Krishnappa Subramanyam
Drexel University, Philadelphia, USA

Seminal Mnemonics in Classification

Subramanyam, K.: **Seminal mnemonics in classification**
In: Intern. Classificat. 3(1976)No.1, p.16–18, 8 refs.

The basic idea underlying seminal mnemonics is that concepts of objects or phenomena which are apparently unrelated at the phenomenal level, may be seen to be related to each other at a deeper level of perception. Seminal mnemonics consists of assigning the same notational digits to such "seminally equivalent" concepts, regardless of their verbal denotation or class context. But the perception of seminal equivalence of concepts is a difficult process, and demands a high degree of intuitive ability in the classificationist. In this paper an attempt is made to explain the theoretical basis of seminal mnemonics and to examine its use in classification.
(Author)

1. Introduction

Notation in a classification scheme is said to have mnemonic value if a given digit represents the same concept, irrespective of the class context of the concept. A fixed relation between the notational digits and the concepts they represent, regardless of the context in which the concepts occur, greatly assists the assignment of notational digits in formulating the class number for a document. Since many basic concepts recur in different class contexts throughout a classification scheme, a fixed digit-concept relationship reduces the need for repeated enumeration, and therefore reduces the size of the classification schedules.

The functions of mnemonics in a classification scheme may be stated thus:

(1) To assist the memory of the classifier in developing class numbers for documents.
(2) To reduce references to classification schedules and indexes.
(3) To reduce the size of schedules.
(4) To facilitate consistent sequence in the enumeration of isolates in similar arrays.

Four kinds of mnemonics are used in the Colon Classification. These are:

(1) Alphabetical
(2) Scheduled
(3) Systematic
(4) Seminal

These are discussed in detail in S. R. Ranganathan's *Prolegomena to Library Classification*, and *Colon Classification*, as well as in a few journal articles. (1–5)
In this paper an attempt is being made to suggest a theoretical basis for seminal mnemonics as used in the Colon Classification.

2. Seminal Mnemonics

The basic idea underlying seminal mnemonics is that concepts of such objects or phenomena, which are apparently unrelated at the phenomenal level, may be seen to be related to each other at a deeper level of perception. Let us examine the following set of concepts that occur in different main classes of a classification scheme.

Concepts of Main Classes	*Concepts of phenomena*
Biology	Morphology
Geology	Morphology
Law	Property (i. e. material possessions)
Linguistics	Morphology
Medicine	Anatomy
Political Science	Constitution
Sociology	Physical Anthropology

Although the concepts listed above occur in different disciplines, and are denoted by different terms, it may be intuitively perceived that they are all different manifestations of the same basic idea of "structure". These concepts are therefore said to be "seminally equivalent". Seminal mnemonics consists of using the same notational digit to denote seminally equivalent regardless of their main class context or terminology.

S. R. Ranganathan has delineated three planes of work in classificatory activity: (1) The idea plane in which the classificationist is primilarly concerned with the nature of the universe of knowledge; (2) the verbal plane in which the primary concern is the problem of expressing concepts in appropriate terminology; and (3) the notational plane wherein the main concern is the development of a set of symbols and rules for their use in the classification scheme.

Seminal equivalences have to be identified in the idea plane; in the verbal plane such equivalences are generally not apparent, as seminally equivalent concepts are often denoted by different terms in different contexts. The classificationist has to have sufficient intuitive insight to be able to recognize seminal equivalence of concepts in the idea plane so that the same digit may be used to represent them in the notational plane.

3. Seminal Equivalence of Entities

Of the few areas in which S. R. Ranganathan has not made his ideas adequately explicit, the theoretical basis of seminal mnemonics is one. This is presumably because seminal equivalence of concepts is based on ineffable principles, and the perception of such equivalence is a trans-intellectual process. The following is a suggested explanation of the seminal equivalence of apparently unrelated entities.

The ancient Hindu seers have hypothesized that everything in the phenomenal world is subject to change. The continually changing phenomenal world is seen as a pro-

https://doi.org/10.5771/0943-7444-1976-1-16 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

jection of an undifferentiated substratum that never undergoes any transformation. This substratum, or the Absolute Reality, manifests itself in the form of myriads of objects and beings constituting the phenomenal universe. The seers discovered that even the most elaborate and intensive study of the phenomenal universe could not reveal the nature of the underlying substratum. Thereafter they directed their attention inward, into the realm of the mind and eventually discovered that the nature of this undifferentiated substratum is transcendental, that it cannot be perceived by the intellect, and that it can only be experienced when one attains a superconscious state, transcending the limitations of the time-space-causation continuum. Various methods for attaining this superconscious state have been described in the Hindu Scriptures, but these are not of concern to us now. What is important is the finding that the astounding diversity of nature as perceived by man through his senses diminishes as we go deeper into the subtler levels of consciousness. Ultimately, at the superconscious level, the myriads of entities which appear to be different and independent at the phenomenal level, merge into one undifferentiated substratum.

The above model is helpful in understanding the basis for seminal mnemonics. The seminal level of perception is one that is close to the substratum of all existence. Concepts of phenomena such as "morphology", "anatomy", and "constitution" which are apparently unrelated, begin to merge toward a central concept of "structure" at the seminal level. S. R. Ranganathan felt that if the classificationist has sufficient insight to see the equivalence of ideas at the Seminal level, then he can use the same digit to represent all those concepts, although they are denoted by different terms in the verbal plane, as in the example discussed above.

4. Seminal Mnemonics in Colon Classification

S. R. Ranganathan is said to have used seminal mnemonics "intuitively and almost unconsciously" in developing Colon Classification, as explained by him in 1937 in the first edition of his *Prolegomena to Library Classification*. This device was then called "unscheduled mnemonic". The term *seminal mnemonics* was suggested by B. I. Palmer and A. J. Wells in 1951 in their *Fundamentals of Library Classification*.

The table below shows the mnemonic significance of digits representing seminally equivalent concepts in Colon Classification (6).

Digit	*Concepts*
1	Unity, God, world, first in evolution, one dimension, solid state
2	Two dimensions, plane, conics, form, structure, anatomy, morphology, source of knowledge, physiography, constitution, physical anthropology.
3	Space, cubics, analysis, function, physiology, three dimensions, syntax, method, social anthropology.
4	Heat, pathology, disease, transport, interlinking, synthesis, hybrid, salt.
5	Energy, light, radiation, organic, liquid, water, emotion, foliage, woman, sex, crime, aesthetics, ocean, foreign land, alien, external, environment, ecology.
6	Dimensions, subtle, mysticism, money, finance, abnormal, phylogeny, evolution, time.
7	Personality, ontogeny, integrated, holism, value, public finance.
8	Travel, pilgrimage, organization, storing, management, fitness.

The following Schedule segment from the Basic Class Law serves to illustrate the use of seminal mnemonics in Colon Classification.

Z LAW

Foci in [P2]

1	Legal person
11	By age and sex
111	Minor
115	Female
1151	Unmarried
1152	Married
1154	Widow
. . .	
5	Crime
51	Against person
515	Against woman
52	Against property
524	Trespass
5242	House-breaking

The isolates "person", "minor person", and "unmarried" (single person) can be seen as seminally related to the idea of "unity", and are therefore assigned the digit 1. The isolates "property" and "house", (both being "possessions of man") and "married person" (couple), signify the notion of "duality" and are assigned the digit 2. In Colon Classification the digit 4 is generally employed to signify the notions of movement and disease or pathology. Accordingly, in the above schedule, the isolates "widow" (social pathology?) and "trespass" (movement) are represented by the digit 4. Wherever possible, the digit 5 has been used for notions such as "female" and "crime" (see table above).

Abdul Rahman and T. Ranganathan have studied the incidence of seminal mnemonics in the various facets in Colon Classification (7). The results of this census indicate that:

a) seminal mnemonics occur in nearly 13 percent of all special isolates.

b) seminal mnemonics are non-existent in the Matter facet (perhaps because this facet contains the least number of isolates); and

c) the incidence of seminal mnemonics is highest (63 percent) in the Energy facet.

5. Some Advantages and Problems

In their assessment of the value of seminal mnemonics, Abdul Rahman and T. Ranganathan have claimed the following advantages (8).

1) Seminal mnemonics aids memory.

2) It discloses coherence, if not the identity in the different fields of the universe of knowledge.

https://doi.org/10.5771/0943-7444-1976-1-16 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY