# Proposals That Preceded the Call Number: Shelf Arrangement in the Francofone Manuals of Librarianship from the Mid-Nineteenth Century to $1930 \dagger$ 

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#### Abstract

Shelf arrangement, from a bibliographic perspective, constitutes a reading proposal of the collection to the users as well as a resource for management and access to the documents. However, the centrality of the call number testifies the near forgetfulness of the different proposals that came before it and the role of the collection of documents and the target audience in the elaboration of the organization, in addition to the overlapping of the bibliographic classification to shelf arrangement. This work is justified by the need to restore shelf arrangement, seeking to understand its fundamental aspects from the literature in which the activity was systematized. Thus, this paper aims at contributing to reorient the shelf arrangement as an activity of information organization, exploring its conformation in the Francophone literature, from the mid-nineteenth century up to the 1930s. As for the methodology, this is an exploratory research made possible through the historicalconceptual investigation of shelf arrangement found in the Francophone manuals of librarianship of that period. This study concludes that the activity was placed by that line since the nineteenth century, when its own terminology was developed under the consideration of the intervention of the contexts, using methods and guided by the diversity of proposals.




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### 1.0 Introduction

In the set of activities that compose information organization, in view of the structuring of systems and services that seek to favor the qualified use of information, we highlight selection, representation and arrangement. Through selection, documents identified as potentially
capable of meeting information needs are selected. These documents are collected, or only referenced, resulting, in both cases, in the formation of a collection. Representation, in turn, takes place through the combination of a series of activities that aim to produce records of documents to compose databases so that these records can be identified, selected and located by the public. Arrange-
ment consists of the elaboration of a space arrangement for documents or for document metadata in order to provide access to them. The arrangement of document metadata is carried out from the access points to the records that refer to the documents, such as the structure of navigation and access to electronic documents and databases search indexes. Shelf arrangement, in turn, addresses the proposition of arrangements for documents in furniture, resulting in the materialization of a reading proposal to the users, in addition to favoring the management and access to documents.

The call number, elaborated from the mid-nineteenth century and of Anglo-American origin, is the model of document ordering predominantly adopted in libraries in Brazil and prevailing content in librarianship undergraduate courses in the country for this activity. It responds by the elaboration of relative localization systems and was systematized by Ranganathan in the 1930s as the junction of the collection number, class number and book number. The model was disseminated in Brazil mainly by the association between the traditional bibliographic classification systems, such as the Dewey Decimal Classification (DDC) and the Universal Decimal Classification (UDC), and the Cutter tables for author names. In spite of its complexity and functionality, especially for some types of documents and institutions, this ordering model of documents seems to have contributed to the reduction of reflections on the functions, characteristics and historicity of the activity, in addition to stifling discussion and the emergence of other proposals.

It may be noted that the theme does not make up the current research agenda in information organization. It should be assumed, however, that this fact does not diminish the relevance of the activity widely performed in professional practice, nor does it negate the need to seek to fill gaps as to its historicity and, at the same time, actuality. In this way, some problems can be evidenced, such as the following:

- The near forgetfulness of different proposals for shelf arrangement and of the reflections that underpin them, before the construction of the call number;
- The significant disregard of shelf arrangement as an activity that should be oriented to the characteristics of the collection of documents and the public in question;
- The constant indiscrimination between shelf arrangement and bibliographic classification, since the latter constitutes one of the methods to accomplish the former.

The highlighted problems point to a reductionist understanding of the activity. There is a supposed stability and universality of the call number that does not hold in itself
but that is evidenced especially when investigating other approaches. Thus, the objective of the study is to contribute to reorient shelf arrangement as an information organization activity, exploring the conformation of the activity present in Francophone literature from the midnineteenth century until the 1930s. The paper is justified by the need to underpin the activity of shelf arrangement, presenting formulations placed in the period in which their systematization occurred. The Francophone line was chosen due to its identification, among the localized western production, as the one that gathers the first systematic contributions regarding shelf arrangement in a quite proposable, although not complete way.

The choice for the manuals is therefore justified, as, in terms of dissemination of ideas, Riché (2009) states that they were, in French language, the main channel through which librarians expressed their conceptions about their practice. This approach allows to present the basic elements for shelf arrangement established by Namur (1834) Constantin (1839), Cousin (1882), Delisle (1896, 1910), Maire (1896), Cim (1902, 1907, 1908), Morel $(1908,1910)$ and Crozet (1932) in the form of a literature review.

The work is structured in four other sections, the next one dedicated to the presentation of fundamental concepts to the understanding of shelf arrangement as an information organization activity. In the third section, we examine the eight authors of the manuals on the presentation of methods and functions associated with shelf arrangement. In the sequence, some considerations about what can be understood as the activity of shelf arrangement for the period covered by the study, especially regarding the methods, considering its relationship with the bibliographic classification, are presented.

### 2.0 Shelf arrangement and information organization

Shelf arrangement in bibliographic information services can be understood as the activity that "consists of the materialization of an arrangement for collections which will be defined with the objective of performing the physical display of the documents in place" (Silva 2016, 32).

Shelf arrangement should be thought of for collections or parts of collections and, in turn, the collection itself will condition the strategies employed for the shelf arrangement's purpose. The objective proposed for the arrangement is also a determining element, since it will point to the choice of the documentary characteristic that will command the structure of the arrangement. Ortega et al. (2016) denominate such characteristics as an attribute " a " and claim that the definition of the arrangement based on a certain attribute may result in the formulation of a reproducible plan and following certain established rules, configuring a method. For the shelf arrangement,
the definition of three methods is established: chronological, alphabetical and systematic.

The chronological method is characterized by the definition of the attributes that allow the establishment of a linear and progressive temporal sequence for the arrangement, as does the order of accession of the documents in the collection or the year of publication. The alphabetical method is based on the choice of attributes that can be organized according to their initial letters from A to Z , usually in an increasing order that will allow the intercalation of new items, as in the case of authorship or document title. The systematic method is based on the selection of structured attributes in classes and subclasses, allowing the intercalation of documents within groupings oriented by this same structure. The main instruments associated with the systematic method are the traditional bibliographic classification systems, such as $D D C$ and UDC. However, it is necessary to consider that these systems do not respond by the systematic method as a whole, since it is possible to use different instruments, elaborated in particular contexts, which can even use simpler hierarchical structures. In any case, despite the type of hierarchical structure used, the bibliographic classification constitutes the fundamental element of the systematic method.

From the exclusive or combined use of these methods, the formation of fixed or relative localization systems is resulted, often represented by codes transposed to labels affixed to the documents that form an arrangement. In the contexts in which codes are used, there will be a direct relation between the documentary attributes chosen for the arrangement and the elements that make up the code. Each of the defined elements will receive a corresponding notation, and the order of these elements will be reproduced in the configuration of a code indicating the location of each document in the collection set, either in fixed or relative location systems.

According to Pinheiro (2007), Prytherch (2005) and Mann (1962), in the fixed location systems, documents are arranged with the purpose of determining a definite place for their positioning, and the materiality of the document is the main considered attribute. The relevance given to the materiality in these systems is justified, as, to a great extent, they are associated to a conservationist approach to the collections, based on the prohibition of access to the shelves by the users and the rigorous use of the space. In these cases, according to Prytherch (2005), there is an exact point of accommodation of the docu-ment-usually represented in the form of alphanumerical notation-that refers to the book shelf, shelf and order of the item on the shelf.

In relative location systems, there is no definite place for each document, since, according to Mann (1962), the arrangements foresee the possibility of constant changes
in the positioning of documents within the collection as more items are integrated with no rupture of the arrangement structure already materialized. Groups of documents are formed from their common characteristics and these aggregate groupings form the basis of the arrangement. New documents are introduced, first according to the group assigned to them and, later, the relationship they establish with the other documents that precede them and succeed them within that group.

The malleability of the arrangements that configure relative localization systems is achieved mainly through the use of traditional bibliographic classification systems. Through the structure of more or less exhaustive classes and subclasses, each document is integrated into a group composed of a certain attribute of interest. By belonging to a class, the document is positioned according to the reading proposal chosen for the arrangement of the collection that contains it. Subsequently, these same documents are individualized based on other attributes, especially the accession number, year of publication of the document or the author's surname, and there may be the addition of other attributes in order to guarantee the uniqueness of each item. Thus, relativity is ensured by the classificatory structure that guides the elaboration of the arrangement, although additional attributes are indispensable to its realization.

Another relevant point to consider regarding the shelf arrangement is the ability of the code assigned to each one of the documents to establish a direct relationship between the item on the shelf and its card in the catalog or its record in a database. It, therefore, provides the bond that allows the search to lead directly to the desired document. The shelf arrangement also offers a view of the collection that allows the definition of actions aimed at the planning of the spaces and the management of the collection itself. Sayers (1944) defined some advantages concerning the use of bibliographic classification systems for shelf arrangement, such as making the collection balanced and representative on the subjects it contemplates, in addition to facilitating the methodical selection of new documents, as well as the removal of those documents that are no longer of interest. Sayers's (1944) ideas can be extended to the arrangements as a whole, regardless of the used method, given that any chosen attributes, when in line with the institutionally defined objectives, may offer ancillary clues to collection management. The arrangement may also contribute to the improvement in the use of available space, considering as variables the desired access modes, collection growth and conservation parameters.

### 3.0 Arrangement in the Francophone librarianship manuals

Throughout the nineteenth century, the publication of Francophone librarianship manuals, mainly in France, especially from the third quarter of the century, was the privileged medium through which the conceptions about the librarian's practice were expressed. As a result of individual engagements, these manuals were characterized by an orientation in order to transmit and explain, pedagogically, the set of basic knowledge necessary for the exercise of the profession as well as practical and procedural advice that would enable the necessary actions to be carried out. According to Riché (2009), the manuals were placed on the frontier of professional training, bibliography course and book history and also a means of expression of claims related to the practice and its updating. Thus, the manuals became an indispensable instrument for knowledge transmission, testimony of the library practices carried out in that context and among them shelf arrangement.

### 3.1 The erudition and the design of practices

Lebailly (2008) argues that librarians did not know the real advance of their status throughout the nineteenth century and that the formation offered by the Ecole des Chartes, from 1821 on, failed to propel a reversal of the picture. The teachings offered in Chartes remained based on humanistic erudition, without major concerns with the preparation for the management activities of the institutions as a whole. Therefore, the two manuals published in the 1830s made explicit mention of these activities. The first, by Namur (1834), provided a long introduction to the history of the book that would serve as a basis for the numerous courses taught at this school, while activities related to the management of collections were presented as a fundamental underpin for the erudition work constituting the librarian action. The second one, by Constantin (1841), inaugurated a first global practical reflection on the profession and used for the first time, in the French context, the word Bibliothéconomie (librarianship). More pragmatically, he sought to meet also the librarians not trained in Chartes but who needed to learn the first notions of librarianship.

Considered the first librarianship manual written in French, the text by Namur (1834), Manuel du bibliothécaire: accompagné of notes critiques, historiques et littéraires, described the different stages of intervention that would need to be carried out on the books. Among them, the arrangement, denominated classement, received relative prominence, since, according to the author, it allowed the search for a certain book. In small libraries, for Namur (1834), books could be displayed on the book shelves exclusively ac-
cording to their accession order, being even possible to choose to group books of the same size and under the same binding in order to produce good appearance. The author argued that within the space of large libraries, in order to save space, avoid visual irregularity and facilitate the maintenance of established order, it was necessary to divide the books from the material distinction by format associated with the use of classification systems. Namur (1834) presented possible classification systems to arrange the shelf such as the one by Jacques Charles Brunet or even his own classificatory scheme, without, however, prescribing the use of any of them.

Shortly thereafter, in Bibliothéconomie, or nouveau manuel complet pour l'arrangement, la conservation et l'administration des bibliothèques, published in 1839 and reprinted in 1841, Constantin (1841) stated that the ways of arranging the books on the shelves should be determined depending on the volume of the collections. If, in small libraries, size could be the only attribute considered for arranging the items, in large collections, the arrangement consisted in ordering them systematically, according to classes and subclasses. The author also pointed out that the choice among the various classification systems depended on the scope and specificity of the library as well as the librarian's taste and the possibility of this system being equally useful to different types of readers. According to Constantin (1841), books should first be arranged according to their position in the used classification system and then separated according to their size and sequentially numbered as they enter the library according to predetermined numerical intervals for each of these sizes.

Constantin (1841) recalled that, in some cases, parts of the collection would be ordered in parallel to the main set. According to the author, this would be the case of books in extraordinary formats, those special ones by their form of elaboration, rarity or content and that would, therefore, require special conservation care. Also, significant for Constantin (1841), it would be the cases of private collections donated to a library under the condition that their original order be preserved so that they would not be scattered among the main collection. However, in certain circumstances, the author argued that public utility should prevail over the vain and capricious will of the donor, thus highlighting the relevance of contextual conditions for choosing the best solutions for shelf arrangement.

### 3.2 The advance in systematizing the activity

According to Riché (2009), after a long period without the publication of new works, from the 1880s, some manuals were produced in response to a new extremely favorable context; on the one hand, the government's de-
sire to standardize the practice of library management and, on the other hand, the professionals waiting for new instructions that could prepare them for the examinations for obtaining the librarian diploma, such as the Certificat d'aptitude aux founctions de bibliothécaire instituted, for the university libraries in 1879.

At this confluence, Cousin's manual (1882), De l'organization et de la administration des bibliothèques publiques et privées, was the first to return to the presentation and explication of librarian practices. In it, arrangement (classement) stood out as an activity that should at the same time serve the organized arrangement of the books and the realization of the inventory. Unlike earlier writers, in Cousin's manual (1882, 29, in translation), book arrangement was considered primarily "under the material point of view, that is, from the point of view of the size of the volumes, without regard to the subject they addressed." In order to meet this purpose, books should be divided by size, contributing to the best management of the space available within the shelves, which was the only attribute available for arrangement purposes.

In 1890, Delisle published Instructions élémentaires pour la mise et maintien en ordre des livres d'une bibliothèque and, having achieved relative success, edited the fourth version of his manual in 1910. In this manual, book arrangement on shelves (classement) was minutely explained in each of its stages and worked with a more extensive and own terminology than that of the name of the activity. According to Delisle (1910, 5, in translation), it was essential for each book to be associated with "a shelf mark (cote) or a number that provided a way of finding it on the shelf and putting it back without hesitation." Moreover, there should be no volume without shelf mark, and "one same shelf mark would never apply to two different volumes" (Delisle, 1910, 6, in translation). For this, it was necessary to mark the book, action that consisted in the inscription of the shelf mark "on the back cover of the volume and in its interior" (Delisle 1910, 6, in translation). Thus, according to Delisle (1910), for arrangement on shelves purposes (classement), the shelf mark (cote) would be the mark of individualization of the book in a collection and the attribution of this mark to the book consisted in the activity of shelf marking (coter).

Before assigning the shelf mark to the books, Delisle (1910) claimed that it would be preferable to distribute them according to a number of divisions, following the diversity of themes, in order to group books that covered the same subject. The structure of classes that would be used to make this division of books was named by the author as arrangement chart (cadre de classement), which should be elaborated and could be modified according to the characteristics of each collection. Thus, the author pointed out that the structure of classes should be
thought locally, in order to meet the specificities of the collection, and not simply transposed from an already consolidated class system.

For the composition of the shelf mark, the classification notation of books, it would be necessary to add a new notation that, within the classes, would individualize each one of the books. The solution proposed by Delisle was to divide a numerical sequence for each class of the structure into four numerical intervals corresponding to the four sizes established for the books, which would be numbered according to their size and accession order in each class. In this way, systematic and chronological attributes were combined for arrangement purposes.

Delisle (1910) also discussed about the possibility of separating parts from the collection in cases where there were rare items, items that required special storage conditions due to their materiality and also when there was interest in forming documentary sets that could facilitate the use. The author even discussed the use of the $D D C$ for arrangement purposes but made reservations about its adoption, mainly because he considered that the decimal scheme gave rise to very extensive shelf marks. Delisle (1896) considered the $D D C$ inadequate for the French libraries as he considered them too closely bonded to the country of origin, and therefore not suitable for the antiquity of the French collections.

In the turn of the nineteenth to the twentieth century, Maire (1896) published the Manual pratique du bibliothécaire and, in the chapter on arrangement (classement), he stated that personal taste or the trends in vogue could no longer be the guiding elements for the choice of librarians who had counted, for some time, with general methods of arrangement. In this sense, the author pointed out (Maire 1896, 107, in translation) the preponderance of arrangements based on the division of "each scientific series and section into several parts, these parts meeting the formats of the books and therefore at their height," followed by an integer that defined the position of the book on the shelf. However, the author criticized the systematic arrangement for implying a very extensive shelf mark for documents, which, in addition to requiring a great deal of memory to be remembered, was not always able to mnemonically relate the denomination of the scientific class of the book to its notation.

Thus, Maire (1896) described solutions based on the chronological method, explaining his preference for arrangements based on the accession order of the books in the library, being the size division the used grouping strategy. Thus, the evaluation of different proposals by Maire (1896) confirms that, according to his understanding, the main function of shelf arrangement was to facilitate storage.

Although he published three books addressing the knowledge needed by librarians and book lovers, Cim did not elaborate a cumulative reflection on arrangement on shelves (classement) which, being presented in 1902 in Une bibliothèque: l'art d'acheter les livres, de les classer, de les conserver et de s'en servir, was reproduced in Le livre: historique, fabrication, achat, classement, usage et entretien, of 1907 and only summarized in Petit manuel de l'amateur de livres, of 1908.

Cim (1902; 1907; 1908) pointed out that books could be arranged on the shelves in the alphabetical order by the surnames of the authors, after their division by size. Likewise, by arranging the accession records of the books in the library, divided according to their size, it would be possible to arrange them on the shelf only on the basis of their accession order. Thus, in the first moment, Cim defended the use of alphabetical and chronological methods as a basis for the composition of the arrangements but combined them with the division of books by size, believing that (Cim 1908, 214, in translation) "the symmetrical regularity of this arrangement would favor the view and produce the best effect." Cim (1902, 216, in translation) also recommended, in cases where it was necessary, "to arrange in sets all the volumes addressing the same subject," separate them initially according to the format, group them on the shelves according to the subject they deal with and, within these groupings, proceed in accordance with the alphabetical order of surnames of the authors. Cim named this system as vertical arrangement (classement vertical), since all the books on the same subject, and in different formats, would be gathered vertically in a shelf.

Although Cim (1902; 1907; 1908) considered relevant that books were systematically placed on the bookshelves, he did not point any preference for any system of bibliographic classification, nor did he explain how an arrangement supported by such systems would be managed. The author also referred (Cim 1908) to the $D D C$, among other classification systems, but warned that it was a system known in Europe only from the 1890s and, given its recent use, still unreliable.

### 3.3 In search of a review of the French library model: new proposals for arrangement

Also at the beginning of the twentieth century, but under a rather different approach from that presented by the authors previously worked, Morel published his reflections in Bibliothèques (1908) and La Librairie public (1910). In these books, in addition to explaining a fierce criticism of French libraries at the turn of the twentieth century, Morel highlighted that the ideal of modernity that he wanted both for libraries and for the training of librarians. This ideal was based on a challenge to the conservationist principles and restricted use of libraries and to the
scholastic training offered by the École de Chartes, which was already considered insufficient.

Morel's (1908) discussion regarding arrangement was initiated by a distinction as to the possibility of being performed in two distinct scopes: in catalogs, with the card catalog arrangement (classement des fiches), and on the shelves, with the book arrangement (classement des liures). According to the author, in several French libraries, under the imperative of arrangement based exclusively on the order of book accession, therefore, in fixed-location systems, many librarians came to believe that the catalog would dismiss the use of other methods for book arrangement on the shelves. Morel (1908, 228, in translation) argued that such a choice involved the establishment of card libraries, but not in book libraries and had been conceived "in the head of the worst enemies of reading," since both forms of arranging were not equivalent or substitutive but complementary. For Morel (1908, 227, in translation), "the best order comes soon when the order does not come from above," being ideal "to let each library find its own arrangement" without requiring that all of them follow a similar arrangement.

According to Morel (1908), love of books, their beauty, or the convenience of use could be the only criteria used for their arrangement in private collections. However, this was not the case with public libraries, since these ones needed to arrange the collections in a way that was compatible with reality and favored their use by the public.

Inspired by the movement of public libraries in England and the United States and a strong advocate of free access to shelves, Morel considered systematic arrangements as the most appropriate. However, the author criticized (Morel 1908) the bibliographic classification systems, because they did not provide space for the different typologies in the schemas and were more focused on ideal elements than on the practical needs of libraries when dealing with collections. For Morel, it was indispensable that a classification system had classes that were not restricted to possible subjects but that, for example, grouped different typologies or were elaborated from certain expectations of use by the public.

It would be important to highlight the central role of the librarian in the elaboration of systematic arrangements. The author did not legitimize the criticisms of discrepancy made to the systems of bibliographic classification by his contemporaries. According to Morel (1908; 1910), the complaints were not exactly related to problems in their elaboration but to the misunderstanding of librarians to demand from ancient systems the expression of elements that were not proper to their time. Morel also called on librarians (Morel 1908, 232, in translation) to make the necessary changes to the systems themselves, since it would be part of "their function to modify, add, reduce" to bring
them closer to the real demands placed by libraries. Thus, the author privileged the systematic arrangements and posed relevant considerations about the systems of bibliographic classification and the role of the librarian as protagonist in this institution.

The Manuel pratique du bibliothécaire, published by Crozet in 1932, was reportedly written with the intention of overcoming "the delay of France in relation to other countries in the practical learning of the work of the librarian" (Lebailly 2008 , 34, in translation).

In this manual, arrangement (classement) was worked by the author from a division between the public reading libraries and the study libraries. The fundamental difference consisted in proposing an arrangement based only on the size of the items and their accession order for the study libraries, whereas in public reading libraries, in addition to size division, books would be systematically grouped and, within the classes, arranged according to their accession order. The division of books by size, in spite of the volume of the collection, was justified by the author as indispensable for its good conservation, for saving space in the library and also to avoid "the unequal height unpleasant to vision" (Crozet 1932, 65, in translation).

According to the author, for both libraries, it was also necessary to assign a shelf mark (cote) that would indicate the place occupied by the book and consisted of "a formula composed of letters and numbers, indicating its shape and its class within the format" (Crozet 1932, 65, in translation). At this point it should be clarified that although Crozet used the term "format," he made reference to the size of the books, because according to his explanations, the format was defined by the size of the item not by the size of the paper and the number of folds that would have been made if the reference was strictly to the size. The author claimed that although the numerical shelf marks were the most common ones among the French, it was possible, at least for parts of the collection, to assign a literal shelf mark (cote littérale) formed exclusively by alphabetical components. The identification of the class was maintained by a capital letter of the alphabet, which was then followed by the first three letters of the author's surname followed by the first letter of the title of the book. This change resulted in an alphabetical arrangement within the classes and not in a chronological arrangement, as had been initially pointed out by the author.

By dealing with structured arrangements from classification systems, Crozet (1932), as did Delisle (1910), presented what he called the arrangement chart (cadre de classement) and that consisted of a classificatory structure developed especially for arranging documents on the shelves. In this way, Crozet (1932) established a differentiation between the classificatory scheme for arranging the shelves and the more detailed and exhaustive classifi-
cation scheme that could be used to prepare the cards in the systematic catalog. The simplicity of the arrangement for ordering the documents, expressed by the author as the necessity of not having numerous hierarchical subdivisions for the main classes, would be fundamental so that the reader could walk autonomously along the shelves and the professional could perform his work properly.

### 4.0 Arrangement (classement): the consolidation of an activity

Despite manifest singularities, in the set of ideas presented by the eight analyzed authors, the recurrence of chronological and systematic methods as ways to propose solutions for shelf arrangement is quite evident.

Concerning the chronological method, the notorious preference for the accession order as the element that leads the arrangements or as an attribute of individualization of the items within the groupings, seems to corroborate with the idea that, to a large extent, the proposals were bonded to the issues of document preservation. The division by size, associated with the accession order brought together documents with similar material properties and, thereby, favored their conservation. It is noteworthy that the accession order is defined through an administrative attribution that assigns a unique and sequentially defined number to each document arrived at the library. In the case of its use as a primary attribute, constituting a fixed location system, it became possible, by exploring the display of the collection itself, to identify documents that had long been part of the collection and those that had been incorporated more recently. Combined with a systematic arrangement, the accession order could answer to this same question in each of the classes defined for the schema but not for the library as a whole. In the proposals by Constantin (1841) and Delisle (1910), the definition of numerical intervals expressed the combination between size and accession order, thus ensuring that there were no identical shelf marks in any of the proposed groupings.

Of all the analyzed authors, Cousin (1882) was the only one who did not describe systematic arrangements, restricted to those of chronological basis, which were exclusively supported by the accession order or based on the association of size with the accession order or the year of publication of the book. As for Constantin (1841), the advantage of the systematic arrangement came from the fact that it disallowed the professional to go through the whole library in search of the books demanded on the same subject. Similarly, Namur (1834) argued that in large libraries, it was an element of fundamental importance for the search and control of the requested books. Therefore, there seems to be an understanding among these authors that
the choice to use systematic arrangement, and hence opting for relative localization systems, would rather be related to facilitating the work of the librarian.

Only with Morel $(1908 ; 1910)$ is this scenario more clearly modified, since the author attributed to the systematic method the primacy of shelf arrangement, considering it the most appropriate for free public access to the bookshelves and should be employed as widely as possible. However, in the set of analyzed manuals, chronological or systematic arrangements were presented without major considerations or comparative assessments that pointed out the advantages associated with the option between one or the other.

The choice that often appeared justified in the manuals and that would fit any proposal was the division of the documents by size, combined with the accession order or with systematic arrangements. The predilection for the agility in the execution of the activity, for saving space or the pleasant visual aspect was present, in some way, in all the analyzed manuals.

Another important point to highlight cohesion among authors is the uncontroversial presence of the term classement to indicate one of the indispensable steps for structuring a library: arrangement. Some of these authors have used other terms, also appropriate to arrangement, to indicate steps and instruments necessary for their realization. Among the analyzed manuals, Morel (1910) was the first author to establish a clear distinction between the terms book arrangement (classement des livres) and card catalog arrangement (classement des fiches). According to the author, arranging the cards of a catalog would not be a substitute for shelf arrangement nor would the reverse be true. The material dimension of the documents would lead to certain choices, such as the separation of the great atlas from the works that commented on them, which would be absolutely unnecessary or incongruous for the uniformity of the cards.

Delisle (1896; 1910) was the first one who used the term shelf mark (cote) to refer to the mark responsible for indicating the position occupied by a document within the collection, whether in fixed or relative location systems. After him, Maire (1896), Cim (1908) Morel (1910) and Crozet (1932) made some mention of the term in the context of the proposals for arranging documents without changing the first assigned meaning. Thus, among the studied authors, classement and cote were the most recurrent and stable terms for the Francophone approach to shelf arrangement.

Distinctive course was observed for arrangement chart (cadre de classement), which, having been used, also for the first time, by Delisle in 1910, appeared again in the manuals only with Crozet in 1932. Despite the temporal difference that separates the two manuals, in both of them the mean-
ing assigned to the arrangement chart was the same. Delisle described (Delisle 1910, 11, in translation) it as the class structure used for arrangement purposes on the shelves, which should "be modified according to the places and above all according to the abundance and nature of the materials." Crozet (1932) presented two arrangement charts in his manual: the first one to prepare the entries in the systematic catalogs and the second one for arranging the documents on the shelves. In explaining the arrangement chart of documents, the author mentioned the need for adaptations in the original classificatory structure, used for arranging in the systematic catalog, according to the demands imposed by the material disposition of the documents. According to Crozet (1932), in two extensive classes, it was possible to transform part of the subordinate classes into classes of the same hierarchical level, or even to re-elaborate some classes in order to favor the composition of shelf marks and easier arrangements. Simplifying the original classification structure adopted in the catalog by reducing the hierarchical levels and the total number of classes would be a fundamental task for the shelf arrangement, according to these proposals.

Hence, in addition to forming a proper term for arrangement, the arrangement chart was characterized by the proposal of elaborating a proper classificatory structure or of the institutional adaptation carried out on a system of bibliographic classification already elaborated, most compatible with the local needs, especially considering the profile of the collection. From another perspective, it can be deduced from the statements of Delisle (1910), Morel (1910) and Crozet (1932) that the function of the librarian was associated with the choices intrinsic to the modes of elaboration or implantation of bibliographic classification systems, therefore, intellective role in the exercise of the practice as they influenced in the chosen solutions not closed or defined in advance.

It is also noteworthy that shelf arrangement was treated separately from the presentation or choice of bibliographic classification systems. In the manuals, the presentation of bibliographic classification systems followed the instructions to elaborate the systematic catalog, as in Namur (1834) and Constantin (1941), or it was explored in a proper section, as in Maire (1896), Cim (1908), Crozet (1932). Such separation made the delation of complementarity, but not of dependence, even clearer but not dependence between the proposition of the shelf arrangement and the use of the systematic method.

The analyzed proposals were discussed in the aspects related to their general scope, failing to contemplate their detailed instrumentalization or the details implied in the option by a certain arrangement. Thus, few authors have dedicated to examining the shelf marks for the proposed arrangements, and none of them disclosed the proce-
dural explication of its composition. It is possible that the elaboration of shelf marks led to the development of solutions that are much more complete and complex than those exposed by the authors, since what is evidenced by the manuals is rather a reflection on the process of shelf arrangement not the search for a replicable solution.

The manuals did not offer detailed descriptions of the technical dimension of the process. If, on the one hand, there are questions about the procedures that would be associated with the presented proposals, on the other hand, the understanding of the shelf arrangement as a particular and necessary step for structuring a library seems to have emphasized its own characteristics in all the processes described in the manuals as in the case of the methods that would enable its effectiveness and the relationship of these methods with the used instruments.

### 5.0 Conclusions

In order to highlight the relevance of shelf arrangement in the scope of information organization, the examination of the librarianship manuals demonstrated the need to search for the historical outlining of the activity in order to resignify it. It was possible to verify that the problem of shelf arrangement was placed, since the nineteenth century, by the Francophone line. This strand searched for ways to respond by activity but not necessarily by a replicable model to perform it as in the case of the call number, whose construction occurred later, although following the analyzed period of this study. The return to the literature demonstrates, therefore, that there is significant production that contemplates the shelf arrangement in terms of its foundations and associated practices. Although this literature is largely sparse and, consequently, still poorly systematized, this literature explains the richness of the theme in the historical configuration of information organization, as well as its contemporaneity in the elaboration of bibliographic information services.

The analyzed strand allows us to highlight the clarity with which the methods of shelf arrangementchronological, alphabetical and systematic-were written by the authors since the mid-nineteenth century, without establishing the primacy of one of them in relation to the others. Likewise, the separation between the systematic method and the bibliographic classification systems seems to be incontestable, especially pointed out by the claim for the need for a class structure adapted to the purpose of arranging the collection in question by some authors mentioning the relevance of the arrangement chart. Thus, the shelf arrangement and bibliographic classification are not confused, and today, in French, they have their own terminology that differentiates them, constructed respectively around the terms classement and classification. In this lan-
guage, we highlight the contemporaneity and dissemination of the term cote as indicative of the shelf mark that individualizes each document in the collection.

If, on the one hand, the examination of the Francophone manuals disclosed its relevance to the principles governing the activity and the strict correlation between the intended objectives and the chosen methods, on the other hand, the fragility of the presented proposals was revealed. In this sense, we emphasize the virtuosity of the call number that, having reached relative stability, could be easily operationalized through the prescription of the use of associated instruments. However, it should be noted that, just as the relative lack of knowledge about the French proposals included in this analysis, the call number also requires studies that make the principles that underpin it sufficiently known and the proposals that have contributed to its emergence and consolidation.

Resuming the discussion about shelf arrangement would allow to establish interlocutions with arrangement in its amplitude, that is, the one that involves shelf arrange-ment-discussed in this paper-and the arrangement of document metadata (in the case of card catalog, as we discussed, but also of electronic documents). This discussion may contribute to more in-depth studies on information organization in the sense of a re-signification that leads to greater academic and social recognition. Likewise, within the scope of teaching, contemplating the arrangement based on the fundamentals that support it would allow to design approaches centered in the abilities to use instruments and rules in favor of the abstraction that allow to operate concepts in the face of the diverse practical demands.

## References

Cim, Albert. 1902. Une bibliothèque: L'art d'acheter les livres, de les classer, de les conserver et de s'en servir. Paris: Ernest Flammarion.
Cim, Albert. 1907. Acbat des livres: aménagement d'une bibliotheque et rangement des lives, catalogues et classification. Historique, fabrication, achat, classement, usage et entretien 4. Paris: Ernest Flammarion.
Cim, Albert. 1908. Petit manuel de l'amateur de livres. Paris: Ernest Flammarion.
Constantin, Léopold Auguste. 1841. Bibliothéconomi; ou, Nowveau manuel complet pour l'arrangement, la conservation et l'administration des bibliothèques. Paris: Librairie Encyclopédique de Roret.
Cousin, Jules. 1882. De l'organisation et de l'administration des bibliothèques publiques et privées: Manuel théorique et pratique du bibliothècaire. Paris: A. Durand et Pedone-Lauriel.
Crozet, Léo. 1932. Manuel pratique du bibliothécaire. Paris: Emile Nourry.

Delisle, Léopold. 1896. "Bibliothèque public aux ÉtatsUnis." Le Journal des Sçavants, 156.
Delisle, Léopold. 1910. Instructions élémentaires et techniques pour la mise et le maintien en ordre des livres d'une bibliothèque. 4th ed., rev. Paris: Librarie Ancienne Honoré Champion.
Lebailly, Guilaume. 2008. "Vers une pensée modernisée du métier de bibliothécaire: le cas du Manuel pratique de Léo Crozet." Memoire d'étude." Thesis, École Nationale Supérieure des Sciences de l'Information et des Bibliothèques. http://www.enssib.fr/bibliotheque-numerique/ documents/2060-vers-une-pensee-modernisee-du-metier-de-bibliothecaire-le-cas-du-manuel-pratique-de-leo-crozet.pdf
Maire, Albert. 1896. Manuel pratique du bibliothécaire: Bibliothèques publiques, bibliothèques universitaires, bibliothèques privées,
 concernant les bibliothèques universitaires de 1837 à 1894. Paris: Alphonse Picard et Fils.
Mann, Margaret, trans. Washington José de Almeida Moura. 1962. Catalogação e classificação de livros. Rio de Janeiro: Fundo de Cultura.
Morel, Eugène. 1908. Bibliothèques: Essai sur le développement des bibliothèques publiques et de la librarie dans les deux mondes. Vol. 2, La bibliothèque libre. Paris: Mercvre de France.
Morel, Eugène. 1910. La librairie publique. Paris: Librarie Armand Colin.
Namur, Jean-Pie. 1834. Manuel du bibliothécaire: Accompagné de notes critiques, bistoriques et littéraires. Bruxelles: J. B. Tircher.
Ortega, Cristina Dotta, Marcelo Nair dos Santos, and Camila Mariana Aparecida da Silva. 2016. A ordenação de documentos na atividade bibliotecária. Brasília: Briquet de Lemos.

Pinheiro, Ana Virginia. 2007. A ordem dos livros na biblioteca: Uma abordagem preliminar ao sistema de localização fixa. Rio de Janeiro: Interciência.
Prytherch, Ray. 2005. s.v. "Fixed location." Harrod's Librarians' Glossary and Reference Book, $10^{\text {th }}$ ed. London: Ashgate.
Riché, Delphine. 2009. "La conception du métier de bibliothécaire dans les manuels de formation des années 1880-1890 à travers trois exemples: Jules Cousin, Léopold Delisle et Albert Maire." Thesis, École Nationale Supérieure des Sciences de l'Information et des Bibliothèques. http://www.enssib.fr/bibliotheque-numerique/ documents/48315-conception-du-metier-de-biblio thecaire-dans-les-manuels-de-formation-des-annees-1880-1890-a-travers-trois-exemples-la-jules-cousin-leopold-delisle-et-albert-maire.pdf
Silva, Camila Mariana Aparecida da. 2016. "Para uma abordagem contemporânea sobre ordenação de documentos: propostas do século XIX e início do XX." Master's thesis, Universidade Federal de Minas Gerais. http://www.bibliotecadigital.ufmg.br/dspace/bitstream /handle/1843/BUBD-AMWGPB/camila_silva_ disserta__o_para_uma_abordagem_contempor_nea_ sobre_a__ordena__o_de_documentos.pdf?sequence=1
Sayers, W. C. Berwick. 1944. A Manual of Classification for Librarians and Bibliographers. $2^{\text {nd }}$ ed., rev. London: Grafton \& Co.

