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Documentation Research and Training Center (DRTC): A Historical Perspective

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ABSTRACT

Progress in education and research, which go hand in hand, are the two key variables to determine the societal impact and ensure the future sustainability of an academic discipline. Since the inception of Library and Information Science (LIS) as an accredited academic discipline, the Documentation Research and Training Centre (DRTC), Bangalore, has been a major, if not sole, progenitor of almost all pedagogical and research advances in the Indian LIS milieu. The present work, a first-of-its-kind historiography, presents a detailed multifaceted description of the historical origin of the DRTC. It also describes the vision, foundation and advances in LIS incubated at DRTC, the de-facto premier information school of the Indian subcontinent. The novelty of the paper, apart from being the first ever historical analysis of DRTC, lies in its exposition of several non-trivial trivia behind the foundation of DRTC which can inspire futuristic educational institution building in the Indian setting.

KEYWORDS: *Deshmukh, C.D, Documentation Research and Training Centre, DRTC, Indian Statistical Institute (ISI,) LIS Education and Research, Mahalanobis, P.C., Ranganathan, S.R.*

INTRODUCTION

Dr. S. R. Ranganathan (1892-1972), a phenomenal visionary and crusader, was a charismatic, multi-faceted intellectual with multiple missions. He is usually associated with only theory and practice of library science and documentation; however, it would be unjust to confine him to library science or documentation only. He was a philosopher whose philosophical ideas could be applied in general across the domains (Ranganathan, 2001)[1]. Besides his pioneering research, he is also well known for imparting research, teaching, and training in library and information science (LIS). The inception of the

Documentation Research and Training Centre, a.k.a. DRTC, is one of the examples of his ambition to uplift the education, training, and research in LIS. The DRTC was established as a unit of the Indian Statistical Institute (ISI) Bangalore center, by S. R. Ranganathan in 1962 on the invitation of the Government of India via Prof. P. C. Mahalanobis (1893-1972) to promote research and conduct training courses in documentation work. Indian Statistical Institute (ISI) is a unique institution devoted to the research, teaching and application of statistics, natural sciences and social sciences. Founded in Kolkata on 17th December 1931, the institute gained the status of an Institution of National Importance by act

number 57 of the Indian Parliament in 1959. The Headquarter of ISI is located in Kolkata. Additionally, there are five centers located in Delhi, Bangalore, Chennai, Giridih and Tezpur. Research in statistics and related disciplines is the primary activity of the Institute. Offices of the Institute located in several other cities in India are primarily engaged in projects and consultancy in Statistical Quality Control (SQC) and Operations Research (OR). The ISI functions under the Ministry of Statistics and Program Implementation (MOSPI) of the Government of India (Ranganathan, 1972)[2].

In the present study we trace the research and development journey of DRTC since its foundation—which is an interesting story in itself.

BACKGROUND AND FOUNDATION

For the foundation of the DRTC, Ranganathan gives the entire credit to the founder Director of Indian statistical institute, Professor P. C. Mahalanobis (Ranganathan, 1972)[2] and his firm belief in such services to the fledgling Indian industry. In his book *Documentation: Genesis and Development* (1972) and at other places Dr. Ranganathan mentions how Mahalanobis persuasively convinced him about the need for documentation research and training in India (Ranganathan, 1972)[2]. After his several assignments in various Indian universities, Dr. Ranganathan shifted to Zurich, Switzerland in 1954 with a mind to settle there permanently; there his son was studying engineering at the famous ETH (Swiss Federal Institute of Technology Zurich). His primary aim of moving to the industrially advanced Europe was to observe firsthand the documentation and other library services to the industry there, and to himself do research and development in the area of documentation (Ranganathan, 1972; Waghmare, 2015)[2, 3]. And he also wished to improve his "own work on documentation by associating himself with the industrially advanced countries of Europe" (Ranganathan, 1972)[2]. Many European librarians visited his house in Switzerland to discuss their classification and documentation problems. According to an agreed program documentalists of various countries came to him in turn for two to three months for further learning.(Ranganathan, 1972)[2] Then came P. C. Mahalanobis, OBE, FRS aptly credited to be

the father of statistics in India. His birthday 29th June is celebrated in India as the National Statistics Day. Politically influential man was close to Jawaharlal Nehru, the Prime Minister, and statistics advisor to the government. A Member of the Planning Commission, he was the architect of the 2nd Five Year Plan (FYP, 1956-1961 which is also termed as Feldman-Mahalanobis model that emphasized on the industrialization of the country. Prof. Mahalanobis had clearly visualized that industrialization is one of the vital engine of economic growth and consequent nation-building. Industrial development requires indigenous research and development. He had a clear idea about ongoing research and development in other countries. Imported know-how is not very useful and practicable and gets dated by the time it reaches developing countries. Indigenous research was the answer. Accordingly, Mahalanobis felt the need for a national centre for documentation research and education where the documentalists could do intensive research in advance documentation theory and techniques. The proposed centre would generate trained manpower to man the documentation centres throughout the country for giving advance information services to industry and academia. Fame of Ranganathan as an expert in library and information science had reached Mahalanobis. To translate his vision into reality, Mahalanobis met Ranganathan in Europe in 1956 to offer him to set up such a centre in India. He requested Dr. Ranganathan to head India's documentation research and training program. He urged Ranganathan not to shirk his responsibility to do his best to the country at that important time (Ranganathan, 1972)[2]. Wary Ranganathan felt otherwise that in the mid-1950s time was not rife for such a dedicated centre. From his experience of the INSDOC he had noted that there was no demand for documentation services by the industrial and business houses. Needed minimal and primitive documentation services were being provided by the Association of Special Libraries and Information Centre (IASLIC, Kolkata) and the Indian National Scientific Documentation Centre (INSDOC, New Delhi). Demand for documentation and information services was in a low key. He always believed that institutions are the product of social forces, and inventions are rooted in necessity. In his view such a before-time centre would not be

effective in the economic milieu of 1950s. Ranganathan was bit conservative in forward looking. He came back to India in February 1957 due to various reasons. Persevering Mahalanobis had not given up. However, it took around another half a decade for Dr. Ranganathan to get convinced about the need of India's documentation research and training program. Sometime later Mahalanobis invited Ranganathan and his wife to visit ISI, Kolkata and himself see for himself the facilities for establishing such a centre. Ranganathan was still apprehensive of the sufficient demand to make viable such documentation services and consequent a centre. But at the same time he also had some reservations on the demand of documentation services by the then fledgling industry. The period of next five years between 1956-1961, has been described by Ranganathan "period of painful inaction"*****. Nevertheless, industrially situation had begun to change for the better. In 1959 Planning Commission(now NITI Ayog), taking interest in documentation services for research and industry appointed one man committee of Ranganathan to suggest ways to increase the services and productivity of the INSDOC for the Third Five Year Plan (1961-1966).

Ranganathan's recommendation of six-fold increase in its productivity and collateral increase in staff and budget were generally accepted. New posts were created but competent professionals were not available to fill these positions (Ranganathan, 1965)[4]. Thus, Ranganathan realized the need of a national documentation training centre. By early 1960s the industry in India had also started realizing the need of documentation services for research and development (R&D). Ranganathan himself had started receiving some demand for such services here and there. Also, Ranganathan believed in the Say's law that supply creates its own demand (Ranganathan, 1965)[4].

"I felt that a national documentation centre could stimulate and persuade the newly emerging industries to accept documentation work and service it offered. In other words, I felt that supply should precede demand in particular conditions of our country"

In 1961 the matter got clinched through the good offices of Mr. Jibanand Saha, the librarian of the ISI, Kolkata. J. Saha successfully played the role of an intermediary between Mahalanobis and Ranganathan--- Sahawas a trusted person for Mahalanobis. Saha repeated the suggestion of Mahalanobis and asked him to prepare the formal memorandum for this purpose. Ranganathan drafted and submitted it in mid-1961. Mahalanobis liked the formal memorandum and got it through the various statutory bodies of the ISI. Even the Prime Minister of India liked it. Everything happened with a lightning speed within two weeks. The DRTC came to fruition after the third endeavor of the director of the ISI, Kolkata--- third time lucky, they say.

As another hitch, Ranganathan's wife Sarada Ranganathan (1908-1985) would not want to settle anywhere else than in south India. By another incidental luck, the ISI was going to establish a fully fledged regional centre at Bangalore and it was decided to make the DRTC one of the units there. This is how the DRTC was conceived and born. A rented building near Ranganathan's house was occupied on 1st January 1962 and the proposed centre was established as a unit of the Indian Statistical Institute at Bangalore, instead of Kolkata (Waghmare, 2015)[3]. This way Ranganathan found another firm forum to continue his research and impart education. It was a kind of a reward to the nomad Ranganathan. His son Yogeshwar Ranganathan (1932-2016) equates the role of Mahalanobis with that of Edward B. Ross in Ranganathan's professional career (Ranganathan, 2001)[1].

After the inception of DRTC, the major documentation research and training activities mostly got shifted by default to DRTC. With the five professionals of INSDOC, training in the documentation was started at DRTC along with to promote research in the library and information science in general. The founding objectives of the DRTC were to:

- Impart research-based education and training to the library and information science professionals to provide advance library and information services in India and abroad.
- train advance documentalists for India and other Afro-Asian countries
- Provide consultancy services in information management and technology especially to industrial houses, business organization, government and the

interested individuals. Staff of the DRTC was tasked for this service. In 1972 he suggested (Ranganathan, 1972)[2]:

A small squad of Consultant-Documentalists should be maintained by the DRTC. The DRTC should send them to particular industries and other agencies in the country to give them consultant service. This will require a very careful planning, so that the cost of the consultant is made up entirely of the consultant fee collected.

If ever such a squad was formed is not known. However in the e-environment need for such a squad is obviated.

In 1965 Ranganathan repeated that research in documentation science and services are the primary objectives of the DRTC. (Ranganathan, 1965)[4] In the same paper Ranganathan believed that the "role of DRTC in future [economic and social] development of the country will be realized hereafter in an increasing manner"-- it was too tall a claim for a sub-autonomous educational institute, or was it some unfounded faith in the power of lowly lying documentation services?.

Figure 1: Inauguration of DRTC (18 August 1962)

INAUGURATION

Mr. Sarat Bannerji, deputy librarian, ISI Kolkata joined as faculty at DRTC on a short time deputation. Mr. A. Neelameghan, a documentalist of Hindustan Antibiotics Limited, Pimpri joined later in April. With Dr. Ranganathan this trio was the first batch of teachers at the DRTC (Ranganathan, 1972)[2]. In April they formulated the syllabus and scheduled to begin classes by 1st of June 1962. But this was not to be. As another queer condition, apart from deputation, the candidates to be admitted were supposed to have undergone two months orientation course at their respective parent institution

before joining—this was a futile condition as the modalities of the pre-admission home orientation were not defined. Thus apart from being already trained professionals the candidates were not to join with a clean slate. It was done to immediately takeoff for a very advanced course. Nevertheless it was not to work for long, if it all it did.

Ganesh Bhattacharyya (1936-2006), an alumnus who had passed out with distinction in the 1963-1965 batch, later joined in April 1965 as a faculty. Dr. Ranganathan taught at DRTC as an honorary professor up to this time and took off from formal and regular teaching. However, he was associated with DRTC until

his demise in September 1972. Now it is the third generation of faculty at the DRTC. Most of them are alumni of the Centre, though it is not the condition. However the induction of new teachers is a tough and testing process. Perhaps this accounts for the low faculty strength there.

TEETHING TROUBLES

In the beginning, the DRTC was not meant for preparing fresh students to embark on a new career. It was distortedly envisioned as a specialized school for the employees delegated from business, industry and the government to learn advance techniques of what we now call information management (Ranganathan, 2001)[1]. – this perhaps justifies the component term 'training' in its nomenclature. The term 'documentation' which was popular in 1930s had become dated by 1960s. Why this old term was given to the state-of-the-art institute cannot be easily known.

The students on deputation from CSIR/INSDOC were awaited for the first term to begin by mid-June 1962. They did not arrive, nor there any information about their whereabouts. When the Director General of the CSIR came to know of this in an incidental meeting with Ranganathan he immediately arranged to depute five employees. They had not undergone the prerequisite orientation course; it was given to them at the DRTC before the beginning of the course. In the first batch apart from CSIR there were one each from DRDO, ISI and a college. Of these some deputed employees from INSDOC left and finally only five students passed out in 1963***. The session was inaugurated by Dr. C. D. Deshmukh on 18th* August 1962 attended by about two hundred scientists. Dr Deshmukh** at that time was ex-officio President of the ISI, and Chairman of the University Grants Commission. He was always impressed by the extraordinary caliber, experience, professional status and selflessness and total dedication of Ranganathan as a library scientist. He was further impressed by his zeal in making India a republic of libraries and services thereto. Chief Justice of the then Mysore State Justice Nittoor Sreenivasa Rau chaired the inaugural session. Pandit Jawaharlal Nehru, the Prime Minister, in his message acknowledging Ranganathan's contribution to advances in documentation

science wished the school to be international to admit students from abroad. There were messages of facilitation from world library bodies such as the Library of Congress, British Museum, FID, and many national libraries and the documentation centers of the world. Deshmukh appreciated the vision of the ISI authorities in establishing the DRTC to provide Ranganathan an apt forum to continue his teaching and high-level research. This way the DRTC was launched to explore and research the information space with fanfare of full ceremonies and so much goodwill from India and abroad. Eugene Garfield (1925-2017), the founder of the Institute of Scientific Information (ISI), in his tribute to Ranganathan termed the DRTC as Ranganathan's crowning glory (Garfield, 1984)[6].

ACADEMIC AWARD AND ADMISSION ELIGIBILITY

From its inception, the DRTC awarded a two-year duration Associate in Documentation (AD) which later was changed to Associate of Documentation and Information Science (ADIS). It was first declared equivalent to Master of Library Science degree of any Indian university only in 1967 due to the efforts of Ranganathan himself--- many ignorant but ill-meaning people created roadblocks which Ranganathan surmounted due to his links and status. Not only this "Ultimately the Home Ministry accepted the recommendations of the [Union] Public Service Commission that the two degrees were nearly of the same standard, but that the holder of an 'Associate-ship in Documentation' should be preferred to an M.Lib.Sc, for the posts of documeantlists" (Ranganathan, 1972)[2] *****. Since 2008-2010, it has been named a two-year Master's in Library and Information Science (MS (LIS)) course putting all issues of equivalence to rest. Considered one of the outstanding institutes of library and information science in the world (Ranganathan, 1965)[4], its MS (LIS) course is equivalent to the two-year master's in library and information science course (M.LIB.ISc) (Ranganathan, 1965)[4] of any Indian university. Its syllabus, both in theory and practice, is way ahead of them.

Notwithstanding with the initial ill-conceived policy of admitting only trained and working librarians, well versed in the idiom of the field,

admission criteria have been made flexible from time to time to get flow of students for training. Until 2007, a postgraduate Bachelors degree in Library and Information Science, or a second-class Masters degree in a subject and at least two years of library/documentation information handling experience, or a four-year plus degree, such as B.E. or M.B.B.S and at least two years of library/documentation information handling experience were required for admission (in ADIS) to DRTC course. Since 2008 admission eligibility has been made open to fresh graduates. Experience in the LIS domain has been waived off; a Bachelor's degree in any field with a minimum of 60% marks from a recognized Indian or foreign university has been made the minimal prerequisite for admission (in MS (LIS)) at DRTC.

Presently admission is based on an All India entrance test conducted by the ISI Kolkata. Due to its reputation and the stipend given to each admitted candidate students from diversified academic backgrounds such as engineering, medicine, computer science and natural sciences are attracted which make them valuable and in-demand LIS professionals, and later the eminent information scientist. Until 1971 only 59 students passed out which hardly makes six students annually. However in later years the admission capacity has varied from five to ten reaching fifteen in a few cases. Ranganathan was firm on smaller intakes as amatter of policy. However he was not oblivious to the need of increased turnout of professionals. His views are (Ranganathan, 1972)[2]:

As the industries realize the importance of the training in DRTC, need will arise to increase the admission. But this should not result in large classes inevitably leading to mass teaching in place of the large amount of individual attention and instruction now so effectively practiced. This will also result in lessening the research effort.

And he further suggests (Ranganathan, 1972)[2]: The plan should be to open more units of the present size of teachers and students [in the same premises]. Each unit will continue to work as the existing unit does. But all the units should share in common activities such as Weekly Colloquia and Annual seminars.

This seems an offhand suggestion whose cost and administrative implications were not thought out by Ranganathan.

INITIAL TEACHING METHODS AT THE DRTC

The DRTC was conceived to be essentially a residential school both for the teachers and the students—a modern gurukul, which it still is to some extent. (Now campus residence for students is compulsory, though not for the teachers). Accordingly its syllabus, teaching and learning methods were devised for it; one way teaching mode of lecturing was shunned. Imparting of education and training was essentially learner oriented—a way ahead of time in India and unlikely to succeed for long. Two months before regular course the students were given an orientation course in systematic thinking and in the basics of library science theory and practice. On each subject there were only one or two lectures at the very beginning of the course to show the highways and byways of the subject. The chief method of learning and education delivery were group discussions, tutorials, project work, case studies, weekly colloquia and two annual seminars. At the end of the course, there were a couple of lectures to summarize all the points covered in the course and for identification of problems and issues for further research—this way research and development went side by side with teaching. The students also did two large projects of about three to four months each to systematically prepare a documentation list on a current or relevant subject. The second project was to be submitted within six months of the end of the scheduled course. In this way it took two and a half years to complete the whole course. Working hours were long at the DRTC and there were no vacations in between the admission and the termination of the two-year course. Ranganathan did not believe that "All work and no play make Jack a dull boy". He knew nothing else than work, and erroneously thought others in his tutelage do so******. They were not even free after the twenty four months and the course-end examination. After that the students went on to observe the working of special libraries in Kolkata for two months. They also had to take a course in translation, machine retrieval, computer programming and advance reprography. It may be mentioned this teaching-learning method was too advanced

not only of his time but for the kind of students admitted and the overall Indian environment of formal educational delivery. They resorted to bit traditional teaching perhaps after 1965 when Ranganathan stopped formal teaching. Later the class was engaged as a whole by the teacher only three hours a day. At other hours the students did their daily individual 'homework' and then met their teacher for tutorial individually and or in small groups to discuss with the teachers. On the way its teaching got resorted to the very commonly dominated method of classroom lectures, which was the teaching method prevailing in Indian universities, presentations and seminars notwithstanding.

EDUCATION DELIVERY AND TRAINING METHODS

The teaching includes regular seminars, presentations, group discussions, and hands on computer training, homework, and colloquia. In the seminar and colloquia, students need to choose the topics. With the help of course coordinators, they have to discuss and make presentation attended by all the researchers and teachers of the Centre. On an average, each MS (LIS) student has to give at least 20 presentations in the course of the degree. The DRTC researchers have worked with several apex bodies such as UNESCO, IFLA, Library of Congress, European Union, etc. Further, the DRTC has taken the lead in introducing, implementing and popularizing the latest technological advancements transforming library and information services in the Indian subcontinent (Kuronen and Pekkarinen, 1999).[11] It has been done so by conducting, especially from the early 2000s, umpteen international conferences and workshops for researchers and professionals on digital libraries, semantic information systems and more recently, on research data management (RDM). We mention some notable cases:

- DRTC conducted in 2005, collaboratively with Hewlett-Packard (HP), one of the first ever international workshops in India on designing digital libraries employing the DSpace software (Prasad and Guha, 2005; Documentation Research and Training Centre, (n.d.)).[12,13].
- DRTC has led and inspired the open access (OAI) movement in India (Prasad, and Madalli, 2007)[14], from its inception till

today, in the broader academic sphere of information and communication technology (ICT).
- The introduction of semantic web technologies in the Indian LIS discourse, and in general the ICT discourse in India, was pioneered by DRTC in collaboration with world-renowned institutions like the University of Trento, Italy[15].
- It recently held many conferences and workshops on Data Representation and Organization techniques[16] to discuss and brainstorm advances in data management for information professionals.
- Moreover, DRTC Professors have actively contributed to National Knowledge Commission (NKC) and National Mission for Libraries (NML) (Ranganathan, 1965)[4], and other national information projects.

RESEARCH WORK AT DRTC

Ranganathan never separated research from teaching. For him research and teaching are hand in glove. He was of the considered opinion that research based teaching is only informed and effective (Ranganathan, 1972)[2]:
At the higher reaches research and training of specialist should not be separated. Without active research by the staff teaching cannot take the students to a high level of thinking, nor it can fill them with enthusiasm and faith in the social benefit of library service in general, and of documentation service in particular. Without the opportunity of teaching advanced students the fountain of research will not become sufficiently profuse. The organization of work in DRTC is based on this assumption.

In a 1965 review of the role of the DRTC Ranganathan wrote that-
'There is a provision for documentalists in service to come to DRTC for a short period to do a definite piece of research or to construct the depth schedule needed in his organization, and for the staff of DRTC to give consultant service' (Ranganathan, 1965)[4].

But this type of research was voluntarily and not any degree research which did not inspire many working librarians and teachers. Only after Ranganathan's death the then DRTC faculty made a beeline for Ph.D. research enrolling themselves in any convenient university and with an obliging guide.

Cashing on the brand value of the DRTC a few of them flew abroad to greener pastures on long tenures assignment—something they could not think of while Ranganathan was alive! The initial work of the DRTC has been mostly concerned with classification theory and practice to support documentation work. Earlier the centre focused on designing depth classification schedules, essential for documentation lists, for different special subjects (Satija, 1992)[8]. However, its focus has recently shifted more towards broader and current areas such as knowledge management, ontology developments and semantic web technologies, big data, and research data management. Apart from Ranganathan's extensive research, enshrined in over 60 books and 1500+ research articles, DRTC students and researchers have contributed to several dimensions of library science, information science and semantic web technologies. The research ranges from designing methodology to practical implementation and metric and comparative studies to developing techniques and models. Some of the notable research areas of post-Ranganathan DRTC publications are depth classification, modes of formation of subjects, indexing, and abstracting techniques, scientometric studies, development of computer packages to facilitate library services and operations, metadata and interoperability and ontology development. Above all, an indexing technique POPSI (**PO**stulate based **P**ermuted **S**ubject **I**ndexing) was devised by DRTC professor Ganesh Bhattacharyya. He also derived a controlled vocabulary device Classaurus for using POPSI. The centre worked on the basic theory of the feasibility of using Colon Classification in a computerized classification system and the 7th edition of Colon Classification published in 1987 was edited by M. A. Gopinath (1940-2013), a Professor at DRTC—who was initially recruited as research assistant to Ranganathan, the National Research Professor, and later absorbed as a faculty (Satija, 2009)[5].

DRTC earlier co-published the journal *Library science with slant to documentation* since 1964 and later its name was changed to *Library Science with slant to Documentation and information*. However, The DRTC is no more associated with it. The journal, now known as *SRELS journal of information management* is sponsored by the Sarada Ranganathan

Endowment for Library Science (Ranganathan, 1972)[2]—but published by a private player.

IMPACT ON RANGANATHAN

Ranganathan himself describes the impact of the DRTC on his work and the fast developments in classification research as a whole (Ranganathan, 1967)[9]:

'Life soon became exciting. Great was the stimulus received from classroom work of a high order, daily discussion with colleagues, the weekly colloquia, the weekly meeting of the Research Circle, and the annual seminars. This stimulus led, in November 1963, to a breakthrough across a long persisting barrier in Depth Classification…[It was the postulate based objective methodology in designing of depth classification schedules which became the content of the first ever paper of the newly started research journal *Library science with a slant to documentation (*Ranganathan, 1964)[7]]. The new methodology designed at that time has already been applied by a team of colleagues to the designing of schedules for the Personality Facets of the subjects going with about a hundred Basic Classes of industrial value. The splendid behaviour of the postulational approach in designing these schedules has been reassuring'.

After the so believed 'inaction' period of 1957-1961, the DRTC period is one of the happiest and peaceful period of his life both in terms of creativity, professional fame and personal happiness. It was the period when he received the highest honour of being designated the National Research Professor in Library Science (1965). The autonomous post carried resources and facilities of men and material as appurtenances. There were no adversaries, even rivals, only colleagues who always held him in great awe and high respect. There was no politics, no arguments, no intrigues only reverence by devoted colleagues and lucky students. His backbiters in the country had subdued in view his new found fame at home and abroad. The hard task master presided over the centre as an irreproachable monarch. At last he found a happy home after the troubled life at Madras, even Varanasi, and at Delhi too there were troubles later (Ranganathan, 1992)[10]. His writ prevailed in his haven and he was the lord of the entire landscape of libraries he could survey. He invited his disciples and admirers from India

and abroad to deliver lectures at the DRTC and the Sarada Ranganathan Endowment. Despite his frail health and poor eye sight he couldfully devote himself to his writing work so much so that four of his books were published posthumously from 1972-1974.

CONCLUSION

Sixty years ago after its delayed birth due to Ranganathan's reservations, the DRTC has undergone many changes in its admission criteria, teaching methods and of course the syllabus. But happily the DRTC has constantly maintained its position and reputation of a unique teaching and research institution, despite the old fashioned even misleading terms 'training and documentation' in its title. It is mostly due to its strong foundations set deeply by Ranganathan by way of academic culture and traditions, and by the rigorous standards and method of induction of the faculty and students. It has changed with time to remain relevant and be among the first ranks of world library schools the world over.

REFERENCES

1. Ranganathan, Y. (2001). *S. R. Ranganathan, pragmatic philosopher of information science: A personal biography*. Mumbai: Bharatiya Vidya Bhavan.
2. Ranganathan, S. R. (1972). *Documentation: Genesis and development*. New Delhi: Vikas Publisher.
3. Waghmare, S.S (2015). *Knowledge mapping of DRTC annual seminar publications: A scientometric study* (http://hdl.handle.net/10603/84309) [Unpublished, Dr. Babasaheb Ambedkar Marathwada University]. ShodhGanga. https://shodhganga.inflibnet.ac.in/
4. Ranganathan, S. R. (1965).*DRTC and its role in documentation*. Bangalore: DRTC.
5. Satija, M. P. (2009). Library education: some rambling questions. (Guest editorial). *SRELS Journal of Information Management*, 45(2), 95-102.
6. Garfield, E. (1984). A tribute to Ranganathan, the father of Indian library science. *Currents comments*, 7(7), 45-49.
7. Ranganathan, S. R. (1964). Design of depth classification: methodology. *Library science with a slant to documentation*, 1(1).
8. Satija, M. P. (1992). *S R Ranganathan and the method of science*. New Delhi: Aditya

Prakshan.
9. Ranganathan, S. R. (1967). *Prolegomena to library classification*, 3rded. Mumbai: Asia Publishing House.
10. Ranganathan, S. R. (1992). *A librarian looks back: An autobiography of Dr. S.R. Ranganathan,* edited by Kaula, P.N. New Delhi: ABC Publishing.
11. Kuronen T, and Pekkarinen P. (1999). Ranganathan revisited: a review article. Journal *of librarianship and information science*, 31(1), 45-48.
12. Prasad, A.R.D., and Guha, N. (2005, March). Persistent identifiers for digital resources. In *DRTC-HP International Workshop on Building Digital Libraries using DSpace*, Bangalore: DRTC.
13. Documentation Research and Training Centre. (n.d.). *LDL: Librarian's Digital Library*. Retrieved May 7, 2021, from https://drtc.isibang.ac.in/ldl/
14. Prasad, A.R.D., and Madalli, D. P. (2007). OPEN MANTRA for Open Access to Information. In Osswald A., Stempfhuber, M., and Wolff, C.(eds.). *Open Innovation*. Proc. 10th International Symposium for Information Science (97-108).
15. Documentation Research and Training Centre. (n.d.). *Living knowledge*. Retrieved August 7, 2021, from https://drtc.isibang.ac.in/research/living -knowledge
16. Documentation Research and Training Centre. (n.d.). *Data Representation and Organization Techniques*. Retrieved March 7, 2022, from https://www.drtc.isibang.ac.in/DRO/

Other Sources:
https://www.isibang.ac.in/~library/portal/Pages/SRRBIO.pdf.
https://www.drtc.isibang.ac.in.
https://www.isko.org/cyclo/ranganathan#4.

APPENDICES AND NOTES

*A firm believer in numerology, Ranganathan considered the digit 9 or any number divisible by it as very auspicious. One finds the numbers 108 or 1008 quite often in his works—this is apart from the digit 5 which too is sacred in Indian tradition, e.g. Five Laws, Five fundamental categories, Five fingers, Five Pandavas, Five members of Panchyat, the village council. Such examples can be multiplied.

**Sir Dr. C. D. Deshmukh, CIE, ICS (1896-1982) was appointed the first chairman (1956-1961) of the UGC established by an act of Parliament in 1956. (Earlierhe served the finance minister of the government of India). One of the first acts of the UGC was to set up a committee on academic libraries in 1957 to suggest measures for their improvement and growth. Ranganathan was invited to chair this committee whose other members were Padmashri S. Bashiruddin, K.S. Hingwe, Padmashri B. S Kesavan and S. Parthasarathy. Mandate of the committee was "to go into all problems of university and college libraries in their entirety and make concrete proposals on the basis of which the UGC can formulate its policy". It may be mentioned that in those days the pay scales of librarians were not standardized and varied from department to department. Pay commission set up for academic institutions never considered library staff as academic. Their Pay scales were way lower than their corresponding teacher colleagues in universities and colleges. Due to this many career minded and brilliant persons were hesitant to take librarianship as their career. The task before the committee was historical, enormous and full of political undertones. *Interalia* as a far reaching recommendation the committee clearly formulated the hierarchy of library staff with designation, job description, and pay scales. This committee emphatically recommended to the hesitant UGC the parity of library staff with the corresponding faculty positions in respect of pay scales, status, promotions and other conditions. Summing up the importance of these recommendations K.W. Humphrey said "it is clear that they revolutionized in a quiet way the library scene in Indian universities and colleges".

Source: Malhan, I.V., Chandel, A.S. and Satija, M.P. *Eds*. Human resource management in libraries and information centres. New Delhi: SRFLIS India, 2016, pp. 82-85.

***The first batch DRTC students who passed out in 1963:
1. Arora G. K.
2. Elhence Dinesh
3. Raizada A. S
4. Rau M. V. R.
5. Subba Rao C. V.
Reference: https://drtc.isibang.ac.in/alumni/alumni-directory

****One wonders if the period 1957-1961 was truly of inaction; though homeless (henever bought his own house or a car) and without any institutional base, Ranganathan became a wandering teacher and scholar. Workaholic Ranganathan utilized this period to bring out various books in new or original editions, authored four FID/CA reports of which he was the general secretary, drafted library bills for Indian states, presided over many conferences and served as a visiting professor in universities, and above all was awarded Padmashri, a very high civilian award, by the government of India. It was during this period he was commissioned by the Planning Commission of India to prepare a report for the development of the INSDOC for the third Five year Plan, 1961-1966. Here is list of Academic and research works of S R Ranganathan from 1957 to 1961:

1957: Colon Classification, 5th ed. Madras: MLA

1957: Five laws of library science, 2nd ed. Madras: MLA

1957: General theory of classification: 7th report of the FID/CA

1957: Library science and scientific method. Madras: MLA

1957: Prolegomena to library classification, 2nded. London: Library Association

1958: Classified Catalogue Code, 4th ed. Madras MLA

1958: General theory of classification: 8th report of the FID/CA

1958: Library personality and library bill, West Bengal. Calcuttta: Bengal Library Association (Presidential address)

1958: Library service in India and abroad: Speech. Madras: Saiva Sidhanta Sangam

1959: Elements of library classification, 2nd ed./by Bernard I. Palmer. London: Association of Assistant Librarians.

1959: General theory of classification: 9th report of the FID/CA

1959: Library administration, 2nd ed. Bombay: Asia Publishing House

1960: Colon Classification, 6th ed. Bombay: Asia Publishing House, 3 parts

1960: General theory of classification: 10threport of the FID/CA. New Delhi: INSDOC

1960: Education for leisure, 4th ed. Bombay: Asia Publishing House

1960: Elements of library classification, 2nd Indian ed. Bombay: Asia Publishing House, Library development plan with a draft bill for

Kerala state. Trivandrum: Kerala Government Press

1960: Library manual for library authorities, etc., 2nd ed. Bombay: Asia Publishing House

1960: Reference service, 2nd ed. Bombay: Asia Publishing House

1960: Social science research and libraries. Bombay: Asia Publishing House (edited with Girja Kumar)

1961: Commemoration bibliography of first 1008 books published by the South India of Saiva Sidhanta Works Publishing Society Sangam. Madras: The Society

1961: 11th report of the FID/CA: Facet sequence and telescoping.

***** AD/DRTC was declared equivalent to M.Lib.Sc for employment vide No. F.3-8/67-CAI (3) of 23rd September 1967. Similarly ADIS was recognizedas equivalent to Master degree vide Ministry of Education and Culture/GoIvide order No. f.18-21/79/T -7 of 23rd September 1980[3].

******Attitudinally extremist Ranganathan believed that more of a good thing is always better! His motto seemed work, work and more work. So is the case with his classification. He was a strong votary of depth classification—to the depth technically possible. When H. E. Bliss (1870-1955) advised in context of classification, "be minute, be minute, be not too minute", to this Ranganathan replied, "be minute, be minute, be too minute". By majority consensus minuteness in classification is useful to some extent only.

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