Ranganathan in London Beginnings of the discipline of library science

Who was S. R. Ranganathan?

- Ranganathan was an Indian librarian, library scientist, and theoretician
- He was a Hindu by religion, a Brahmin, and steeped in the knowledge of Indian philosophy, literature and language
- Until his early thirties he was a professional mathematician, a university professor and published author
- In 1923 he was offered the post of University Librarian at Madras University, although he had no knowledge or experience of library management
- His new employers proposed he come to London to learn about contemporary practice in the profession
- What he learned in London started a career of immense global importance



Ranganathan the student

- Ranganathan's intended destination was the British Museum Library, but they suggested he would do better at the newly established Library School at UCL, where he subsequently enrolled in September 1924
- He did not achieve any particular qualification, but studied those subjects in which he had an interest – library economy, bibliography, cataloguing, and classification – in which he sat, and passed, the examinations
- Classification was taught by Charles Berwick Sayers, with whom Ranganathan formed a close relationship
- Sayers was Librarian at the London Borough of Croydon, where Ranganathan spent much of his time learning about the profession 'on the ground'
- He was not an especially distinguished student, although he gained first class marks in cataloguing and classification



Life in london

- Ranganathan originally lived near the College, at 112 Gower Street
- Later, with a group of Indian student friends, he moved to lodge with a Mrs Hendersen in Maida Vale
- They instructed her on how to prepare Indian dishes, and Ranganathan's letters home show how he was able to follow a traditional Hindu regime
- He also continued to practise his religion, maintained his Indian style of dress, and avoided western social habits
- He was determined to avoid the experience of his hero, the mathematician Ramanujan, whose time in England and attempts to westernise doubtless contributed to his untimely death at the age of 32.

Thinking about libraries

- It was during his time in London that Ranganathan began to formulate many of his innovative ideas
- He became determined to establish librarianship as a proper discipline

 library science
- He applied scientific thinking to the subject for the first time, and he started to look for rules, patterns and laws inherent in library practice in an attempt to produce a theory of LS
- Western commentators are broadly agreed that this the scientific approach was his most significant contribution to the field
- It has been observed that his scientific cast of mind is what makes his writing impenetrable to many rather than his use of language, or the influences of Indian religion and philosophy

A broad view of librarianship

- Ranganathan's published works are extensive (more than 60 books and over 1500 articles and papers), and he covers all areas of practice
- Apart from the Five Laws of Library Science, he researched and wrote about library management, professional education, classification, indexing, cataloguing, standards, information communication and exchange, bibliography, and most other aspects of the field
- He was also politically active, and a powerful advocate for libraries as instruments of education, and the right of access to libraries and information
- During his lifetime he travelled the world speaking about his ideas, sat on many international committees, and was honoured by numerous institutions

Classification

- Of the subjects he studied at UCL classification was the one with which he most engaged, and he is most widely recognised for his work in this field
- He is generally credited with originating the method of faceted classification, although similar ideas were already circulating
- Today his ideas of faceted classification are influential in every area of information organization and retrieval, and he is the one librarian that most non-library information workers will know about
- Faceted classification was the central concept for the UK Classification Research Group, set up by another UCL luminary, B. C. Vickery, one time Director of the Library School, and the most influential writer on faceted classification after Ranganathan himself.

Classification and mathematics

- There is evidence that even as a student he had already started to think about classification in a mathematical way, as opposed to the more philosophical approaches that were employed previously
- And, of course, it was in London that he saw the engineering toy Meccano, which most people believe inspired his fundamentally different take on constructing classifications
- His notion of a classification scheme was one based on individual simple concepts which could be combined according to various rules and principles to create a structured model of a subject field
- It was a way of representing multidimensional subject content in a logical and predictable manner, and one which could be manipulated mechanically
- It is essentially a mathematical model of a domain



Developing theory

- Many of Ranganathan's ideas at this time were fairly rudimentary, including the first versions of the Colon Classification
- He was yet to come up with notions such as fundamental categories or facets
- His *Prolegomena to library classification* shows significant differences between the first (1937), second (1957), and third(1967) editions
- Commentators have identified at least stages of development in his theoretical writing: basic classification; depth classification; and abstract classification
- As this theory develops it becomes more complex and more mathematical in its nature

Key mathematical ideas in classification

• Central to Ranganathan's later thinking is the postulational approach to classification modelling which provides a direct link with maths:

"Mathematics merely sets up several models with several systems of postulates as the basis, quite unmindful of the existence or otherwise of a correlate universe within the realm of experience or facts." (*Prolegomena*)

- This stresses the artificiality of both classificatory and mathematical models, and their mutability according to need
- It contrasts strongly with earlier classification theory that focussed on the existence of a 'natural order' of things

Other mathematical analogies in *Prolegomena (3rd edition)*

- mathematics is a tool for mechanising inference; classification is a tool for mechanising arrangement of subjects;
- both use numbers as tools;
- both generalise their concept of numbers;
- both are parsimonious in exercising the freedom to create new numbers;
- both mathematics and classification are equivalent to artificial languages using their respective symbolic systems;
- both are clear about the limitations on the use of these artificial languages;
- both separate work in the idea plane from that in the notational plane; notation can be used as a computational tool before returning the results to the idea plane;
- the notational plane can reveal gaps in the coverage of the domain and the potential for their development.

Abstract classification

The progress made so far in the general theory of library classification makes us sense the existence of a theory of abstract classification, analogous to pure mathematics. Abstract classification provides a model – both in idea and notational planes – irrespective of any particular state of development and structure of the universe of knowledge. This model is also irrespective of any particular subject or region in the universe of knowledge. It is indeed a pure model. It is a model in abstract.

"Documentation Work and Abstract Classification," *Annals of Library Science* 2, no. 1 (1955): 10.



