

CHAIN PROCEDURE AND DICTIONARY CATALOGUE

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[Begins with an account of the genesis and a large scale application of chain procedure. Shows the success of the present rules of chain procedure in the choice and rendering of headings for class index entries in classified catalogue. Shows their unhelpfulness in the choice and rendering of headings for subject entries in dictionary catalogue. Calls for study of further samples in order to establish a helpful set of rules of chain procedure for use in dictionary catalogue.]

0 Abbreviation

The following abbreviations are used in this paper :—

BNB: *British national bibliography*

CC: Colon Classification

Ccc: *Classified catalogue code*, ed 3, 1951, by S.R. Ranganathan

DC: Decimal Classification

Dee: *Dictionary catalogue code*, ed 2, 1952, by S.R. Ranganathan

Fundamentals: Library catalogue: Fundamentals and procedure
1949 by S.R. Ranganathan.

Theory: Theory of library catalogue, 1938, by S.R. Ranganathan

Wells: Our debt to India by A.J. Wells in *Library science in India*
ed by K. Chandrasekharam, 57-63.

1 Genesis of Chain Procedure

Chain Procedure is a device to derive subject headings from Class Number, mechanically—that is without reading the book and determining the subjects (s) of a document. Reading the book would have been already made in fixing the class Number of a document. It is an offence to the Law of Parsimony to repeat the same piece of work. The chain procedure is thus a method for respecting the Law of Parsimony. This method was first described in the *Theory*, chap 11. This first draft was clumsy and involved. In *Fundamentals*, (Part 3) a simplified version of the chain procedure was given. In *Ccc* rules 310 and its sub-divisions, the application of the procedure to the choice and rendering of headings for class index entries was laid

down in detail. Edition 3 of *Ccc* introduced also the concepts of Sought Link, Unsought Link, and Significant Link.

2 Large Scale Application

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A large scale application of Chain Procedure began in 1951. This was in the BNB. It is a classified catalogue. We read in *Wells* "I had decided to introduce three techniques into the new BNB. . . . detailed featuring, chain indexing, and the imposition of the facet formula on the DC schedules. It was soon realised that the chain procedure is not helpful unless the class number is co-extensive with the subject of a book. DC notation failed in this respect. BNB developed its "(1)" symbol and its system of verbal extension of class number to make the latter fit for use in chain procedure." Generally speaking, the rules of chain-procedure yielded helpful commonly sought class index headings for a Classified Catalogue.

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However there has been no large scale application of chain procedure to a Dictionary Catalogue. There has thus been no verification of the efficiency or trustworthiness of chain procedure as a tool in deriving the choice and rendering subject headings in a Dictionary Catalogue. No concrete experiment, so to speak, has been made as in the case of Classified Catalogue.

3 Intellectual Experiment

However, intellectual experiment is in progress. During my visit to London in June 1954, I was informed by Wells and Coates of BNB about a result of such an intellectual experiment. The current rules of chain procedure do not yield helpful commonly sought subject-headings for Dictionary Catalogue.

4 Example

Consider the CC Number T15:315.44. This is thrown into the following chain, stating sought links only:—

T	=	Education
T15	=	Elementary education
T15:3	=	Teaching method in elementary school

T15:31	=	Audo-visual methods in elementary school
	↓	
T15:315	=	Visual method in elementary school
	↓	
T15:315.44	=	Visual method in elementary schools in India

According to the present rules of chain procedure the last sought link gives the following choice and rendering of the heading of the specific subject entry.

INDIA. VISUAL METHOD. ELEMENTARY EDUCATION

Experience of reference service in libraries shows that materials on this subject are not looked for in a Dictionary Catalogue under the main heading "India". On the other hand it is looked for under the more heading "Visual method." Thus the present rules of chain procedure fail.

5. Success in Classifical Catalogue

In the Classified Catalogue, the success of the present rules is due to two causes:— Let us consider readers seeking materials on "Visual method of teaching in elementary schools in India." A reader normally begins with the alphabetical part. The majority of readers will look up the heading "Visual method." We shall denote such readers by the term "Class 1 Readers". The heading looked up will send the reader to a region of the classified part under the class number T15:315. Some may look up the main heading "India". We shall denote such readers by the term "Class 2 Readers". This heading will send the reader to the region of the classified part under the class number T15:315.44. A few may perhaps look up the main heading "Elementary education." We shall denote such readers by the term "Class 3 Readers". This heading will send the reader to the region of the classified part under the class Number T15. But every one of these will land in the same relevant region of the classified part. There the panorama of the feature headings and the entries themselves will make the reader pick up easily the entries on the "visual method of teaching in elementary schools in India." The entry beginning with "India" will serve the reader exactly and expeditiously, provided he is a Class 2 Reader and

brings to the alphabetical part of the catalogue a trained sharp analytical mind and looks up "India". Class 2 Reader may be rare; however, this rare reader is given the best service without any dis-service to Class 1 Readers who may look up only "Visual method." For him the heading "Visual method" gives an immediate hold and satisfaction. On arrival at the classified part, he has to spend a little more time than a Class 2 Reader, before finding the materials on "Visual methods of teaching in elementary schools in India". Even the less trained Class 3 Reader, who looks up only "Elementary education," has the same initial satisfaction as Class 1 Reader, but perhaps a little more loss of time before arriving at the materials on "Visual methods of teaching in elementary schools in India". Thus the current rules of chain procedure give the desired help to every class of reader, more or less of equal measure if the catalogue is a classified one. If a Class 1 Reader or a Class 3 Reader has to spend more time in the classified part than a Class 2 Reader, it is not due to any defect in the catalogue or the chain procedure. It is due only to their inability to state the exact requirement. To put it cynically, "Each reader gets what he deserves."

6 The Unhelpfulness in Dictionary Catalogue

In the Dictionary Catalogue, the unhelpfulness of the present rule is due to a psychological reason. Let us first consider the more numerous Class 1 Readers. Such a reader looks up "Visual method." But he finds the following "see also entry":—

VISUAL METHOD. ELEMENTARY EDUCATION

See also

INDIA. VISUAL METHOD. ELEMENTARY EDUCATION

The third section of the above entry will really have a large number of referred-to headings. The reader will have to choose the particular referred-to heading in which he is interested and then go on to the appropriate region of the catalogue, to find the entries needed by him. If he is interested in "Visual method" in different countries or in the teaching of different subjects, he will have to go to several regions of the catalogue. He is tired by this. He will be more comfortable if he is saved this. But in the classified catalogue, he will find them all together in the classified part. He need not go

from region to region. Thus the psychology of the majority of readers would suggest to the Dictionary Catalogue that it should collect together under "Visual methods" all the materials, whether they are "Visual methods" in different countries or "Visual methods" in teaching of different subjects.

61 CLASSIFIED POCKET

No doubt this amounts to forming a classified pocket or oasis in the alphabetical desert. But it is a demand of an inherent classified approach in human mind. The chain procedure should respect this inherent tendency in readers. But the chain procedure is baffled in its attempt to decide which link in the chain will satisfy this inherent tendency in readers. The last link which it caught hold of is amenable to be caught mechanically, because of its unique position in the chain. Similarly the first link can also be caught mechanically. But surely it is not helpful to make "Education" the main heading of the specific subject entry. Class I Readers will not look up this heading. Will any of the next three links—Elementary education, Teaching method or Audio Visual method—be looked up by Class I Readers—that is by the most numerous class of readers? The present belief is that they will not. Probably this is due to Class I Readers having been accustomed to a particular way of approaching the catalogue, brought into vogue by the conventional subject headings in current use. The *Theory* has shown that the subject headings in current use have not been chosen on a consistent rational basis. They are largely the result of "flair" known to be notoriously inconsistent.

62 NEED FOR INVESTIGATION

Even after making allowance for the pressure of the irrational subject headings in current use, there is perhaps intrinsic psychological reason for the majority of readers not thinking of "India" as the main heading, while seeking materials on "Visual methods of teaching in elementary schools in India." An objective field study and observations and a statistical analysis of the results of the observation should form the foundation for the framing of the rules of chain procedure in such a way that the main heading for the specific subject entry can correspond to that one of the upper links which is likely to be thought of by the majority of readers. The library profes-

sion should arrange for such an objective investigation to be made. Without it, the choice of specific subject heading is a matter of listless drift. The dangers of such a drift have not been till now leading to crisis, because only materials embodying macro thought are being largely catalogued.

7 ADVENT OF DOCUMENTATION

But to-day documentation has been accepted as a necessary service to be done by libraries. The emphasis of documentation is on micro thought. Classifiers have already become sensitive to this. The FID provides the forum for evolving the necessary Depth Classification. But the cataloguers have not yet become sufficiently sensitive to the demands of micro thought on the choice of specific subject headings. IFLA has been for some years playing with the idea of tidying up cataloguing practice. But it has not yet made any head-way even in regard to the much simpler author heading. It is up to the new generation of cataloguers, who alone know the pressure of micro thought, to take up this problem and pursue it along scientific lines. A mere recording of current practices and striking a common factor will not meet the situation. A mutation is called for in cataloguing practice, because a mutation has occurred during recent years in the universe of knowledge and in the division of labour between the research worker and the library profession.