RIDER'S INTERNATIONAL CLASSIFICATION
AN EVALUATION
(CLASSIFICATION PROBLEM, 1)
M A GOPINATH

[Gives a brief description of the lay out of RIC. Shows that the RIC schedule could be slimmed down to about 270 pages by giving separate schedules of different (CI). Classifies by CC a random sample of 242 subjects enumerated as subdivisions of (MC) U Medicine of RIC. Compares RIC with CC with respect to the host class, helpfulness of facet sequence, co-extensiveness in (CN), terminology, and hospitality in notation.]

Abbreviation used :

  (BC) = Basic Class
  CC   ≠ Colon Classification
  (CC) = Canonical Class
  (CI) = Common Isolate
  (CN) = Class Number
  DC   = Devep Decimal Classification
  (HC) = Host Class
  (MC) = Main Class
  RIC   = RIDER Fremont : Rider's international classification for the arrangement of
              books on the shelves of general libraries. Preliminary Ed. 1961.

0 Introduction

Dr Fremont Rider, whose name is associated with micro card and compact shelving, has produced a new scheme of classification—Rider's International Classification. Dr Rider was a university librarian for a long time. He cut out new ground in his book the *Scholar and the future of the research library* [11]. This disclosed his progressive outlook and penetrating vision of the future. It postulated the possibility of a library without either a stack room or a circulation counter. It proposed the replacement of a book of normal size by a

negative copy of a micro-card 125×75 cm. By putting a few cents into the slot the reader could get a micro card. A second startling idea of Rider was Compact Shelving. In a book on this subject he made many suggestions including that of a particular shelf containing books wanted by the reader being moved on to him, on pressing a button. The third contribution of Dr Rider is the International Classification forming the subject of the present study.

01 PURPOSE OF THE PAPER

The purpose of this paper is to evaluate RIC on the basis of

1 Law of Parsimony ; and

2 Its capacity to give coextensive (CN) not only for the past and present subjects but also for the future subjects arising out of the new developments in the universe of knowledge.

Incidentally this is a demonstration in the methodology of evaluating a scheme of classification on the basis of certain Normative Principles.

1 Lay Out

RIC is a one-fold three-dimensional scheme [1]. It maps out the entire universe of knowledge in a three dimensional scheme. The scheme consists of 26 (MC). Under each (MC) there are 26 sub-classes. These form array of order 2. RIC provides for 676 sub-classes in the array of order 2. Each one of these 676 sub-classes is further sub-divided into 26 sub-sub-classes. These form array of order 3. Thus, there are 17,576 sub-sub-classes in the array of order 3. The arrays of higher orders (in the Idea Plane) are telescoped into the arrays of order 3 (in the Notational Plane). RIC puts forth its own sequence of (MC), different from the sequence of (MC) in any other scheme so far produced. Dr Rider has not given any clue regarding the principle for his sequence of (MC).

2 Common Isolate and the Law of Parsimony

A working definition of Common Isolate is :—

" Common isolate is an isolate idea, denoted by the same isolate term in the Verbal Plane and represented by the same isolate number in the Notational Plane, whatever be the host class, and admits of being attached to several classes belonging to several (BC) " [4]. In general, Time, Space, and Language Isolates can be made (GI). In other words, they are Potential (CI). They are actually so made in CC, by denoting each such isolate by the same term and representing it by the same isolate number, irrespective of the host class to which it is attached. But RIC does not do so. For, although each set of Potential (CI) does occur in several places of the schedule of RIC, the isolates are not represented by the same digits in each of the places.

21 WITHOUT A SCHEDULE OF ACTUAL (CI)

The following table indicates the number of (CN) with a Potential (CI) and the total number of pages devoted to them out of the total 930 pages of the RIC schedule.

Kind of (CI)	Number	N of pages	N of pages 930×100
Language	219	11	1.2
Space	3,402	170	18.3
Time	1,034	52	5.6
Others	1,694	85	9.15
Total	6,349	318	34.25

22 WITH A SCHEDULE OF ACTUAL (CI)

If the Potential (CI) were made Actual (CI), the number of pages occupied by them would be as shown in the following table :

Kind	N of (CI)	Pages
Language	26	1.3
Space	907	45
Time	12	1
Others	6	1
Total	951	48.3

This would indicate that the number of pages required to enumerate all the 951 actual (CI) will be only about 48.

If the Potential (CI) were made Actual (CI), there would be a saving of (318-48)=270 pages in the 930 pages of the schedule in RIC. As a result of the failure to make the Potential (CI) into Actual (CI), while the Law of Parsimony is respected in regard to the number of digits in the (CN), it gets violated in regard to the number of pages in the schedule to the extent of 270 pages. Further, it also gets neglected in regard to the mental strain of the classifiers, cataloguers, and the habitual users of the classified sequence, in their having to turn from one number to another while in search of one and the same isolate idea. It is a moot point whether greater weightage should be given to the Law of Parsimony in regard to the number of digits in a (CN) or in regard to the mental strain of the classifier and of the user. Rider categorically takes the former position and enthusiastically says that the position taken by him " Has to throw mnemonics to the winds " [8]. But most of the other classificationists, take the opposite view. Let us illustrate the different positions taken by them. In RIC, the isolate idea " Cyclopaedia " is represented by the three different digits B, 0, and Q in three different places—*viz* EUB, ELO, EUQ. On the other hand, in CC it is represented by one and the same digit '*k*' in all the places. In DC it is represented by one and the same digit-pair "03" in all the places. Surely this lightens the work of the classifiers and the users.

3 Sample Table

We shall compare the RIC with CC in regard to Host Class, Helpfulness of Facet Sequence, Co-extensiveness in Class Number, Terminology, and Hos-

pitality in Notation. For this comparison, we shall use a random sample of the subjects enumerated as subdivisions of (MC) U Medicine in RIC. In Table 1, these subjects are arranged in the RIC sequence. The CC numbers co-extensive with each of the RIC numbers are given. In Table 2, the subjects are arranged in the CC sequence. The RIC numbers are also given. In Table 2, each CC number is co-extensive with the subject represented by it.

31 TABLE 1 : RIC SEQUENCE

RIC	Subject	CC Co-extensive with RIC
UA	Human Anotomy. General. Respiratory. Digestive	L4:2 and L2:2
UAA	Dissection. Dissection manuals. Anatomical laboratory techniques.	L:12
UAB	Human cytology and histology (Microscopic study of tissues.)	L11
UAC	Osseous (bony) tissues.	L12-82
UAD	Muscular and adipose tissues. Connective, epithelial, and cartilagenous tissues.	L83:2
UAE	Nerve tissues.	L74:2
UAF	Blood, lymph, and allied tissues.	L35:2
UAG	Microscopic study of pathogenic bacteria and viruses.	G24:19
UAH	Microscopic study of pathogenic fungi and protozoa.	G44:19
UAI	Regional anatomy. (Of parts of the body considered as wholes.)	L1:2
UAJ	Head and neck. Skull. Jaws.	L18:2
UAK	Thorax. Chest.	L15:2
UAL	Abdomen.	L14:2
UAM	Upper extremities. Arm. Elbow. Wrist. Hand.	L16:2
UAN	Lower extremities. Thigh. Knee. Leg. Foot.	L13:2
UAO	Respiratory system. Lungs and pleura.	L4:2
UAP	Nose. Larynx. Trachea. Bronchi.	L41:2
UAQ	Diaphragm. Mediastinum.	L1493:2
UAR	Digestive system. Stomach.	L2:2
UAS	·Mouth. Tongue. Salivary glands. (for the teeth see US)	L21:2
UAT	Pharynx. Tonsils. Esophagus.	L23:2
UAU	Intestines. Rectum. Anus.	L25:2
UAV	Liver. Gall bladder. Biliary tract.	L291:2
UAW	Pancreas. Peritoneum. Mesentery. Omentum.	L293:2
UAX	Lymphatic and glandular system. Spleen.	L39:2
UAY	Thymus, thyroid, parathyroid, adrenal, glands.	L63:2
UAZ	Mammary glands. Breasts.	L556:2
UB	Human anatomy. Musculoskeleta Neuro anatomy	L8:2 L7:2
UBN	Sense organs. ⁕Tactile. Proprioceptive.	L791:2
UBO	Eyes.	L185:2

RIC	Subject	CC Co-extensive with RIC
UBP	Ears.	L183:2
UBQ	Olfactory organs.	I 41:2
UC	Human physiology. Cardiovascular. Respiratory. Digestive.	L3:3 L4:3 and L2:2
UCA	Human physiology. Human biophysics.	L:3
UCN	Physiology of the respiratory system	
	Respiratory bio-chemistry. Gaseous exchange in the blood.	L4:3
UCO	Respiratory physics.	
	Breathing movements, sounds, rhythms, etc.	L4:(C)
UCP	Physiology of asphyxiation.	L:492
UCQ	Physiology of the digestive system.	
	Processes of digestion and metabolism.	L2:3
UCR	Oral and dental digestion.	
	Mastication, salivation, etc.	L214:3
UCS	Gastric digestion.	
	(In the stomach.) Gastric Juice. Pepsin.	L245:3
UCT	Intestinal digestion.	
	Functions of the intestines, liver, gall bladder, Pancreas,	
	bile ducts, pancreatic juice, tyrpsin, lipase, etc.	L25:3
UCU	Absorption.	
	(Of digested food into the blood stream.)	L:32
UCV	Physiology of the hunger and thirst sensations.	L:341
UCW	Metabolism. Of water. Of minerals.	L:33
UCX	Of vitamins.	L33;E97
UCY	Of carbohydrates and proteins.	L:33;E2Z2
UCZ	Of fats and lipoids.	L:33;E96
UE	Human physiology. Nervous System. Senses.	L7:3 and L76:3
UEL	Physiology of the organs of sight.	L185:3
UEM	Fibrous tunics of the eye. Corenea, conjunctive, sclera, etc.	L185:3
UEN	Eyeball and uvea. Crystalline lens. Vitreous	L185:3
UEO	Optic nerve and retina.	L185-74:3
UEP	Tear ducts and tears.	L1856:3
UJ	Medicine. Endocrine and Digestive tract diseases.	L6:4 and L2:4
UJJ	Diseases of the mouth, throat and esophagus.	
	Mumps. Tonsilitis. Stomatitis. Trench mouth.	L21:4
UJK	Stomach diseases.	
	(Gastric ulcers. Gastritis. Indigestion. Gastroen-	
	teritis, etc.)	L24:4
UJL	Intestinal diseases.	L25:4
	(Diarrhea. Constipation. Obstructions.)	
UJM	Intestinal ulcers. Diverticulitis.	L25:474
UJN	Enteritis. Colitis. Duodenitis. Ileitis.	L26:415
UJO	Diseases of the rectum and anus.	
	(Proctology.)	L2723:4
UJP	Diseases of the liver, gall bladder, etc.	
	(Hepatitis. Necroses. Cirrhosis. Jaundice, etc. For	
	the surgical removal of gall stones See UQL).	L291:4
UJQ	Diseases of the pancreas and peritoneum.	L293:4

RIC	Subject	CC Co-extensive with RIC
UJR	Nutritional (metabolic) diseases.	L:46
UJS	Beriberi.	L:4632
UJT	Scurvy.	L:4631
UJU	Pellagra.	L:461 (E972)
UL	Medicine. Communicable Diseases	L:42
ULA	Communicable diseases.	L:42
ULB	Eruptive fevers (Exanthemata).	L:423
ULC	Chicken pox (Varicella).	L:4232
ULD	Small pox (Variola major).	L:4231
ULE	Scarlet fever (Scarlatina).	L65:423
ULF	Measles (Rubeola). German measles.	L:4233
ULG	Bacterial, virus, and rickettsial diseases.	L:42
ULH	Spotted fevers	
	Rocky Mtn. spotted fever and various foreign tickbite fevers.	L:4234
ULI	Yellow fever.	L35:4263
ULJ	Typhus infections.	
	(Louse borne, flea borne, etc.)	L35:4231
ULK	Pasteurella infections. Tularemia. Other.	L35:424
ULL	Plague. Bubonic plague.	L396:4241
ULM	Salmonella infections. Salmonella fever. Others.	L:4242
ULN	Typhoid and Paratyphoid fevers.	L25:4241
ULO	Bacillary intoxications. Botulism. Other.	L25:4242
ULP	Lockjaw (Tetanus).	L72:4241
ULQ	Diptheria.	L41:4241
ULR	Enteric infections.	L25:424
ULS	Asiatic cholera.	L25:4251.4
ULT	European cholera.	L25:4251.5
ULU	Cholera infantum.	L9C,25:4251
ULV	Dysentery (Amoebic and bacillary).	L25:424
ULW	Toxemia. Septicemia. Pyemia. etc.	L35:44
ULX	Erysipelas.	L87:4244
UR	Opthalmology and Otology	L185:4 and L183:4
URI	Pathology of the eyes. In general.	
	And incl. any disorders not listed below.	L185:4:4
URJ	Wounds and injuries to the eyes.	
	Foreign bodies in the eyes.	L185:477:4
URK	Blindness. Institutions of the blind.	
	" Seeing eye " dogs.	L185:456
URL	Colour blindness.	L185:455:4
URM	Diseases of the cornea, sclera, iris and unea.	
	Corneal transplants. Enucleation. Eye banks.	L18512:4
URN	Of the retina and optic nerve.	L18517:4
URO	Of the crystalline lens and vitreous body.	
	Cataracts.	L18522:4
URP	Of the eyeball. Glaucoma.	L185:4

RIC	Subject	CC Co-extensive with RIC
URQ	Of the eye muscles. Heterophoria.	
	Strabismus (Cross eyes). Diplopia, etc.	L185:4
URR	Of the eyelids and conjunctiva. Trachoma.	
	Granulation. Conjunctivitis. Styes, etc.	L18511:4
URS	Of the tear glands and ducts. Dacryocystitis	L1856:4
URT	Disorders of refraction and accommodation.	
	Presbyopia and Myopia (near-and far-sightedness). Astig-matism, etc.	L185:45
URU	Correction of these disorders by spectacles or contact lenses. Optometry.	L185:45:6(C51:23)
UZ	Public Health. Fire and Safety work.	L:5491
UZA	Governmental attempts to prevent accidents.	L:5497
UZB	Highway traffic safety rules and regulations.	MX411:44:(Z)
UZC	Railway traffic safety rules and regulations.	MX415:94:(Z)
UZD	Water travel safety rules and regulations.	
	(Life boats, life preservers, sea lanes etc.)	MX42:94:(Z)
UZE	Air travel safety rules and regulations.	MX43:94:(Z)
UZF	Fire prevention and protection.	L:5491
UZJ	In theaters, night clubs, and other places of entertainment.	L:55(NA,8(NT))
UZK	In barber shops and beauty shops.	L:55(NA,8)
UZL	At swimming pools and bathing beaches.	
	(For artificial respiration see UPY).	L:55(NA,8)
UZM	In apartment houses, hotels, motels, inns and boarding houses.	L:55(NA,3)
UZN	In restaurants, lunch rooms, snack bars, and other public eating places.	L:55(NA,43)
UZP	Handling, storage, transport, and use of explosives.	F5594:98Y4
UZQ	Prevention of gas asphyxiation.	L:492:5
UZR	First aid work. Non-professional emergency medical treat-ment.	L:4:97

32 TABLE 2 : CC SEQUENCE

CC	Subject	RIC
F5594	Explosives	RK
F5594:98Y4	Safety precautions	UZP
G2	Protista	TDW
G24	Pathogenic Protista	
G24:19	Microscopic study	UAG
G24:19	Pathogenic bacteria and viruses	UAG
G24:19	Pathogenic fungi and protozoa	UAH
G34:19	Pathogenic viruses	UAG
G44:19	Pathogenic bacteria	UAG
G54:19	Pathogenic fungus	UAH
G64:19	Pathogenic protozoa	UAH

CC	Subject	RJC
L	Medicine	U
L:12	Dissection	UAA
L:2	Anatomy	UA
L:2:f3	Laboratory technique	UAA
L:3	Physiology	UC
L:32	Absorption	UCU
L:33	Metabolism	UCW
L:33;E210	Water	UCW
L:33;E68	Carbohydrates	UCY
L:33;E94	Fat	UCZ
L:33;E96	Lipoids	UCZ
L:33;E97	Vitamin	UCX
L:33;E9Z2	Proteins	UCY
L:341	Hunger	UCV
L:345	Thirst	UCV
L:4	Disease	UJ
L:419	Communicable	ULA
L:42	Infection	ULG
L:423	Eruptive fevers	ULB
L:4231	Small Pox	ULD
L:4232	Chicken pox	ULC
L:4233	Measeles (Rubeola)	ULF
L:4234	Spotted fever	ULH
L:424	Bacillary intoxications	ULG
L:4242	Salmonella	ULM
L:46	Nutritional	UJR
L:461(E972)	Pellagra	UJU
L:4631	Scurvy	UJT
L:4632	Beriberi	UJS
L:492	Asphyxiation	UCP
L:492:5	Prevention	UZQ
L:5491	Fire prevention and protection	UZF
L:5491:989S	Inspecting rules	UZG
L:5491:989S2	Fire extinction	UZH
L:5497	Government attempts to prevent accidents	UZA
L:55	Safety precautions for special situations	UZO
L:55 (-)	Safety and health precautions for in special types of places	UZI
L:55(NA,3)	Apartment houses	UZM
L:55(NA,4)	Hotels	UZM
L:55(NA,43)	Restaurants	UZN
L:55(NA,8(MM7))	Barber and beauty shops	UZK
L:55(NA,8(MY251))	Swimming pool	UZL
L:55(NA,8(NT))	Theaters, night clubs, and other places of entertainment	UZJ
L1:2	Regional anatomy	UAI
L11	Cytology	UAB

CC	Subject	RJC
L11-291:4995	Neuroses of liver	UJP
L12	Histology	UAB
L12:19	Microscopy	UAB
L12-22	Bony tissues	UAC
L13:2	Lower extremeties, Anatomy	UAN
L132:2	Foot, Anatomy	UAN
L134:2	Leg, Anatomy	UAN
L135:2	Knee, Anatomy	UAN
L136:2	Thigh, Anatomy	UAN
L14	Abdomen, Anatomy	UAL
L14-86111:2	Peritoneum, Anatomy	UAW
L14-86111:4	Peritoneum, Disease	UJQ
L14-861119X:2	Omentum, Anatomy	UAW
L14-861119Y:2	Mesentery, Anatomy	UAW
L1493:2	Diaphragm, Anatomy	UAQ
L15:2	Thorax, Anatomy	UAK
L158:2	Mediastinum, Anatomy	UAQ
L16:2	Upper extremeties, Anatomy	UAM
L163:2	Arm, Anatomy	UAM
L164:2	Elbow, Aanotomy	UAM
L166:2	Wrist, Anatomy	UAM
L167:2	Hand, Anatomy	UAM
L17:2	Neck, Anatomy	UAJ
L18:2	Head, Anatomy	UAJ
L18-82:2	Skull, Anatomy	UAJ
L183:2	Ears, Anatomy	UBP
L185:2	Eye, Anatomy	UBO
L185:4:4	Physiology	UBL
L1851:3	Eyeball, Physiology	UEN
L1853:3	Fibrous tunics of the eye, Physiology	UEM
L1853:4	Eyeball, Disease	URP
L185:45	Eye, Disorder of refraction and accommodation	URT
L185:45:6(C51:23)	Eye, Correction	URU
L185:451	Myopia	U: .:
L185:452	Presbyopia	URT
L185:453	Astigmatism	URT
L185:454	Glaucoma	URP
L185:455	Colour blindness	URL
L185:456	Blindness	URK
L185:456,F	Institution for the blind	URK
L185:47:75:8	Eyebank	URM
L185:47:76	Enucleation	URM
L185:4712	Strabismus (Cross Eyes)	URQ
L185:4713	Heterophoria	URQ
L185:4715	Diplopia	URQ
L185:477	Eye, Wounds and injuries	URJ
L185:48	Eye Foreign bodies	URJ

CC	Subject	RIC
L185-83:3	Eye, Muscles, Physiology	UEQ
L185-83:4	Eye, Muscles, Disease	URQ
L18511:3	Eyelids, Physiology	UEQ
L18511:4	Eyelids, Disease	URR
L18511:473	Granulation	URR
L18511-86113:3	Conjunctiva, Physiology	UEM
L18511-86113:4	Conjunctiva, Disease	URR
L18511-86113:415	Conjunctivitis	URR
L18511-86113:42	Trachoma	URR
L18512:3	Cornea, Physiology	UEM
L18512:4	Cornea, Disease	URM
L18512:47:75	Corneal transplants	URM
L18512:3	Sclera, Physiology	UEM
L18513:4	Sclera, Disease	URM
L18514:4	Iris, Disease	URM
L18516:415	Styes	URR
L18517:3	Retina, Physiology	UEO
L18517:4	Retina, Disease	URN
L18521:3	Aquesous, humour, Physiology	UEN
L18522:3	Crystaline lens, Physiology	UEN
L18522:4	Crystaline lens, Disease	URO
L18522:4565	Cataracts	URO
L18523:3	Vitreous humour, Physiology	UEN
L18523:4	Vitreous humour, Disease	URO
L1856:4	Tear gland, Diseases	URS
L18565:3	Tears, Physiology	UEP
L18595:3	Uvea, Physiology	UEN
L18895:4	Uvea, Disease	URM
L2:2	Digestive system, Anatomy	UAR
L2:3	Digestive system, Physiology	UCQ
L2:451	Indigestion	UJK
L21	Mouth	
L21:2	Mouth, Anatomy	UAS
L21:4	Mouth, Disease	UJJ
L21252:415	Stomatitis	UJJ
L2127:2	Jaws, Anatomy	UAJ
L213:2	Tongue, Anatomy	UAS
L214:3	Dental digestion	UCR
L216:2	Salivary glands, Anatomy	UAS
L2161:423	Mumps	UJJ
L219:2	Tonsils, Anatomy	UAT
L219:415	Tonsilitis	UJJ
L22:2	Pharnyx, Anatomy	UAT
L23:2	Esophagus, Anatomy	UAT
L24:2	Stomach, Anatomy	UAR
L24:3	Stomach, Physiology	UCS

CC	Subject	RIC
L24:4	Stomach, Disease	UJK
L24:415	Gastritis	UJK
L24:415	Gastroenteritis	UJK
L245:3	Gastric digestion	UCS
L245:474	Gastric ulcers	UJK
L245(E982PR-P):3	Pepsin, Digestion	UCS
L25:2	Intestines, Anatomy	UAU
L25:3	Intestines, Physiology	UCT
L25:4	Intestines, Disease	UJL
L25:415	Diverticulitis	UJM
L25:424	Enteric infections	ULR
L25:4241	Typhoid	ULN
L25:4242	Bacillary	ULV
L25:4251.4	Asiatic cholera	ULS
L25:4251.5	European cholera	ULT
L25:4262	Amoebic dysentery	ULV
L25:451	Constipation	UJL
L25:452	Diarrhoea	UJL
L25:474	Ulcers	UJM
L26:415	Enteritis	UJN
L266:415	Duodenitis	UJN
L268:415	Ileitis	UJN
L2722:415	Colitis	UJN
L2723:2	Rectum, Anatomy	UAU
L2723:4	Rectum, Disease	UJO
L2724:2	Anus, Anatomy	UAU
L2724:4	Anus, Disease	UJO
L291:2	Liver, Anatomy	UAV
L291:3	Liver, Physiology	UCT
L291:4	Liver Disease	UJP
L291:415	Hepatitis	UJP
L291:415	Cirrhosis	UJP
L291:453	Jaundice	UJP
L2917:2	Biliary tract, Anatomy	UAV
L2917:3	Biliary tract, Physiology	UCT
L292:2	Gall bladder, Anatomy	UAV
L292:3	Gall bladder, Physiology	UCT
L292:4	Gall bladder, Disease	UJP
L293:2	Pancreas, Anatomy	UAW
L293:3	Pancreas, Physiology	UCT
L293:4	Pancreas, Disease	UJQ
L2935:3	Pancreas, Juice	UCT
L2935(E982E-L):3	Lipase, Digestion	UCT
L2935(E982PR-T):3	Trypsin, Digestion	"
L35:2	Blood, Anatomy	UAF
L35:38	Blood, Gaseous exchange.	UCN

CC	Subject	RIC
L35:4231	Typhus infection	ULJ
L35:4241	Septicemia	ULW
L35:4242	Pyemia	ULW
L35:4263	Yellow fever	ULI
L35:44	Toxemia	ULW
L39:2	Lymphatic vessel, Anatomy	UAX
L396:2	Lymph, Anatomy	UAF
L396:4241	Bubonic plague	ULL
L4:2	Respiratory system, Anatomy	UAO
L4:3	Respiratory system, Physiology	UCN
L4:(C)	Respiratory physics	UCO
L4:(E)	Respiratory biochemistry	UCN
L412:2	Olfactory organs, Anatomy	UBQ
L41:4241	Dipteria	ULQ
L41:2	Nose, Anatomy	UAP
L42:2	Larynx, Anatomy	UAP
L43:2	Trachea, Anatomy	UAP
L44:2	Bronchi, Anatomy	UAP
L45:2	Lungs, Anatomy	UAO
L4511:2	Pleura, Anatomy	UAO
L556:2	Breasts, Anatomy	UAZ
L6:2	Glandular Anatomy	UAX
L61:2	Adrenal glands, Anatomy	UAY
L62:2	Spleen, Anatomy	UAX
L63:2	Thymus, Anatomy	UAY
L64:2	Parathyroid, Anatomy	UAY
L65:2	Thyroid, Anatomy	UAY
L65:4	Throat, Disease	UJJ
L65:423	Scarlet fever	ULE
L72:4241	Tetanus	ULP
L74:2	Nerve, Anatomy	UAE
L74-185:3	Optic Nerve, Physiology	UEO
L74-185:4	Optic Nerve, Disease	URN
L76:2	Proprioceptive	UBN
L76-87:2	Tactile	UBN
L791:2	Sense organs, Anatomy	UBN
L83:2	Muscles, Anatomy	UAD
L86:2	Connective, Anatomy	UAD
L861:2	Epithelium, Anatomy	UAD
L866:2	Cartalegeneous, Anatomy	UAD
L9C,25:4251	Cholera infantum	ULU
MX411:94:(Z)	High way traffic, Safety rules and regulations	UZB
MX415:94:(Z)	Railway traffic, Safty rules and regulations	UZC
MX42:94:(Z)	Water travel, Safety rules and regulations	UZD
MX43:94:(Z)	Air travel, Safety rules and regulations	UZE

4 Host Class

The differences in the (HC) for the two following subjects mentioned in Sec 3 are worth consideration:

41 EXPLOSIVES : HANDLING, STORAGE, TRANSPORT AND USE

See RIC number UZP in Table 1 in Sec 31. CC treats the ' Safety precautions for handling, storage transport, and use of explosives ' as a sub-class of the class " Management of the manufacture of explosives ". This means that CC puts the subject in the (MC) F Technology. On the other hand, RIC treats it as a sub-class of the class " Public health, Fire and safety works ". This means that RIC puts the above subject in the (MC) U Medicine.

42 TRAFFIC SAFETY RULES AND REGULATIONS

See RIC numbers UZB to UZE in Table 1 in Sec 31. CC treats the ' High way traffic safety rules and regulations ' ' Railway traffic rules and regulations ' etc as rules for safety measure in the various kinds of transport. This means that CC puts the above subject as a (CC) in the (MC) M Useful Arts. On the other hand, RIC treats them as sub-classes of the class " Public health. Fire and safety works ". This means that RIC puts the above subject as a subdivision of the (MC) U Medicine.

43 APPEAL TO THE LAWS OF LIBRARY SCIENCE

Whether the (HC) to which the above two subjects are assigned in CC is more helpful or that to which they are assigned in RIC is more helpful, needs consideration. This is a decision to be made in the Idea Plane. The Second, the Third, and the Fourth Laws of Library Science may be used in making the decision. The question to be answered is, " Will the safety measures be the same in all enterprises and industries ? Or will they vary with the enterprise or industry ? " Presumably, they will vary. If so, the placing in CC will satisfy the Laws of Library Science better. This is further supported by the fact that the Managing Authorities of the enterprise or industry are the party who will form the primary users of the documents on the subject.

5 Helpfulness of Facet Sequence

We shall study the helpfulness of the sequences of facets preferred respectively by RIC and CC. For this purpose, we shall take the following subject as a random sample.

Anatomy of the human digestive system.

Putting this in Kernel Terms we get,

Anatomy. Digestive System. Medicine. Both the schemes agree on the (BC) to be 'Medicine'. The difference comes only in the sequence of the two isolate facets.

RIC prefers " Anatomy. Digestive System ".
CC prefers " Digestive System. Anatomy ".

CC's sequence of facets conforms to the Wall-Picture Principle [8]. According to this Principle, the concept ' Anatomy ' will not be operative unless the concept ' Digestive System ' is conceded. This Principle expresses a fundamental way in which the mind works. The sequence preferred by RIC is the very reverse of the one indicated by Wall-Picture Principle. Perhaps, this unnatural preference can be explained only as due to the pressure of DC tradition.

51 LACUNA IN RIC

Incidentally, it may be stated that, while RIC provides for a specific study such as Anatomy, Physiology, and Disease of a specific organ, it does not provide for a study of all such problems in respect of a sepecific organ. This is again, perhaps, due to the pressure of DC tradition.

6 Co-extensiveness and the Law of Parsimony

With regard to the co-extensiveness of (CN) with the subject, the following are the inferences from the sample tables given in Sec 3.

Number of Subjects

Studied in Sec 3	With co-extensive (CN) in			
	CC		RIC	
	Absolute figures	Percentage	Absolute figures	Percentage
242	242	100	125	52

The above statement shows that RIC provides for co-extensive (CN) only for about half the number of subjects, while the CC does so for all the subjects. Obviously, the two schemes differ in their approach to classification of books. According to RIC books do not require close classification. Dr Rider says, " The " materials " demanding " close " classification treatment are (usually) not books. They are unbound pamphlets, reports, " separates ", and similar small items. Often they are not in printed form at all, but in mimeographed or typewritten form ". [9]

The universe of knowledge is throwing forth cascades of micro-thought. As book-production is today, these micro-thoughts appear not only in the form of articles in periodicals, reports etc but also in the form of books. The thought embodied in the articles of today may appear as books within a few years. This statement can be inferred from past experience. The thought embodied in books of today is deeper than what it was a decade ago. This means that the books require closer classification than what RIC has given.

61 TABLE 3 : RIC SEQUENCE

The following table gives a list of eleven books published during the period 1957-62 on ' Diseases of Liver ' and ' Diseases of Gallbladder '. Column

1. of the table gives the serial number ; column 2 gives the RIC call number ; and column 3 gives the example with the name of its author, title and year of publication.

SN	RIC	Example
1	UJP.VD	DAVIDSON C S : Cirrhosis of the liver. 1957.
2	UJP.VJ	JAASKELAINEN V : Gallbladder diseases. 1958.
3	UJP.VL	LEEVY C M : Practical diagnosis and treatment of liver disease. 1957.
4	UJP.VP	PHILLIPS D F : Non-functioning of gallbladder. 1958.
5	UJP.VS	SHERLOCK S : Diseases of the liver and biliary system. Ed 2. 1958.
6	UJP.WC	CAMERON R and HOU PC : Biliary cirrhosis. 1962.
7	UJP.WE	ELFVING G : Crypts and ducts in the gallbladder wall. 1960.
8	UJP.WK	KLECKNER M S : Cirrhosis of the liver. 1960.
9	UJP.WS	SELZER D W : Pathologic study of so-called papillomas occurring in non-calculous gallbladders. 1060.
10	UJP.WS2	SNEDDON J R: Natural treatment of liver troubles and associated ailments. 1960.
11	UJP.WW	WHITCOMB F F : Bile pigments of jaundice. 1960.

It could be seen from the above table that the books on 'Diseases of Liver' and on ' Diseases of Gallbladder ' are all assigned one and the same (CN) ' UJP '. The sub-arrangement is by Book Number. In this arrangement of books there may not be much difficulty in picking out a particular book. But it is time consuming to pick out or view together while browsing all the books on a specific subject such as ' Liver Diseases '. For, they get scattered among the books such as those dealing with ' Diseases of Gallbladder '. On the other hand, if co-extensive (CN) is assigned to each one of the specific subjects embodied in the respective books, the arrangement will be as follows :

62 TABLE 4 : CC SEQUENCE

The following table arranges the above eleven books in the CC sequence. Column 1 gives the serial number of the document ; column 2 the CC (CN) co-extensive with the specific subject of the document; and column 3 the example, giving the name of its author, title, and the year of publication.

SN	CC	Examples
	L241 *Liver*	
1	L291:4	N58 SHERLOCK S : Diseases of the liver and biliary system. Ed. 2. 1958.
2	L291:4:6	N57 LEEVY C M : Practical diagnosis and treatment of liver disease. 1957.
3	L291:4:6	N60 SNEDDON J R : Natural treatment of liver troubles and associated ailments. 1960.
4	1.291:415	N57 DAVIDSON C S : Cirrhosis of the liver. 1957.
5	L291:415	N60 KLECKNER M S : Cirrhosis of the liver. 1960.

SN	CC	Example
6	L291:453:42915 L2917 *Gallbladder*	N60 Whitcomb F F: Bile pigments of jaundice. 1960.
7	L2917:412	N60 Elfving G : Crypts and ducts in the gallbladder wall. 1960.
8	L2917:415	N62 Cameron R and HOU P C : Biliary cirrhosis. 1962.
9	L292:4	N58 Jaaskelainen V : Gallbladder diseases. 1958.
10	L292:452	N58 Phillips D F : Non-functioning of gallbladder. 1962.
11	L292:47247	N60 Selzer D W : Pathologic study of socalled papillomas occurring in non-calculous gallbladders. 1960.

The above table shows how the co-extensive (CN) brings together all the closely related books. All the books pertaining to ' Liver Disease ' are brought together and similarly those on ' Diseases of Gallbladder ' are also brought together. Thus, in a closely classified sequence, a reader can pick out all the books on the specific subject of his interest more quickly than in a broadly classified collection. He will so find them together on the shelves while browsing. So also it will be in respect of the Main Entries in the Classified Catalogue. This will be a help, if the library is not an open-access one.

7 Terminology

Terminology is the set of terms used in a schedule to denote the ideas represented by the ordinal numbers. The set of terms used in a Scheme of Classification are to be chosen carefully. For this purpose, they are to be precise and pin-pointed. This, in turn, requires, the observation and strict adherence to certain normative principles both by the classificationist at the time of the preparation of the schedule and by the classifier at the time of its use. We shall study RIC in relation to these Principles.

71 Canon of Context

The following comments on RIC can be made in regard to the Canon of Context. [3]

1 Normally the organism of study in Medicine is known to be the human body. Therefore, according to the Canon of Context it would be sufficient to use the term ' Anatomy ' against the number UA, and Cytology and Histology against the number UAB, and Physiology against the number UCA, without prefixing the epithet ' Human '.

2 Against the (CN) UAB we find the term ' Microscopic study of tissues'. But the term " tissues " is repeated against the next four (CN). This again shows failure to take advantage of the Canon of Context.

3 Again, the (CN) UCA represents ' Human Physiology '. The repetition of the term ' Physiology ' against the succeeding (CN) UCN, UPC, UCQ, UCU, and UEL, could have been avoided.

4 A similar remark applies also to the repetition of the term ' Disease ', against the (CN) in the Host Classes UJ, UK, UL, UM, and UO and their subdivisions.

72 Enumeration

In many instances, a (CN) falling within the area of ' Anatomy ' has against it not only a comprehensive term denoting the idea represented by the (CN), but has also other terms denoting its subdivisions. For example, the term ' Upper Extremities ' is followed by the terms ' Arm, Elbow, Wrist, Hand '. It is unnecessary to enumerate in detail such component terms. It is unnecessary to enumerate these in detail when co-extensive (CN) is not meant to be assigned. We can include the other terms in an alphabetical index and refer each one of them to the proper (CN). The schedule should not function as a dictionary.

73 Co-ordinate Terms

In many Instances, a (CN) is made to represent several co-ordinate classes explicitly mentioned. This happens to be unavoidable as there is no single comprehensive term to cover them all, taken together. Here are two such examples.

1   ULG Bacterial, Virus and Nickettsial diseases.

2   URM Diseases of the cornea, sclera, iris and uvea.

      Corneal transplants.   Enucleation.   Eye banks.

74 Homonyms

In some cases, the RIC's terminology creates homonyms, as in the case of the following two (CN).

      JJC   Welfare work for the blind.   Braille books.   Talking books.
               Seeing eye dogs.   Recreation for the blind.

      URK   Blindness.   Institution for the blind.   Seeing eye dogs.

The term ' Seeing eye dogs ' is enumerated in two places.   In the context of first case it can be taken as a kind of ' Relief Work'. But in the second, it comes under the (HC) UR, Opthalmiology and it is difficult to make out what the classificationist has in his mind.

75 Synonym

Synonyms are also equally dangerous as homonyms in a classificatory language.   The classificationist should avoid synonyms by adopting other methods—such as giving a term against a (CN) and referring all the other synonymous terms to the same (CN) by means of an alphabetical index.   But RIC enumerates all the synonymous terms against a (CN).

For example, against the (CN) UAK we have ' Thorax. Chest'.   According-ing to *Blackiston's new gould medical dictionary*(1951) ' Thorax ' and ' Chest ' are synonymous terms.

8 Hospitality in Notation

A shrewd classificationist who expects his scheme of classification to last long should fight his way through the uncertain and unpredictable growth of the universe of knowledge.   He should so design his notational system that it stands the onslaught of the universe of knowledge.   The capacity to stand this

onslaught is called ' Hospitality '. Hospitality in Notation means, the extent of provision to accommodate the newly emerging classes in the proper filiatory sequence decided by the Idea Plane. Hospitality demands interpolation and extra-polation. Hospitality in Notation is recognised to have two forms.

1 Hospitality in Array [5] ; and

2 Hospitality in Chain [6]

RIC has not fully recognised the need for ' Hospitality '. Its notational system can not stand the pressure on hospitality caused by growth of universe of knowledge. For example, the array of (MC) is fully coccupied by the existing classes of the universe of knowledge. It cannot take any more (MC). Thus, there is no provision for Hospitality in the Array of (MC). In the arrays of orders 2 and 3, the hospitality is respected only to the extent of providing gaps. This provision is inadequate. The gaps may soon get choked up. Rigidity—a danger in any scheme of classfiication—is fast outwitting RIC's notational system. Hospitality in Chain is not respected in RIC as isolates belonging to an array of order higher than 3 are invariably telescoped into the array of order 3. Sometimes a whole Chain of Classes is represented by one and the same (CN).

CC's notation has made provision for Hospitality by means of 12 Devices [2]. The latest one is that of Empty and Emptying digits—which make possible the interpolation of a new isolate between any two existing consecutive isolates and the extra-polation at the two ends of any array.

BIBLIOGRAPHICAL REFERENCES

Note—1 The following is a list of documents used.

2 Column 1 gives the S N of the document.

3 Column 2 gives the number of the Section in the text, containing the reference.

4 Unless indicated otherwise, the author of the document is S R Ranganathan.

1 See I NEELAMEGHAN A : New developments in library classification in India. (Paper presented to International Study Conference on Classification Research (Elsinore) 1964, September). Working Paper 6.

2 See 8 *Ibid* (See 3431).

3 See 71 Canon of context. RANGANATHAN S R : *Prolegomena to library classification.* Ed 2, 1957, Sec 174).

4 See 2 Common isolates. RANGANATHAN S R : *Elements of library classification.* Ed 3, 1957, Chap P).

5 See 8 Hospitality in array. RANGANATHAN S R : *Prolegomena to library classification.* Ed 2, 1957, Chap 22).

6 See 8 Hospitality in chain. (*Ibid.* Chap 23)

7 See 5 Wall-picture principle. (RANGANATHAN S R : *Elements of library classification.* Ed 3. 1962. Sec N32).

8 See 22 RIDER Fremont : *Rider's international classification for the arrangement of books on the shelves of general libraries.* Prelim Ed. 1961. P XXII).

9 See 6 *Ibid*, (P xxviii).

STATEMENT OF MAN-HOURS

The preparation of this paper has taken nearly 40 hours of author's time and 8 hours of editor's time.