

MODERN ARCHIVES: AN INTEGRATED APPROACH  
TO INFORMATION MANAGEMENT

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ABSTRACT

This paper describes the object and methods of the archival science as it relates to information sciences. It argues that archival science has a significant role to play in information sciences since the records it handles are the object of no other information science and that its method aims at the preservation of unique and original documents. The paper suggests as well that the archival methods could also be applied effectively in the economical management of modern information systems.

RESUME

Cette communication décrit l'objet et les méthodes de l'archivistique moderne dans ses dimensions touchant les sciences de l'information. L'auteur soutient que l'archiviste revêt une place spéciale au sein de la famille des sciences de l'information puisque les documents qu'elle vise ne sont l'objet d'aucune autre science de l'information et que sa méthode est axée sur la conservation de documents originaux et uniques. Dans un second temps, l'auteur fait valoir que les méthodes de l'archivistique peuvent également être utilisées efficacement dans une gestion économique et efficace de systèmes modernes de banques de données.

MODERN ARCHIVES: AN INTEGRATED APPROACH  
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Archives has one major difference from other information systems in that the document itself is unique and has an intrinsic importance. On the other hand, it also shares a major problem with them: it must efficiently make known the contents of the records in custody.

Archives is a relatively new field in Canada. Although the Public Archives of Canada, the oldest archival institution in this country, was established more than a century ago, the major developments in the field occurred only relatively recently. After the second World War, no less than six provincial governments, a few universities and a great number of business, social and religious organizations created their archives services. As is the case with many other information sciences, this growth is largely tributary of the information explosion which has had a major impact on our society since the war. This fast rate of growth however has also been greatly facilitated by the previous development of a solid British and European tradition which had already for centuries applied a distinct and recognized body of knowledge to the systematic preservation of documents of permanent value. The Dutch archivists Muller, Feith and Fruin<sup>1</sup> with their research on principles of organization of archives and the British archivist Sir Hilary Jenkinson<sup>2</sup> with his work on the definition of archives have more than anyone else given the profession its lettres de créances.

Considering the newness of the impact of the field in this country, it is not surprising that most matters relating to archives are still ill-defined in the public mind. For most, archives constitute a preserve for historians where only the papers of the most important people are kept in order to facilitate the writing and the documentation of the national history. For others, archives are simply a place where one sends ancient documents, assuming that if they are old and dusty, they must be historical. Still, more often than not, the image of the archivist persists as a bent white-bearded old man or a little old lady trying to read some illegible note on a table filled with dusty papers.

I would like to suggest in this paper that, although archives is without question a science of document preservation, it is also an information science with its own mandate and characteristics. As it gets better known, it should play an increasingly useful role under the all inclusive umbrella of information sciences. I also believe that archival practices which have proven useful for the management of the records of organizations can equally serve well all other kinds of information management.

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<sup>1</sup> See especially Samuel Muller, J.A. Feith and R. Fruin. Manual for the Arrangement and Description of Archives (New York 1940).

<sup>2</sup> Hilary Jenkinson. A Manual of Archives Administration (London, 1937).

## MODERN ARCHIVES

The priorities of archivists may perhaps have appeared to the outsider too exclusively centered around the accumulation of old papers. In any new programme, especially in the field of information science, there is certainly a certain amount of catching up which must be performed. This, however, should not mask the ultimate aim of archives which remains to protect the information that documents of permanent value of all media contain and provide in order to make it available to the public. As archival science evolves and increasingly faces the problems of administering ever growing inventories of documents and files, it seeks, as it must, new solutions to new problems. In order to deal efficiently with its information problem, it needs to participate in the research and the development of the general fields of information sciences. It should not do so with a view to finding miraculous recipes or ready-made packaged solution which others may already be using, but with the firm objective in mind of bringing its own point of view to the debates and eventually contributing to the development of compatible and well adapted information systems solutions.

As an information science, archives deals with a special type of information: records. To adapt the definition of the British archivist Sir Hilary Jenkinson to the Canadian context, it deals with information of permanent value contained in documents of various media which are produced through and are part of the transaction of human activities.<sup>3</sup> Uniqueness and authenticity make it important to keep original records or series of records. Because the object of archives is those documents produced through the transaction of human activities of which the documents are themselves part, the archival document is the record itself and must be kept as close as possible to its original shape. Because its physical characteristics are part of the activity it documents, they are themselves information which is best preserved by maintaining the originals. Any means of reproduction or microcopy of paper document will only reproduce part of the information as would, perforce, the transcript of an oral document without its magnetic tape.

Since archives deals with documents of permanent value, it does not in fact restrict itself to those of historical value, but also encompasses others of legal, financial or even artistic value, whether old or only getting old. The archivist must preserve documents of value to corporate researchers as well as those likely to be of interest to academic researchers of any discipline in need of background information or of data for studies of long term phenomena. He must equally be ready to help the doctor in need of genealogical information to circumscribe the effects of a rarer illness or the native researcher in search of evidence to prove a right.

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<sup>3</sup> See Hilary Jenkinson, A Manual of Archives Administration, London, 1937, p.11. Reflecting the context of the British situation, he defined archives as: "one (document) which was drawn up or used in the course of an administrative or executive transaction (whether public or private) or which itself formed a part: and subsequently preserved in their own custody for their own information by the person or persons responsible for that transaction and their legitimate successors."

## MODERN ARCHIVES

Thanks to the wild imagination for words of our forefathers, French and English, archives are not only records and unique documents, but are also the institution and the building housing the institution which has custody of documents of permanent value. It is indeed a building (or part of a building) with special characteristics, large enough to house the original documents and to provide space for research activities, and offering the best physical conditions possible to ensure the preservation of documents. Although the conditions of archival accommodation vary greatly from one institution to the other from the best to the sub-standard, the very fact of removing records of permanent value from the office where they were created as soon as they no longer serve a useful purpose, does a minimum to ensure their longevity. Yet, even if their common goal aims at preserving records permanently, archival institutions differ greatly according to the mandate conferred upon them by their sponsor: most repositories establish their acquisition policy on some rational basis evolving directly from the character of their sponsor: a business archives, for example, cares for the records of its company, a Provincial archives for the records of its provincial governmental structure. In the United States, the National Archives and Record Services and, in the United Kingdom, the Public Records Office, care exclusively for the records of their own governmental administration. Sometimes, however, the mandate is broadened to include the acquisition of related archival records created by agents other than the sponsor. In Canada, unlike the United States and the United Kingdom, most archival repositories sponsored by governments run "total" archives programmes which aim at preserving both records of the governmental institution supporting them and any other records deemed of permanent value in their geographic and political sphere, including private collections of manuscripts, oral, photographic and even machine-readable records.

Nevertheless, it takes more than archival documents and an archival building to make an archives for, implicitly, archives is also and foremost the scientific and systematic process by which the documents of potential permanent value are regularly identified and preserved. In fact, it caters to the long term needs of the various organizations which created them as well as, when possible, the needs of independent researchers using primary data for the pursuit of studies useful to the total community. To put it in more theoretical terms, archives aims at building up the collective memories of organizations and communities, selecting from the vast amount of information produced daily those elements which it will need to retain for future use and those which can be eliminated without being missed. To be sure, if certain societies or organizations have better memories than others, it largely depends on their ability to use the total concept of archives for the management of their contemporary records and the permanent retention of the useful ones.

Archivists are not only responsible for the preservation of the relatively limited number of historical documents which have survived, sometimes miraculously, through the ages, but acknowledge as well a responsibility, which only they can assume, for the total process by which the meaningful documents of the present are created, selected, preserved and, in due time, made available to individual private researchers. Without the application of the systematic process of archives, no means can be found to insure that the

## MODERN ARCHIVES

right current documents are preserved and serviced; then, chance only would determine what information tools future generations will use to know the preceding ones. It would indeed prove vain for the archivists to try to do so much for the recuperation of older and valuable records, if they would let the potential historical records created daily be disposed of without any attempt to appraise the value of the information they contain. The application of the archival procedure in its practical implications ensures as well that the records which have no permanent value will only be retained for the time for which they are useful and that they will be destroyed when they are no longer useful, thereby facilitating the use of the remaining ones and helping the organization it serves, economize important sums of money in increased efficiency, storage equipment and facilities. As the management of modern organizations relies less and less on instinct and, increasingly, on analysis of basic facts and figures, archival science, in its records management dimension, provides the process by which the vital information of permanent value of an organization is preserved.

The role of records management is crucial to the systematic process of regular transfer of meaningful records of permanent value to the archival repository. It consists of maintaining economically the records created and kept by an organization. In order to ensure that only the useful records are kept, the records manager-archivist helps managers determine the period during which operating records should remain current and establishes schedules to ensure the systematic application of retention periods. At the expiration of such periods, the records of no current value are regularly destroyed, those which are referred to less frequently but still useful are removed from the valuable office space and are stored in less costly dormant records storage area. When the retention period of given series of records is determined or at any phase of their life cycles, the archivist appraises the potential permanent value of the records under examination and makes provision for their transfer and preservation in permanent storage when they are no longer currently useful for the purpose for which they were created.

Caught between the historians, who want no record to ever be destroyed and the short-sighted pragmatist manager who wants to destroy all records for which he has no immediate use, the archivist is developing and applying the precepts of a body of knowledge which needs only to be studied more systematically to be recognized universally as one of the sciences of information management. Although their efforts to preserve the original documents make the archivists share a number of concerns with museum curators and their duties at the receiving end of record management makes them sensitive to problems of paperworks managers, there is no doubt that they also have very much in common with other information scientists. The role they perform as information scientists is important not only because archives deals with the management of paperwork, but also and mainly because the information provided by records of human transactions is not the object of any other information science. Archives then shares the same clientèle as other information sciences, especially in its public service dimension, because their basic reference mandate is the same. There would indeed be no very useful purpose served in acquiring and preserving records of transactions if no systematic effort at making their contents known, was attempted. However, while archival arrangement must continue to be based

upon the original guiding principles of provenance<sup>4</sup> and respect of original order<sup>5</sup> which ensure logical and practical treatment of archival documents, archivists will increasingly have to turn their attention to the progress of other information sciences and use such tools as descriptive rules, finding aids and indexing techniques to ensure a minimum of uniformity necessary to efficiently help the researcher who also uses the products of other information sciences.

In their current research, archivists are confronted with big systems: they need more than ever to find and develop a discipline of their own and basic descriptive protocols which fit their object, their methods and their tools. While most archival information bases are still small and underdeveloped, the potential for national and international systems is illimited.<sup>6</sup> Because archival information systems deal with unique sources of information, the implementation of new and the improvement of existing systems becomes crucial and must be directed to an effort for better efficiency and accuracy. On one hand, the problems of describing records which were not produced for general information purposes are quite complex and must be resolved before any implementation of integrated finding aids systems for archives. On the other hand, since new records of permanent value are constantly created, any information system for archival material must take into account this problem of the ever-growing data bases. The development of efficient communication networks will require extensive basic research in finding aid production and indexing techniques in order to, not only make national networks provide efficient service to researchers and to other institutions, but as well facilitate international cooperation.

The archivist needs compatible reference tools to be in a position to cope with the products of the same information explosion which has affected and, to a certain extent, made some other information sciences. He needs also to become part of the information networks currently developed to contribute usefully in the normal exchanges of information which networks facilitate. In a sense, thanks to the research and development of other information sciences, the basic archival problem in reference is not one of availability of systems, but rather of compatibility of given systems to the particular circumstances of archival practice. Trying to apply the Dewey decimal classification system, for instance, and treat an archival private manuscript collection like any other type of documentation has not only proven useless, but has even been harmful and inefficient for both collection control and reference. In practice, however, when the basic precautions are taken, many

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<sup>4</sup>The principle of provenance requires that records emanating from the same creating agency be kept together.

<sup>5</sup>The principle of respect des fonds or original order requires that the arrangement used during the active life of the records be retained.

<sup>6</sup>See Michael E. Carroll. "NATIS, an International Information System: Impossible Dream or Attainable Reality?" The American Archivist. 39, 3 (July 1976): 337-341.

## MODERN ARCHIVES

tools of other information sciences can be successfully adapted for use by archives: the Anglo-American cataloguing rules for manuscripts are a case in point; the use of the Preserved Context Indexing System (PRECIS), developed by Derek Austin and a research team for the British National Bibliography, may prove to be another; in many ways, the data bank concept could also help answer some of the more crying information retrieval and indexing needs of archivists and would provide at the same time a useful tool for the control of information on massive collections of archival data. Basic research such as the efforts of the Task Force on Information Control of the Archives Branch of the Public Archives of Canada to find common ground for the description of all archival media need to be pursued by the archival associations in cooperation with other information scientists. Because often archivists are still perceived only as a professional group, archival science has not yet been acknowledged by funding agencies as a legitimate academic discipline like library and other information sciences. Therefore, for the time being, it is still difficult to find the monies necessary to carry out basic research. We may hope that the work of the Canada Council's Consultative Group on Archives may continue to bring about a fundamental change of attitude initiated by the Symons' Report on Canadian Studies published in 1975.

On the other hand, archival science not only needs more knowledge and exposure to other information sciences, it also has something to offer. As part of its objective to care for the management of information generated through the transaction of all kinds of human activities, the archival process can be of service to the other information sciences in so far as the management of their information bases is a well defined transaction.

Most information sciences have paid a great deal of attention to the problems of construction and maintenance of relevant, up-to-date and comprehensive collections of information focusing mainly on the need to make them useful and useable to various definitions of customers: librarians dealing with printed sources, computer scientists coping with machine-readable data, documentalists handling closely related elements of information on various media are all doing an adequate job in gathering useful information to make it available to researchers, as the increasing acceptance of their services by various types of organizations is demonstrating. Few, however, have yet addressed themselves comprehensively to the problems of the aging of the information they handle. When they provide updating procedures, they do not generally plan the inclusion of mechanisms to preserve the information about past contents of their information base; in their legitimate effort to provide instant up-to-date information, managers of information banks simply forego any means of reconstituting the status of the information available at particular past instances. When elements of information in a data bank are erased or outdated technical books are thrown out and replaced by more current editions, no systematic procedures are put into effect to appraise whether the obsolete information elements or the printed documents, while out-dated, could still possess characteristics which would make them worth preserving for historical or simply long-term administrative needs.

## MODERN ARCHIVES

Strictly from an administrative point of view, the use of archival records management techniques can only help improve the quality of information bases. While we can all be impressed by the apparent unlimited capabilities of computer storage, we must also develop an awareness of the need to manage efficiently the information it stores for such simple reasons as prevention of overloading, maintenance of fast response time and overall economics. Very little research has been done on the practical implications of a systematic application of the "half-life" concept. Its attempt to lead to an evaluation of "the time required for obsolescence of one-half of the currently published literature",<sup>7</sup> complement in many aspects the concept of file retention scheduling which records managers and archivists have applied successfully as part of their trade.

If, as computer experts would have it, the office of the future is to be completely automated and based on machine-readable records, it may become too easy, by pressing a set of commands on a terminal, to wipe out within a second the entire correspondence of a given administrative unit without giving any consideration to the need to preserve some of the basic historical and other data of permanent value it contains. It is frightening to think that, without proper scheduling of records retention and appraisal of the relevance of elements of information, we are also slowly taking part in the destruction of valuable information on the state and status of the information currently held at any given point in time. Archivists have developed, in the records management dimension of their task, means to help control the growth and relevance of records and preserve information of permanent value on various media; they can certainly contribute in helping other information scientists control more systematically the growth and quality of their data base and provide assistance to other professionals in the process of evaluating the potential permanency of the information handled by various manual and automated methods and systems.

It becomes difficult at this point to assess in practical terms the mechanisms which could be developed by archivists in cooperation with other information scientists to ensure that the information of permanent value contained in information banks will be appraised and defined efficiently and economically. While a number of successful efforts are presently made to provide for archival storage of machine-readable records, such initiatives mainly concern data collected for entire out-dated data records, and we have yet to see any widespread efforts to systematically review, discard and keep in an alternate location library catalogue cards for books which have become obsolete.

It seems evident that, as the barriers between most sciences, - pure, applied, social and even management, - are gradually disappearing in this day and age of interdisciplinary approaches, so must the frontiers between the various information sciences. In our efforts to serve the same researching public, we should not fear the competition of other information sciences for, while each possesses similarities with others, each also draws its essential mandate from differing objects, methods and tools.



## MODERN ARCHIVES

In Canada, archival science is still in its infancy. Despite the fact that problems of formal education and professional certification for archivists have not yet been totally resolved, the object, methods and tools of their body of knowledge cannot be ignored. While their role should be acknowledged in the preservation, maintenance and management of an important source of information, they should not themselves fear participation in larger more comprehensive entities and can only benefit by participating in interdisciplinary initiatives with other information scientists.