tr>
<tr>
<td>5)</td>
<td>Parenthesis (')</td>
<td>2</td>
</tr>
<tr>
<td>6)</td>
<td>Punctuation marks as connecting symbols</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Inverted comma (')</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dot(.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Colon (:)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Semi-colon (;)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comma (,)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hyphen (-)</td>
<td></td>
</tr>
<tr>
<td>7)</td>
<td>Zero as a connecting symbol</td>
<td>1</td>
</tr>
<tr>
<td>8)</td>
<td>Arrows:</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Forward Arrow $\rightarrow$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Backward Arrow $\leftarrow$</td>
<td></td>
</tr>
</tbody>
</table>
The Indo-Arabic numerals (1-9) and the Roman alphabets (both capital and small letters) are known as substantive digits in CC. The Roman capital letters and the Greek letters \( \Delta \) (delta) and \( \Sigma \) (sigma) are used to denote the Main and Canonical Classes and also as Time isolates in CC. The Indo-Arabic numerals are used to represent different facets of the subject. The numerals are used as decimal fractions. The Roman small letters are used as common isolates, second level of time isolate and also for phase relations.

The digit 0, the punctuation marks and the arrows are used as connectives or conjunctions. The starter and arrester brackets are used for the Subject Device.

In Colon Classification each of the digits have been given ordinal value and the sequence of their arrangement in ascending order is as follows:

\[ \cdots \leftrightarrow 0^{'};;\ldots; a b c d e f g h j k m n p q r s t u v w x y z 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M \Delta \Sigma N O P Q R S T U V W X Y Z \]

### 8.5 STRUCTURE AND LAYOUT

The book has been divided into three parts:

- **Part 1:** Rules
- **Part 2:** Schedules
- **Part 3:** Classics and Sacred Books

**Part 1:** This part relates to rules, which gives definitions, explanations and examples.

Chapters 01-04 deal with Call Number, Class Number, Book Number and Collection Number, respectively.

Chapter 05 introduces the concept of Facet, Focus and the Devices by which Foci may be formed in the Facets of Class Number.

Chapter 06 deals with contractions.

Chapters 07 and 08 explain the Canons of Classification and the Principles for securing helpful sequence.

Chapters 1-5 deal with Main Classes, Common Isolates, Time Isolates, Space Isolates and Language Isolates, respectively.

Chapter 6 introduces the concepts of Phase, Intra-facet and Intra-array relations.

Chapter 7 deals with Classic Device, which helps, in organising Classics in Indology and other fields.

The remaining Chapters in this part are devoted to each one of the Main Classes dealing with rules and peculiarities involved therein and also the worked out examples.

At the end of this part, there is an Index.

**Part 2:** This part consists of the schedules of Classification as follows:

- **Chapter 02:** schedule of Form Divisions for construction of Book Number.
- **Chapters 1-5:** the schedules of Common Isolates, Time Isolates, Space Isolates and the Language Isolates, respectively.

Chapter 6: Schedules for the Phase, the Intra-facet and the Intra-array relations.

In the remaining chapters, the schedules of all the Main Classes are given.

The alphabetical Index to the Schedules of Space Isolate (Chapter 4) and of the Personality Isolates in Botany (Chapter I) and Zoology (Chapter K) are given immediately after the respective schedules. Index to all the fundamental constituent terms in the schedules is given in one alphabetical sequence at the end of Part 2. Before the Index starts, general instructions on how to use the Index are given.

**Part 3:** This part provides worked out Class Numbers of Classics in Indology. It also provides schedule of Sacred Books with special names, followed by an index.

The pagination of each part runs in separate sequences. Two blocks separated by a dot represent the page number. The number appearing to the left of the dot represents the part and the
number to the right indicates the page number in that part; for instance 1.7 means page 7 in part 1; similarly 2.123 and 3.53.

At the beginning of the book, after the preliminary pages, there is an Annexure containing some corrections of misprints and a few minor changes.

8.6 THE INDEX IN CC

As indicated to you already in Section 8.5, Alphabetical Index to the schedules is provided at page no. 2.124 of CC. This is an Index to the fundamental constituent terms in the Schedules of Classification contained in Part 2 of C. This Index helps in recognising the Main Class and facet of a given isolate term which you are expected to classify. But you must know how to use this Index.

At the beginning of the Index, instructions to use the Index and Key to the Contractions are given. You have to understand the meaning and implications of a given entry in the Index. Here is a sample entry from the Index:

Epidermis G [P], K [P2], L [P], 871

It means the isolate term epidermis occurs in Biology as personality [P], in Zoology as second level personality [P2] and in Medicine as personality [P]. The isolate number for epidermis in all these cases is 871 and the Class Numbers is:

G 871
K, 871
L 871

You have to make use of this Index in order to know the main classes and the facets of a given isolate term of subject. The Index also helps you to know in what context is an isolate term used and its appearance in various facets of main classes and the relevant isolate number.

Self Check Exercise

3) Derive Class Numbers for the following isolate terms by using the Index.
   a) Cell, Primary
   b) Drilling machine
   c) Excess nutrition
   d) Folklore
   e) Grindstone
   f) Motor nerve

Note: i) Write your answers in the space given below.
   ii) Check your answers with the answers given at the end of this Unit.

8.7 SUMMARY

In this Unit, you have been introduced to the scheme of Colon Classification. The scheme is different from the other schemes of classification in respect of its analytico-synthetic quality
and also being a freely faceted scheme. CC uses mixed notation, which has the property of incorporating as many new classes as possible. The Colon Classification has undergone several revisions. The latest edition is the Seventh, which does not contain an index. Thus, it is the sixth edition which is still being used by many libraries in our country.

8.8 ANSWERS TO SELF CHECK EXERCISES

1) The major changes made in the sixth edition are:
   i) ‘Rules’ section was re-arranged and partly rewritten;
   ii) Chapter 6 on Contractions, Chapter 7 on Canons of Classification and Chapter 8 on Principles and Postulates were added in the Rules section;
   iii) In the Schedule section, schedules for Phase, Intra-facet and Intra-array relation were added;
   iv) Changes made in some of the schedules; and
   v) In the 1963 reprint, Annexure was added incorporating the major changes made after 1960.

2) a) Library Science (M.C.) = 2
   Research Libraries [P] = 36
   Maps [M] = 17
   Classification [E] = 51
   Madras [S] = 4411
   1976 [T] = N76
   Class No. 236; 17: 51.4411’N76

   b) Library Science (M.C.) = 2
   Reference Books [M] = 47
   Accession [E] = 84
   Bombay [S] = 4431
   1966 [T] = N66
   Class No. 248; 47: 84.4431’N66

3) a) C6:11
   b) D6.845
   c) L:462
   d) Y:351
   e) D6.853
   f) G 77
   K, 77
   L 77

8.9 KEY WORDS

Analytico-Synthetic : A scheme of classification based on the analysis of a subject into different facets and the synthesis of facet numbers into class numbers with the help of connecting symbols.

Canonical Class : Any digit in a class number prefixed to a facet number other than the basic number.
Facet: A group of isolates identified on the basis of a single fundamental category.
Focus: Term used to denote an isolate idea or a basic class.
Isolate Idea: A thought unit, which is a manifestation of one of the five fundamental categories.
Notation: The use of ordinal numbers (digits) to represent classes in a scheme of classification.

8.10 REFERENCES AND FURTHER READING


