Lib sc. 9; 1972; PAPER R.

Colon Classification for Economics in the Light of the Idea of Adjunct Main Subject. [Instalment 1.] (Classification problems, 64). (Design series. 30). (Social science series. 6).

S R Ranganathan, National Research Professor in Library Science, and Honorary Professor, DRTC, Bangalore-3.

[This is instalment I on the re-building of CC Schedule for Economics. During the last half a century, CC has been developing in the light of the General Theory of Library Classification and of the development in the Universe of Subjects. It has now reached Stage 8 — that of Freely Faceted Stage. While preparing Ed 7, incorporating all the latest findings, difficulty was felt in the revision of the Main Subject "X Economics". The absence of Standard Terminology and the abstract nature of the subject have been causing difficulties. In re-doing Economics, one of the new ideas used is that of Adjunct Main Subject. The first cluster of the Adjunct Main Subjects going with "X Economics-in-Theory" consists of "XV Economics-in-Action in a territory and in a business enterprise in a territory", and Economics-in-Theory in business enterprise". other subjects of the cluster - XYA International Economics (with its own Adjunct Main Subjects), XYT Econometrics, and XYV Economico-cybernetics will be taken up in a future instalment of this sub-series. This instalment deals only with the schedules for the Personality Isolates. The schedule for (1P1) of "X Economicsin-Theory" is derived from the comparative study of the six schemes - DC, UDC, LC, CC, BC, and RIC. The schedules for Property Isolates, Energy Isolates, and Method Isolates, and the Isolates for Round 2 will be taken up in a future instalment of this sub-series.]

## 1 Stages in the Development of Colon Classification

11 STAGE 1: PRIMITIVE STAGE

The Colon Classification (CC) was first conceived while in England in 1925. Its special quality was later indicated by the

term 'Faceted Scheme for Classification'. By May 1925, provisional sets of Schedules were made for:

1 Main Subjects:

2 Anteriorising Common Isolates;

3 Space Isolates;

4 Time Isolates; and

5 Special Isolates for the classification of compound subjects going with some of the Main Subject.

#### 112 Try-Out 1

These tentative schedules were used, in my voyage back to Madras in M V Dumana, to classify the books on board the ship and rearrange them in a classified sequence. The Captain of the Ship kindly allowed it; and many of the passengers appreciated the improvement in the usefulness of the new arrangement of books.

## 113 Try-Out 2

Further, I had with me an interleaved copy of the printed catalogue (1914) of the Madras University Library; it had listed about 10,000 books as distinct from periodical publications. Each of the books with tell-tale title was given its Colon Numbers against its entry. The refractory books were classified after looking into the books on reaching Madras.

#### 12 STAGE 2: STARTING OF CLASSIFICATION

## 121 Recruitment of Staff for Classification

Two raw-graduates were appointed for the Library. They were given in-training while the Class Numbers were put in the books already classified during voyage and thereafter. They were also put against their respective entries in the pastedown catalogue.

## 122 Starting of Regular Classification

Then regular classification work started. Based mainly on my familiarity with the subjects, their popularity among the readers, and an appreciable collection in them, the books in the Main subject Literature, Education, Psychology, History, and Law were taken up successively for classification. After arriving at the necessary schedule of special isolates, in regard to each subject, the books in it were classified by all the three of us. Part of the routine of each day was to enter the Class Number of each book at stated places in each book and also against its entry in the paste-down catalogue. Then followed in succession the other subjects as determined by the size of our collection on the subject, the popularity of the subject, and the experts' help

available in the building of the schedules of special isolates for the subject.

#### 123 Additions and Amendments to the Schedules

Any new problems arising in the classification work done during the day was also discussed and a solution was found out. Then the necessary additions and amendments were made in the provisional schedules of isolates.

After some time, the staff were able to classify without my immediate presence and help. Then I withdrew myself now and again each day to take up Stage 3 in the development of Colon Classification.

#### 13 STAGE 3: TRY-OUT IN SYSTEMATIC CLASSIFICATION

Literature formed the largest and the most popularly used collection. As the classification of the books in this subject was nearing completion, all the books classified were picked out from their alphabetical positions in their old arrangement. They were then arranged, in the classified sequence in the most accessible part of the stack-space. All the new accessions in "Literature" were also classified along with the old books.

#### 14 STAGE 4: PREPARATION OF CLASSIFIED CATALOGUE

As Stage 3 was in progress, a classified catalogue with an alphabetical index was prepared concurrently with the classification of the books. A raw-graduate was recruited for cataloguing. He was given in-training in cataloguing according to a provisional Classified Catalogue Code drawn up by me. The catalogue was of course made in cards of standard size — 125 mm × 175 mm. The catalogue cards were filed in a cabinet. And the necessary guide-cards were prepared and inserted.

#### 15 STAGE 5: TRY-OUT WITH READERS

In the region occupied by the classified books shelf-guides and bay-guides were put up to the limited extent allowed by the peculiar kind of book-racks in use in the Connemera Public Library, where our Library was temporarily located. The doors of the book-racks were all thrown open. Readers were taken direct to the shelves. I personally gave them all possible reference help till each reader could get the books needed by him at the moment. By the by, this was indeed the first time of the introduction of "Open access" and of "Reference service" in South India, and perhaps in India as a whole. This gave me very rich experience. Whenever warranted the readers were also introduced to the Classified Catalogue and to its use. The reaction of the readers to the sequence of the subjects was care-

fully observed. Whenever necessary, the help of the readers was sought to get, if possible, a more helpful sequence. Notes taken of all such reactions and suggestions were discussed with the classifying and the cataloguing staff each evening. Anything found helpful was incorporated in the Schedules of Isolates and in the Catalogue.

Apart from continuing Open Access and Reference Service in this way, as and when the classification of each Main Subject was completed, the books on them were brought together in a helpful place in the stack-space and the process was repeated as

in the case of the Main Subject "Literature".

#### 16 STAGE 6: RIGIDLY FACETED STAGE

Any compound subject going with a basic subject was assumed to present a pre-determined set of facets arranged in a pre-determined sequence. During that period the Schedule of Isolates for each of the facets likely to occur in the compound subjects, going with a particular basic subject, was constructed with the help of the university and college teachers in the respective subjects. This was possible because, before becoming the University Librarian in 1924, I had myself belonged to that group. And I had sufficient intimacy with them. Therefore they gave me their help ungrudgingly. At this stage, facets were all chosen by flair and not on the basis of any guiding principles provided by a Theory of Library Classification. In fact at that time there was no such Theory of a dynamic kind, worth-speaking of.

## 17 STAGE 7: THEORY OF LIBRARY CLASSIFICATION

The first book on the Theory of Library Classification—the Prolegomena—came out in 1937 (3). This formulated some guiding principles for identifying the different possible facets needed in compound subjects. It also helped in fixing the relative sequence of the facets of a compound subject. In the light of this Theory the facet structure of some of the subjects was changed into a more helpful one. Even here, the facet structure was rigid. The only improvement was in the increase of the number of facets in the facet structure going with certain basic subjects.

#### 18 STAGE 8: FREELY FACETED STAGE

The further development in the Theory of Classification led to the concept of a "Freely Faceted Classification". In contradistinction, each of the earlier versions of CC was described as "Rigidly Faceted Scheme". In a Freely Faceted Classification, a compound subject going with a particular basic

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subject has freedom to present as many or as few facets as found necessary; in particular, it need not present every facet possible in other compound subjects. This brought the realisation that the facet structure does not belong to the basic subject but only to the compound subjects going with it.

#### 2 Delay in the Work on Edition 7 of CC

21 DIFFICULTIES IN LIBRARY SCIENCE, MATHEMATICS, AND ENGINEERING

In 1969 work was started in revising the CC for its Ed 7. in the light of all the new principles evolved in the Theory of Classification, and the new compound subjects arising in the Universe of Subjects, in association with each basic subject. In the course of this work, four subjects have been giving difficulty. In fact these subjects alone are still delaying the release of Edition 7. These four subjects are "X Economics", "D Engineering", "B Mathematics", and "2 Library Science". "Library Science" can be taken up and done easily. The difficulties of "Engineering" belong mostly to the Notational Plane, created by Production Engineering involving an innumerable number of basic subjects and of raw materials, intermediate commodities. and ultimate commodities. "Mathematics" is an ever growing subject. It grows in unexpected ways; and therefore, it is difficult to anticipate what will come round the corner and finalise either the facet structure or the schedules for different basic subjects going with it. Therefore, this subject will have to be revised from time to time, in the light of the latest ideas current at the time. We are therefore taking the help of mathematicians in deciding the peculiarities met with today in the revision of the scheme for the classification of Mathematics.

## 22 DIFFICULTIES IN ECONOMICS

220 Reason for Difficulties

The scheme for the classification of the subjects in "Economics" was done badly in Stage 2 and it has continued to be virtually the same down to Ed 6 (1960). The difficulty in Stage 2 was due to the conditions prevailing in the Madras University Library at that time. These were as shown in the succeeding sections.

## 221 Non-Availability of a Representative Collection of Books in Economics

I took charge of that Library in 1924. Then most of its books in Economics had been segregated into a Departmental Library with little control by the librarian, and even access to it was not easy for him. The main Library had only a few out-

moded books on Economics. Its annual accession was negligible, for the acquisition of all worth while new books was made by the Departmental Library.

222 Non-Availability of Expert Economists for Consultation

I could not find, as I did in other subjects, any teachers of economics either interested in classification or even in arranging, in a helpful sequence, the large collection in the Departmental Library. Each teacher knew the exact position, among the shelves, of the few books wanted by him now and then. That was deemed to be sufficient for him.

223 Resulting Faulty Facet Structure and the Schedules of Special Isolates

The result, of the unusual absence of opportunity either to make an extensive study of books on Economics or to have helpful consultation with interested and willing teachers of economics, had an unfortunate effect. In Stage 2 of the development of CC, the facet structure and the schedules of isolates for each facet, needed in Economics were not constructed in a helpful way. Before releasing Ed 7 of CC, it was strongly felt that this fault in the Colon scheme for the classification of the subjects in Economics should be removed.

224 Absence of Standard Terminology in Economics

Another factor obstructing a helpful design of facet structure and of enumeration in the schedules of special isolates for subjects in Economics was the absence of an agreed standard terminology in the subject-field. For nearly a century each of the Natural Sciences has been building up a standard terminology. For this purpose many of them have established International Committees for Nomenclature. Even as late as 1950, difficulties were felt in the establishment of schedules for special isolates for Agriculture, for want of adequate technical terms. In that year the International Conference on the subject gave approval to the use of the term 'Cultivar' to denote a cultivable variety of a plant. The use of this standard term removed many of the difficulties felt till then in constructing the schedules of special isolates for "Crops". When the facet structure and the schedules for special isolates for use in Economics were first attempted, no standard technical terms were available in Economics. It is not known whether much progress has been made in the field of economics even today. Every classificationist is looking forward to the professional economists to remove this handicap.

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225 Testimony of the Economists Themselves

The economists themselves bear testimony to the handicaps felt by them as a result of there being no agreed technical terminology in their subject field. As an illustration here is a statement by a Senior Lecturer in Economics. "It is usual for books on economics to open with a discussion of the inadequacy of concise definitions of the subject. Though it may be difficult to agree on a satisfactory, concise definition of economics, its subject-matter presents less difficulty. Since nowadays most people earn their living by specialising in relatively narrow fields of activity, almost any ordinary business transaction involves many branches of the subject. Specialisation makes an exchange of goods and services necessary, and this is helped by the use of money as a medium of exchange. Economics is concerned with many problems of production, but not with the technique of production. Some problems of production fall within the province of the technician. Economics is concerned with such problems as the scale of production, whether firms carry out the production of a commodity from start to finish or whether they undertake only single processes. Economics has to do with production as a whole, that is, the national income. Another important branch of the subject is devoted to problems associated with the distribution of the national income. This involves a study of money and the determination of prices.

"If certain assumptions are made regarding the economic behaviour of people a set of economic principles can be built up by logical reasoning. Economic theory may often appear to be unrelated to the problems of the actual world, but it provides the principles and tools of analysis required for a study of the actual economic problems of the real world, this being the field of applied economics. Yet another branch of economics is devoted to a description of the working and functions of economic institutions such as central and commercial banks, the stock exchange, etc. Most practical problems can be regarded from many different angles, the economic aspect being only one of them. Economics is a social science because it concerns itself with an aspect of human behaviour. As such it formed at one time a branch of philosophy. With the expansion of the subject, due to the increasing complexity of production and distribution following upon the Industrial Revolution, it became a separate subject of study" (1).

## 3 Methods Used for Improving the Facet Structure

31 DETERMINATION OF FACET STRUCTURE
Our own work for improving the facet structure for the

compound subjects going Economics went along the following lines:

- 1 Extensive study of current books and particularly of papers in Economics;
- 2 Making full use of the indications of the advanced stage already reached by the Theory of Library Classification;
- 3 The clear view now got of the Five Fundamental Categories and their manifestations;
- 4 Improvement in the understanding and the application of the Postulates for Classification;
- 5 Use of the recently developed concept of Adjunct Main Subject; and
- 6 Using the concept of Adjunct Main Subject to replace the main subject "X Economics" by several Adjunct Main Subjects forming the cluster "X Economics".

## 32 DEFINITION AND EXAMPLES OF ADJUNCT MAIN SUBJECTS

Giving effect to the opinions expressed by the specialists in economics, has been made easy by the concept of Adjunct Main Subjects developed during the last 2 years. An Adjunct Main Subject is a Main Subject closely related to an already existing Main Subject but not identical with it but demanding its own status as a Main Subject on its own right. Further all the Adjunct Main Subjects of a specific Main Subject should come immediately after the latter, without any other Main Subject or any of its Adjunct Main Subjects intervening. Here are some examples of Adjunct Main Subjects:

B Mathematics V History

BT Statistical calculus VX Theory of archeology

BX Astronomy

E Chemistry
EX Chemical engineering
Y Sociology
YX Social work
YYT Sociometry
YYV Socio-cybernetics

L Medicine

LUD Medical technology

LYI Nursing

33 ADJUNCT MAIN SUBJECTS FORMING THE CLUSTER "X ECONOMICS"

The following is the list of Adjunct Main Subjects forming the cluster of "X Economics":

1 "X Economics-in-theory"

- 2 "XV, [(GD)] Economics-in-action in any specified terri-
- tory";
  3 "XV, [(GD)], [(SD)] Economics-in-Action of business enterprise in a specified territory";
- 4 "XX, [(SD)] Economics-in-Theory of business enterprise";
  - 5 "XYA International Economics-in-Theory";
- 6 "XYAV, [(GD)] International Economics-in-Action in specified countries";
- 7 "XYAV, [(GD)], [1P2] International economics-in-Action of Business enterprise in specified countries with reference to specified business enterprise";
- 8 "XYAX, [IPI] International Economics-in-Theory of Business Enterprise";
  - 9 "XYT Econometrics"; and
  - 10 "XYV Economico-cybernetics".

#### 4 Soliciting Opinion of Specialists

40 OPINION ON RELATIVE HELPFULNESS

The opinion of some specialists in Economics was sought on the following points:

- A The relative helpfulness or otherwise of:
- Al Separating the documents into the two respective groups Economics-in-Theory and Economics-in-Action, the first preceding the second; and
- A2 Mixing up the two kinds of documents into a single sequence; similarly
  - B The relative helpfulness or otherwise of:
- B1 Separating the documents into the two respective groups Economics-in-Action of Business Enterprise and Economics-in-Theory of Business Enterprise, the first preceding the second; and
  - C The relative helpfulness or otherwise of:
- C1 Separating the documents into the two respective groups International Economics-in-Theory and International Economicsin-Action, the first preceding the second; and
- C2 Mixing the two kinds of documents into a single sequence.
- In order to make it easy for the specialists to give their opinion on the relative helpfulness of the alternative arrangements, the matter in the following sections were supplied to them.
- 41 ECONOMICS-IN-THEORY AND ECONOMICS-IN-ACTION
  411 Arrangements of 45 Subjects in Two Blocks

SN	Class Number	Subject
		X Economics-in-Theory
1	x	Economics (General)
2	X,5	Money
3	X,6	Finance
4	X,61	Individual finance
5	X,62 X,7	Family finance
1 2 3 4 5 6 7	X,7	Public finance
7	X,72	Taxation
	XV Econon	nics-in-Action in Specified Territory  XV,2 Economics, India
8	<b>V</b> V 2	Indian Economics (General)
ş	XV,2 XV,2,5	Money in India
10	XV,2,6	Indian finance
ii	XV,2,61	Individual finance in India
12	XV,2,62	Family finance in India
13	XV,2,7	India's public finance
14	XV,2,72	Taxation in India
	XV,2	11 Economics, Tamil Nadu Tamil Nadu Economics (General)
15	XV,211	Tamil Nadu Economics (General)
16	XV,211,5	Money in Tamil Nadu
17	XV,211,72	Taxation in Tamil Nadu
	XV	7,243 Economics, Punjab
18	XV,243	Punjab Economics (General)
19	XV,243,5	Money in Punjab
20	XV 276 7	75 Economics, West Bengal West Bengal Economics (General)
20 21	XV,275,7	Money in West Bengal
21	XV,275,5	Money in West Bengal XV,3 Economics, UK
22	XV,3	Economics of UK (General)
23	XV3.5	Money in UK
24	XV,3,5 XV,3,6	Finance in UK
25	XV,3,61	Individual finance in UK
26	XV,3,62	Family finance in UK
27	XV,3,7	Public finance in UK
28	XV,3,72	Taxation in UK
	XV,3	
29	XV,31	Economics of England (General)
30	XV,31,5	Money in England
31	XV,31,72	Taxation in England
32	XV,58	V,58 Economics, USSR Russian Economics
33	XV,58,5	Money in USSR
34	XV,58,6	Russia's finance
35	XV,58,61	Individual finance in USSR
36	XV,58,62	Family finance in USSR
37	XV,58,62 XV,58,7	Russia's Public finance
38	XV,58,72	Taxation in USSR
••	X	V,73 Economics, USA
39	XV,73 XV,73,5	American economics (General)
40	XV,73,5	Money in USA
41	XV,/3,0 XV 73.61	America's finance
42 43	XV,73,6 XV,73,61 XV,73,62	Individual finance in USA
44	XV,73,7	Family finance in USA America's Public finance
45	XV,73,72	Taxation in USA
	,,	

sn	Class Number	Subject
1	x	X Economics (General) Economics (General)
	X.2	Economics, India (General)
2 3 4	X.2 X.211	Indian economics (General) Tamil Nadu economics (General)
4	X.243	Punjab economics (General)
5	X.275	West Bengal economics (General)
6	X.3	Economics, UK (General) British economics (General)
7	X.31	English economics (General)
	X.58	Economics, USSR (General)
8	X.58 X.73	Russian economics (General) Economics, USA (General)
9	X.73	American economics (General)
		X,5 Economics, Money
10 11	X,5 X,5.2	Money (in theory) Money in India
12	X,5.211	Money in Tamil Nadu
13	X,5.243	Money in Punjab
14 15	X,5.275 X.5.3	Money in West Bengal Money in UK
16	X,5.3 X,5.3I	Money in England
17	X,5.58 X,5.73	Money in USSR
18	A,3.73	Money in USA (,6 Economics, Finance
19	X,6	Finance (in Theory)
20 21	X,6.2 X,6.3	Indian finance British finance
22	X,6.58	Russian finance
23	X,6.58 X,6.73	American finance
24	X,61 X,61	Economics, Individual Finance Individual finance (in Theory)
25	X,61.2	Individual finance in India
26	X,61.3	Individual finance in UK
27 28	X,61.58 X,61.73	Individual finance in USSR Individual finance in USA
	X,62	Economics, Family Finance Family finance (in Theory)
29	X,62	Family finance (in Theory)
30 31	X,62.2 X,62.3	Family finance in India Family finance in UK
32	X,62.58	Family finance in USSR
33	X,62.73 X,7	Family finance in USA Economics, Public Finance
34	X.7	Public finance (in Theory)
35	X,7.2	India's public finance
36 37	X,7.3 X,7.58	British public finance Russia's public finance
38	X,7.73	American public finance
20		72 Economics, Taxation Taxation (in Theory)
39 40	X,72 X.72.2	Taxation (in Incory)
41	X,72.2 X,72.211	Taxation in Tamil Nadu
42 43	X,72.3 X,72.31	Taxation in UK Taxation in England
44	X,72.58	Taxation in USSR
45	X,72.73	Taxation in USA

42 ECONOMICS-IN-THEORY OF BUSINESS ENTERPRISE AND ECONOMICS-IN-ACTION OF BUSINESS ENTERPRISE

## 421 Arrangement of 16 Subjects in Two Blocks

SN	Class Number	Subject			
XX	XX Economics-in-Action of Business Enterprise in Specified Territory				
1	XV,2,A	Economics-in-action of Business Enterprise in India			
2	XV,2,(D)	Economics-in-action of engineering business enter- prise in India			
3	XV,2,(F,3)	Economics-in-action of food business enter- prise in India			
4	XV,2,(J)	Economics-in-action of agricultural business enterprise in India			
	XV.3.A Economic	s-in-Action of Business Enterprise, UK			
5 6	XV,3,A	Economics-in-action of business enterprise in UK			
6	XV,3,(D)	Economics-in-action of engineering business enterprise in UK			
7	XV,3,(F,3)	Economics-in-action of food business enter- prise in UK			
8	XV,3,(J)	Economics-in-action of agricultural business enterprise in UK			
	XV.73 Economic	s-in-Action of Business Enterprise, USA			
9	XV,73,A	Economics-in-action of business enterprise in USA			
10	XV,73,(D)	Economics-in-action of engineering business industry in USA			
11	XV,73,(F,3)	Economics-in-action of food business enter- prise in USA			
12	XV,73,(J)	Economics-in-action of agricultural enterprise in USA			
	XX Economi	cs-in-Theory of Business Enterprise			
13	XX	Economics-in-Theory of Business enterprise			
14	XX,(D)	Economics-in-theory of engineering business enterprise			
15	XX,(F,3)	Economics-in-theory of food business enterprise			
16	XX (I)	Economics-in-theory of agricultural business enterprise			

## 422 Arrangement of the Same Subjects in a Single Block

SN	Τ	Class Number	Subject			
	XX Economics of Business Enterprise					
1		XX	Economics of business enterprise			
2		XX.2	Economics-in-action of business enterprise in India			
2		XX.3	Economics-in-action of business enterprise in UK			
4		XX.73	Economics-in-action of business enterprise in USA			
5		XX,(D)	Economics-in-theory of engineering business enterprise			
6		XX,(D).2	Economics-in-action of engineering business enterprise in India			
7		XX,(D).3	Economics-in-action of engineering business enterprise in UK			
8		XX,(D), 73	Economics-in-action of engineering business enterprise in USA			
9		XX,(F,3)	Economics-in-theory of food business enterprise			

SN	Class Number	Subject
10	XX,(F,3).2	Economics-in-action of food business enter- prise in India
11	XX,(F,3).3	Economics-in-action of food business enterprise in UK
12	XX,(F,3).73	Economics-in-action of food business enterprise in USA
13	XX,(J)	Economics-in-theory of agricultural business enterprise
14	XX,(J).2	Economics-in-action of agricultural business enterprise in India
15	XX,(J).3	Economics-in-action of agricultural business enterprise in UK
16	XX,(J).73	Economics-in-action of agricultural business enterprise in USA

## 43 International Economics

Regarding "International Economics" no list of subjects was furnished. But, opinion of specialists was sought on certain issues. as follows:

Note.— 1 The term 'International' is not used here in the disjunctive sense. The term 'International Economics' would describe only the Economics of individual countries, printed as different Chapters in one and the same volume.

Note.— 2 On the other hand in this section the term 'International' is used in the integral sense taking the world as a whole as the unit of study with the different nations as its sovereign constituents.

1 International Economics may deal with either:

I The subject "in-Theory" covering problems like the genesis and development, in general terms, of topics such as International trade, Balance of trade, International finance, Foreign exchange, and International bank; or

2 The subject "in-Action" covering the actual concrete incidence, in the economic relation between countries, of the

problems developed in general terms "in-Theory".

12 No doubt a book primarily on "Theory" may give actual examples; and a book primarily on "Action" may here and there add some bit of theory either as a starting point or as a concluding point. In such cases judgement will have to be exercised whether the book should be treated to be essentially on "Theory" or on "Action". There may still be some overlapping cases which should be met with by some convention.

Do you think that there are or are likely to be produced books or papers on these two respective kinds of subjects? If there are, can you give me one or two examples of each type? Or do you think that the need for this distinction will not arise at all?

14 Is "Economics relation between countries" to be put in "Economics" or in "Foreign policy in History"?

## 5 Economics in Theory

## 50 FACET STRUCTURE

The following will be the facet structure presented by most of the Compound Subjects going with the Main Subject "X Economics-in-Theory".

X, [1P1]; [1MP1]: [1E]

X, [Factor of study]; [Property]: [Action]

CC (Ed7;1972)	Isolate Idea	LC (Ed3;1950)
X 1 12	Economics Consumption Want	нвяоі
121 124 125	Real want Pseudo want Luxury want	HB841
17 172 173	Standard of living Low standard Medium standard	HD6978
174 175	High standard By Commodity Divisions by (SD) (Illustrative)	
175 (D-66) 175 (L;573) 175 (NW)	Electricity Food Cinema	
2 21	Resources Natural resource Divisions by (SD) (Illustrative)	
21 (H-1) 21 (J) 21 (JX)	Mineral resource Agricultural resource Forest resource	
21 (KX) 21 (KX, 2) 25	Animal resource Cattle resource Industrial resource	
25 (D) 25 (F)	Divisions by (SD) (Illustrative) Engineering industry Technological industry	
25 (F, 1) 27 271	Fertilizer industry Unit of production Whole commodity	
275 3 31	Atomised production Distribution Land (Rent)	HB771
32 33 34	Capital (Interest) Entrepreneur (Pay) Employee (Wage)	
35 36 4	Trader (Commission) Consumer (Fair price) Value	HB201
41 42 422	By Basis Utility Marginal utility	
45 4 <b>6</b>	Cost of production Price	HB221

A book on this Main Subject will not have either Space Facet or Time Facet.

## 51 SCHEDULE OF (1P1) ISOLATES

We begin with the following table of (1P1) isolates in all the six schemes for classification. In the table, the Basic Subjec Number for "Economics" is omitted in all cases, except in LCt

DC (Ed18;1971)	UDC (Ed3;1961)	BC (Ed3;1953)	RIC (Ed1;1961)
33 947	33 94	I BE AK BL	L
947	183	BM	

921 921 921 921 921	98	BU	
852-1	013	AK	
	013	AM AMM	
852	851/853.2	MG	то

CC (Ed7·1972)	Isolate Idea	LC (Ed 3;1950)
5 51*Z 51 52 525 527 53*Z 53 532*Z	Money By Kind Commodity Metal Silver Gold Currency Coin By Material	HG221
532 535 537 558 55 552 555 56 561 562 564	Bimetallism Silver Gold Token coin Paper money Bank note Government note Cheque Bearet Crossed Draft	HG301 HG289 HG318 HG348
57 594 595 595 5951	Bill of exchange Counterfeit money Black money Blbck money of kind 1: Increase in the quantity of a contsie's money made by a foreign country by leaving behind in the first country money without taking away its equivallent due to it from	<b>Н</b> G33₊
5954	the firt country  Black money of kiod of 2:  The coins of currency notes of one country being illegimately produced in a foreign country and put in circulation in another country	
6 61 62	Private finance Individual finance Family finance	HG171–188 HG179
68	Corporate finance (other than business enterprise)	HG4026
68 (2X) 68 (T) 68 (T, 2)	Divisions by (SD) (Illustrative) Library Educational institution School	HG4029 . L HG4029 . E HG4629 . S

DC (Ed18;1971)	UDC (Ed3;1961)	BC (Ed3·1953)	RIC (Ed1;1961)
24 240·4	24	PD	K
	257	PE PK PI	KR
242.3	242	PJ	KN
240·42 24·042 24·043	246	PH PG	KN KM KP
24.044	25 251	PP PR	KS
			KX
			кx
29	29	PN	KU

2 QT

CC (Ed7;1972)	Isolate Idea	LC (Ed3;1950)
7	Public finance	HJ
71	Budget	HJ2005
711	Type of budget	
7112	Deficit budget	
7113	Balanced budget	
7114	Surplus budget	
7115	Interim budget	
7116	Supplementary budget	
7117	Capital budget	
72 <b>•Z</b>	Public income	
72 <b>•Z</b> 1	By source	
72 21	Tax	HJ2240-7395
	Direct tax	HJ3851
721 °Z		123031
721 *Z1	By source Poll source	HJ4911
721		HJ5580-5582
7211	Tax on bachelor	113330-3362
7212	Tax on maiden	
7215	Tax on emigrant	
7216	Tax on immigrant	
7218	Tax on pilgrim	
7219	Tax on foreigner	7774101
722	Property tax	HJ4101
7221	Land tax	HJ4151
72213	Cultivable	
72214	Uncultivable	
72216	Forest	HJ4167
722 <b>2</b>	Building tax	HJ4173
7226	Personal property tax	HJ4581
723	Income tax	HJ4621
7231	Tax on rent	HJ4631
7232	Tax on interest	HJ4621
7233	Tax on agriculture	
7234	Tax on salary	НЈ4639
7235	Tax on government bond	НЈ4633
7236	Capital gains tax	HJ4653.C3
7238	Tax on profit	HJ4631
72384	Excess profit tax	HJ4653.E8
72395	Tax on Foreign income	HJ4635
724	Professional tax	HJ5675
725	Wealth tax	
7252	Tax on capital	
7256	Tax on personal wealth tax	
7257	Tax on business wealth tax	
72572	Tax on factory	
725722	Tax on factory building	
725726	Tax on factory machinery	
72574	Tax on factory transport	
7258	Tax on social wealth	
,200	Divisions by (SD)	
	(illustrative)	
7258 (2V)	Tax on library	
7258 (Q;4568)	Tax on temple	
7258 (Tm2)	Tax on school	
726	Inheritance tax (Death duty)	HJ5801
720		1305001

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DC (Ed18;1971)	UDC (Ed3;1961)	BC (Ed3;1953)	RIC (Ed1;1961)
6 350.622 350·7224	6 612 612·16 612·162 612·161 612·162	TF TU	M MCB
350.7224	612-165		
350.7224 62 694	62 621	U UE	P
625	621.6 621.66 621.66	UF	PX
622	621.1	UG UH	PT
622 623 624 624.26	621.3 621.5	UH UI UJ	PW Pl
624.22 624.24	621.512 624.5	UI	PM
624.14 624.3	6241.7	UR	PM
	621.7		

627.6 624.9

PL

CC (Ed7;1972	Isolate Idea	LC (Ed3;1950)
727	Expenditure tax	
7271	Purchase tax	
7275	Luxury tax	HJ5771
72751	Tax on animal	HJ5788
72752	Tax on furniture	HJ5780.F6
72754	Tax on vehicle	HJ5780.V4
72755	Tax on jewellery	HJ5783
72757_	Tax on cloth	HJ5783
7291 <b>*Z</b>	Indirect tax	HJ5009
7291 *Z1	By Source	*******
7291	Licence fee	HJ5301
7292	Excise duty	HJ5009 HJ5711
7293	Sales tax	HJ5301
7294	Stamp duty	H22301
7295	Customs duty	
72951	Import duty Export duty	
72955 7297	Entertainment tax	HJ5791
72A*Z	By Taxing System	1100791
72A	Specific tax	
72D	Ad Valorem	
72G	Single tax	HJ2352
72K	Progressive taxation	HJ2236
72M	Proportional taxation	HJ2236
72R	Octroi	HJ9120
72W	Double taxation	HJ2341
73	Income from natural resource	
731	Land	
732	Uncultivable land	
733	Cultivable land	*******
734	Forest	HJ3805
735	Water	HJ3809
7351	Underground	
7353 7355	Lake River	
7357	Ocean	
737	Mineral	HJ3807
738	Treasure-trove	1125001
741	Income from rent	
743	Income from interest	
75	Income from business enterprise	
752	Industrial enterprise	HJ3811
	Division by (SD)	
	(illustrative)	
752 (F,1)	Fertilizer industry	
752 (F,9453)	Petroleum industry	
753	Service enterprise	
	Divisions by (SD)	
753 (XV,A41:	(illustrative) 5) Railway	HJ3815
755 (AV,A41.	Trade enterprise	U12012
76 76	Contribution from government to	
,,	government	
761	From government of higher status	
762	From government of lower status	

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	DC (Ed18;1971)	UDC (Ed3;1961)	BC (Ed3;1953)	RIC (Ed1;1961)
	627 · 1	622 622 622·4	UQ	PN PW
			UI	PW
	629.4	623	UN	
	616 627.1 627.1 627.2 626 626.4 626.3	622.2 622.24 628.15 622.1 622.22 624.17	UO US UT UT UT UQA	PR PO PN PN
	629 · 3	620.262.2	UBL	
		620.32	UBT	
	612		TDD	
			TDD	

612

611 615

619

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CC (Ed7, 1972)	Isolate Idea	LC (Ed3.1950)
766 768 78 781*Z	From government to local body From foreign government Loan By source of loan Internal	НЈ8003-8963
782 783 784 785*Z 785 787 788 7891 7891	Treasury note Individual person Corporate body Foreign Government Individual person Corporate body International World bank	НЈ8083
7897 791 7911 7912 791 () 791 (T) 796	World balls International Monetary Fund Expenditure Capital expenditure Annual expenditure Other division by (SD) (illustrative) Education Consolidated fund	HJ2005

7 <b>A</b>	Isolates of First Component Federal government (In a unitary government 7A will not occur and 7B will denote
7B 7F	"Government" Government of Constituent State Local body
7A-71 7B-71 7F-71	Compound Isolates (Illustrative) Federal Budget State Budget Local body Budget

DC (Ed18;1971)	UDC (Ed3;1961)	BC (Ed3:1953)	RDC (Ed1;1961)
618·8 634	63	TR	ML
634 · 33			
			мо
639	65	VA	MY

# 52 COMPARISON OF THE HELPFULNESS OF THE SEQUENCE OF (1P1) ISOLATES

To facilitate comparison of the relative helpfulness of the sequence of (1P1) isolates, going with the Main Subject "X Economics-in-Theory", in the different schemes for classifica-

DC	UDC	LC
Money Gold coin Paper money Counterfeit mcney Public finance Tax Land tax Movable property tax Income tax Poll tax Excise duty Sales tax Luxury tax Loan Expenditure Price Budget	Money Gold coin Paper money Counterfeit money Public finance Budget Tax Land tax Movable property tax Income tax Poll tax Excise duty Sales tax Luxury tax Loan Expenditure Price	Price Money Gold coin Counterfeit money Paper money Public finance Budget Expenditure Tex Land tax Income tax Movable property tax Poll tax Excise duty Sales tax Luxury tax Loan

tion, a table of the (IPI) isolates found in all the six schemes being studied is given hereunder. In the column relating to each scheme, the isolate ideas are given in the sequence of their respective isolate numbers, though the isolate numbers are not given.

СС	вс	RIC
Price	Price	Budget
Money	Money	Money
Gold coin	Gold coin	Gold coin
Paper money	Counterfeit money	Paper money
Counterfeit money	Paper money	Counterfeit money
Public finance	Public finance	Public finance
Budget	Loan	Loan
Tax	Budget	Expenditure
Poll tax	Tax	Tax
Land tax	Poll tax	Income tax
Movable property	Land tax	Luxury tax
tax	Movable property tax	Sales tax
Income tax	Income tax	Excise duty
Luxury tax	Excise duty	Land tax
Excise duty	Luxury tax	Movable property tax
Sales tax	Sales tax	Poll tax
Loan Expenditure	Expenditure	Price

Continued in P 378

53 OBSERVATIONS ON THE DIFFERENCE IN THE SEQUENCE OF THE (1P1) ISOLATES

531 Array of Order 1 Isolates

Let us first concentrate on the isolates in the Array of Order 1. They are only two — "Money" and "Public Finance". Their sequence is the same in all the schemes — Money, Public Finance. This is a helpful sequence satisfying the Principle of Later in Evolution.

532 Divisions of Money

We shall next take the three isolates—"Gold Coin", "Paper Money", and "Counterfeit Money"—in the Array of Order 2 as viewed from the Idea Plane and having Money as their immediate universe. The above mentioned sequence is found in the schedule of the four schemes—DC, UDC, CC, and RIC. But their sequence in LC and BC is "Gold Coin", "Counterfeit Money", and "Paper Money". Surely "Counterfeit" is possible not only in "Coin" but also in "Paper Money". Therefore, the sequence in LC and DC is obviously not helpful. It is difficult to guess what Principle for Helpful Sequence has been followed by LC and BC, in this case.

533 Position of Budget

There is only one isolate "Budget" in the first order divisions of "Public Finance". Therefore, there is no sequence to be compared. However, in DC and RIC, the array isolate "Budget" is not provided in "Economics", but only in "Public Administration." According to the Canon of Context, "Budget" as a division of "Public Administration" is different from it as a division of "Economics." This needs rectification.

534 First Order Divisions of Income

"Tax" and "Loan" are the two first order divisions, with "Income" as immediate universe. The above mentioned sequence is found in DC, UDC, LC, and CC. But the reverse sequence is found in BC and RIC. The Principles for Helpful Sequence to be applied in this case is the Principle of Later in Evolution (5). BC and RIC violate this Principle.

535 Divisions of Tax

In DC and UDC the position of "Poll Tax" does not comply with the Principle of Later in Evolution (5) or the Principle of Increasing Complexity (6). The proper place for it should be the very first one in the sequence. In DC, "Excise Duty", "Sales Tax" and "Luxury Tax" are clubbed together. But in the other five schemes they are shown separately. There

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are six ways of arranging these three array isolates. The sequence—"Excise duty", "Sales tax," and "Luxury tax"— is found in UDC and LC. But the other three schemes have three other sequences—"Luxury tax", "Excise duty', and "Sales tax" in CC; "Excise duty," "Luxury tax," and "Sales tax" in BC; and "Luxury tax", "Sales tax", and "Excise duty" in RIC. Of these three Array Isolates, it is reasonable to assume that "Luxury tax" is "Tax on Expenditure on movable property". If this assumption is right, its position in CC and RIC should be taken to be helpful. In the four schemes UDC, LC, CC and BC "Excise duty" precedes "Sales Tax"; while in RIC the reverse sequence is used. The sequence—"Excise duty," "Sales tax"—satisfies the Principle of Later in Time (4), for Production precedes Sale; and therefore the sequence "Excise duty", "Sales tax" is helpful. The sequence in RIC violates this Principle; therefore it may be taken to be unhelpful.

### 536 Position of "Price"

The array isolate "Price" occurs as a sub-division of "Finance" in DC, UDC, BC, and RIC. But in LC, "Price" occurs immediately after "Value"; but the degree of indention found in the printed schedule of LC makes them co-ordinate array isolates. On the other hand, the isolate numbers in CC definitely show that "Price" is subordinate to "Value". It is difficult to decide whether the indication of LC or CC is more helpful. The next question for consideration is whether "Price" should go with "Finance" or with "Value". "Price" is defined as the "amount of money that has to be paid for a commodity or service" (2). If we put emphasis on the term Money qua money in this definition "Price" should go with "Finance". But, if "Price" is taken merely to be the indicator — expressed in terms of the common unit "Money" - of the degree of "Value" of a commodity or a service, it should go with "Value". This is a moot point requiring careful discussion among expert economists and classificationists.

## 537 Schedule of (1P1) Isolates for CC

The Schedule given in Column 1 in Sec 51 is taken as the Schedule of (1P1) for "X Economics-in-Theory" for CC.

## 54 SCHEDULE OF (1MP1) ISOLATES

The Schedules for (1MP1) isolates for "X Economics-in-Theory" will be a differentiated one. Its study may be taken up in a future instalment of this sub-series of Papers.

#### 55 SCHEDULE OF (1E) ISOLATES

The Schedules for (1E) isolates and the Schedules for isolates in Round 2 for "X Economics-in-Theory" may be taken up in a future instalment of this sub-series of Papers.

#### 6 Economics-in-Action in a Territory

#### 61 OFT-OCCURRING FACET STRUCTURE

The following will be the facet structure presented by most of the compound subjects going with the Adjunct Main Subject "XV Economics-in-Action in a specified Territory."

XV, [IPI], [IP2]; [IMPI]: [IE] [T] XV, [Territory by (GD)], [Same as (IPI) of X];

[Same as (1MP1) of X]: [Same as (1E) of X]
Of course, (T) is a Common Isolate. Still, it is mentioned in the above Facet Formula, to emphasise that every Class Number of every Compound Subject going with "Economicsin-Action of a Territory," should have a [T], because, "Economics-in-Action of a Territory" will vary with Time.

The isolates in [IPI] may be not only a political division of the world, but also any of the other possible divisions of the world, based on say, Physical features, Population clusters, and other divisions of various kinds, as given in the Schedule of Space Isolates found in CC.

#### 7 Economics-in-Action of a Business Enterprise in a Territory 70 FACET STRUCTURE

The following will be the facet structure presented by most of the Compound Subjects going with the Adjunct Main Subject "XV Economics-in-Action of a Business Enterprise in a Terгітогу ".

XV, [IPI], [IP2], [IP3]; [IMPI : [IE]' [T] XV, [Territory by (GD)], [Business enterprise], [Same as (IPI) of X]; [Same as (IMPI) of X]: [Same as (IE) of X]

## 71 SCHEDULE OF (1P2) BUSINESS ENTERPRISE ISOLATES

A	By Business Enterprise	C7	Body beautifying
В	Communication	C781 C783	Hair dressing Manicure
BI	Postal	C8	Travel agency
B5	Telegraphic	C()	Others by (SD)
<b>B</b> 6	Wireless		(Illustrative)
		C (LU7)	Sanatorium
$\boldsymbol{c}$	Service institution	C(LYI)	Nursing
C2	Brokerage	C (MA6)	Hotel
C3	Canvass	C (PW6)	Typewriting institution
C5	Watchman business	C (Q;4568)	Temple service

E
Barter
E111
El12   Gift exchange   H168   Truck
E12
E16
E17
E171
E178
H322   Goods
E2*Z   By Quantum of unit   H38   Tourist
E26
Fair
Divisions by period (Illustrative)
Company   Comp
E262   Weekly   H525   Junk
E264   Monthly   H526   Ferry boat
E267
E3
E31
E32   Small store   H55   Bout
E34
E35
E36   Temporary stores
E396
E396
Divisions by Period (Illustrative)
E3962 Weekly H71 Aeroplane E3964 Monthly H72 Land plane E3966 Festival H73 Amphibious plane H74 Sea plane E5*Z By Area H76 Helicopter E5 Home trade H77 Hovercraft E54 Intra-state H7A Passenger plane E55 Inter-state H7B Cargo plane Trainer  H Transport
E3962 Weekly H71 Aeroplane E3964 Monthly H72 Land plane E3966 Festival H73 Amphibious plane H74 Sea plane E5*Z By Area H76 Helicopter E5 Home trade H77 Hovercraft E54 Intra-state H7A Passenger plane E55 Inter-state H7B Cargo plane Trainer  H Transport
E3964         Monthly         H72         Land plane           E3966         Festival         H73         Amphibious plane           H74         Sea plane         E5e plane           E5*Z         By Area         H76         Helicopter           E5         Home trade         H77         Hovercraft           E54         Intra-state         H7A         Passenger plane           E55         Inter-state         H7B         Cargo plane           H         Transport
## Transport ## Sea plane  ## Amphibious plane  ## Amphibious plane  ## Amphibious plane  ## Sea plane  ## By Area ## H76 ## Helicopter  ## H000 Helicopter  ## H77 Hovercraft  ## Passenger plane  ## Cargo plane  ## Transport  ## Transport
E5*Z By Area H76 Helicopter E5 Home trade H77 Hovercraft E54 Intra-state H7A Passenger plane E55 Inter-state H7B Cargo plane H7 Transport
E5*Z By Area H76 Helicopter E5 Home trade H77 Hovercraft E54 Intra-state H78 Cargo plane E55 Inter-state H7B Cargo plane H7 Transport
E5
E54 Intra-state H7A Passenger plane E55 Inter-state H7B Cargo plane H7E Trainer  H Transport
E55 Inter-state H7B Cargo plane H7E Trainer H Transport
H7E Trainer H Transport
HI Road P1*Z By Kind of bank
HII Vehicles drawn by mus- PI Central bank
cular power P2 Mortgage bank
H113 Rickshaw P21 Land
H115 Trolley P22 Movable property
H117 Cycle P5 Merchant bank
H13 Animal drawn vehicle P6 Investment bank
H131 Cart P8 Commercial bank H133 Jutka P91 Individual-owned bnnk
P92 Trust
H16 Driven by mechanical P94 Chit fund
power P95*Z By Banking system
Hi61 Motor cycle P95 Branch banking

20	7	4
к	. 1	1

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P96 P98 Q	Group banking Chain banking Money market	S3 S4 S41	Fidelity Accident Fire
R R1*Z R1 R11 R16	Investment By form of investment Stock (Bond) Government bond Local government bond Share	S42 S43 S44 S45 S46 S48 S491 S498	Burglary Workman's compensation Health Travel Freight Liability Play ground Weather
R21 R22 R223 R226 R25 R6*Z R6 R61 R61 R67 R8	Ordinary share Preference share Participating share Cumulative share Debenture stock Other forms of investment Bank deposit Fixed Recurring Lottery Pawn broking	S6 S61 S62 S65	Annuity Immediate annuity Deferred annuity Life annuity Annuity certain Terminable Perpetual Child Education Marriage
S S1*Z S1 S11 S12 S18 S2 S21	Social finance (Insurance By Risk Life Whole Endowment Group Property Land property	)S8 S84 S85 S86 S87 S88 ()	Social insurance Disability Unemployment Widow's annuity Old age annuity Funeral expense Other business enterprises Divisions by (SD)
\$22 \$24 \$241 \$245 \$245 \$245 \$26	Movable property Vehicle Land vehicle Marine vehicle Air vehicle Money	(D) (F) (F,3) (J) (J,381,78)	Engineering industry Technological industry Food industry Agricultural industry Rice industry

#### 8 Economics-in-Theory of Business Enterprise

Facet Structure and Isolates are same as in Sec 7 except that [1P2] is made [1P1]; and [1P3], is made [1P2]

# 91 Other Schedules of Isolates and Other Adjunct Main Subjects 911 OTHER SCHEDULES OF ISOLATES

The other schedules of isolates — such as (1MPI), (1E), and those for Round 2 — for the Adjunct Main Subjects studied in this instalment will be taken up in a future instalment of this sub-series.

#### 912 OTHER ADJUNCT MAIN SUBJECTS

Further instalments of this sub-series will take up successively the study of the Adjunct Main Subjects going with

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"XYA International Economics", "XYT Econometrics" and "XYV Economico-cybernetics".

- 92 Bibliographical References
- 1 Sec 225 HANSON (JL). Dictionary of economics and commerce. Ed 3. 1969. P 148.
- 2 Sec 536 —. P 374.
- 3 Sec 17 RANGANATHAN (S.R.). Prolegomena to library classification. Ed 1, 1937.
- 4 Sec 535 —. Ed 3. 1967. Chap FB.
- 5 Sec 534 —. Chap FC.
- 6 Sec 535 ---. Chap FF.