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*Ranganathan between philosophical and
epistemological dilemmas:
around the problem of Library Science
“scientificity” in the 1930s*

Introduction

This paper to carry out the debate on Ranganathan’s philosophical and epistemological dilemmas at the beginning of his bibliographic production in Library Science in the 1930s. As a consequence, it’s point out some interpretations of a given Brazilian hermeneutic about Ranganathan’s work. Our interests are mainly to contribute to the understanding of the philosophical and epistemological role of Ranganathan’s thought.

The 1930s represent an advance in Library Science epistemological foundations, mainly by publications of theoretical background. Among these publications are the ideas of Paul Otlet (1934), Ortega y Gasset ([1935] 2005), Ranganathan ([1931] 2009), as well as the developments of the Library Graduate Chicago School in the United States (Butler, 1933), as well as the unfolding of Russian epistemologi-

cal thought by Nicolas Roubakine ([1922] 1998).

The debate “of” and “about” Ranganathan makes us return to elucidative discussions for issues such as the untranslatability of Ranganathan’s work; the impossibility of Library Science laws as a deductive condition or a simple pragmatic activity; transcendental pragmatics as the centrality of Ranganathan’s thought, or, in other words, the relationship between the use and understanding of the totality of Library Science philosophy as a transcendent project in the material world (including the epistemological-empirical structure of a scientific field and its method). The holistic thinking of Ranganathan will lead us, as we will discuss, to the foundation of a political philosophy from Library Science, with the focus on documentary democracy (Saldanha 2016, 2020).

This article is the result of the convergence of three projects, developed between 2019 and 2022, namely, “Historical epistemology of Information Science and knowledge organization: from the philosophical foundations of language to the critical theory of classification” (funding by Conselho Nacional para o Desenvolvimento Científico e Tecnológico, CNPq, Brazil), “Knowledge organization in the domain of traditional peoples and communities in Brazil: languages, technologies, informational institutions and pragmatic data integration” (funding by Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro, Faperj, Brazil) and “Documentary languages from Rio de Janeiro for innovation: knowledge organization for science, culture and society in the State of Rio de Janeiro” (funding by Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro, Faperj, Brazil).

These projects structurally sought to discuss the relationship between epistemology and knowledge organization theory in Library Science, scientific domains that have Ranganathan as one of the direct responsible for theoretical production and its transformation in the 20th century. Likewise, the results presented here are the horizon of the production of an interpretation of Ranganathan’s thought in the

last eight years, based on the Brazilian research group *Ecce Liber: filosofia, linguagem e organização dos saberes*, developed in the Instituto Brasileiro de Informação em Ciência e Tecnologia (IBICT), Universidade Federal do Estado do Rio de Janeiro (Unirio) and Universidade Federal do Rio de Janeiro (UFRJ).

An important methodological-terminological aspect for the construction of the text is the use of the consultation version. We use the classic version from 1931. But the source of Ranganathan's thought used is structurally the Brazilian translation made by Tarcísio Zandonade in 2009, edited by Briquet de Lemos. The option is given for the discussion between the classic 1931 source of the book *The Five Laws of Library Science* and the debate on the resumption of the epistemological discussion (mainly the return of Ranganathan to the debate on the scientific method) made by the Indian philosopher himself in the revised edition of the same work in the 1950s, as well as the school of commentators on Ranganathan's work in Brazil, from which this article departs. In this case, when referring to the sources of Ranganathan's original thought produced in the late 1920s and published in 1931, we will use the format: ([1931], 2009). On the other hand, when we refer to the epistemological review of Ranganathan made by the philosopher himself in the 1950s in the same work, we will use the format here in the Citation: (Ranganathan 2009). Still on the issue of the source consulted and the references of this project, it is the review via the Brazilian tradition of interpretive reading of Ranganathan's work, as well as our constructed works (Saldanha, 2014, 2015, 2016, 2020) in the last years.

Another methodological-terminological remark in the work is the use of the terms "librarianship" and "library science". This is a central point of this research, precisely because it is a question referring to the terminology that denominates the epistemic field under debate. Ranganathan's ideas are developing in a historical period of great terminological mutations in the field. And again the 1930s are in evidence. With the publication of Paul Otlet's *Traité de Documentation* (1934)

the use of the term “documentation” in epistemological definitions began to be adopted.

Ranganathan (2009) himself will resume his discussion on the scientific method, adopting the term for his epistemic reflection. At the same time, the relationship between the scientific nature of the terms “librarianship” and “library science” was in full question in the 1930s, due to the growth of scientific research results at the University of Chicago Graduate Library School. Furthermore, between the 1930s and the 1940s, with Cybernetics and the Mathematical Theory of Communication, the use of the term “information” was increasingly adopted for theoretical and then epistemological reflection in the field.

For this research, the term “library science” will be adopted to designate our scientific field for the following reason: the dialogue opened by Ranganathan with the Anglo-American tradition since the 1920s, a school of thought that will use “library science” and, later, “library and information science”. It is in the context of this research tradition that Ranganathan conducts his studies in the field and conceives the first ideas of the forthcoming Five Laws of Library Science. In addition to this issue, it is precisely from the 1930s onwards, due to reflections and questions about the scientific nature of the field, that this concept (“library science”) becomes widely adopted.

A historical epistemological discourse for Library Science: letters to the scientificity of a field

We can find discourses in different works prior to the 1930s for the construction of a science oriented towards the most different issues related to the book, the readers, the libraries, as well as on the impact of the bibliographic world on social reality. The discourses prior to the 19th century, in our studies, are solid bases in theoretical-applied terms, respecting each typology from a given historical period. Examples

are Richard de Bury, in circa 1345, with the *Philobiblon*, focusing on Bibliophilia; Conrad Gesner, in 1545, with a focus on Bibliography, and Gabriel Naudé, in 1627, with a direct focus on the institutional issue, the library, or the configuration of Library Science.

These are theoretical discourses, with applied models, however, in our point of view, not epistemological, that is, its focus is not on creating a science. What we seek to affirm is that these are non-reflective discourses on the specific construction of a macro-science. Among the historical works that demonstrate this production, we can mention, from Brazil, the historical reviews by Serrai (1975), Araujo (2015) and Crippa (2014, 2017).

For this review, we start from the discourse on a general science of the book by Gabriel Peignot (1802). It is not a question of positioning this work as a pioneer or only proposal to understand the historical epistemological foundation of the scientific field later transformed by Ranganathan. The choice is directly related, precisely, to the theoretical-methodological developments in Library Science in the 1930s, mainly in the relation between the influence of Paul Otlet and of his project with other knowledge organization practices that have a direct connection with Peignot, including, most notably, Ranganathan.

In addition, this choice by the discourse for a “general science of the book” in Peignot is fundamentally related historical-epistemic conditions:

a) the attempt to unify all the different theoretical-methodological experiences between book, reading and book institutions, including classification theory produced in the 16th, 17th and 18th centuries;

b) the scientific method, with an Enlightenment background, of rationalization of descriptions, or the “dictionary method”, applied by Peignot (1802) to gather the ideas already produced in the field up to that point;

c) the epistemological discourse, that is, reflective, comprising, under the concept of Bibliology, a science already constituted at the beginning of the 19th century, with bibliographical production, theories,

methods and techniques developed and registered, in foundational works, such as those by Gesner and Naudé;

d) the influence of the epistemological concept used by Peignot (1802) – Bibliology - in the theoretical-methodological work of Russian Nicolas Roubakine (1922) as the influence of the general definition of the scientific field on Paul Otlet’s epistemology (1934).

In his *Dictionnaire Raisoné de Bibliologie*, published in 1802, Peignot objectively seeks to propose an epistemological discourse for the field today understood in the English language under expressions such as “library and information science”.

That work of the bibliographer, librarian and bibliophile Peignot anticipates a) the difficulties of demarcation frontier of the field today called “informational”, b) the objective relations between disciplines that co-constitute knowledge organizational practices, in the future treated by the complicated concept of “interdisciplinarity”, c) the emergence of a disciplinary domain focused in a doubly empirical idea of knowledge (Saldanha 2015).

In this sense, Peignot (1802) gives us a material and metamaterial discourse for the future scientificity of Library Science:

- “material” due to a structuring rationality dedicated to studies of the demonstrable, mark of the scientific Revolution consolidated in the 18th century – this revolution is probably impracticable without the development of the Bibliology (in epistemic sense) in the period between Conrad Gesner and Gabriel Peignot, and, still (in the technical sense), in the period that separates the invention of the printing press and its definitive expansion to the 1700s, consolidating the relationship between knowledge and bibliographic rationality (Saldanha 2015);

- “metamaterial”, due to this consolidation above placed, that is, the period that crosses the reception Aristotelianism in the West, at the beginning of the second millennium of Western chronology, through the typographic revolution, responds to a process of erasing the possible problematic relations between orality & knowledge versus writing & knowledge, founders, in part, of philosophy platonic and mani-

fested in the Plato's *Phaedrus*. When we have reached the revolution of a rationality of "being consciousness", or "consciousness capable of conceiving the world", between Cartesianism and Kantianism, we consolidate the "devotion" to the knowledge record as one of the main possibilities of knowledge in its development (Saldanha 2015).

Context: the 1930s and the "epistemological march" in Library Science

The scientific method is, therefore, the object of questioning about the Library Science scientificity in 1930s. Different epistemological approaches are under development and will have a direct influence on the Library Science tradition, such as positivism, neopositivism, pragmatics. The place of Ranganathan's thought in the 1930s and his epistemological concern in the development of the Five Laws of Library Science in the face of international production in the field (Saldanha, 2014). In other words, the research seeks to contribute to the understanding of the relationship between philosophy and epistemology in Ranganathan's thought. We can say that Ranganathan is on the frontier of the epistemic lines of his context and will have, throughout the 1920s, a singular capacity to combine the ideas of his time.

In 1930s, we find both the production of a logical atomic view of language and a pragmatic view of social language. On the one hand, the search for a relativist postulate, and, on the other, an essentialist postulate about language, focuses on the review of philosophy itself as a practice of knowing. In other words, "knowledge" is seen through the prism of language, but this view comes from two clearly distinct views. We have pragmatic empiricism, which resorts to the open plan of language construction from its ordinary experience, and, at the same time, neopositivist metaphysics, which seeks a rationality based on the idealism of a language without cultural barriers (Saldanha 2014).

In the second half of the 1920s, the University of Chicago Gradu-

ate Library School is founded, creating a training structure oriented towards the scientific method in Library Science. Among the faculty that will compose the constitution of an epistemological debate from the Chicago tradition from 1930s, we find Lee Pierce Butler and Jesse Hauk Shera. In the same scope, the scientific journal *The Library Quarterly* in 1931 was born, publishing the results of research carried out at the school, focusing on previously described and applied scientific methods.

With *An introduction to library science*, Butler (1933) created an important discussion of the foundations of Library Science within the scope of the human and social sciences, questioning the scientific nature of the field through the practices developed up to that decade. As a result of the developments of the generation of the 1930s in Chicago, Jesse Shera will build a great bibliographical work around different areas of Library Science in the following decades. His great contribution can be identified, mainly, in the epistemological scope. His discussion of social epistemology (Shera, 1977) as the basis for the formation of the Library Science is certainly one of the most important reflections on the social role of research and action in the field.

Returning to Gabriel Peignot, Paul Otlet publishes in 1934 his *Traité de Documentation*, a synthesis of his forty-year trajectory of research on the circulation of recorded knowledge. Otlet's epistemological ideas (1934) are directly linked to the concept of Bibliology affirmed by Peignot (1802) in his discourse on the existence of a constituted science in Modernity.

Paul Otlet reprendra la définition de Peignot en posant la bibliologie comme science Générale embrassant l'ensemble systématique classé des données relatives à la production, la conservation, la circulation et l'utilisation des écrits et des documents de toute espèce et comme science théorique, comparative, génétique et abstraite, embrassant tous les livres e toutes les espèces et toutes les formes de documents (Couzinet 2011).

Otlet (1934) defines in his *Traité de Documentation* a relationship

between positivism and the social and cultural symbolism of the book as a form of social change. A strong belief in the systematization of knowledge and in new techniques establishes the general horizon of progress from science.

In the same decade, the Spanish neoplatonic philosopher Ortega y Gasset ([1935] 2005) presents in his *The Mission of the Librarian* a synthesis of the formation of Library Science thinking from the performance of its professional. Even though it is not considered an epistemological work (and this is not its intention), Ortega y Gasset's "booklet" is one of the most objective and clear sources for understanding the historical process of formation of ideas in Library Science in 20th century. Observing that, after the French Revolution, the book becomes socially essential in reality, the role of the librarian becomes, therefore, a function of the State, for its survival through knowledge. Fundamentally, his point of view of the future of training in the Library Science, with a kind of "filter" in front of the torrent of books and his knowledge.

Ranganathan's thought anticipates these important ideas of knowledge production for the configuration of Library Science foundations. In our understanding, the position of the Indian philosopher pre-establishes a critique of both the positivism and the neoplatonism (including in the foundations of neopositivism, or logical atomism) of the field. Ranganathan allows us to think about the scientific method, establishing, on the one hand, a philosophy for Library Science, on the other, a social epistemologic foundation with a descriptive and systematic basis. It is a philosophy that establishes, in a solid description, a method and a praxis.

Between philosophy and epistemology: a self-analysis between deduction and induction

Ranganathan lies his classic work, *The Five Laws of Library Sci-*

ence ([1931] 2009) between two poles: philosophy and epistemology. Coming from mathematics, his thought has a classical speculative nature – his epistemology begins with a “pure epistemology” – or a Pythagoreanism translated into hierarchies and universal postulates. However, in the face of the multiple transformations of science in the 1930s, of the Chicago Graduate Library School, of social thought, of the Anglo-American influence, another way of thinking is revealed in Ranganathan.

On August 12, 1956, Ranganathan (2009), revisiting his own work *The Five Laws of Library Science*, rewrites the Genesis section to address, among other aspects, a central dimension of his work, more than 20 years after the first edition: the epistemological issue. The nominated philosopher explains, in §04, the condition of the scientific method as a central element for philosophical work of 1931.

The experience I had accumulated in terms of scientific study and research generated a sense of revolt against having to store in memory and deal with a myriad of disconnected information and unrelated types of practices. Wouldn't all these empirical aggregates of information and practices be reducible to a handful of fundamental principles? Could it not be possible to adopt, in this case, the inductive process? Would it not be possible to deduce from fundamental principles all known practices? Do not the fundamental principles contain, as necessary implications, many other practices that are currently not current or known? Will such practices not become necessary whenever the boundary conditions established by society change? These questions began to stir in my mind. Of course, there was an awareness that the topic to be studied belonged to the field of social sciences and not to the natural sciences. The scientific method, however, was equally applicable to both fields. The only difference was in position occupied by fundamental principles. These constituted hypotheses in the natural sciences and normative principles in the social sciences. But the cycle of the scientific method was similar in both cases. The question to be answered was this: what are the normative principles to which the trends observed in librarian practices and allude to future trends that are currently not very visible? This had agitated my mind since the first months of 1925. (Ranganathan 2009, p. 4, translation of the Brazilian version by the author)

This long quote reproduced here can be considered one of the most important epistemological self-reflections in Library Science. Faced with the mutations in the field and the impacts of the philosophical-epistemological works of the 1930s, including his own book of 1931, Ranganathan questions the scientific rigor of his philosophy – in other words, the Indian philosopher realizes a self-analysis of his ideas between deduction and induction methods.

In §08 (Consequences), Ranganathan concludes Genesis section with objective self-questioning:

Over the 25 years since the first edition, however, two fundamental changes. One was the generalization of the concept of ‘book’, accentuated in recent years in the word ‘documentation’. The second change was the generalization of the term ‘growth’, which occurred on my own ideas, elicited while teaching and working in the books Library development plan (1950) and Library book selection (1953). Furthermore, I felt the need to answer the question ‘is librarianship a science?’ Furthermore, the library movement has made great strides in many countries, including India. To make room for these changes, added an eighth chapter, entitled ‘Scientific Method, Library Science and the march of digvijaya’. This chapter is new in this edition now. (Ranganathan 2009, p. 5, translation of the Brazilian version by the author)

Ranganathan’s attention in revisiting is to seek clarification of the epistemological and methodological foundations present in his philosophy, or, basically, to establish the scientific method of his five laws. Thus, section 8 of the work is founded in the late edition. It is clearly a response to the potential empty transcendence of the deduction of its laws and to the Western model of science’s systematic description.

What Ranganathan (2009) actually did, in the 1950s, before building a new scientific method for Library Science, was the review and confirmation of his empirical theses, under the philosophy developed in the 1920s, and published in 1931. The Indian philosopher takes up the *digvijaya* concept, probably the most important concept within *The Five Laws of Library Science*, to prove that his philosophy con-

tains both an epistemology (the description of a science) and its main methods. *Digvijaya* represents the world-conquering expedition; in the sense of his philosophy, it is about, from the relationship between the First and Second laws, to bring knowledge through books to all readers. This is a common exercise in the 1920s and 1930s, for example, in the epistemological treatises of Nicolas Roubakine (1922) and Paul Otlet (1934). Not coincidentally, Ranganathan (2009) cites the documentation movement defined by Otlet in the conception of his scientific method for Library Science – Otlet who, in turn, had departed from the scientific definition of our field expressed by Peignot in 1802, through the Bibliology concept.

Ranganathan (2009) begins by asking: What is a science? Then he tries to describe the scientific method.

‘Is library science a science?’ Indeed, the answer to this question depends on the answer to another: ‘What is science?’ The note of scepticism regarding library science as a science often goes back to a narrow definition of the term ‘science’. These two restrictions are common and can be proved to be false. (Ranganathan 2009, p. 264, translation of the Brazilian version by the author)

Based on his review of the definition of science (in a general sense), Ranganathan (2009) points out two meanings:

- (1) System based or purported to be based on scientific principles: a method of organization, functioning, etc., which harmonizes practical or utilitarian purposes with scientific laws: e.g. domestic science; zootechnics.
- (2) Accumulated and recognized knowledge that has been systematized and formulated with reference to general truths and made available in work, life or the pursuit of truth. (Ranganathan 2009, p. 265 translation of the Brazilian version by the author)

Returning to the initial discussion of this text, we can say that this system and the knowledge accumulated and recognized for the construction of Library Science goes back, in Ranganathan (2009),

fundamentally, to the theoretical production line of Peignot (1802) and Roubakine ([1922] 1998). From here, Ranganathan develops the concepts of *kartru-tantra*, *vastu-tantra*, *satyam vada* and the aforementioned concept of *digvijaya* to defend the epistemological foundation of his philosophy published in 1930s. It is about seeking, in the 1950s, a systematization of theses expressed in *The Five Laws of Library Science* of 1931.

Ranganathan, in § 82, seeks to relate the Second Law to new types of books and practices; in § 83, the philosopher connects the Third Law and the documentation developed by Paul Otlet; in § 84, the Fourth Law is discussed from the point of view of the new practices and functions of libraries in the middle of the 20th century; the Fifth Law is reviewed based on the implications of the methodological re-reading carried out via the previous laws. Ranganathan (2009) also seeks to comprehend and systematize in § 86 the Branches of library science, in § 87 a Teaching and research and, resuming its conceptualization in Sanskrit, § 88, The march of the digvijaya.

From a schematic theory conceived in fragment § 08, Ranganathan conceives the “spiral of the scientific method”.

The scientific method is characterized by an endless spiral movement. [...]. The cycle that this spiral implies must be followed according to the clockwise movement. To facilitate this monitoring, the four cardinal points of the cycle are called nadir, ascending, zenith and descending. The nadir marks the accumulation of facts, obtained by observation, experimentation and other forms of experience. The ascendant marks the accumulation of induced or empirical laws, extracted from the facts accumulated at the nadir, through the inductive logic that includes normal equations and other instruments of statistical calculation. The zenith marks the fundamental laws formulated with the aid of some degree of intuition, so as to encompass all induced or empirical laws, accumulated in the ascendant, as obligatory inferences. The descendant marks the accumulation of deduced laws, obtained from the fundamental laws at the zenith, with the aid of deductive logic which includes general semantics and all kinds of mathematical calculations. (Ranganathan 2009, p. 268, translation of the Brazilian version by the author)



Figure: Spiral of Scientific Method (Ranganathan 2009).

We find a look at the use, the action, the construction of meaning through the transformation of the social reality. To this complex structure, between transcendence and social change, between what comes from the speculative world, and what comes from the social world, we understand as the formulation of a transcendental pragmatics. In our view, Ranganathan establishes, between philosophy and epistemology, a transcendental pragmatics that conceives social change as a mode of transcendence in the subjects' own contingency experience.

In fragment § 04 («Scientific method»), Ranganathan (2009, p. 2) wondered: «Cannot all these empirical aggregates of information and practices be reduced to a handful of basic principles?» In the search

for this and other answers that would lead him to the five ‘laws’, the Indian philosopher places Library Science as a social science and seeks to understand, as in a preamble to the epiphany of the ‘laws’, to what extent the entire empirical experience of the library universe could be translated from deductions or simple regulations (Saldanha 2016).

Declaredly, under the influence of Western empirical science, Ranganathan (2009) seeks a kind of epistemological “justification” to position Library Science as another science, with characteristics similar to the others. We can punctually argue that it is here, in an attempt to present a “scientific method” (which has its most advanced elaboration in the development of the theory of classification), the Indian philosopher’s quest to demonstrate, to Westerners, what is pragmatic in transcendental declaration of his way of thinking and expressing himself.

In strictly political terms, this attempt, which leads to the configuration of the “spiral of the scientific method” as an transcendental pragmatic explanation for the advance of *digvijaya*, is related to the epistemological-institutional advance of the term documentation in Europe and the consequent expression of the term information which, Emancipated in the English-speaking Library Science vocabulary, it would soon occupy a prominent place in the race for the scientific affirmation of experiences in knowledge organization, issues that were still preliminary in the 1920s, when we identified the moment of creation of ‘laws’ (Saldanha 2016).

It is in § 08, in search of a formulation for such a justification, Ranganathan (2009) seeks the correlation between the scientific method, Library Science and the advancement of *digvijaya*. If, on the one hand, the Indian philosopher is clearly making an attempt here to compare the modes of explanation of what is called scientific among Westerners, he resumes some experiences of “classification” of his Eastern experience, by unfolding each western ‘category’ from a kind of derivation – for the case of the “know” movement, we have “knower”, “known”, ‘knowledge’ (Saldanha 2016).

To expand the border inflection between East and West, Ranganathan ([1931] 2009, p. 267) presents the method as coming from, in Sanskrit, the expression *vastu-tantra*, a method acquired through *tapas*, which brings together concentration, self-sublimation, and self-development, coming to mean “dependent on the known”. The *vastu-tantra*, unfolded in § 812, demonstrates, in our view, the condition of continuous perception, never denied, of an ongoing transcendental pragmatics in Ranganathan’s thought that conceives the five “laws”, or, fundamentally, the five “mantras” (it is, therefore, an attempt to affirm the empirical in permanent correlation with the transcendent as a metaphysical totality and, simultaneously, as a possibility of physical transformation, or in the material world) (Saldanha 2016).

Digvijaya, kartru-tantra, vastu-tantra, satyam vada: scientificity from Ranganathan’s transcendental pragmatics

In the case of the Second Law in Ranganathan’s thought, what interests us fundamentally is the untranslatable concept for the Western world: *digvijaya*. The term would mean in Medieval India the process of conquest in the sense of spreading its influence over other peoples. In general terms, it would be a military campaign and, by extension, the victory of this campaign experienced in a vast territorial space. The *digvijaya*, as a concept from the epistemic Library Science vocabulary, is responsible for bringing the «democratic good news announced by the relentless Second Law» (Ranganathan [1931] 2009, p. 94)

The Library Science *digvijaya* can only be thought of, according to the Indian philosopher, if the librarian movement in the United States in the 19th century is recognized, when it became «the land of libraries» (Ranganathan, 2009, p. 95). Its construction would involve a political action centred on multiculturalism, whose discursive project should result in the negotiation with the state of a library legislation capable of enforcing the mantra of the Second Law – «If there is an

important lesson, What the history of the Second Law digvijaya clearly underlines is the responsibility of the education minister to provide books for all». (Ranganathan [1931] 2009, p. 137)

The concepts of *vastu-tantra* and *satyam vada* allow us to understand the complex interplay between philosophy and epistemology, methodology and praxis in Ranganathan.

- §81 *Kartru-tantra*: In describing the scientific method, we will use the following terms taken for granted: know, knower, known, knowledge; senses, sensation or perception, observation, experimentation; intellect, association, reasoning, logic, inductive logic, deductive logic; memory, remembrance, remembrance; emotion, feeling; the way of knowing with the help of the faculties and methods mentioned in the last four sections is called *kartru-tantra* in Sanskrit, which means ‘dependent on the knower’; intuition or transintellectual, transsensorial, transemotional and transmnemonic way of directly knowing the thing itself. This mode is called *vastu-tantra* in Sanskrit. It is said to be acquired through tapas, a method of concentration, self-sublimation and self-development, and means ‘dependent on the known’.

- §812 *Vastu-tantra*: To expand the border inflection between East and West, Ranganathan presents his method as coming from the expression *vastu-tantra*, which brings together concentration, self-sublimation and self-development, coming to mean “dependent on the known”. *Vastu-tantra* demonstrates the condition of continuous perception, never denied, of a transcendental pragmatics. (Ranganathan [1931] 2009, p. 267)

- §11 *Satyam vada*: The First Law points to a behaviour, or *satyam vada*, indicating the act of speaking the truth (let’s see: it is not about the truth as a question, but the question of saying – language – the truth). If the Indian philosopher himself calls his principles, first, laws, and secondly deductive statements, even comparing them, for example, to the statements of Newtonian laws, his cultural-linguistic way of exposition demonstrates the problems of identity approximation between east and west (Ranganathan [1931] 2009, p. 17).

The above concepts demonstrate, through philosophy, what, through the spiral of scientific method, is reaffirmed in the relationship between transcendence and praxis, or transcendental pragmatics.

Transcendental pragmatics

In order to understand Ranganathan's transcendental pragmatics, we resorted, through the philosophy of language, to the debate on the linguistic formation of Indian philosophy (Saldanha, 2016). Our focus here, based on Wittgenstein's (1979) philosophy, is to understand how language and the world are co-constituted. This co-constitution seems to clarify Ranganathan's work.

As Weedwood (2022) points out, in the geopolitical context today treated as 'Indian', 'grammar' as a 'discipline' had considerable sophistication in relation to Western language comprehension practices. Throughout the first millennium before Christ, this exercise already existed, that is, there was already an extremely rich way of 'classifying' the functions of words, of understanding discourse, of analysing language as a totality related to the encounter with the content of the sacred texts of the Vedas. In the modern context, in the scope of European colonization in Indian territory, Weedwood (2022, p. 91) points to the impact of British administrators in the relationship with Indian scholars. The linguist highlights the "complexity of the grammatical system" of Sanskrit, "since the usual paradigms of Western grammar simply did not exist and the student was required to master an increasingly complex series of derivational rules".

According to Weedwood (2022), it was possible, to improve the philological concept of "root", linked to the primitive elements of words, not found in the language as a direct manifestation, but subject to identification from the derived forms that contain a common or radical base. This potential, in turn, was fundamental for the shift between philology and linguistics, or the search for a scientificity of

linguistics in the face of philology from the 19th century onwards. We ask ourselves, for example, in this scenario, how can we not relate this to the construction of Ranganathan's (1970) classificatory thinking?

The search for "revelation", through language, of material practices given in the transcendental scope finds in the long and lasting experience of Sanskrit, certainly, an undeniable cultural connection for an Indian, even under the aegis of Anglophone imperialism. The demonstration of this "peculiar way" not only of thinking, but of dealing with thought as a matter of language, is doubly mirrored in Ranganathan: both his structure of thought is not typical of Western views (and certainly it is here, to a large extent, the Ranganathan's "untranslatability" expressed in the sometimes contradictory way of expressing the transcendence and pragmatics of the 5 "laws" or "mantras"), how its discursive expression, its "style of writing", is radically different from the grounding discourses of Western thought (marked, for example, by the combination of verse and prose, deductive and inductive approaches to the same demonstration, evocation of sacred, literary, and scientific elements in the same argument).

However, from the transcendence inherited from the Hindu culture, Ranganathan performs a material crossing in his karma that puts him in dialogue with a fundamentally material culture (probably the most "materialist" existing there in the global historical context) (Saldanha 2016). Ranganathan's scientific method, or the scientificity of his philosophy, is submerged in this complex relationship between language and the world, theory and praxis.

In Brazilian tropics: from the openness of the facets to the critical philosophy in Library Science

The unfolding of Ranganathan's thought has in Brazil numerous great approaches in the last 50 years. There are different interpreters who have carried out fundamental hermeneutics about Ranganathan,

its books, its concepts. From the 1970s to 2022, we find an intense production on the Indian philosopher in Brazilian scientific literature in Library Science. Ranganathan's work will be received more directly because of his thought linked to classification theory. Among dozens of investigated authors, the thought of Hagar Espanha Gomes stands out from the 1970s to the present day (Gomes 1996, Campos – Gomes 2003). Hagar Gomes was responsible for developing studies of and about Ranganathan's classification theory from the Graduate Program in Information Science at the Instituto Brasileiro de Informação em Ciência e Tecnologia (IBICT), the pioneer graduate course in the "Library and Information Science" in Latin America and the Caribbean. From this tradition, the Brazilian theoretical and applied literature on classification theory is very extensive. Since this is not the focus of the present work, below we try to point to part of the philosophical and epistemological debate in Ranganathan.

Unlike an Brazilian large production on Ranganathan in the field of classification theory, scientific research on the philosophy and epistemology of the Indian philosopher is rarer. However, the relations between classification theory, philosophy, and epistemology in the Brazilian interpretation of Ranganathan advance in the 21st century. These theoretical relationships demonstrate the Indian philosopher's relevance to a critical theory in Library Science. In other words, cultural and social studies developed in Brazil in the 21st century find Ranganathan and identify in the philosopher a source for dialogue with critical epistemological lines, such as decoloniality and symbolic interactionism. We can point as an example:

- Sepúlveda (1996) built an important analysis between philosophy and culture to understand Ranganathan's ideas. As a starting point, the researcher points to the fact that the genesis of Ranganathan's thinking was the result of his holistic view of the Universe and influenced by Brahmin and Chinese cultures and also by Astrology. His Ideational, Verbal and Notational Plans, as well as his Five Fundamental Categories of his classification theory and his Five Laws of

Librarianship show, according to the author, the influence of Brahmin culture on his holistic vision. Also examples of this influence are the definition of Colon Classification and the importance given by Ranganathan to Documentation. The influence of Chinese culture on his holistic vision is based on the definition given by Ranganathan to his Universe of Knowledge, his spiral of subject development and the scientific method. His division of the Universe of Knowledge into quadrants and the concepts of Ascendant, Descendant demonstrate his astrological sources.

- In 2016, the book, *As contribuições brasileiras de Ranganathan para a Biblioteconomia,: reflexões e desafios* (Ranganathan's contributions to Library Science: reflections and challenges), edited by Elaine Rosângela de Oliveira Lucas, Elisa Cristina Delfini Corrêa, Gisela Eggert-Steindel (eds.), published by the *Federação Brasileira de Associações de Bibliotecários, Cientistas da Informação e Instituições* (FEBAB), represents a fundamental contribution, in the most different aspects of the work of the Indian philosopher, from the Brazilian tradition in Library Science.

- Morais and Gracioso (2020) demonstrate the contributions that the so-called Fundamental Categories of Ranganathan, expanded in light of the Literary Categories, can have as a method of reasoning applied to practices dedicated to the identification and systematization of decolonial thinking in Latin American informational productions. Here the scope of decolonial studies is in dialogue with classification theory in Ranganathan.

- Amorim and Sales (2022) discuss the epistemological relationships between the disciplinary macro-concepts, Bibliography and Documentation, in Paul Otlet and Ranganathan. In the authors' point of view, for Otlet, Bibliography and Documentation were different stages of an evolutionary scientific movement that had advanced from a procedural dimension to a methodological-scientific stage, disconnecting from the Library Science and inserting itself in the so-called Bibliology. For Ranganathan, Documentation was a set of activities

analogous to cataloguing and reference service (library activities) and Bibliography was focused on bibliographic production and its role in communication social, supported also by Library Science.

Last year, the Brazilian culture celebrate the centenary of the Week of Modern Art in São Paulo, in 1922. It is a movement of questioning and reinterpretation of Brazilian culture. In this regard, we will be able to see, in the research of Menezes and Barros, how Ranganathan continues to influence sociocultural studies in Library Science. We present the example of these authors' work as evidence of the possibilities of sociocultural re-readings of Ranganathan's ideas in contemporary Brazil.

From the transcendental pragmatics perspective, Vinícios Menezes (2020) understands Ranganathan as a social philosopher of Library Science, fundamentally a kind of "anthropologist of knowledge". The thinking of Ranganathan, according to Vinícios Menezes, leads us to a kind of "anthropophagy" of the book and the humanities of the book, as well as Stella Mello e Barros (2022), on the relationship between Aristotle and Ranganathan.

For Menezes (2020) Ranganathan shifted the colon from the supplementary character occupied in the Universal Decimal Classification (UDC) – «an auxiliary sign of relationship that limits the subjects it links» – to the core plane of his thought, to the point of calling his classification scheme Colon Classification. In view of his pragmatic bias, Ranganathan is in the grammar of the relationship, with the colon being his classifying (or declassifying) cipher. Far beyond the technical meaning of the "colon" for classification, Ranganathan makes the colon the rhythmic "energy" of his scheme – «energy ':' (colon)» –, reflected, for example, in the Library Science "mantras" of his profane thought.

The colon is the symbolic trail capable of translating and uniting everything, without deriving anything, "only" relating – hence the colon classification being "coextensive" and "faceted" like toys (parts of a game), it uses "fragments" and parts belonging to disparate structural sets to «transform, as the case may be, old meanings into signifiers

and vice versa». Menezes claims that the colon is the pointing with the Ranganathanian finger at the formless book that is confused with the immanence of life and its thematizations. For Ranganathan, the book can be considered as the «tripartite energy of the colon», whose aim of its use brings in its message the possible opening of the soul and body of the person-subject book, since this is soul (theme), subtle body (communicated subject) and gross body (physicality) (Menezes 2020).

For Menezes (2020), the knowledge production in Ranganathan between Library Science epistemology and classification theory opens the way for a critical-cultural philosophy of language, centrally a decolonial thought, from Amerindian roots from Brazil to the world. The literality and metaphor of the colon represents grammatical accentuation and his immanent dimension of the relationship, which precedes the name. That is, the colon is the pronoun, the contingent relationship of the human with the world, the formless as the formation of every form – French philosopher Jacques Derrida said – the pre-classified dimension of every classification. Therefore, it is about the Amerindian capacity to wake up or simply to see the soul of things – to establish socio-cosmic relations with the world in its uncontained scope – that colon is about. Merging themes is just one of its functions.

For Barros (2022), the study on the construction of the Personality category in the relationship between Aristotle and Ranganathan opens the way for a sociocultural perspective of the field. In Aristotle, the eternal realm of substance and form materially realized in things that are generated and corrupted cannot be compared to the pragmatic proposal of Colon Classification as designed by Ranganathan. Support or receptacle (Platonic *χώρα* and Aristotelian *ὑλη*) of formless objects, acquires a form and possible meanings in the relationship between facets expressed in the representation that allows its recovery and informational use. Greek philosophy, fundamentally moralistic, socially exclusive, sexist, racist and anti-democratic, from the point of view of social criticism of late modernity, is precisely the opposite of Ranganathan's philosophy, whose ethical-epistemic foundations aim

at education, equal constitutional rights and the implementation of documentary democracy. For this reason, conceiving categorization in Aristotle and Ranganathan disregarding the ethical-epistemic nuances of the intentionality of technical-instrumental discourses disconnected from a social context based on an attempt to solve the poverty resulting from English colonization means not realizing that Ranganathan formulates his categorical application proposal as an overture of political resistance to the representativeness of pluriepistemes and to epistemic justice. Ranganathan presents the role of education in helping to rebuild, that is, to change the reality of individual men and the structure of society is the material implementation of the «movement of the mills» («the North winds do not move mills») (Barros 2022).

The *morphé* (external form), the *eidós* (universal form) and the matter (*hylé* or *hypokemeinon*) in Aristotle configure the principles of being in the essentialist discourse opposed to Ranganathan's pragmatics. However, the identification of the terms that reproduce the form in the Colon Classification occurs because it doubly articulates the donation and the privation of the form. But with the presence of the influence of the pragmatic current in Library Science between the 1920s and 1930s, the cited terms that reproduce the concept of information has the objective of making the *epistemes* in the world act. Information actions carried out by information users in the changing world. The formulation and use of categories that are conditioned to the objectives and purposes of each intellectual conception. When he states that Aristotle proposed an ontological analysis, focused on beings, Ranganathan already focused on knowledge registers – the so-called classification categories (Barros 2022).

For Barros (2022), we can infer that the different proposal of the objectives of Aristotle and Ranganathan – the intentionality of the discourse regarding the proposal of a model of structuring information in a system of organization and meaning of a reality. In transcendental pragmatics in Ranganathan there is no clear separation between the universe of transcendent knowledge and the materiality of documen-

tal information, since it is the relationship or the epistemic configuration of the interchangeability of the senses. The articulation between the facets captured in a representation that provides the necessary conditions or the epistemic “weapons” of political resistance to move and transform reality based on the intentionality of discourses based equality of rights and documentary democracy are central in Ranganathan’s ideas. In the opposite direction to “staying on the path” inaugurated in Greek philosophy and deployed in colonisations that generates epistemic effects at every step taken this epistemic situation in the field of Library and Information Science is identified in the long duration. Ranganathan, influenced by Aristotle, thus presents us with a different horizon for democratic development via his philosophy and classification theory (Barros 2022).

Ranganathan integrates, therefore, what we call documentary democracy, that is, the political foundation of Library Science based on the epistemology of knowledge organization. Documentary democracy (dialectical meta-informational cartography of the people, their land and their gestures) is the condition of structural representation necessary for the citizenship of those represented (there, in documentary networks, “presented”), while establishing itself as the only way to of State sovereignty – the communion of the legitimately represented people – in the face of international informational wars. The construction of documentary democracy, is questioned, therefore, in the transition from the organization of knowledge to the ordinary organization of socially oppressed knowledge. In his Five Laws, since 1931, Ranganathan provides us with strong sociocultural elements for the horizon of documentary democracy (Saldanha, 2020).

Final remarks: from transcendental pragmatics to documentary democracy

The ‘simple’ way to understand such ‘laws’ is to find them, there-

fore, as ‘mantras’, exercises of connection with the transcendental world that free the mind from everything that materially covers it. A double risk is born here: the first, which can lead to the interpretation (or even the accusation) of the Ranganathanian point of view as an orientalist mysticism, not only difficult to ‘access’, but also scientifically inappropriate.

Ranganathan’s philosophy is, as the author himself demonstrates, holistic. Ranganathan’s ideals seek an integral way of understanding social reality. This philosophy allows us to go from the transcendental plane to the plane of action – from philosophy to the epistemological scheme of a field (its scientificity), to its empirically proven theories (the praxis that transforms reality through the scientific method). It is, therefore, a political philosophy of Library Science, oriented towards the horizon of a documentary democracy.

The great epistemological transformations of the 1930s in the field of library science are directly or indirectly linked to Ranganathan’s philosophical and epistemological theses. We can affirm the argumentative production of *The Five Laws of Library Science* as a synthesis of the great milestones of scientific questioning of the period, as well as a set of ideas for future theories, centrally social and cultural studies in Library Science. Ranganathan’s work paves the way for a social theory of the field. This is a philosophy of open knowledge mathematical ethnography. It is a philosophy of relationship, recognition of the plurality of cultures and their transversalities.

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Abstract

This paper is to carry out a debate on Ranganathan's epistemological and methodological dilemmas at the beginning of his bibliographic production in Library Science in the 1930s. As a consequence, the paper point out some interpretations of a given Brazilian hermeneutic about Ranganathan's work. Our interests are mainly to contribute to the understanding of the philosophical and epistemological role of Ranganathan's thought. The results demonstrate Ranganathan's philosophical-epistemological relevance, from logic to pragmatics, from deductive constructions to the social and cultural theories of Library Science. Ranganathan's philosophy allows us to go from the transcendental plane to the plane of action – from philosophy to the epistemological scheme of a field (its scientificity), to its empirically proven theories (the praxis that transforms reality through the scientific method). It is, therefore, a political philosophy of Library Science, oriented towards the horizon of a documentary democracy.

Ranganathan; Library Science Epistemology; Library Science Philosophy; Transcendental pragmatics; Documentary democracy

Il presente lavoro si propone di condurre un dibattito sui dilemmi dilemma filosofico ed epistemologico di Ranganathan all'inizio della sua produzione filosofica nella Biblioteconomia negli anni '30. Di conseguenza, l'articolo evidenzia alcune interpretazioni di una data ermeneutica brasiliana sull'opera di Ranganathan. I nostri interessi sono principalmente quelli di contribuire alla comprensione del ruolo filosofico ed epistemologico del pensiero di Ranganathan. I risultati dimostrano la rilevanza filosofico-epistemologica di Ranganathan, dalla logica alla pragmatica, dalle costruzioni deduttiva alle teorie sociali e culturali della Biblioteconomia. La filosofia di Ranganathan ci permette di passare dal piano trascendentale al piano dell'azione – dalla filosofia

allo schema epistemologico di un campo (la sua scientificità), alle sue teorie empiricamente provate (la prassi che trasforma la realtà attraverso il metodo scientifico). Si tratta, quindi, di una filosofia politica della Biblioteconomia, orientata verso l'orizzonte di una democrazia documentaria.

Ranganathan; Epistemologia della Biblioteconomia; Filosofia della Biblioteconomia; Pragmatica trascendentale; Democrazia documentaria