

FACET SEQUENCE AND THE LAW OF PARAMETER

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Shows that the existing principles of Facet Sequence give in the case of the subject Pharmacology a facet sequence which satisfies the Second Law of Library Science in respect of the medical profession where it violates the Second Law in the case of the pharmacology profession. The conflict is resolved by taking into consideration the parameter reader in the two cases. In the case of the medical profession the reader is the one interested in treating a disease with drugs whereas in the case of the pharmacology profession the reader is one interested in the study of the action of the drug. A general normative principle - Law of Parameter - belonging to the family of the Laws of Interpretation is highlighted. A systematic examination of schedules of CC from the angle of this Law is suggested.

Abbreviations used;

- (BF) = Basic facet
CC = Colon classification
DC = Decimal classification
E = Energy
[E] = Energy facet
(FC) = Fundamental category
P = Personality
[P] = Personality facet

0 INTRODUCTION

Five principles have so far been formulated to determine consistently a helpful sequence of the facets of subjects. It was conjectured as follows in 1962; "The five

principles enumerated above prove sufficient to determine the helpful sequence of facets uniquely in most of the subjects. However, nobody can assert that they will prove sufficient in all subjects. As we gain experience with such refractory subjects, we should be able to formulate additional principles to meet their cases". [1] It appeared as if the need for the formulation of a new principle had arisen. It arose in connection with the design of the schedules for the depth classification of Pharmacology. Following the tradition of DC, CC had originally included Pharmacology as a subdivision of the (BF) Medicine. But in ed 6 CC made Pharmacology an independent (BF) and placed it next to Medicine. Medicine is taken to denote "Knowledge of the human body, knowledge of disease, and methods of treatment" [5]. Pharmacology is taken to denote "The science of detection and measurement of the effects of drugs or other chemicals on biological systems" [4]. These denotations justify treating these two fields of knowledge as independent (BC) and putting them in juxtaposition to satisfy the Canons of Filiatory Sequence [3]. In designing the schedule for Pharmacology, the subject has to be distinguished from Therapeutics. Therapeutics is taken to denote "The branch of medical science [Medicine] dealing with the treatment of disease".

1 SCHEDULES FOR PHARMACOLOGY

Apart from the facets of Systems and Specials [2] the following will be the three dominant facets calling for schedules: Drug; Organ; and Effect. The epithet 'dominant' is used to imply the possibility of many other facets in different rounds and levels in a 'microsubject'.

Biological system includes man, animal, and plant. We shall restrict the (BC) LX to man without prejudice to the inclusion of laboratory animals also. It is on the basis of this restriction that the second dominant facet suggested is organ instead of a whole body of a living organism and then an organ of it. While the notational system is capable of accommodating Pharmacology of man, animal as well as plant in the (BC) LX, restricting the place LX to human pharmacology is to respect current practice.

11 Fundamental Categories Manifested

The first step in the design of the schedule is to determine the (FC) of which each of the three facets mentioned in 1 is to be deemed to be a manifestation. There will not be much difficulty in deeming Organ to be a manifestation of P. But the facet Drug requires some thought. Obviously it is not a manifestation of the (FC) Time or Space S or Energy E. The choice is to be determined by the subject context. Subject context as the discriminant may be illustrated as follows: Consider 'Gold' in the context of Chemistry and also in the context of goldsmith. The chemistry of gold is concerned with the 'individualising particularities' of gold as a substance. But the smithy of gold is concerned with the transformation of the raw material gold into a commodity, such as a jewel or an utensil. In goldsmithy the 'individualising particularities' of gold are not studied but are simply put to use. In pharmacology we do not use a drug as a raw material to be transformed into a commodity. On the other hand, the interest is in the study of the 'individualising particularities' of the drug. Thus Drug is deemed to be a manifestation of P in the subject context of Pharmacology.

12 Sequence of the Facets

To determine the sequence among the three dominant facets, without loss of generality, we may take a particular subject belonging to the (BF) Pharmacology. This will be a convenience. Consider the Raw Title:

Senna and the evacuation of the Intestines... 12 A

To derive the Full Title we have to supply the (BF) Pharmacology which is implied. Then the Full Title will be

In Pharmacology, senna and the evacuation of the intestines 12 B

The Kernal Title derived from this is

Pharmacology, Senna, Evacuation, Intestines..... 12 C

To derive the Analysed Title we proceed as follows: Pharmacology is easily marked as (BF). 'Evacuation' suggests itself as a manifestation of the (FC) E. The other two kernal isolates we have already seen to be manifestations of the (FC) P. There is only one energy isolate. Therefore there are two rounds, One before it and one after it.

Consider 'Senna' and 'Evacuation'.

This not a case of a commodity being got by the transformation of a raw material. Therefore the 'Commodity-Raw material-Transformation Principle' is not applicable. Let us try the 'Wall-Picture Principle'. The concept behind the isolate P 'Senna' will not be operative unless the concept behind the isolate [E] 'Evacuation' is conceded. This means that P 'Senna' belongs to round 2.

Now let us apply the 'Wall-Picture Principle' in deciding the sequence between the isolate E 'Evacuation' and the isolate P 'Intestine'. The concept behind the isolate [E] 'Evacuation' will not be operative unless the concept behind the isolate P 'Intestines' is conceded. This means that the isolate P 'Intestines' belongs to round 1. Thus, the Analysed Title will be:

Pharmacology (BC). Intestines [P]. Evacuation [E]. Senna [2P] 12 D

The Transformed Title will be:

Pharmacology (BF) Intestines [P]
Evacuation [E]. Senna [2P] 12 E

This was the sequence followed by CC upto ed 5. But the Pharmacologists were not satisfied with this arrangement.

2 A RELATED SUBJECT

A doctor usually prescribes Senna when there is constipation, and the Intestines need evacuation. Let us then consider the following Raw Title.

Senna as a remedy for constipation...
2.0.

To derive the Full Title we have to supply the (BF) Medicine which is implied. We have also to break the composite term 'Constipation' into the constituent terms 'Disease of the intestines due to underfunctioning'. (Constipation is a homonym standing for the disease as well as for the cause of the underfunctioning). Thus the Full Title is:

In medicine, senna as a remedy for the disease of the Intestines due to underfunctioning. 2 A

From this we get the Kernal Title:

Medicine. Senna. Remedy. Disease.
Intestines. Underfunctioning. 2 B

To derive the Analysed Title from the Kernal Title we proceed as follows. Medicine is obviously the (BF). The isolate 'Remedy' as well as the isolate 'Disease' are deemed to be manifestations of the (FC) E. By applying the 'Wall-Picture Principle' we get the sequence as 'Disease' [E] and 'Remedy' [2E]. The occurrence of two E's creates three rounds. Each of the isolates 'Senna', 'Intestines' and 'Underfunctioning' is deemed to be manifestation of the (FC) P. In the verbal Plane 'Underfunctioning' appears to be a manifestation of (FC) E. But in the idea plane it is really the cause of the disease, even as a bacteria can be the cause of the disease. It is on this analogy that we take 'Underfunctioning' as a manifestation of the (FC) P.

We have to assign each of the three P isolates to its appropriate round. Here obviously the 'Commodity-Raw material-Transformation Principle' is not applicable. We shall apply the 'Wall-Picture Principle'. Consider the sequence between the isolate P 'Senna' and the isolate E 'Disease'. The concept behind the isolate P 'Senna' will not be operative unless the concept behind the isolate E 'Disease' is conceded. Therefore the isolate P 'Senna' cannot be assigned to round 1. It can only be assigned to round 2 or round 3.

Let us consider the sequence between the isolate P 'Senna' and the isolate 2E 'Remedy'. The concept behind the isolate P 'Senna' will not be operative unless the concept behind the isolate [2E] 'Remedy' is conceded. Therefore the isolate 'Senna' is to be assigned to round 3. Therefore 'Senna' should be marked as [3P]. Let us now consider the isolate E 'Disease' and the isolate P 'Intestines'. By the 'Wall-Picture Principle' it is seen that the isolate P 'Intestines' should precede the isolate E 'Disease'. Therefore the isolate P 'Intestines' belongs to round 1.

Let us next consider the sequence between the isolate [E] 'Disease' and the isolate P 'Underfunctioning'. The concept behind the isolate P 'Underfunctioning' will not be operative unless the concept behind the isolate E 'Disease' is conceded. This means that the isolate P 'Underfunctioning' succeeds the isolate E 'Disease'.

Let us next consider the isolate P 'Underfunctioning' and the isolate 2E 'Remedy'. By applying 'Wall-Picture Principle' it is easily seen that the isolate P 'Underfunctioning' should precede the isolate [2E] 'Remedy'. Thus [P] 'Underfunctioning' belongs to round 2. Thus the isolate P 'Underfunctioning' should be marked [2P].

Therefore the Analysed Title is:

Medicine [BC]. Senna [3P]. Remedy [2E]. Disease [E]. Intestines [P]. Underfunctioning [2P]. 2 D'

From the above Analysed Title we derive the following Transformed Title:

Medicine [BC]. Intestines [P]. Disease [E]. Underfunctioning [P]. Remedy [E]. Senna [P].
 \ 2 D

3 COMPARISON

Let us now compare the Transformed Titles 12E and 2E. In both of them [P] 'Senna' comes after [P] 'Intestines' and indeed in the last round.

4 CONFLICT

The medical profession is satisfied with this sequence. But as already stated in sec 12 the pharmacology profession is not. In other words, while the sequences in both cases satisfy the principles for facet sequence, it satisfies the Second Law of Library Science in respect of the medical profession, whereas it violates the Second Law in the case of the Pharmacology Profession. Thus the five principles already formulated for facet sequence lands us in a crisis. We cannot proceed as if there were no conflict by upholding the five principles of facet sequence and denying the differential demands of the Second Law; for, the Laws of Library Science are paramount.

5 RESOLUTION OF THE CONFLICT

On the other hand, the conflict must be declared. The resolution must be sought in the domain of the principles for the facet sequence. Here we should seek to resolve the conflict by one of the following methods arranged in the sequence of preference:

- 1 Interpretation of the existing principles;
- 2 Amending one or more of the existing principles; and
- 3 Addition of a new principle.

The above sequence of preference is indicated by the Law of Parsimony viewed as 'Ockam's Razor'.

6 INTERPRETATION OF THE PRINCIPLES

Let us first examine whether any mistake has been made in the application of the 'Wall-Picture Principle' - this means the

interpretation of the principle in the respective contexts of the two (BF) s Pharmacology and Medicine. We should really look for the trouble in the decision as to which isolate is to be conceded earlier, the isolate P 'Senna' or the isolate P 'Organ'

61 Role of Parameters

In the application of the Laws of Library Science the Parameter 'Reader' is involved. The specific value of this parameter can be a generalist reader or a specialist reader of one kind or another. The application of the 'Wall-Picture Principle' should take the specific value of this parameter in the context of the (BF).

7 THE PARAMETER

71 Pharmacologist

The value of the parameter in the context of the (BF) Pharmacology is 'Pharmacologist'.

711 Senna

As already stated in Sec 12 a Pharmacologist begins with the concept of the isolate P 'Drug' and in this case the isolate P 'Senna'. It is only after the concept of the isolate P 'Senna' is conceded, that the concept of either the isolate E 'Evacuation' or the isolate P 'Intestines' becomes operative. With this interpretation of the 'Wall-Picture Principle' in the context of the (BF) Pharmacology, we get:

Pharmacology (BF). Senna [P].
 Evacuation 7 A

712 Intestines

Let us next consider the sequence of the isolate 'Evacuation' and the isolate [P] 'Intestines'. The pharmacologist begins with the study of the effect of senna. The concept of the isolate 'Action' or (Effect) is therefore to be conceded first before the concept of the 'Organ' on which the action takes place becomes operative. Therefore, in the context of the (BF) Pharmacology, the isolate P 'Organ' comes after the isolate [E] Action or (Effect).

713 Evacuation

Further, the Pharmacologist is interested to know what exactly is the kind of the action. The concept behind the isolate P 'Intestines' should be conceded before the concept behind the isolate 'Evacuation' becomes operative. Therefore the sequence should be 'Intestines' [P], Evacuation.

The next problem for consideration is to determine the (FC) of which 'Evacuation' is to be deemed a manifestation. The apparent form of the term 'Evacuation' tempts one to deem it to be a manifestation of the (FC) E.

We should remember that when viewed through the verbal plane, the concepts in the idea plane are often seen aberrated. It requires careful judgment based on considerable experience to apply the correction for such an aberration. One of the ways of doing it is as follows:

Read the term in verbal plane with the E isolate preceding or succeeding it which ever is appropriate. In this case we read the isolate term 'Evacuation' with the E isolate 'Action'.

If 'Evacuation' is a kind of 'Action', 'Evacuation' as the E isolate becomes redundant. But while studying the drug, one should not start with any presumption about the kind of action. Therefore, one can start only with 'Action' in general for the focus in E. This course being necessary it looks as if the isolate 'Evacuation' would be redundant if it were to be taken as [E]. At the same time we cannot omit it.

We have to understand the meaning of 'Evacuation' in its noun form. This meaning is the 'Act of evacuating'.

Therefore, we have to deem the idea behind 'Evacuation' to be a manifestation of the (FC) P.

We have seen that 'Intestines' is [2P]. Therefore 'Evacuation' should be [2P2]

Since the Law of Interpretation has itself helped into resolving the conflict mentioned in Sec 4 there is no need for us either to amend the existing principles for facet

sequence or adding a new principle for the same.

8 LAW OF INTERPRETATION

81 Law of Parameter

A general normative principle belonging to the family of the Laws of Interpretation is highlighted in the above discussion. It may be stated as follows:

In applying or interpreting the principles for facet sequence - particularly the ubiquitous 'Wall-Picture Principle' - the value of the Parameter 'Reader' should be taken into consideration.

This law may be called the Law of Parameter.

This Law has not been sensed till now. This failure had led to difficulties. This law has an helpful effect in the design of the schedules for the classification of the subjects arising out of a (BC). Barring the facets of Specials and Systems, [P] - which may be called the first intrinsic facet - should be the one determined by the specialist reader specific to the (BC).

This fact makes it obligatory for the classificationist to indicate the [P] - the first round first level facet - in the absence of Specials or Systems facet. In the latest Presentation of the schedules for [P] in CC, it will be observed that the [P] schedule, are generally telescoped facets.

The Law of Parameter given above gives a direction to the classificationist. He should put in the earliest sectors of [P], the schedule of the facet of primary interest, to the reader specialising in the (BC) concerned.

The published ed of CC gives a facet formula in association with each (BC) and gives the schedule for [P]. The schedules for [P] for the different (BC) should now be reviewed, from the angle of this Law of Parameter. A rough glance shows that the direction of the Law of Parameter has been generally followed unconsciously. But a systematic examination of the schedules of each (BC) should be taken up.

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