Lib sc. 6; 1969; PAPER M.

Colon Classification Edition 7 (1971): A Preview. (Classification problems. 32).

SR Ranganathan, National Research Professor in Library science, and Honorary Professor, Documentation Research and Training Centre, Bangalore 3.

The field of library classification is the Universe of Subjects. Its purpose is to arrange subjects in a linear sequence helpful to the majority of readers and to mechanise the arrangement by representing each subject by a unique Ordinal Number. The increase in the extension, depth, and proliferation of the Universe of Subjects is now accelerating at a great rate. Twelve modes of formation of subjects are described. Six species of schemes are defined beginning with a purely enumerative one and ending with a Freely Faceted analytico-synthetic one. Version 3 of Colon Classification given in Ed 7 (1971) is now the only representative of the Freely Faceted scheme.

Till about 1950, the design and development of schemes for classification were largely done through flair. Since 1950, a dynamic theory of classification is being developed as a basis for schemes for classification. One of the chief elements in this Dynamic Theory is the separation of work in the Idea Plane and in the Notational Plane. Idea plane is paramount. The versatility of the Notational Plane should be continuously increased to enable it to implement the findings of the Idea Plane in respect of the sequence of subjects — past, present, and future. With this as background, the rest of the paper indicates the changes being introduced in Colon Classification, Ed 7 (1971).

In this edition the Main Subjects and Partial Comprehensions are increased to 105. Of these, 34 myolve correction work. 13 of these do not involve change

of place; but 21 do. These 21 Main Subjects are new and do not have much literary warrant. The Concept of Fused Main Subject is implemented and 10 of them are included in Ed 7. The Concept of "Matter-Property Isolate" has been developed; and many of the isolates forcedly deemed to be manifestations of Energy in the past have now been brought into this new category. This involves only change of the indicator digit ":" (colon) into ";" (semicolon) but no change of place. New indicator digits have been introduced for anteriorising isolates and for phase relation, without involving change of place. The insertion of the indicator digit "," (comma) is made obligatory even in the case of the first level Personality. The capacity of an array in the Notational Plane has been increased considerably. Any amount of interpolation at any point in an array has been made possible with the use of Emptying Digits. The procedure for correction work is described; and it is shown to be not urgent in most cases. Annexure I gives the new and the old facet formula for the diverse Basic Subjects.

0 Background

01 FIELD AND PURPOSE OF LIBRARY CLASSIFICATION

The field of operation of library classification is the Universe of Subjects. Its operation in this field is conditioned by the subject-requirements of the Universe of Readers. The essential purpose of library classification is the arrangement of subjects in a linear sequence helpful to the majority among the Universe of Readers. Though the human intellect is capable of recognising and even studying many dimensions, it feels comfortable to move along a line - be it to think out and communicate within oneself in order to develop a subject, or to communicate a developed subject to others, or to receive communication about subjects developed by others. Therefore, the purpose of library classification is to arrange subjects in a helpful linear sequence - helpful to the majority among readers -, though the Universe of Subjects is multi-dimensional. Arrangement in a preferred linear sequence of thousands of subjects taken from the multidimensional Universe of Subjects should be inevitably mechanised. The time-honoured simple tool for mechanisation of arrangement in a linear sequence is the Ordinal Number. Therefore, an essential step in library classification is the representation of each subject by a unique Ordinal Number, denoted by the term 'Class Number' in our context. Hence the vital role of notational system in library classification. The sequence of the subjects is, however, determined in the idea plane; and the Class Number

in the notational plane comes in only thereafter. For simplicity, the word 'Classification' will be used hereafter in the place of the term 'Library Classification'. Both classification-in-theory and classification-in-action — the work of both the classificationist and the classifier — amount to transforming a multi-dimensional space into a one-dimensional one; or to change the analogy, it amounts to mapping a multi-dimensional space on a line (28, 34).

02 Universe of Readers

Let us first look at the Universe of Readers. Literacy is an essential pre-requisite for knowing the Universe of Subjects through reading. From the vedic times downwards till about a century ago, the literates in any nation were negligibly few. Even among those few literates, the scholars interested in developing their own knowledge by reading books on several subjects were only a fraction. Even of this fraction, the scholars engaged in adding or developing new subjects formed a still smaller fraction. Thus, till about a century ago, the Universe of Readers was small in any country whatever—whether in intellectually active period or rest-period. However, in such a social context, the few scholars were very high in the scale of intellectual ability and had highly integrated personality. They could, therefore, easily find their way in the Universe of Subjects without the aid of classified arrangement.

03 Universe of Subjects

Let us next look at the Universe of Subjects. For many centuries it was developed, extended, or deepened at a very low rate. Except for sporadic epochs, a distinctly higher rate or continuous global development may be said to have begun about the eighteenth century. Generally, this happened in over-populated countries.

031 Slow Increase in Proliferation

Since then, the proliferation of subjects has been slowly increasing. A measure of the slow growth in the rate of the creation of fundamentally new ideas and subjects is given in the

following table (5):

	Main Subject	subje	f major new ects created du entury in the	ıring
		1451–1700	1701–1900	1901-1950
B C	Mathematics Physics	9	24 21	21 68
D E F	Engineering Chemistry		23 37 21	46 80
G H	Technology Biology Geology		4 16	70 8 8
I J	Botany Agriculture	<u>1</u>	7 2	4 2
K L	Zoology Medicine	4	4 21	4 80
	Total	21	180	391

032 Rapid Increase in Major Inventions

The following table (54) shows that major inventions had already begun to occur almost every year:

Year	Major Invention or Discovery
1892	Automatic telephone patented. Internal combustion
1894	Typhoid anti-toxin and diphtheria anti-toxin
1895	X-Ray. Principles of the motorcar patented
1896	Steam turbine patented. First cinema show
1897	Electrons identified
1898	Radium
1899	Long distance telephone. 'Sugar' prune developed
1900	Gasoline motor. Submarine
1901	Wireless signals flashed across the Atlantic. High speed steel
1902	Active emanations of radium identified
1903	Ford car patented. First flight of 120 feet in 12 seconds

LIB SC

Year	Major Invention or Discovery
1904	Fessenden's plan of radio-wave production patented
1905	Theory of Relativity announced
1906	Crystal detector patented
1907	Vitamin hypothesis postulated
1908	Two and a half miles of continuous flight
1909	Installation of wireless in steamship
1910	Ionic medication
1911	Hydro-air plane
1912	Talking pictures
1913	Tungsten filament patented
1914	Military tank
1915	Continental telephone installed
1916	Browning machine gun
1917	Submarine detector
1918	First Air-mail service began

033 Proliferation Crosses the Limit

The data given in Sec 032 suggest that the proliferations in the Universe of Subjects have already crossed the limit within the capacity of even the most prodigious scholar to find his way about in the Universe of Subjects, without the aid of a classification capable of arranging the subjects in a helpful linear sequence. Indeed, it has been said that Herbert Spencer of the mid-nineteenth century was the last of the versatile men reputed to have known all the subjects developed upto his period (69).

04 EFFECT OF SOCIAL PRESSURE

O41 Artificial Commodities and Increase in Natural Commodities

During the last half a century, social pressure is accelerating
the extension and the deepening of the Universe of Subjects.
This pressure arises out of the two factors:—

1 Increase in population pressure; and

2 Increase in the standard of life. Population pressure has gone beyond the capacity of natural and near-natural commodities to maintain the people. The material wants — such as clothing, housing facilities, and transport facilities — have increased manifold even in the case of persons in the lower economic strata. For example, as a result of this social pressure, artificial building materials — such as concrete and reinforced concrete — have to be produced and continuously

improved upon. Artificial fibres have to be made to meet the clothing needs. Ever increasing artificial materials, such as plastics, and sources of power, such as nuclear power, have to be invented, discovered, and continuously improved upon. Chemical fertilisers have become a necessity. So also the means of transport and their speeds have to be continuously improved upon.

The result of this is the need for the

- 1 Intensification of the production of natural commodities; and
 - 2 Production of artificial commodities.

042 Need for Intensive Research

The work mentioned at the end of Sec 041 has to be based

- on
 1 Continuous improvement of technology; and in its turn this has to be based on
- 2 Continuous research on large scale developmental research, pragmatic research, applied research, and pure or fundamental research; and these intellectual activities have ultimately to depend upon fundamental laws called Hypotheses and Postulates in Natural Sciences and Normative Principles in Social Sciences. Such 'Fundamental Laws' are formulated at intervals by persons with considerable intuition.

043 Increase in the Number of Research Personnel

The need for continuous research has resulted in the increase of research personnel to nearly a hundred times of what it was at the turn of the present century. According to Academician L A Artsimovich, "All wellknown Russian physicists [in 1900] could be accommodated on a single sofa, while the funds allocated for physical research were much less than those allowed for keeping the Czar's stables." It has been estimated that the number of scientific research personnel has risen in Russia from 11,600 in 1914 to 769,600 in 1967—that is, nearly seventy-fold (16). A recent American study (19) estimated that the number of scientific research personnel has risen in China from 600,000 in 1955 to 2,400,000 in 1962.

The estimated man-power engaged on research and development during 1962 in some other countries was (14):

United States	1,160,000
United Kingdom	211,000
Germany	142,000
France	111,000
India (59)	80,000
Netherlands	33,000
Belgium	22,000

This fabulous increase in the number of research personnel is accelerating the proliferation in the Universe of Subjects at a fabulous rate. This has to be so because social pressure demands that the interval between any major invention or discovery and its exploitation for human purposes should be reduced towards a vanishing point.

044 Acceleration of Exploitation of Inventions

SN	Subject	Y	ear of	N of
214	Subject	Discovery of Principle	Practical development of device	years of lag
1	Photography	1727	1839	112
1 2 3	Telephone Atomic power	1823	1876	53
_	release	1932	1945	13
4	Transistor	1940	1948	8
5	Laser	1958	1960	2

045 Effect on Classification

The number of subjects with literary warrant — at the book-level and at the article-level — has already reached astronomical dimensions. Due to increase in literacy, there is now a great increase in the number of generalist readers seeking to find books suited to them from among thousands of books expounding a large variety of subjects. In addition, in order to conserve the research potential of humanity without wastage due to unintended duplication of research, each specialist reader has to be served with articles in periodicals relevant to his work that is, micro documents - pinpointedly, exhaustively, and expeditiously, in order to satisfy respectively Laws 2, 3, and 4 of Library Science. For this purpose, Classification should be made very deep and powerful. There is another phenomenon in the subject-document relation. At the beginning of its creation, a subject is usually able to attract to itself only articles in periodicals. As time passes on, some of them attract to themselves whole books - that is, macro documents. Therefore, convenience suggests that classification for article-level and that for book-level should be the same. This was not fully realised till recently (51). What delayed the realisation was faulty foundation of classifictation

— both in the Idea Plane and in the Notational Plane — and the failure to separate the work in the Idea Plane from that in the Notational Plane. After these defects were removed, it is being increasingly realised that not only that one and the same classification capable of serving both book-level and article-level is possible, but also that it is necessary.

05 Preliminaries to Classification

051 Technical Terminology

In order to secure precision in communication — reducing to a minimum if not eliminating, any leakage, noise, and aberration in it — we shall now define a set of technical terms (56).

1 Idea.— The product of thinking, reflecting, imagining, etc got by intellect by integrating with the aid of logic, a selection from the apperception mass, and/or what is directly apprehended by intuition, and deposited in the memory.

2 Subject.— An organised or systematised body of ideas, whose extension and intension are likely to fall coherently within the field of interest and comfortably within the intellectual competence and the field of inevitable specialisation of a normal person.

3 Isolate Idea.— Any idea or idea-complex fit to form a component of a Subject, but not by itself fit to be deemed to be a subject.

4 Basic Subject.— A subject without any Isolate Idea as a component.

5 Compound Subject.— A subject with a Basic Subject and one or more Isolate Ideas as components.

6 Facet.— A generic term used to denote any component.—be it a Basic Subject or an isolate—of a Compound Subject.

7 Order of a Compound Subject.— Number of facets in the Compound Subject.

The Order of a Basic Subject without any isolate attached to it is 1.

8 Main Subject.— A subject included in the schedule of Main Subjects. The presumption is that no Main Subject can be expressed in terms of the other Main Subjects in the schedule.

Main Subject is by itself a Basic Subject.

91 Non-Main Basic Subject.— A Canonical, or Specials, or System subdivision of a Main Subject.

911 Host Main Subject.— The Main Subject of which any specific Non-Main Basic subject is a division.

912 Components of a Non-Main Basic Subject.— Its Host Main Subject, and a division of it taken independently of the former.

We can have a Canonical Component, a Specials Component, and a System Component.

- 913 Non-Main Component of a Basic Subject.— The Canonical. Specials, or System division taken independently of the Host Main Subject.
- 92 Compound Basic Subject.— A Basic Subject having a Host Main Subject and two or more non-main components. Example:
 - The Canonical division "Magnetism" in 1 CN1-7 "Quantum Physics"
 - The Specials division "Child" in "Ayurvedic LB-9C Medicine"
 - 3 LB-9UA3-9C The Specials division "Child" in the Environmented Specials division "Tropical Medicine" in "Ayurvedic Medicine"
- 921 Order of a Compound Basic Subject.— The number of non-main components other than the first one.

Example 1 in Category 914 is a Compound Basic Subject of Order 1. So is Example 2. Example 3 is a Compound Subject of Order 2.

93 Simple Basic Subject.— A Basic Subject consisting of a Main Subject alone, or one Host Main Subject and one and only one non-main component.

Example:

C **Physics**

C5 Radiation Physics

Quantum Physics

94 Compound Isolate.— An isolate consisting of two or more isolates taken from one and the same schedule of isolates.

The following examples are taken from the schedule of organ isolates provided for being taken with the Main Subject "Medicine" to form Compound Subjects

163 Arm

36 Artery

36-163 Arteries of arms

The last example contains a Compound Isolate. Each of the first two examples contains a Simple Isolate. (See Sec 291 for other examples of Compound Isolates).

95 Compound Facet.— A Facet having a Compound Basic Subject or a Compound Isolate.

96 Sub-Facet.— Any component of a compound facet — be it a basic facet or an isolate facet.

1 "Quantum Physics" and "Magnetism" are both subfacets in the Compound Basic Facet "Magnetism in Quantum Physics".

2 "Arms" and "Arteries" are both sub-facets in the

Compound Isolate Facet "Arteries of Arms".

V 6, N 3; 1969 SEPTEMBER

052 Three Correlated Universes

Knowledge is a result of the knower (as distinct from "Seer") knowing the Universe of Knowees. This he does gradually over centuries. We shall assume that the Universe of Knowees exists whether any knower knows it or not. The Universe of Knowledge grows with the extent to which the knowers know the Universe of Knowees; it is only a sub-universe of the Universe of Knowees; and it is ever-growing. Thus, the Universe of Knowledge is a correlate of the Universe of Knowees. "Knowledge" is not "Subject" (See Sec 051, Category 2). The Universe of Subjects grows with the extent to which bits of the Universe of Knowledge are organised, systematised, and expounded as subjects; it is only a sub-universe of the Universe of Knowledge; and it is ever-growing. The Universe of Subjects is a correlate of the Universe of Knowledge. The philosophers have been all along attempting to divide the Universe of Knowledge into bits and to arrange the bits in some acceptable sequence (49). But 'Classificationists' and 'Classifiers' are concerned only with dividing the Universe of Subjects into bits, arranging the bits in a helpful linear sequence, and representing each bit by a distinctive Class Number (27).

053 Modes of Formation of Subjects

The following twelve modes of formation of subjects have been so far isolated:—

1 Lamination 1.— In this mode, one or more isolate facets are laminated over a Basic Facet. This results in Compound Subjects (See Sec 051, Category 5).

2 Lamination 2.— In this mode, two or more sub-facets of a Compound Facet are laminated over one another (See Sec

051, Category 91).

- 3 Loose Assemblage 1.— In this mode, two or more subjects—be it simple or compound—are studied in their mutual relation. The relation may be a general one, or one of bias, or of comparison, or of difference, or of influence; or one subject may be used as the tool for studying the other subject. This is called 'Inter-Subject Phase Relation'. This results in a Complex Subject (50).
- 4 Loose Assemblage 2.— In this mode, two or more isolates taken from one and the same schedule are brought into mutual relation. The relation may be of any of the kinds mentioned with reference to Loose Assemblage 1. This is called 'Intra-Facet Phase Relation'. This results in a Complex Isolate (44). A Facet made of a Complex Isolate is called 'Complex Facet of Kind 1'.
- 5 Loose Assemblage 3.— In this mode, two or more isolates taken from one and the same array of order higher than 1 in one

and the same schedule are brought into mutual relation. The relation may be of any of the kinds mentioned with reference to Loose Assemblage 1. This is called 'Intra-Array Phase Relation'. This results in a Complex Array Isolate (44). A Facet made of Complex Array Isolate is called 'Complex Facet of Kind 2'.

6 Fission.— In this mode, an Isolate or a Basic Subject.— be it main or non-main—gets fissioned or split into sub-divisions.

7 Dissection.— This term is used to denote fission when we consider an array of divisions of an isolate or of a Basic Subject,

resulting from fission (38).

8 Denudation.— This term is used to denote fission when we consider one and only one of the sub-division of an isolate

or of a Basic Subject, resulting from fission (33).

91 Fusion.— In this mode, two or more Main Subjects are fused together in such a way that each of them loses its individuality in respect of the schedules of isolates needed to form the Compound Subjects going with it. This results in 'Fused Main Subject' (26). Fused Main Subjects are gaining literary warrant in recent years — say, within the last five decades. "GUE Biochemistry" is an example. (for full list See Sec 18).

92 Distillation.— In this mode, a pure discipline is evolved as a Main Subject, out of the experiences in its appearance-inaction in diverse Compound Subjects going with different Host Basic Subjects or occasionally even with Host Compound Subject. This results in a Distilled Main Subject (24). Distilled Main Subjects are gaining literary warrant in recent years—say, within the last two decades. "8 Management" is an example. "VT

Pure discipline of Archaeology" is another example.

93 Partial Comprehension.— Several Main Subjects are sometimes treated integrally or disjunctively in one and the same book. A Partial Comprehension has meaning only with reference to the Main Subjects recognised and enumerated in the Schedule. What is now a Partial Comprehension might have been a Main Subject in very early days before Fission advanced sufficiently. The term 'Partial Comprehension' is not used to denote a Main Subject taken as the host for non-Main Basic Subjects, such as Canonical, Specials, and System, Basic Subjects. Generally, a 'Partial Comprehension' attracts periodical publications, enclopaedias, and other reference books, and occasionally general books.

Example:

A Natural Sciences

MZZ Humanities

SZ Social Sciences

94 Subject Bundle.— In this mode, a new kind of Partial Comprehension of subjects is formed. For convenience in orga-

nisation of research, the preliminary results and the data obtained in different Basic Subjects or Compound Subjects going with the different Basic Subjects involved in the study of some phenomenon or entity are published in one and the same book disjunctively for further investigation and elaboration independently by the specialist in the respective subjects. Thus, an account of different subjects are brought together out of exigency without any substantial integral account of them. This results in "Subject Bundle" (21). Books containing "Subject-Bundle" had existed for nearly a century. In other words, literary warrant for Subject Bundles is not recent. And yet, classificatory discipline has begun to give a satisfactory treatment to them only during the last few years.

Example:

ABE Ocean Sciences
AG Space Sciences
AV Defence Sciences

Today, Partial Comprehension and Subject Bundles are the result of developments in Book Production rather than intrinsic to subjects.

941 Occasionally, there may be a schedule consisting of isolates to be used only as components of a compound isolate, and not occurring by themselves as Isolates. Examples will be found in the Chapters on Language Isolates, Space Isolates, and Special Isolates of the Main Subject "Law".

06 Species of Schemes for Classification

The following six species can be recognised among the schemes for classification of subjects, developed till now.

1 Purely Enumerative Scheme

Example.— Rider's International Classification (1961). It gives one omnibus schedule of enumerated subjects, most of which are Compound Subjects.

2 Almost Enumerative Scheme

Example.— Decimal Classification. In its Ed 17 (1965), this gives independent schedules of common Time, Space, and Form Isolates respectively and also a long omnibus schedule of enumerated subjects, most of which are Compound Subjects.

3 Almost Faceted Scheme

Example.— Universal Decimal Classification (1905). It gives independent schedules of common Time, Space, and Form Isolates respectively; and in addition, it gives schedules of Special Isolates for use in Compound Subjects going with certain enumerated Basic and Compound Subjects. But it does not provide

Lib Sc

for Special Isolates in all possible cases. On the other hand, it uses more or less the long omnibus Decimal Classification schedule of enumerated subjects, most of which are Compound Subjects. However, by its Colon Device, it provides for using some of the enumerated subjects as if they were facets for use in forming Compound Subjects. This device is also used to form Complex Subjects. Thus, this is a multi-purpose device.

4 Fully but Rigidly Faceted Scheme

Example.— Colon Classification Version 1—Ed 1 (1933) to Ed 3 (1950). It gives only short independent schedules of Basic Subjects, a few Common Isolates, and a large number of Special Isolates in association with different Basic Subjects; thus, it is Fully Faceted. But it is "Rigidly Faceted", because the facets that should go with each Basic Subject and their sequence are pre-determined, without reference to the various possible Compound Subjects capable of going with that Basic Subject. This makes Version I of Colon Classification severely rigid, though fully faceted.

5 Almost Freely Faceted Scheme

Example.— Colon Classification Version 2—Ed 4 (1952) to reprint of Ed 6 with Annexure (1963). It is "Almost-Freely Faceted", because the use of different Indicator Digits for diverse kinds of facets and the concept of Rounds and Levels removed the severe rigidity in the number and the sequence of facets that can occur in a Compound Subject. However, some rigidity lurked in respect of Levels of Facet within a Round. It is on account of this that it was not Freely Faceted in full measure.

6 Freely Faceted Scheme

Example.— Colon Classification Version 3—forthcoming Ed 7 (1971). With the help of Sector Notation, the rigidity in the number of Levels of facets and of their sequence in a Round lurking in Version 2 has been nearly removed. Further, some facets originally considered as Levels have been recognised to be Sub-Facets in a facet of one and the same level. Above all, this Version recognises that facets belong to Compound Subjects and not to Basic Subjects. Therefore, pre-determination of the facets for all the Compound Subjects likely to go with any Basic Subject is ruled out. Thus, in its Version 3, Colon Classification has now become a Freely Faceted Scheme.

061 Analytico-Synthetic Scheme

The term 'Analytico-Synthetic Scheme' is a generic term to denote any scheme in which a Compound Subject is first analysed into its facets in the idea plane and later synthesised in the Verbal Plane and in the notational plane respectively.

Example.— All the editions of Colon Classification are

fully analytico-synthetic. Universal Decimal Classification has a slight touch of analytico-synthetic quality. It can be seen that the quality of a scheme being faceted implies its being analytico-synthetic.

062 Preference for Faceted Classification

A preference to Faceted Classification appears to have now emerged. Probably it is gaining increasing support. The first demonstration of a fully faceted scheme for classification was published in 1933 in Colon Classification, Ed 1. W C Berwick Sayers (64) was the first to emphasise the value of a Faceted Classification; it was in 1955. In the same year, the International Federation for Documentation (60) recommended a deeper study of Faceted Classification. In 1957, the Classification Research Group (London) (8) stressed during the International Study Conference on Classification held at Dorking, that Faceted Classification should replace Enumerative Classification. In 1959, E I Shamurin (65) of USSR, stated that by-passing Faceted Classification would be impossible in the future. In 1964, Harold Lancour, Dean of the Graduate Library School of the University of Pittsburgh (13) stated that future schemes for classification should necessarily be Faceted ones. In the same year J H Shera, Dean of the School of Library Science of the Case Western Reserve University (Cleveland) (66), pointed out that a Faceted Classification would replace the no longer adequate pigeon-holed taxonomic classification and would make a fluid system of classification possible.

07 NON-THEORY-BASED SCHEME

071 Law of Least Action

Inertia is a well-known quality of things. Even the human mind shares that quality to some extent. But the life-force prevents the absolute sway of the Law of Inertia over the humans. Therefore, it has to allow itself to be replaced by the Law of Least Action in all human work, mental or physical. This has retarded the development of schemes for classification of subjects. With this at the back of our mind, we shall describe the schemes for classification mentioned in Sec 06.

072 Decimal Classification

Decimal Classification was designed at the beginning of the last quarter of the nineteenth century. It was first published in 1876. Its design was just suited to the state of the Universe of Subjects at that time. It was just sufficient to classify the subjects that had gained literary warrant, at book-level, at that time.

206 Lib Sc

Its design was pragmatic. It was not based on any objectively formulated Theory of Classification, though some sort of theory might have guided the author from the sub-conscious level.

Barring the common Form Isolates, it looked at that time as if a subject could be deepened only by sharpening the last facet contained in it. All the earlier facets were frozen. This made the enumeration of Compound Subjects possible. This is so far as idea plane goes.

In the notational plane, the contribution of Decimal Classification was the Decimal Fraction Notation. It is being used by all the important later schemes worth consideration — particularly.

the ones mentioned in Sec 06.

With slight additions and changes made now and then, Decimal Classification worked fairly satisfactorily for about a generation — that is, till the turn of the present century.

073 Universal Decimal Classification

In order to meet the new demands of the Universe of Subjects, the design of Universal Decimal Classification was begun in 1895 and its Ed 1 came out in 1905. It accepted the long enumerated core of Decimal Classification, but provided for the sharpening of some of the facets other than the last. This was made necessary by the change that had come over the state of the Universe of Subjects by that time — in other words, by the new kind of literary warrant that was arising.

Its design was pragmatic. It was not based on any objectively

formulated Theory of Classification.

Expressed in terms of schedules, Universal Decimal Classification introduced common schedules of Time Isolates, Space Isolates, and a few short schedules of Special Isolates — called Special Auxiliaries and Analytical Divisions-needed for use in Compound Subjects other than those enumerated in its core of Decimal Classification. This is so far as the Idea Plane goes.

In the notational plane, Universal Decimal Classification found it necessary to use Indicator Digits to mark off the different Common Isolate Facets and the Special Isolate Facets in a Class

Number.

This scheme worked fairly satisfactorily for about one generation after its design — that is, till about 1925. By that time, Decimal Classification had been outmoded by one generation - that is, by about twenty-five years.

074 Colon Classification Version 1

In order to meet the new demands of the Universe of Subjects, the design of Colon Classification Version 1 was begun

in 1924 and its Ed I was published in 1933. By about that time, the state of the Universe of Subjects began to present many more proliferations thrown forth practically at the end of each isolate facet and of even the Basic Facet of a Compound Subject. These proliferations had attracted sufficient literary warrant by 1924.

This factor necessitated the total abandoning of the enumeration of Compound Subjects. Therefore, Colon Classification gave only short schedules of Basic Subjects, and of different Common Isolates — namely, Time, Space, Language, and Anteriorising ones; and in addition, a few short schedules of Special Isolates for use in Compound Subjects going with the respective Basic Subjects. An implication of this was that Class Numbers were given only for Basic Subjects and not for Compound Subjects. The construction of the Class Number for each Compound Subject had to be done by the classifier in accordance with prescribed Rules. This was a sharp departure from what was in vogue in the earlier schemes. It was this new feature that led H E Bliss to describe Colon Classification as "Synthetic Classification" (7). This is so far as Idea Plane goes.

In the Notational Plane, Colon Classification Version 1 used the digit ":" (colon) as an Indicator Digit for every kind of isolate facet.

The design of Colon Classification Version 1 was not based on any objectively formulated Theory of Classification, though some sort of theory might have guided the design from the subconscious level.

Colon Classification Version 1 (Ed 1 to Ed 3) worked fairly satisfactorily for about one generation—that is, till about 1950. By that time, it was vaguely felt, that an ad hoc scheme not based on a sound Theory of Classification could not keep step with the changes in the Universe of Subjects. It was realised that a scheme for classification should be based on a sound Dynamic Theory. The theory has to be dynamic if it is to keep step with the increasing changes and proliferations in the Universe of Subjects.

08 THEORY-BASED SCHEME

081 General Trend

In any sphere of life, practice precedes theory. Lifeforce stimulates man to improvise, to design, and to develop various aids — both at the physical and at the mental levels. After a long experience is gained with an improvised aid, a theory is developed in order to understand the aid deeply and to systematise, improve, refine, and develop it. So it has been with classification too. Within fifty years after the design of Decimal Classification, E C Richardson (61) and W C Berwick Sayers

208

(62, 63) made comparative studies of the then known schemes. for classification; and they also evolved a Theory of Classification. It was largely "descriptive formulation" and "interpretative explanation". It was static and not dynamic. The theory of H E Bliss (6) and that of myself (47) published within the next fifteen years were nearly similar to the earlier ones and were also almost static. They simply added a few more Descriptive Canons. After 1949, a Dynamic Theory of Classification was slowly evolved by my co-workers and myself. Instalments of this theory were published in the pages of the Abgila (1949-1953) and of the Annals of library science (1954-1963); and they are now being continued in the Library science with a slant to documentation (1964-). The first consolidated account of this Dynamic Theory was published in 1957 (48).

082 Separation of Planes of Work

One of the basic contributions of this Dynamic Theory was the separation of the work of classification in the Idea, Verbal, and Notational Planes respectively. Before this was done, lack of capacity in the Notational Plane inhibited free work in the Idea Plane.

Nor was the Notational Plane cultivated. On the other hand, there was reluctance to cultivate it. Indeed, there was even opposition to attention being paid to it.

The use of popular terms with all their homonyms and synonyms in the Verbal Plane caused confusion in the Idea Plane.

The separation of the work in the three planes laid bare the paramountcy of the work in the Idea Plane and the need to allow it to develop unhindered on its own right. It also emphasised that the versatility of the Notational Plane should be progressively increased in order to enable it to implement every finding in the Idea Plane.

The need for developing homonym-free, synonym-free technical terminology for each discipline was realised. It does not matter, however, if one and the same technical term is used in different disciplines to denote different ideas, though the ideal would be

to remove such homonyms also.

The improvement of the versatility of the Notational Plane falls entirely within the province of the Library Profession. But the improvement of the Verbal Plane needs cooperation with subject specialists and linguists. Work in this matter would be necessarily slow. Till satisfactory result is achieved, the Canon of Context (31) and the Canon of Enumeration (39) are pressed into service to remove the edge from the fault of homonym.

083 Colon Classification Version 2

Colon Classification Version 2 improved on Version 1 by basing itself on the Theory of Classification developed from 1950 to 1963. Version 2 was first published as Ed 4 in 1952. Some further improvements were successively made in the light of the further findings of the theory. The last edition of Version 2 appeared in 1963 as Colon Classification Ed 6, reprinted with Annexure. One essential new feature of this version is that it implemented the Postulates of Five Fundamental Categories, of Rounds, and of Levels, formulated in the Idea Plane. To implement this in the Notational Plane, five different Indicator Digits were used in the place of the single Indicator Digit used in Version 1. A different Indicator Digit now corresponds respectively to each of the five Fundamental Categories Personality (P), Matter (M), Energy (E). Space (S), Time (T) — PMEST in short.

Another essential new feature is the acceptance, in the Idea Plane, of the interpolation of new Main Subjects and new Partial Comprehensions in the array of Main Subjects. To implement this in the Notational Plane, Greek letters were used provisional upto Ed 6 (1960), as the work in the Notational Plane could not be continued sufficiently on account of more urgent work.

Colon Classification Version 2 continued to give fairly satisfactory service only for about fourteen years.

084 Faster Migration from Article-Level to Book-level

Each of Decimal Classification, Universal Decimal Classification, and Colon Classification Version 1 continued to be fairly satisfactory for about twenty-five years; this period was reduced to nearly a half in the case of Colon Classification Version 2, in spite of its being theory-based. This phenomenon was traceable to a new trend in the Universe of Subjects. Subjects of the status of article-level began to migrate into that of book-level, at a greater rate than before 1950. Decimal Classification, for example, was overwhelmed by this new trend. Its editors were obliged to declare in self-defence that Decimal Classification was not intended for the classification of articles (10). They even showed a dislike to the BNB introducing its "Verbal Extension Device" in 1950 to fit Decimal Classification for classifying the deeper subjects gaining literary warrant at book-level (68). These subjects had formerly belonged only to article-level. By 1964, Colon Classification Version 2 was also overpowered by a few of such migrations to book-level.

085 Deeper and More Dynamic Theory of Classification

The frequent migration of subjects from article-level to book-level indicated that a deeper and more Dynamic Theory

210 Lib Sc

of Classification was needed to meet the recurrence of such migrations at increasingly shorter intervals. This in its turn indicated that even book classification should follow the deeper and more Dynamic Theory found necessary for article-classification — that is, Depth Classification, as we call it.

0851 Help from DRTC

The establishment of DRTC (= Documentation Research and Training Centre) at Bangalore in 1962 provided facilities for deepening the Theory of Classification and making it more dynamic. By 1963, the first break-through was made (35). This removed some of the clogs obstructing work in the Idea Plane (41). Active work in the design of depth schedules of Colon Classification for the classification of articles progressed.

0852 Back-log of Errors

Some back-log of errors originating in 1924, at the first time of the design of Colon Classification, were seen to obstruct work. The term 'Problem' was used in 1924 to denote manifestations of Energy. This error was sensed early in 1950. But at that time the error was perpetuated by describing Energy Isolates rightly as manifestations of action and also wrongly as any other isolates listed in Energy Schedules (29)! Evasion of a problem cannot go further. It was like Sir Oracle saying, "When I open my lips, let no dogs bark!"

086 New Results in Theory

l Already in 1958, we had begun to see that Property Isolates should be deemed to be manifestations of Matter. By 1966, such manifestations of Matter were called 'Matter-Property (MP)' Isolates, in order to distinguish them from 'Matter-Material (MM)' Isolates. The implementation of this concept in the Idea Plane disclosed that some of the isolates forcedly included in the earlier years in the "Problem schedules", but later named forcedly as 'Energy' schedules, were in reality (MP) isolates.

Examples:

Anatomy, Physiology, Disease, and Development in the Schedules in Chap from "G Biology" to "L Medicine" in Part 2;

Morphology, Syntax, and Meaning in the Schedule in Chap "P Linguistics" in Part 2;

Scripture, Theology, and Sect in the Schedule in Chap "Q Religion" in Part 2;

Constitution, Function, and Civic Rights and Duties in the Schedules in Chap "V History" and "W Political Science";

and

Physical Feature, Social Activity, Social Pathology, Demography, and Equipment in the Schedule in Chap "Y Sociology" in Part 2.

This was the finding in the Idea Plane.

To implement it in the Notational Plane the Indicator Digits for such isolates had to be changed from ":" (colon) to ";" (semicolon).

2 Again, the prescription that the Indicator Digit -, - (comma) need not be inserted before the first (P) Isolate Number coming after a Basic Class Number or an (E) Isolate Number was found to be false economy; and it had to be given up.

3 The capacity of an array in the Notational Plane was increased by divesting Roman small letters of anteriorising quality (18, 36) and by restoring to digit "0" (zero) its natural ordinal value lying between the digits "z" and '1" (17, 37).

4 To make interpolation possible at any point in the array of Main Subjects and in any other array, the digits T to Z were postulated to be Emptying Digits (45). This eliminated the use

of Greek letters, other than A.

5 It was found convenient to denote a facet made of superimposition of isolates by the term 'Compound Facet'. The possibility of combining three or more component sub-facets into a single Compound Facet was found to be necessary. This was necessary not only in Isolate Facets but also in Basic Facets (23).

6 The theory in the Idea Plane formulated 18 principles to get helpful sequence of isolates (42) and also the powerful Wall-Picture Principle for helpful sequence of facets and of isolates (52).

7 The necessary improvements have been made in the theory of Notational Plane in order to implement the findings of the Idea Plane. One of the resulting advantages is the provision for increase in the number of Sectors in an Array. The Mnemonic Device in the Notational Plane has also been improved considerably (1 to 4, 26).

087 Colon Classification Version 3

Colon Classification Version 3 now being prepared for the Press for publication in 1971, incorporates all the findings of the deeper and more Dynamic Theory of Classification now being consciously developed. As a result, it has become a Freely Faceted Analytico-Synthetic Scheme for Classification.

It is now possible for the Notational Plane to place any new Main Subject, or non-Main Basic Subject — simple or compound — and any Isolate — simple or compound — in any facet, in the helpful position determined by the Idea Plane. As a result,

212 Lib Sc

any new Compound Subject will be placed by the Notational Plane in the position determined for it by the Idea Plane as the most helpful position among the already existing subjects.

It is now believed that this Freely Faceted Version 3 of Colon Classification, can satisfy all the Laws of Library Science by keeping step with the new developments in the Universe of Subjects, but with slight changes in Class Numbers for quite a long time—indeed, till man's mode of thinking is totally changed by mutation. Perhaps, this is an ambitious belief. But it can be conjectured that Colon Classification Version 3 will not get outmoded by the accelerated proliferations in the Universe of Subjects, for three or four generations to come. Perhaps a more modest estimate is that Colon Classification Version 3 will be worthy of being continued without serious changes for a period much larger than the earlier versions of Colon Classification or than any non-faceted scheme for classification, old or new.

0871 Analogy from the Ramayana

The expectation of life of a scheme for classification will increase in the measure of its inner mechanism to implement a Theory of Classification that, in its turn, has itself inner mechanism to enable it to keep step with the frequent extension, deepening and proliferation of the Universe of Subjects. Let us represent the Universe of Subjects by an unknown terrain with all kinds of surprises at every turn. Here comes an analogy from Valmiki's Ramayana (67). The King Bhagiratha goes in advance in his chariot carving out a suitable course for the river Ganga; and the river is tamed and trained to follow that course. Similar is the relation between Universe of Subjects, Theory of Classification, and Scheme for Classification.

088 Object of this Paper

With the above background study, the rest of the parer is devoted to an indication of the changes which will occur in Colon Classification, Ed 7 (1971). The purpose of the indication of these changes in advance is to enable the libraries using Colon Classification to changeover to Ed 7 (1971) even from now without waiting for a little over a year—that is, till Ed 7 is released. On account of the large accession in our libraries today, the adoption of Colon Classification, Ed 7 even from now will considerably reduce the load of correction work after the release of Ed 7. If preferred, the correction of the old stock too can be done in the case of the old books frequently going out.

1 Main Subjects and Partial Comprehensions

11 SCHEDULE OF MAIN SUBJECTS AND PARTIAL COMPREHENSIONS
The following table gives a schedule of Main Subjects and Partial Comprehensions. It gives also successively the Class Number according to Ed 7 (1971), Class Number according to Ed 6 (1960), and the nature of the changes, in respect of each subject as between Ed 6 and Ed 7:

Abbreviations Used

New Main Subject other than Distilled and Fused = New Distilled Main Subject = Fused Main Subject

New Main Subject formerly a Canonical Subject or a Compound Subject or a System Basic Subject New Partial Comprehensions ! II NW/CS OD/CP

Class Number but no change of place OP/NC = Old Partial Comprehension with no change

of Class Number

Subject with change of Class

OM/CN = Old Main

OM/NC = Old Main Subject with no change of Class = Old Partial Comprehension with change of

Number or place

OP/CN

Number but no change of place

= Old Distilled Main Subject with change of Class Number and place

Note: I The name of each Partial Comprehension is in italies.

2 The name of each Fused Main Subject is in Block Face.

The name of each of the other New Main Subjects, including New Distilled Main Subjects, is in capitals and small capitals.

	colonial married marri												
SN	Subject	Ed 7 (1971)	Ed 6 (1960)	OM	CN	CS	OD	ΩN	FM	NM	OP NC	SS	N N
1 2	Generalia Universe of Subjects: Structure	z ire 1	M	Yes									
e.	and Development Library Science	2	7	Yes									
40	Book Science Reading Method	3 3 4	3	Yes						Yes			
90	Notes Taking	×,		:						Yes			
~ 00	Schibition Technique	4 ~	4	res				Yes					
60	Museology Systemology	9						Yes					

			_ ~
COLON	CI ASSIF	CATION.	FD /

	Yes	Yes	z X	Yes
			×	
	× R			
		۲œ	Yes	Yes
			Ϋ́ε	Yes
Yes	Yes	Yes		
Yes Yes				
		χ χ α		
	Yes		Yes	Yes
(g) (g)	∀ ∞ 9	B28 B9	в9:6 Г С	D D:(E)
52888 58888	922 A A Z B	BT BTT BV BWZ BWZ BX	BXT CC CC CC CC	D DV DZ E E
16 Evaluation Technique 17 Conference Technique 18 Seminar Technique 19 Commission Technique 20 Communication	21 Symbolism 22 Natural and Social Sciences 23 Natural Sciences 24 Mathematical Sciences 25 Mathematics	26 Statistical Analysis 27 Operations Research 28 Cybernetics 29 Astronomy and Astrophysics 30 Astronomy	31 Astrophysics 32 Physical Sciences 33 Physical Sciences 34 Space Physics 35 Engineering and Technology	36 Engineering 37 Draughtmanship 38 Chemical Sciences 39 Chemistry 40 Chemical Engineering
	Evaluation Technique 9g (:g) Yes Conference Technique 9p (p) Yes Seminar Technique 9t Communication Yes Communication 9P (P) Yes	Evaluation Technique 9g (;g) Yes Conference Technique 9p (p) Yes Seminar Technique 9r Yes Commission Technique 9r Yes Communication Yes Yes Symbolism Yes Yes Natural and Social Sciences A A A A A A A A A A A A A A A A A A A	Evaluation Technique 9g (; g) (; g) Yes Conference Technique 9p (p) Yes Yes Seminar Technique 9t (p) Yes Yes Communication 9t (p) Yes Yes Symbolism Natural Sciences Yes Yes Natural Sciences A A A A A A A A A A A A A A A A A A A	Evaluation Technique 9g (;g) (;g) (p) Yes (see Free Included Parameter) Yes Yes (se

V 6, N 3; 1969 SEPTEMBER

M1

불	Yes	Yes	Ϋ́εs	Yes	Ϋ́	Yes
99 99						
So						
ΣX						۶
FM		Yes Yes Yes	Yes Yes Yes			
9						
00 CG						
SS	Yes				Yes	
₹85 85			Yes			Yes
OM	Yes	Yes		Yes	Ycs	Yes
Ed 7 Fd 6 (1971) (1960)	F G G91	G:(B7) G:(C) E9G H	H:(C) H:(E) HZ	1	- es	K KZ L
Ed 7 (1971)	F FZ GT GUA	GUB GUC GUE GZ H	HUB HV HVT HX	I	L XI.	KZ KZ L
Subject	Technology Biological Sciences Biology Microbiology Molecular Biology	Biomechanics Biophysics Biochemistry Geological Sciences Geology	Geodesy Geophysics Geochemistry Mining Plant Sciences	Botany Agriculture, Forestry and Animal Huckandun	Agirculture Forestry Animal Sciences	Zoology Animal Husbandry Medical Sciences Medicial Technology
S	44444	44 48 80 80	52 53 54 55	56 57	888	26828

	c	COLON CLASSIF	FICATION, EL	7	M1
Yes			Yes	K K	Yes
	Yes				× 8
		× s			
					Yes
	χ _S				
Yes Yes	Yes		Yes Yes Yes		
Yes					
	Yes	Yes Yes Yes		Yes Yes	Yes
L: 5 L: 14 L: 15 LZ	L:4:1 M:(Z)	⊲ zzoa	P (1) P(6) P(3)	0 × v	a T D
1.05 1.05 1.05 1.07 1.07	LYI LYX LYX MX MZZ MZZ	⊲ zZo⊶	PUI PU6 PU7 PZZ PZZ	S R R 20	XZT ZZ U
Public Health Hospilal and Sanitorium Hospital Sanitorium Pharmacognosy	Nursing LYI Medical Jurisprudence LYX Wecklid Arts M Humanities and Social Sciences MZ Humanities	Mysticism and Spiritual Experience Fine Arts Linguage and Literature Literature Linguistics	Calligraphy Typewriting Shorthand Religion and Philosophy Religion and Ethics	Religion Philosophy and Psychology Philosophy Psychology and Education Psychology	Applied Psychology Social Sciences Education Geography and History Geography
36885	122 125 125 125 125 125 125 125 125 125	67 <i>C</i> 86 87 88 88	88 83 22 85 43 25 25 25 25 25 25 25 25 25 25 25 25 25	888828	92 93 94 95

V 6, N 3; 1969 SEPTEMBER

		Ed 7 (1971)	Ed 6 (1960)	ZO NO	OM OM NM	SZ	8p	NDN	FM	X	NC	S S	
History, Political Science and	cience and	ZO											Yes
History Historical Source (as a Pure	as a Pure	> \	>	Yes				Yes					
Discipline) Political Science Geopolitics		≱≩	w wogu	Yes					Yes				
Economics Economics of Industries	ıstries	×××	€ 8××	Yes		Yes							
Sociology Social Work Law		, X,	7 X X	Yes	Yes								
		105	46	31	4	12	12 4	12	9	7	-	12 10 7 1 5 18	82

was num Mair In E	Note.— In Ed 6 "(r) Administration Report enumerated among the Main Subjects. The ber of Main Subjects in Ed 6, as found in the n Subjects, is 47 instead of 46 as shown in the d 7, this subject has become a Compound Subject Main Subject "3 Book Science".	erefore Sched above	, the ule of table.
12	CENSUS OF MAIN SUBJECTS AND PARTIAL COMPI Number of Main Subjects and Partial Comprehensions in Ed 7 105 do. in Ed 6 46 Number of New Main Subjects and New Partial Comprehensions in Ed 7	rehensi 59	ONS
121	Census of New Main Subjects and New Partial Number of New Main Subjects and New Partial Comprehensions These 59 are made of the following: Number of subjects involving no correction work New Distilled Main Subjects New Partial Comprehensions Total Number of New Main Subjects	Compre	nsions 59
	converted from the Old Non- Main Subjects involving cor- rection work	21	50
122	Census of New Main Subjects Involving Corn Number of subjects involving correction work These 21 are made of the following: Number of subjects involving correction work but no change of place Number of subjects involving correction work as well as change of place	4 17	59 Work 21
123	Census of New Main Subjects Involving Chang Number of New Main Subjects involving cor- rection work as well as change of place These 17 are made of the following: Fused Main Subjects	ge of P	lace
V.C	New Main Subjects formerly Canonical or Compound Subjects	7	17
V 6,	N 3; 1969 SEPTEMBER		219

13	CENSUS OF OLD MAIN SUBJECTS AND OLD PART HENSIONS	IAL	Compre-
	Number of Old Main Subjects and Old Partial Comprehensions of Ed 6 involving correc- tion work		13
	These 13 are made of the following: Number of subjects involving correction work but no change of place	9	
	Number of subjects involving correc- tion work as well as change of place	4	
	_	_	13
131	Census of Old Main Subjects and Partial Co Involving Correction Work, But No Change of	mpre f Pla	chensions ace
	Number of subjects involving correction work but no change of place These 9 are made of the following: Old Main Subjects other than Old Distilled		9
	Main Subjects Old Partial Comprehensions	4 5	_ 9
14	Overall Census Number of Main Subjects and Partial Comprehensions in Ed 7 These 105 are made of the following:		105
	Number of subjects not involving correction work Number of subjects involving correction	71	
	work	34	105
141	Census of Subjects Involving Correction Number of subjects involving correction work These 34 are made of the following:		34
	Number of subjects involving correction work but no change of place	13	
	Number of subjects involving correction work as well as change of place	21	_ 34

7

21

142	Census of Main Subjects and Partial Comprehe Involving Correction Work, But No Change of Place		ns
	Number of Main Subjects and Partial Com- prehensions involving correction work but no change of place These 13 are made of the following:		13
	Partial Comprehensions Main Subjects —	5 8	- 13
143	Census of Main Subjects Involving Correction Change of Place	as	well as
	Number of Main Subjects involving correction work as well as change of place		21

15 No Need for Correction Work

Distilled Main Subjects Fused Main Subjects

Other Main Subjects

Out of the 105 Main Subjects and Partial Comprehensions in Ed 7, 71 do not require any correction work. Twenty-five of them are new subjects attracting literary warrant only recently. Thus, these do not add any load to correction work.

These 21 are made of the following:

16 No Urgency in Correction Work

Out of the 105 Main Subjects and Partial Comprehensions in Ed 7, 13 Main Subjects involve correction work but no change of place. These are the following:

1 Five Partial Comprehensions: Mathematical Sciences; Physical Sciences; Humanities; Literature and Language; and

Social Sciences.

2 Eight Main Subjects: Mining; Forestry; Animal Husbandry; Pharmacognosy; Calligraphy; Typewriting; Shorthand; and Social Work.

In each of these subjects, the books having old Class Numbers and those with new Class Numbers will come together in one and the same place, but in two distinct groups. This will cause no serious difficulty to the reader or to the library staff. Therefore, there is no urgency for correction work in these 13 subjects. It can be done slowly at leisure.

161 The number of books and periodicals in any one of the 5 Partial Comprehensions mentioned in Sec 16 will be very small.

162 In Service Libraries, other than the Specialist Libraries concerned, the number of books and periodicals in any one of the 8 Main Subjects mentioned in Sec 16 will not be large.

17 CORRECTION WORK INVOLVED IN DISTILLED MAIN SUBJECTS The following 4 Distilled Main Subjects involve correction work as well as change of place: Evaluation Technique; Conference Technique; Communication; and Management. This should be done immediately.

171 Among the 4 Distilled Main Subjects mentioned in Sec 17, the first three subjects are of recent origin. They are not likely to have more than a dozen books in any library. But the pure discipline of Management has been attracting literary warrant for about two decades. Even then, in a service library. other than a Specialist Library in "Management", there may not be more than about fifty books on the subject. Thus, the correction work involved is relatively small.

18 CORRECTION WORK INVOLVED IN FUSED MAIN SUBJECTS Fused Main Subjects appear for the first time in Ed 7. Till now, they were treated as Compound Subjects. Therefore, they involve correction work as well as change of place. They are only 10 in number, and they are the following:

Astrophysics Biophysics Geochemistry Chemical Medical Jurisprudence Biochemistry Engineering Geodesy Geopolitics Biomechanics Geophysics

This correction work should be completed as quickly as possible.

181 Among the 10 subjects mentioned in Sec 18, the 6 Subjects Biomechanics, Biophysics, Geodesy, Geochemistry, and Geopolitics, and Historical Source may not have much literary warrant.

182 But Biochemistry and Geophysics will have much of literary warrant. Here, the term 'Geophysics' denotes a Main Subject with the following as Canonical Basic Subjects:

> Geoelectricity Oceanology Geomagnetism Meteorology Internal Geodynamics Aerology (Upper Air physics)

Hydrogeology

The correction work involved in these seven Fused Main Subjects will be appreciably large.

191 Correction Work in Other New Main Subjects

The following 9 subjects are deemed to be new Main Subjects in Ed 7:—Statistical Analysis, Astronomy, Astrophysics, Micro-

LIB SC

biology, Public Health, Hospital, Sanitorium, Nursing, and Economics of Industries. Till now, the first two were listed as Canonical Divisions of Mathematics. The last seven were treated as Compound Subjects. Therefore, they involve correction work as well as change of place. These subjects have had considerable literary warrant for several years. Therefore, the correction work involved will be considerable. In respect of "BT Statistical Analysis", it must be remembered, while collecting books for correction, that this subject can appear as Phase 2 of Complex Subjects. These can be located with the aid of the entries under the heading "Statistical Analysis" in the alphabetical part of the catalogue.

2 Basic Subjects

Ed 7 has increased the number of Basic Subjects. This has been done in several ways.

- 21 Some old Main Subjects such as "3 Book Science" and some new Main Subjects such as "9 Research Technique" have been divided into Canonical Divisions. In these cases literary warrant is developing just now. Therefore, there will be no need for correction work.
- 22 In some subjects, such as "D Engineering", "F Technology", "U Geography", and "X Economics", Round 1, Level 1 (P) Isolates have been treated as Canonical Divisions. Experience has shown this to be helpful. For, the Compound Subjects going with them require their own respective different Schedules of Special Isolates. In these cases, there will be no need for correction work.
- 23 In "X Economics", some of the (E) Isolates have been changed into Canonical Divisions. However, their literary warrant is small. Therefore, the correction work needed will be small.
- 24 A new kind of formation of subjects namely, Subject Bundles (See Sec 053, Category 94)— has been added as Canonical Divisions of "A Natural Sciences". Perhaps, a similar thing may become necessary in respect of some other Partial Comprehensions also. These Subject Bundles are gaining literary warrant, only just now. Therefore, there will be no need for much correction work.
 - 25 Systems have been changed into Basic Subjects.
 - 26 Specials have been changed into Basic Subjects.
- 27 A device "Environmental Device" has been provided to indicate environmented treatment of a Main Subject, as a kind of Specials. Such a treatment is included in the Schedule of Specials Basic Subjects.
- 28 Compound Basic Subjects using the System part, Specials part, and Canonical Division part as its components —

have been provided for (See Sec 051, Category 914). There is literary warrant for this. The Indicator Digit for each of the second and later components of a Compound Basic Subject is "-" (hyphen). Originally, these components were treated as isolates in different Levels in Round 1; therefore, had "," (comma) as the Indicator Digit. Hence, these cases require correction. But literary warrant has been negligibly small in these cases. Therefore, the correction work needed will also be negligibly small.

291 Compound Isolate Facets have been occasionally used in the earlier editions of Colon Classification (See Sec 051, Category 92). They have to be used very much in depth classification - particularly, for Production Engineering and Production Technology. The need for Compound (P) Isolate Facets with even ten or more components has arisen in many subjects. Apart from this, even at book-level Compound (S) Isolate Facets are now becoming necessary (11). For this purpose, the divisions shown under "I World" in the Schedule of Space Isolates in Ed 6, made of non-territorial divisions of the world, had to be changed slightly. The digit "0" (zero) is to be prefixed to the Subject Device division number. Further, the digit "z" is to be prefixed to the number of the Imperial Country in the number for an Empire. Each of the non-territorial divisions should be regarded as second or later components of (S) Isolate Facet with "I World" as the first component. The digit "-" (hyphen) should be used as the Indicator Digit for the number representing each of the non-territorial divisions. This kind of divisions can also be used to form Compound Space Isolates with a continent, a country, a constituent State, or any other territorial division, and of any Population Cluster, as the Host Isolate. Examples:

1-0(P,111) 1-A 1-N4 1-Z56 1-Z56-0(P,111)	English speaking countries Near-Sovereign formation United Nations area. British empire English speaking countries in the British empire
4	Asia
4–97	Pacific countries of Asia
4–97–0(J,381)	Rice belt of the Pacific countries of Asia
44	India
44-9J	Western region
44-Z4435	Maharashtra empire
44-Z45	Moghul India

224

44-Z56 British India
4411 Tamil Nadu
4411-0(J,781) Cotton belt of Tamil Nadu
4411-952 Arabian front of Tamil Nadu
44112 Chingleput District

If Compound Isolates have not been used for the non-territorial divisions—that is to say, if the Indicator Digit "-" (hyphen) had not been used before the non-territorial components—the sequence in the above illustrative schedule would become quite unhelpful. For example, "44 India" would have come before the non-territorial divisions of "4 Asia" such as "497 Pacific countries of Asia". A similar thing would have happened in the case of India. To gain a richer experience of this phenomenon, the (S) Isolates in the above illustrative schedule may be re-arranged, dropping the digit "-" (hyphen), "0" (zero), and "Z", wherever they occur.

292 An advance account of what is said in Sec 25 to 28 has been already published (20).

293 A tentative advance list of Basic Subjects including Main Subjects and Partial Comprehensions has been already published (22). It will form Chap EQ of CC, Ed 7.

3 Common Isolates

31 Anteriorising Common Isolates

The Indicator Digit—"—(double inverted comma) is used to indicate an "Anteriorising Isolate". As stated in Sec 0863, this releases the Roman small letters for use in the formation of arrays in the same manner as the Indo-Arabic numerals and the Roman capital letters. Further, while working on the design of Electronic Doc-Finder, it was found convenient to have only one digit with anteriorising value instead of all the Roman small letters (18, 36).

32 Examples

1 Bibliography of Mathematics will be represented by B " a and not by Ba.

2 Encyclopaedia of Mathematics will be represented by

B " k and not by Bk.

3 Journal of the Indian Mathematical Society will be represented by B " m44,N, and not by Bm44,N. The insertion of—"— (double inverted comma) could be made easily without rewriting the whole Class Number.

33 No Urgency for Correction

The majority of corrections in this category will be concerned with "m Periodicals", "n Serials", "r Periodical Reports",

V 6, N 3; 1969 SEPTEMBER

and "x Collected Works". The number of cases of other Anteriorising Common Isolates will not be large. Moreover, in the former cases, the uncorrected and the corrected numbers can be arranged together without any difficulty. Therefore, the correction of the old volumes need not be done immediately. It can be spread over a long term — even years.

34 COMMON FUNDAMENTAL CATEGORY ISOLATES

Ed 7 includes Common Fundamental Category Isolates — for, (E), (MP), and (P). As they are mostly new, these will not require any correction work. An advance list of such Common Isolates had already been published (30, 55, 57).

4 Phase Relation

The new Indicator Digit "&" (ampersand) is used in the place of the old Indicator Digit "0" (zero) for Phase Relation.

41 As stated in Sec 0863, this releases the digit "0" (zero) for use in an array as in the case of the other Indo-Arabic numerals and the Roman capital letters (17, 37).

Example:

Psychology for Teachers will be represented by S&bT and not by SobT.

42 The number of Phased Class Numbers is not large. Therefore, the correction work in this case will not be much. The digit "0" (zero) can be easily changed into the digit "&" (ampersand) without rewriting the whole Class Number.

5 Change of some [E] Isolates into [MP] Isolates

51 Since 1967, the schedules of (E), (E) cum (2P), (2E), and (2E) cum (3P) Isolates are being systematically examined as part of the preparation of Ed 7.

52 The subdivisions 54 onwards give a brief outline of the changes of this kind already marked out for inclusion in Ed 7.

53 No Urgency in Correction Work

As a result of the changes of this kind, the Indicator Digit should be changed from ":" (colon) to ";" (semicolon).

These changes will require a considerable amount of correction work. In most cases, however, the new books and the corrected old ones on the one hand, and the uncorrected old books on the other, will come together in the same place, but in two distinct groups. This will cause no serious difficulty to the reader or to the library staff. Therefore, there is no urgency for correction work in these cases. It can be done slowly at leisure. But books that do not satisfy this condition should be corrected very early; and they will not be many.

54 CHANGE OF (E) ISOLATES INTO (MP) ISOLATES

The following table gives the change-over in the schedules for different Basic Subjects, from under the heading (E) Isolates to under the heading (MP) Isolates:

	Basic Subject	Cases of Change-Over		
B23 Theory of Equation C7 Magnetism J Agriculture JX Forestry KX Animal Husbandry		All (E) isolates The isolates "2 Morphology" "3 Physiology", "4 Disease" and "5 Hygiene" only.		
541	Examples of the change:			
	Subject	Class Number		

Subject Ed 7 (New) Ed 6 (Old) Formal Solution of Cubic Equation Virus disease of Rice Plant Morphology of the Cow Class Number Ed 7 (New) Ed 6 (Old) B23,3;5 B233:5 J,381;423 J381: 423 KX,311;2 KX311:2

55 CHANGE OF (E) cum (2P) ISOLATES INTO (MP) ISOLATES

The following table gives the change-over in the schedules
for different Basic Subjects, from under the heading (E) cum (2P)
Isolates to under the heading (MP) Isolates:

Basic Subject		Cases of Change-Over		
2	Library Science	All (E) cum (2P) Isolates other than "97 Documentation"		
B13	Theory of Integers	All (E) cum (2P) Isolates		
B15	Algebraic Number and Ideal Number	All (E) cum (2P) Isolates		
B16	Complex and Hyper- complex Numbers	All (E) cum (2P) Isolates		
B25	Higher Algebra	All (E) cum (2P) Isolates		
B33	Differential and Integral Equations	All (E) cum (2P) Isolates All (E) cum (2P) Isolates		

	Basic Subject	Cases of Change-Over
B37 B38	Complex Variable	All (E) cum (2P) Isolates All (E) cum (2P) Isolates
B7 C2	Mechanics Properties of Matter	All (E) cum (2P) Isolates All (P2) Isolates
C3	Sound	All (E) cum (2P) Isolates
C4	Heat	All (E) cum (2P) Isolates
C5	Radiation	All (E) cum (2P) Isolates
C6	Electricity Nuclear Physics	All (E) cum (2P) Isolates All (E) cum (2P) Isolates
E	Chemistry	All (E) cum (2P) Isolates other than "3 Analytical Chemistry", "4 Synthesis", "5 Extraction", and "8 Manipulation" and their divisions.
F	Technology	All (E) cum (2P) Isolates except "Manipulation" divisions
G	Biology	All (E) cum (2P) Isolates other than "8 Manipulation"
1	Botany	Same as that for the Main Subject "G Biology"
K	Zoology	Same as that for the Main Subject "G Biology" and in addition the following: "591 Relation to Young Ones" and "595 Courting"
L	Medicine	All (E) cum (2P) Isolates other than "5 Public Health and Hygiene" and their divisions. (Note: In Ed 7 "5" represents Hygiene" instead of "57")
Δ	Spiritual Experience and Mysticism	All (E) cum (2P) Isolates
P	Linguistics	All (E) cum (2P) Isolates
P Q S T V X	Religion	All (E) cum (2P) Isolates
S	Psychology	All (E) cum (2P) Isolates
V	Education History	All (E) cum (2P) Isolates All (E) cum (2P) Isolates
×	Economics	(Under consideration)
ŵ	Political Science	Same as that for the Main Subject "V History"
Y	Sociology	All (E) cum (2P) Isolates

551 Examples of the change:

CN	Subian	Class	Number
SN	Subject	Ed 7 (New)	Ed 6 (Old)
1	Library classification	2;51	2:51
2	Representation of a function of	D27.26	D27-26
2	Real Variable as Infinite Series	B37;26	B37:26 B713: 32
3 4	Kinetics of Rigid Body Diffraction of X-rays	B7,13;32 C5,3;55	C53: 55
5	Chemical Kinetics	C3,3,33	C33.33
,	Note: Subjects at SN 6 to 11		
	go with the Main Subject		
	"Medicine"		
6	Tuberculosis	L;421	L:421
7	Tuberculosis of the Lungs	L,45;421	L45:421
8	Tuberculosis of the Lungs of a		
	Child	L9C,45;421	L9C,45;421
9	Tuberculosis of the Lungs according to Ayurveda	LB,45;421	LB,45;421
10	Child Medicine in Ayurveda	LB-9C	LB,9C
11	Tuberculosis of the Lungs of a	LB-9C,45;	LB,9C,45:
	Child according to Ayurveda	421	421
12	(Psychology of) Anger	S;524	S:524
13	Anger of the Old	S,38;524	S38:524
14	Anger of a Refugee	S9B; 524	
15	Psycho-analysis of Anger	SM9;524	SM9:524
16	Psycho-analysis of Refugee	SM9-9B	
17	Psycho-analysis of the anger of the Refugee	SM9-9B;524	
18	Functions of the President of U.S.A brought upto 1950's	V,73,1;3'N5	V73,1:3'N5
19	Functions of the Head of a Democratic State	W,6,1;3	W6,1:3
20	Marriage Ceremony in Christian Community	Y,73(Q6); 317	Y73(Q6): 317

56 CHANGE OF (2E) ISOLATE INTO (B) ISOLATE

The following table gives the change-over in the schedule for a Basic Subject, to under the heading (E) from under the heading (2E) in respect of those isolates in (E), and (E) cum (2P) changed into isolates in (MP):

	Basic Subject	Cases of C	hange-Over
	Agriculture	All (2E) Isola	ites
561	Examples of the change:		
		Class	Number
SN	Subject	Ed 7 (New)	Ed 6 (Old)
1	Sowing the seeds in paddy cultivation	J,381;38:3	J381:38:3
2	Prevention of the virus disease	J,381;423:5	J381:423:5
3	of the rice plant Curing the rice after harvest	J,381;78:6	J381:78:6

Here the term 'Harvest' gives trouble in the Verbal Plane. We will be replacing it by a suitable term very soon.

57 Breaking of (2E) *cum* (3P) Isolates into (E) Isolates and (2P) Isolates

The following table gives the change-over in the schedules for a Basic Subject, to under the heading (E), (2P) from under the heading (2E) cum (3P) in respect of those isolates in (E), and (E) cum (2P) changed to (MP) isolates:

	Basic Subject	Cases of C	hange-Over
L	Medicine	All (2E) cum	(3P) Isolates
571	Examples of the change:		
		Class N	Number
	Subject	Ed 7 (New)	Ed 6 (Old)
X-R	ay therapy of the tuberculosis of the Lungs.	L,45;421 :6,253	L45:421 :6253

58 Change of Facet Structure

581 A facet formula is in a sense meaningless; it is indeed an anachronism.

582 However, it may be of help for the beginners and for those that have been accustomed to its use in Ed 6, if the facet structure for the commonly occurring. Compound Subjects is given.

583 The table in Annexure 2 gives such facet structures. Col 1 gives the Host Basic Subject along with its Class Number. Col 2 gives the facet structure of Compound Subjects to be used in Ed 7. Col 3 gives the corresponding facet structure used in Ed 6. In the copy of the Colon classification used by the classifier. changing the facet structure accordingly will be helpful till Ed 7 is acquired.

6 Personality Facet: Level 1

61 In many cases of the depth classification of articles. the number of digits in the host non-Main Basic Class Number and in the Round 1, Level 1 of [P] taken together exceeds the maximum limit six, set by comfort of the physiology of the eyes and of the psychology of memory (53). So it was in respect of [E] cum [2P] numbers. To avoid this, the Indicator Digit "," (comma) should be inserted before Level 1 of (P) facet in any Round in any subject, whether the Host Subject is a Main Subject or a non-Main Basic subject. For this purpose, the Rules 05502 and 05503 in Part 1 of Colon Classification, Ed 6 (1960) and the corresponding rules in earlier editions are deleted (See Sec 086).

62. This change requires correction work in the case of many Compound Subjects. This does not mean, however, "all subjects". The volumes of periodical publications and the books. belonging to simple subjects without any (P) isolate facets, will not need this correction; and most of the periodical publications are of this kind. These form a considerable part of the collection

in a library.

63 Further, this correction need not be done immediately. It can be spread over some time. In the case of books, the new ones and the corrected old ones will come before the old uncorrected books. This will be a temporary advantage. For, the most used books will come earlier than the less used ones.

7 Personality Facet: Two or More Levels

71 All the special facets in any Compound Subject going with the Main Subject "O Literature" or with "Z" Law are [P]; and these belong to different Levels. Further, it is conjectured that a pre-determined facet structure can be used for the Compound Subjects going with each of these two Main Subjects. In

most cases each Level is possible only if its Immediate Earlier Level occurs. If, however, it happens that a facet occurs without its prescribed Immediate Earlier Level preceding it, the digit "0" (zero) should be prefixed to the Isolate Number in the Level actually occurring.

Example:

O,111,1 English Poetry; but O,01 Poetry in general

As a result, the second subject will come earlier than the first.

This will satisfy the Canon of Decreasing Extension (32).

72 It is conjectured that the first two Levels of Round 1 [P] can be pre-determined for the Compound Subjects going with the Main Subject "V History"—the Country Facet, and the facet made of the Organ of the Government of the Country. The latter cannot occur without the first preceding it. It is conjectured that similar is the case with the Basic Subjects "B25 Algebraic Transformations" and "B33 Differential and Integral Equations."

73 It is conjectured that the first two Levels of Round [P] can be pre-determined for the Compound Subjects going with the

following Basic Subjects:

HX Mining; \(\triangle \) Spiritual Experience and Mysticism;

I Botany; R3 Metaphysics; K Zoology; R4 Ethics; and LX5 Pharmacopoeia; W Political Science.

In these cases, the prescribed Level 2 can occur without Level 1. If so, the digit "0" (zero) should be prefixed to the Isolate Number in Level 2 of [P].

Example:

I,015 Leaf of a plant; but

1,5,15 Leaf of a flowering plant.

74 In the case of the Basic Subjects with "N" Fine Arts as the host Main Subject, what was prescribed in Ed 6 as [P] and [P2] for jointly representing Style in Ed 6 have now been changed into a System which is individualised successively by (GD) and (CD). The result is a System Basic Subject. If the (CD) number occurs in the System Number, it must be preceded by the Indicator Digit "-" (hyphen).

Example:

In the place of

ND44,C Buddhist Sculpture.

We now have

ND(44 C) Buddhist Sculpture.

The old Style Number is now treated as System Number. In this case, the System Number begins with an Indo-Arabic numeral, whereas in other cases it begins with a Roman capital letter. A System Number should come last in the Array of the non-main part of a Basic Subject. It is to secure this that the System Number is enclosed in circular brackets in this case. Incidentally, head a single digit. The resulting System Number as if it were a single digit. The resulting System Number (44-C), for example, is a Compound System Number. After this change is made, [P3] and [P4] will be the only surviving pre-determined Levels in Round 1 of [P]. Therefore, they should be re-named [P1] and [P2] — that is, Round 1, Levels 1 and 2 of [P]. These new pre-determined Levels 1 and 2 of [P] may be dealt with on the analogy given in Sec 73.

75 In the case of the Main Subject "P Linguistics", what was prescribed as [P] and [P2] in Ed 6 have now been changed

into components of a Compound Isolate.

Example:

In the place of

P111,J,9D56175 Yorkshire Dialect of Modern English we now have

P,111-J-9D56175 Yorkshire Dialect of Modern English. The resulting isolate is a Compound Isolate. After this change is made, [P3] will be the only surviving pre-determined Level in Round 1 of [P]. Therefore, it should be re-named [P]—that is, Round 1 Level 1 of [P].

8 Correction Work

81 INCIDENCE OF CORRECTION WORK

All books accessioned after a definite epoch—say, 1 October 1969—should be classified according to Ed 7. The Class Number of the older books should be corrected, wherever warranted.

The incidence of correction work is not equally heavy in all subjects. The difference in the heaviness of the correction work to be done has been indicated in earlier sections.

Again, the urgency of the correction work is not the same in all subjects. The difference in the urgency of correction work to be done has been indicated in earlier sections.

82 DIFFERENCE BETWEEN LOCAL SERVICE LIBRARY AND STATE OR NATIONAL CENTRAL LIBRARY

The term 'Local Service Library' includes public library, school library, college library, university library, and specialist library.

The number of old books whose Class Numbers are to be corrected will be much less in a Local Service Library or in the Service Collection of a State or National Central Library than in the Dormitory Collection of either of these. For, in a Local Service Library, worn-out books and books outmoded in thought or in method of presentation would have been weeded out from

time to time. The average number of volumes may not exceed — indeed, should not exceed — about 50,000 in a Local Service Library. In a City or a District Central Library, the live-collection may exceed 50,000 volumes. But most of them will be copies of one and the same book intended for use in the Branch Libraries.

In a University Library, the upper limit to the number of volumes may have to go upto 300,000. If the number of volumes exceeds any prescribed upper limit, the outmoded books should be transferred to the Dormitory Collection of the State Central Library (43). Further, a large number of the volumes held in a University Library will be made of long sets of periodical publications and collected works. As stated in Sec 33, there is no urgency for correction work in these cases.

The correction work in a Dormitory Collection in a State or National Central Library may be left to the Method of Osmosis (46). Most of this collection can be made to remain with the old Class Numbers. To pick out any volume of this collection, occasionally needed, all that the library will have to do is to maintain a conversion table showing in parallel columns the new Class Numbers and the equivalent old Class Numbers.

83 Personnel for Correction Work

The nature of the correction work — whether it is purely mechanical or whether it involves different degrees of thinking — can be easily found out. Depending on the nature of the correction work, it will have to be entrusted to professionals in some cases, and to semi-professionals in a larger number of cases, and to fourth class employees (Janitors and Peons) in a still larger number of cases. Any mechanical correction work done by a fourth class employee should be checked and revised by a semi-professional. If properly organised, the correction work may not need any additional staff, as it can be done partly at leisure and partly as pick-up work. At any rate, the additional staff required and the duration of its employment should be reduced to a minimum.

84 Correction Procedure

Correction work is a continuing process in any library seeking to do its best for the readers, in due fulfilment of the Laws of Library Science. Therefore, the planning, the work analysis, the job analysis, and the routine involved in correction work have been described in detail in my Library administration (1935 and 1959) (40). The correction work should be entrusted to the care of a professional member of the staff. He should be the Chief of the Technical Section or of the Maintenance Section. We shall refer to him as the Chief of the Correction Section.

234

For each quantum of volumes taken out for correction, the work should be organised as follows:

- 1 The Chief should control the entire process of correction with the aid of the Shelf Register Cards. He should pull out the Shelf Register Cards for all the volumes in the prescribed quantum and make the correction in the respective cards. He should transfer these cards to the Shelf Register Card Correction Box.
- 2 A semi-professional should then carry out the correction of the Call Number on the back of the title page of each volume and in all the other places in it. Another semi-professional should verify the correction. Then the volumes should be reshelved and thus be released for use.
- 3 A professional assistant should pick out all the catalogue cards and the accession cards of each volume. It must be remembered that, in a well-organised catalogue, the Tracing Section in the back of the Main Card will enumerate all the added entries (58). In picking out the added entry cards, some device should be used to avoid picking out the General Entry Cards—such as those of Class-index Entry or See also Subject Entry, as the case may be, if they had been already corrected in connection with an earlier volume. A simple device may be to draw a short pencil line to the left of the heading in the back of the Main Card, when it is corrected. The cards picked out should be put into a correction tray.
- 4 With the aid of the controlling Shelf Register Cards, a semiprofessional should correct all the Class Numbers in the cards in the Correction Tray.
- 5 A professional assistant should verify the corrections and then pass the verified cards on for re-insertion in the catalogue cabinet and the accession cabinet respectively.
- 6 A semi-professional should then re-insert all the corrected cards in their respective cabinets. In these cases, a systematic checking of the refiling of the cards may not be worthwhile. But test check is desirable.
- 7 Depending on the estimated total size of the correction work, the corrected cards may be re-inserted in the catalogue cabinet; this will be possible in routine correction. Or, they may be re-inserted in a newly formed sequence of corrected cards. This will be necessary only if the majority of the live-books need correction as a result of wholesale change of the scheme for classification.

85 QUANTUM FOR CORRECTION WORK

850 Two Quanta

Two different kinds of quanta are possible for correction work — weekly quantum and daily quantum.

851 Weekly Quantum

The weekly quantum will concern the volumes not much in demand. The procedure for this quantum should begin on the first day of the week and the entire procedure should be completed before the end of the week. The number of volumes included in the weekly quantum should be determined by the number of man hours available during the week to do the correction work either as pick up work and/or continuous special work during slack seasons, as the case may be.

852 Daily Quantum

The daily quantum will consist of the volumes returned by the readers during the course of the day. The entire procedure of correction work should be completed within the day and what is left over should be completed early on the next day. The daily quantum is determined by the Method of Osmosis (46).

86 EVASION OF RESPONSIBILITY

Some librarians raise Administrative Difficulties (!) against doing correction work of any kind. This is nothing short of armchair decision and evasion of responsibility. Looked from another angle, it is passing on to their successors, an ever-increasing load of correction work. Each of these attitudes on the part of librarians amounts to escapism. Unfortunately, escapism is possible in library work, because the reader does not know what kind of service he can expect from the library staff. Reference service can be evaded; keeping the library open for long hours can be evaded; keeping the library open on all the days of the vear can be evaded; several copies of the same book can be acquired in order to spend away the book fund some how or other before the end of the financial year and thus the acquiring of a large variety of books, in anticipation of the needs of the readers, can be evaded; and so also correction work can be evaded — even more easily. None of these evasions can be detected by the readers and some of these not even by the top management - evasion of correction work is one of them going absolutely scot-free. It is only the conscience of the library staff and their loyalty to the Laws of Library Science and high professional ethics that can stop any such evasion.

87 Universe of Subjects Imposes Correction Work

The correction work is not always necessitated by any fault in a scheme for classification. On the other hand, It is necessitated by the obligation of any scheme for classification to keep step with the changes taking place—almost year after year, at present—in the Universe of Subjects. No Librarian

can play the ostrich and close his eyes to this inevitable change. Nor can any librarian play the King Canute and order the Universe of Subjects not to have any change. Whatever be the scheme used, correction work is inevitable. To avoid correction work and to go on merrily with Ed 12 (1927) or Ed 13 (1932) or Ed 14 (1942) or Ed 16 (1958) of Decimal Classification; or with Ed 3 (1930) or Ed 6 (1960) of Colon Classification—is nothing but deliberate evasion.

871 Comparison of Correction Work in Colon Classification and in Decimal Classification

According to Custer, the Editor (9), the number of relocations in Ed 17 of Decimal Classification is 746 and in Ed 16
it is 1,603. However, each re-location does not involve violent
change of place to the point of changing the Basic Subject itself.
Other changes are only minor and within one and the same Basic
Subject. We are here concerned only with the cases in which
there is change of Basic Subject, whether Main or non-Main.
Here is a comparative table of the number of new Main or Basic
Subjects involving correction work:—

Scheme	Ed 16	Ed 17	Ed 7
	(1958)	(1965)	(1971)
Decimal Classification Colon Classification	150	140	21 (See Sec 143)

The figures in Col 2 and 3, and in Col 4, give a comparative measure of the amount of correction work involved, in changing over from the old edition to new, in Decimal Classification and in Colon Classification respectively. The figure for Decimal Classification Ed 16 is given by Guha (12); that for Ed 17 is given by Jayaraj (15). This differential load of correction work should be borne by the libraries using Colon Classification and Decimal Classification respectively.

88 FAITH

My faith is that the young members of the library profession in India and those who are just entering the profession will not fall a victim to an easy going evading habit. My hope is that they will not be misled by any wrong tradition prevailing in some library or other. My further hope is that they will not hide the results of their evasion from the eyes of their top-management

by methods of courtiership and of splashy demonstration of mechanical contrivances of unproven value—and, even if proved, not viable in the present conditions of India. The wish is that every young librarian will make correction work a part of the daily routine of the library and make it a point of honour to keep the books classified by the latest version of the scheme in use and not to bequeath any arrears of correction work to his successor. May our librarians rise to this high sense of responsibility and high level of professional ethics.

91 BIBLIOGRAPHICAL REFERENCES

No	te:-	A. W
	1 The	following is the list of the documents used.
	2 Col 1	gives the serial number of the documents included in it.
		gives the number of the Section in the text, where the reference the document occurs.
1	Sec 086	ABDUL RAHMAN and RANGANATHAN (T). Array isolates and
_		seminal mnemonics in CC. (An lib sc. 9; 1962; Paper T).
2	Sec 086	and Non-seminal mnemonics. (;
_		Paper A).
3	Sec 086	— and —. Seminal mnemonics. (—. Paper E).
4	Sec 086	— and —. Systematic versus seminal mnemonics. (—.
-	C 021	-; Paper X).
5	Sec 031	BAVADEKAR (Pramodini) and others. Rate of development of the Universe of Subjects and the design of schemes for classifi-
		the Universe of Subjects and the design of schemes for classifi-
		cation. (DRTC Seminar. [Papers and proceedings]. 5; 1967; Paper A, Sec 52).
6	Sec 081	BLISS (H E). Organisation of knowledge in libraries. Ed 2.
U	Sec our	1939.
7	Sec 074	—. System of bibliographic classification. Ed 2, 1935.
8	Sec 062	CLASSIFICATION RESEARCH GROUP (London). Need for a
		faceted classification as the basis of all methods of informa-
		tion retrieval. (International Study Conference on Classifi-
		cation for Information Retrieval (Dorking) (1957). Pro-
		ceedings. 1957. Appendix 2. P 137-47).
9	Sec 871	CUSTER (B A). Ed. Decimal classification. Ed 17. 1965.
	0 004	Sec 5. 133.
	Sec 084	—. Mr Phillips. (Lib Assoc record. 62; 1960; 406-7).
11	Sec 291	GOPINATH (M A) and MALHOTRA (V K). Geographical sche-
		dule in CC, DC, and UDC. (Lib sc. 3; 1966; Paper K,
12	Sec 871	Sec 01).
12	Sec 6/1	GUHA (B) and others. Change of (BC) in DC ed 16. (An lib sc. 7: 1960; Paper N).
13	Sec 062	HERALD OF library science. 3; 1964; 91.
14	Sec 043	INDIA, EDUCATION (—— Commission) (1964) Report: Edu-
• •	500 0.5	cation and national development. P 408.
15	Sec 871	JAYARAJ (P). Change of basic subjects in DC edition 17 and
		impact of CC on DC. (to be published later).
16	Sec 043	MIKHAILOV (A I) and others. Ed. On theoretical problems of
		informatics. (FID 435). 1969.
17		NEEL IMEGHAN (A). Use of zero in the notational system of
	41	CC. (DRTC Seminar. [Papers and proceedings], 6: 1968;
		Paper BL, Sec 73).

238

```
18 Sec 086 Neelameghan (A) and Bhattacharyya (G). Extrapolation at
         31
               the beginning of an array in Colon Classification. (----;
                Paper BK).
             OLDHAM (C H G). Science in China, (Science today, 3, 9; 1969, May; 44).
RANGANATHAN (S R). Basic subjects and their kinds. (Lib
19 Sec 043
    Sec 292
               sc. 5; 1968; Paper C).
    Sec 053
                                         Sec 01, Cat 8).
    Sec 293
                                         Sec 02).
                                         Sec 31).
    Sec 086
                                         Sec 5).
    Sec 053
    Sec 053
                                         Sec 6).
             Sec 086
               library classification. Ed 3. 1967. Part K).
              —. Classificationist and classifier. (——. Chap CQ).
    Sec 052

    Classification as transformation. (——. Part Q).

    Sec 01
    Sec 0852 - Colon classification, Ed 4, 1952, Part 1, Sec 653
               and 6531.
    Sec 34
               Common property isolates. (An lib sc. 7; 1960;
               Paper A).
               Sec 082
31
               _
                                                  Chap ES).
    Sec 71
               —. Decreasing extension. (—
                    Denudation. (---. Chap PD).
   Sec 053
   Sec 01
                   Descriptive account of Colon classification, 1967.
               (Being the Indian edition of Ranganathan (S R). Colon
               Classification. 1965. (Rutgers series on systems for the
               intellectual organisation of information. 4). Sec B6 to
               B63 and Chap ZB.
35 Sec 0851 ---. Design of depth classification: Methodology. (Lib
               sc. 1; 1964; Paper A).
    Sec 086
                   Developments in the use of digits in Colon Classification.
         31
                 Lib. sc. 6; 1969; Paper A, Sec 864).
               — (—, —; Sec 865).
— Dissection. (In author's Prolegomena to library classifi-
    Sec 086
   Sec 053
               cation. Ed 3. 1967. Chap PB).
               — Enumeration. (——. Chap GC).
39
   Sec 082

    Library administration. Ed 2. 1959. Sec 2534:2.
    Library classification through a century. (International

40
   Sec 84
    Sec 0851 ---
               Study Conference on Classification. 2;
               Elsinore; Classification research. P 17-18).

    List of principles for helpful sequence. (In author's

42 Sec 086
               Prolegomena to library classification. Ed 3. 1967. Chap BD).
               Madras University Library: Genesis, development and growth. (Lib Assoc rec. 59; 1957; 15).

Notation for phase relation. (In author's Prolegomena to library classification. Ed 3. 1967. Chap SD).
    Sec 82
    Sec 053
               —. Notational plane: Interpolation and extrapolation.
(An lib sc. 10; 1963; Paper A, Sec 45).
    Sec 086
               Sec 82
        852
               code. Ed 5. 1964. Chap CG).

    Prolegomena to library classification. 1937.

    Sec 081
                   ——. Ed 2, 1957.
48
    Sec 081
    Sec 052

    Sec 713 to 7175.

                   - Ed 3. 1967. Chap CR, Sec 34.
50
   Sec .053
                          Sec 045
   Sec 086
                          —. Chap RM and RN.
```

•	. 4	•	

RANGANATHAN

53	Sec 61	RANGANATHAN (S R). Psychology and notational structure. (In author's) Documentation and abstract classification. (International Congress of Libraries and Documentation Centres (Brussels) (1955). V 2 B. Communications. P 108-139.
54	Sec 032	School and college libraries, 1942, Sec 11111.
	Sec 34	 Space isolate. (Common isolates in documentation work. 3).
		(Rev doc. 24; 1957; 18-28, Sec 5 to 56).
56	Sec 051	. Terminology concerning ideas. (In author's Prolego-
		mena to library classification. Ed 3. 1967. Chap CR).
57	Sec 34	Time isolate. (Common isolates in documentation work.2). (Rev doc. 23: 1956; 70-9).
58	Sec 84	- Tracing Section. (In author's Classified catalogue
		code. Ed 5. 1964. Chap MH).
59	Sec 043	RANGARAO (B V). Scientific research in India: An analysis of publications. (J scient ind res. 26; 1967; 174).
60	Sec 062	REVUE DE la documentation. 22; 1955; 139.
61	Sec 081	RICHARDSON (E C). Classification: Theoretical and practical.
		1930. (Ed 3: 1964), P 5-9.
62	Sec 081	SAYERS (W C Berwick). Introduction to library classification,
		1926 (Ed 3; 1962).
63	Sec 061	—. Manual of library classification. Ed 3. 1955. Sec 3.
64	Sec 062	Sec 3061.
65	Sec 062	SHAMURIN (E I). Essay on the history of library and bibliographical classification. V 2. 1959. Chap 8. P 326.
66	Sec 062	SHERA (J H). Analysis of thought. (In Ranganathan (S R).
		Descriptive account of Colon Classification. 1965. Sec ZL21).
67	Sec 0871	VALMIKI. Ramayana. Balakanda. Chap 43.
68	Sec 084	Wells (A J). Bridish national bibliography. (An lib sc.
_		4; 1957; 79).
69	Sec 033	WORLD BOOK encyclopaedia. V 16. 1962. P 607.

240

LIB SC

92. Annexure 1. Change in Facet Structure

Facet Formula	Ed 6 (1960)	2[P];[M]:[B] [2P] B13[P];[P2]:[E] [2P] B15[P];[P2]:[E][2P] B16[P];[r2]:[E][2P]	B23[P]:[E]	B25(P,1(P2);18] (2P) B33(P);1(P2);18] (2P) B37(P;18] (2P) B38(P);18] (2P) B6(P);18] (2P)	87[P]:[E][2P] 89[P]:[E][2P] C2[P]:[E][2P] C3[P]:[E][2P]		C983[P]:[E] [2P] E[P]:[E] [2.P]	G[P]:[E] [2P] H1[P]:[E] [2P] H2[P]:[E] [2A] H7[P]:[E] [2A]
	Ed 7 (1971)	2,[P];[MP] B13,[P];[MP] B15,[P];[MP] B16,[P];[MP]	B23,[P];[MP]	B25,P ₀ ,P2];[MP] B33,Pj,[P2],[MP] B3,[P];[MP] B38,[P];[MP] B6,[P];[MP]	B7,[P];[MP] BV,[P];[MP] C3,[P];[MP]	SOS SE	C9B3,[P];[MP] E,[P];[MP]	G,[P]:[MP] H1,[P];[MP]:[E] H2,[P]:[MP]:[E] H7,[P]:[MP]:E]
Basic Subject	200500000000000000000000000000000000000	Library Science Theory of Integers Algebraic Number and Ideal Complex and Hyper-Complex	Theory of Equation	Higher Algebra Differential and Integral Equations Real Variable Complex Variable Geometry	Mechanics Astronomy Properties of Matter Sound	neat Radiation Electricity Magnetism	Nuclear Physics Chemistry	Biology Mineralogy Petrology Fonnmic Geology
1		2 B13 B15 B16	B23	B37 B37 B38 B6	ಹಿಡಿದಿದ್ದ	3885	е В В	9 2 2 2 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4

	Doile C. Kind	Facet Formula	ıla
	pasic onoject	Ed 7 (1971)	Ed 6 (1960)
XXX	Mining Botany Agriculture Zoology Animal Husbandry	HX,{?};{M?} I,[P],[P2];{MP}:(E) J,[P],[P2];{MP}:(E),[ZP] K,[P],[P2];{MP}:(E) KX,[P],[P2];{MP}:(E)	HZ[P],[P2];[E] [2P]][P],[P2];[E] [2P];[2E] J[P];[E] [2P];[2E] K[P],[P2];[E] [2P] KZ[P];[E] [2P];
LX3 M7 M7	Medicine Pharmacology Pharmacopeia Textiles Rope Making	L,,P);(MP);(E),(2P) LX3,P);(MP) LX5,P) M7,(P);(MM);(E) M7,(P);(MM);(E)	L/2 :[5][2P]:[25][3P] L/2 P]:[5][2P] L/2 P]:[7]:[7] M7 P]:[6][2P] M7 P]:[6][2P]
△ZZZZO⊌O¤¾ ABOOπ	Spiritual Experience and Mysticism Architecture Town Planning Sculpture Painting Music Literature Linguistics Religion Metaphysics Ethics	△,(P,(P2):(M2) NB,(P1,(P2):(MP) NB,(P1,(P2):(MP) ND,(P1;(MM):(E) NC,(P1;(MM):(E) NC,(P1;(PM):(E) O,(P1;(P2):(MP) P,(P1;(P2):(MP) R3,(P) R4,(P),(P2)	△[P], [42]; [E] [2P] NA[P], [42]; [F], [44]; [E] NB[P], [P2], [P3]; [M]; [E] [2P] NO[P], [P2]; [P3]; [M]; [E] [2P] NO[P], [P2]; [P3]; [M]; [P3]; [M]; [P3]; [M]; [P3]; [M]; [P3]; [M]; [P3]; [P
%+>≥××	Psycholocy Education History Political Science Sociology Law	S.(4):[MP] T.[P]:[MP] V. [P]:[P2]:[MP] W.[P]:[P3]:[M.] Y.[P]:[MP]:[E]:[2P] Z.(P].(P2]:[P3]:[P4]:	S(P):[E]:2P] T[P]:[E]:2P] V[P]:[E]:2P] W[P]:[-2]:[E]:2P] Y[P]:[E]:2P] Y[P]:[E]:2P] Z[P]:[E]:2P] Z[P]:[E]:2P] Z[P]:[E]:2P]:[E]:2P] Z[P]:[E]:2P]:[E]:2P] Z[P]:[E]:2P]:[E]:2P] Z[P]:[E]:2P]:[E]:[E]:2P]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:E]:[E]:[

LIB SC