Challenges of Knowledge Representation in Contemporary Archival Science

Abstract
Since its emergence as a discipline, in the nineteenth century (1889), the theory and practice of Archival Science have focused on the arrangement and description of archival materials as complementary and inseparable nuclear processes that aim to classify, order, to describe and to give access to records. These processes have their specific goals sharing one in common: the representation of archival knowledge. In the late 1980s a paradigm shift was announced in Archival Science, especially after the appearance of the new forms of document production and information technologies. The discipline was then invited to rethink its theoretical and methodological bases founded in the nineteenth century so it could handle the contemporary archival knowledge production, organization and representation. In this sense, the present paper aims to discuss, under a theoretical perspective, the archival representation, more specifically the archival description facing these changes and proposals, in order to illustrate the challenges faced by Contemporary Archival Science in a new context of production, organization and representation of archival knowledge.

Introduction
Knowledge Organization (KO) as a field that studies the processes and systems of document description, indexing and classification finds in Information Science (IS) a fertile ground for discussions on “nature and quality of such knowledge organizing processes (KOP) as well as the knowledge organizing systems (KOS) used to organize documents, document representations, works and concepts” (Hjørland, 2008).

This paper aims to discuss, from a theoretical perspective, archival representation, more specifically the archival description in order to illustrate the challenges faced by Contemporary Archival Science in the new context of production, organization and representation of archival knowledge.

Since its emergence as a discipline, in the 19th Century (with the publication of the Manual for the arrangement and description of Archives in 1889 by the Dutch trio Muller, Feith and Fruin), the theory and practice of Archival Science have focused on the arrangement and description of archival materials as complementary and inseparable nuclear processes that aim to classify, order, describe and provide access to records. These processes have their common goal: the representation of archival knowledge.

Over the years, the archivist was seen as a simple guardian of records and documents, whose role on knowledge arrangement and description should be limited to revealing the meaning and the significance explicit in the document. In this sense, the archival knowledge representation was also restricted to the immediate and static meaning of the record, to the things one could read directly in the document.

In the late 1980's there was a paradigm shift in Archival Science after the appearance of new forms of record production and information technologies. There was rethinking on its theoretical and methodological bases founded in the nineteenth century. Postmodern Archival Science was born, aiming to “denaturalize” what the modern Archival Science hitherto assumed to be natural, normal and rational. The core definitions and processes of Archival Science were put into a discussion and brought to debate the concept of archival record and the processes used to create, organize and represent it. The archival record, once understood as a sub product of an innocent, neutral and impartial action – features proposed by Sir Hilary Jenkinson in 1922 – was now seen as an entity socially and culturally constructed, as a symbol shaped by an author for a specific purpose, far from
being a sub product of an innocent and impartial action. Consequently the organization and representation of this knowledge should no longer be studied as neutral and free of functional and social influences.

Specifically regarding the representation of this knowledge it is important to highlight the role of the archivist as an active agent in memory construction and meaning attribution, since the record meanings are now being constantly reviewed as each user uses it to different purposes. From the Postmodern Archival Science perspective, the record meaning changes over time according to the uses to which each user intends to do from it. As stated by Duffy and Harris (2002, p. 265) “records are always in the process of being made, "their" stories are never ending, and the stories of those who are conventionally called records creators, records managers, archivists, users and so on are (shifting, intermingling) parts of bigger stories understandable only in the ever-changing broader contexts of society”. In this sense, the Archival Science moves its focus from the set of records to its social, organizational and functional on-going creation contexts.

As a result, the act of representation must follow a dynamic flow and archivists should “begin to think less in terms of a single definitive, static arrangement and description process, but rather in terms of continuous, relative, fluid arrangements and descriptions as on-going representational process” (Yakel, 2003).

The principle of respect des fonds and its challenges in the Post-modern archival representation

The principle of provenance (respect des fonds) since its promulgation in 1841, in order to solve the problems caused by the subject organization adopted by the Archives Nationales in France after the French Revolution, is considered to be the guide to organizing and representing process in Archival Science and perhaps the safest method to preserve the integrity of the sets of records produced by the same person or institution. It consists to “group, without mixing them with others, the archives (documents of every kind) created by or coming from an administration, establishment, person, or corporate body” (Duchein, 1983). Though its importance and precision have never been contested it is important to understand that, facing new perspectives of creating, organizing and representing processes, the principle also goes through changes that should be reflected in archival representation.

As pointed out by Duffy and Harris (2002, p. 268) “in modern bureaucracies, it is common for the same records to be created, accumulated, and used by numerous, different, successor or parallel agencies. Records emanate from business activities and in turn are used to support and carry out other business activities. Moreover, series of records move from the control or custody of one organization to another. This reality has led numerous archivists to suggest that the multi-faceted aspects of provenance are eroded when archival practice dictates the creation of fonds-level description and credits the creation of the records (and thus provenance) to one, and only one, individual or organization”. There is therefore a need to connect the record to all its contexts, focusing on all the relations that were established between it and the entities that use it, so that its multi-faceted nature can be represented entirely.

In this sense, the provenance study as an assumption to archival representation finds a fulcrum not only in understanding the record creator, but also in the relationship between the creators, the functions and management and maintenance systems of records. Once again, all the contexts should be represented at the moment of classification, arrangement and description of archival knowledge.

In the classification system usually adopted by the Archival Science the fonds (also known in Anglo-Saxon countries as “record group” or “archive group”) are the broadest and most essential units of record to Archival Science, followed by the records series and
the item. However, over the last decades the application of the record group concept for archival description faced a practical problem that derives, as pointed out by Cook (1993, p. 24) “from viewing it exclusively as a physical entity rather than as a conceptual principle”. This view reflects a records-oriented, descriptive cataloging tradition, as opposed to the context-oriented life-cycle data management approach. In other words it is essential that the archivist can focus on the context rather than on the record, understanding the principle of provenance as a virtual and dynamic principle that rules the practical activities and the establishment of physical series. In Bearman and Cook’s view it is essential that archival description focus on “the conjunction of the context of the activity and the information system in the records creating organization. This conjunction might take place at the level of the fond” as long as the fond is truly presented as a conjunction of the creator’s functions and activities on the one hand and, on the other hand, of the records and information systems - the actual products - which proceed from those functions and activities” (Cook, 1993, p 28) - or at the level of the series.

The postmodern approach and its authors defend the abolition of the record group from the archival classification system, once it enables the archivist to work with the multi-provenance nature of records. As they understand the record as a continuum, to establish a one and only creator or fond would be too limiting. To McKemmish (1998, p. 192) "the physical reconstruction of the fonds in a record group, while providing one view of what is a multiple reality, obscures or obliterates other views”. In order to understand the concept of fond as a virtual and conceptual guide – instead of a physical category - some authors have proposed the series 1 to be the first category for purposes of arrangement in archives.

This approach based on functional-structural contexts proposed by postmodern Archival Science finds a place, among others, in the Australian description systems that have been investigating these contextual relationships understanding the archival records as dynamic and virtual organisms that are constantly evolving over the last decades. The description system of the Australian National Archives since the publication of Scott’s articles about the abandonment of the record group concept, in 1866, ignores the record group concept describing records series as the primary level of classification and the item as the secondary level. According to Scott there are some problems presented in the application of the record group concept to archives (i.e. when the record group is created from the records of a transferring or controlling agency the risk is that they might lose their creation original order; or when similar series are created by different agencies in the same organization) that can only be solved with the application of the series as a primary category. As regards to archival representation considering the series as a primary physical category in the classification systems allows the archivist to

“describe records series in their totality and links descriptions of records to all the contextual entities that created, accumulated, used, controlled, owned, or transferred the records in the series. This system emphasizes the importance of linking a record entity to its various contextual entities and stresses the importance of inter-relationships” (Duff; Harris, 2002, p. 268).

Some authors like Eastwood (2002) and MacNeil (1992) do not agree with the abandonment of the record group concept advocating that there is no other provenance beyond the agency that creates the record. For these authors the concept of fond or record group fits perfectly.

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1 According to the Glossary of Archival and Records terminology, published by the Association of American Archivists, the series are groups of similar records that are arranged to filling system and that are related as the result of being created, received, or used in the same activity.
Although the series system (postmodern) and fonds-based approaches disagree regarding the provenance issue, both pursue the same goal, which is to represent – organize and describe – the context and the evidential value of the archival records.

The power to describe is the power to make and remake records and to determine how they will be used and remade in the future. Each story we tell about our records, each description we compile, changes the meaning of the records and re-creates them. These different views of provenance significantly affect the type of descriptive architecture proposed by their advocates.

Equally influential are their assumptions about what archival description is, when description takes place, and its purpose (Duff; Harris, 2002, p. 271).

The connection between the record and its context is an intellectual process that is materialized through the finding aids resulting from the archival knowledge representing process and understood as a bridge between the user and the record. According to Cook, one of the postmodern authors the description must reflect the ever changing records history, since each time the user accesses the record new representations are created from new uses and interpretations. In this sense the finding aids must be constantly recreated and updated to reflect and to represent complex and dynamic realities in ever changing process. On the opposite side there is the fonds-based description that is based on bibliographical description, which represents static objects producing static finding aids.

The representing process in Archival Science is also based on international standards for archival description and encoding of finding aids such as ISAD (G) – General International Standard Archival Description – ISAAP (CPF) – International Standard Archival Authority Record for Corporate Bodies – and EAD – Encoded Archival Description – that present a challenge to information professional in a context where the desconstruction of the standardization of routines is necessary as the record production, organizing and representing processes acquire a dynamic status in a postmodern discipline, going against the static and neutral position observed so far.

Despite these international standards for archival description, the Archival Science faces a conceptual challenge, once its principles and definitions not always find a consensus between the authors in the area. The principle of provenance and the record group/fond concepts are only a few examples among lots of concepts and terms that are interpreted in many different ways. This conceptual problem has a mayor reflection on organizing and representing processes once a concept or principle miscomprehension can lead the professional of information to irreparable mistakes. That is why is so important and urgent to discuss these issues, once it allows the solidification of the discipline in a moment of paradigm rupture and changes, facing the new forms of records creation and management.

However the biggest challenge facing the Archival Science today regarding the knowledge representation is to make the archivist understand the complex system of relationships between the record and its historical context (i.e. all the existing intentions behind the record creation and the information it carries) so he can move “from a monolithic legacy of past archival theory, from the old fashioned „one-thing-one-entry approach” (Cook, 2001, p. 32).

Conclusion

Considering these questions, it is possible to conclude that the postmodern approach is the only one that seems to deal better with contemporary issues, once it goes deeper on questions about archival representation and its relationship between the archivist, the record creation context and the user. In this sense, the archival postmodern representation “would reflect, in short, sustained contextual research by the archivist into the history of the records and their creator(s), and produce ever-changing descriptions as the records creation and custodial history itself never ends (as at the moment of archival accessioning or of creating
a fonds entry)" (Cook, 2001, p. 34). The archival knowledge representation can no longer be limited to standards of archival description or static views proposed by the archivist and the record itself. The contemporary Archival Science must be aware that archival representation is continually reinvented, reconstructed and reborn.

To describe is how the archivist make and remake the record. In this context it must be his role to find between these two or more approaches a balance that can offer the best record representation, one that can fit in the very particular and unique archival context which he/she is describing.

References
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