

**ARTICLE****The relationship between cataloging and the reference service**Luiza Arias <sup>1</sup>  <https://orcid.org/0000-0003-1228-3717>Naira Christofoletti Silveira <sup>2</sup>  <https://orcid.org/0000-0002-0490-0052><sup>1</sup> Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brasil / e-mail: [luizaarias94@gmail.com](mailto:luizaarias94@gmail.com)<sup>2</sup> Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brasil / e-mail: [naira.silveira@unirio.br](mailto:naira.silveira@unirio.br)**ABSTRACT**

The theme of this article is the relationship between the reference work and cataloging, regarding the importance of connecting the work of the cataloging librarian with the work of the reference librarian, for the efficient attendance of the user's needs. It aims to reveal the relationship between the reference work and the catalog, through Functional Requirements for Bibliographic Records (FRBR) user tasks and the six phases of the reference process proposed by Nice Figueiredo. This is a bibliographical and documentary research paper. For the preparation of this work, a literature review was conducted regarding the subjects dealt with in it: the catalog, FRBR user tasks and reference work. It was also observed that this relationship is extremely important for the improvement of the cataloging and a larger attendance of the needs of its users.

**KEYWORDS**

Catalogs. Reference services. User tasks.

**A relação entre catalogação e o serviço de referência****RESUMO**

Este artigo possui como temática a relação entre o serviço de referência e a catalogação, no que diz respeito à importância da conexão do trabalho do bibliotecário catalogador com o trabalho do bibliotecário de referência para o atendimento eficiente das necessidades do usuário. Tem como objetivo apresentar a relação entre o serviço de referência e o catálogo, por meio das tarefas do usuário dos Requisitos Funcionais para Registros Bibliográficos (FRBR) e das seis fases do processo de referência propostas por Nice Figueiredo. Trata-se de uma pesquisa bibliográfica e documental. Para a elaboração deste trabalho foi realizada uma revisão de literatura referente aos assuntos tratados: o catálogo, as tarefas do usuário do FRBR e o serviço de referência. Observou-se que os dois campos de estudo se relacionam na literatura e ambos são necessários para um atendimento de qualidade ao usuário.

**PALAVRAS-CHAVE**

Catálogos. Serviços de referência. Tarefas do usuário.



**JITA:** IA. Cataloging, bibliographic control.

## 1 INTRODUCTION

This article addresses the relationship between the catalog and the reference service, identifying the connection between the cataloger's work and the reference librarian and the importance of maintaining a link between both functions to meet the user's needs. To this end, a correspondence will be made between the six phases of the reference process proposed by Nice Figueiredo (1992) and the user's tasks of the Functional Requirements for Bibliographic Records (FRBR).

The catalog must be an effective and efficient tool that allows the user to find a bibliographic resource, identify it (identify) or differentiate it from other documents with similar characteristics, select the one that is pertinent to his or her needs, obtain access to it and navigate through the catalog (IFLA, 2016).

The catalog must be understood as a communication tool between the collection and the user, so it is of utmost importance that in its construction the focus is directed to the user and his needs. In the construction of a catalog decisions must be based on the look and understanding of its future user (IFLA, 2016). Therefore, the viewpoint of the user must be present in the making of the librarian, conciliating both the reference service and the documentary representation.

The first general principle of the Declaration of International Cataloguing Principles (IFLA, 2016) is to serve the convenience of the user at the time of constitution of the catalog. Considering that the reference service is the user's first contact with the information unit, the importance of the reference librarian in the development of the library catalog is evident.

Therefore, this work has as context the relation of the reference service with the construction of a library catalog and its general objective is to present the relation between the reference service and the catalog, through the tasks of the FRBR user and the six phases of the reference process proposed by Nice Figueiredo.

The scientific relevance for the development of this study is evidenced by bringing together two distinct areas - reference service and cataloguing - drawing attention to the relationship between them, how they complement each other and how the interaction between the two contributes to the proper functioning of an information unit. In addition, the themes raised in the article present few studies and researches and, therefore, deserve more attention.

## 2 METHODOLOGICAL PROCEDURES

Based on the definitions of Dalfovo, Lana and Silveira (2008), the present study is characterized in a descriptive research for understanding qualitative analysis, based on a survey of bibliographic data, seeking to describe and present concepts and their relationships between cataloguing and the reference service. According to the collection procedures it is a bibliographic research, because it presents as a starting point the literature and document review, due to the analysis made of the Declaration of International Cataloguing Principles, as well as the final report of the Functional Requirements for Bibliographic Records (FRBR).

For the elaboration of this work, a literature review was carried out regarding the themes: the catalog, the tasks of the FRBR user and the reference service. The information

was collected by consulting physical and digital sources, based on authors renowned in the field of librarianship, as well as digital repositories such as BRAPCI.

The recovered literature was read and analyzed in order to relate the user's tasks with the six phases of the reference process. In section 3 references about the catalog and user tasks are presented, in section 4 the focus was on the questions concerning the reference service and in section 5 the two fields of studies were related. Finally, section 6 presents the final considerations.

### 3 THE CATALOG AND USER TASKS

The catalog is a communication tool, as it is the link between the information contained in the archive document and the user. It is from the consultation made in this tool that the individual, either independently or with the help of the librarian of reference, will remedy their informational needs.

Catalog is a means of communication, which conveys messages about the records of knowledge, of one or several collections, real or cyberspace, presenting them with their own syntax and semantics and gathering the records of knowledge by similarities, for the users of these collections. The catalog explains, through the messages, the attributes of the entities and the relationships between them (MEY; SILVEIRA, 2009, p. 13).

According to Ferraz (1991, p. 91) "the catalog is an organized list in any order, allowing those who consult it to have an idea of the material it refers to, without the need for physical access to that material". The author also brings the idea of the catalog as an instrument elaborated for the location of a certain bibliographic item in the library that has as main function the grouping of information for its users.

Mey and Silveira (2009) state that librarians are responsible for making representations of the records of knowledge, the raw material of making librarians, in order to facilitate their search and subsequent access. In this scenario, cataloguing is carried out, i.e., the process of composing the catalog or "preparing bibliographic records that become entries in a catalog" (FERRAZ, 1991, p. 92). For the authors mentioned above, the richness of cataloguing is based on the relationships between the records of knowledge, constituted in order to create alternatives of choice for users. Furthermore, it has the function of "characterizing the records of knowledge, individualizing them, making them unique among the others, as well as gathering them by their similarities" (MEY; SILVEIRA, 2009, p. 8).

As stated by Ferraz (1991) through the catalog it is possible for the user to know if the library has the desired item and, if so, where it is located in the collection. "In short, it can be said that the catalogs convey the message elaborated by the cataloguing of their interest and allowing the records of knowledge to find their users" (MEY; SILVEIRA, 2009, p. 13).

The basic functions assigned to the catalog, at various times, can be divided into two main categories: those related to the inventory, which quickly and precisely determine the existence of a document, and those related to recovery, by access by subject (MACHADO, 2003, p. 46-47).

Ferraz (1991) explains that the development of the catalog comes from antiquity with the clay tablets systematically grouped in the rooms of the Library of Nineveh and

the Library of Alexandria, as recalled by Mey and Silveira (2009), with his important librarian Calímaco who in his pinakoi organized the volumes from great subjects, as well as made use of labels to identify the author and the title of the book.

The author adds that with the advent of the press in the 16th century, the catalog's function underwent a sudden and important change that, due to the increase in book production, demanded a more careful organization. In this context, the catalog became an essential tool for the recovery of information.

In that same century, which was a true watershed for cataloguing, "the catalogs proliferate with commercial purposes and the so-called book fairs originate, making Leipzig and Frankfurt known" (MACHADO, 2003, p. 47). After some advances in the early 18th century:

the catalogs were seen more as simplified lists than as inventories. Some practices were imposed: classified or alphabetical catalogs, although some still remained organized by book size; indexes were considered useful, although not indispensable; authors' names came by surname, although ordered chronologically; the title page acquired a certain prestige, with the titles being transcribed literally; publication data and 'binding with' notes were included; the remissive ones became common use, as well as some analytical entries (MEY; SILVEIRA, 2009, p. 68-69).

Between the end of the 19th century and the beginning of the 20th century, cataloguing practice was systematized through initiatives such as that of Anthony Panizzi, assistant librarian of the British Museum, with his "91 rules of cataloguing", until Charles Ami Cutter, the first cataloguing theorist with the publication of "Rules for a Dictionary Catalog" in 1876, where "the importance of the structure of library cataloguing is really defined" (MACHADO, 2003, p. 47).

In 1961, almost one hundred years after the printing of the "Rules for a Dictionary Catalog", the "Paris Declaration of Principles" was published as a result of the International Conference on Cataloguing Principles. Still according to the author, the functions and structure of the catalogs instituted by this declaration are very similar to those exposed by Cutter (MACHADO, 2003).

Due to technological advances and the increased visibility of the catalog, Figueiredo (1996) highlights the importance of the librarian taking into account the needs and reality of its potential virtual user, a group that is increasingly demanding.

Currently, it is possible to find all and any type of information about the most varied subjects on the Internet. However, much of this information is vulnerable and has no guarantee of validity. Therefore, according to Sousa e Fujita (2012, p. 71-72), the library catalog should be seen by the institutions that house it and by the users themselves as a "[...] secure tool for access to documentary information, treated and stored". In this scenario, it is essential that the librarian seeks to adapt and accompany the changes resulting from new technologies so that his service continues to be indispensable for those who want to obtain true and credible information.

It is important that the cataloguing librarian understands that the works that come into his hands must be examined and prepared in order to serve the purpose for which they were written. And for this to be possible, "the cataloger must understand the public, foresee the needs of the reader, and make every effort to make the location of books easy and logical" (MANN, 1962, p. 16).

When building a catalog, decisions must be based on the look and understanding of its future user (IFLA, 2016). Thus, the viewpoint of the user must be present in the making of the librarian both in the reference service and in the technical processing.

In this context, Functional Requirements for Bibliographic Records (FRBR) emerge, consisting of a conceptual model developed by the International Federation of Library Associations and Institutions (IFLA) based on entity-relationship (E-R). "By proposing relationships of various kinds, FRBR proposes the grouping of entities with similarities, offering a greater number of options to the user who seeks information in bibliographic records" (MORENO; MÁRDERO ARELLANO, 2005, p. 20).

This model has its origin in the concerns raised by the participants of the Seminar on Bibliographic Records in Stockholm, held in 1990. According to Moreno (2006) the emergency points discussed in this opportunity were the intensification of cataloguing costs and the need to save on this process, the intense growth of publications and the fast propagation of new formats and materials, besides the innumerable access methods.

From then on, during the following eight years, the study group from the Cataloguing Section and the Classification and Indexing Section of IFLA, together with the collaboration of consultants and volunteers from all over the world, developed the "Final Report: FRBR" and thus the model was born that restructured the bibliographic records to reflect the conceptual structure of information searches, taking into account the diversity of users, materials and formats (MORENO, 2006).

The main objectives of FRBR are:

First, provide a clearly defined structured framework for relating data recorded in bibliographic records to the needs of the users of these records. The second objective is to recommend a basic level of functionality for records created by national bibliographic entities (IFLA, 1998, p. 7).

FRBR establish the user's tasks, the entities of the bibliographic records, the attributes of each of the entities and the relationships between the entities. The entity, an essential aspect of an E-R database "is a 'thing', 'set of artifacts', 'being', or 'something of the molded reality', with common characteristics that allow it to be identified among other entities" (MEY; SILVEIRA, 2009, p. 18), can be concrete or abstract; the attributes concern the characteristics of the entity and the relationships occur between the entities.

FRBRs are defined through the generic tasks practiced by users when using a library catalog or a national bibliography, which are to find, identify, select and obtain a resource and navigate through the catalog. The methodology of entity analysis of the e-r model present in this conceptual model has the focus on clearly defining the entities of interest to the users of the bibliographic records, as well as their attributes and the types of relationships that occur between the entities (IFLA, 1998).

Due to the numerous modernizations and technological advances that have occurred in the world in recent decades, according to Souza, Bezerra e Costa (2016) the theoretical-methodological paradigm that underpinned the studies in the field of descriptive representation has undergone changes and its focus that was previously on the item has been transferred to the user. One of the main issues addressed by those involved was the importance of meeting the information needs of users efficiently and effectively taking into account the most diverse types of media and methods of access to information.

The intention was to produce a conceptual model that integrated the specific attributes and relationships aimed at the different tasks that users perform when consulting bibliographic records in order to retrieve pertinent information. The

'user tasks' synthesize basic requirements that must be provided by the system in order to help the user navigate, find, identify, select and obtain a resource (SOUZA; BEZERRA; COSTA, 2016, p. 117).

From the realization of this important and necessary debate, according to Souza, Bezerra e Costa (2016) it was possible the emergence of a new paradigm of the Descriptive Representation, which placed the user and his information needs as the main point to rethink the Principles of Cataloguing. "Since each user has a certain need and must meet it, FRBR is designed to have greater adherence to the generic tasks performed by users when searching or using bibliographic catalogs" (FUSCO, 2011, p. 82).

According to Souza, Bezerra e Costa (2016)

[...] the restructuring of the bibliographic description has meant a new way of reflecting the conceptual structure of information searches, taking into account not only the diversity of users, but also of materials (textual, musical, cartographic, audiovisual, graphic and three-dimensional); of physical media (paper, film, sound recordings, iconography, optical storage media, etc.); formats (books, sheets, discs, cassettes, photographs, cartridges, etc.) and the different forms of expression of a work (SOUZA; BEZERRA; COSTA, 2016, p. 118).

Among the changes coming from the FRBR conceptual model, one is widely disseminated and has great importance for this article: the tasks of the user. According to Moreno (2009), this is the concept less explored in the literature about FRBR and, therefore, deserves special attention and a greater prominence regarding new studies and elaboration of works. Considering that the reference librarian is usually the first contact of the user when accessing a library, in the following section the reference service will be approached, seeking to relate it to the documentary representation.

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#### 4 THE REFERENCE SERVICE AND ITS SIX PHASES

According to Grogan (1995) until the mid-nineteenth century, most intellectuals sought a library only when their own private collections were not enough to assist them in one of their studies. This scenario began to be modified from the triggering of some factors, among them the development of the publishing industry.

From that moment on, according to the author, books with increasingly specific subjects were being published and with the growth of periodical publications, the amount of knowledge produced expanded to such an extent that scholars at the time would no longer be able to hold it in their private collections and, because of this, they began to frequent libraries in search of authors and subjects of interest, as well as the help of the librarian in this process.

In addition, "the expansion of public education and the advancement of literacy have created a whole new reading public" (GROGAN, 1995, p. 24), brought with it new demands, presenting very diverse information needs and looking forward to a personalized service offer (ACCART, 2012).

According to Figueiredo (1992), the first mention of the reference service took place in 1876 during the 1st Conference of the American Library Association (ALA), where librarian Samuel Swett Green spoke about "helping readers". Until that moment, the library had its collection and the public attended it to enjoy it. Then, it became known that the public needed a more targeted orientation to make correct and complete use of

the collection. The librarian assumes the role of mediator between the information and the user, helping this individual in his search in a personalized way, providing guidance for the formulation of the consultation to make it more precise (ACCART, 2012).

Figueiredo (1992) highlights that the user-oriented approach that the reference service brings to the library's day-to-day life, inherent to such activity, concerns how it should be seen and perceived by the information professional, what his need for information is and, in accordance with this perception, what attitude the librarian should take to better serve the user.

The reference service covers a number of activities and competencies with the purpose of offering a service to a certain public, in general an answer to a question. The reference function [...] is necessary and increasingly essential for a good perception of the expectations and needs of users in terms of information and information search. (ACCART, 2012, p. 3-4)

In summary, Mangas (2007, p. 2) states that in "most of the reference service settings it is possible to see that the human dimension, that is, the personal contact between the user and the librarian appears as a common and essential element. The main objective of the reference service would then be to assist and guide the user in the search for pertinent information. "Except for reception, the reference work consists of three main activities: informing (or answering questions), researching information and training users" (ACCART, 2012, p. 105).

According to Grogan (1995, p. 16) "[...] the reference service in its broadest sense generally includes both informational functions (i.e. the reference work) and instructional functions".

Accart (2012) points out that because the reference service performs multiple functions (reception, orientation, research, user training, etc.), it becomes the first point of contact with the user, so it is the quality and efficiency of this process that this individual will take into account when forming the image of the institution. "The reference service is the soul and nerves of the entire library and its efficiency is an indication of the efficiency achieved in the other sections of the institution" (LITTON, 1975, p. 6).

Located in the last stage of the documentary chain - composed of the activities of acquisition, processing and dissemination of information - and being, as said before, the first point of contact with the user, the reference service appears, according to Accart (2012), as a synthesis of all the processes that precede it. Being the real point of meeting with the user, the outcome of all the work previously done with the documents.

Thus, the existence of a quality reference service depends entirely on the good general functioning of the institution with regard to the satisfactory completion of each of the elements of the documentary chain. According to Litton (1975, p. 30) "a close collaboration between the reference room and the other sectors of the library is essential" for the user to be met in his information needs. In this scenario Accart (2012, p. 37) states that

The policy of reference maintains a direct relationship with the policies of the other services of the institution: acquisition, cataloguing, indexing, etc. It constitutes one of the essential links, since the reference service, thanks to direct contact with the public, is in a position to perceive what the users' expectations are regarding documentation. It knows their needs and anticipates them. This regular observation of users' behavior can be one of the elements that should be thought of when formulating the general information policy.

Grogan (1995, p. 33) reports that even librarians who do not work in the reference service in their daily lives believe that this is a "matter that should never be omitted from the professional training of librarians.

With the enormous amount of information that exists, there is a serious problem in identifying and recovering information that is truly relevant. In this context, the role of the librarian becomes indispensable, since he is the professional capable of filtering, organizing, analyzing and disseminating pertinent and updated information to the user who needs it. After all, he will know how to direct the tools to access information and, in this way, guide the user in his search in front of the enormous amount of information available in the most diverse media. "For the user, the reference professional occupies a position of advisor and trainer, performing, in fact, a mediation between information needs and information sources" (ACCART, 2012, p. 127).

According to Figueiredo (1991) the reference process is nothing more than the librarian's information search procedure in order to meet the user's information needs. It is a process that involves direct interaction between the reference librarian and his user, requiring from this professional, certain technical and human skills for the efficient achievement of the service. "The reference librarian is therefore the interpreter, translator, advisor and therefore essential to the service of information and assistance to readers" (MARTINS; RIBEIRO, 1972, p. 76)

Mangas (2007, p. 10) views the reference process as "the succession of steps through which the reference librarian seeks to quickly and pertinently obtain answers to questions posed by users. In his book "Serviço de referência e informação" (*Reference and information service*), Nice Menezes de Figueiredo (1992) deals with the six phases of the reference process, from the receipt of the question to the transmission of the answer, which consists of a model proposed by Jahoda and Olson and adapted to the research of his work. In the present study, these phases were analyzed.

In the past, according to Figueiredo (1992, p. 11), the vast majority of reference queries could be classified as "prompt response", of the "hit and run" type that could be answered in a maximum of ten minutes. However, the author points out the evolution of the reference service in terms of the specialization of information and, therefore, of libraries. Therefore, in this scenario, this service technique no longer meets the informational needs of users.

Thus, Figueiredo (1992) also states that this change has brought about a reference service in which the librarian should have more time and effort, as well as make use of his knowledge for the interpretation and analysis of the informational needs of those he serves. For Martins and Ribeiro (1972, p. 31) "the librarian of reference is the interpreter of the collection and to interpret it will have to communicate with those to serve.

Furthermore, Figueiredo (1992) ensures that the advent of the computer and the automation of catalogs led the reference librarian to adopt a new interview approach, expanding the human interaction between the professional and the user. This has only increased the perception of the librarian's role as a necessary and important professional during the search process, combining his technical and human skills.

Consequently, the author concludes that due to the use of computerized systems in libraries, the effectiveness of the reference function has been substantially increased, combining the speed of service and fast data collection.

Figueiredo (1992) presents the phases of the reference process: message selection, negotiation, development of the search strategy, the search, response selection and renegotiation. It emphasizes that although librarians often do not respect the order of these phases or do not carry them out as separate phases, this scheme is valid for a study of the reference process.

The first phase is the selection of the message which, according to Figueiredo (1991), is the moment to identify what is essential in the question proposed by the user. After such an analysis, in a subconscious process, the reference librarian determines the subject and identifies the probable instruments of which he will make use. From that moment on, if the librarian feels the need to clarify some point of the issue, the second phase of the reference process, the negotiation, begins.

Being clear the real informational need of the user, through a discussion with the user about the proposed issue, the librarian moves to the development of the search strategy, the third and crucial phase of the reference process. Demanding greater intellectual accuracy from the librarian, the success of such phase will depend on how trained this professional is for the service he performs, as well as how knowledgeable he is about his library and the resources available to answer the user's question. In addition, "for a correct performance in this phase, the librarian must have the ability to translate the user's question, as established in the negotiation, into the language of the catalogs, as well as into that of the other bibliographic instruments in the collection" (FIGUEIREDO, 1992, p. 47).

Once the intellectual part is finished, the librarian begins the mechanical part, as defined by Figueiredo (1992, p. 48), performing "the search in the sources identified as the most likely to contain the answer". However, the author points out that the search phase also depends on the training and capacity of the librarian, as well as his responsibility and care in providing the correct response to user demand.

Once the search procedure has been completed, the next phase is the selection of the answer which, according to Figueiredo (1992, p. 51), "challenges the librarian to put to work his reasoning process in the comparison and analysis of the information, in decision making, and in the conclusion as to the usefulness of the materials found or not", taking into account the relevance and pertinence of the material that will be provided. Figueiredo (1991) reiterates that the information identified at this stage must be adequate and complete to be useful to the user.

If the necessary information has not been found or is insufficient to fill the user's information gap, the librarian should begin renegotiating the issue and resume all phases of the reference process. Figueiredo (1992, p. 53) emphasizes the importance of this phase in the reference process, since it is there that "the librarian has the means to refine every aspect of the issue in any of the phases of the process".

"However, the success or failure of this service still depends largely on the correct negotiation with the user and the elaborate search strategy, since the accuracy of the search will depend on whether or not the user discovers what is requested" (FIGUEIREDO, 1991, p. 52).

Besides Figueiredo (1992), other authors have also worked with this same perspective. Grogan (1995) in his book "The practice of reference service" divided the reference process into eight steps: the problem, the need for information, the initial question, the negotiated issue, the search strategy, the search process, the answer and the solution. While Mangas (2007) distributed the process in four distinct steps: reception

and identification of the question, reference interview, research strategies and obtaining the answer, and providing the answer and checking its relevance.

It is possible to see that the stages or phases cited by both the above-mentioned authors and Nice Figueiredo have many similarities, although they differ in quantity. Among the differences are, for example, that the first two steps of Grogan (1995, p. 34) are aimed "exclusively at the person who is around the problem," in an intra-personal process that is not considered in the phases of Figueiredo and the stages of Mangas. Both start the reference process from the doubt brought by the user to the librarian, which characterizes an interpersonal process.

From the study done, we note the relationship between the six phases of the reference process proposed by Nice Figueiredo and the tasks of the FRBR users, which will be better explained in the following section.

## 5 THE RELATIONSHIP BETWEEN CATALOGUING AND REFERENCE SERVICE

In accordance with Martins and Ribeiro (1972), for the reference librarian to fulfill his role in the best possible way, it is necessary that this section uses the resources coming from the entire library.

The importance of collaboration between all sections of an information unit is stressed by Litton (1975, p. 30), as it "mobilizes all its resources to meet requests for information", making the institution in which it is inserted stronger. In this scenario, we bring the importance of the relationship between the reference service and the catalog, the interaction of reference librarians and cataloging librarians and their sectors. "In a word, we can say that all employees help readers, directly or indirectly" (LITTON, 1975, p. 4).

"In general, cataloguing has been defined as the act of preparing catalogs" (MEY, 1987, p. 4). Although it is considered by many to be an essentially technical activity, cataloguing is, in fact, "[...] a much wider undertaking of studying, registering and interpreting books, so that they can go into the hands of the thousands of readers who seek reading material of all kinds for all purposes" (MANN, 1962, p. 15). According to Cruz (1994, p. 90), the librarian is the "interpreter of the documents and the link between the author and the users".

For this to be done concretely and efficiently, as Mann (1962) states, the cataloger must understand the public and foresee the needs of the users. This professional must make an effort to locate the books within the information unit, in a simple and logical way.

Mey (1987) compiles several catalog definitions from renowned authors and is attentive to the fact that in none of the definitions has the user been taken into consideration, since as she herself says, he is the "major interested party" for whom the catalog is elaborated. Therefore, she believes that definitions that do not include the user are "incomplete and even inconsistent with the objectives and functions of the catalog" (MEY, 1987, p. 17).

The catalog should be seen as a means of communication, just as it is the reference service, thus establishing a "relationship between readers' needs and library resources" (MEY, 1987, p. 17). It is evident that, for a long period of time, "the focus of the descriptive representation has always been on the needs of the average user, i.e., the

librarian, and not on the end-user perspective" (MORENO; MÁRDERO ARELLANO, 2005, p. 22). However, as Mey (1987) recalls, it was Cutter who took the user as the starting point for defining the objectives of the catalog, the main purpose of this auxiliary tool being to allow that individual to find what he or she wants within a unit of information.

In this context, reaffirming and renewing the perspectives of cataloguing, FRBR appears, a model that "establishes new concepts including metadata (to facilitate the inclusion and navigation of data in the digital environment), which, in the future, will give rise to the new International Cataloguing Code, whose main objective will be user satisfaction" (SANTOS; CORRÊA, 2009, p. 31-32). From that moment on, according to Oliver (2011) the focus of cataloguing becomes the user, who seeks the record, and no longer the cataloger himself, who creates it.

Figueiredo (1992) shows us some similarities between the reference process and the catalogs. Among them are: the impact felt by both areas due to the advent of Information Science in the 1960s, while one predicted the possibility of the existence of a computerized catalog, the other began investigations for the automation of the reference service, see the success of experiments in information retrieval systems; they have similar goals, since both areas seek to "determine users and their approaches to the catalog or reference librarian" (FIGUEIREDO, 1992, p. 43); in addition, they have common interests. Among them are

determining the purposes of the user when making use of the catalog or reference service, and which types of information in the catalog are useful to users; both are interested in the study of the users' performance in handling the catalog, or in front of the reference table. (FIGUEIREDO, 1992, p. 43)

Litton (1975) draws attention to the interest of the librarian of reference in the elaboration of the catalog, after all he is the professional who will use such instrument daily in order to serve his public. As Figueiredo (1992) reminds us, it is essential that the reference librarian be familiar with the system with which he will work and that he know how the cataloguing and indexing of documents is done by the library's technical processing sector. After all, the success of the reference process will depend on the size of the resources offered by the information unit, as well as on the language of the sources available to this professional.

For Mey and Silveira (2009), cataloguing should enable the user to express his internal message. Therefore, the reference librarian, an individual who maintains a direct relationship with the user, has the necessary competence to offer "suggestions on the adequacy of records to the level of the clientele" (MARTINS; RIBEIRO, 1979, p. 68), using words that are of current use in orders made by users. Such measures overcome deficiencies that may occur during the reference process.

As Litton (1975, p. 33) points out, "only close collaboration between the reference sections and technical processes can result in technical work that is equal to the constant requests of a demanding public.

Both Figueiredo (1992) and Litton (1975) stress the importance of the information unit's management taking responsibility for maintaining a solid relationship among its sectors, scheduling meetings between cataloguers and reference librarians, as well as providing training to keep employees updated. Another very interesting measure would be the organization of a "staff table so that librarians do not have to deal with the user all the time, thus providing for routine changes" (FIGUEIREDO, 1992, p. 103).

From this analysis, we will highlight the relationship discussed through the perceived link between the FRBR user's tasks and the six phases of the reference process proposed by Nice Figueiredo.

Regarding the six phases of the reference process, we have the user as participant of four of them, except for the phase of the search strategy and the search, where only the librarian works. The tasks of the FRBR user bring intrinsic to them a "[...] new conception of management based on the primacy of the client and on values of excellence to achieve their satisfaction [...]" (MANGAS, 2007, p. 8). According to Oliver (2011) the user's needs, the starting point of the reference service, are defined in FRBR in terms of the user's tasks.

Both the message selection phase, the first of the reference process, and the task to be found have the same precept: meeting the informational need brought by the user. It is from this gap of knowledge exposed by the user to the reference librarian that the reference process begins. The librarian will finally find an entity, as a result of a search using an attribute (IFLA, 1998).

The **negotiation** phase is characterized by the clarification of any doubts that may exist about the issue offered by the user, through an interview with him. Assuming the same principle, the task to **identify** allows the confirmation that the described entity corresponds to the sought entity or distinguish between entities of similar characteristics (IFLA, 1998).

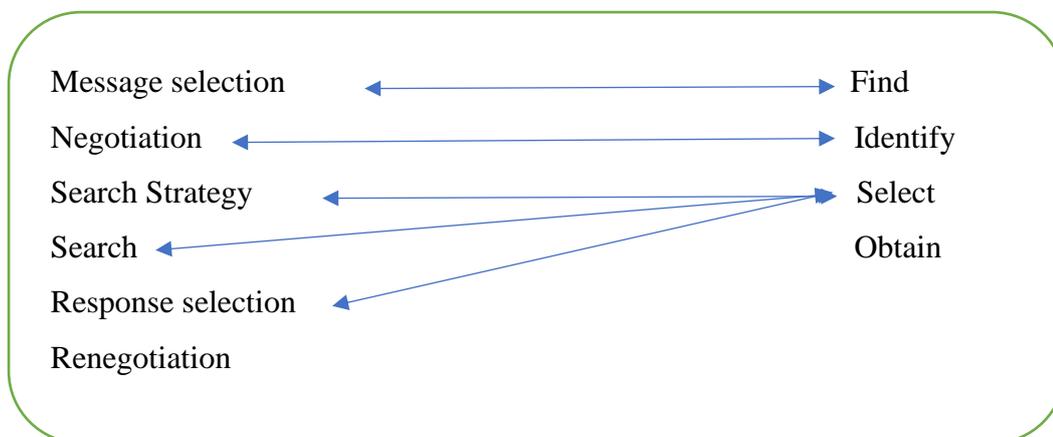
After understanding the user's real needs and confirming that the entity described by the user corresponds to the one being searched, we start to define the sources where the search will be carried out - the third phase of the reference process, called **search strategy** - in order to meet "the user's specifications as to physical format, etc. or the rejection of an entity that does not meet the user's needs" (TILLET, 2003, p. 5). In other words, **select** the pertinent information that meets the user's informational needs. In this scenario, it is possible to notice that both the search strategy and the search itself are related, even if indirectly.

The task **selected** is directly linked to the **answer selection** phase - penultimate of the reference process, since both situations are characterized by the joint work between librarian and user in the choice of the ideal answer to the question formulated in order to meet the existing needs.

During this moment of analysis of the information collected for final selection, it is possible that neither of them really meets the user's needs. Therefore, the **renegotiation** phase would fit here, in case the information found is rejected by the user, and the user leaves for the last phase of the reference process that is characterized by a new discussion between librarian and user in order to restart the process.

Finally, with the desired information and satisfied user, the service can be closed and this individual will finally **obtain** the entity described. The textually explained account is illustrated in the figure below.

**Figure 1.** The six phases of the reference process and the user's tasks.



Source: Author (2017).

Based on the analysis of literature, it can be observed that the two disciplines of study - Cataloguing and Reference Service - are extremely related and aim at the meeting between information and the user, even if sometimes they seem so distant because they are in different sectors of the library, or even that the first is related to an activity of representation and organization that deals directly with the document, while the second is linked to human contact.

## 6 FINAL CONSIDERATIONS

As final considerations, from the literature review and the analysis performed in section 5 of this article, the relationship between the reference service and the catalog becomes evident through the FRBR user tasks and the six phases of the reference process proposed by Nice Figueiredo.

The literature presents subsidies that demonstrate that the relationship between both fields of study reveals that both the cataloguing librarian needs to know the reference process and the reference librarian needs to know the procedures performed in the elaboration of the catalog. For some time, the segmentation of disciplines should be seen as a method of presenting students with specific knowledge, but it cannot be done in isolation, as they complement each other and are necessary for professional performance.

It is necessary to emphasize that although literature presents a relationship between these two fields, it is necessary to study more deeply how this relationship occurs in practice. In a previous study, Arias (2017) conducted a survey with the application of a questionnaire and most of the librarian respondents presented a favorable view of the interaction between the reference librarian and the cataloger, as well as believe that this relationship is of extreme importance for the improvement of cataloguing and greater satisfaction of the needs of users.

In this sense, it is pointed out that studies that establish a relationship between Cataloguing and the Reference Service are extremely important for the development of the Librarianship. The exchange of knowledge of these different actors - librarian cataloger and reference librarian - in the routine of the information unit would bring great

benefit to the user and in the development of different products for dissemination of information and knowledge.

Finally, it is believed that the link between cataloguing and the reference service is evident when considering the tasks of the users present in the FRBR and in the phases foreseen by Figueiredo. In order to strengthen cataloguing as a social and human activity, not only as a technical treatment of the document, it is believed that this research may motivate future studies in the library community. Therefore, this work sought to present the importance of the user-centered vision for the construction and updating of library catalogs, highlighting the need for joint action between reference librarian and cataloger.

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