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Uniform Form Divisions (Common Isolates) for Digital Environment, A Proposal

Dr. Leena Shah

Librarian, Govt. College, Mehidpur, Dist. Ujjain (M.P.)
456443 India

E-mail: leenataksali@yahoo.co.in

Prof. Sudhir Kumar

Reader and Head, School of Studies in Library &
Information Science, (Faculty of IT) Vikram University,
Ujjain (M.P.) 456010

E-mail: skumarram2000@yahoo.co.in

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Abstract:

The study has proposed unification of three major schemes DDC, UDC and CC and developed uniform table for Form Divisions (Common Isolates), which can be used by any of the schemes of library classification or by a uniform classification scheme devised for digital environment. Paper suggests new postulation for the arrangement of geographical divisions. The paper also suggests for further research to prepare uniform classification code, which can be applied in digital environment. Concludes that IFLA may undertake a uniform classification code projects and its application in electronic environment.

1. Introduction: -

The word 'Classification' is derived from a Latin word Classis, which was used in ancient Rome for groups of citizens according to their wealth. Classification is probably the simplest method of discovering order in the overwhelming multiplicity of nature. It is a process of sorting, which brings together like things/objects and separates unlike ones. The ideas or objects are collected into groups. These groups stand for certain qualities which its members posses. The procedure, necessary to form the groups is

called classifying and the result is a classification. According to **Ranganathan** “ Library Classification is the translation of the name of the subject of a book into preferred artificial language of ordinal numbers (1)

Classification has ruled traditional libraries for centuries in systematic arrangement of the books for their better retrieval. The classification, not only assists the memory, but also expresses the relationships of things. The need for a classification system is much more in today’s electronic environment than ever before. In the traditional physical library environment users have an opportunity to go through the physical documents to one’s requirements Human intermediaries with natural intelligence and memory sometimes could elaborate or condense a search depending on the situation and manage to get relevant information. Whereas, in the electronic environment, available information technologies may have the speed and capability of rummaging through information wilderness but does not possess the intelligence to discriminate relevant document from irrelevant and redundant documents.

Emerging information and communication technologies enable almost seamless access to vast number of information sources of various types. Internet and World Wide Web have given rise to a new concept called “cyber library” also known as “virtual library” which hosts electronic documents rather than conventional hard copy documents. Because of its tremendous speed and capacity to hold large amounts of data in electronic form, Internet has influenced the way information is generated and distributed. However the same characteristics are the root causes for information access problems on the Internet.

1.1 The Search Engines: -

On the part of the users some knowledge of the search engines and browsers available is helpful but not sufficient for Internet search. Browsing is an information retrieval mechanism for navigating among documents by clicking hyper-links. The browsing is better known as surfing meaning exploring the Web by clicking hyperlink after hyperlink. (2). The search engines hunt for specific words or terms. Search engines rely on software robots or spiders to automatically index websites that exist on the Internet. Search engine uses automated software “ spiders” that crawl through the Web to collect and index the full text of pages that they find. The key component of Web engine automation is the robot or spider, a piece of software. When Internet surfers search for certain keywords, the websites found would be listed based on the selected search engine’s specific criteria. Such text searches frequently retrieve tens of thousands of pages, many of them irrelevant to the information seeker’s interest. It is not possible to quickly locate only the information needed and trust that it is authentic and reliable.

Most of the search engines currently available suffer from basic drawbacks like they cannot identify the context in which a query is formulated and cannot identify the importance of the order in which the search terms have to be located.

To overcome this difficulty, there are Boolean search techniques where Boolean operators enter certain words to be specific in search for example “Central AND nervous AND system AND man.” The results thus obtained may not be just restricted to medicine, but may be from any subject, which contains these words, anywhere in the document in any sequence. Thus one may get document dealing with nervous man and central system, or central man and nervous system etc. In such a situation any body can guess the relevance of the results thus obtained to the query. There are many filtering and sifting techniques such as proximity search and page ranking are available to improve the Boolean strategies. Even then due to exponential growth of the Internet documents, such searches yield thousands of documents and make it practically impossible for any user to go through all the documents in order to decide the most relevant documents suited to ones requirements. (3).

It is a pleasant way of discovering information by accident but not very efficient technique for discovering new sites. Since Web contains millions of documents, the surfing has become a pastime of later-night hyperlink addicts. One may not find anything relevant to his research goal on surfing and a surf session may be nothing more than thrashing-unprofitable, without any goal in mind and anything useful. It often proves time consuming process.

1.2 Classification and the web: -

In order to have access in a more orderly fashion, many techniques of web access have evolved ranging from “starting point pages” to “distributed subject trees” through “Indices” and invoking search engines all having made through use of subject classification/ indexing techniques in these “lists”. (4) Though there are attempts to organize documents on the Internet using traditional classification schemes, so far they have met with little success. The reasons for this are high growth rate of Internet resources., linear and hierarchical nature of conventional classification schemes and the characteristic features of electronic documents such as, ability to be mirrored in as many locations as possible, ability to have hypertext links with other electronic documents on the net, etc. (5)

Classification has helped documentalists in arranging documentation lists for decades. Vast amount of work now being carried out on the principles of coding for searching the literature by machines. Ranganathan advocated that some kind of synthetic classification will be in any case forced on the makers of machine codes if they are to avoid the immense searching labors that are made inevitable by random codes. (6).

Some Web sites have organized knowledge on the Internet by devising their own classification schemes. Still most of the problems remain as serious as they were in the beginning of this century. (7) There have been suggestions that the data mounted on Internet sites be organized at least into broad subject classes using one of the widely used traditional classification schemes. Projects like Dublin Core Metadata elements set and automatic generation of DC information are under way. (8) After some day classification will be tool for internet access. In global world then we will need a uniform classification

scheme. To achieve this goal, we have prepared uniform tables for form divisions (common), space and time isolates. In this paper we have presented uniform table for Form Divisions/Common Isolates in forgoing paragraph.

2. Form Divisions (Common Isolates): -

In this section we have discussed salient features of few classification schemes and use of Form divisions (common isolates) in these schemes. The term Common Isolate has been used by Dr. S.R. Ranganathan in his Colon Classification scheme. Other schemes have used other terms like Form Divisions, Standard Subdivisions of Form, Common Auxiliaries of Form, etc. According to Ranganathan “ Common Isolate is an isolate idea represented by the same isolate term and by the same isolate number in more or less every class having it. (9) DDC defines it as “ Subdivisions found in Table 1 that represent frequently recurring any physical forms (Dictionaries, Periodicals) or approaches (History, Research) applicable to any subject or discipline. They may be used with any number in the schedule and tables for concepts that approximate the whole of the number unless there are instructions to the Contrary”. (10)

The Common isolates represent the way the subject of the book has been treated internally-e.g. Historical treatment, bibliography, encyclopedia or a textbook. They are recurring concepts and mostly pertain to the form of the document and other extra-textual aspects. Isolates representing such aspects are called Common Isolates (CI). It may be again noted that Common Isolates are mere auxiliaries, and not part of the subject proper. Since these are recurring concepts and remain the same in name in all the main classes, hence they are listed once for all making them same in all cases.

We can conclude that Form Divisions (Common Isolates) should have following properties:

1. Use of same term,
2. Use of same notation,
3. Attachable to any class,
4. Attached with the same connecting symbols,
5. Have a separate schedule,
6. Either represents external form of book other than the book in general or represents any form of book other than the book in general or may represent both at a time.
7. They are distinguished from general books on the subject.

Time and space isolates (Geographical Division) can also be used with any schedule of the schemes. But in the context of this paper, we mean common isolates, which denotes form of the document or subject i.e. Form Divisions.

There are many library classification schemes, which have provisions of such form divisions (common isolates). A few important one are Dewey's Decimal Classification (1876), Cutter's Expensive Classification (1891-1903), Library of Congress's Library of Congress Classification (1901), FID's Universal Decimal

Classification, (1905), Brown's Subject Classification (1906), Ranganathan's Colon Classification (1933), Bliss's Bibliographic Classification (1935), Rider's International Classification (1961) and FID/ SRC's Broad System of Ordering, (1978).

The DDC, UDC and CC are some important schemes of library classification being practised in many libraries of the world. These schemes have long list of Form Divisions (common isolates). Most of the other schemes do not provide such tables in detail. DDC and UDC have revised the schedules from time to time.

C A Cutter has published 7 separate classifications schemes each one being in progressive stages of elaboration, though often notation has been changed. His Expansive Classification has meager provision of common isolates called 'Form Facets' in an auxiliary table. A dot (.) has been used as its indicator digit. Only 8 Form Facets have been used. He has made use of different form facets in various editions though a few are common also. He has given maximum 9 such form facets a few being common in earlier and later expansions. These are Dictionary, Encyclopedia, Indexes, Museums, Periodicals, Quotations References and Societies in earlier edition. But in 7th expansion he used Theory, Bibliography, Biography, History, Dictionaries, Handbook, Periodicals, Societies and Collection (By several authors).

Library of Congress is purely enumerative scheme without Common Isolates. At places it has used 7 points, which occur through out the schedules and may be considered as Common Isolates though their exact sequence differs at places. It includes Periodicals, Societies, Collection, Dictionaries, Theory, Philosophy, History, Treatises, Law relation, state relation, Study and teaching, Special subjects.

J. D. Brown's Subject Classification has used mixed notation and a few connecting symbols Plus (+) and dot (.). Brown gave list of Categorical Tables having 960 isolates and added with a dot. A few to quote are Catalogues, Bibliography, Encyclopedias, Philosophy, Theory, Periodicals, Collections, History, Maps, Family history, Patents, Education, Diseases, Management, Logic, Cleaning, Collecting. These are considered common isolates. The scheme is not in much use now a day.

H.E. Bliss's Bibliographical Classification though has used mixed notation, but it is an enumerative scheme. It also uses comma (,) as facet indicator and hyphen (-) for combining divisions. Sometimes it also makes use of comma (,), percentage (%), slash (/), dollar (\$) and asteric (*) signs. It has 9 "Anterior Numeral Classes" 1/9, which may be considered as Common Isolates. These are Collection, Bibliography, Special collection, Departmental collection, Archives, Periodicals, Miscellaneous, Historic and Local collection and antiquated books. In addition to, it has 4 systematic schedules of Form, Space, Language and Time isolates. Its Systematic table of Form also has 6 subdivisions, often alternate to Anterior Numerals Classes. These are Reference Books Dictionaries, Encyclopedia, Bibliography, History, Study of the Subjects and Periodicals.

F. Rider's International Classification is an enumerative scheme. The notation consists of Roman Capitals only. The limit of 3 letters has been assigned to specify any

subject. It does not even recognize schedule of Common Isolates, so much so that even geographical divisions are absent.

Broad System Of Ordering developed by FID/SRC (Subject Field Reference Code) is to serve as switching language between different information systems in the process of information transfer system in a network under UNISIST programme. The scheme recognizes Common Applicable Subject Fields such as Philosophy, Statistics, Information Science, Education, History, Research and Economics, etc. which may go with any other subject field in the universe of knowledge.

Melvil Dewey's DDC is pure notation enumerative scheme with many auxiliary tables; a few of them are applicable in certain schedules and at specified places. Standard Divisions are common isolates in DDC and can be attached to any schedules.

DDC is pure notation scheme. There is no definite indicator digit. The Standard Subdivisions are added in the end of the base number. The Standard Subdivisions start with a Zero (0) so they can be distinguished from schedule in a class number. While adding a Standard Subdivisions to a schedule, if the number of the schedule ends with a Zero (0) or two Zeros (00), they are invariably eliminated. The use of extra Zero's for Standard Subdivisions at specified places is to provide hospitality in the schedule.

All subjects which have a Standard Subdivision attached, are arranged after main subject. In this way all Standard Subdivisions in DDC are posteriorising. The philosophy behind this approach is that no one will read a conference before a book on the topic. DDC has identified two types of Standard Subdivisions one recurring Physical Form and another recurring approach but these are not clearly mentioned. In the manual DDC has recognized 6 kinds of Standard Subdivisions though no nomenclature has been provided.

These are:

1. Subdivisions which bring the methods of other disciplines to bear on the subject, e.g. auxiliary techniques, education, research, management, philosophy and theory.
2. Subdivisions, which relate the subject to its users, e.g. the subject as a profession, the subject for persons in specific occupations
3. Subdivisions which identify a specific kind of information about the subject, e.g. directories, product lists, identification marks, statistics, illustrations.
4. Subdivisions which treat the whole subject but in a restricted situation, e.g. by kinds of persons, areas, historical periods.
5. Subdivisions, which indicate the bibliographic forms that the information may take, e.g. encyclopedias, periodicals and;
6. Miscellaneous subdivisions, e.g. biography, formulae and specifications, humorous treatment. (11).

Like DDC, Universal Decimal Classification (UDC) is also pure notation scheme but has number of auxiliary tables with distinguished connecting symbols Relation sign, a colon, slash / and Plus + comma, are added to connect two subjects or isolates. Common Auxiliaries of Form is one important table, which denotes the form or

presentation of documents. These are Common Isolates. In UDC Common Auxiliary Subdivisions (Table Id) denote the documents according to their “Bibliographic Form”, “Physical Form” and “Form of Presentation. It also has method of developing Common Auxiliaries of Form not listed in this list.

The Common Auxiliaries of Form 01-07 and some numbers of 08 represent various types of documents with different form of presentation of subject matter such as Dictionary, Encyclopedia, Bibliography, etc. The outer forms or physical forms of the documents have been enumerated in (084) and (086). Pictorial documents, 3D documents (like globes, etc) and Audio -Visual materials are enumerated in this section. The subdivision for works handling specific subject from the point of view of origin, development and general history represents ‘Form of Representation’, e.g. 09 history, Geography, etc. Colon Classification has been devised with lot of classification theory. Though due to lack of periodic revision policy its now lacks many modern terms but still due to its large theoretical base cannot be discarded.

Colon Classification is analytical scheme of classification with mixed notation. It has made use of five fundamental categories. Space (Geographical division) and Time are two such categories. The scheme has used connecting symbols for each category. It has sharpened the concept of Common Isolates. It has recognized two types of common isolates, the Anteriorising Common Isolates (ACI) and Posteriorising Common Isolates (PCI)

Anteriorising Common Isolates (ACI) according to Dr. Ranganathan, documents are considered approach documents and readers would like to have a preview them before taking up the study of a regular treatise or a book or any other document on a subject. This means that subjects having an Anteriorising Common Isolate should precede the host subject on the shelf. On account of this, he has called these as Anteriorising Common Isolate (ACI).

On the basis of position of their attachment with the host subject three-sub types of Anteriorising Common Isolates have been recognized. ACI (applicable before space facet) include Common Isolates like Bibliography, Concordance, Table, Formula, Atlas, Encyclopedia, Periodicals, Serials, Conference-proceedings, History, Biography, Collected Works, Case-Study and Digest, etc. Each has its own facet formula for further individualization of these isolates

Posteriorising Common Isolates (PCI) are such subdivisions as may be commonly applied to many subjects, but are considered to reduce the extension of the host subject they qualify. Therefore, the subjects with these isolates should better be fitted after the host subjects. These isolates may be of Energy Facet or of Personality Facet and should take the connecting links for Energy and Personality when following the host subjects. Posteriorising Common Isolates according to Dr. Ranganathan, subjects having PCI should be followed after the host class, as these documents will be consulted only after consulting the documentation the host subject. So they are shelved after the host class.

3. Uniform Tables for Common Isolates:-

After studying few important classification schemes we have prepared uniform tables for Form Divisions (Common Isolates), geographical divisions and time Isolates. These uniform tables can replace existing tables without much structural changes. In case a new uniform classification is evolved in near future to meet the requirements in electronic environment, these tables can easily be used.

The Uniform tables have been prepared in such a way that existing structure of notation in three schemes do not change. The uniform table is more comprehensive, contemporary and logically arranged. Uniform tables are one step ahead as they are common for all these three schemes.

The uniform tables have two types of notation Pure Indo-Arabic Numerals and Mixed Roman Alphabets and Indo-Arabic Numerals. Column one used only pure notation with Indo Arabic Numerals. Columns two and three used mix notation both Indo Arabic Numerals and Roman Alphabets (both capital & small). Hierarchy has been maintained in column one and two so the notation is longer. In the notation given in column three hierarchies are not maintained to make the notation shorter.

Mixed notation schemes like CC 6 & CC 7 have option to use either longer notation or shorter notation (in column two or three). They can also use notation given in column one. Pure notation schemes like DDC & UDC have no choice but to use notation given in column one. Uniform Classification Code may use either one.

The arrangement of Form Divisions (Common Isolates) in uniform table is based on external form (Physical form (01-06) and internal form (Approach materials) of documents (07-08). Major reference collections have been grouped in -01. Notations -04 and -09 have been used for Special topics and Geographical Division and Historical Periods respectively to avoid any structural change in DDC. These may be used for some other purposes in uniform classification at a later stage.

Table: UNIFORM TABLE FOR COMMON ISOLATES / STANDARD SUBDIVISIONS / FORM DIVISIONS

PARTICULARES	PURE NOTATION	MIX NOTATION	SHORTER
REFERENCE WORKS			
OR REFERENCE BOOKS	01	a	—
Dictionary	011	a1	a
Encyclopedias	012	a2	b
Yearbooks	013	a3	c
Almanac, Calendar, Diaries	014	a4	d
Directories: Commercial, Trade consumer and buyers guides,, etc.	015	a5	e
Biographies, Case studies,			

Works	016	a6	f
Biographies, Auto-			
Biographies, Ana, Letters	0161	a61	f1
Individual	01611	a611	f11
Collective	01612	a612	f12
Case Studies	0162	a62	f2
Works(Collected or Selected)	0163	a63	f3
Individual	01631	a631	f31
Collective	01632	a632	f32
Research Works	017	a7	g
Theses	0171	a71	g1
Dissertations. Project Reports	0172	a72	g2
Conference, Manuals, etc.	018	a8	h
Conference, Proceedings,etc	0181	a81	h1
Manuals	0182	a82	h2
Handbooks	0183	a83	h3
Digest	0184	a84	h4
Guidebooks	0185	a85	h5
Concordances	0186	a86	h6
BIBLIOGRAPHIC DISCRIPTIONS	02	b	j
Bibliographies	021	b1	j1
Indexes	022	b2	j2
Abstracts	023	b3	j3
Summaries	024	b4	j4
Surveys	025	b5	j5
Lists	026	b6	j6
Lists	0261	b61	j61
Inventories	0262	b62	j62
Stock list	0263	b63	j63
SERIAL PUBLICATIONS	03	c	k
Periodical, Journals, House Journals, Magazines.	031	c1	k1
News papers	032	c2	k2
News bulletins	033	c3	k3
News letters	034	c4	k4
Articles in Serials	035	c5	k5
Articles in News papers	036	c6	k6
SPECIAL TOPICS	04	-	-
[Specially used in DDC]			
MISCELLANY	05	e	
Educational and studying	051	e1	l
Curricula. Syllabus	0511	e11	l1

Synopsis	0512	e12	12
Self-instructions, Correspondence, Refreshers texts	0513	e13	13
Practical exercises			
Training	0514	e14	14
Teaching aids	0515	e15	15
Teaching methods	0516	e16	16
Awards, Financial			
Supporting	052	e2	m
Competitions	0521	e21	m1
Awards	0523	e23	m3
Fellowships and			
Scholarships	0524	e24	m4
Grants-in-aid	0525	e25	m5
Honorary titles	0526	e26	m6
Prizes	0527	e27	m7
Oral Records	053	e3	n
Addresses	0531	e31	n1
Lectures	0532	e32	n2
Speeches	0533	e33	n3
Reports	054	e4	p
Administrative	0541	e41	p1
Management	0542	e42	p2
Progress	0543	e43	p3
Research	0544	e44	p4
Project	0545	e45	p5
Statistics	0546	e46	p6
Commission	0547	e47	p7
Others	0548	e48	p8
Trade	05481	e481	p81
Marketing	05482	e482	p82
Technical and normative			
documents and Tables	055	e5	q
Recipes: Directions for use, hints & instructions	0551	e51	q1
forms & blanks	0552	e52	q2
Tables: Including Classification, statistical, technical data, calcula- tion, numeric, monograms, network diagrams, etc.	0553	e53	q3
Nomenclatures, Standards, etc	056	e6	r
Nomenclatures	0561	e61	r1

Standards	0562	e62	r2
Codes	0563	e63	r3
Specifications	0564	e64	r4
Patterns, Samples	0565	e65	r5
Comparative presentation	0566	e66	r6
Tenders	0567	e67	r7
Formulae	0568	e68	r8
Plans, Projects,			
Programes	057	e7	s
Plans	0571	e71	s1
Projects	0572	e72	s2
Programmes	0573	e73	s3
Attestations.Licences &			
Contracts and other	058	e8	t
Licences. Certificates, etc	0581	e81	t1
Passports, Identity and			
Nationality certificates	05811	e811	t11
Driving licences, certifi- cates of property, Ownership, identificat- ions, registration			
Papers, title, deeds, etc.	05812	e812	t12
Contracts	0582	e82	t2
Ownership marks	05821	e821	t21
Artists and craftsmen marks	05822	e822	t22
Trademarks and other			
Commercial marks	05823	e823	t23
Patents and similar documents	05824	e824	t24
Other Miscellaneous	059	e91	t4
Notifications	0591	e911	t41
Declarations of opinion, critical reviews	0592	e912	t42
Requests	0593	e913	t43
Questionnaires	0594	e914	t44
Bulletin	0595	e915	u5
Of Official documents	0596	e916	t46
Statuts, Rules, Regulations, Membership lists,			
Annual reports	05961	e9161	t461
Correspondence	05962	e9162	t462
Letters	05963	e9163	t463
Circulars	05964	e9164	t464
Pamphlets	05965	e9165	t465
Brochures	05966	e9166	t466

Business documents	0597	e917	t47
Prospectus, price lists, trade catalogues, Advertisements, etc	05971	e9171	t471
NON-BOOK MATERIALS	06	f	u
Manuscripts	061	f1	u1
Pictures. Illustration	062	f2	u2
Drafting	0621	f21	u21
Drawings	0622	f22	u22
Photographes	0623	f23	u23
Photocopies	0624	f24	u 24
Schematic representation	063	f3	u3
Diagrams	0631	f31	u31
Profiles	0632	f32	u32
Block diagrams	0633	f33	u33
Cartographic images	064	f4	u4
Maps	0641	f41	u41
Atlases	0642	f42	u42
Plans	0643	f43	u43
Charts	0643	f43	u43
Pictorial posters	0644	f44	u44
Visual documents	065	f5	u5
Globes	0651	f51	u51
Models	0652	f52	u52
Relief maps	0653	f53	u53
Audio-documents sound recording	066	f6	u6
Gromophone recording	0661	f61	u61
Magnetic tape	0662	f62	u62
Others	0663	f63	u63
Video recording	067	f7	u7
Videotapes	0671	f71	u71
Video discs	0672	f72	u72
Others	0673	f73	u73
Films	068	f8	u8
Still:Includings Microfilms			
Micro fishes, Micro cards	0681	f81	u81
Movies:Includings film Rolls	0682	f82	u82
Silent	06821	f821	u821
Sound	06822	f822	u822
Animations	06823	f823	u823
Computer Readable	069	f91	u91
Hard discs	0691	f911	u911
Floppies	0692	f912	u912

Compact discs	0693	f913	u913
Others	0694	f914	u914
THEORITICAL DOCUMENTS,			
HISTORICAL AND LEGAL	07	g	v
History	071	g1	v1
Philosophy and theory	072	g2	v2
Scientific principles	0721	g21	v21
Psychological principles	0722	g22	v22
Other principles	0723	g23	v23
Historical Sources	073	g3	v3
Archaeology	0731	g31	v31
Epigraphy	0732	g32	v32
Numismatics	0733	g33	v33
Heraldry	0734	g34	v34
Geneology	0735	g35	v35
Tradition	0736	g36	v36
Literature	0737	g37	v37
Language	0738	g38	v38
Archives	07391	g391	v391
Official sources	07392	g392	v392
Public records	07393	g393	v393
Legal Sources and documents	074	g4	v4
Agreements and treaties	0741	g41	v41
International	07411	g411	v411
National	07412	g412	v412
Local	07413	g413	v413
Acts, bills, etc	0742	g42	v42
Legal sources	0743	g43	v43
Casebooks	0744	g44	v44
Processes	075	h	w
Classification	0751	h1	w1
Value	0752	h2	w2
Development	0753	h3	w3
Improvement	0754	h4	w4
Comparison	0755	h5	w5
Criticism	0756	h6	w6
Evaluation	0757	h7	w7
Discussion	0758	h8	w8
Designing	07591	h91	w91
Preservation	07592	h92	w92
Restoration	07593	h93	w93
Conservation	07594	h94	w94

Forecasting	07595	h95	w95
INSTITUTION, PROFESSIONS, MANAGEMENT, RECEAR	08	j	x
Profession	081	j1	x1
Institution	082	j2	x2
Investigating	0821	j21	x21
Observational	08211	j211	x211
Laboratory	08212	j212	x212
Experimental	08213	j213	x213
Discussional	08214	j214	x214
Consultant	08215	j215	x215
Yogic Centre (Asrama)	08216	j216	x216
Testing Organisations	08217	j217	x217
Learned Bodies	0823	j23	x23
Popularising	0824	j24	x24
Exhibition Centres	08241	j241	x241
Museums	08242	j242	x242
Educational	0825	j25	x25
Lower	08251	j251	x251
Middle	08252	j252	x252
Higher	08253	j253	x253
Advisory Bodies	0826	j26	x26
Administrative department	0827	j27	x27
Aiding bodies	0828	j28	x28
Endowments	08291	j291	x291
Cultural organizations	08292	j292	x292
Rehabilitation centres	08293	j293	x293
Industrial bodies	08294	j294	x294
Commercial bodies	08295	j295	x295
Management	083	j3	x3
Organization and financial	0831	j31	x31
Plant	0832	j32	x32
Personnel	0833	j33	x33
Executive	0834	j34	x34
Production	0835	j35	x35
Materials	0836	j36	x36
Distribution, Selling	0837	j37	x37
Research, Investigations	084	j4	x4
Historical	0841	j41	x41
Descriptive	08411	j411	x411
Sampling techniques	08412	j412	x412
Experimental research	08413	j413	x413

Others	08414	j414	x414
Statistical method	0842	j42	x42
Presentation of statistics	0843	j43	x43
History and geographic distribution	09	-	-
Time period	0901/ 0909	* 1	
Geographical treatment- Graphical treatment- General	091	*2	
Geographical treatment- Ancient	092	*3	
Geographical treatment- Modren World	093/099	*4	

- Note:**
- *1 Use Uniform table (T 59) Time Isolates for detailed subdivisions.
 - *2 Use Uniform table (T 55) Space Isolates: World / Area Regions Places in General for detailed subdivision.
 - *3 Use Uniform table (T 55) Space Isolates: Ancient World 2 for detailed subdivisions.
 - *4 Use Uniform table (T 56- 58) Space Isolates : Modern World 4/9 for detailed subdivisions.

4. Use of Uniform Schemes by Existing Schemes of Library Classification:-

The uniform tables for Form Divisions (Common Isolates) can be used by any scheme: -

DDC can substitute Table 1. Standard Subdivisions by the uniform table for Form Divisions (Common Isolates). Notation given in column one prepared for pure notation schemes may be adopted. A zero already exists in this table. '04' is available for special topics, '08' in uniform table has been used for 'Institution and Professions'. In DDC it has been used for 'History and description with respect to kinds of persons', which have been eliminated. If required these may be acquired from T7. '09' is assigned for 'Geographical & Historical Periods'. Thus notational structure of DDC will remain the same. More zeros can be used as per instructions given in the schedule for the use of 01-08, e.g.

Directories of adult education 374 + - 0015 = 374.0015

Dictionary of public administration 350 + - 00011 = 350.00011

Similarly Use of 09 will also be done as per instructions given in the schedules.

In DDC scheme there is no provision to use two Standard Subdivisions together. If DDC permits use of a hyphen to add two or more Standard Subdivisions at a time this problem can be solved, e.g.

Abstracting periodicals - 031 + - + - 023 = -031- 023

If DDC also permit use of a connecting symbol for Standard Subdivisions, it can have enormous hospitality in notation.

In UDC this uniform table can substitute Table-Ic Common Auxiliaries of Form very easily. The notation given in column one may be enclosed within circular brackets (0...). The concept of Unlisted Common Auxiliaries of Form of UDC may be used even with this uniform table. With the use of Colon after bracket nought (0:..) such Common Auxiliaries of Form can be extended by the classifiers. This is great autonomy to the classifiers.e.g.

Biography presented in novel form 929 (0: 82-31)

If we need to use two Common Auxiliaries of Form (Common Isolates) together, they can be added with a connecting symbol Hyphen (-), e.g.

Library Science Abstracting 02 (031-023)

In Colon Classification the notation given in column two or three can be used. A double inverted comma (“) may be used as a connecting symbol for all common isolates. Concept of ACI's and PCI's may not be helpful & be omitted. A common isolate number may be further amplified by GD and CD whenever required. These may be used as [P1] (Level one of Personality facet) and [P2] (Level two of Personality facet) separated by a comma in between Common Isolate and [P1] and also between [P1] and [P2]. Two Common Isolates can be brought together by using separate double inverted commas for each common isolates. If preferred a hyphen may also be used in between. Facet formula for the last common isolates may be used for further amplifications.

5. Guiding Principles for Uniform table for Geographical Divisions:-

We have also prepared uniform table for Geographical divisions. The details are very lengthy. We have used new guiding principles adopted to prepare uniform table for them.

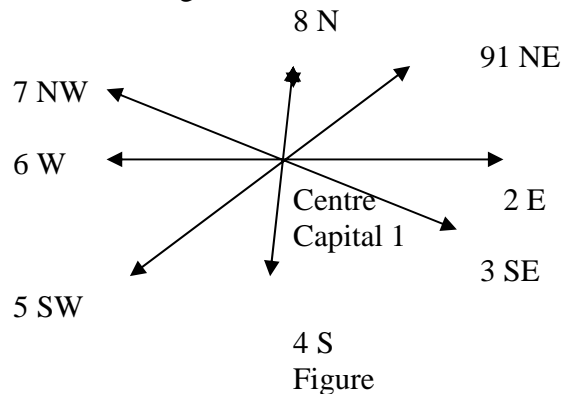
Most library classification schemes theoretically have not laid any guiding principles, though practically they have followed some or the other principle to arrange geographical divisions. In Colon Classification Dr. Ranganathan has developed “Principle of Spatial Contiguity. Spatial contiguity has some meaning Geographical features resemble to some extent and cultural similarities are also visible there in. So the documents can be arranged in helpful order to the users by maintaining spatial contiguity. For this he has followed many principles to arrange geographical division. The principle includes number of sub-principles, which are antithetic pairs of five groups of principles to guide the classificationist for listing the isolates. These sub-principles are Principles of bottom upwards/ top downwards, Principle of left to right/ right to left, Principle of back to front/front to back, Principle of clock-wise direction/ counter clock-wise direction, Principle of periphery to center/centre to periphery, and Principle of away from position or increasing distance/decreasing distance.

These guiding principles guide in arranging various geographical areas. But the unsolved question is from where to start? For the arrangement of political divisions of a continent (i.e. countries) there is no guiding principle. The Sun rises in the East, so we may start from extreme East. North is marked in the maps so we can start from extreme North. We may also start in some other way. Similarly there is no principle to arrange administrative divisions and sub divisions within a country.

In this research some new guiding principles have been evolved so that all geographical divisions and subdivisions can be arranged.

These are:-

1. We should start from east, which may include NE or SE and then move towards S, SW, W and NW and NE in clockwise direction to maintain spatial contiguity as shown in the figure:



2. Within a country, the capital should be the starting point and then among countries move towards East (and North East) to South, South East and West and North completing the circle in clockwise direction. Where the clockwise direction is not easily possible some other sub-principle should be used. The spatial contiguity should be maintained as far as possible.
3. Within each country Divisions and subdivisions should be arranged starting from Headquarter/ Capital and then going towards East and moving in clockwise direction.
4. Smaller units may be arranged alphabetically because spatial contiguity may not be desirable

A uniform table for continents and countries and area Place in general has been prepared based on these principles. Similarly uniform table for India and States of Madhya Pradesh has been prepared as an example for further research.

A uniform table for geographical divisions can be prepared. But it requires thorough knowledge of geographical, political and administrative units of each country, and detailed maps of each unit in a country. This can be undertaken as a project with the help of institutions like, IFLA if we are really serious to make a uniform classification scheme suitable in every condition.

6. Time Isolates :-

This Uniform table for time has been prepared, which can substitute the existing tables. This uniform table for Time Isolates first includes Archaeological periods and Geological periods. These are two different well-recognized methods of arranging ancient periods. In Geological periods years in "Million Years Before Present (MYBP) are given. They may be converted into BC by deducting 2000 Years. The last in it is Postglacial (10300-to present) Specific time divisions are given in 3, Duration, Age and Periodicity are arranged in 4. 5 includes season, temperature, humidity and other time divisions. Phenomena in time such as evolution, consecutive, recurrence, etc. are given in 6.

7. Conclusion: -

The uniform table of form division prepared is helpful not only to the existing schemes of library classification but also will be necessary in electronic environment. Development of geographical schedule is difficult task, as it requires details of every country and its subunits. Certain principles have to be agreed among library classification to maintain spatial contiguity. This will require human resources and enough funds. IFLA can sponsor or undertake such a project. Time has come when there should be one and only one library classification scheme in the world. Efforts on use of classification in digital environment has to be accelerated. If we desire a total information society. We must first agree on a unique and internationally accepted systematic classification.

With the above discussion it is obvious that on some or the other day experiments on use of traditional classification schemes in electronic environment will be successful and there will be a uniform classification for that such tables as we have prepared will be of immense help. The existing classification schemes can also make use of such uniform schedules so as to get isolates not listed at present, but often required in day by day business of the library. Let us hope day is not far when there will be uniform library classification for traditional libraries and for electronic environment

8. Suggestions: -

On the basis of this study, following suggestions have been made.

1. Looking to the need for standardization in classification in electronic era, uniform Form Divisions (common Isolates) and time isolates be adopted by exiting schemes of library classification. At this juncture of cross road for library profession, where world is developing International Information, it is highly essential to adopt a common code of common, space and time isolates. It is highly essential that, there should be a International classification expert committee to continuously revise and amend Common formats.

2. Looking to the need for standardisation in electronic information retrieval, steps may also be taken to unify schedule of library classification schemes.
3. Looking to the need to standardize geographical codes of the World, universal geographic code be prepared on cooperation basis with DDC and UDC, etc.
4. Looking to the need for library classification to electronic era, an International committee be set up to look after into the matter.

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