Implementing the Concept of Fonds: Primary Access Point, Multilevel Description and Authority Control

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Introduction

The concept of fonds is inextricably related to provenance and the principle of provenance. This concept is undeniably complex, as witnessed by the variations of its interpretation and implementation in archival arrangement and description. The development of a code for the description of archival material, *Rules for Archival Description*, by the Canadian archival community has made it possible to apply the concept more consistently.

Terry Cook has given a historical overview of the fonds concept and the difficulties encountered in implementing it.² It is clear from Cook's essay that, for the fonds concept to be applied fully and consistently in a set of rules, an 'administrative procedure' needs to be outlined, so that the solution suggested by Cook, that of using authority control, may in fact be applied and implemented.

The purpose of this discussion, therefore, is to outline that 'administrative procedure.' In doing so, the discussion will attempt to address many of the difficulties that Cook's essay has raised regarding the practical application of the fonds concept.

The structure of the fonds and its parts is a reflection of its arrangement. The rules concerned with multilevel description have been designed to deal with that structure. (More on this topic will appear in section 3 of the paper.) *RAD* incorporates the concept of **main entry**, adapted for archival description. In the *RAD* glossary, the concepts of creator and custody are separated into provenance, creator and custodial history. Since the main entry, now called **primary access point** in *RAD*, is the fundamental instrument that will be used to control the parameters of the fonds, an explanation of the main entry concept, where it comes from and how it has been applied in libraries, will not only be useful but essential for the understanding of the purpose and function of access points in general and of the primary access point in particular. Considerable attention, therefore, is paid to this in the first section of the paper. In the suggested 'administrative procedure,' moreover, authority records are deployed to control the primary and additional access points. How this is to be done will form the last section of the paper.

The Main Entry Concept: Current Thinking and Understanding

Codes, lists, glossaries and dictionaries used and produced by the library and archival professions undoubtedly best reflect what these professions understand by **Main Entry** and its associated terms. It may be revealing to examine some of the definitions proposed for the terms **Entry**, **Main Entry**, **Added Entry** and **Heading**, which are all closely related terms.

The terms 'Main Entry', 'Added Entry' and 'Heading' do not appear in either the first or the second edition of the ICA's *Dictionary of Archival Terminology*.³ Nor do they appear in Frank B. Evans' "A Basic Glossary for Archivists, Manuscript Curators, and Records Managers," published in *The American Archivist* in July 1974.⁴ The reason for the omission of these terms from archival lexicons may be the fact that they relate to standards of description, or cataloguing rules or codes. Since such standards for archives are only now being developed, or have just appeared in a few countries, such terms do not yet appear widely in archival lexicons.

The impetus for the development of standards for the description for archives originated from the pressure on archival institutions to automate the functions for controlling their holdings. Although the archival literature does not often explicitly mention automation as the primary reason for standardization, automation nevertheless is believed to be part of the solution to the problem of gaining control over, and access to, the mass of documents flowing into archives around the world.

That standards for description are a prerequisite to rationale automation has been recognized fairly universally.⁵ Standards of description are actively being developed in the United Kingdom (Michael Cook's Manual of Archival Description [MAD]⁶), in the United States (Steve L. Hensen's Archives, Personal Papers, and Manuscripts: A Cataloging Manual for Archival Repositories, Historical Societies, and Manuscript Libraries [APPM])⁷ and in Canada (Rules for Archival Description [RAD]). In the United States, it has recently been recognized that without such standards, the content of thousands of machine-readable records that are being created by archives is not consistent from record to record, in spite of conforming to Machine-Readable Cataloguing for Archives & Manuscripts: the MARC-AMC format. This is a standard format governing the structure of machine-readable records, not the description of the contents of such records.⁸

In view of these developments, an investigation of the concept of Main Entry, which has been used and applied in one form or another in the description of library materials for well over a century, and its applicability to standards of description for archival materials, is both appropriate and timely.

In spite of its frequent and common use in the library community, the term Mail Entry is not consistently defined in professional lexicons. The usual two meanings of the term are given in *The ALA Glossary of Library and Information Science*, where Main Entry is defined as "access point to a bibliographic record by which the bibliographic item is to be uniformly identified and cited," on one hand, and the "complete catalog record of a bibliographic item, presented in the form by which the entity is to be uniformly identified and cited," on the other. This second definition clearly includes the entire description, whereas the first is restricted to the access point only. Confusion creeps in because **main entry heading** is defined as "the access point at the head of the main entry." Does this mean that the terms Main Entry (first definition) and Main Entry Heading are synonymous?

The Anglo-American Cataloguing Rules (AACR2) introduced the term 'access point' in to the North American cataloguing world. ¹⁰ It was imported into AACR2 from the International Standard Bibliographic Description (ISBD). The term itself, which originated from computer science, is often extrapolated to main access point, a synonym for 'main entry' or 'main entry heading.' Similarly, the term added access point is synonymous with 'added entry.' AACR2 retains the ALA Glossary's second definition of main entry, i.e., the entire description. It does not include in its glossary a definition for main entry heading, but instead includes the terms heading and main heading and their definitions. Thus AACR2 is internally consistent and no overlap in meaning occurs.

The Paris Statement of Principles is perhaps clearest on this issue. ¹¹ It does not attempt to define the terms. It characterizes main entry as "a full entry, giving all the particulars necessary for identifying the book," an interpretation adopted by *AACR2*. The phrase "all particulars for **identifying** the book" is very important, because to create a main entry requires a predetermined level of detail of description in each case. In the Statement of Principles the term 'heading' is used generically, so 'uniform heading' should be interpreted to mean standardized heading. This usage is also adopted by *AACR2*.

The definitions for **entry** in the ICA *Dictionary of Archival Terminology* come close to being those for the entire description. ¹² They do not depart in substance from the concept of full entry articulated in the Statement of Principles.

The main source of confusion seems to be in the double meaning of the term 'main entry'. Definitions which state that the main entry is the entire description seem to predominate. None make clear, however, whether the main entry includes or excludes the main entry heading itself. This confusing omission has been greatly exacerbated by the MARC formats that define the 1XX fields as Main Entry — [Personal or Corporate Name or Name of Conference or Uniform Title], thus creating the impression that main entry is to be understood as a single access point to the description, transformed into a **heading** at output. ¹³ This is certainly not consistent with the definition for Main Entry given in the AACR2 glossary.

It has to be kept in mind that with the exception of Access Point all these terms were defined, and their meanings described, in the manual environment of the card catalogue(s), and are therefore based on the index card concept. The question arises (and will be discussed later on) whether these concepts are still valid in an automated environment, and in particular in an automated on-line environment. In the meantime, the card, or rather the information that appears on a card, should be thought of as the equivalent of a machine-readable record. This is not such a strange transition because, for example, the original contract that the Library of Congress tendered to the United Aircraft Corporate Systems Center Division of United Aircraft Corporation in February 1966 was "to convert Library of Congress cataloging data [that appear on catalogue cards] to machine-readable form." This work lead directly to the first MARC format.

The definitions and concepts as they exist in current library lexicons are summarized in **Figures 1** and **2**, and the following paragraphs. Again, it has to be emphasized that the illustration presupposes the manual environment of the index card. Thus, the three solid-line boxes of **Figure 1** and, similarly, the four boxes of **Figure 2** contain information that appears on one card (the image of which has been realized as a stippled outline for the card surrounding the boxes), or may be thought of as appearing as a unit of information represented by a single, logical machine-readable record.¹⁵

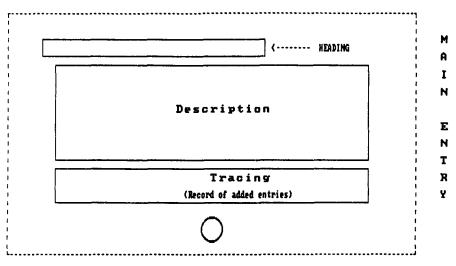


Figure 1: Main Entry (Unit Card)

Because the heading in **Figure 1** is on the main entry [card], the box containing the heading on this card is the **main heading**, i.e., the heading of the main entry or the main entry heading. From this it follows that, when an added entry is prepared, one of the headings that appears in the tracing is promoted to serve as a heading for the added entry [card] and placed over (or above) the main entry, as shown in **Figure 2**; this card (record) becomes an added entry card or record.

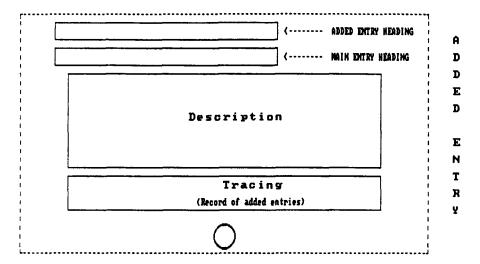


Figure 2: Added Entry (On Main Entry Unit Card)

In a manual (card) environment, the easiest and most economical way to produce added entries is to copy the main entry card as many times as needed and then add, at the top of the copied card, the heading for the added entry (the unit card concept). Therefore, in this sort of environment, the main entry includes the main heading or main entry heading, because the card that serves as the added entry is a copy of the main entry card.

Thus a **heading** is merely a word or phrase that appears at the head of a description and serves as the filing device for that description; it is the word or phrase by which the description is filed alphabetically, numerically or alphanumerically (depending on what the heading contains) in a file containing numerous descriptive records. Headings, therefore, contain what archivists might call indexing terms and what in a computer file would be termed access points. Consequently, headings contain information (words, phrases, numbers, etc.) that are standardized and under vocabulary control, or *authority control*.

In an automated environment, the computer does all the work of producing copies of a description on output. The single, logical machine-readable record contains all the information needed to produce main and added entry cards, or to output the information contained in a record in a list under their main and added entries as headings. Similarly, it is easy to specify an output product that lists all descriptions which have the same main or added entry heading under that heading, i.e., the heading appears only once for all descriptions which have that heading in common.\(^{16}\) One can thus also specify dropping the main entry heading on output of descriptions that are to appear under added entries. Under these circumstances, it is assumed that all headings under which a description is to appear in a particular output product are equal. There is no ranking into main and secondary or added entry headings. It is this possibility that makes one think that the main entry heading concept may be irrelevant in an automated environment.\(^{17}\) Whether it is so depends on knowing what, precisely, are the characteristics of main and added entry headings.

If the Paris Statement of Principles and the Anglo-American Cataloguing Rules are to be followed, then the first characteristic of main entry heading would be that every description must have one, and no more than one such heading. Secondly, if the entity chosen to function as main entry heading is not present, a substitute main entry heading must take its place. For library materials, when an author cannot be identified, the title is substituted as main entry. These technical characteristics ensure that a main entry catalogue will have a card for every book in the library; a search of the main entry catalogue ensures that not a single book is missed. The author/title catalogue in libraries is the main entry catalogue. Since subject headings are always added entries, subject catalogues cannot be trusted to yield a scan of all books in the library, because not all catalogue records (cards) receive a subject added entry.

The intellectual reason for the concept of main entry derives from choosing the author as the heading under which the main description has to be entered. In the case of multiple but equal responsibility for the intellectual or artistic content of a work, one of the authors has to be chosen to take the function and position of the main entry heading, while the others receive added entry headings. By virtue of the position as main entry heading, that author becomes the *principal* author, while the others become *secondary* or *additional* authors, whether there is any factual basis for this or not. In other words, the choice of main entry becomes regulated by cataloguing rules that specify, for example,

the position of the name on the title page as a criterion for determining the main author, and not necessarily the portion which that author contributed to the intellectual or artistic content of the work. This is one of the arguments used by critics as a reason for abandoning the main entry concept.

In an automated environment, if the main entry concept is consistently applied, that is, if a main entry heading is consistently present in the machine-readable record, it means that when searching via the main entry heading as access point—searching on the 1XX fields, in MARC parlance—one can be certain that the search will not miss a single record. i.e., all records are covered in the search. This is not the case for searching via added entry headings, which are not necessarily made for every record in the file. In an automated environment, there is only one record for the unit of material being described, and if the user is allowed to search the main entry and all added entries in one pass, as most such systems allow, all records will also be covered in the search. Main and added entries become equal, and the concept of main and added entry becomes irrelevant. So why perpetuate the concept? The answer is that all systems need, and therefore produce, output of all kinds, including hardcopy output and output to the screen of a terminal. Not all systems are on-line, of course, and such systems have hard-copy output as a matter of course and by design. There is not a single automated system, including those that run on microcomputers, either in a network or as standalone, regardless of the database management system used, that does not at some point produce output. As soon as output is wanted or needed, the concept of main entry heading becomes immediately relevant again, because any output needs to be produced in some kind of meaningful order. The selection criteria for output of the entire file will only find in the main entry heading the data element that is meaningful (in contrast to such meaningless data elements as control numbers), and will ensure that records are selected for output, all in one pass. When, in response to a query, a partial list, or a so-called "hit list" is presented on screen or on paper, it also requires meaningful order.¹⁹ Again, the main entry is the only rational data element for this purpose.

In summary, the main entry concept is not necessarily meaningful or relevant in an automated environment if, but only if, that system never has any need for reports that are meaningful to the user. Since there is no such system in existence, and there will not be for a long time, the concept is still meaningful and should be retained.

The Archival Application of the Main Entry Concept

As to the relevance of the main entry concept for archival description, three issues need to be explored: (i) the organizational structure of archival descriptions, (ii) the data element that will have to function as the main entry heading for archival description; and (iii) the function of that heading in the archival application.

The Structure of Archival Descriptions

In the library world, generally speaking, there is little need for descriptive linkages. In the vast majority of cases, one description represents one unit of material, and that is that. Each description forms an independent card or record in the catalogue or database. Each record does not depend on another for giving the complete picture for the unit being described.²⁰ Even analytical records are independent records in this environment.

Though AACR2 makes provision for describing multipart units of material in rule 13.6, Multilevel Description, this technique is little used in North American cataloguing practice.²¹

Rule 0.1 in *RAD* states that the rules "aim to provide a consistent and common foundation for the description of archival material within a fonds . . ." which implies that the prime unit of description (the primary object of description) is the fonds. The same rule continues with the statement that "the application of these rules will result in descriptions for archival material at various levels, e.g., fonds, series, file, and item levels." This implies that the description of the fonds consists of a set of descriptions, and indeed that the fonds is a dynamic and organic assemblage of material that may consist of series; a series may consist of files; and a file may consist of items. Each of these units becomes (or has the potential of becoming) an object of description, resulting in a set of descriptions that portrays and links the related parts of the fonds as a whole in a hierarchical fashion. Michael Cook, in his MAD *User Guide*, considers a description higher up in the hierarchy to be the macro description relative to those below it anywhere in the hierarchy. He calls the lower level the micro level. The terms 'macro' and 'micro', he states, are therefore relative and depend on the way in which different levels of description are related to each other.²²

The concepts of provenance and original order demand that these hierarchical linkages be maintained in order to show how the context of the material being described relates to the whole.²³ Archival descriptive structures, therefore, are multilevel in nature, where the fonds represents the top, or highest level, the series the next level down, the file the next level, etc. This structure of descriptions for the fonds and its parts is a reflection of its arrangement, the process which it has gone through previous to description. Rule 0.2 of *RAD* makes this clear by stating, "Although most archivists start to gather information about the material to be described during the accessioning process, the rules assume that the material has already been examined, arranged and the information necessary for description compiled" [italics added]. This means that the unit of description to which the rules are to be applied has already been demarcated during the arrangement process. The determination of what belongs to the fonds to be described, therefore, is a function of the arrangement of the fonds, not its description.²⁴

The multilevel nature of the fonds is the starting-point of the rules for description. This is confirmed in *RAD* Chapter 11, which (in rule 11.0A1) instructs the use of multilevel description when, "in addition to the description of the fonds as a whole, separate descriptions of some or all of its parts are required;" furthermore, "when separate descriptions below the fonds level are required (e.g., series, file or item level descriptions), multilevel description is used to vertically link the descriptions of one level to another." The rules that follow in Chapter 11 then proceed to give instructions on how to describe each level and the elements of description approriate to them. It is important to note that the levels referred to are *levels of description*, not hierarchical *levels of headings*. The latter are dealt with in the authority system associated with the system of description.

The hierarchical structure of descriptions, which is a reflection of the arrangement of the fonds, is shown in **Figure 3**. The illustration depicts six levels; and indeed there may be any number of such levels in a particular fonds. The levels are not fixed. This is recognized in *RAD*, which invariably uses "e.g." instead of "i.e." when mentioning

specific levels, e.g., series, files and items, as well as in the footnote to rule 11.0B1, which states that "since the levels of description will follow levels of arrangement, they may include intervening levels not specifically mentioned in the rules."

Figure 4 shows an unacceptable starting point for archival description. Decisions regarding where to make the separation (represented by the broken lines with question marks at each end) have to be made, so that each series and all that belongs to it is part of only one fonds. Such decisions have to be made during arrangement. Decisions regarding fonds identification may have to be made at lower levels in the hierarchy, yet they are most likely to occur at the series or subseries level.

Because the character of archival arrangement is so complex, descriptive structures are, inevitably, more complex than library structures. They also require mandatory linking, an application of the archival principles of provenance and *respect des fonds*. Furthermore, it is **provenance** that binds together the descriptive records that provide a representation of a fonds. The application of the multilevel rules in Chapter 11 of *RAD* provide the technique for representing this basic fonds structure.

The Main Entry Heading for Archival Description

Since it is provenance that binds together the archival descriptions pertaining to the same fonds, it becomes the prime, and the only reasonable candidate for the function of main entry in archival description. The provenance denotes the agent, i.e., the agency, institution, organization or individual that created, accumulated or maintained the records that are identified by the descriptions.²⁵ That agent can be represented by a name. When that name is standardized, as it must be if it is to function as a heading, it becomes the provenance heading. Since the provenance heading, as stated above, binds together descriptions of the same fonds, and is a mandatory linking agent when the archival principle of respect des fonds is applied, main entry, for this reason alone, becomes more relevant to archival description than it ever was or could be to the description of library materials. There is, in other words, a strong intellectual reason for main entry in archival description, in addition to the technical, filing-organization or collocation function. Because of the somewhat confused meaning of main entry in the library world, as described earlier in this paper, and since its application to archival description would only make use of the 'heading' connotatio of the term, it would be wise to use primary access point instead of 'main entry' for the archival application. The preferred term has also been used with this meaning by RAD, which defines it in the glossary as the "access point under which the descriptive record for a fonds and all its parts may be searched and identified." Thus the term 'primary access point' will henceforth be used. In the archival application, the primary access point would contain the provenance heading, which should be defined as "the heading which identifies the provenance of a fonds and serves as the primary access point to it."

If there is a primary access point, it follows that there are other access points which will be called secondary or added access points. These will contain additional names or subjects linked to the relevant authority heading in the authority records of the finding aid system. Although this creates a complex structure, it is neither a new idea nor is there any new technology involved in implementing it. Current library systems that have linked authority files, such as UTLAS and DOBIS, already maintain this linkage between authority records and descriptive or bibliographic records. They do this, moreover, in

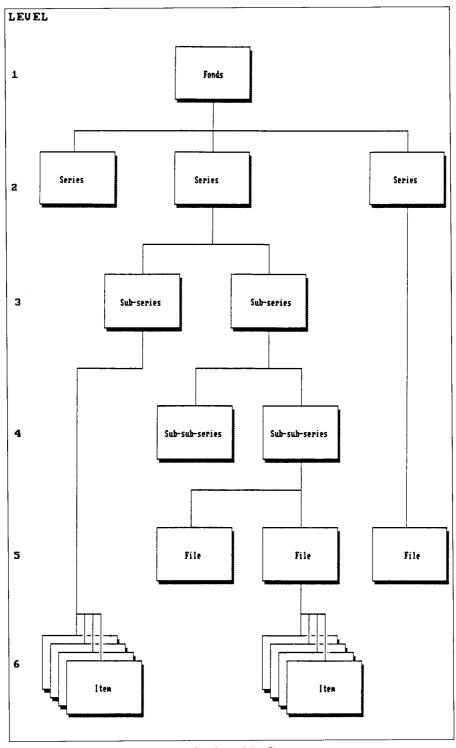


Figure 3: Relationship Between a Fonds and Its Parts

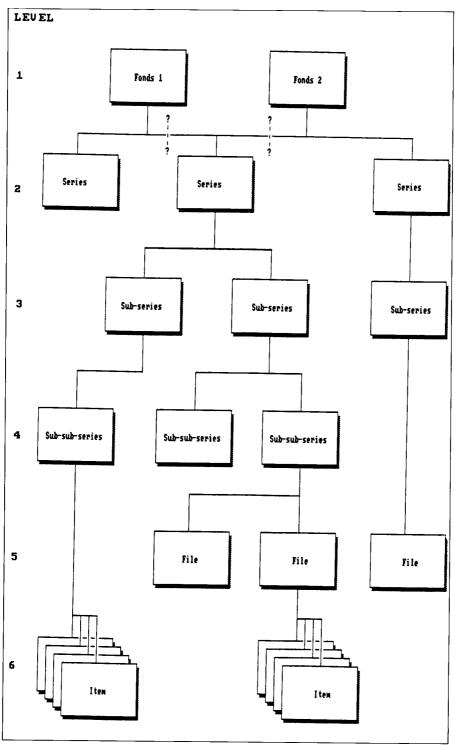


Figure 4: Multiple Fonds and Their Parts

Canada's both official languages, English and French. In these systems the authority records and bibliographic records form separate files and may even be in separate databases, though this is not necessary. These systems are approximately two decades old. Given the upgrading of many of them now underway from flat-file or hierarchical to relational systems, such a capability becomes even greater.

The Practical Application of Primary Access Point for Archival Description: The Function of the Primary Access Point

Because the object of archival description is the fonds, all the descriptions that result from describing a fonds, e.g., series, files and items, have to be considered together as the universal description of the fonds. The 'macro' description in the hierarchy is the fonds level description. The macro description "contains, in itself, every piece of information or data element which is a common factor to the micro material which they govern. Repetition of these common factors in the micro descriptions can then be avoided."26 It makes sense to derive the primary access point from this fonds description, because the provenance information which it contains relates to the provenance of the entire fonds. The fonds level description is a summary description of the entire fonds in a single descriptive record, which for all intents and purposes, is only used as a collocating device to enable the linking to it of the descriptions of the parts and to carry the all-important primary access point. All the descriptions of the parts, e.g., series, files and items within a fonds, may be given added access points. Multiple access is thus provided, but there will be only one primary access point. Since the primary access point is the provenance heading, it contains the name of the person, family or corporate body that created the records, in accordance with the definition of provenance (see Note 25 for the RAD definition of provenance). The primary access point thus identifies the fonds, but does not necessarily establish its extent.

The primary access point collocates descriptions of all the parts of a fonds under the name of the creator of the fonds. It identifies the provenance of the fonds at the end of its life cycle, when it has become an archival unit. It is for this reason that the name which the primary access point contains (the provenance heading) has to be the latest form of the name, while the added access points, which may be attached to all descriptions below the fonds level, contain the names of the creators of the parts, e.g., series, files and items, at the time they were created. The function performed by, or the relationship of the person, family or corporate body represented by the name contained in the added access point, to the records described, is determined by the position which the name occupies in the descriptive record, not in the authority record. Thus, for example, an added access point containing the name of an agency that had custody over the records, but did not use them or augment them, would appear in the custodial history element of the archival description area. The name of an agency receiving an added access point because it was a user of the records, and augmented them in the conduct of its business, would appear also in the Title and Statement of Responsibility area of the description.

The above paragraph holds the key to controlling the fonds. The method is to use the latest form of the name for the primary access point (of which there is only one, and which is derived from the highest, or fonds level description) and alternative names for added access points, derived from the lower levels of description, e.g., series, subseries, file and item.²⁷

A heading is by definition standardized, and thus under authority control. Authority control forms part of the 'administrative procedure' for determining the parameters of the fonds. The topic of authorities and authority control is discussed in a later section; details of what authority control is, and how to apply it in archives, are examined in a set of papers published by the Bureau of Canadian Archivists' Planning Committee on Descriptive Standards.²⁸

Authority Control as an Instrument for Fonds Management

The Authority System

There is an extensive literature explaining the different aspects of authority control, and it is outside the scope of this paper to duplicate that information.²⁹ A discussion of the use of authorities and authority control as a tool for fonds delineation, however, will be attempted. Since provenance can only be a person, family or corporate body, which, as a special category, includes conferences and meetings, the discussion will also be limited to name authorities for these entities.

Authority files consist of records, which contain, as the most important data element, the authorized form of the name chosen to function as the heading or access point. This data element, present in every authority record, is the primary reason for its existence and is the element after which the record has been named. The creation of the authorized form of the name is regulated by the cataloguing rules, or rules of description, used for the purpose. In other words, the application of the rules creates the form of the name chosen as the authorized form. It is irrelevant which rules are chosen to create the authorized form of the name, so long as all the parties involved in the use and maintenance of the authority file consistently apply the same rules.³⁰ Authority records may be kept on cards, sheets, slips of paper or in any other form, including machine-readable form in a computer database. Authority systems were in existence well before there were computers; they do not have to be automated.

In addition to this most important data element, the authority record may contain much other information, such as: references to variant forms of the name; predecessor name(s) and successor name(s), each of which also has its own authority record; the source for the name; the linguistic form of the name, when applicable; notes on how to use the heading and how not to use the heading; the rules which were used in the establishment of the name heading; verification procedure; and who created the name heading and when, etc. Referencing of different forms of the name, as well as predecessor and successor names, is internal to the authority file. There are usually two types of referencing: from an unauthorized form of a name to an authorized form, called a see reference; and a cross-referencing system operating between two authorized forms of a name, for example, between successor or predecessor names of the same body. These are called see also references. Authority files for archival applications may be enriched with other kinds of information, such as biographical information for persons, genealogy for families, and administrative history for corporate bodies. In addition, descriptions of the functions, programmes and products of corporate bodies may be included, either as part of the actual authority record or in separate files linked to it.

Authority records thus contain information which archivists find very important for understanding the context of the records which these persons, families and corporate

bodies created, accumulated and used in the conduct of their business and lives. Furthermore, the authority system creates the environment for gaining access to that information in the most efficient way. The information in the system documents the relationship among persons, families and corporate bodies, when such relationships exist, through narrative text in notes and by means of a referencing system. For example, information about the mergers, division and dissolution of agencies and/or their sub-organizational units, which Terry Cook points to as creating problems in assigning creatorship (in the archival sense of the word) to a control unit, is, or at any rate should be, documented in the records of the authority system. It appears that authority control and authority systems are going to play a central role in the intellectual control of archival materials. Without the information contained in the authority files, the contextual information necessary for the understanding of archival records would be unorganized and thus very poorly managed. This kind of information, when occurring in finding aids such as inventories, is written as narrative text and therefore not well deployed for the purpose of access and information retrieval; relatively speaking, it is inaccessible.

The Relationship Between Authorities and Descriptive Records

The relationship between the authorities and the descriptive records, i.e., the records that describe the fonds in its totality, is shown in **Figure 5**. In order to keep the figure as straightforward as possible, only one rather simplified example of a fonds is shown.

At first sight, nevertheless, the diagram looks rather complicated. In the diagram the boxes represent descriptions, i.e., all the elements of description in accordance with the rules for description in use. These descriptions are also called records, e.g., a fonds descriptive record, file record, record for an individual item and an authority record containing elements of description for a name authority. Thus, the box labelled 'fonds' represents the description of the fonds or the fonds descriptive record, the box labelled series, the series description or series record, etc. The figure looks like a wiring diagram and, to a certain extent, it is. On the left of the diagram (left of the double vertical line), the wires are the relationships of the fonds description to the descriptions of its parts. Paths from and to descriptive record data elements and the relevant authority records are shown by broken lines crossing the double vertical line. The double vertical line represents the boundary between the descriptive (or bibliographic) records system, which contains the descriptions of the fonds and its parts, and the authority system, representing the authority records and the referencing system between authorities. Examples of the two kinds of references referred to above, the see and the see also references, are shown on the right-hand side of the authority system with one-directional arrows for the see, and two-directional arrows for the see also references. No pointer to a descriptive record appears on an authority record that is a see reference as this record contains an unauthorized heading. Authority records that are cross-referenced with see also references, on the other hand, may carry pointers to descriptive records, because they both contain authorized forms of the name.

One of the names in the authority file functions as the primary access point and contains the provenance heading. It is the latest name (i.e., the last creator, accumulator and user) represented in the records belonging to this fonds. The parts of the fonds, identified as series, subseries, a file and items in the example, may have migrated; they may have been created by predecessors of the person, family or corporate body whose

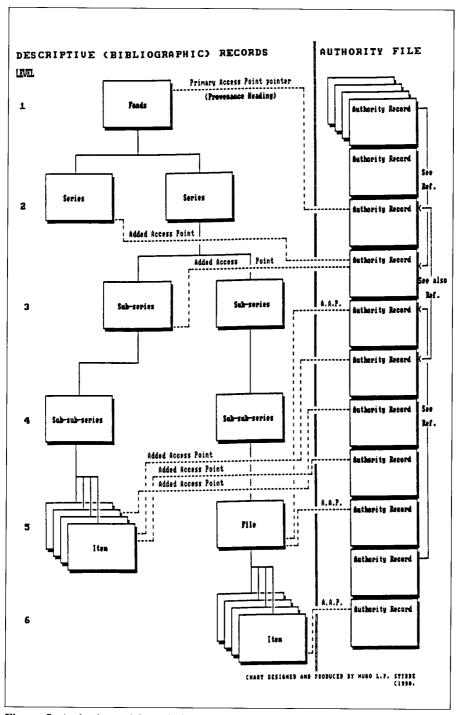


Figure 5: Authority and Descriptive Record Relationships

name appears in the provenance heading. They may have been created by an entity no longer existing. The records may have been transferred to the agency, which used and added to the records, and thus they now belong to, and are an integral part of, the fonds as delineated. The creators, users and accumulators of any of the parts, if differently named from the one which appears in the provenance heading, receive an added access point heading. This is shown by the broken lines labelled Added Access Point or 'AAP.' As stated before, the function which the entity performed on the records is revealed by the position of the heading in the descriptive record, in the Archival Description Area or the Statement of Responsibility Area. The general rule for Multilevel Description in *RAD* states that information given at a higher level is, excluding stated exceptions, not to be repeated at a lower level. In line with this general rule, added access point indicators in **Fugure 5** do not run from an authority record to lower levels of description when they have already been provided at a higher level in the descriptive hierarchy.

It should be clear that proper identification of the fonds during the process of arrangement cannot be circumvented. The administrative procedure outlined below, together with the tools provided for carrying out this task, can only function as a guideline that will ultimately result in the procedure's being carried out consistently and efficiently.

The 'Administrative Procedure'

What is the 'administrative procedure' referred to at the beginning of this paper that will delineate the fonds? Given the tools, as described above, (1) a structure for the descriptions of a fonds, (2) the primary access point and added access points as well as functions for both, (3) authority records in an authority system, (4) a system of relationships between the descriptions of the fonds and its parts, together with pointers from the authorities to the descriptive records, and (5) the *Rules for Archival Description* the administrative procedure can now be outlined.

Once the fonds has been identified during the course of arrangement, units of description may also be identified which reflect that arrangement. *RAD* has guidelines that will perhaps make this an easier procedure than it was in the past, when there were no rules.

First, it is internal evidence from the records themselves that must determine who was the **latest** creator, or accumulator and user of those records for the period covered by them. Terry Cook correctly points out that the transferring agency, for example, is not necessarily the creator or accumulator and user of the records transferred, let alone the **latest** creator. The agency may have had only custody of the records, and therefore had authority to transfer them to a repository. Given the definition of provenance in *RAD*, such a transferring agency is to be mentioned in the custodial history element, or in the Note Area stating that it was the agency that transferred the records. In the control form that documents the accession of those records, the agency should be mentioned as the source of acquisition.³¹

Secondly, there should be a distinction made between the various degrees of importance of the components of provenance: creatorship, accumulation (receipt, filing and organizing, etc.), use and custody. For the purpose of determining the provenance heading, a sequence of priority needs to be established. Use in the absence of creation and accumulation, for example, should be a less important criterion for the provenance heading than creation, in the absence of use and accumulation of the records. In fact, one may

well question the validity of the assignment of provenance to a group of records if the person, family or corporate body only used the records and did nothing further with them.

The preface of *RAD* also speaks of "natural and organic unity" as one of the criteria of a fonds. This natural and organic unity means that the records comprising a fonds are created, accumulated and used as part of the normal conduct of the creator's business. The fonds and its parts are always to be considered and examined in the context of the whole. Therefore, it is vital to provide contextual information in order to allow readers to identify the fonds properly in terms of its creator(s), accumulator(s) and user(s).

Chapter 21 of *RAD* will assist in the determination of the provenance heading from among the various possibilities. In large measure, this chapter will assist archivists to analyse the complexities of function as the main determinant of creatorship.

Whatever process is used and whichever rules are applied, the provenance heading will be established for the unit at hand identified for description. The description of a fonds will in fact often proceed one step at a time, as its parts are identified. It is not necessary, and will often not be possible for large and complex fonds, to describe all the parts in detail in the fonds level description, the principal object of which is to identify the general characteristics of the fonds. In most cases, the parts to be described will be series. The provenance heading for the series, which may or may not differ from the provenance heading for the entire fonds, will again most often be the latest person, family or corporate body that created the series. Series are then described in accordance with the rules given in the first part of *RAD*. The second part deals with the formation of names as access points.

If the entire fonds consists of only one series, the process is finished. That description can function as the fonds description. The simplest case of fonds creation is shown in **Figure 6a**. Added access points may be made for all other persons or corporate bodies that have contributed to the creation, accumulation and use in this series in the past. All the names so identified as access points are then linked to the relevant authority records in the authority file, as illustrated previously (see **Figure 5**). If the authority files contain the necessary biographical, genealogical, and administrative history information, as discussed in the section above on authority systems, and the description of the series, etc., itself contains the necessary function and role information that make clear the reason for the linkage to the authority records then all the required contextual information is available.

If there are other series that have a similar provenance heading, then they belong to the same fonds. In that case a summary fonds description has to be made and the provenance heading migrates up to the fonds level description, where it functions as the primary access point for the fonds as a whole. The series descriptions will then have become descriptions of the second level, and may provide added access points for all other persons or corporate bodies that have contributed to the creation, or accumulation and use of the material in that series. All that changes in the first series described is the translation of the primary access point to a higher level of description, the fonds level. The added access points do not change. That is, the names and links to the authority records do not change.

Once a two-tier hierarchical structure has been achieved, the levels have to be linked. The linked two-tier structure is schematically shown in **Figure 6b**. *RAD* states that this

operation is accomplished by identifying the part-to-whole relationships of the hierarchy through "... mak[ing] the levels distinct by layout or typography" in manual systems, on printed texts, or by means of a computer link in an automated system. *RAD* does not prescribe specific techniques for linking the descriptions because it concentrates on standardizing the procedure of description rather than standardizing the products, i.e., the different types of finding aids that may be produced by organizing and compiling the descriptions, and their associated access points, in different ways.

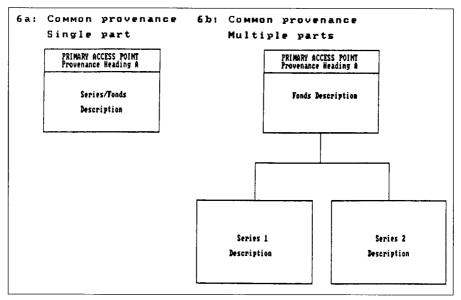


Figure 6: Fonds Creation 1

Any level of description below the series follows the same procedural steps as outlined above. Thus in a single series fonds, where there are subseries, files and items to be described, the fonds structure as shown in **Figure 3** will be built.

Thus far, the procedural steps have been fairly straightforward. Only the case of units of description with a similar provenance has been considered. Moreover, a series which has a provenance that is in no way related to an already established provenance heading, or that is not related to an organization's or agency's structure above or below the level for which a previously established provenance heading exists, is also relatively easy to handle, because the situation represents two different fonds. A new provenance heading should be established in such a case, and two separate fonds created.

This systematic construction of a fonds is a re-creation of how the fonds came into existence during the active stage of its life cycle. If accruals to a fonds came to the repository in the sequence in which they were created, life for the archivist would be made much simpler. The re-creation of the fonds would proceed in the same sequence as it was originally created, and the systematic rebuilding of the fonds structure would not need to involve constant adjustments and changes.

This process produces two hierarchies: a documentary and a provenancial one. In the diagram of **Figure 5**, the documentary hierarchy is represented by the description of the fonds and its parts, on the left-hand side. The provenancial hierarchy is shown on the right-hand side, represented by the authority records and the authority system. Connections between the two are established, of which more will be said below. The first few steps in an actual case of such fonds re-creation will illustrate some of the points made above. Text and figures in this illustration are closely linked. The entire fonds of course cannot be accommodated in the illustration. However, an attempt is made to include as much as necessary for the purposes of illustrating the problem areas and some of the issues raised by Terry Cook's paper.

The fonds chosen for the first set of illustrations is a relatively straightforward one, namely that of the Association of Canadian Archivists.³² Figure 7, fonds creation 2, depicts a scenario for the three stages of fonds construction. The scenario is fictitious, of course, because the sequence of accruals may not have been as shown; indeed, all of the material may have arrived at the same time.

It is assumed that the first accession contained files of the executive officers of the association, and that this material was arranged in a series containing materials related to the Executive Committee of the Association of Canadian Archivists. In the period covered by the records, 1975-1983, the latest name for the creator is the Executive Committee of the Association of Canadian Archivists. A further subdivision by the name and term of office of each officer suggests itself. However, this is not done in the inventory. The primary access point that has to be determined for this series is therefore that of the Executive Committee. The provenance heading is the authorized form of the name which is to be established by means of the rules in use. (It is assumed of course that RAD will be applied.) Under these rules, the provenance heading will be Association of Canadian Archivists. Executive Committee. Under rule 24.13, this is a type 2 name which contains a word that implies administrative subordination, i.e., Committee. An authority record is created for the Executive Committee, if it does not already exist, and the primary access point heading is linked to the authority. Because Executive Committee is a subordinate name, however, the authority record for the Association must also be created in the provenancial hierarchy of the authority file. An authority for the Association of Canadian Archivists is therefore also established. if one does not already exist. This is shown in Figure 7, Stage 1. No added access points are made for the members of the committee, etc. because, according to RAD, these should be made at the level at which the particular files of these officers are described.

The basic elements that control the headings in an authority record for the Association of Canadian Archivists and its Executive Committee would be as follows:

Association of Canadian Archivists

x ACA

See also Canadian Historical Association. Archives Section

xx Canadian Historical Association. Archives Section

Established in June 1975 as an independent association out of the Archives Section of the Canadian Historical Association. Records of this body are

entered under the name used at the time of creation of the records. The provenance heading for this body is the most recent name or last name used by the body.

Found: National Archives of Canada MG 28, I 340, vol. 1, 1-1: Annual General Meeting 1974-, Correspondence, Minutes, Programme and Reports, 1973-1974.

Association of Canadian Archivists. Executive Committee

Established in June 1975. Records of this body are entered under the name used at the time of creation of the records. The provenance heading for this body is the most recent name or last name used by the body.

Found: National Archives of Canada MG 28, I 340, vol. 1, I-1: Annual General Meeting 1974-, Correspondence, Minutes, Programme and Reports, 1973-1974.³³

As shown in Figure 7, fonds creation 2, stage 1, we now have a documentary hierarchy of one level and a provenancial hierarchy of two levels. If no further material were to be acquired from the Association of Canadian Archivists, there would be no need to create another level in the documentary hierarchy, because the description of the records of the Executive Committee cannot be linked anywhere above itself; there are no descriptions to link it to, and no other series are present which would need to be linked to a common origin in order to show that they belong to the same fonds. The series, description together with the two-level provenancial hierarchy and the authority records for the Committee and the Association itself, provide all the documentation necessary to identify the fonds of the Association of Canadian Archivists.

The next accrual is of records of the Education Committee. It undergoes the same procedure as the records of the Executive Committee. It is the same type 2 name so the provenance heading for it is the **Association of Canadian Archivists. Education Committee**. There are now two series with headings for two committees of the same association. The documentary hierarchy can now be expanded through providing a summary description above the series (which can be a sous-fonds or fonds) in order to link the two series to a common provenance. This summary description receives the provenance heading of the sous-fonds/fonds, whichever the case may be, indicating that the two series belong to the same larger aggregate. The headings of the series become added access points appropriately subordinated in the documentary hierarchy. No cross-references appear between the names of the Association and its Committees. This would be superfluous because of their type 2 status, where the committees already contain the name of the originating body. This situation is depicted in **Figure 7**, **fonds creation 2**, stage 2.

The next accrual, which again, after arrangement and unit of description designation, comes in the form of a series, consists of files created, accumulated and used by officers of the association including minutes of annual meetings, committees and correspondence of the Archives Section of the Canadian Historical Association. This material was in the files of a former official of the Archives Section of the Canadian Historical Association who subsequently became an official of the new Association of Canadian Archivists.

These files were last used by an official of the new association and thus became part of its fonds. It was therefore appropriate to arrange it as a subseries of the Executive Committee of the Association of Canadian Archivists. Based on the subject content of the material, the description receives an added access point for the Archives Section of the Canadian Historical Association. In order to show where the Archives Section was located in the administrative hierarchy of the Canadian Historical Association, both the Archives Section and the Canadian Historical Association's authority records were created in the authority system. The example of **Figure 7**, **fonds creation 2**, stage 3, shows both the documentary hierarchy and the provenancial hierarchy for the two associations.

The authority system provides a *See also* reference to and from the organization that preceded the Association of Canadian Archivists, namely the Archives Section of the Canadian Historical Association, the authorized heading for which is Canadian Historical Association. Archives Section. The authority record for this entity would include the following:

Canadian Historical Association. Archives Section

See also Canadian Historical Association. Archives Committee

Association of Canadian Archivists Canadian Historical Association

xx Canadian Historical Association. Archives Committee

Association of Canadian Archivists Canadian Historical Association

The name was changed from the Archives Committee to the Archives Section by the Council of the Canadian Historical Association during its annual meeting in Montreal in 1956. The Archives Section of the Canadian Historical Association was discontinued after the establishment of the Association of Canadian Archivists in June 1975. Records of this body are entered under the name used at the time of creation of the records. The provenance heading of this body is the most recent name, or last name used by the body.

Found: Report upon the organization and constitution of the Archives Section of the Canadian Historical Association / prepared by A.D. Ridge, April 1966. — National Archives of Canada MG 28, I 340, vol. 1, 1-1: Annual General Meeting 1974-, Correspondence, Minutes, Programme and Reports, 1973-1974.

In this manner a fonds, parts of which were created, accumulated and used by different entities is constructed. It is important to note that this procedure will enable any part of a fonds to be described without having to describe all of its parts.

The next problem which needs attention is how far upwards to move in the organization's hierarchical structure when building or re-creating a fonds, i.e., what constitutes the maximum? When building a fonds, the evidence for what constitutes an integrated document or record structure must come from the records themselves. That is a cardinal assumption implicit in the principle of *respect des fonds*. For example, the National

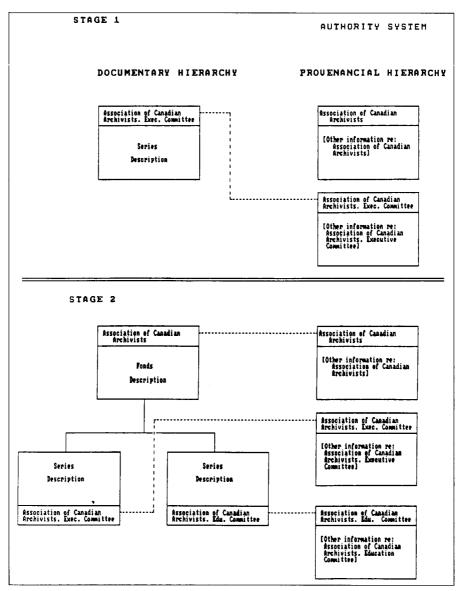


Figure 7: Fonds creation 2

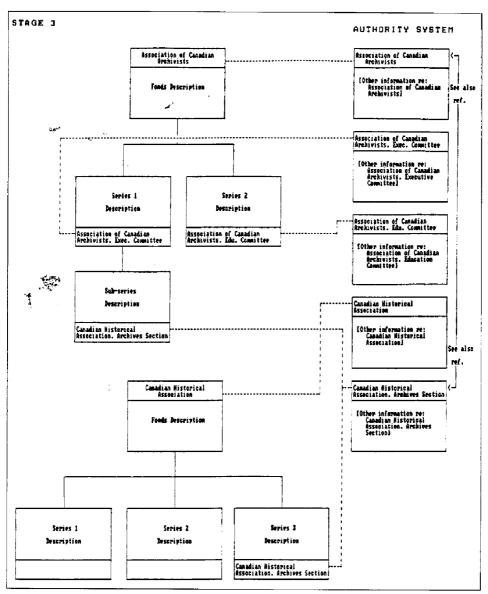


Figure 7: Fonds creation 2

Archives of Canada and the National Library of Canada are two cultural agencies the directors of which report and are responsible to the Minister of Communications. In the not so distant past, however, these two cultural agencies were under the Secretary of State. Yet there is no evidence in the records of the National Library of Canada, or of the National Archives, that these two cultural agencies kept a common records registry system, nor is there any evidence that their records are, or ever were, integrated into either the records of the Secretary of State or the records of the Department of Communications. Thus, even though the hierarchical organizational structure is to be taken **to the departmental level, there is no evidence in the records themselves that the documentary structure should extend to that level. The fact that these two agencies are subordinate to the Department of Communications is documented by their respective authority records. The National Archives of Canada and the National Library of Canada are two separate fonds. The Department of Communications has its own separate fonds. This example demonstrates the utility of, really the essential need for, the dual relationship indicators that exist in archival descriptive structures as illustrated in Figure 5. On the left-hand side (left of the double line) the fonds relationships are shown; on the righthand side (right of the double line) the organization's hierarchical structure (among other things) is documented and outlined. The two do not necessarily coincide.34

It is apparent that there are two hierarchies, a documentary and a provenancial one.³⁵ The documentary hierarchy is represented in the records themselves. The multilevel structure of description, with its mandatory linking, is a representation of that hierarchy. The provenancial hierarchy is a jurisdictional one; it is documented in the authority system. Above a certain level of description it is no longer the records that are described but the provenancial hierarchy, as embodied in the structure of authorities, the authority records, files and system, including its internal linkages. Among other things, the provenancial hierarchy describes and portrays organizations and their internal administrative components, not documents. Authority systems accomplish this in a formal, structurally consistent manner amenable to the demands of information retrieval. The level of description above which the documentary hierarchy converts into the provenancial one is generally the series level. The fonds concept includes both; they should thus be seen as a continuum.

Thus, the minimal/maximal fonds delineation problem becomes irrelevant, because the fonds is as much one or the other depending on the records as described and present in the repository. One should exclude determining provenance for records that are not in the repository. Nor should an entire organization with all its sub-organizational units be documented if the repository does not hold all the records pertaining to the organization and its sub-units. The fonds is only as big as the records available for it. The building of the fonds and the procedures described here are incremental.

The example of different locations for the records of a single creator can be handled by assigning the appropriate provenance heading to the parts. An author's papers deposited in different institutions across the country obviously belong to one fonds, the parts of which are scattered. They will be identifiable as parts of the same fonds if all the repositories that describe the parts have entered them under the same authorized form of the name for the creator of that fonds. If ever a union list were to be created for the repositories in question, then the descriptions of the parts of the fonds would come together as one universal fonds level description. ³⁶ Similarly, the records of the forest-fire prevention unit in the Canadian North, which devolved from the records of the Department

of Indian and Northern Affairs in the National Archives of Canada to the Northwest Territories Archives, would be entered under the authorized form of the name of the forest-fire prevention unit, which, it is assumed, has a proper name.³⁷ Unless the Northwest Territories Archives has the records of the Department of Indian and Northern Affairs itself (which this example assumes it does not), the records of the forest-fire protection unit would be entered under its own name. As far as the Northwest Territories Archives is concerned, it has the fonds of the forest-fire prevention unit (by whatever authorized form of the name that unit is identified in the authority system), not the fonds of the Department of Indian and Northern Affairs. The fact that the forest-fire prevention unit is part of the Department of Indian and Northern Affairs, and where that unit is located in the structure of that department, is documented in the authority system. The contextual relationship to the whole is therefore not lost or hidden, nor the fact that the forestfire prevention unit records are in reality part of the fonds of the Department of Indian and Northern Affairs. For when these records are brought back into a single repository (or represented in a single finding aid), the heading that has functioned as the primary access point in the Northwest Territories Archives would become an added access point in the fonds structure. The authority system will have identified that primary access point as belonging to the hierarchical structure of the organization of which it is or was a part, the Department of Indian and Northern Affairs.

Name changes are also documented by the authority system, not in the descriptive record. For entities that have changed their name over time, the authority system cross references the names and ensures access to the entity no matter by what name it is known or searched. Changes in function are documented in the administrative history and function files that may also be attached to, or embedded in, the authority system.

Finally, what about those fonds of truly multiple creatorship or provenance or indeterminate creatorship or provenance, such as some electronic records? These types of records may well have to be entered under title. The chapter on Uniform Titles (Chapter 25 of AACR2) will then come into play, and RAD may well have to include such a chapter. When a title becomes an access point (whether primary or added), it will have to be controlled. Titles will then be included in the authority file. Any person, family or corporate body that contributed to creating the electronic records or manipulated, used or changed their contents³⁸ may receive an added access point. As time goes on, archival repositories will receive more and more of these types of contemporary records. The rules for creating titles for these records probably will be augmented in order to give more specific guidance. Authority records for the standardized titles used for access will increase. Eventually, title access may become the norm rather than the exception.

In summary, the 'administrative procedure' that this section of the paper propounds, consists, first of all, in determining who is the latest, or most recent, person, family or corporate body to have created or accumulated and used the records actually present, for the period covered by them; secondly, creating an authority record for the name of that person, family or corporate body, if one does not already exist, and using it as the provenance heading for the description of the unit; thirdly, describing the unit using *RAD*; and fourthly, making added access points for all other persons, families or corporate bodies which have performed any of the functions of creation, accumulation and use, and/or custody of the unit being described.

These four basic steps can be repeated as many times as there are units to describe. However, after the first unit has been described and access points chosen, any subsequent unit requires additional procedural steps. After the step which determined who was the latest, or most recent person, family or corporate body to have created or accumulated and used the records, etc., these additional steps include the identification of the fonds to which the unit belongs and the unit's relation to the already described units, i.e., the determination of the hierarchical position of the unit to be described in relation to the other parts of the fonds. Is it a subunit of an already described unit, a similar unit at the same level, or a new unit at a higher level? The decision where in the fonds to place the unit to be described should be based on a thorough examination of the structure of the organization of the creating body or agency, its function(s) and where the creator of the unit to be described belongs in this structure, how its records were managed within the organization, etc. The name of the creator, accumulator and/or user will then have to be compared with previously established provenance heading. If it is the same, a summary fonds level description is prepared, the provenance heading is moved to it as the primary access point, the description of the unit at hand is proceeded with, and the unit is linked in its appropriate position in the hierarchical structure—as illustrated in Figure 7, stage 2. Added access points may now be provided for the unit just described. If the person, family or corporate body identified in this step is not the same as the previously established provenance heading, then it has to be determined where the unit fits in the structure of the organization of the family or corporate body.³⁹ If it is located above the level of the last established provenance heading, it takes over from that heading; if below, it becomes an added access point to the description of the unit at hand; if it is equal, e.g., another person in a family, it is case one above. If it is an earlier entity, no longer in existence, or an entity which has merged with another entity, it also becomes an added access point to the description at hand. These steps are repeated for every unit going through the process of description.

The whole process or set of procedures could be illustrated by a flow diagram and then further refined. Although that is outside the scope of this discussion, it is hoped that the reader has gained an insight into the manner in which a representation of the fonds is created through description and in accordance with the organic concept of archival arrangement. It is also hoped that the distinction between description of records or documents (the documentary hierarchy) and the description of organizations and jurisdictions (the provenancial hierarchy) may be recognized more clearly.

Conclusion

Many archivists and institutions have followed the types of procedures outlined above for years, as demonstrated by their practice of isolating the description of the records themselves in one section of the finding aid, such as an inventory, and dealing with the structure and administrative history of the organization that created the records elsewhere in the finding aid. All that the above steps accomplish is the systematization and standardization of this procedure. They place descriptive data and access points in the provenancial context, suitable for automation.⁴⁰

Although the procedure described seems to run counter to the dictum of describing archival material from the general to the specific, it is also clear that one cannot know the general if one does not know the specific. More and more, it is becoming common-

place for repositories not to acquire fonds in one accession but to accumulate them in several accessions or accruals. As a rule, they receive only a small part of a fonds, and even if it is believed to be complete, one can never be sure. In other words, it is not possible to execute a complete and accurate fonds description if all that is available to base that description on is a small part of the fonds. In most cases, therefore, the fonds description can only be tentative and incomplete, created purely for the purpose of tying the parts of the fonds together and carrying the provenance heading. This description, however, may be enhanced as the fonds receives accruals and completed when the fonds is closed.

The suggested procedure may indeed *seem* to contradict the principle of describing from the general to the specific. It nevertheless does so by describing the general as known and the material in hand at the time the description is prepared. It is in this light that the principle has to be seen to apply.

It is apparent that the fonds concept is not only intellectual, but physical. The complexity of a fonds is directly related to the structural complexity of the creator. Personal fonds are the simplest; family and corporate body fonds may be very complex, particularly if the creators have long life spans. They are all manageable, however, given the tools that are now available, as enumerated and discussed earlier in this paper. The suggested procedure for building or re-creating the fonds frees it from theoretical constraints. The fonds is a viable concept. In fact, it is the only structure that realizes the principle of provenance.

Notes

- 1 Bureau of Canadian Archivists' Planning Committee on Descriptive Standards, Rules for Archival Description (Ottawa, 1990). (This work will hereafter be cited as RAD.)
- 2 Terry Cook, "The Concept of the Archival Fonds: Theory, Description, and Provenance in the Post-custodial Era," Treatment of the Archival Fonds: Theory, Method, and Practice (Ottawa, 1992).
- 3 International Council on Archives, Dictionary of Archival Terminology = Dictionnaire de terminologie archivistique [English and French with equivalents in Dutch, German, Italian, Russian and Spanish] 2nd rev. ed. (München, New York, etc., 1988). (ICA Handbooks Series, Volume 7.)
- 4 Frank B. Evans, "A Basic Glossary for Archivists, Manuscript Curators, and Records Managers," The American Archivist 37 (July 1974), pp. 415-433. A much expanded new version by Lew and Lynn Bellardo has been published by the Society of American Archivists, a draft of which was circulating for comment in the summer of 1990. This draft was available to me when the paper was written. It includes the term 'Main Entry,' defined as follows: "In information retrieval, the entry point considered primary. The information given at this point may be fuller than that at other access points for the same document." Also included in the new version is 'Added Entry,' defined as "(1) An access point other than a main entry. (2) In a catalog, a descriptive record additional to the main entry, by which the same document or group of documents is represented." 'Entry' is defined as "(1) The recording of a document or transaction in a list, journal, register, etc. (2) An item thus recorded. (3) The unit of description in a finding aid." These definitions are identical to those in the Dictionary of Archival Terminology, 2nd ed., 1988. (See Note 12.)
- 5 See, for example, Jean E. Dryden and Kent M. Haworth, Developing Descriptive Standards: A Call to Action [prepared for the Planning Committee on Descriptive Standards (Occasional Paper no. 1), Bureau of Canadian Archivists, July 1987], pp. 3-4. Also, John B. Thomas III, "The Necessity of Standards in an Automated Environment," Library Trends (Summer 1987), pp. 125-39.

- 6 Michael Cook and Margaret Procter, Manual of Archival Description (MAD) 2nd ed., rev. (Aldershot, 1989).
- 7 Steven L. Hensen, Archives, Personal Papers, and Manuscripts: A Cataloging Manual for Archival Repositories, Historical Societies, and Manuscript Libraries, 2nd ed. (Chicago, 1989); hereafter APPM.
- 8 Avra Michelson found "massive inconsistency in descriptive practice" in a survey of forty repositories inputting into RLIN using MARCAMC. She reported the results of this survey in "Description and Reference in the Age of Automation," The American Archivist 50 (Spring 1987), pp. 192-208. Max J. Evans and Lisa B. Weber, MARC for Archives and Manuscripts: a Compendium of Practice (Madison, 1985), is also a good source for actual examples of the inconsistent application of so called 'content standards.' Appendix B contains many examples that vividly demonstrate such inconsistencies. See also Hugo L. P. Stibbe [assisted by Denis Castonguay], MARC Accessioning Pilot Project Final Report (Ottawa, 1990), where it is pointed out that one of the major problems in converting unstandardized accession records to standardized ones was the conceptualization of the elements of description. This led to difficulties in assigning these elements to the otherwise well-defined data elements of the MARC formats. This, in turn, resulted in wildly inconsistent and even inappropriate data content in similar fields across records.
- 9 Heartsill Young, ed., The ALA Glossary of Library and Information Science (Chicago, 1983).
- 10 Michael Gorman and Paul Winkler, eds., Anglo-American Cataloguing Rules, Second Edition (Chicago and Ottawa, 1978).
- 11 Eva Verona, Statement of Principles Adopted at the International Conference on Cataloguing Principles Paris, October 1961 [Annotated Edition with commentary and examples] (London, 1971).
- 12 The second edition (1988) has the following three definitions in the English language: (1) the recording in a list, journal, register, etc. of a document or transaction, (2) an item thus recorded, and (3) the unit of description in a finding aid.
- 13 The Machine-Readable Cataloguing (MARC) formats are national standard formats for the exchange of bibliographic data in machine-readable form. They all conform to the specifications of the international standard *Format for Bibliographic Interchange on Magnetic Tape* (ISO 2709-1981) and its American counterpart (ANSI Z39.2-1979).
- 14 Henriette Avram, The MARC Pilot Project: Final Report on a Project Sponsored by the Council on Library Resources Inc. (Washington, 1968), p. 4.
- 15 A 'logical record' is the record as seen from the perspective of the user. This as opposed to a 'physical record' which, in computer parlance, is the record as it physically exists in the computer system. For example, a logical record may be physically stored in many locations on a computer storage device, or indeed may be completely differently structured in the computer.
- 16 This gathering of descriptions under a common characteristic, a heading in this case, is called collocation. It is one of the main functions of a catalogue.
- 17 See, for example, Betty Baughman and Elaine Svenonius "AACR2: Main Entry Free?" Cataloging and Classification Quarterly 5, no. 1 (Fall 1984), pp. 1-15. Also F.H. Ayres, "Main Entry; Lynch Pin or Dodo?" Journal of Librarianship 10, no. 3 (July 1978), pp. 169-81.
- 18 In most automated systems which use MARC structured records, when the title takes over the function of main entry, there is no 1XX field and the system takes the information in the 245 Title field, subfield \$a, as the heading or access point. The MARC formats do not provide for Main Entry Title, but provide for Main Entry Uniform Title. A uniform title is not the same as a title that substitutes for the main entry.
- 19 The problem of the lack of meaningful order in a so-called "hit-list," or other output product of a computer system, starts to show when the system grows in volume of records held. One hears few complaints in the beginning, but when the system has been paid for and the contracting designers of the the system have long gone, the problem of having to go through page after page (or screen after screen) of responses to a query in order to find the one record you need recurs, but there is no one around to fix the problem. One never can be sure until the end of the list whether the response has produced the record sought.

- 20 This has changed due to the introduction of the MARC Format for Holdings and Locations and the decision to use the two-tier hierarchical model for representing multiple versions. There will now be records that are dependent on another record for presenting the complete information on a particular bibliographic entity. See the Multiple Versions Forum Report: Report from a Meeting held December 6-8, 1989, Airlie, Virginia (Washington, 1990). It is still a very simple model, however, because no matter how many versions of a particular bibliographic entity exist, the two-tier hierarchical model only has two records, the parent record, which contains the elements that are common to all versions thus making it an almost generic description of the bibliographic entity and on the second level, a record which describes all other versions in a single record. This simple model contrasts with what RAD envisions in the multilevel description model typical of the structure of a fonds (see Figure 3).
- 21 Analytical records in this context are records that describe part(s) of a bibliographic entity using the techniques outlined in Chapter 13 of AACR2, other than the multilevel technique outlined in rule 13.6 of that chapter. It should be noted that, as currently formulated, rule 13.6 restricts that analytical model to use only in a single catalogue record. I believe this to be an unnecessary restriction. The International Standard Bibliographic Description (ISBD), from which the term and technique of multilevel cataloguing were imported, does not explicitly state that the "complete identification of both part and comprehensive whole [has to be] in a single record that shows as its primary element the description of the whole." In other words, the whole and its parts may also be represented in multiple records; RAD prescribes the latter.
- 22 Michael Cook and Margaret Procter, MAD *User Guide: How to Set About Listing Archives. A Short Explanatory Guide to the Rules and Recommendations of the* Manual of Archival Description (Aldershot, 1989) [British Library R & D Report 5965], p. 13.
- 23 Heather MacNeil explores this contextual relationship extensively in her paper, "The Context is All: Describing a Fonds and its Parts in Accordance with the Rules for Archival Description," Treatment of the Archival Fonds: Theory, Method, and Practice (Ottawa, 1992).
- 24 It should be recognized that most, if not all, of the problems regarding the fonds which Cook's paper addresses, are problems that archivists have in arranging the material, not describing it. These problems with arrangement have been naturally shifted down the archival processing sequence to description, because in description one can no longer avoid the problem. Description makes it quite clear what decisions have been made during arrangement, so it is only natural to blame the lack of consistency in and procedure of description for the problems. Of course, the recognition of the locus of the problems does not solve them. Solutions have to be found. See in particular the theoretical discussion of the fonds according to RAD in Heather MacNeil's paper, ibid.
- 25 The definition of **provenance** in the glossary of *RAD* is, "The person(s) or office(s) of origin of records, i.e., the person(s), family (families), or corporate body (bodies) that created and/or accumulated and used records in the course of that creator's activities or functions." Under the heading for **creator** the glossary refers to **provenance**. This definition of provenance is a crucial one, because it contains the kernel of the 'administrative procedure' for determining the boundaries of the fonds. Note also that I use 'agent', 'agency', 'government body', and 'corporate body' interchangeably throughout the discussion. This follows from the definition of corporate body in *RAD*, where the definition includes all of them.
- 26 Michael Cook and Margaret Procter, MAD User Guide, p. 13.
- 27 Steven Hensen, in APPM, rule 2.1B3, also supports latest name entry for corporate bodies that changed name over time, even though APPM does not deal with fonds or multilevel description. APPM nevertheless recognizes that the key to the control of the provenance of records lies with the main entry.
- 28 Louise Gagnon-Arguin, An Introduction to Authority Control for Archivists (Ottawa, 1989) and Elizabeth Black, Authority Control: A Manual for Archivists (Ottawa, 1992).
- 29 The reader is referred to the two works cited, ibid. For a much more detailed and thorough treatment of the subject see, for example, Robert H. Burger, Authority Work: The Creation, Use, Maintenance, and Evaluation of Authority Records and Files (Littleton, 1985).
- 30 In RAD, the rules dealing with the creation of the authorized form of a name are in Chapter 22, "Headings for Persons", Chapter 23, "Geographic Names", and Chapter 24, "Headings for Corporate Bodies". In

this delineation RAD follows AACR2, which has the same chapters on the same topics.

- 31 Accession records are administrative control records. They record the administrative transaction of taking archival material into custody. Units of material which arrive as an accession at the door of a repository are not necessarily identical to the units in which that material will be arranged once it has gone through the arrangement process. Therefore, the unit of description may be entirely different from the unit (or units) in which the material arrived at the repository as an accession or accessions.
- 32 The inventory of the Canadian Historical Association (MG 28/14) and the Association of Canadian Archivists (MG 28/1340) were studied in order to obtain the examples discussed. Because the inventory predates *RAD*, titles and other descriptive details had to be modified.
- 33 Note that no *see also* references are made from the Association to the heading for the Executive Committee or vice versa. Although *RAD* rules do not prevent making a cross-reference to an administrative subordinate body, it is not necessary to do so in this case because the heading of the subordinate body already includes the name of the body to which it reports.
- 34 This example also illustrates a fundamental difference between the Canadian approach in RAD and the American approach in APPM. The Canadian rules demand the linking of the descriptive records in order to preserve the documentary hierarchy by having to apply multilevel description (Chapter 11); APPM does not. APPM recognizes archival descriptive structures in its introduction, but does not supply rules for handling and/or preserving these structures. What would happen if APPM were followed can be imagined by removing, from Figure 5, the solid lines between the boxes which represent the links between the descriptions of archival material (between the fonds and its series, the series and its subseries, the files and its items, etc.). The result would be independent descriptions without the sense of level of description, each entered under the latest or most recent name (see APPM rules 2.1B2 and 2.1B3), linked to their respective authority records. One would have to depend entirely on the authority system in order to find out whether two units of description which have the same provenance heading belong to the same fonds. Only for the relatively rare cases where the units described happen to have the latest name of the creator, etc., in common, would a common provenance be identifiable. Having the same name for a heading does indeed mean common provenance, but common provenance does not imply the same name. APPM provides for the former, but not the latter; *RAD* provides for both.
- 35 I am indebted to Terry Eastwood for the recognition of the two types of hierarchies and the relationship between them. He mentions the two types in his analysis of the archival function of arrangement in his paper, "Putting the Parts of the Whole Together: A Systematic Approach to Access to Information from the Archives of Contemporary Administration," given at the Seminar on Arrangement and Description of Archives, Koblenz, Germany, 29 September to 2 October 1990.
- 36 This obviously requires that the repositories in question use the same authority, and necessitates the use of a common authority system and/or file. It points to the importance of a national strategy on authorities, use of the rules for authority record creation and cooperation in the maintenance, use and dissemination of authority records.
- 37 In an authority system all names are unique. Such a generic name as "Forest-Fire Prevention Unit," if this were the name of the unit in question, would become unique when the rules in *RAD* were applied in order to create the authorized form of the name.
- 38 Otherwise, whatever will be determined as equivalent to the functions that are associated with provenance for electronic records.
- 39 For a personal fonds the name is always the same.
- 40 An example of the application of a systematized fonds structure in an automated environment, using the Anglo-American Cataloguing Rules, namely the MARC format and its implementation on UTLAS, is described in Hugo L. P. Stibbe, "UTLAS and Automated Control: the National Map Collection, Public Archives of Canada," Archives, Automation & Access: Proceedings of an Interdisciplinary Conference at the University of Victoria, Victoria, BC 1-2 March 1986, pp. 61-84. Another version of this paper was given at the 1985 IFLA General Conference. Chicago, under the title "International Bibliographic Standards in Cartographic Archives: the National Map Collection, Public Archives of Canada Experience." (This paper was published in INSPEL 20, no. 1 [1986], pp. 5-33.)