

For History's Sake: The Work of the Canadian Institute for Historical Microreproductions

by ERNEST B. INGLES

The origins of the Canadian Institute for Historical Microreproductions (CIHM) have been chronicled elsewhere.¹ But, with the exception of a small number of archival repositories with which the Institute has worked over the past several years, little is known within the archival community about the Institute's purpose, the terms of its charter, its processes and procedures, and the nature and availability of its publications. This article will explain these facets of the Institute's mandate and seek to enlist the support of Canadian archives in the Institute's work.

The Institute is an independent, non-profit corporation. It is governed by a board of directors composed of distinguished Canadian scholars, librarians, and archivists. The corporation's objectives are to ensure the preservation in Canada and elsewhere of written material by Canadians or about Canada or Canadians; to collect, store, and distribute such material in microreproduction; to make such material already in the country more easily available to all Canadians, and specifically to facilitate access to such material by the compiling of appropriate catalogues; to make such material not now in Canada available to Canadian libraries and archives; to make such material that is rare or scarce more widely available; and to bring together fragmented collections of such material.

In the three years preceding its establishment, two separate appeals were made for such an agency. The first was by Professor Thomas H.B. Symons in the Report of the Commission on Canadian Studies, entitled *To Know Ourselves* (Association of Universities and Colleges of Canada, Ottawa, 1975). Among his many recommendations and observations, Symons noted the need to return, in some form, printed resources stored in foreign repositories, and to restore and to preserve the Canadian print heritage.

A second and more direct call was made by the Canada Council Consultative Group on University Research Libraries. The Council convened this group in 1977 with a mandate to identify the most pressing problems facing research libraries. In particular the Group was asked to address the question of strengthening collections in the humanities and the social sciences. A major concern identified in the Group's

1 Parts of this article have appeared in "Bibliography for Canadian Studies: Present Trends and Future Needs — Bibliographie pour les Etudes Canadiennes : Situation actuelle et besoins futurs," *Canadian Issues* 4 (1982), pp. 137-46; and *Canadian Library Journal* 40 (June 1983), pp. 134-40.

report was that of supporting retrospective Canadian studies. It drew attention to the weakness in library holdings of seventeenth-, eighteenth-, nineteenth-, and twentieth-century printed materials by Canadians or about Canada and Canadians. The Group forcefully warned that even in those regions of the country boasting rich collections of Canadiana, long-term access could not be guaranteed because the materials were rapidly deteriorating through natural aging processes and through heavy use.

In reporting its recommendations, the Group under Chairperson Dr. Hans Möller, commented: "One striking and, to us, important characteristic of research collections in universities across the country which immediately came to light was their weakness in Canadian materials. Collections of Canadiana are poor at most libraries and incomplete overall. A great deal of Canadiana is not preserved anywhere within the country."² Discussing conservation, the report stated: "Not only is it difficult to obtain access to Canadiana, but books are rapidly deteriorating.... We are faced with the alarming prospect that students in future generations will have very little early Canadian material to study, unless some large and constructive measures are taken immediately."³

The Canada Council acted quickly and decisively to attack the problems identified by the Consultative Group. On 17 January 1978, the Council created the Canadian Institute for Historical Microreproductions.

THE PRESERVATION PROBLEM

The Consultative Group's concern for the preservation of printed Canadiana was not without precedent, nor was it without a contemporary context. Concern about the permanence of books and other papers was as old as the paper-making craft itself. This conservation problem has been the *bête noire* of the archival and library professions for over a century. Today both face the task of preserving millions of volumes of printed documents on paper. Much of this paper is now excessively acidic. The source of this acidity was the alum-rosin sizing introduced into the paper-manufacturing process in the middle of the nineteenth century. But, if this factor alone was not enough, the deleterious effects of the acid have been aggravated by air pollutants, inadequately controlled environmental levels in many of our repositories, and the often times innocent, yet nonetheless damaging, policies and processes of librarians, curators, and researchers in relation to the materials entrusted to their care.

While the preservation of printed materials has been a matter of long-standing concern, it was not until the late 1950s that scientific attempts were made to examine the extent and rate of paper decay. It was left to William J. Barrow at his Richmond, Virginia, laboratory to identify, through empirical study, the problem and to

2 *University Research Libraries: Report of the Consultative Group on University Research Libraries* (Ottawa, 1978), p. 1.

3 *Ibid.*, p. 25.

44422

CONSTITUTION OF THE PETERBORO MECHANICS' INSTITUTE.

ADOPTED FEBRUARY, 1843.

OBJECT OF THE INSTITUTE.

Art. This Association shall be called the "*Peterboro Mechanics' Institute*."

2d. Its object shall be to instruct its members in the principles of the Arts and in the various branches of Science and useful knowledge.

3d. The establishment of a *Lecturing* consisting of *Works on the Arts and Sciences* and general *Literature*, a *Museum* of Natural History, *Mineralogy*, &c. &c. and *Lectures* from time to time on various subjects in the Institute may direct.

INSTITUTE HOW CONSTITUTED.

4th. The Institute shall consist of an unlimited number of Members who shall pay an Admission Fee of 2s. 6d. each and an annual subscription of 5s. to be paid quarterly or yearly in advance and who shall sign a Declaration to the following effect, viz.—"I do hereby promise to observe and keep all the Laws and regulations of the Peterboro Mechanics' Institute and to promote its welfare to the best of my ability."

5th. Any person paying the sum of two pounds ten shillings currency, or presenting a donation of Books or Philosophical Apparatus to the amount of 25s may become a member for life.

OFFICERS OF THE INSTITUTE.

6th. The officers of the Institute shall consist of a President, Vice President, Treasurer, Secretary, and six Committee men, who together shall form a Committee of Management, to whom the general Government of the Institute shall be committed—six of whom shall form a Quorum.

7th. All Officers must be Members of the Institute, shall be elected by Ballot, and no person shall be considered elected unless he receive a majority of the votes present.

8th. The annual Election of Officers and Committee men shall take place on the first Thursday of January in every year—and *fourteen* days Public Notice of such election shall be given by the Secretary—and the General Meetings of the Institute shall be held on the first Thursdays in January, April, July and October in each year and the Meeting in January to be considered as the Annual Meeting.

ADMISSION OF MEMBERS AND THEIR CONTRIBUTIONS.

9th. The Members of the Institute shall be divided into two classes, 1st *Ordinary*, consisting of those who reside in Peterboro and its immediate vicinity—2d *Corresponding*—in consist of those who reside at a distance. The Corresponding Members shall not pay any subscription, and whatever monies they may give towards the funds of the Institute shall be considered as donations, they shall have a right while in Peterboro, to attend the meetings of the Institute, but not to vote unless they have taken up their residence in the town of its immediate vicinity, in which case they shall be subject to the same Laws as Ordinary Members.

RULES AND REGULATIONS OF THE LIBRARY.

1st. The Library shall be open for the delivery and Exchange of Books every Monday evening from 8 to 9 o'clock.

2d. No Member shall be allowed to have more than one work in his possession at any one time.

3d. Members shall not be allowed to retain a Book in their possession longer than the time specified by the Label on the inside of the cover, without renewing the same, under the penalty of *One Penny* for each day it may be detained; but they may have it renewed by the Librarian if it has not been demanded by any other Member.

10th. Members shall be admitted by Ballot after the 23 day of February 1843, and on admission every ordinary member shall pay his subscription in advance and sign the Declaration before mentioned.

11th. After the 31 day of February 1843, every candidate for admission to the Institute must be nominated by two members in the following form, "We the undersigned members of the Peterboro Mechanics' Institute from our personal knowledge of _____ do hereby recommend him as a fit and proper person to become a member of the Peterboro Mechanics' Institute," and this form must be delivered to the Secretary that it may be filed for future reference.

12th. Every Member on paying his Subscription shall receive from the Secretary a copy of the Constitution and By-Laws of the Institute, and a *Card* which will entitle him to all the privileges and advantages of the Institute, for the period for which he has paid.

13th. No Member will be admitted to any of the rooms of the Institute without producing his *Card*. The Members Cards are personal and not transferable.

RECEIPTS AND EXPENDITURES.

14th. All monies received on account of the Institute shall be paid to the Secretary, and by him to the Treasurer.

15th. No money shall ever be paid on account of the Institute but by order of the Committee of management.

POWERS OF THE COMMITTEE OF MANAGEMENT.

16th. The Committee of Management shall have full power to amend the general *Licours* or *By-Laws*, in whatever manner they may deem most beneficial for the objects of the Institute.

17th. The Committee of Management shall have the power of fining or expelling any Member who may conduct himself improperly, but the person so fined or expelled shall have the right of appeal to the first regular meeting of the Institute.

18th. Special meetings of the Institute may be called by the President upon a requisition signed by a majority of the Committee of Management or any Ten of the Members.

19th. The Committee of Management shall have the power of making any By-Laws for their own Government, which may not be repugnant to the Constitution and also of making any regulations they may deem expedient for the admission of visitors.

20th. Notice of any proposed alteration in the Constitution or By-Laws of the Institute, must be given in writing to the Secretary and passed up in the Library for three months previous to the Annual Meeting, when such proposed alteration must have the support of three fourths of the Members present to authorize its adoption.

T. Messenger, Printer, Peterboro.

Records of the Civil and Provincial Secretaries, Upper Canada and Canada West, RG 5, C 1, vol. 113, file 6208 of 1843, page 44422, "Constitution of the Peterborough Mechanics' Institute," enclosed with a request for aid, 1843. Courtesy: Public Archives of Canada, C-16148.

develop workable and economical processes for retarding deterioration.⁴ In large part it also was Barrow's assertions in the period between 1957 and 1967 which provoked the conservation/preservation initiatives of the past decade.

With a grant from the Council on Library Resources and the Virginia State Library, Barrow undertook to study the "deterioration of modern book papers." His first report, made public in 1959, was based on tests conducted on "500 typical non-fiction books printed in the United States"⁵ from 1900 to 1959. His data were startling. By 1957, the papers used in those books published in the first decade of the century had lost 96 per cent of their strength; the papers from the period 1940-49 had lost 64 per cent of their strength.⁶ In both instances the decay was in proportion to the acid content of the papers. From these studies Barrow concluded that "if material which should be preserved indefinitely is going to pieces as rapidly as these figures indicate, it seems probable that most library books printed in the first half of the 20th century will be in an unusable condition in the next century."⁷

As startling was Barrow's assertion that 40 per cent of the books published during the first forty years of the twentieth century would be so deteriorated by 1983 that moderate use would make them unusable,⁸ and that 97 per cent of the titles had a useful life of fifty years or less.⁹ His studies came to the not surprising conclusion that materials published between 1850 and 1900 were in the final stages of deterioration. To round out the picture, subsequent studies have shown that books printed on rag paper manufactured before 1850, hitherto assumed to be stable, also record high acid levels, with resulting dramatic losses of strength.¹⁰

Various studies and evaluations of library collections have underlined the Barrow predictions. As early as 1962, in the wake of the first Barrow reports, the Association of Research Libraries, with funding from the Council on Library Resources, initiated a sampling study to assess the "magnitude of the paper-deterioration problem." The results of the study indicated that for nonserial titles (equalling three billion printed pages) listed in the National Union Catalogue, 60 per cent were printed on rapidly deteriorating paper.¹¹ In 1976 the Library of Congress in the United States estimated that "of 17,000,000 volumes in its collections, 6,000,000 (or 34 per cent) were either completely unusable or irreparably damaged due to advanced stages of deterioration."¹² In 1977 it was estimated that 11,500 man-years

4 Those interested in these developments should refer to Verner Clapp's "The Story of Permanent/Durable Bookpaper, 1115-1970." Clapp's synthesis is informative and will lead the curious to a collateral literature of interest to bibliographers, librarians, and archivists alike. See *Scholarly Publishing* 2 (January 1971), pp. 107-24; (April 1971), pp. 229-45; and (July 1971), pp. 353-67.

5 Randolph W. Church, ed., *Deterioration of Book Stock: Causes and Remedies: Two Studies on the Permanence of Book Paper*, Virginia State Library Publications No. 10, conducted by W.J. Barrow. (Richmond, 1959), p. 7.

6 *Ibid.*

7 *Ibid.*, p. 16.

8 Planning Conference for a National Preservation Program. *Proceedings* (Washington, D.C., 1976), p. 27.

9 *Ibid.*, p. 5.

10 *Ibid.*, p. 28.

11 Edwin E. William, "Magnitude of the Paper-Deterioration Problem as Measured by a National Union Catalog Sample," *College and Research Libraries* 23 (November 1962), pp. 499, 543.

12 M. Hillman, "A National Preservation Program for Library Materials in Canada," (Ottawa, 1980), p. 1.

of conservation work were required to restore the most needy volumes in the Library of Congress rare books division.¹³ On 21 June 1979, the Chairman of the Board of the French national library, the *Bibliothèque nationale*, announced:

At the present time, 90,000 volumes are in such a sorry state that they can scarcely be said to exist anymore; 7,000,000 pages of periodicals can no longer be consulted, while 36,000 maps, 375,000 prints, 300,000 photographs, 37,700 musical documents and 31,000 manuscripts are also in a highly critical condition.¹⁴

To these reports can be added a preservationist's report at Harvard's Widener Library stating that 50 to 60 per cent of Harvard's research collection will be unusable in twenty years.¹⁵ A recent evaluation of the collections of the New York Public Library, one of the world's largest and most renowned research libraries, indicates that 50 per cent of their collections are so badly deteriorated that they are unusable.¹⁶ Reports from Stanford University show that 26.5 per cent of their collections are in poor condition.¹⁷ Columbia University estimates that 30 per cent of its library collections require preservation treatment at a total cost of \$34 million.¹⁸

The situation in Canada mirrors that internationally, although statistics are not as readily available. In 1978, the late William Ready estimated that more than 150 years of conservation work by his staff of three conservators were needed to save the McMaster University rare book collections.¹⁹ A recent survey conducted by the National Library of Canada indicated that 61 per cent of Canadian libraries were able to spend less than 1 per cent of their acquisition budgets on conservation. This same study pointed to 2,000,000 items in the collections of these institutions which needed "expert restoration and repair if they are to survive."²⁰ (Since the Institute was established, the Consultative Group on Canadian Archives for the Social Sciences and Humanities Research Council of Canada found in their 1980 report, *Canadian Archives*, an equally desperate state of affairs for materials in archival institutions, a finding much reinforced by the submissions and report of the Federal Cultural Policy Review Committee in 1982).

On the basis of these realities, the Canada Council's Consultative Group on University Research Libraries expressed legitimate anxiety about whether many Canadian repositories could preserve their holdings, or even a significant part of their holdings, of pre-1950 printed materials much beyond the end of the century. The Institute was seen as a positive response to this situation.

13 P.W. Darling, "Preservation: A National Plan at Last?" *Library Journal*, (15 February 1977), p. 447.

14 Hillman, "National Preservation Program," p. 1.

15 Eric Strange, "From the Rags to Ruin," *Atlantic Monthly* 243 (June 1979), p. 90.

16 Planning Conference, *Proceedings*, p. 13.

17 "Preservation and Conservation of Library Material," *Outlook on Research Libraries*, (March 1980), p. 5.

18 Patricia Battin, "Research Libraries in the Network Environment: The Case for Cooperation," *Journal of Academic Librarianship*, (May 1980), p. 71.

19 William Ready, "Deterioration is Winning the Library Stakes," *Canadian Library Journal*, (June 1978), p. 205.

20 Joyce M. Banks, "Some Notes on Conservation in Canada," (Ottawa, National Library of Canada, 1979: Mimeographed).

The use of microfilm as a panacea for the preservation and dissemination of rare or endangered printed or manuscript materials had been proposed before. The technology had been employed in many projects by numerous commercial and non-profit agencies in many countries. But the idea of developing a coordinated strategy for the preservation microfilming of a nation's entire printed heritage was another matter again. Various proposals along these lines had been made previously. The most encompassing of these, prepared in 1964 under the auspices of the Association of Research Libraries,²¹ called for coordination of conservation with preservation microfilming. Little came directly of the ARL plan, although it did serve, together with the Barrow studies, to focus the attention of the library community on the preservation issue and set the stage for numerous initiatives in the 1970s and the 1980s.²²

THE CONTENT OF THE CANADIANA PRESERVATION COLLECTION

When the Institute was established in 1978, it was not given a mandate to coordinate a comprehensive strategy for the physical conservation of "Canadiana" with the preservation microfilming of each vulnerable title.²³ But the limitations of the Institute's mandate were more than offset by its actual terms of reference: identifying, locating, and microfilming titles to be included in a retrospective Canadiana collection. It was a daunting task but, to the optimistic, an achievable one given that Canada was a young country with a manageable bibliographic heritage. Even so, it was considered prudent to limit the initial phase of the project to monographic materials (including pamphlets and broadsheets) and to include only materials with imprints predating 1901. The latter date was artificial in terms of any benchmark in Canadian historical or bibliographical development, but the date did have advantages of convenience in terms of copyright considerations and of available bibliographic research upon which to draw. It was decided, after considerable discussion, that the collection was to encompass all relevant items printed in Canada, all relevant items printed outside Canada and written by Canadians, and all relevant items of Canadian implication published outside Canada.

The following categories indicate the nature of the materials which were to be included: monographs, pamphlets, leaflets, playbills and broadsides, catalogues of books, pictures, articles for sale or commercial products, separates, advertizements for services, products, or entertainments, and non-Canadian government monographs with Canadian content, particularly if unobtainable in Canada.

The principles of selection were habitually easier to enunciate than to apply. How was the Institute to define Canadiana in the absence of some physical yardstick? It would be begging the question to say that it interpreted Canadiana broadly. In point

21 See "The Preservation of Deteriorating Books, Part I: An Examination of the Problem," *Library Journal*, (1 January 1966), p. 54; and "The Preservation of Deteriorating Books, Part II: Recommendations for a Solution," *Library Journal*, (15 January 1966), p. 189.

22 The National Endowment for the Humanities and the Mellon Foundation recently announced a large award to the Research Libraries Group for preservation microfilming of Canadiana.

23 Concurrent with the planning of the microfilming project, the National Library was developing its own preservation programme to assure the physical preservation of at least one copy of every significant Canadian title. The programme document, endorsed by the Library's Advisory Board in April 1979, did recognize the contribution to be made by the Institute in such a programme.

Bytown and the Ottawa River SETTLEMENTS.

TO EMIGRANTS REQUIRING EMPLOYMENT OR SEEKING LOCATIONS FOR SETTLEMENT.

Owing to the diversion of the route of Emigrants proceeding to the West from the Ottawa and Rideau Canal route to that of the St. Lawrence, but few Emigrants have proceeded during late years to that section of the country; consequently, labourers are now much wanted, and the rates of wages have considerably increased.

The lumber trade of the Ottawa, which annually requires from 25,000 to 30,000 men, is now, owing to the increased demand for that great staple of the country, about to be much extended; and as almost all those who transact this business are largely engaged in farming, a most favourable opportunity is now offered to Emigrants to proceed to that section of the country: good active men will get, the first year, from £2 to £3 per month with their board; and, after they have become acquainted with the work of the country and acquired the necessary skill, they will be competent to earn the highest wages, from £3 10s. to £4 per month, or from £35 to £40 per annum.

Crown Lands, and those belonging to private individuals, can be obtained on more reasonable terms than in any other section of the Province; and farmers receive the highest cash prices for all the surplus produce they may have to dispose of.

Apart from the demand for labour which the lumber trade affords, a large amount of money is about to be expended on the following public works:—a Timber Slide at Portage-du-Fort, a new Road from Bytown to Pembroke, a Plank Road from Bytown to Bell's Corner, Bytown and Prescott Railroad, and a Road to connect the waters of the Ottawa with Lake Huron, on which works a large number of labourers will be required.

The following gentlemen, resident in the neighbourhood, will furnish on application all needful advice and information; and they have undertaken to give the fullest directions to Emigrants, whether their object be Labour or Settlement:—

Joseph Asmond, Esq.....	Bytown.
Messrs. C. & R. McDonnell.....	Do.
John Egan & Co.....	Aylmer.
John Foran, Esq.....	Do.
Robert Conroy, Esq.....	Do.
Alexander McDonnell, Esq.....	Sand Point, Township of McNab.
Thomas O'Neill, Esq.....	Castleford, Township of Horton.
John Poupard, Esq.....	Westmeath.
John Sappie, Esq.....	Pembroke.
D. O'Meara, Esq.....	Do.

ROUTE AND MODE OF CONVEYANCE.

From Montreal to Bytown, by steamer daily.....	120 miles.
Bytown to Aylmer, by land.....	9 Do.
Aylmer to Sand Point, by steamer.....	45 Do.
Sand Point to Castleford, do.....	8 Do.
Castleford to Portage-du-Fort, do.....	9 Do.
Portage-du-Fort to Pembroke, by land and water.....	33 Do.

A. C. BUCHANAN,

CHIEF AGENT.

Emigration Department, }
Quebec, August 11th, 1851. }

Records of the Civil and Provincial Secretaries, Upper Canada and Canada West, RG 5, C 1, vol. 439, file 509 of 1855, Broadside "Bytown and the Ottawa River Settlements," enclosed with the letter of J. Egan, M. P. P., regarding appointment of an Emigrant Agent at Ottawa, 1855. Courtesy: Public Archives of Canada, C-2245.

of fact, whatever was printed in monographic form and could reasonably be envisaged as potentially useful to Canadians in the imaginative reconstruction of their past was to be included in the collection. For example, those interested in botanical and natural history would find Joseph François Lafitau's *Mémoire présenté à son altesse royale Mgr le Duc d'Orléans, régent de France, concernant la précieuse plante du Gin-Seng de Tartaire, découverte au Canada...* (Paris, 1718). Both literary scholars and historians of discovery would be provided with a copy of William Vaughan's *The Golden Fleece...*, first published in 1626. Rare works such as Robert Marsh's *Seven Years of my Life...* (Buffalo, 1848), *Hymns and Spiritual Songs on a Variety of Pleasing and Important Subjects...*, (Windsor, N.S., 1796), and Alexander Caulfield Anderson's *Hand-Book and Map to the Gold Region of Frazer's and Thompson's Rivers...*, (San Francisco, c1858), are other examples of works, among tens of thousands, that this collection was to make available.

The collection also included works not so well known, for instance, those relating to the French empire in the Old American Northwest as well as works relating to the British occupation of Oregon up to 1846. It included novels by foreigners, such as *An American Cousin*, by Sommerville and Ross, in which the setting was vaguely Canadian. Also reproduced were scientific treatises on the Arctic by nineteenth-century German and Russian authors. It included the accounts of the early voyages as well as all ensuing secondary literature to appear before 1901. It included travellers' narratives in which Canada occupied anything from a few pages to an entire volume as well as printed ephemera, such as company prospectuses and popular or political broadsides.

The application of selection criteria was fairly straightforward so long as uncertainties were confined to questions of subject matter and place of imprint. Careful investigation of the item itself could usually be relied on to resolve doubts on those scores. Boundaries were most likely to be obscure in cases where doubts had arisen over the author's nationality. It was rarely obvious from a book on a non-Canadian subject that an author was Canadian, and bibliographers, like most human beings, have fallible memories when it comes to remembering names. A solid background in Canadian studies was the firmest assurance of acquiring a ready familiarity with the figures of the past. Name recognition, however, was no solution to the deeper question of what constituted a Canadian author.

Were only native-born Canadians to be considered? If so, the collection should include Bat Masterson, the American gunslinger and sometime journalist. He was born in November 1853, in Henryville, Quebec, thirty miles southeast of Montreal, and spent the first eight years of his life there. Sometime in 1861, he and his family moved first to upper New York State and later to the American frontier.²⁴ Or was the rule to be a colonial bastardization in fine Palmerstonian tradition of an ancient precept: once a Canadian, always a Canadian. If so, then we would have to include the voluminous works of that Niagara of printer's ink, William Cobbett. Necessity dictated selectivity, at least in Cobbett's case. Although it is true that he served with the British Army for seven years in military posts along the border, his Canadian experiences were of peripheral importance in his development as a radical thinker

24 R.L. DeArmont, *Bat Masterson: The Man and The Legend* (Norman, Oklahoma, 1979), pp. 9-10.

and political commentator. Omission or inclusion was a discretionary matter and hung on no firmer principle than a perception of an author's physical or imaginative relationship with Canada.

BIBLIOGRAPHICAL RESEARCH GROUP

From the outset, it was clear that the methodologies of the project had to be based on sound bibliographical principles. Common sense dictated that, before a single title could be microfilmed, a suitable method of identifying the body of Canadiana (defined according to the Institute's criteria of inclusion) had to be evolved. In short, a retrospective bibliographical repertory of publications was required. The question to be answered was how such a file was to be compiled and what level of bibliographical detail was commensurate with the purpose the file was to serve.

As with any project, cost considerations were important. Ideally, the Institute should have developed a working file tailored to its unique needs. This would have required several years of costly research and delayed the microfilming of the vulnerable titles. It would also have been fiscally irresponsible given the impressive work that was continuing in the Cataloguing Branch of the National Library by its Retrospective Bibliography Division (RETRO). To enable the Institute to move ahead with the task of developing its microfiche collection, it seemed prudent to utilize the bibliographic entries and methodology of RETRO (1867-1900). This had the advantage of permitting the Institute to proceed quickly with its filming operations although, as experience was to show, this decision was not without its drawbacks.²⁵

We can see, from an early internal memorandum, the evolution of bibliographic methodology, which eventually led to administrative changes:

Plausibility dictated the original adoption of the National Library's approach to retrospective bibliography, when we set to work in the winter of 1978-79. Mutual compatibility of the projects held out the alluring prospects of a fund of 35,000 records for the period 1867-1900. It seemed an easy matter to continue adding titles from other published bibliographies and catalogues.... Yet, as a method of identifying titles it was soon clear that the approach had severe limitations.... The method illustrated the drawbacks, both in bibliographic terms and in terms of the needs of the Institute's microfilming division, of constructing records without the book in hand.... Nowhere had the demand for a reliable mechanism to identify titles been stronger than among the staff

25 In making the decision to accept the practices of RETRO for the form of heading (the alternative to which meant reformulating headings for nearly 35,000 entries), certain processing problems were created. The Institute began to use the RETRO file as its form of heading authority. These data were then used to develop a truncated, eye-legible microfiche header as a tag to identify the filmed document. However, by using the RETRO heading (developed using criteria based on AACR1), the Institute header and the main heading on the final cataloguing record (developed using criteria based on AACR2) frequently differed in form. Where differences occurred (55 per cent were unchanged), the majority were a matter of form and formatting (38 per cent) rather than of content. In some corporate authorship or editorship, the differences lead to confusion (7 per cent). Steps were taken to minimize the incidence of difference for post-1867 materials and changes were made in policies and procedures to ensure that this should not be as great a problem for pre-1867 titles.

employed in the production division. Before any title could be filmed it had to be borrowed from the owner on interlibrary loan. But titles can be systematically borrowed only when differentiated. The bibliographer had to identify, by his own investigations, all different forms of the book. Depending on the complexity of the text's printing history he may have to distinguish not only editions, but within each edition the variant issues worthy of attention. It was not solely or even primarily reasons of pure scholarship that drove the bibliographers on to reconstruct this bibliographic family tree. The point of the exercise was not necessarily to follow Fredson Bowers, the distinguished American bibliographer and theorist, in purposefully seeking out the ideal or perfect copy of the book, as intended by the printer, publisher or author for final issue. It was the practical concerns of the Institute to avoid, on the one hand, filming the same book twice, or on the other to miss filming unique items altogether. The points of difference between one title and another had to be recorded in sufficient detail to enable the production staff to identify any copy in hand as definitely from a certain edition, impression or issue....

The need to base the Institute's methodology on the physical examination of each item had, within a year, grown obvious and an alternate approach, based in large measure on the experience of the British Library's Eighteenth-Century Short Title Catalogue (ESTC) Project, was adopted.²⁶

It may be useful to turn from this discussion of theoretical processes to the Institute's working methods. Three factors have determined operational procedures: the uneven standards of published bibliographies and institutional catalogues, as well as the notorious unreliability of union catalogues; the needs, referred to above, of the Institute's production division; and the necessity of gathering data from hundreds of repositories in Canada and abroad.

Given these assumptions and needs, and taking advantage of the experience of the ESTC, the Institute began to base its descriptions on facsimile reproductions of title-pages augmented by a statement of format and pagination as well as other supplementary notes. Obviously, to insist on handwritten copies of thousands of items with scrupulous attention to wording and punctuation was out of the question. When possible the Institute chose to rely on a photocopy of the title-page together with preliminary pages for each book. The advantages of a photocopy were several: errors of transcription were avoided, the laborious process of transcription was eliminated, and thus more time could be spent in the exhilarating pursuit of unique materials. Photocopying proved an effective method of gathering information from different repositories in that it made inconsequential the variations in cataloguing practice. Indeed, it was no longer necessary to worry about even the existence of a catalogue before tapping the resources of a contributing institution.

The Institute has been active in repositories across the country. Researchers, working directly from library shelves or from archival collections, photocopy title-pages of relevant publications and prepare physical descriptions for each found

26 See R.C. Alston and M.J. Janetta, *Bibliography, Machine Readable Cataloguing and the ESTC...* (London, 1978).

item. The title-pages are sent to Ottawa for processing. For this purpose the Institute maintains offices in the National Library/Public Archives of Canada building. Upon receipt the title pages enter the Institute's systems when they are attached to BIBSLIPS, thus forming the nucleus of RECORD PACKAGES. These dockets are then passed to the verification unit of the Bibliographic Research Group. The working routines of this unit fall into six principle stages: the transcription of the bibliographic information on to the BIBSLIP following examination of the photocopies or facsimiles; the verification of the transcription through a number of prescribed routines; the addition of bibliographical data from other bibliographies, catalogues, reference sources, etc.; the recording of locations (*differentiating* between verified and unverified locations); the addition of the appropriate AACR2 heading and the establishment of a working name-authority for the author; and the maintenance of internal manual files, including a main entry file, a title file, an authority file, and a RECORD PACKAGE file.

In this manner, a RECORD PACKAGE is created for each title. These packages contain some or all of the following documents: a source record taken from a bibliography, card catalogue, union catalogue, etc.; a photocopied or manually-transcribed title page; a BIBSLIP reflecting the basic elements of description, AACR2 heading, locations, sources of information, notes, etc.; and a unit card with AACR2 format description.²⁷

PRODUCTION GROUP

When the RECORD PACKAGE is complete, it is passed to the Production Group. The responsibility of this Department is to acquire, prepare, and microfilm every title which has been identified as Canadiana within the Institute's terms of reference.

Once scheduled for filming, a possible lending repository is selected (*if more than one is known*) for the title. At present the Institute is borrowing materials from over two hundred repositories in Canada and the United States. Arrangements for the interlibrary loan of each item are initiated and the book is brought to one of the Institute's camera locations. In acquiring a title for filming, the Institute employs standard interlibrary loan procedures, verifying the loan request and the condition of the item with data supplied by the Research Group. When possible, existing delivery services or courier services are used to transport materials. Permissions have been sought to utilize the Library Delivery Service (LDS) between federal department libraries, the Inter-University Transit System (IUTS) between Ontario Universities, and the latter's Quebec counterpart, *Prêts entre bibliothèques universitaires* — Quebec University Interlibrary Loan (PEBUQUILL). In addition, as a number of repositories will not lend their materials unless Institute staff retrieve and transport them, the Institute operates its own courier system.

Upon receipt, the title is collated, page by page, to ascertain its completeness. If the volume is incomplete, it is returned to the lending repository and a perfect copy is sought. Given the physical condition of many of the titles which the Institute films, it is not uncommon that two or three loans are required before a filmable copy, that is,

27 In order to facilitate wider access to the Institute's bibliographic research, an agreement was negotiated with the National Library which obligates the Institute to contribute its records to the Library's Retrospective Bibliography Division.

a copy which includes all its pages, plates, maps, etc., is located. From time to time, no complete copy can be found. On such occasions a perfect copy is reconstructed photographically from a number of imperfect copies (and noted accordingly) or the most complete copy is filmed with the imperfections recorded.

In preparation for filming, each title is examined, and a Pre-Filming Condition Report made, for insurance purposes, outlining the item's condition. Technical and Bibliographical Note Targets are prepared for filming with the book to alert the researcher to physical elements of the original which may affect the microfilm image or the knowledge of which may be helpful in understanding peculiarities of the copy filmed.

When materials are camera-ready, they are sent to the film unit. Here trained micrographic technicians determine the best approach to filming after evaluating the condition of each item. The Institute uses cameras modified to handle fragile book materials. In order to obtain the best image possible, understanding that the original documents vary greatly in size, the cameras are capable of a range in reduction ratio of between 10X and 32X. Density levels can also be adjusted to compensate for variations in paper discolouration.

After filming, each book is submitted to a rigorous editorial check to make certain that it was filmed properly and in its entirety. The quality of the film is also checked by the Institute's filming contractor, as well as by an independent agency, the Central Microfilm Operation of the Public Archives of Canada.

CATALOGUING GROUP

Once the book has been filmed, the resulting microform edition remains to be catalogued. In order to ensure the quality and availability of bibliographic access to the Canadian microfiche, the National Library and the Institute concurred that there were mutual and positive benefits for the Canadian research community in cooperating in the cataloguing of the collection. In a memorandum of agreement signed 11 January 1980, the National Library agreed to train the Institute's cataloguing and coding personnel; to monitor the quality of bibliographic descriptions and record creation; to provide the services of all technical support personnel for library systems analysis, computer programming, and computer operation; to make available for the Institute's use the mini-computer processor of the Library to control the input of data; and to make work space available for Institute personnel. The Library also agreed to facilitate the preparation and distribution of the Institute's bibliographic products.

The Cataloguing Group has, since cataloguing began, used the *Anglo-American Cataloguing Rules* (Ottawa, Chicago, 1978) and its French version *Règles de catalogage anglo-américaines* (Montreal, 1980) as the standard for headings and bibliographical descriptions. The Institute has followed the code in general compliance with National Library's policy.²⁸ The Institute breaks with AACR2 when recording the place of publication, name of publisher, and date of publication. In order to facilitate scholarly use of the collection, the imprint of the original

28 "National Library Statement on Cataloguing of Microforms," *National Library News*, (January-February 1981), p. 1.

publication appears where the data can be machine-processed. The Institute's imprint, as publisher of the microform edition, appears as a note. The physical description of the original publication is also input into the machine-readable file. It is, however, suppressed in most of the Institute's cataloguing products.

Sources used for subject analysis are the *Library of Congress Subject Headings* (9th edition, Library of Congress, Washington, D.C., 1980), and its supplements; and *Canadian Subject Headings* (National Library of Canada, Ottawa, 1978). For French subject headings, *Répertoire de vedettes-matières*, (8e édition, Bibliothèque de l'Université Laval, Québec, 1976), and its COM Supplément, (National Library of Canada, Ottawa, and Bibliothèque de l'Université Laval, Québec) are used. Each title in the collection receives a Dewey decimal classification number assigned from the *Dewey Decimal Classification and Relative Index* (nineteenth edition, Albany, N.Y., 1979).

The Institute makes available its cataloguing data on magnetic tape, generated in the CAN-MARC format. To ensure the widest possible distribution of the data, the Institute maintains a file within the University of Toronto Library Automation Systems (UTLAS). Through its agent in the United States, University Microfilms International, the data are entered into the On-line Computer Library Center (OCLC), one of the world's largest on-line bibliographic utilities.

The Institute also publishes an annual cumulating catalogue entitled *Canada the Printed Record: A Bibliographic Register with Indexes/Catalogue d'imprimés canadiens: répertoire bibliographique avec index*. The publication is distributed on COM (42.1 reduction) and in a binder format. It is composed of two main parts: a register reproducing in a computer-generated numerical sequence the complete entries, and the following seven indexes: Authors/titles/series; English subject headings; French subject headings; Dewey decimal classification; place of publication; date of publication; and CIHM series number.

Upon completion of the project, the *Catalogue* will contain in excess of 50,000 complete register entries accessed by over 350,000 index entries. In addition to providing an eye-readable listing to the collection, the catalogue will serve as a reference guide to retrospective printed Canadiana and as a selection tool for those institutions wishing to acquire single publications or groups of publications from the Institute.

DISTRIBUTION OF THE COLLECTION

Canadian archivists are acutely aware that students and researchers are turning in increasing numbers to the study of Canada's social, political, economic, literary, and scientific past. This interest is reflected at the post-secondary educational level by the number of formal Canadian Studies programmes which have been established. But interest is not confined to universities and colleges alone; it can also be found in the secondary school systems and within the general public at large, as witnessed by the high use of regional and specialized Canadiana collections and archives.

The Canada Council was concerned that the Institute ensure the widest possible access to its collection and to any associated catalogues. The Institute devotes much of its energies to this end. It makes the *Canadiana microfiche collection available at cost* (approximately \$1.70 per title on a standing order basis) to archives across the

Canada. Whereas in the past many researchers had to travel some distance at considerable cost to consult printed materials relevant to their areas of research, they now could consult a microform copy at an institution near at hand.

Should an institution or an individual researcher wish to acquire single titles or groupings of titles, the Institute can provide this service at a low cost. To facilitate selective acquisition, the Institute makes available printed, non-cumulating, comprehensive, short-title catalogues. These catalogues are arranged by author and provide basic bibliographic information. While the collection can be approached from an infinite number of thematic perspectives, the Institute does make available short-title listings for twelve broad subject segments derived from the full collection. These are: History and Geography; Native American Studies; Sociology, Psychology, and Anthropology; Economics; Religion and Philosophy; Science, Technology, Agriculture, and Medicine; English-Canadian Language and Literature; French-Canadian Language and Literature; Political Science; Law; Education; and Music and Fine Arts.

FUTURE DIRECTION

What does the future hold for the Institute once it has completed the preservation microfilming of pre-1900 Canadiana? A possible research and microfilming strategy has been submitted to the appropriate federal funding agencies. In this multi-year plan, three additional segments of the Canadian printed record are identified as endangered. A strategy for their inclusion into the preservation collection has been recommended. The first segment would include in the collection serial publications (excluding newspapers) with a Canadian imprint and with a date of first issue predating 1901. A serial has been defined according to the *Anglo-American Cataloguing Rules, 1980*, as a publication "in any medium issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely."²⁹ Preliminary research suggests a total of 2,100 titles would be filmed.

Serial publications were selected as the next phase of the project for several reasons. First, the paper used in their manufacture was substandard even for the period. As a result, a great deal of this material is already lost and the quantity is increasing daily. Librarians and archivists across the country agree on the immediate need to replace deteriorating hard-copy journal holdings with subsidized low-cost microform editions. Secondly, because of the unsystematic acquisition policies of Canadian collecting institutions, serial holdings are grossly incomplete. Again, many issues of Canadian journals can only be located in foreign repositories. It is imperative to complete the runs of these publications in a microform edition. Thirdly, serial publications are an essential component of the research record, but their research potential has not been fully realized because of the difficulties of access. For this reason, one of the most fundamental bibliographic research tools has never been produced in Canada: that is, a retrospective index to nineteenth- and twentieth-century Canadian serial publications. The need for such a research tool was underlined in submissions to the Commission on Canadian Studies by

29 *Anglo-American Cataloguing Rules* (Chicago and Ottawa, 1978), p. 570

representatives of the Canadian historical research community.³⁰ The bringing together of all the relevant serials into one collection would greatly facilitate such an undertaking.

The next segment scheduled for inclusion would be post-1901 monographic publications. Projections for items in this category indicate approximately 76,000 titles for the period 1901-40 and an additional 19,500 titles for the period 1940-50.

Finally, the last projected segment would see the preservation filming of serial publications published with a Canadian imprint and initially published between 1901 and 1940. Projections suggest a total of 6,300 titles in this segment.

This strategy is, however, not meant to be prescriptive. The Institute encourages the input of Canadian archivists in the development of its future plans. Those interested in the questions of document preservation and in the dissemination of Canadian research materials in microform are asked to put forward their views. The Institute wishes to reflect in its programmes the needs of the Canadian profession. Please forward any queries or suggestions as well as orders for publications, catalogues, or listings to the Canadian Institute for Historical Microreproductions, P.O. Box 2428, Station D, Ottawa, Ontario K1P 5W5.

30 T.H.B. Symons, *To Know Ourselves: The Report of the Commission on Canadian Studies*, volume two (Ottawa, 1975), p. 65.