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Speciator of Kind 2
With Special Reference to Social Sciences.

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[The concept of Speciator of Kind 2, earlier called Special Component, is explained. Case studies illustrating some problems — such as, formation of homonymous class numbers and unhelpful sequence among compound subjects containing compound isolates — with particular reference to classifying subjects in the social sciences, are presented. The following recommendations have been made: (1) The name 'Special Component' be changed to 'Speciator of Kind 2'; (2) Use of "=" (equal to sign) as indicator digit for Speciator of Kind 2; (3) Use of "+" (plus) for connecting the component numbers derived by applying the Alphabetical Device to a multinomial; (4) Thei ndicator digits " – " (hyphen), "=" and "+" should fall in the sequence mentioned when arranged according to the increasing ordinal value; (5) The Sector (S -za) be allocated to the Speciators of Kind 2 for Language Isolates and other Sectors to the Speciators of Kind 2 for Space Isolates; and (6) Position Fixers, b, c, d, ... x, be used with Speciators of Kind 2, in order to secure a relatively more helpful sequence among Compound Subjects containing Compound Space Isolates with two or more Speciators of Kind 2 combined successively. The digits a and y are reserved for any future use for interpolation.]

ABBREVIATIONS USED

CC = Colon Classification (CN) = Class Number

1 Scope of the Paper

The concept of Special Component for forming Compound Isolates was developed in 1970. Separate schedules of Special Components for forming Compound Space Isolates and Compound Language Isolates respectively were drawn up (4) (*See also* Appendix to this paper for the schedules from CC, ed 7). This paper presents a few case studies illustrating some problems

in the formation of Compound Space Isolates and Compound Language Isolates forming facets of Compound Subjects and when such a Compound Idea occurs as a speciator to isolates in a Compound Subject. The suggested solutions to the problems will be incorporated in CC, ed 7.

The illustrative case studies are based on a study of about 350 books and some articles on subjects in the social sciences and anthropological linguistics. Problems similar to those illustrated here may also occur in classifying subjects in the natural sciences.

2 Case Study 1

21 Subjects for Consideration

Consider the pairs of subjects mentioned in col (b) and the (CN) for each of them according to CC, ed 7, given in col (c) of the following table:

SN	Subject	Colon (CN)
(a)	(b)	(c)
11	Sociology of the African family	Y,86–2
12	Sociology of the communities of Equatorial Africa	Y,86–2
21	Sociology of occupational groups of Africa	Y,86–4
22	Sociology of communities of sub-tropical Africa	Y,86–4

22 Homonym

It will be noted that one and the same (CN) represents more than one subject — that is, the (CN) is homonymous. This is due to the fact that digits from the same Sector (S — 1) are allocated to Speciator of Kind 2 for forming Compound Space Isolates as well as for Special Isolates in the schedule for Personality in Sociology.

23 Resolution of Homonym

231 *Method* 1

One method of resolving the homonym is to allocate different sectors to special components and to the special isolates. It is, of course, inexpedient to disturb the sectors allocated to the special isolates in the schedules for the different subjects. There-

fore, the special components for forming Compound Space Isolates may be assigned an appropriate sector. Since the special isolates in most of the schedules in CC have been allocated digits starting from sector (S — 1) and of higher ordinal value, the schedule of special components can be assigned digits from zone (Z — a).

Suppose "Equatorial" is assigned b and subtropical d, then the subjects in the table in Sec 21 will get the following (CN):

SN	Subject	Colon (CN)
11	Sociology of African family	Y,86–2
12	Sociology of the communities of Equatorial Africa	Y,86–b
21	Sociology of Occupational groups of Africa	Y,86–4
22	Sociology of communities of Sub-tropical Africa	Y,86–d

The homonym is thus resolved.

24 FURTHER PROBLEMS

1 The method of resolution of homonym suggested in Sec 231 is only an *ad hoc* solution. It does not straighten out all problems. For example, the special components for forming Compound Language Isolates are also assigned digits from (Z —a); and it is also prescribed in the schedule for language, that some of the languages may be derived by Geographical Device. This implies the possibility of special components for Language and for Space isolates occurring in the construction of a (CN) for a Language Isolate. If the digit f represents a "Creole" variant in the schedule of Special Components for Language, and "forest regions" in the schedule of Special Components for Space Isoates, then the (CN)

P,6–f may be interpreted to represent either African creole
or
Language of the forest regions of Africa.

The chances of such conflicts and homonyms will increase as the number of schedules of Special Components for isolates in different schedules increases. Therefore, the allocation of the available digits from (Z — a) among the schedules of Special Components needed in subjects going with different Basic Subjects has to be done carefully so as to avoid any possibility of homonymous (CN).

2 The digits in (Z — a) being reserved for Special Components they cannot be assigned to Speciators of Kind 1. If they are assigned to Speciator of Kind 1 also, there will be greater chances of homonymous (CN). This introduces rigidity in the notational plane. In the revision of CC, ed 6 to prepare its ed 7, the release of the digits in (Z — a) for extrapolation earlier to (S — 1) in a schedule of isolates and for array division (2) has been of considerable help in accommodating conveniently the new developments — apart from the concept of Special Components in the universe of subjects. It is desirable that this hospitality in the notational plane is preserved.

3 It has already been found that the digits from (Z — a) alone would be inadequate for assigning numbers for Special Components for Space Isolates. In fact, most of the one-digited and two-digited sectors have been used up in the schedule of Special Components for Space Isolates.

These factors led to an examination of the concept of Special Component. The findings are discussed in Sec 3.

3 Idea Plane

31 Special Component and Speciator

In a Compound Isolate a Special Component is attached to the primary isolate by a hyphen (—). An idea occurring as a speciator in a Compound Isolate is also attached to the Primary Isolate by a hyphen. Thus, in the notational plane the Special Component is treated in the same manner as a speciator. In fact, it was realised that the function of the two is essentially similar. Therefore, a Special Component is now called Speciator of Kind 2. This evidently implies that there is a difference between the conventional speciator — that is, Speciator of Kind 1 — and Speciator of Kind 2.

32 Wider Occurrence

Until recently, each set of "Special Components" has been prescribed for use with specific isolate ideas only. Hence the epithet "Special". However, it is now found that schedules of such components can be drawn up for more general use, that is, with isolates occurring in schedules for different subjects going with different Basic Subjects. For example, ideas such as, "Low", "Medium", "High". Therefore, in the rest of this paper the term 'Speciator' will be used for Speciator of Kind 1 and the term 'Speciator of Kind 2' for 'Special Component'.

33 Strength of Bond

Consider the following speciators to the Isolate Idea:

"Table".

By Design
Note.— To be derived *by* (GD)
Japanese
Indian
European
etc

By Purpose
Dining
Class room
Reading room
etc

By Size
Small
Medium
Large

By Material of make
Wooden
Metal
Steel
Aluminium
etc

Speciators of Kind 2 for Space Isolates include the following:

By Population cluster
Village
Town
City
Supercity

By Orientation
East
South
West
North
Centre

Consider the following subjects:

1 Large table of Indian design
2 Large dining table of Indian design
3 Large wooden dining table of Indian design
4 Table of South Indian design
5 Large table of South Indian design
6 Large dining table of South Indian design
7 Large wooden dining table of South Indian design
8 Large wooden table of Indian village design

These subjects may be respectively structured as indicated below according to the Postulational Method of Classifying, using the speciators mentioned above.

1 (BS), Table-Indian design-Large
2 (BS), Table-Indian design-Dining-Large
3 (BS), Table-Indian design-Dining-Wooden-Large
4 (BS), Table-India-South-Design
5 (BS), Table-India-South-Design-Dining-Large
6 (BS), Table-India-South-Design-Dining-Wooden-Large
7 (BS), Table-India-Village-Design-Wooden-Large

It will be obvious that a speciator such as "Large" or "Dining", or "Wooden" *should not* be interpolated between the components "India" and "South", nor between "India" and "Village". This implies a relatively greater strength of bond between "India"

and "South" and "India" and "Village" than between "India" and any of the other speciators.

34 Differential Indication

In a coextensive representation of the subject it is helpful to explicitly indicate the higher strength of bond between the principal idea and Speciator of Kind 2 forming a Compound Idea and of the Principal Idea and Speciator of Kind 1 forming a Compound Idea.

35 Indicator Digit

In the notational plane an appropriate indicator digit should be chosen for attaching a Speciator of Kind 2. Factors for consideration in the choice of an indicator digit are:

1 The ease with which it can be written as a distinct digit — that is, distinct from other indicator digits and the substantive digits already in use in the scheme;

2 Availability of the digit preferably as a single stroke in the typewriter;

3 Convenient usability of the digit for representation in computer-readable entries.

Considering the digits already in use in the notational system of CC, the "equal to" sign (=) nearly satisfies these conditions. However, this digit is already in use in CC for connecting the abbreviated components resulting from the application of the Alphabetical Device to a multinomial (1). Since a hyphen (-) is used for connecting a Speciator of Kind 1, it was thought appropriate to use the "equal to" sign (Two hyphens in parallel) for attaching the Speciator of Kind 2. This decision entailed changing the digit used for connecting the abbreviated components of a multinomial. Earlier, the congruence sign (≡) was suggested for this purpose (3). Subsequently, however, taking into account the factors for choice of indicator digit mentioned above, the "plus" (+) sign has been accepted for the purpose in the place of the congruence sign.

36 Ordinal Value

A helpful arrangement of subjects is obtained if the three indicator digits, namely, hyphen (-), equal to sign (=) and plus (+) fall in the sequence mentioned, when arranged in the increasing order of their ordinal value. Thus, the ordinal value is the lowest for "hyphen", highest for "plus", and intermediate for "equal to" sign. Some examples of (CN) containing these indicator digits are given in Sec 7.

37 SPECIATORS OF KIND 2 FOR SPACE ISOLATES AND FOR LANGUAGE ISOLATES

The prescription of a distinctive indicator digit for Speciator of Kind 2 would not solve the problem mentioned in Sec 24 — that is, when Speciator of Kind 2 for Space Isolates and for Language Isolates occur as components in one and the same (CN) for a Compound Isolate. The problem can be solved, at present, only by allocating different sectors to these two sets of Speciators of Kind 2. This is being done for CC, ed 7, as indicated in the schedules given in Sec 8.

4 Case Study 2

41 SUBJECTS FOR CONSIDERATION

Consider the subjects mentioned in col (b) and the (CN) for each of them given in col (c) of the following table:

SN	Subject	Colon (CN)
(a)	(b)	(c)
11	Education in the French territories of North Africa	T.6=9N=A53
12	Education in the French territories in Africa	T.6=A53
21	History of British territories in West Africa	V,6=95=A56
22	History of British territories in Africa	V,6=A56

42 ANNOTATION

421 *Subjects at* 11 *and* 12

Among the subjects 11 and 12, the latter is relatively more general or of greater extension than the former. Therefore, the (CN) for the subject at 12 should file earlier to that for the subject at 11, so as to conform to the Principle of Decreasing Extension. However, arranged according to the ordinal value of the (CN) for the two subjects given in col (c) of the table, the sequence of the subjects is just the reverse of what is deemed a helpful sequence.

Consider the (CN) T.6=A53=9N for the subject "Education in the French territories of North Africa". Then the sequence of the two subjects at 11 and 12 aranged according to the ordinal value of their respective (CN) will conform to the Principle of Decrea. ing Extension. However, the (CN) T.6=A53 =9N would represent coextensively and more appropriately the

subject "Education in the northern parts of the French territories in Africa". Therefore, it should not be used for representing the subject mentioned at 11.

422 *Subjects at* 21 *and* 22

The problem of sequence between the subjects mentioned at 21 and 22 in the table in Sec 41 is exactly similar to that discussed in Sec 421 in relation to the subjects mentioned at 11 and 12 in the same table. The only difference is that in subjects 11 and 12, the Speciator of Kind 2 occurs in Compound Space Isolates whereas in Subjects 21 and 22 it occurs in Compound Personality Isolates.

423 *Reason for the Problem*

From the above examples it becomes evident that such problems of sequence among subjects involving Compound Isolates containing Speciators of Kind 2 can arise in Compound Subjects going with different Basic Subjects. The cause of the trouble is that on the basis of the Principles for Helpful Sequence (5), the Speciators of Kind 2 — for example, for Space Isolates— get arranged in a certain sequence, and are required to be combined in a prescribed sequence. For example, the Speciators of Kind 2 for Space Isolates are grouped according to the following characteristics:

(S — 0a) By Geographical feature

(S — 01) By Population cluster

(S — 1) By Zone

(S — 9A) By Orientation

(S — a) {By Empire formation
{By Near Sovereign formation

(S — (. . .)) By Subject group

The characteristics are enumerated in the schedule in their sequence mentioned above, conforming to the Principle of Increasing Concreteness. Therefore, according to the Principle of Inversion, in the facet structure (that is, in a class number), the sequence in which the speciators derived on the basis of the respective characteristics are to be combined will be the reverse of the schedule sequence. Thus, with respect to the Principal Idea with which the Speciators of Kind 2 are compounded, the Speciator of Kind 2 derived on the basis of

By Subject group will be in remove 1

By Near-sovereign formation will be in remove 2

By Empire formation will be in remove 3

By Orientation will be in remove 4
By Zone will be in remove 5
and so on.

In such a case the ordinal value of the number for the successive Speciators of Kind 2 in the Compound Isolate will be in the decreasing sequence.

However, in subjects we find the need to combine the Speciators of Kind 2 derived on the basis of the different characteristics in a sequence not conforming to the above prescription. Hence the problem.

5 Provisional Solution

51 Use of Position Fixers

We have tried several solutions. The one suggested here is, perhaps the least objectionable. The suggestion is only in respect of Compound Isolates containing two or more Speciators of Kind 2.

Consider a Compound Isolate containing two or more Speciators of Kind 2 taken from one and the same schedule, in which the sequence of the speciator components determined by the Principles of Helpful Sequence is such that the ordinal value of the numbers assigned to the speciators is *not* in the decreasing sequence (in facet structure). Then, beginning with the first of such component numbers which violates the Principle of Decreasing Sequence in ordinal value, prefix a digit from the schedule of "Position Fixers" given below to each of the successive components representing a Speciator of Kind 2 taken from one and the same schedule. The ordinal value of the Position Fixers, prefixed to the number for the successive Speciator of Kind 2, should be in the decreasing sequence.

Schedule of Position Fixers: b, c, ... x (excluding i, l, and o).

Here are a few examples illustrating the use of Position Fixers as prescribed above.

T.6 Education in Africa
T.6=9N Education in North Africa
T.6=9N=xA53 Education in French territories of North Africa
T.6=9N=x(P,111) Education in the English speaking areas of North Africa
T.6=9N=xA53=w(Q,7) Education in the Muslim areas in the French territories of North Africa
T.6=9N=zJ8 Education in the forest areas of North Africa
T.6=A53 Education in the French territories of Africa
T.6=A53=9N Education in the northern parts of the French territories in Africa

T·6=A53=x(Q,7) Education in the Muslim areas of the French territories of Africa

52 CHOICE OF DIGITS FOR POSITION FIXERS

The choice of the digits b to x as Position Fixers is based on the following considerations:

1 All the sectors from (S — 0a) to (S — (...)) have been allocated to Speciators of Kind 2 for Space Isolates. Therefore, use of digits from any of these sectors as Position Fixers is inexpedient. This leaves only the digits in (S — za) and (S — a) for assignment to the Position Fixers.

2 The digits a to x were earlier assigned to Speciators of Kind 2 for Language Isolates (5). It has been mentioned in Sec 24 that Speciators of Kind 2 for Space Isolates and for Language Isolates can occur concurrently in a Compound Isolate. Therefore, the sector (S — za) has now been allocated to Speciators of Kind 2 for Language Isolates. Thus, the allocation of sector (S — a) for the Position Fixers helps to avoid a potential homonym with the Speciators of Kind 2 for Language Isolates. Further, when Speciators of Kind 2 for Space Isolates and Speciators of Kind 2 for Language Isolates occur concurrently in one and the same Compound Isolate, the Position Fixer will still be helpful.

6 Summary of Suggestions

1 The name 'Special Component' be changed to 'Speciator of Kind 2'.

2 Use of "=" (equal to sign) as indicator digit for Speciator of Kind 2.

3 Use of "+" (plus sign) for connecting the component numbers derived by applying the Alphabetical Device to a multinomial.

4 The indicator digits "—", "=" and "+" should fall in the sequence mentioned when arranged according to the increasing ordinal value.

5 The Sector (S — za) be allocated to the Speciators of Kind 2 for Language Isolates and other Sectors to the Speciators of Kind 2 for Space Isolates.

6 Position Fixers, b, c, d ... x, be used with Speciators of Kind 2, in order to secure a relatively more helpful sequence among Compound Subjects containing Compound Space Isolates with two or more Speciators of Kind 2 combined successively. The digits a and y are reserved for any future use for interpolation.

7 Examples of Subjects

Examples of subjects classified using the suggestions made in this paper are given below. The subjects are arranged according to the increasing ordinal value of the (CN).

SN	Class Number	Subject
(a)	(b)	(c)
1	u	Area studies
2	u,4	Asian studies
3	u,4=97	Studies of Pacific countries of Asia
4	u,4=9G	South-East Asia studies
5	u,44	Indology
6	u,44=9G	South India studies
7	u,6	African studies
8	u,6=9J	West African studies
9	u,6=9J=xA56	Studies of British territories in West Africa
10	u,6=A56	Studies of British territories in Africa
11	u,6=A56=9J=96	Studies of Atlantic countries of British territories in West Africa
12	L,24;424B	Disease of stomach caused by *Bacillus* sp of bacteria
13	L,24;424B+S	Disease of stomach caused by *Bacillus subtilis*
14	P.6=ZJ8	Languages of African forest areas
15	P.6=9G	Languages of South Africa
16	P,111=J42	Pidgin English
17	P,111=J42=d	Dialect of Pidgin English
18	P,6A	African languages
19	P,6S	Swahili language
20	P,6S=d	Dialect of Swahili
21	T.6	Education in Africa
22	T.6=9N	Education in North Africa
23	T.6=9N=xA53	Education in French territories of North Africa
24	T.6=9N=xA53=w(Q,7)	Education in the Muslim areas in the French territories of North Africa
25	T.6=9N=x(P,111)	Education in the English-speaking areas of North Africa
26	T.6=9N-x(Q,7)	Education in the Muslim areas of North Africa
27	T.6=9N=zJ8	Education in the forest areas of North Africa
28	T.6=Z53	Education in the French territories of Africa
29	T.6=A53=x(Q,7)	Education in the Muslim areas of the French territories of Africa
30	T.6=A53=9N	Education in the Northern parts of the French territories of Africa
31	T.6=(P,111)	Education in the English-speaking areas of Africa

(a)	(b)	(c)
32	T.6=(Q,7)	Education in the Muslim areas of Africa
33	V,6	History of Africa
34	V,6=zf70N=xg7	History of the Nile delta area in Africa
35	V,6=9J=xA56	History of the British territories in West Africa
36	V,6=A56	History of British territories in Africa
37	Y,86	Sociology of the African people
38	Y,86–2	Sociology of the African family
39	Y,86–4	Sociology of the occupational groups in Africa
40	Y,86–45	Sociology of commercial class in Africa
41	Y,86=zJ8	Sociology of African forest communities
42	Y,86=2	Sociology of communities of Equatorial Africa
43	Y,86=2–45	Sociology of commercial class of Equatorial Africa
44	Y,86=2—x(XX)	Sociology of industrial communities of Equatorial Africa
45	Y,86=9J=xA56–45	Sociology of the commercial class of the British territories in West Africa
46	Y,86=(XX)	Sociology of industrial communities of Africa

71 ANNOTATION

In the above list, the sequence of compound subjects going with one and the same Basic Subject should be considered only within a block of subjects having one and the same first isolate number.

8 Appendix

81 SPECIATORS OF KIND 2 FOR SPACE ISOLATES

0a*	Disjunctive treatment		*rived by* (AD) *with a* "0" *(zero) prefixed to the* (AD) *number*
0a	*By Geographical feature* *Note.— Same as the divisions from* "Ub" *to* "Ux6" *for Environment Divisions with the proviso that the initial digit* "U" *should be replaced by* "0". *(Illustrative)*		*(Illustrative Compound Isolates)*
		1=0f7	Rivers of the world
		4=0m7	Mountains of Asia
		4=0m70H	The Himalayas
0f7	River	0z	*By Population cluster group* (for collective treatment only)
0j8	Forest		
0k2	Desert	01	Hamlet (upto 500)
	Note.— Individual geographical feature to be de-	02	Village (500 to 5,000)

03 Town (5,000 to 50,000)
04 Super-town (50,000 to 100,000)
05 City (100,000 to 500,000)
06 Super-city (500,000 to 1,000,000)
07 Extra-super-city (1,000,000 and above)
Note.— Individual population cluster to be derived by (AD) *with a* "0" *(zero) prefixed to the* (AD) *number.*
(Illustrative Compound Isolates)
1=05 Cities of the world
44=0B Bombay city
441131=0K Kumbakonam town

1 By Zone
2 Equatorial
3 Tropical
4 Sub-tropical
5 Temperate
7 Sub-arctic
8 Arctic
(Illustrative Compound Isolates)
1=3 Tropical zone of the world
4=5 Temperate zone of Asia

91 *By Area surrounding an ocean*
(Illustrative Compound Isolates)
1=97 Pacific countries of the world
4=97 Pacific countries of Asia

9A *By Orientation*
9B East
9C Near-east
9D Middle-east
9E Far-east
9F South-east
9G South
9H South-west
9J West
9M North-west
9J West
9M North-west
9N North
[illegible] North-east
9Q Centre
9R Inside
9S Outside
Note.— Divisions as for "9A By Orientation" above.
(Illustrative Compound Isolates)
9SG Southern outside
9SN Northern outside
(Illustrative Compound Isolates)
44=9G South India

A *By Empire*
Note.— Divisions by (GD)
(Illustrative)
A52 Roman empire
A55 French empire
A56 British empire
(Illustrative Compound Isolates)
1=A56 The British Empire
4=A56 The British Empire in Asia

3 *By Near-sovereign formation*
Note.— Individual formation to be derived by (CD)
(Illustrative)
CN League of Nations
CN4 United Nations
CN48 The Commonwealth
CN49 NATO countries
CN5 Colombo plan countries
CN53 SEATO countries
CN54 Western European Union
CN55 CENTO countries
(Illustrative Compound Isolates)
1=CN4 United Nations countries
4=CN4 United Nations countries of Asia

(···) *By Subject-group*
Note.— Divisions by (SD)
(Illustrative)
(J,381) Rice belt
(P,111) English speaking area
(Q,7) Muslim area
(W,691) Communistic area
(X61,73) Dollar area
(Illustrative Compound Isolates)
1=(Q,7) Muslim areas of the world
44=(J,381) Rice belt of India

82 SPECIATORS OF KIND 2 FOR LANGUAGE ISOLATES

za* *By Variant*
zb Slang
zd Dialect
Note.— Divisions by (GD)
zg Local jargon
zt *Note.— Divisions by* (GD)

zt Technical jargon
Note.— Divisions by (GD)

zA *By Stage*
Note.— Divisions by (CD)

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