Book-History Studies Come of Age: The Digital Legacy of the History of the Book in Canada / Histoire du livre et de l'imprimé au Canada Project¹

Bertrum H. MacDonald*

In 1990, in her foreword to Freda Waldon's *Bibliography of Canadiana Published in Great Britain, 1519-1763*, Mabel Thompson wrote:

Dr. Freda Waldon worked on the compilation for over three decades, but she was unable to find a publisher. Canada was not yet ready for so detailed a study of bibliographical introspection.²

Canada may not have been ready for such analysis in Waldon's time (she completed the compilation in the middle of the twentieth century),³ but today is far different. Major changes in publication

* Bertrum H. MacDonald is Professor of Information Management in the Faculty of Management at Dalhousie University in Halifax, Nova Scotia. He was the electronic resources editor for the project, History of the Book in Canada / Histoire du livre et de l'imprimé au Canada (HBiC/HLIC). His research focuses on the diffusion and impact of scientific information in the past and present.

1 This paper is based on the work undertaken during HBiC/HLIC, which was supported by a \$2.3 million Major Collaborative Research Initiative grant from the Social Sciences and Humanities Research Council of Canada. Numerous students were engaged in design and development of the databases, particularly research assistants at Dalhousie University where the electronic resources were hosted: Candace Anderson, Erin Armstrong, M.J. D'Elia, Charles Erlichman, Francesca Frati, Shely Henry, Marcus Leja, David Luinstra, Anne G. MacKinnon, Pamela Maher, Elizabeth Millar, Rhonda Miller, Adam Taaffe, and Shaine Widdifield. The databases were launched publicly in 2003 from a server supplied by Dalhousie University Computing Services through the assistance of Randy Barkhouse and Bruno Roy. Additional advice was provided by Dalhousie faculty and staff members Louise Spiteri, Haidar Moukdad, and Vivien Hannon.

2 Mabel Thompson, foreword to *Bibliography of Canadiana Published in Great Britain, 1519-1763*, by Freda Farrell Waldon, ed. William F.E. Morley (Toronto: ECW Press / Ottawa: National Library of Canada, 1990), x.

3 Even in the late 1970s Frances Halpenny cautioned that with regard to publication of bibliographies, "we must be sensible about our expectations, resilient in maintaining our efforts, and innovative in finding ways to meet difficulties." Frances G. Halpenny, "The Publishing of Bibliography in Canada," in *The Bibliographical Society of Canada: Colloquium 3, National Library of*

practices, markedly increased interest in book history, and, most importantly, advances in information technologies are together prompting detailed investigations from perspectives that simply were not possible until recently. New research tools and technologies (primarily Web-based) and the internalization of "being digital" by a younger generation of scholars are motivating today's researchers to ask new questions of both unexplored topics as well as those studied earlier. New digital research tools are opening up fresh avenues of study and enriching understanding of the history of print culture substantially.

Canadian book historians have been at the forefront of these developments, especially through initiatives of the project, History of the Book in Canada / Histoire du livre et de l'imprimé au Canada (HBiC/HLIC). The suite of digital research tools created under the project's mandate, which will be relaunched by Library and Archives Canada (LAC) in a new guise for ongoing public access, are a significant contribution to Canadian scholarship.⁴ These databases encapsulate several principal legacy characteristics of the project, including: 1) full appreciation of the Anglo-American and *histoire du livre* traditions in book history, 2) clear engagement with international book-history models, that is, Robert Darnton's communications circuit and Adams and Barker's new model,⁵ 3) comprehensive, bilingual accessibility, 4) application of rigorous standards of accuracy and usability, and 5) demonstrated extensive, interdisciplinary collaboration, which is a requirement for the design and development of national digital resources. These databases illustrate research initiatives at their best, both because the resources were created to support current research effectively and because the infrastructure necessary for further development of these important research tools was also well developed.

Landmark studies or schools of thought often characterize the evolution of disciplines. In the case of the history of print culture, it

Canada, Ottawa, 19–21 October 1978, ed. Elizabeth Hulse (Toronto: Coach House Press, 1979), 52.

4 As a final step in the completion of the objectives of HBiC/HLIC, the editorial team entered into an agreement to transfer a copy of the databases to LAC for relaunch, further development, and full public access.

5 Robert Darnton, "What Is the History of Books," *Daedulus* III, no. 3 (Summer 1982): 65–83; Thomas R. Adams and Nicolas Barker, "A New Model for the Study of the Book," in *A Potencie of Life: Books in Society; The Clark Lectures 1986–1987*, ed. Nicolas Barker (London: The British Library, 1993), 5–43.

is generally accepted that two primary traditions have influenced the field, namely, the French *histoire du livre*, epitomized by Febvre and Martin's *L'apparition du livre*,⁶ and Anglo-American scholarship with its emphasis on analytical and descriptive bibliography. The latter has as "its first objective the compilation of detailed and accurate lists of books, and as its second, the bibliographical and textual analysis of books of literary significance."⁷ Although these traditions were pursued in parallel for decades, recent intersections of the two are leading to new historical understanding about print culture. The outcomes of such convergence are seen in scholarly studies of book history in Canada of late. Today, Canada is a multicultural society, but French and British political and cultural values and practices have had, and continue to have, a major impact on the country's development. Research that has embraced both book-history schools of thought reflects the history of the country itself, but also more clearly demonstrates the benefits of engaging the two perspectives together. Digital technologies and resources enable researchers to follow this approach.

When HBIC/HLIC was launched in 2000, the timing was right to focus one substantial facet of the undertaking on building digital research tools. In contrast to other national book-history projects, Canadian scholars had begun, by the end of the last century, to recognize the value of applying information technologies to historical data.⁸ In the bibliographical community, which includes a large cadre of librarians, appreciable experience in creating and using databases had been built up over the last quarter of the twentieth century. Furthermore, by the end of the 1990s, it was increasingly obvious that the continuing rapid deployment of the Internet would facilitate access, and also greater interest, in historical studies. Thus the project editors' plan to develop digital resources was foresighted, and an appropriate combination of historical and information-science

6 Lucien Febvre and Henri-Jean Martin, *L'apparition du livre* (Paris: Éditions Albin Michel, 1958).

7 John Feather, "Cross-Channel Currents: Historical Bibliography and *l'histoire du livre*," *Library*, 6th ser., 2, no. 1 (1980): 2.

8 One particularly interesting application of digital technologies is set out in Fiona A. Black, Bertrum H. MacDonald, and J. Malcolm W. Black, "Geographic Information Systems: A New Research Method for Book History," *Book History* 1 (1998): 11–31; and Bertrum H. MacDonald and Fiona A. Black, "Using GIS for Spatial and Temporal Analyses in Print Culture Studies: Some Opportunities and Challenges," *Social Science History* 24, no. 3 (2000): 505–36.

scholars was assembled in the research team for this objective to be achieved. A portion of the project budget was designated for this work, the wisdom of which was recognized in the rigorous scrutiny that the grant application received from reviewers and the adjudication panel. The financial resources allocated to HBiC/HLIC merit particular acknowledgement. Bibliographical scholars appreciate that substantial investment is required to build national, bilingual databases to the standards set by HBiC/HLIC. In addition, for research databases of this calibre to have long-lasting impact, which they should if designed well, additional resources for maintenance (such as migration through new versions of software) and further development frequently are needed. The fact that this essay documents this achievement is a good measure of the success of the endeavour. As a national initiative, HBiC/HLIC set out and reached substantial research objectives in a tight, six-year timeline – an accomplishment that has not been matched by any other country. It is not surprising that these efforts have earned the interest, and indeed envy, of international peers who have learned about the project through papers given at conferences in North America and Europe.⁹

Description of the Databases

The following sections briefly describe the five databases of the HBiC/HLIC project and sketch some of the decisions that underlie

9 Bertrum H. MacDonald and Fiona A. Black, "Digital Resources for Documenting and Mapping Print Culture History" (paper presented at the annual conference of the Society for the History of Authorship, Reading and Publishing [SHARP], Halifax, 14–17 July 2005); Fiona A. Black and Bertrum H. MacDonald, "Immigrant Workers and Expatriate Entrepreneurs: The Canadian Book Trade and Library Index and Cross-Border Business in Print" (SHARP, Lyon, 13–17 July 2004); Bertrum H. MacDonald, Elizabeth Millar, Rhonda Miller, and Anne G. MacKinnon, "Crossing Borders: The Impact of French and Anglo-American Book-history Methods on the Study of Print Culture in Canada" (SHARP, Lyon, 13–17 July 2004); Anne G. MacKinnon and Bertrum H. MacDonald, "Beyond the Models: The Language of Print Culture" (SHARP, Claremont, CA, 9–12 July 2003); Bertrum H. MacDonald, "The Electronic Resources of the History of the Book in Canada Project" (Rare Books and Manuscripts Section, American Library Association / Canadian Library Association joint conference, Toronto, 22 June 2003); and Errin Armstrong, Fiona A. Black, Bertrum H. MacDonald, Elise Moore, and Shain Widdifield, "Newspapers and Directories as Critical Resources for Book Trade History," (annual conference of the Bibliographical Society of Canada, Halifax, 18 June 2002).

the design and related infrastructure of these resources.¹⁰ Then, examples of research questions and scenarios that have already been pursued will illustrate how these databases will foster further study. The illustrations come from the current location of the electronic resources on a server at Dalhousie University (see Figure 1).¹¹ Examples taken from the bilingual interface of the site highlight a principal feature of the databases, namely access in both languages facilitated by indexes developed by the project team (see Figure 2). Anticipating that research questions and interests will vary broadly, we designed the record structure of each of the databases to accommodate considerable searching flexibility. This objective was accomplished by creating several detailed indexes, which brought the full collaborative insights of the project team – editors, research students, and translators – to bear.

Figure 1. Bilingual Website of the Electronic Resources – www.dal.ca/hbic-hlic.

- 10 Detailed manuals for creating the databases were prepared by the project research teams and have been placed on the project's electronic resources website for the benefit of other researchers.
- 11 The databases can be accessed at <http://www.dal.ca/hbic-hlic>. When LAC relaunches the databases, it is unlikely that the design applied in the HBiC/HLIC site will be mirrored precisely.

Database	Search Option	Description	Number of Records
Bibliography of the History of the Book in Canada	Basic Advanced	The Bibliography of the History of the Book in Canada (BHBiC / BHLIC) database catalogues publications on the history of print culture in Canada from the sixteenth century to the present. (Last updated: 27 April 2006)	5259
Canadian Book Catalogues	Basic Advanced	The Canadian Book Catalogues (CBC / CCRI) database includes records of publicly accessible printed catalogues relating to book history and print culture in Canada from its beginnings to 1950. (Last updated: 10 May 2003)	1037
Canadian Book Trade and Library Index	Basic Advanced	The Canadian Book Trade and Library Index (CBTLI / ICMLB) provides a comprehensive record of individuals and organizations relating to the book and allied trades in Canada. The current focus is on the eighteenth and nineteenth centuries. (Last updated: 8 October 2004)	11522
Canadian Imprints	Basic Advanced	The Canadian Imprints (CI / IC) database provides bibliographic records of all known imprints, excluding newspapers, from the Atlantic Provinces, Quebec, and Ontario from 1752 to 1840. (Last updated: 7 October 2004)	199
Canadian Textbooks	Basic Advanced	The Canadian Textbooks (CT / MSC) database includes bibliographic descriptions of Canadian textbooks, encompassing print materials used in Canadian schools, outside Quebec, prior to university-level education. (Last updated: 9 July 2003)	4961

Figure 2. Brief Description of the Five Databases.

**I. *Bibliography of the History of the Book in Canada /
Bibliographie sur l'histoire du livre et de l'imprimé au Canada*
(BHBiC/BHLIC)**

Accounts of the history of print culture in Canada appeared as early as the 1850s, but most of the published historical studies are much more recent. During the latter half of the twentieth century, historical bibliography and *histoire du livre* were firmly rooted here. Marie Tremaine's pioneering bibliographical work in the 1930s, and principally her detailed *Bibliography of Canadian Imprints, 1751–1800* published in 1952,¹² set the standard and the stage for subsequent scholarship in the Anglo-American tradition.¹³ By 1985 when George

12 Marie Tremaine, *A Bibliography of Canadian Imprints, 1751–1800* (Toronto: University of Toronto Press, 1952; repr. 1999). Her earlier work included: Marie Tremaine and Frances M. Staton, *A Bibliography of Canadiana: Being Items in the Public Library of Toronto, Canada, Relating to the Early History and Development of Canada* (Toronto: Toronto Public Library, 1934).

13 Subsequent examples include: Patricia Lockhart Fleming, *Upper Canadian Imprints, 1801–1841: A Bibliography* (Toronto: University of Toronto Press /

L. Parker published his groundbreaking, *The Beginnings of the Book Trade in Canada*,¹⁴ he could demonstrate a fertile field for much further inquiry. Beginning in the 1960s and 1970s French Canadian historians, such as Claude Galarneau and Yvan Lamonde, began to build and expand the *histoire du livre* tradition in Canada.¹⁵ These two lines of research are seen in the publications of numerous other scholars, and the total body of literature that has accumulated includes hundreds of additional publications.

How could researchers determine what had been published on the subject? Well, not easily. Beginning in the 1970s, some Canadian titles were included in the *Annual Bibliography of the History of the Printed Book and Libraries (ABHB)*, published in The Hague.¹⁶ In 1993, Mark Bartlett, Fiona Black, and I compiled a more thorough, but by no means complete, bibliography.¹⁷ Neither of these resources adequately documented a rich and growing field of scholarship. More importantly, both were produced in print format, which limited complex or innovative searching. Even when recent records of *ABHB* were placed on the Web in *Book History Online*, Canadian coverage

Ottawa: National Library of Canada / Canadian Government Publishing Centre, 1988); Fleming, *Atlantic Canadian Imprints, 1801–1820: A Bibliography* (Toronto: University of Toronto Press, 1991); and Carl Spadoni and Judy Donnelly, *A Bibliography of McClelland and Stewart Imprints, 1909–1985: A Publisher's Legacy* (Toronto: ECW Press, 1994).

14 George L. Parker, *The Beginnings of the Book Trade in Canada* (Toronto: University of Toronto Press, 1985).

15 See Claude Galarneau, *Edmond de Nevers, essayiste*, Cahiers de l'Institut d'histoire, Université Laval, no. 2 (Québec: Presses Universitaires Laval, 1960); Claude Galarneau, *La France devant l'opinion canadienne, 1760–1815*, Cahiers de l'Institut d'histoire, Université Laval, no. 16 (Québec: Presses de l'Université Laval, 1970); and Claude Galarneau et Maurice Lemire, eds., *Livre et lecture au Québec, 1800–1850* (Québec: Institut québécois de recherche sur la culture, 1988), among other titles by Galarneau. Publications from the period by Yvan Lamonde include: *Les bibliothèques de collectivités à Montréal (17^e–19^e siècle): sources et problèmes* (Montréal: Bibliothèque nationale du Québec, 1979); Yvan Lamonde and Daniel Olivier, *Les bibliothèques personnelles au Québec: inventaire analytique et préliminaire des sources* (Montréal: Bibliothèque nationale du Québec, 1983); and Yvan Lamonde, ed., *L'imprimé au Québec: aspects historiques, 18^e–20^e siècles* (Québec: Institut québécois de recherche sur la culture, 1983).

16 *Annual Bibliography of the History of the Printed Book and Libraries* (The Hague: Martinus Nijhoff, v. 1–, 1970). In recent years the annual volumes have been edited by staff at the Department of Special Collections at the Koninklijke Bibliotheek.

17 Mark C. Bartlett, Fiona A. Black, and Bertrum H. MacDonald, *The History of the Book in Canada: A Bibliography* (Halifax: B. H. MacDonald, 1993).

was restricted by the rather narrow parameters established by *ABHB* in the early 1970s and only post-1998 records were accessible.¹⁸ Thus, to provide a much more comprehensive, accessible research resource, the *Bibliography of the History of the Book in Canada / Bibliographie sur l'histoire du livre et de l'imprimé au Canada* (BHBiC/BHLIC) was deemed necessary both to support the work leading to the production of the three volumes of the project and to encourage research more widely.

The more than 5200 records in the current database contain typical bibliographical information complemented by several index fields that were carefully designed to allow for sophisticated searching and analysis. Subject descriptors were assigned, based on a comprehensive thesaurus of broad and narrow subjects designed specifically for this purpose by the project team.¹⁹ Each publication was also indexed for its geographic focus, using a controlled vocabulary of twenty-seven geographic designations that match the political history of Canada, and the temporal focus of each publication was categorized by up to seven time periods. In addition, the language of each work and where applicable the type of reference format (for example, biography, catalogue, encyclopaedia, bibliography, etc.) were recorded (see Figure 3). Thus the significance of this database rests in its comprehensive coverage and the myriad of different queries facilitated by the extensive indexing structure.

2. Canadian Book Catalogues / Catalogues canadiens relatifs à l'imprimé (CBC/CCRI)

Originating in the research interests of Yvan Lamonde, the database, *Canadian Book Catalogues / Catalogues canadiens relatifs à l'imprimé* (CBC/CCRI), is unique among national book-history projects. Publishers' catalogues, booksellers' catalogues, public and private library catalogues, and book auction catalogues have been used in

¹⁸ The online database, *Book History Online*, is available at <http://www.kb.nl/bho>.

¹⁹ The subject vocabulary itself is an important accomplishment of HBiC/HLIC and has been described in two papers: Anne G. MacKinnon and Bertrum H. MacDonald, "Subject Access to the History of Print Culture Literature: A Case Analysis," (annual conference of the Bibliographical Society of Canada, Montreal, 16–17 May 2001); and Anne G. MacKinnon and Bertrum H. MacDonald, "Beyond the Models: The Language of Print Culture" (SHARP, Claremont, CA, 9–12 July 2003). The full details of the subject vocabulary are available at <http://www.dal.ca/hbic-hlic>.

Record Example	
NOTE: If a record does not contain any data in a field, that field will not be displayed with the record.	
Record ID:	1619
Author:	Gerson, Carole
Article Title:	"Dragged at Anne's Chariot Wheels": L.M. Montgomery and the sequels to "Anne of Green Gables"
Journal Title:	Papers of the Bibliographical Society of Canada = Cahiers de la Société bibliographique du Canada
Year of Publication:	1997
Journal Volume/Pages:	35, no. 2 (fall / automne): 143-159
Broad Subject:	Authorship / Statut d'auteur Women / Femmes Publishing / Édition Genre Books / Livres
Narrow Subject:	Authors Publishers International publishing Children's literature Fiction Auteurs Édition internationale Maisons d'édition Littérature jeunesse
Topics:	Montgomery, Lucy Maud Page, L.C. (publisher / maison d'édition) Anne of Green Gables (text / texte)
Geographic Coverage:	Canada
Time Period:	1841-1917 1918-1959
Language:	English / Anglais
Library Location:	CaNSHD

Figure 3. Example of a Record from the *Bibliography of the History of the Book in Canada / Bibliographie sur l'histoire du livre et de l'imprimé au Canada* database.

book-history studies in Canada and elsewhere to document distribution and availability of publications and to provide a window on reading patterns. But a specific database of such important research evidence had not been created previously. With over a thousand records, this database "records publicly accessible printed catalogues relating to book history and print culture in Canada from its beginnings to 1950."²⁰ Catalogues published inside Canada, or outside Canada yet representing Canadian collections, are documented. The records were created based on bibliographical references and on catalogue records

20 Andrea Rotundo, Patricia Lockhart Fleming, Yvan Lamonde, Anne MacKinnon, Bertrum MacDonald, and Marcus Leja, *Canadian Book Catalogues Database Entry Manual* (Halifax: HBIC/HLIC, 2003), 1. The full manual is available in English and French at <http://www.dal.ca/hbic-hlic>.

of libraries, archives, and online collections, such as *Early Canadiana Online*. Lists of books appearing only in newspapers or periodicals were excluded. With up to nineteen fields (see Figure 4), searches by title, year, number of pages, language, and place of publication, as well as by publisher, bookseller, printer, auctioneer, institution, and catalogue type are possible. This database "enables researchers to quantify the output of catalogues by a particular institution, town, province, or type, and to identify a variety of patterns over a period of time," and the records also facilitate "further research into the contents of catalogues by conveniently identifying a location where each catalogue can be examined."²¹ By studying the contents of catalogues, the importance of particular genres can be established, publications available to readers can be ascertained, and insights into the intellectual world of Canadian history can be achieved.

Contenu	
Les fiches de la base CCRI / CBC se composent des champs:	
Identifiant:	Numéro d'identification de la fiche.
Compilateur:	Responsable(s) de la rédaction du catalogue.
Propriétaire:	Propriétaire des ouvrages recensés dans le catalogue.
Titre:	Titre principal du catalogue.
Institution:	Institution ayant commandé le catalogue.
Imprimeur:	Responsable de l'impression du catalogue.
Encanteur:	Responsable de la vente aux enchères des ouvrages catalogués.
Lieu d'impression:	Ville et province où le catalogue a été imprimé.
Lieu de publication:	Ville et province où le catalogue a été publié.
Éditeur:	Responsable de la publication et de la diffusion du catalogue.
Date de publication:	Année de publication du catalogue.
Pagination:	Nombre de pages du catalogue.
Illustration:	Indicateur de la présence d'illustrations.
Classement:	Principe de classement des rubriques dans le catalogue.
Langue:	Langue de rédaction du catalogue (en général, le français ou l'anglais).
Bibliothèque:	Sigle attribué par la Bibliothèque nationale du Canada à la bibliothèque détenant l'exemplaire localisé. Nomenclature des bibliothèques.
ICMH:	Numéro de la microfiche produite par l'Institut canadien de microreproductions historiques.
Entrée bibliographie:	Rubrique de la bibliographie répertoriant le catalogue.
Genre:	Genre ou type du catalogue.
Notes:	Renseignements complémentaires sur le catalogue.

Figure 4. Record Structure of the *Canadian Book Catalogues / Catalogues canadiens relatifs à l'imprimé* database.

21 HBIC/HLIC, "Canadian Book Catalogues," History of the Book in Canada Electronic Resources, <http://acsweb2.ucis.dal.ca/hbicdb/english/catalogues.html> (accessed 21 May 2008).

3. *Canadian Book Trade and Library Index / L'index canadien des métiers du livre et des bibliothèques* (CBTLI/ICMLB)

Major figures in libraries and the book trades have often been the focus of book-history studies, but the contributions of many thousands of lesser known individuals who worked in these same fields remain obscure. While important, at least in terms of numbers, the latter have proven difficult to investigate because of a paucity or scattering of records. To overcome this challenge, the *Canadian Book Trade and Library Index / L'index canadien des métiers du livre et des bibliothèques* (CBTLI/ICMLB) aims to provide a comprehensive record of individuals and organizations involved in the book and allied trades in the country. Currently containing over 11,500 records,²² this database is being created by systematically examining several sources including Elizabeth Hulse's *Dictionary of Toronto Printers, Publishers, Booksellers, and the Allied Trades, 1798–1990*,²³ an unpublished directory of book trade members in Nova Scotia compiled by Shirley Elliott and Douglas Lochhead, city directories, newspapers, biographical sources, files Yvan Lamonde assembled for Montreal,²⁴ and census records as they become available in database format.²⁵ Census files are the most comprehensive source of names of individuals and their employment,²⁶ but other published and archival records often provide additional information that identifies more details of activities. "Individuals such as printers, booksellers,

²² Two thousand more records in a working file will be added in the near future, and more records will be created in a research project led by Fiona A. Black at Dalhousie University.

²³ Elizabeth Hulse, *Dictionary of Toronto Printers, Publishers, Booksellers, and the Allied Trades, 1798–1990* (Toronto: Anson-Cartwright, 1982). Records from this source were extracted with the permission of the compiler.

²⁴ Yvan Lamonde made his file of research notes on slips of paper documenting Montreal-based individuals available for entry in the database.

²⁵ In order to extract relevant information from the decennial censuses they must be available in database format so that a variety of necessary searches to identify all relevant names can be conducted. To date, only a small number of the census files have been converted to database format.

²⁶ The 1881 census, the only available in database form while HBIC/HLIC was in progress, yielded over seven thousand relevant records. The 1881 census file was developed by the Church of Latter Day Saints and refined in work at the Université de Montréal in the 1881 Canadian Census Project.

librarians, and paper makers and organizations such as publishing houses, libraries, and press clubs" are represented in the database.²⁷

As with each of the HBiC/HLIC databases, indexing in CBTLI/ICMLB provides unique and enhanced access; a record could consist of up to forty-five fields constructed from several sources (see Figure 5). Besides providing a single location for information about thousands of individuals, the significance of this database arises from the geographic information included in every record. Depending on information contained in archival or published sources, the geographic data can be as detailed as the floor of a building in which a business or library was located or only specify the town in which an individual worked. CBTLI/ICMLB was designed with applications of geographic information system (GIS) analysis in mind, a feature that alone sets it apart from the two comparable databases that initially served as models – the British and the Scottish book trade indexes.²⁸ With its combination of both the notable and obscure this database provides the means to probe patterns and trends not identifiable through any other data source.

4. *Canadian Imprints / Imprimés canadiens (CI/IC)*

Although early Canadian imprints have received considerable scholarly attention, experts on this subject have frequently noted that no comprehensive record of the full output of the press in the century after printing began in 1752 has yet been produced. Although Marie Tremaine was thorough in her pioneering bibliographical research, Patricia Lockhart Fleming and Sandra Alston discovered numerous items that she had not noted.²⁹ Gaps are known to exist in *Canadiana: Canada's National Bibliography*³⁰ and in numerous

27 HBiC/HLIC, "Canadian Book Trade and Library Index," History of the Book in Canada Electronic Resources, <http://acsweb2.ucis.dal.ca/hbicdb/english/cbti.html> (accessed 21 May 2008).

28 University of Birmingham, "The British Book Trade Index," <http://www.bbti.bham.ac.uk/> (accessed 21 May 2008); National Library of Scotland, "Scottish Book Trade Index (SBTI)," <http://www.nls.uk/catalogues/resources/sbti/index.html> (accessed 21 May 2008). The SBTI is not currently available in database form.

29 Patricia Lockhart Fleming and Sandra Alston, *Early Canadian Printing: A Supplement to Marie Tremaine's A Bibliography of Canadian Imprints, 1751-1800* (Toronto: University of Toronto Press, 1999).

30 National Library of Canada, *Canadiana: Canada's National Bibliography* (Ottawa: National Library of Canada, 1950-91).

Record Example	
NOTE: If a record does not contain any data in a field, that field will not be displayed with the record.	
Record ID:	569
Name:	Moore, Clement P.
Variant Name Form (s):	Moore, C.P.
Gender or Organization:	M
Book Trade Role(s)/Date(s) 1:	Bookseller (unspecified) / Libraire (indéterminé), 1890-1900 Stationer (unspecified) / Marchand de papier (indéterminé), 1890-1900
Province/Territory/District 1:	Nova Scotia / Nouvelle-Écosse
Town 1:	Sydney
Street Address 1:	Charlotte Street
Book Trade Role(s)/Date(s) 2:	Bookseller (unspecified) / Libraire (indéterminé), 1890-1897 Stationer (unspecified) / Marchand de papier (indéterminé), 1890-1897
Province/Territory/District 2:	Nova Scotia / Nouvelle-Écosse
Town 2:	North Sydney
Non-Book Trade Role(s)/Date(s):	Fancy goods dealer / Marchand d'articles de fantaisie, 1890-1897 General merchant / Marchand, 1890-1897 Hardware merchant / Quincaillier, 1890-1900 Picture framer / Encadreur, 1890-1897 Toy maker/seller / Fabricant/Marchand de jouets, 1890-1896
Firm(s)/Institutions(s):	MacKeen, Moore & Co.
Decade(s) in Business:	1890-1899 1900-1909
Partner(s):	McKeen, George K.
Directory Sources:	McAlpine's Nova Scotia Directory, 1890-1897, p. 287, 1218, 1222, 1223; Bard's & Co's Business and Professional Directory, 1900, p. 158
Notes:	Large ad, p. 1222, McAlpine's, lists sales of "Iron, Steel, Nails, Glass, Paints, Varnishes, Oils, Carpenters' Tools, Carriage Stock, Groceries, Ship Chandlery, Etc. - Stationery, Toys, and Fancy Goods" at MacKeen, Moore, & Co. Sydney and North Sydney locations are noted. George K. McKeen and Clement P. Moore are the proprietors of MacKeen, Moore & Co. See individual entries under their names. McKeen is spelled "McKeen" in George McKeen's individual listing in McAlpine's and "MacKeen" in the listings of the company. Bard's listing states "bookseller, stationer, hardware" only.

Figure 5. Example of a Record from the *Canadian Book Trade and Library Index / L'Index canadien des métiers du livre et des bibliothèques*.

other bibliographical accounts published over the past century that document public and private collections of Canada's print heritage.³¹ Even Canadiana.org, which included more than ninety thousand titles in its Early Canadiana Research Collection, developed a working file of additional titles that had not been filmed.³² Thus, at the initiative of Patricia Lockhart Fleming, HBiC/HLIC added the database, Canadian Imprints / Imprimés canadiens (CI/IC), to the suite of digital resources, and with about seven thousand records it will provide the best available documentation of imprints up to 1840. "All known books, pamphlets, and single sheets (including printed forms intended to be completed in manuscript), government documents, and serials printed in the Atlantic Provinces, Quebec, and Ontario from 1752 to 1840" will be documented.³³ Newspapers have been excluded from the database, but newspaper prospectuses and laws printed from type set for a newspaper are included. Records of up to twenty-seven fields were created from primary sources, from printed bibliographies, and from library catalogues. Due to the variety of indexes and individual fields (title, year, language, number of pages, and place of publication, as well as author, gender, illustrator, printer, publisher, and subject), this database will enable researchers to undertake studies about the "output of the press by date, place, subject or printer and to identify broad patterns of printing activity in early Canada."³⁴

31 From the nineteenth century through to the present, numerous librarians and scholars have compiled bibliographies of collections or genres of Canadian publications, such as: Philéas Gagnon, *Essai de bibliographie canadienne: inventaire d'une bibliothèque comprenant imprimés, manuscrits, estampes, etc. relatifs à l'histoire du Canada et des pays adjacents avec des notes bibliographiques* (Québec: imprimé pour l'auteur, 1895–1913).

32 Canadiana.org, "About Canadiana.org," Early Canadiana Online, <http://www.canadiana.org/eco.php?doc=cihm> (accessed 21 May 2008); Myriam McCormack, "Preserving and Providing Access to Canada's Printed Heritage: The Canadian Institute for Historical Microreproductions at 25 Years," *Papers of the Bibliographical Society of Canada / Cahiers de la Société bibliographique du Canada* 41, no. 1 (2003): 7–41.

33 HBiC/HLIC, "Canadian Imprints," History of the Book in Canada Electronic Resources, <http://acsweb2.ucis.dal.ca/hbicdb/english/imprints.html> (accessed 21 May 2008).

34 Ibid.

5. *Canadian Textbooks / Manuels scolaires canadiens* (CT/MS)

School texts were a financial mainstay of numerous publishing houses throughout Canada's colonial and national history. Textbooks also figured prominently in the import trade linking Canada with the international book publishing business. As Paul Aubin has confirmed through his extensive work in documenting school texts in Quebec, the number of titles in this genre is large.³⁵ At his initiative, a database of school texts used in schools outside of Quebec was included in the digital resources created by HBiC/HLIC. Working with records from several significant collections in the country,³⁶ Aubin and his research assistants created a file of close to five thousand school texts, defined as "all print materials used in Canadian schools prior to university-level education."³⁷ It is estimated that the current database offers only a portion of Canadian textbook production, and further work will lead to an augmented database. The history of school texts in Canada is complex. Thus a school text was assumed to be "Canadian" when at least one of the phases of production (writing, publishing, printing) was completed in Canada. Furthermore, "titles published initially in a foreign country but reprinted in Canada, with or without modification, and with or without permission from foreign authors or publishers, [were] included in this database." Also included were "books initially published in a foreign country (e.g., England, Ireland, France, and United States) but later reprinted in Canada."³⁸ A wide variety of searches and research questions can be accommodated with this database due to the structure of the records, such as the ability to link editions and reprints, which appear as separate and complete records.

Research Supported by the Databases

The foresight of building the suite of HBiC/HLIC digital resources was demonstrated in research undertaken for the volumes published by the project. Using data from CI/IC, Sandra Alston and Jessica

35 Paul Aubin, "Les manuels scolaires québécois," Bibliothèque de l'Université Laval, <http://www.bibl.ulaval.ca/ress/manscol/> (accessed 21 May 2008).

36 The records came largely from the catalogues of Canadiana.org, the Ontario Institute for Studies in Education, and two collections of the University of British Columbia.

37 HBiC/HLIC, "Canadian Textbooks," History of the Book in Canada Electronic Resources, <http://acsweb2.ucis.dal.ca/hbicdb/english/textbooks.html> (accessed 21 May 2008).

38 Ibid.

Bowslaugh developed a statistical analysis of printing in Canada up to 1840.³⁹ They discovered a rapid rise in the number of imprints following the turn of the nineteenth century (see Figure 6), but noted a dip in the trend line in the second decade of the century that will only be explained through further study. Their analysis confirmed that although printing spread throughout the British North American colonies of the period, larger urban settings, such as Halifax, Quebec City, and Montreal, were the primary locations of the printing businesses. Statistics from CI/IC also allowed Alston and Bowslaugh to illustrate broad subject patterns in the titles produced over the first eight decades of printing in Canada (see Figure 7). Only by polling aggregate information in the database could this analysis be completed. Their conclusions provide a platform for probing the early publishing record in more detail.

Figure 6. Imprints by Decade. Reprinted from *History of the Book in Canada. Volume 1. Beginnings to 1840*, ed. Patricia Lockhart Fleming, Gilles Gallichan, and Yvan Lamonde (Toronto: University of Toronto Press, 2004), 89.

39 Sandra Alston and Jessica Bowslaugh, "A Statistical Analysis of Early Canadian Imprints," in *History of the Book in Canada [HBiC]*, vol. 1, *Beginnings to 1840*, ed. Patricia Lockhart Fleming, Gilles Gallichan, and Yvan Lamonde (Toronto: University of Toronto Press, 2004), 88–92.

Figure 7. Imprints by Subject. Reprinted from *History of the Book in Canada. Volume 1. Beginnings to 1840*, ed. Patricia Lockhart Fleming, Gilles Gallichan, and Yvan Lamonde (Toronto: University of Toronto Press, 2004), 91.

Yvan Lamonde and Andrea Rotundo were able to characterize the book trade and bookstores prior to 1840 by carefully examining information revealed by CBC/CCRI.⁴⁰ In their study they examined various catalogues described in the database: auction catalogues, bookstore catalogues, and catalogues of circulating libraries and reading rooms. Without the database their analysis would have been difficult to pursue, primarily because all the records together allowed them to see patterns about the trade and to note anomalies, such as the detailed auction catalogue of the 10,380 volumes in the private library of the Quebec City businessman, John Fleming.⁴¹

CBTLI/ICMLB supported the creation of the map, "Book Trade Members in the 1881 Census" (see Figure 8).⁴² This map is an example

⁴⁰ Yvan Lamonde and Andrea Rotundo, "The Book Trade and Bookstores," in *HBC 1:124-37*.

⁴¹ *Ibid.* 130.

⁴² "Book Trade Members in the 1881 Census," in *History of the Book in Canada*, vol. 2, 1840-1918, ed. Yvan Lamonde, Patricia Lockhart Fleming, and Fiona A. Black (Toronto: University of Toronto Press, 2005), 199, map 6.1.

Figure 8. Book Trade Members in the 1881 Census. Reprinted from *History of the Book in Canada. Volume II. 1840-1918*, ed. Yvan Lamonde, Patricia Lockhart Fleming, and Fiona A. Black (Toronto: University of Toronto Press, 2005), 199.

of applications of GIS software to Canadian print culture questions, which permit complex analyses of multiple layers of data (see Figure 9). Such an analysis was undertaken in a project by Fiona Black, Bertrum MacDonald, and Candace Anderson.⁴³ Two maps from that research, “Ethnicity of Book Trade Members in Nova Scotia Districts, 1881 Census” (see Figure 10), and “Religion of Book Trade Members in Nova Scotia Districts, 1881 Census” (see Figure 11), illustrate how records from CBTLI / ICMLB can be incorporated into a GIS for multi-variable analyses. Print culture phenomena frequently entail numerous factors in complex integration. By incorporating data from CBTLI / ICMLB in a GIS, it is feasible to address questions about the history of print culture that cannot otherwise be achieved.⁴⁴

43 Fiona A. Black, Bertrum H. MacDonald, and Candace Anderson, “Dealing with the Learning Curve: Using GIS as a Framework for Cultural Research” (paper presented at the conference, *History and Geography: Assessing the Role of Geographical Information in Historical Scholarship*, organized by the Hermon Dunlap Smith Center for the History of Cartography, Newberry Library, Chicago, 25–27 March 2004).

44 A recent and informative description of GIS applications in historical scholarship is found in Anne Kelly Knowles, “GIS and History,” in *Placing History: How*

Figure 9. Examples of data layers in a "Geography of the Book."

Figure 10. Ethnicity of Book Trade Members in Nova Scotia Districts 1881 Census.

Figure 11. Religion of Book Trade Members in Nova Scotia Districts 1881 Census.

A bibliometric analysis of the records in BHBiC/BHLIC provides another example of how research questions can be pursued with the HBiC/HLIC databases.⁴⁵ In this instance, quantitative analyses provide insights which, when complemented by more focussed case studies, can lead to a clearer understanding of book history in the country.⁴⁶ Aggregate data from BHBiC/BHLIC can highlight

Maps, Spatial Data, and GIS Are Changing Historical Scholarship, ed. Anne Kelly Knowles (Redlands, CA: ESRI Press, 2008), 1–25.

- 45 Bertrum H. MacDonald, Elizabeth Millar, Rhonda Miller, and Anne G. MacKinnon, "Crossing Borders: The Impact of French and Anglo-American Book-history Methods on the Study of Print Culture in Canada" (SHARP, Lyon, 13–17 July 2004). This study was based on the records entered in BHBiC/BHLIC by the date of the conference.
- 46 For commentary on quantitative analyses in book history see Simon Eliot, "Very Necessary but Not Quite Sufficient. A Personal View of Quantitative Analysis in Book History," *Book History* 5 (2002): 283–93. See also his studies based on bibliographic databases: "Patterns and Trends and the NSTC: Some Initial Observations," pts. 1 and 2, *Publishing History* 42 (1997): 79–104; 43 (1998): 71–112; and *Some Patterns and Trends in British Publishing, 1800–1919*, Occasional

national, regional, linguistic and cultural patterns. For example, as Figure 12 makes clear, a surge in scholarly work by French-language authors (mostly Quebec-based) in the 1970s and 1980s led to a higher proportion of the total number of publications published in French than previously. The same data examined from another perspective shows differences in subject interests of researchers writing in English and French (see Figure 13). Similarly, probing the same data from yet another point of view highlights the degree to which research interests have focussed on particular chronological periods (see Figure 14). That the cumulative BHBiC/BHLIC data can draw attention to such patterns raises questions about why the trends have occurred, and further investigations could unfold with information obtained from other sources. A question of the relationship of the *histoire du livre* and Anglo-American print-culture traditions with language of publication (which can serve as an indicator of allegiance to a tradition) could be probed, for example. Aggregate data from BHBiC/BHLIC could be examined to test whether French-language authors are more likely to be influenced by *histoire du livre* than English-language scholars. The database design allows analyses that reveal how factors below the level of the nation – such as linguistic, regional, political, or cultural determinants – have influenced the development of book history in Canada.

Figure 12. Distribution of Publications by Decade of Publication and by Language.

Figure 13. Distribution of Selected Subjects by Language of Publication.

Figure 14. Distribution of Publications by Chronological Focus.

Discussion

The line of studies that can be pursued in book history, a vibrant area of study in Canada and numerous other countries, has been demonstrably broadened with the advent of digital technologies. Book history – “bibliographic introspection,” to use Mabel Thompson’s label – has come of age, and Canadians have been a major contributor to this development.

A case can quite easily be made that the history of print culture should be thought of as an international subject. National borders are generally porous to products of the printing press and also to publishing practices. As a consequence, cross-border effects on a nation's print culture are noticeable even though the geographic, political, and social make-up of a country shapes that culture. The digital research tools built by HBiC/HLIC provide a wealth of data to allow scholars to probe both national and international characteristics of print culture in this country. As the examples of research already undertaken with the HBiC/HLIC databases illustrate, the range of possible investigations the databases can support has both breadth and depth. Both traditional research approaches and many new avenues of analysis can be followed. Datasets like these bring book history into the twenty-first century, where digital and printed media are colliding and evolving together.⁴⁷ HBiC/HLIC has stepped in front of comparable projects around the world to demonstrate clearly the significance and potential of employing digital resources for analysis and documentation of book history. The project has established legacy tools that embrace the bilingual fabric of the country. Further, confirmation has been given that interdisciplinary collaboration is effective in building digital resources to high-quality standards. In the process, over thirty student assistants involved in the design and construction of the databases have become a cadre of well-trained information professionals and researchers now employed throughout the country. In sum, by building and placing the databases at Library and Archives Canada, HBiC/HLIC has provided the country with a sizeable, rich national resource to foster ongoing research about a major facet of our heritage.

SOMMAIRE

Durant la dernière décennie, l'histoire de la culture de l'imprimé est devenue un important sujet d'étude au Canada. Mise en valeur

47 In a recent essay, Simon Eliot suggests that book history is "being forced to view the book in a larger and more dynamic context. That context is, for want of a better phrase, the history of information and its communication." Simon Eliot, "Whither Book History in the UK, and Beyond?" in *The Commonwealth of Books: Essays and Studies in Honour of Ian Willison*, ed. Wallace Kirsop and Meridith Sherlock (Melbourne: Centre for the Book, Monash University, 2007), 138.

récemment par le projet *History of the Book in Canada / Histoire du livre et de l'imprimé au Canada*, cette discipline fut intensivement explorée par des chercheurs qui ont voulu savoir comment la culture de l'imprimé avait contribué à façonner le pays depuis ses premiers contacts avec l'Europe jusqu'à nos jours. Le développement accéléré de l'Internet et des technologies numériques coïncide avec l'intérêt croissant qu'on accorde à l'histoire du livre, et les chercheurs se sont mis en quête de nouveaux outils de recherche en vue d'appuyer et d'élargir leurs analyses. Cet article décrit les diverses ressources numériques adoptées par le projet *History of the Book in Canada / Histoire du livre et de l'imprimé au Canada* et rendues accessibles aux étudiants et chercheurs afin de leur fournir de nouveaux champs d'activité. On y traite également des bases de données conçues et programmées en vue d'établir des normes détaillées favorisant un accès bilingue. Tout en prenant en considération les méthodes utilisées pour créer les bases de données, l'article esquisse à grand traits la manière dont les ressources numériques ont été mises à contribution dans la recherche et laisse entrevoir les innovations que celles-ci peuvent apporter dans le domaine de l'histoire de la culture de l'imprimé au Canada en lien avec le monde de la documentation et de la cartographie.