Appraisal Methodology: Macro-Appraisal and Functional Analysis Part B: Guidelines for Performing an Archival Appraisal on Government Records

National Archives of Canada
Government Records Branch

Appraisal Methodology: Macro-Appraisal and Functional Analysis

Part B: Guidelines for Performing an Archival Appraisal on Government Records

Approved.

17 Oct 2001

Prepared by Terry Cook, Summer 2000
Reviewed and Edited by Richard Brown and Judith Roberts-Moore
with the Government Records Disposition Program Review Committee:
Angèle Alain, Catherine Bailey, Brian Beaven, Gabrielle Blais, Normand Fortier,
Yvette Hackett, Andrew Horrall, Candace Loewen, Paul Marsden,
Jean-Stéphen Piché, Sheila Powell, Paul Sabourin, Summer 2001

§ Registry File 6243 - [illegible]

Appraisal Methodology: Macro-Appraisal and Functional Analysis
Part B: Guidelines for Performing an Archival Appraisal on Government Records

Purpose

The first part of the *Appraisal Methodology* dealt with theory and concepts; this part provides guidelines for archivists to follow in order to conduct individual appraisal projects. The intention of these guidelines is not to provide archivists with a prescriptive appraisal template which must be rigidly adhered to in all cases, but rather to provide the elements of an appropriate appraisal research agenda and the basic methodological steps which can be utilized to make records disposition decisions within the NA context of macro-appraisal.

Applying the Appraisal Methodology

Research is the key element in the application of the appraisal methodology. Archivists should first familiarize themselves with the methodology and criteria contained in the *Government-Wide Plan*, which is an example of macro-appraisal conceived in its broadest sense. When negotiating the *Multi-Year Disposition Plan*, archivists should conduct a further macro-appraisal of the institution itself to identify the appropriate targets according to their perceived importance from an archival perspective. Archivists should also review past appraisal decisions and precedents for the other functions of the specific institution as well as similar functions undertaken by other government institutions by consulting the information available in the *Records Disposition Authority Control System* (*RDACS*) and related internal disposition registry files. In addition, archivists need to be familiar with the government-wide appraisal decisions made in the *Multi-Institutional Disposition Authorities* (*MIDA*).

With this background knowledge, archivists can apply the appraisal methodology by:

- conducting research to decide the complexity and relative importance of the functions, sub-functions, sub-sub functions, programs, and activities within the comprehensive functional *MYDP* target and submission (see next section);

- conducting research to identify the structural site (the *Offices of Primary Interest*) where the most important functions take place;

- conducting research to understand the nature and best location to illustrate the impact of the function or program on Canadians and the public's interaction with the function or program;

- forming a macro-appraisal hypothesis about the relative importance of the function or program, where the critical records are located, and which and how many records would provide sufficient archival documentation;

- testing or confirming the hypothesis by reviewing select records created by the function or program being assessed;
- analyzing the value of other records outside the program covered by the submission where duplication is suspected, or where information systems cross functional or structural boundaries;
- identifying additional records that may have legal, intrinsic, or informational value; and
- identifying any factors (technical, cost, legal impediments, etc.) that may negatively affect the choices being made, and subsequently either adjusting the appraisal decision or crafting terms and conditions for transfer or monitoring.

This research agenda and methodology represents, in effect, the complete records disposition business process normally required to provide archival records preservation recommendations to the National Archivist for final approval. The Archival Appraisal Report has been designed to both reflect this business process and to serve as an accountability and audit trail in the same transparent way that other business processes of government are conducted. For further guidance on the presentation of the appraisal research and decision-making processes, see Richard Brown (with Yvette Hackett and Marc Cockburn), ***Drafting an Appraisal Report for the Disposition of Government Records*** (Government Records Branch, March 2001).

Functional Appraisal Criteria and Forming the Macro-Appraisal Hypothesis

The research pertinent to and the formation of appraisal hypotheses occurs at the stage of appraising an institutional program identified in an *MYDP*. At this stage, macro-appraisal methodology requires an assessment of the importance and scope of the legislation, mandates, and policies relevant to the institution as a whole. Thereafter, archivists are asked to evaluate its functions, activities and programs as well as their impact on government and the public. The basic objective is to investigate the information universe of the records creator to identify the recorded information in all media: its nature, structure, characteristics, creation-process, and, especially, interrelationships with other information/records creators and users.

This institution level research normally occurs before an effort to assess the archival value of any records is attempted. However, an examination of records is often necessary to obtain full contextual information about the institution. It is often the case that information provided by the institution about its programs and activities is not comprehensive, and archivists must rely upon details obtained from records in order to understand how the institution has organized itself to deliver programs and services, and how its functions and business processes operate. Investigating records to discern contextual information about the records creator is *not* the same as appraising them for archival value. Part of this creator research also involves the consultation of other published and near-print sources, and interviews with departmental staff, especially at senior policy and working operational levels. Supporting information can also be obtained by research about departmental functions, operational planning frameworks, business process re-engineering studies and projects, business area analyses, computer system design reports and work-flow analysis.

Typically, macro-appraisal methodology moves in a top-down fashion from the operational purpose or broad societal function of the records creator, through various administrative structures and business processes designed to implement that function (and numerous sub-functions), to information systems created to produce and organize records that permit those processes to work, and finally to the records which document all the foregoing as well as the impact of function and structure on the government and public and vice versa. The methodology emphasizes the archival value of the location or site (*Office of Primary Interest*) of records creation rather than the value of the records at this stage. Its purpose is to assess the capacity of branches/ sectors/ offices to create records of value in a global way rather than dealing directly, one by one, with extensive records in different physical formats.

Upon completion of the macro-appraisal, the archivist forms a set of hypotheses regarding the appraisal work lying ahead. The archivist should consider all or some of the following functional criteria where these have not already been discerned at the stage of *MYDP* research and planning, or in *MIDA* work:

- Assess the extent of applicable legislation, regulations and policies as well as their complexity, assigned to various parts of the function. Generally speaking, the more complex pieces of legislation and formal policies relating to a function, the greater its importance, or *value*;

- Assess the degree of influence of the function or program on the rest of the institution, on the rest of government, and on either all of Canadian society or significant sectors of it. This influence can be judged by the prominence accorded to it in annual reports, parliamentary debates, profile of cabinet minister, news and other media reports, special commissions or tribunals struck to investigate the function, existence of any court appeals concerning activities within the function, etc.;

- Assess the numbers of staff, sub-offices or units and the size of budget of each to gauge the breadth and complexity of a function via its structural organization and expenditure influence. (This factor is relative: the Privy Council Office has few staff, no sub-offices, and a small direct budget; the Employment Insurance function employs thousands in hundreds of offices dispensing billions of dollars.) Functional comparisons must be conducted between similar programs or within the same macro-functional *clusters* to avoid comparing "apples and oranges";

- Assess whether semi-independent or wholly dependent boards, tribunals, commissions, or councils normally report to or through the functional area, and the nature of their functional interrelationship. Usually, the more dependent the agency, the greater the weight or impact of the function;

- Assess the functional leadership of the whole targeted branch or sector within the context of its larger institutional functional cluster (as learned from earlier *MYDP* research) and thus its seniority in a cluster of intra-and inter-agency activities. This amounts to a structural hierarchy for functions, where one unit may be senior in a given field and has a broader and deeper impact on government or society than its subsidiary, parallel, or even parent units. Afterwards, evaluate the relative importance of all these sub-units to the functional whole;

- Assess the functional mandates for all the constituent administrative units within the larger branch or sector that is the appraisal functional target, now and over time. (Does each unit actively undertake all or most aspects of a given activity, or does it only concentrate on a small aspect of the broader function?);

- Assess the degree and nature of the functional autonomy of regional and field offices and thus the likelihood of significant pockets of unique records existing in such non-headquarters sites (control over budget, independent or locally modified records systems, loose reporting relationships to HQ are some indicators);

- Trace the work processes, including the flow of data from regional and field into headquarters systems, between headquarters' systems and internal organizational units, and between headquarters and other government institutions. Identify the key players/creators in these work flows;

- Understand the nature of the program delivery activities of all units within the branch or sector, when they actually interact with other government clients and more importantly the public. Discern whether these program delivery products at the case or transactional level are primarily of a repetitive, homogeneous nature or of a specialized, individualized character;

- Assess the interaction of the public with the functional program. This will be essential for later appraisal of hard-copy and electronic case files. (Do the policies, procedures, and business processes allow the public's view to be recorded directly rather than indirectly? In other words, do they reflect their views and opinions rather than merely the rigid application of established procedures or their unquestioned acceptance?);

- Identify the existence of specialized one-of-a-kind research institutes, stations, or laboratories producing unique records or observational data and thus requiring individual attention;

- Assess the degree to which the "official line" revealed through annual reports, mandate statements, policy, senior management files and manuals becomes the operational reality for client departments and the public. (Is there evidence of significant variations between the original goals and the actual results or daily operations of a given function, policy, program, or activity?)

The variances outlined above may come from individuals, businesses, lobby groups, political groups, other levels of government and so forth. But, it is important to identify other narratives existing within the records so that archivists may leave for posterity competing "truths" about the past for researchers to weigh rather than just preserving the dominant or "winning" voices.

Functional analysis is a practical means to gauge the complexity, nature, and impact of the targeted function on the operations of government, on other functions, and on Canadian society. In formulating the appraisal hypothesis, the archivist links the functional context to structure (the *Office of Primary Interest*) in order to establish targets for documentation and identify entities which have control over records and the authority to dispose of them. The result of this functional analysis also guides the order in which the remaining appraisal takes place. Obviously the records of functions (sub-functions, programs, activities) judged to be more important should be investigated first since that often allows records of subsidiary functions to be eliminated entirely or be acquired on a much reduced scale.

Testing the Macro-Appraisal Hypothesis

Once the appraisal hypothesis is formulated, the actual appraisal of the records can begin. The hypothesis is tested, and either modified or confirmed. This stage should proceed as comprehensively as possible. Ideally, the archivist examines all records in all media at the same time in a logical order; however, it is recognized that this is not always possible in every instance.

If appraising records in an institution for the first time, it is logical for the archivist to start with a review of the policy records, then the operational records and finally regional or field office records. If policy and other operational records have already been the object of a previous appraisal, the archivist should be familiar with the decisions and reasons behind them before proceeding to the present object of appraisal.

Testing the hypothesis(es) typically requires the investigation of actual records by spot-checking different categories. Archivists cannot possibly examine all the records but they can review examples, especially for those categories that raise questions about their value as archival documents. The archivist will normally be searching for variance in the actual records from the knowledge gained through macro-appraisal research. The greater the importance of the function, the more likely the archivist will preserve records documenting that functional variance.

To accomplish a comprehensive records review, the appraisal methodology recommends the following nine phases. Ideally the archivist will proceed from one phase to another to avoid duplication of research and appraisal work. However, it is recognized that some phases may occur concurrently, especially if investigation uncovers new information on the function or the way information is recorded. Of course, depending upon extant knowledge and project complexity, it may be not necessary to undertake every step. Unless otherwise specified, the following phases apply in the first instance to headquarters only.

Documenting the Functional Program

1. Relevant published and near-published information, including relevant legislation, regulations, policies, organization charts, annual reports and specialized studies, estimates and budgets, operational planning frameworks and central agency agreements should normally be researched first, with special focus on the functional-structural area covered by the submission. It may be that such sources, for some functions, are "sufficient evidence" and no other documentation need be acquired. The decision to acquire this documentation may permit all or more of the records in some of the following categories to be destroyed as duplicate or feeder documentation.

2. Policy and related subject files in all physical formats relevant to the functional program covered by the submission should be appraised next, first, from the Minister's Office, then the Deputy Minister or CEO's offices, then the senior policy and program coordination units on down to the larger operational areas. This includes internal research studies, "grey literature", reports which analyze policies and programs, policy manuals, special reference collections, briefing books, and automated office systems.

   This phase also includes learning (or confirming), from headquarters staff and the records, the importance and functional autonomy of regional and field activity relating to the program at the policy and major operational areas, but not concerning *routine* program administration or delivery. "Sufficient evidence" of the program may be obtained from one or two of these offices, e.g. the CEO or the policy analysis unit.

3. Central agency sources of documentation found in Treasury Board, Public Service Commission, Auditor General, Comptroller General, Finance, Justice, Privy Council Office, Statistics Canada, Public Works, etc., in the form of budgets, audits, parliamentary inquiries, commission and investigatory reports, statistical reports and surveys, program planning frameworks, and so on should be investigated. These sources often contain valuable aggregated or summary information from the targeted organization's records. If the information is centralized, it should be acquired from the relevant central agency.

4. Records of relevant parent or partner agencies within the functional cluster may duplicate some or all information in subject or case files. Duplication must be avoided as far as possible. Governmental functions are increasingly inter-institutional and even inter-jurisdictional (provincial and municipal involvement in federal programs, and records). For example, there were subject and case level records for the home insulation programs in four

federal departments. Appraised in isolation, there would probably have been four archival accessions rather than one.

American archivists have termed this the *cluster concept*. If there are several interrelated series of records -- military records involving individuals might include the personnel file, court martial files, hospital records, burial files, awards and medals files, and so on -- these should be appraised together to identify overlapping information. A better appraisal decision will result. The same clustering occurs in immigration and certain court records, and doubtless elsewhere. Ideally, it will be identified in the *MYDP* before the submission is even crafted, but if not, the identification of duplication or, really, sharing of functions and activities, and therefore of records, is an essential step in appraisal.

Program Delivery and Public Impact

5. Moving now from policy and subject operational records to case records, the first step is to consider the existence of all *essential case file series*, to ensure that no unnecessary duplication of general demographic information occurs between the records covered by the submission and the type of essential records normally targeted for preservation by many foreign countries. Several ICA countries have identified essential records as belonging in four categories:

   a) those proving civil status (births, deaths, marriages, divorce, adoption, citizenship, naturalization, and aboriginal status);
   b) land registry records;
   c) certain legal records (wills, judgements, and decisions of many types of regulatory and semi-judicial tribunals and boards and agencies as well as courts); and
   d) the national census (and related survey material).

   The taxation records are an essential fifth source, as they also permit the destruction of vast quantities of feeder data and their supporting paper case files (for example, all regular case and data files of Employment Insurance, Canada Pension Plan, other government pensions, scholarships, grants, family allowance, etc. have been approved for destruction on this basis). Some categories are not under federal jurisdiction, but for those that are, it is recommended that the National Archives of Canada acquire these taxation records without qualification. These records allow for the identity and status of Canadians now and their descendants over time, protect their rights and privileges as citizens, and provide a demographic profile of the nation, its people and organizations against which to judge program impact and variance.

6. Related electronic data, not operational or administrative program files in automated office systems, should be assessed next, especially program-delivery and strategic program-analysis systems. Electronic records in aggregate form often reveal the relevant demographic and statistical patterns from which variation may occur at the case file level. (Often input and

output material is included on case files, thus rendering them less useful if the electronic record is protected.) Archivists should also investigate micro-data information as well as special samples or longitudinal data-files built by the agency from its own micro-data to perform policy and program analysis.

The archivist at this stage also learns (or confirms) the role of regional and field data systems, and their relationship and data sharing with the headquarters' systems. This information is found in corporate data, meta-data models, information plans, operational planning frameworks, system documentation, and in talking to informatics managers and key system users, and ideally should already be in the Information Analysis Report.

7. The agency's own user procedure and system's operating manuals should be assessed next. These are often a better source for the evidential "process" or "procedural" information than case files.

8. The case file series is appraised next as a whole for any possible additional collective value. If what is valuable in the case files can be documented following phases1 to 7, and especially phases 5-7, it should be documented, and the case files should not be preserved as a whole, save for the consideration of phase 9.

   However, where there is evidence of significant variance from the program, then case files are often the best way to document this other business narrative. The Archival Appraisal Report must indicate clearly why case files are being preserved, and the rationale for the chosen methodology (e.g., keep all the series where volume is low; take an example; undertake a statistical sample; or make a selection using qualitative criteria.).

9. Finally, the case file series as a whole is appraised to identify files within the series as exceptions for their specific informational value or for unusual, controversial, or precedent-setting cases.

Headquarters and Regional Records

Phases 1 to 7 usually occur at headquarters before select regional and field offices are visited. Except for specialized or unique regional activity, few of these regional records are retained unless they document significant activity or dimensions of Canadian society not available at headquarters or indicate significant differences from the program. Thus, the headquarters appraisal should be completed, or nearly so, before any regional work is undertaken, unless the regional entity is an Office of Primary Interest for particular functions.

Obviously, archivists cannot visit all regional and field offices for a large sector with an extensive functional network across the country. It is recommended that if the functional analysis indicates that regional and/or field offices may create records having archival value, one "typical" regional office and perhaps two field offices should be visited.

Visual and Sound Media

Visual and sound media should first be appraised within the functional context outlined in this *Appraisal Methodology*. Photographs, films or maps, for example, are not just visual subject content of a person, place, or event; they are part of government functions and programs. They support the conduct of government business. For some functions, such as communicating government programs to the public, audio-visual media may well be the most succinct reflection of the function or activity, and thus the best archival record to provide succinct and sufficient evidence of a function. As noted, appraisal criteria for visual and sound media are being developed to complement this *Appraisal Methodology*. When this work is complete, media considerations can be better integrated into the appraisal methodology for government records.

General Appraisal Criteria

After completing the process outlined in this document, the archivist considers the following factors at the "record" (usually series) level. These micro-appraisal factors are those traditionally enunciated in the archival appraisal literature:

- **Completeness and comprehensiveness of the series.** The more complete, and the more comprehensive a series is for the given function or program, including successful as well as unsuccessful cases, regional as well as headquarters input, the greater its value.

- **Authenticity.** The records must have been created in the normal course of business under established procedures, and clearly linked by provenance to their creator and originating or successor record-keeping system. There must be assurance the records are genuine, and unaltered, or that any alterations have left a clear audit trail.

- **Uniqueness.** Is the record one of a kind or is the content, context and structure of the record duplicated in whole or in part? Is significant information tabulated, summarized, or abstracted in policy and subject files, data bases, internal studies, grey literature, or formal publications? If the record or information is unique, does it merely confirm impressions already recorded elsewhere? Does it supplement what is known, or does it provide a fresh body of data? If the latter, its value increases.

- **Relationship to other records.** If the records complement, supplement, or otherwise extend the understanding or significance of other records in NA custody, their value increases. Similarly, the potential to link records with other record types increases their value. This notion of complementarity extends under "total archives" to private-sector holdings of the NA, and to holdings of other archives in the Canadian archival community.

- **Dates and time-span.** The earlier the date of the series, especially for pre-1946 records when other sources were less available, the more value the series may have. Similarly, for comparative and longitudinal studies, the longer period of time covered by a series of records, the greater their value.

- **Extent.** Obviously the overall existing volume of the series, and the annual rate of accumulation, must be considered. The greater the extent of records on a function or activity, the less value the majority of these records possess.

- **Usability.** The records must be legible, coherent, accompanied by relevant supporting documentation (or meta-data), and arranged or indexed in a manner rendering them usable by researchers, or have the potential to be made so. Value increases if the records are usable in this way.

- **Manipulability.** For electronic records, are they readily manipulated, aggregated, severable, linkable, with full contextual documentation (meta-data) available? Value increases if the records are usable in this way.

- **Physical condition of the records.** Records in poor physical condition directly affect the long-term conservation costs of the National Archives and the potential of the records for public consultation or other uses. The physical status of records does not determine their archival value from an intellectual perspective, but it does represent a significant factor which needs to be articulated in the context of a recommendation for the National Archives to acquire them. Will the National Archives be required to expend major resources in order to conserve the records and make them available for public use? Considering the resource levels of the National Archives, does the archival value of the records justify their acquisition and the resulting costs of their conservation?

Additional Appraisal Considerations

In the course of conducting the appraisal methodology outlined above, archivists may encounter records that do not fit the definitions or the methodology for determining archival value as described in this document. They do not reflect how government functions in a significant way, and they may not be from an *Office of Primary Interest*, but rather from an *Office of Collateral Interest* or in some research or special reference unit. These records may even be at the file or item or small collection level.

Nevertheless, as a qualification (documented in the Archival Appraisal Report) to the results of the macro-appraisal approach, such records may be considered to have archival value and thus acquired.

A very strong argument must be made in their favour, and the "General Appraisal Criteria" of the previous section, for informational value in particular, must be strictly and convincingly applied.

Retention of Records for Legal Requirements

If the Government of Canada has formal legal requirements to keep records on an on-going or permanent basis, the NA may acquire the records on behalf of government since it has the environmentally controlled storage facilities and preservation expertise even if such records do not fall within the macro-appraisal determination of archival value. Certain land records, such as property leases in national parks or First Nations reserves, are obvious examples (if they are not already captured in the "essential records category"). Before considering disaggregated case files, archivists should look for summaries, extracts, and policy files. For example, the National Capital Commission once expropriated land from the front yards of 1000 homeowners to widen a road. This action generated over 100 metres of case files, but also one thick aggregated file which summarized each homeowner's situation and compensation paid. Even if the agency insisted on long-term legal retention of documentation, the National Archives would normally acquire only the aggregated file, not all the case records. "Sufficient evidence" and not all possible evidence should always be the watchword.

Archivists must stringently apply the "General Appraisal Criteria" to determine if a legal requirement exists for the retention of records by the NA. Records may be used in court someday (or already have been) because the government may be sued over issues documented in the records. It may be good business practice to retain these records for potential legal proceedings; however, this is not the same as a requirement embedded in legislation for retention by the National Archives. These circumstances relate to *records retention periods* and to the accountabilities of government institutions within the context of their business needs analysis. Drug testing and drug approval case files, or agricultural pesticide and fertilizer research records, are examples of instances where the records do not have archival value but may have long-term business or other values to government institutions. The evidential value of records (which all records have to some degree) for the purposes of providing archival documentation of government business is not the same as legal evidence required in court proceedings. A legal requirement for permanent retention, as opposed to an archival requirement, means the record has a particular legal status under a federal statute and must be retained indefinitely.

Retention of Records of Intrinsic Value

A tiny fraction of government records have aesthetic or high monetary value, although their information content is duplicated elsewhere, or relatively unimportant. Criteria for such intrinsic values need to be more clearly articulated. Government records appraised as having intrinsic value should be declared archival and retained by the National Archives. Original Indian Treaties, sealed proclamations or hand-painted scrolls are textual examples.

Retention of Records for Informational Value

This is the most difficult qualification of macro-appraisal, since all records by definition have some informational value to someone, and every record has some potential research value to some discipline or interest group or individual, now or in the future. In the context of the government records disposition program, informational value is very narrowly defined. It is ascribed to records containing information on people, events, places, ideas, or social phenomena. The records must be created, collected or maintained *exclusively* by the federal government *and,* they must have *national significance.* Records of national significance substantially enrich our understanding about Canada's history, society, culture, ideas, and people at the level of nation-wide prominence or major national activity.

Sometimes the Government of Canada is in a position to create, collect or maintain a body of unique records containing rich information not available elsewhere. Examples might be shipwreck registers, patents of inventions, hydrographic charts, wildlife observational data, Canadian Olympic athletes biographical files, etc. Certain collections of ephemera may also qualify. The Archival Appraisal Report must convincingly demonstrate that the information meets the definition of *national significance.* In addition, the "General Appraisal Criteria" must be applied. Using these criteria, the archivist justifies the preservation of the records for their *informational value,* rather than as *sufficient evidence* to document government's business functions.

Documenting Appraisal Conclusions and the Records Preservation Context

Throughout the research and analysis outlined in the *Appraisal Methodology* above, it is important for archivists to consider their recommendations within the complete context of the records selection and records preservation process, including previous appraisal decisions and actual transfers of records to the National Archives by government institutions. Links should also be established between appraisal rationale and the finding aids created by the NA to provide access to archival records resulting from the application of records disposition authorities. Archival appraisal and preservation decisions form an essential part of the audit trail which informs the Canadian public about the surviving archival record of government, specifically:

- what the National Archives has decided to preserve;
- what the public can expect to find in the current archival records holdings;
- when records can be expected to be added to the holdings, etc.

Consequently, as final methodological step, archivists provide a full profile of the appraisal and records preservation context to support their recommendations for the approval of the National Archivist. Normally this profile, including linkages to other contextual information maintained by the National Archives is described in the Archival Appraisal Report. The companion document, *Drafting an Archival Appraisal Report for the Disposition of Government Records*, provides guidelines for writing this report.

Selected Bibliography
(Publications Only)

Appraisal Case Studies Published by Program Staff:

Catherine Bailey, "From the Top Down: The Practice of Macro-Appraisal," *Archivaria* 43 (Spring 1997), pp. 89-128.

Brian P. N. Beaven, "Macro-Appraisal: From Theory to Practice," *Archivaria* 48 (Fall 1999), pp. 154-198.

Jim Burant, "Ephemera, Archives, and Another View of History," *Archivaria* 40 (Fall 1995), pp. 189-198.

Eldon Frost, "A Weak Link in the Chain: Records Scheduling as a Source of Archival Acquisition," *Archivaria* 33 (Winter 1991-92).

Candace Loewen, "From Human Neglect to Planetary Survival: New Approaches to the Appraisal of Environmental Records," *Archivaria* 33 (Winter 1991-92), pp. 87-103.

Dan Moore, "Too Many Records, Too Little Time, Too Few Resources: The Need for a Researched Based Planned Approach to the Acquisition of Government Records," *La mission de L'archiviste dans la société*, GIRA (groupe interdisciplinaire de recherche en archivistique), (Montreal, 1994).

Jean-Stéphen Piché and Sheila Powell, "Counting Archives In: The Appraisal of the 1991 Census of Canada," *Archivaria* 45 (Spring 1998), pp. 27-43.

Jean-Stéphen Piché,"Macro-Appraisal and Duplication of Information: Federal Real Property Management Records," *Archivaria* 39 (Spring 1995), pp. 39-50.

Sheila Powell, "Archival Reappraisal: The Immigration Case Files," *Archivaria* 33 (Winter 1991-92), pp. 104-116.

Ellen Scheinberg, "Case File Theory: Does It Work in Practice?," *Archivaria* 38 (Fall 1994), pp. 45-60.

Bruce Wilson, "Systematic Appraisal of the Records of the Government of Canada at the National Archives of Canada," *Archivaria* 38 (Fall 1994), pp. 218-231.