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The Challenge of Building Multilingual Collections in Canadian Public Libraries

Juris Dilevko and Keren Dali

A Web-based survey was conducted to determine the extent to which Canadian public libraries are collecting multilingual materials (foreign languages other than English and French), the methods that they use to select these materials, and whether public librarians are sufficiently prepared to provide their multilingual clientele with an adequate range of materials and services. There is room for improvement with regard to collection development of multilingual materials in Canadian public libraries, as well as in educating staff about keeping multilingual collections current, diverse, and of sufficient interest to potential users to keep such materials circulating. The main constraints preventing public libraries from developing better multilingual collections are addressed, and recommendations for improving the state of multilingual holdings are provided.

In 1973, the National Library of Canada (NLC) began a centralized Multilingual Biblioservice (MBS) that offered public libraries books in a wide variety of languages other than English and French—the two official languages of Canada. Some twenty years later, it reduced “the scope of the work of MBS and donat[ed] the collection to public libraries and deposit centers across the country” (NLC 1994, 2). In 1994 NLC published *A World of Information: Creating Multicultural Collections and Programs in Canadian Public Libraries (AWI)* as a way of “offering advisory service to assist public libraries serving ethnocultural minority communities across Canada” (2). AWI was designed to help “librarians in towns and small cities . . . establish continuing contacts with the ethnocultural minority communities that may use your library’s multilingual collection” and thus “find the support and information you need to manage a multilingual collection” (2–3). It began from the premise that all Canadian public institutions should “respond to the diverse needs and interests of all community members,” and specifically invoked the Multiculturalism Policy of Canada, which “reflects a conviction that, by accepting and promoting cultural diversity, Canadian society will develop a shared sense of Canadian identity that respects the diversity of the country and its people” (3). More specifically, AWI quoted guidelines about multilingual (ML) collections issued by the Canadian Library Association, which state that “minority language communities of 300 or more people in a library system should receive service on a fair and equitable per capita level and that, for communities of fewer than 300 people . . . libraries should provide at least several basic reference books and a newspaper or periodical title” (3). In addition, AWI featured sections that

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gave practical advice about the importance of establishing contact with minority communities and the ways in which ML communities can help in developing collections by “advising on subjects of interest, popular authors and publications, . . . particular community needs . . . and screening titles for acquisitions” (5–6). It also contained detailed information about ways in which to build staff skills so as to better serve ML patrons. For example, the benefits of holding training sessions about the key role of ML newspapers were described, as well as the advantages of workshops about “recent international publications . . . [so that] staff could become familiar with the names of important fiction and non-fiction writers or titles from, for example, Spain, Greece, the Indian sub-continent and China” (22). Finally, AWI stressed the importance of training staff about cross-cultural communication patterns insofar as “cultural awareness can help staff to understand the impact of culture on behaviour” (23). In other words, as summarized in the *Guidelines for Multilingual Materials Collection and Development and Library Services* prepared by the Multilingual Materials Subcommittee (MMS) of the American Library Association, “access to library materials for ethnic, cultural and linguistic groups should not be seen as ‘additional’ or ‘extra’ services, but as an integral part of every library’s services” (MMS 1990, sec. 1, par. 3). As Wertheimer observes, “the multilingual part of the library must be an oasis, not a ghetto” (1991, 381–82).

In 2000 NLC instituted a review of its collection policies and procedures “to define requirements to build a more broadly based collection for all Canadians, including collections in heritage languages”—a review that led to recommendations about further study about the state of ML resources and services (Zielinska 2002, 5). As one component of this further study, NLC surveyed 21 large public libraries in various provinces across Canada, including library systems in Vancouver, Calgary, Edmonton, Winnipeg, Hamilton, Toronto, Thunder Bay, Halifax, and St. John’s, about the state of their ML collections and the role of NLC in helping them develop such collections. A central finding of this survey was that “only the largest [libraries] are still able to maintain active resources and services in selected heritage languages and that medium and small libraries have a very difficult time in developing resources and providing services in languages represented by the new immigrants” (Zielinska 2002, 5). Although there are very impressive ML collections at, for example, the Toronto, Vancouver, Surrey, Richmond, and Calgary library systems, other libraries indicated that they “depend on the old material received from the Multilingual Biblioservice in the mid-1990s, or on gifts from the community” (Multicultural Resources and Services 2002). Three of the 21 surveyed systems indicate that they have “no budget” for multilingual collections and services, and another seven sys-

tems characterize their budget using the words “not adequate” (1, 5, 6, 7, 8, 10, 13). When library systems do have money to spend, staff members are concerned about “issues in active collection development,” including the need “to identify international publishers,” as well as the difficulty in finding staff members “that have knowledge of the recent immigration group language[s]” (56). Many library systems would therefore be amenable to NLC services “provided mainly through the Internet, including provision of online acquisition tools, cooperative cataloguing, access to evaluated Internet resources in heritage languages, [and a] directory of multilingual collections” among others (56). As a step toward the realization of these goals, a position for a Coordinator for Multilingual Resources and Services was funded in late 2001 (56).

One interpretation of the recent energy devoted to ML issues by NLC may be that the phasing out of the Multilingual Biblioservice and its replacement by the AWI program did not lead to satisfactory outcomes for ML collections and ML collection development on a national basis. The NLC may have come to the same conclusion as St. Lifer and Nelson, who found, in the United States context, that both white and minority librarians believe that “library collections are not diversified enough to meet the needs of swelling multicultural populations,” to say nothing of the fact that the few existing minority librarians believe that “much of the dialog involving diversity in the profession . . . amounts to lip service and hand-wringing” (1997, 43). As noted previously, one reason for the lack of collection diversity may be that budgetary constraints and staff shortages bring about a situation where developing ML collections is viewed as an “extra” activity that does not have a high priority level, given all the other expenditures that need to be made and low demand. Paradoxically, such a view may inadvertently lead librarians to see their ML collections as ancillary entities that are not central to the mission of their libraries. However, MMS emphasizes that “low demand could be the result of situations where inadequate or no service has been previously provided, or, because of low expectations or unfamiliarity with library services on the part of potential users” (MMS 1990, sec. 2.1.2, par. 3). Thus, it recommends that “it may be necessary in the case of smaller and widely scattered groups, to provide a proportionally higher level [of materials] in order to establish a minimal effective collection” (sec. 2.1.3).

The issue of “smaller and widely scattered groups” is particularly germane to the Canadian situation. As summarized by Krauss, the Canadian federal government and various provincial governments have embarked upon “a new immigration policy designed to attract young, preferably large foreign families to rural Canada” (2002, A1). By “creat[ing] more magnets for immigration everywhere,” the

provinces hope to prevent the death of small, rural communities. For instance, Manitoba instituted a policy in the late 1990s “to attract German-speaking Mennonites, Argentine Jews, Filipinos, and Bosnians” to towns such as Steinbach, which have a historical connection to immigrants from certain regions and countries (A8). In addition, New Brunswick is “looking for affluent students from China and Hong Kong, who local officials hope will coalesce into their own community and perhaps attract their families” and Saskatchewan is “looking to Korea and Ukraine to bring experienced farmhands to its hog barns” (A8).

To be sure, as noted by Krauss (2002), 81% of immigrants settle in the metropolitan areas of Toronto, Vancouver, and Montreal, yet, in light of concerted efforts to attract immigrants to rural areas, public libraries in all parts of Canada may be faced with increased user demand for ML collections and services. The NLC survey described here, referenced as Multicultural Resources and Services (2002), provides invaluable information about the ML collections in 21 public libraries in Canada, as well as the attitudes of these libraries to proposed initiatives that would aid in expanding their ML collections. Although not affiliated with NLC, the present study follows in the footsteps of the NLC survey and Aerts’s *Survey of Multilingual Library Services in B[ritish] C[olumbia]* (2000). Focusing on specific material types and specific acquisitions strategies, the present study aims to provide additional information about the current capabilities and future willingness of Canadian libraries to develop their ML collections.

Purpose

Accordingly, the broad purpose of this research is to determine the extent to which Canadian public libraries, at the beginning of the twenty-first century, are collecting ML materials and the methods that they use to select these materials. (The terms multilingual [ML] materials, foreign language materials, and non-English/non-French materials are used interchangeably throughout this article.) Do ML collections in Canadian public libraries reflect the declared principles of multiculturalism, and are public librarians sufficiently prepared and skilled to provide their ML clientele with an adequate array of library materials and services? The following five research questions were posed:

- Do Canadian public libraries want to shrink, maintain at current levels, or add to their collections of ML materials produced in the languages of the largest ML groups in their service areas?
- What are the biggest constraints that prevent Canadian public libraries from having ML materials?

- Do Canadian public libraries have electronic resources on their Web sites that would be of interest to the ML populations of their service areas?
- What tools and methods do Canadian public libraries use to select ML resources for the purposes of collection development?
- What measures are Canadian public libraries taking to determine what ML individuals in their service areas would like to see in their library collections?

Method

As mentioned above, Canada has two official languages: English and French. French speakers are concentrated to a very great extent in the province of Québec. This survey focuses on libraries in the English-speaking provinces and territories of Canada. According to *The Bowker Annual 2001* (46th ed.), there are 1,615 public libraries in Canada, including branches (389). Of this number, 172 are in the French-speaking province of Québec, as per the latest count in the 2001–02 edition of the *American Library Directory* (54th ed.). The number of libraries designated as public libraries in Québec was counted by hand from the *American Library Directory*. This number was then subtracted from the total figure of 1,615 provided by *The Bowker Annual*. Libraries in Québec were excluded from this survey. Using e-mail addresses supplied by the company Database Directories and its *Canadian Libraries Database and Mailing List*, we sent two rounds of e-mail messages, in March/April 2002, to the 1,443 (1,615 minus 172) Canadian public libraries in the nine English-language provinces and three territories asking them to fill out a Web-based survey about their collection development practices for ML materials. (Database Directories supplied more addresses than the number of libraries counted by *The Bowker Annual 2001*, but for the purposes of this research, we made the decision to take 1,443 as the correct number of public libraries in the English-speaking provinces and territories of Canada.) In addition, messages were posted to various provincial and national library association electronic discussion lists to remind librarians to complete the survey. The survey consisted of 10 questions, some with subdivisions. Five questions were answered by using either drop-down menus or radio buttons. Five questions were answered by fill-in-the-blank text boxes. The first question asked responding libraries to identify themselves as a sole unit library, a main branch, a branch of a system with one to five branches, a branch of a system with six to ten branches, or a branch system with more than ten branches, as well to state the population of their service area. The second question asked them to indicate their geographical location by province or territory. The third question

asked them to list the three largest linguistic groups in their service area who have the ability to speak a language other than English or French, as well as the approximate sizes of those groups. Although we asked about geographical location by province/territory and sizes of foreign language groups, responses of libraries could not be verified using census data because we did not ask for a specific geographic town or city location within a province. Two subsequent questions inquired about how many items of various types (e.g., adult nonfiction, newspapers, children's books) the responding public library *currently* owned in its three designated non-English and non-French languages, as well as how many items of the same type each library would like to own. Another two questions inquired about the top three reasons why they did not have more materials in these languages and whether there were any other material types not previously mentioned that they would like to own.

The eighth question asked whether the responding library had, on its Web site, links to ML materials (e.g., newspapers, magazines, government documents) that may be of interest to foreign language patrons. In addition, it inquired about the presence or absence of character encoding software (e.g., Cyrillic, Chinese, Arabic) that allows people to read materials in languages written in non-Romanized scripts. The ninth question asked the libraries to identify the frequency with which they used 11 methods (e.g., local foreign language bookstores, Web sites of ML publishers) to enhance their foreign language collections. Finally, libraries were asked to indicate whether they were taking eight steps to enhance their links with foreign language community members. Ideas for questions were drawn from *Guidelines for Multilingual Materials Collection and Development and Library Services*, published by the American Library Association (1990), as well as from *Multicultural Communities Guidelines for Library Services*, published by the International Federation of Library Associations (IFLA 1998). The survey was pretested by one librarian and changes were made as a result of her suggestions. Trial surveys were submitted from various parts of the country to ensure that data was being collected in complete and usable form by the database software. Complete texts of these questions may be found in the appendix.

A total of 202 responses was received, of which 166 were usable, for a response rate of 11.5%. Of the initial 202 responses, 25 were rejected because they indicated that French speakers were the primary ML group and 11 responses indicated that English speakers were the primary ML group. Although 11.5% is low, it must be remembered that the entire population, and not a sample, of Canadian public libraries was contacted. The geographic distribution of the 166 usable responses is as follows: Ontario (52), Alberta (29), British Columbia (29), Saskatchewan (18), Nova Scotia (13), New Brunswick (10), Manitoba (7),

Newfoundland (3), two each from Yukon and the Northwest Territories, and one from Prince Edward Island. Broad distribution of responses from across the country was therefore achieved, with 110 responses (66.3%) coming from Ontario, Alberta, and British Columbia. According to the 2001 Canadian Census, the three most populous English-speaking provinces of Canada are Ontario, British Columbia, and Alberta, containing, respectively, 38%, 13%, and 9.9% of the entire Canadian population (Statistics Canada 2001). Cumulatively, these provinces contain 60.9% of Canadian inhabitants. The distribution of responding libraries in the present survey therefore parallels, in general terms, the population distribution in Canada.

Of the 166 total responses, 165 described their library as follows: sole unit (50 [30.3%]); main branch (40 [24.2%]); branch of a system with five or fewer branches (20 [12.1%]); and branch of a system with six or more branches (55 [33.3%]). If we consider sole unit systems and all branches as examples of small or mid-sized libraries, then 125 responding libraries (75.8%) could be classified as small or midsized. For 101 of the responding public libraries, the percentage of ML speakers in the library community service area could be calculated. Sixty-three (62.4%) of the responding libraries were in communities where the population of ML speakers (of the largest foreign language group served) was less than 10% and 38 libraries (37.6%) were in communities where the ML population (of the largest foreign language group served) was 10% or more. As shown in table 1, the 10 largest identified ML groups served by the responding public libraries were: German (37), Chinese (26), Dutch (14), Urdu/Punjabi (12), 9 each for Korean and Vietnamese, 8 each for Ukrainian and Italian, Japanese (7), and Polish (6). Even though the survey specifically asked for information about the languages of the *three* largest ML groups, the results reported below, unless indicated otherwise, speak only about the single largest ML group identified by responding libraries insofar as many responding libraries did not name more than one such group.

Results

Shrinking, Maintaining, or Expanding the Collection?

How do public libraries quantitatively view the state of their ML collections in the language of their largest ML community? To answer this question, we first asked libraries to state the number of items of various ML material types that they currently own; subsequently, we asked them how many items of the same material type they would *like* to own. We then subtracted the first number from the second number. If the result was positive, the library was deemed as wanting to expand its ML collection for this material type; if the result was negative, the library was deemed as wanting to

either reduce (or remove completely) its ML collection for this material type; if the numbers matched, the library was deemed as wanting to maintain its ML collection for this material level at current levels.

As shown in table 2, in seven of the ten material types (reference books, newspapers, magazines, videos and DVDs, audiocassettes and CDs, ESL materials, and computer software), more than 50% of public libraries want to maintain such items at their current levels. For example, 101 libraries (60.8%) want to maintain their newspaper collections at current levels, and 109 libraries (65.7%) want to maintain their collections of videos and DVDs at current levels. In the categories of adult nonfiction (42.8%) and children's books (46.4%), a plurality of libraries want to maintain their collections at current levels, but there is an almost equal number of libraries who want to expand their collections: 38% want to expand their adult nonfiction holdings, while 43.4% wish to expand their children's collections. With regard to adult fiction, an almost equal number of libraries want to expand their adult fiction (41%) as the number of libraries who wish to maintain adult fiction at current levels (39.8%). On average, regardless of the type of item, 53.8% of libraries want to maintain their collections at current levels.

A small minority of libraries want to reduce or remove completely their collections (across all material types) in the language of their largest ML community. For example, only 17 libraries (10.2%) want to decrease the number of, or remove, their children's books, and only 10 libraries (6%) want to decrease the number of, or remove, their magazine collections. However, of all the material types listed in table 2, adult fiction and adult nonfiction are the most susceptible to reduction or removal, with 32 libraries each (19.3%) wanting to reduce the size of, or remove entirely, their adult fiction and adult nonfiction collections. In general, the desire to decrease the number of items, or remove them entirely, averages 12% (3.6% + 8.4%), regardless of material type. To be fair, reducing may sometimes be seen as a positive activity, depending on whether new material is added to replace the eliminated material and whether the eliminated material is obsolete. But, as shown in table 2, for seven of the ten material types mentioned, the majority of libraries that want to decrease the size of their collections want to eliminate the entire collection (8.4%); the exceptions are video and DVDs, audiocassettes and CDs, and computer software.

A greater number of public libraries want to add to their collections than want to reduce or remove them. As indicated in table 2, across all material types, 34.2% of responding libraries want to add ML materials. The two types of ML materials that the largest number of public libraries want to add more of are adult fiction and children's books. Seventy-two libraries (43.4%) want to add more chil-

Table 1. Largest Foreign Language (Multilingual) Groups Served by Responding Libraries

Language	Respondents	Language	Respondents
German	37	Aboriginal languages	5
Chinese	26	Portuguese	5
Dutch	14	Filipino	3
Urdu/Punjabi	12	Finnish	2
Korean	9	South Slavic	2
Vietnamese	9	Spanish	2
Italian	8	Gaelic	1
Ukrainian	8	Hebrew	1
Japanese	7	Hungarian	1
Polish	6	Norwegian	1

n=159

Table 2. What Do Libraries Want to Do with Items in the Language of Their Largest Foreign Language (Multilingual) Community?

Type of material	Reduce collection		Remove entire collection		No change		Expand collection	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Reference books	6	(3.6)	18	(10.8)	84	(50.6)	58	(34.9)
Adult fiction	6	(3.6)	26	(15.7)	66	(39.8)	68	(41)
Adult nonfiction	5	(3)	27	(16.3)	71	(42.8)	63	(38)
Children's books	2	(1.2)	15	(9)	77	(46.4)	72	(43.4)
Newspapers	0	(0)	9	(5.4)	101	(60.8)	56	(33.7)
Magazines	1	(0.6)	9	(5.4)	92	(55.4)	64	(38.6)
Videos and DVDs	6	(3.6)	4	(2.4)	109	(65.7)	47	(28.3)
Audiocassettes and CDs	10	(6)	10	(6)	95	(57.2)	51	(30.7)
ESL materials	9	(5.4)	14	(8.4)	88	(53)	55	(33.1)
Computer software	14	(8.4)	8	(4.8)	110	(66.3)	34	(20.5)
Average %	3.6		8.4		53.8		34.2	

n=166

dren's books, and of these 72 libraries, 12 want to add 100 or more new titles. Sixty-eight libraries (41%) want to add more adult fiction, and of these 68 libraries, 27 want to add 100 or more new titles. Fifty-eight libraries (34.9%) want to add reference books, another 55 public libraries (33.1%) want to add English as a Second Language (ESL) materials, 51 libraries (30.7%) want to add audiocassettes and CDs, and 34 libraries (20.5%) want to add computer software.

These results can be interpreted in two ways. When the percentage of libraries who want to expand their ML collections are added with the libraries who want to maintain their ML collections at current levels, the resulting figure is, on average and across all material types, an impressive 88% (53.8% + 34.2%). On the other hand, on average and across all material types, 65.8% of all Canadian public libraries (53.8% + 12%) want to reduce or leave

unchanged their ML collections. Just as the figure of 88% mentioned above sheds favorable light on libraries, the figure of 65.8% gives cause for concern, given the increasing presence of various ML groups in Canada.

The willingness of Canadian public libraries to reduce, or leave unchanged, their collections of materials in the language of their largest ML community extends across materials in all ML groups. Perhaps most surprising is the data provided by public libraries whose largest ML community served is the Chinese, one of the fastest-growing ML groups in Canada. As shown in table 3, across all material types, a majority of Canadian public libraries (50% or more) wish to reduce or maintain at current levels their Chinese materials. The same general pattern is evident for various types of materials (with a few notable exceptions) produced in the Korean, Urdu/Punjabi, Vietnamese, and Japanese languages. In Urdu/Punjabi, these exceptions are adult nonfiction and children's books; in Vietnamese, these exceptions are adult fiction, children's books, magazines, and ESL materials; in Japanese, these exceptions are newspapers, magazines, and computer software.

On the other hand, as shown in table 4, there is a general increase in the willingness of public libraries to expand their ML collections of materials produced in the language of the largest ML group served as the size of that ML group in the community increases. Of the 126 responding libraries providing appropriate data, libraries with service populations that have fewer than 300 individuals of the largest ML group served are the least willing to expand their ML collections in this language. For example, only 30% of this group of libraries wants to expand its ML children's and adult fiction collections in that language, and only 17.5% want to expand their ML newspaper collection in that language. Similar low figures pertain to magazines, videos and

DVDs, reference books, and audiocassettes and CDs. As the number of individuals of the largest ML group rises, so too does the commitment to expand the size of a library's ML collection in that language. This trend is most evident in the category of children's books and magazines. The percentage of public libraries willing to add more ML children's books increases from 30% to 50% to 52.4% to 66.7% as the population of the largest ML group rises past 300, then past 1,000, and finally past 10,000. The percentage of public libraries willing to add more ML magazines in that language increases from 20% to 50% to 52.4% to 61.1% as the population of the largest ML group rises past 300, then past 1,000, and finally past 10,000. Of course, there is not a perfect linear progression of this kind in all the material types; yet a general upward trend can be discerned for each material type. For example, while only 20% of public libraries want to add more reference materials when there are fewer than 300 individuals of the largest ML group served in the community, this figure increases to 46.2% in communities with populations of between 300 and 999, then dips slightly to 38.1% for communities with populations of between 1,000 and 10,000, and then rises again to 50% for communities of more than 10,000. Willingness to add ML adult nonfiction materials rises from 22.5% to 57.7% before dipping to 44.4%; willingness to add ML audiocassettes and CDs increases from 15% to 50%; and willingness to add ML computer software increases from 12.5% to 61.1%.

In addition, as shown in table 5, when the percentage of ML speakers of the largest foreign language group served in the community that a library serves is 10% or more, public libraries, in general, are more willing to expand their ML collections in that language than when the percentage of ML speakers of the largest foreign language group served in the community is less than 10%. In six of the material types, there

Table 3. Libraries Willing to Reduce or Leave Their Foreign Language (Multilingual) Collections Unchanged for the 10 Largest Foreign Language (Multilingual) Groups

Type of material	German (n=37)		Chinese (n=26)		Dutch (n=14)		Urdu/Punjabi (n=12)		Korean (n=9)		Vietnamese (n=9)		Italian (n=8)		Ukrainian (n=8)		Japanese (n=7)		Polish (n=6)	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Reference books	24	(64.9)	19	(73.1)	8	(57.1)	7	(58.3)	6	(66.7)	5	(55.6)	7	(87.5)	4	(50)	4	(57.1)	4	(66.7)
Adult fiction	18	(48.6)	18	(69.2)	6	(42.9)	7	(58.3)	8	(88.9)	4	(44.4)	4	(50)	4	(50)	5	(71.4)	5	(83.3)
Adult nonfiction	23	(62.2)	15	(57.7)	7	(50)	5	(41.7)	8	(88.9)	5	(55.6)	4	(50)	5	(62.5)	4	(57.1)	5	(83.3)
Children's books	19	(51.4)	17	(65.4)	9	(64.3)	4	(33.3)	6	(66.7)	3	(33.3)	5	(62.5)	3	(37.5)	4	(57.1)	5	(83.3)
Newspapers	26	(70.3)	15	(57.7)	8	(57.1)	8	(66.7)	6	(66.7)	5	(55.6)	5	(62.5)	6	(75)	3	(42.9)	4	(66.7)
Magazines	23	(62.2)	16	(61.5)	9	(64.3)	6	(50)	6	(66.7)	4	(44.4)	3	(37.5)	4	(50)	3	(42.9)	5	(83.3)
Videos and DVDs	28	(75.7)	20	(76.9)	10	(71.4)	7	(58.3)	6	(66.7)	6	(66.7)	4	(50)	4	(50)	6	(85.7)	4	(66.7)
Audiocassettes and CDs	24	(64.9)	22	(84.6)	10	(71.4)	9	(75)	6	(66.7)	5	(55.6)	4	(50)	5	(62.5)	4	(57.1)	4	(66.7)
ESL materials	25	(67.6)	17	(65.4)	10	(71.4)	8	(66.7)	7	(77.8)	4	(44.4)	5	(62.5)	5	(62.5)	4	(57.1)	5	(83.3)
Computer software	30	(81.1)	21	(80.8)	13	(92.9)	9	(75)	6	(66.7)	7	(77.8)	4	(50)	8	(100)	3	(42.9)	6	(100)
Average %		64.9		69.2		64.3		58.3		72.2		53.3		56.3		60		57.1		78.3

is at least a 6% increase, in absolute terms, in the willingness to expand ML collections (reference books, adult nonfiction, children's books, videos and DVDs, ESL materials, and computer software). In two other material types (magazines and audiocassettes and CDs), willingness to expand ML collections increases by 4.6% in absolute terms. The findings from tables 4 and 5 make sense. Because public libraries are in the business of serving members of their community, it stands to reason that the greater the number of individuals speaking a specific ML language in that community, the greater the emphasis that public libraries will place on expanding their collections of materials in that language.

Constraints to Acquiring More Multilingual Materials

When public libraries were asked to name their top three constraints to acquiring more ML materials, the three biggest constraints in total, across all library types, were demand (mentioned by 29.2% of responding libraries), budget (mentioned by 25.9%), and space (mentioned by 20.2%). Availability of materials (12.5%) and expertise (including cataloging expertise) (12%) were somewhat lower down the list (see table 6). Many librarians wrote that lack of demand and low circulation figures create a situation in which potential costs of ML collection growth are not justified. Smaller libraries and library branches can obtain any ML materials requested by users through inter-library loans from, for example, "a larger branch" or "a regional library." Accordingly, these libraries see no need to accumulate significant amounts of ML materials in their own locations. The "no need" notion derives from two basic factors: a very small number of users requesting materials in ML languages and a lack of interest on the part of ML speakers in reading their own languages even when the ML community size is large. As some respondents emphasized, many ML speakers are already fluent in English, or are "wishing to become so." Second and third generations of immigrants are "thoroughly Canadian," and thus have almost no interest in borrowing materials in their mother-tongue languages. In addition, recent immigrants are "more interested in integrating themselves and their children into Canadian life" (and are therefore "anxious to learn one or both official languages") than in demanding materials in

Table 4. Libraries Willing to Expand the Foreign Language (Multilingual) Collection of Their Largest Foreign Language Group Served by Size of Largest Foreign Language (Multilingual) Group Served in Their General User Population

Type of material	Fewer than 300 (n=40)		300-999 (n=26)		1,000-10,000 (n=42)		More than 10,001 (n=18)	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Reference books	8	(20)	12	(46.2)	16	(38.1)	9	(50)
Adult fiction	12	(30)	11	(42.3)	23	(54.8)	10	(55.6)
Adult nonfiction	9	(22.5)	15	(57.7)	24	(57.1)	8	(44.4)
Children's books	12	(30)	13	(50)	22	(52.4)	12	(66.7)
Newspapers	7	(17.5)	13	(50)	18	(42.9)	10	(55.6)
Magazines	8	(20)	13	(50)	22	(52.4)	11	(61.1)
Videos and DVDs	4	(10)	10	(38.5)	13	(31)	11	(61.1)
Audiocassettes and CDs	6	(15)	10	(38.5)	15	(35.7)	9	(50)
ESL materials	7	(17.5)	12	(46.2)	13	(31)	12	(66.7)
Computer software	5	(12.5)	7	(26.9)	9	(21.4)	11	(61.1)

Table 5. Libraries Willing to Expand Their Foreign Language (Multilingual) Collection of Their Largest Foreign Language Group Served by Percentage of Foreign Language (Multilingual) Speakers of the Largest Foreign Language Group Served in Their General User Population

Type of material	Less than 10% (n=63)		10% or more (n=38)	
	No.	(%)	No.	(%)
Reference books	14	(22.2)	16	(42.1)
Adult fiction	27	(42.9)	14	(36.8)
Adult nonfiction	26	(41.3)	18	(47.4)
Children's books	23	(36.5)	17	(44.7)
Newspapers	23	(36.5)	12	(31.6)
Magazines	22	(34.9)	15	(39.5)
Videos and DVDs	13	(20.6)	13	(34.2)
Audiocassettes and CDs	17	(27.0)	12	(31.6)
ESL materials	15	(23.8)	16	(42.1)
Computer software	9	(14.3)	14	(36.8)

their language of origin. Respondents mentioned situations where Italian, Asian, and Spanish language collections in their libraries amounted to what can best be described as unutilized ballast. One respondent described how the German language collection in her or his library was eventually dismantled and donated to the local population.

Ironically, a lack of demand can, as one respondent phrased it, turn out to be a "good thing" for public libraries, since library staff have "no ability to function in these [foreign] languages." Many respondents pointed out that, because staff members do not have knowledge of ML languages, it is inevitable that they show "ignorance of resources available" for the purposes of selection and purchase of materials in these languages. Accordingly, the lack of ability to speak, read, and write ML languages undermines the expertise and performance of public librarians in such areas as collection development, acquisitions, and cataloging. It also hampers their contacts with ML communities because they have great difficulty in discovering "what would be popular." Lack of expertise is often complicated

Table 6. Main Constraints Preventing Public Libraries from Having More Foreign Language (Multilingual) Materials by Library Type

Type of library	Demand	Budget	Space	Availability	Expertise	Prejudice
Sole unit	30	28	23	13	14	0
Main branch	23	26	19	16	15	0
Branch of a system with five or fewer branches	18	10	8	9	6	0
Branch of a system with six or more branches	36	31	24	8	9	1
Total <i>n</i> =367 (multiple answers allowed)	107 (29.2%)	95 (25.9%)	74 (20.2%)	46 (12.5%)	44 (12.0%)	1 (0.3%)

by a scarcity of, and difficulty in, obtaining ML selection tools to the point that some librarians think “they do not exist.” Finally, because many libraries have limited funds, they are cautious about spending money on materials that are not expected to be used to any great extent. Indeed, a number of respondents stressed “fighting for our lives in terms of just basic funding” to acquire a sufficient number of English-language materials.

Online Multilingual Materials

When asked whether they had links to ML materials such as newspapers, magazines, and government documents that could be of interest to individuals speaking the three most popular non-English languages in the library’s service area, only 9 libraries (6.1%) said that they had 5 or more such links (see table 7). Another 21 libraries (14.2%) said that they currently had five or fewer such links, but indicated that they would like to have more in the future. Fifty-three libraries (35.8%) admitted that, although they did not currently have such links, they nevertheless would like to have some. Given the fact that, according to the 1996 Canadian Census, there are more than 2.5 million individuals in Canada who identify themselves as speaking a language other than English or French at home, the lack of ML links on library Web sites is perplexing. Even more perplexing, in light of the above, is the fact that 65 public libraries (43.9%), of all sizes and types, indicated that they saw “no need” to have links to ML newspapers and magazines on their Web sites.

Often, especially those languages written in such non-Romanized scripts as Chinese, Ukrainian, Punjabi, Vietnamese, and Urdu, foreign languages can only be read in the electronic medium with the aid of character encoding software (table 8). As the 1996 Census states, there are more than 500,000 individuals who speak Chinese at home, more than 200,000 who speak Punjabi at home, and just under 100,000 individuals who speak Vietnamese at home (Statistics Canada, 1996a). These figures are likely to

increase in the 2001 Census. However, despite the large presence of ML speakers, only 21 (6 + 15) public libraries (14.3%) currently have character-encoding software on their Web sites to enable foreign languages to be read (see table 8). Another 43 libraries (29.3%) note that, while they do not have such software now, they

would like to include one or more such character encodings on their sites in the near future. Yet the majority of libraries (83 [56.5%]) indicate that they have “no need” to load such software onto their servers. Taken together with the 43.9% of public libraries who do not want to have links to ML newspapers or magazines, the lack of enthusiasm for character encodings may be a sign that much work still needs to be done towards making public libraries welcoming places for ML users. Moreover, if a public library wants to allow its users who speak languages written in non-Romanized scripts to send e-mails in their own languages, or if a public library wants to enable users to display its Web pages in non-Romanized scripts and search these pages using search terms written in non-Romanized scripts, then additional work with keyboard options, character encoding, and, possibly, translation software needs to be done by library personnel.

Selection Methods for Multilingual Materials

As shown in table 9, a large majority of public libraries never use the 11 selection methods identified: printed catalogs of foreign language publishers; Web sites of foreign language publishers; Web sites that review foreign language materials; local foreign language specialty bookstores; foreign language bookstores in another North American city; bookstores in the country where this language is spoken; Web sites of foreign language bookstores anywhere in the world; library staff who speak this language; library volunteers who speak this language; local people who speak this language; and approval plans. (Data in tables 9 and 10 are based on the “finding out about printed material in this foreign language” column of Survey Question 9 in the appendix.) Moreover, those libraries that do use these methods use them on a very infrequent basis, for the most part only “about once or twice a year.” As shown in table 10, the most popular selection methods for the 10 largest ML groups are, in order, printed catalogs of foreign language publishers (33), approval plans (31), and local people who speak this language

(27). Far down the list are such methods as local foreign language bookstores (15), bookstores in the country where this language is spoken (13), and Web sites of foreign language bookstores anywhere in the world (6). Nevertheless, some of the less popular methods listed in tables 9 and 10 are relatively accessible. Public libraries who are serious about wishing to improve the state of their ML collections should be exploring a number of these avenues.

Other Measures Taken by Public Libraries to Improve Multilingual Collections

In the same way that many Canadian public libraries see no need to link electronically to online ML newspapers and magazines, load non-Roman alphabet character encoding software onto their servers, or make use of a wide array of selection strategies, so too it appears that many of them do not see the need to adopt any of the eight strategies listed in table 11 to improve their ML services that have either a direct or indirect bearing on ML collections. Indeed, for six of these eight strategies, the majority of public libraries are content to do nothing. For example, 87 libraries (52.4%) do not have any paid staff who work 20 or more hours and who speak any of the top three ML languages spoken in that library's service area, and 111 libraries (66.9%) do not have any volunteers who speak any of these ML languages. Equally problematic is that 101

responding libraries (60.8%) have not had at least three diversity training sessions in the past year where staff are instructed in such things as cross-cultural communication

Table 7. Availability of Online Materials in Foreign (Non-English and Non-French) Languages by Library Type

Type of library	We have many (5 or more)	We have a few (less than 5), but would like more	We don't have any now, but would like to have some	No need to have any
Sole unit	1	8	17	17
Main branch	3	3	18	15
Branch of a system with five or fewer branches	1	2	3	13
Branch of a system with six or more branches	4	8	15	20
Total <i>n</i> =148	9 (6.1%)	21 (14.2%)	53 (35.8%)	65 (43.9%)

Table 8. Availability of Encoding Support for Non-Romanized Scripts on Library Web Sites by Library Type

Type of library	We have many (5 or more)	We have a few (less than 5), but would like more	We don't have any now, but would like to have some	No need to have any
Sole unit	3	7	12	21
Main branch	1	3	19	16
Branch of a system with five or fewer branches	2	2	2	12
Branch of a system with six or more branches	0	3	10	34
Total <i>n</i> =147	6 (4.1%)	15 (10.2%)	43 (29.3%)	83 (56.5%)

Table 9. Frequency of Methods Used for Selecting (Finding Out About) Foreign-Language (Multilingual) Materials by All Respondents

Selection method	Never	About once or twice per year	About 3-7 times per year	About once a month
Printed catalogs of foreign language publishers	127	16	15	8
Web sites of foreign language publishers	145	9	9	3
Web sites that review foreign language materials	148	8	8	2
Local foreign language specialty bookstores	146	11	8	1
Foreign language bookstores in another North American city	140	17	7	2
Bookstores in the country where this foreign language is spoken	151	11	2	2
Web sites of foreign language bookstores anywhere in the world	159	4	2	1
Library staff who speak this language	148	13	3	2
Library volunteers who speak this language	153	7	6	0
Local people who speak this language	132	20	7	7
Approval plans used by my library	131	18	1	16
Total <i>n</i> =166				

Table 10. Most Popular Methods of Selecting (Finding out about) Foreign Language (Multilingual) Materials That Are Used at Least Once a Year for the 10 Largest Foreign Language (Multilingual) Groups

Selection method	German	Chinese	Dutch	Urdu/ Punjabi	Korean	Vietnamese	Italian	Ukrainian	Japanese	Polish	Total
Printed catalogs of foreign language publishers	8	10	3	3	1	1	3	2	1	1	33
Approval plans used by my library	11	7	4	2	0	1	2	1	2	1	31
Local people who speak this foreign language	11	3	3	4	0	1	3	0	1	1	27
Foreign language bookstores in another North American city	4	6	3	2	1	1	2	0	2	2	23
Web sites of foreign language publishers	4	7	0	2	0	0	3	1	0	2	19
Web sites that review foreign language materials	7	5	1	1	1	0	1	0	0	1	17
Local foreign language specialty bookstores	4	3	2	1	0	2	1	0	2	0	15
Library staff who speak this language	4	4	1	2	0	0	2	1	0	1	15
Bookstores in the country where this language is spoken	2	5	0	2	0	1	1	0	0	2	13
Library volunteers who speak this language	2	3	1	2	0	0	0	0	1	0	9
Web sites of foreign language bookstores anywhere in the world	1	4	0	1	0	0	0	0	0	0	6

patterns, and the same number of libraries (101) have not conducted an ML user survey. Still, it is encouraging to find that 61 libraries (37%) have a mechanism that allows ML speakers to make suggestions about how the library can improve service to them, and that another 31 libraries (18.8%) are either working on implementing such a mechanism or are aware that they need one. In addition, 34 libraries (20.5%) have put together a collection of resources on diversity and multiculturalism, 47 libraries (28.7%) have developed community outreach partnerships with ML groups to shape collection development policies, and another 28 libraries (17%) are either working on implementing such outreach partnerships or are aware that they need to do so.

Just as public libraries were more willing to expand the size of their ML collections if they served a population area that had large numbers of ML groups (see tables 4 and 5), so it is also the case that public libraries are more willing to move forward with the eight actions listed in table 11 when the largest foreign language group served constitutes 10% or more of their general user population. As shown in table 12, the percentage of libraries not willing to undertake five of these actions—including hiring paid staff who speak ML languages, hiring volunteers who speak ML languages, imple-

menting diversity training, conducting needs assessments, and developing outreach initiatives—falls when the percentage of foreign language speakers (of the largest foreign language group served) in their general user population is 10% or more. For instance, while 58.7% of libraries with ML populations of less than 10% do not see a need to hire ML staff, only 44.7% of libraries with ML populations of 10% or more see no need to hire staff who speak ML languages. Although this is a marked improvement, it is still true that 44.7% of responding libraries that have 10% or more foreign language speakers in their general user population see no need to hire staff who speak ML languages. The same pattern can be seen with engaging volunteers who speak ML languages. Although the percentage of libraries not wishing to engage such volunteers drops (from 77.8% to 60.5%) when a library serves a population consisting of 10% or more of ML speakers, 60.5% of public libraries are nevertheless not willing to engage such volunteers. Libraries are unwilling to undertake two actions—making available a collection of staff development resources on diversity and multiculturalism and conducting user surveys—at about the same rates regardless of the percentage of ML speakers (of the largest foreign language group served) in the general user population.

Table 11. Actions Undertaken by Public Libraries to Meet the Needs of Their Foreign Language (Multilingual) Clientele

Actions	Yes		We're working on implementing this within the next year		We're aware we need to do this, but right now we don't have the time or the money to do it		There is no need and no plans for us to do this	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Do you have any paid staff who work 20 or more hours in your library who speak any of the top three foreign languages spoken in your service area? (<i>n</i> =166)	43	(25.9)	0		36	(21.7)	87	(52.4)
Do you have any library volunteers who speak any of the top three foreign languages spoken in your service area? (<i>n</i> =166)	22	(13.3)	3	(1.8)	30	(18.1)	111	(66.9)
Has your library put together a collection of staff development resources (videos, pamphlets, etc.) on issues of diversity and multiculturalism? (<i>n</i> =166)	34	(20.5)	3	(1.8)	48	(28.9)	81	(48.8)
Does your library provide diversity training sessions (at least 3 in the past year) to staff? Diversity training courses provide instruction in such things as crosscultural communication and so on. (<i>n</i> =166)	17	(10.2)	1	(0.6)	47	(28.3)	101	(60.8)
Has your library conducted a formal needs assessment study about non-English and non-French language speakers in your community? (<i>n</i> =166)	21	(12.7)	1	(0.6)	47	(28.3)	97	(58.4)
Has your library conducted a user-survey targeting non-English and non-French speakers in your community? (<i>n</i> =166)	21	(12.7)	1	(0.6)	43	(25.9)	101	(60.8)
Do you have a mechanism that allows foreign language speakers to make suggestions about how your library can improve service to them? (<i>n</i> =165)	61	(37)	2	(1.2)	29	(17.6)	73	(44.2)
Has your library developed community outreach partnerships with various non-English and non-French cultural groups to help shape collection development policy in your library? (<i>n</i> =164)	47	(28.7)	4	(2.4)	24	(14.6)	89	(54.3)

Table 12. Libraries Seeing No Need to Undertake Actions to Improve Collections for Their Foreign Language (Multilingual) Clientele by Percentage of Foreign Language Speakers of the Largest Foreign Language Group Served in Their General User Population

Actions	Less than 10% (<i>n</i> =63)		10% or more (<i>n</i> =38)	
	No.	(%)	No.	(%)
Hire paid staff (20 or more hours per week) who speak foreign languages	37	(58.7)	17	(44.7)
Engage library volunteers speaking foreign languages	49	(77.8)	23	(60.5)
Make available a collection of staff development resources on diversity and multiculturalism	32	(50.8)	21	(55.3)
Implement diversity training	41	(65.1)	22	(57.9)
Conduct a formal needs assessment	38	(60.3)	21	(55.3)
Conduct a user survey	36	(57.1)	24	(63.2)
Implement a mechanism for foreign language speakers to make suggestions	25	(40.3)*	22	(57.9)
Develop community outreach initiatives to foreign language groups to help in collection development	37	(58.7)	18	(48.7)**

n*=62*n*=37

Limitations

There are a number of limitations to this study. The low response rate of 11.5% makes the results presented here tenuous; they may not be able to be generalized. Because 75.8% of responses were received from sole unit libraries or branches, the reality of large central systems may be not adequately represented. In addition, there were no

responses from public libraries serving, for example, the Spanish or Arabic communities. Public libraries serving German populations may be overrepresented given the fact that, according to the 1996 Census, there are only 114,085 individuals who declared German as their home language, while there are 586,085 individuals who declared Chinese as their home language (Statistics Canada 1996a). This may be an accident of response, or it may be an indication that

librarians in some locations were unaware of, or unwilling to complete, this survey. Finally, some large metropolitan public library systems have policies where the main branch reports on behalf of all other branches. Other systems allow their branches to respond individually to surveys. Thus, the results provided by a library system that has a wealth of ML resources but only reports once as a complete entity may be statistically submerged by results coming from individual branches of another library system that may not necessarily have ML resources at all its branches. Nevertheless, the results gathered here should be seen as a sign, however imperfect, that some public libraries in Canada may find themselves to be in a situation where they are unable to provide ML collections and services at a sufficient level.

Discussion

One way to interpret these results is to see a relationship between, on the one hand, the fact that a significant number of Canadian public libraries are not undertaking hiring, outreach, and diversity training initiatives of the type listed in table 11 and, on the other hand, the relatively poor outcomes that these libraries show with regard to employing a wide variety of selection tools to expand their ML collections. If public library collection development personnel do not know very much about, or do not make extensive use of, the various selection methods listed in table 9, it would be difficult indeed to expand their ML collections in the various material types listed in tables 2–5. Some support for this assertion is provided in table 6, where 12.5% of libraries state that perceived lack of availability of ML materials deters them from having a greater number of such materials. Even if librarians do know about the various collection development methods listed in table 9, they may not be able to use them because they lack reading knowledge of foreign languages or other expertise. As shown in table 6, lack of expertise was mentioned as a constraint on ML collection development by 12% of respondents. In addition, the lack of willingness to make available ML online materials (table 7) and character encoding software for non-Romanized scripts (table 8) suggests that Canadian public libraries are not doing as much as they could in terms of creating an inviting atmosphere for ML clients.

Of course, it may also be the case that many libraries lack adequate budgets to collect ML materials at a level that matches the needs of their communities. Our findings show that 25.9% of surveyed libraries stated that budgetary constraints inhibited development of their ML collections (table 6). As noted above, the NLC survey found that 10 out of 21 library systems in relatively large metropolitan areas either had no budget (three libraries) or an inadequate budget (seven libraries) for ML materials (Multicultural

Resources and Services 2002, 1, 5, 6, 7, 8, 10, 13). Rajwant Chilana (2001), while praising the efforts of the Fraser Valley Regional Library (in British Columbia) in providing materials and services in such languages as Punjabi, Hindi, and Chinese, nevertheless notes that, in an era of “diminishing budgets” and “increasing demands from users for quality services,” “there is an increasing pressure on our staff to justify/review the size, growth rate, and content of non-English language collections,” in other words, to be “fiscally responsible” without losing sight of cultural and linguistic diversity (19–20).

Moreover, as indicated in table 6, the perceived lack of demand for ML materials is an inhibiting factor for many public libraries in their decisions not to increase the size of their ML collections. But, as the Multilingual Materials Subcommittee (1990) of the ALA points out, lack of demand may be a function of previous inadequate service and the perception, on the part of ML communities, that public libraries have nothing to offer them. As Gitner (1998) explains, the Queens Borough Public Library (QBPL) runs a successful “New Americans” program that offers “a unique mix of interrelated programs, services, and collections designed to reach” individuals speaking more than 100 different languages through a “*proactive* approach” (emphasis added) that includes “personal contacts by phone and in-person to local community agencies, attendance at community fairs, and press releases to the ethnic media” (143–44). In other words, QBPL is creating demand by “let[ting] immigrants know that the library welcomes them and has many programs and services to offer them and their families” (144). Moreover, in the area of collection development, QBPL goes out of its way to “provide general popular materials from their home countries on the same topics that we provide our English-speaking customers, i.e., fiction, parenting, cookbooks, biographies, romances, children’s books, videos, and music CDs” as a way of assuring its diverse clientele that “it respects their native culture, language, and customs” (145). In addition, it has instituted a “Mail-a-Book” program in seven languages, defined as “annotated lists of about one hundred titles each that act as a public-relations tool and allow customers to become acquainted with the library” without having to physically come to the library (145). Certainly, as the NLC survey makes clear, numerous large public libraries in Canadian metropolitan areas have substantial collections of non-English materials in such diverse languages as Bosnian, Chinese, Farsi, Hindi, Portuguese, Russian, and others (Multicultural Resources and Services 2002). And in 2000, the Toronto Public Library increased its French and multilingual materials budget to \$1.5 million, or 12% of the budget (Toronto Public Library 2001). In addition, it has implemented “a resource deposit model for its circulating French and multilingual collections,” whereby “142 large

resource collections [that] are located at District and larger branches with language communities . . . supply material for approximately 350 smaller collections at Neighbourhood branches where needed,” and it also provides access to over 500 multilingual magazines and newspapers in “over 70 languages via the Newsconnect Gateway on the Virtual Reference Library” (2–3). It is encouraging, moreover, to see that, in general, as the size of the largest foreign language group served increases, public libraries are willing to increase the size of their ML collections in that language (tables 4 and 5). Nonetheless, some of the public libraries that responded to the present survey had an ambiguous relationship with the concept of ML collections, especially when it comes to finding out about (selecting) print materials in foreign languages and establishing electronic collections in foreign languages.

Why might this be so? Public libraries, for all intents and purposes, reflect the knowledge, worldviews, energy, and initiatives of their staff members. Staff members, both professional and paraprofessional, are, in turn, influenced, to some extent at least, by the emphases placed on different values and outlooks in the various institutions offering degree programs in library and information science (LIS). It may very well be that, at a time when technological, electronic, and digital concerns are given pride of place in the curriculum, issues directly pertaining to the development and expansion of ML collections and services in libraries and other information organizations are not receiving the kind of primary, concerted, and obligatory attention that they deserve.

Identifying demographic trends in the United States whereby Hispanic and Asian populations will account for the major portion of population growth in the next 20 years, Nance-Mitchell (1996) called for a rapid increase in the number of minority librarians recruited and retained in LIS programs. Gollop (1999) concurred, but also noted that LIS programs “must make every effort to prepare all their graduates to work in larger multicultural environments [even if] such preparation may mean altering several courses in a school’s curriculum” (385). Gollop’s emphasis on the word “all” springs from her realization that students who have an initial interest in multiculturalism and diversity issues will “usually self-select and enroll in courses that have a broader cultural perspective . . . but that students who do not necessarily hold such an interest will apply their precious credit hours to taking other courses” (390). But, in light of demographic trends, those latter students may increasingly “find themselves ill prepared for encounters with library patrons who are very different from themselves [because the students] possess little knowledge of how best to respond to and bridge those differences” (390). Basing her proposals on the work of Lorna Peterson, she therefore suggests “organizing units in a given course . . . around multicultural

diversity issues” so that all students, no matter what courses they elect to take, are deliberately and systematically exposed to multicultural issues in a variety of contexts and situations (390).

This recommendation is all the more pertinent when seen in the context of two other studies. First, East and Lam (1995) found that, when LIS schools were asked whether any planned single course on multiculturalism would have required, highly recommended, recommended, or optional status, only one school (out of 17) said it would be required, while nine schools (out of 17) said it would be optional (207). Second, Peterson (1999) observed that “courses described as devoted to diversity [in the curricula of LIS schools] were generally reported as experimental with low enrollments” (24) and that four schools had recently dropped multicultural courses (although three schools had added experimental courses). Single optional courses about multicultural librarianship therefore do not seem to work as well as they might. Even if LIS schools adopt such courses, making them optional rather than required typically guarantees low enrollments—a state of affairs that contributes to the eventual demise of such courses in an academic atmosphere where devoting resources and energy to courses that only attract a handful of students is frowned upon.

Yet multicultural and multilingual issues pervade every aspect of library and information work. For example, as Chu (2000) observes, all media, including electronic media, are nonneutral. Indeed, many multimedia resources that purport to be multicultural are “developed in the western world . . . by middle-class white males” and thus reflect “a very limited selection of the universe of knowledge . . . and a particular vision of legitimate knowledge and culture” (255–56). Accordingly, librarians, among others, must be sensitive to a wide range of evaluative criteria—including such ideas as invisibility, fragmentation, language variance, and language bias—when developing, maintaining, and weeding multimedia resources. If such sensitivity and knowledge are called for when dealing with multicultural materials produced in English, the knowledge and sensitivity required when dealing with materials produced in languages other than English is equally great, if not greater.

What specific types of knowledge should librarians be gaining about multilingual populations? First, as recognized by Berry, Kim, and Boski (1988), there must be an awareness of the various “psychological acculturation” processes of multilingual groups (e.g., integration, assimilation, separation, and marginalization), as well as an understanding that, beyond their linguistic differences, multilingual groups can be divided into five subcategories: immigrants; refugees; native peoples; ethnic groups; and sojourners (62–66), each with their own unique characteristics. Mylopoulos (2000), explaining that there are three stages of

the settlement process of immigrants (an orientation stage; an intermediary stage focused on “longer-term resettlement”; and a final stage centered on “how one can get reliable and understandable information on a consistent basis”), argues that librarians should recognize that information must be provided in “a contextual way” so that it meets “the everyday lives of people” who often live in “small worlds” (27). Freiband (1992) observes that librarians must have the knowledge necessary to “develop collections on an international level,” which means a ready acquaintance with “ethnic and minority publishers and producers of library materials,” and the ability “to communicate directly with these groups in their own languages and to recognize cultural differences in nonverbal communications patterns” (288–89). A *World of Information* mentioned that knowing about literary and publishing trends in foreign countries is something that should become an important part of the intellectual toolkit of library staff (NLC 1994). These last points speak eloquently about the pressing need to train existing and future library staff in ML language skills and cultural phenomena—a humanistic approach to library education that is, unfortunately, fast becoming outmoded. These points also speak forcefully about the necessity to proactively recruit ML speakers into LIS programs and to offer them a structured and far-reaching program of study that emphasizes ML concerns in every course taken.

One education model that recognizes that librarians must have broad-based knowledge about cultural phenomenon and multilingual abilities in order to serve diverse populations is the Israeli retraining program for professional librarians immigrating from Russia. As described by Lazinger and Peritz (1993), this program starts from the premise that if Russian-educated librarians are to serve Israeli library patrons adequately, they must not only know about computer technologies and processes, but must also be well versed about cultural matters. The program thus consists of 600 hours of study, which includes 40-hour courses in Modern Hebrew Literature, Modern Jewish History, Jewish Bibliography, and a 100-hour course in Hebrew. Certainly, the specific intent of this program is far-removed from the Canadian situation, but its general principles can be readily applied to ML collections and services in Canadian public libraries. Why? Simply put, the Israeli program recognizes that first-rate library service must be informed by an in-depth cultural and linguistic understanding of the populations served. In the Canadian context, an idea that might be worth exploring is for public libraries, of whatever size, to identify ML populations in their service areas, and then have an existing staff member undergo an Israeli-style training program for each identified ML group. Another approach would be for LIS programs to offer blocks of courses that would be specially tailored to address

the needs of individual ML groups, such as the Koreans, Chinese, and Russians. For instance, a Korean library module would include courses in the Korean language, Korean history, and Korean culture and literature, as well projects to design computer user interfaces for Korean-speaking library patrons, explore contemporary reading interests of Koreans, and gain familiarity with Korean-language publishers in North America and abroad. This recommendation is summarized in the IFLA document *Multicultural Communities Guidelines for Library Services*, which urges that “Library schools should ensure that *all* courses deal with the issues involved for library staff in an ethnically, linguistically or culturally diverse society” (emphasis added) (IFLA 1998, Section 7.4[a]).

On a more concrete level, public libraries can enter into partnership arrangements with private companies that enable what Henczel and Monester (2002) call “the streamlined incorporation” of ML collections into existing library collections (par. 2). Henczel and Monester are part of a collaboration between CAVAL Collaborative Solutions (CAVAL) and the Foreign Language Bookshop (FLB) that delivers shelf-ready materials in more than 70 non-English languages to many public libraries in Australia and New Zealand at a “fair price” (par. 22). Recognizing that “[e]ach country and culture has a different reading profile” and that “politics, religion, regional economics, and literacy standards” affect library collection development, FLB attempts to select “the titles most attractive to the readers of a local community rather than those titles deemed to be suitable by intellectuals” (par. 13–14). Alternatively, based on the model of the Southern Ontario Multilingual Pool, described by Skrzyszewski (1993), a group of libraries can contribute money to establishing a collection of ML resources—resources that can then be rotated in blocks through member libraries and be made available through interlibrary loan arrangements (132). Another idea may be to seek grants from funding agencies when demographic trends reveal that a predetermined number of immigrants (e.g., 50) speaking a foreign language has moved into the service area of the public library. For instance, the Everett (Wash.) Public Library, using statistics from the school district and the 2001 Census showing an influx of Vietnamese, Russian, and Arabic speakers into the county, and noting that “the library’s Evergreen branch has no foreign language materials and the bookmobile reported unmet demands for children’s books in Arabic,” applied for a \$34,660 grant to increase its collections in these languages and to market its services to these linguistic communities (Goffredo 2002, par. 9).

These are worthwhile approaches to the dilemma faced by many public libraries seeking to strengthen their ML collections. However, it is also important to heed the findings of Berger (2002), who reports on a survey of how

Danish ethnic minorities use public libraries and their satisfaction levels with library services. With regard to collections and collection development, Berger explains that it is “mainly adults that demand and use materials in their mother tongue” and that these adults “also wish to influence which books and music the libraries purchase” (83). Not only do they prefer titles dealing with topics “related to the cultural context of the immigrants’ original countries such as books on cooking, childcare, sex guidance, religion, history, and contemporary politics,” they also want materials that “help them maintain and develop their familiarity with the history, culture, and current developments of their native country” (83). Involving immigrant community members in library plans and purchasing decisions of foreign-language materials is therefore something that should not be overlooked, especially because of the relatively few library staff members who have knowledge of foreign languages and cultural issues. This suggestion leads to one area for future research; namely, looking at the extent to which public libraries take steps to involve ML community members in collection development decisions, the ways in which this process works, the advantages and disadvantages of this process, and the outcomes of this process in terms of library use, circulation, and satisfaction levels.

Finally, there is the vexing question of donations and appeals to members of ethnic and immigrant communities for financial help in supporting the development of multilingual collections and services. To be sure, this can often be one way to begin a collection in a specific foreign language. As Skrzyszewski (1997) points out, the Toronto Reference Library increased its collection of Turkish materials through the valiant efforts of one individual staff member who “wrote to community newsletters, sent letters to the Consulate, and asked friends from Turkey and the community to donate books, . . . [and] established a partnership between the National Library of Turkey and the Metropolitan [Toronto] Library” (92). The NLC survey indicates that four large library systems partly rely on funding from the ethnic community and donations to increase their ML collections (Multicultural Resources and Services 2002, 3, 5, 10). Although these may be appealing methods of collection development, especially when public libraries are faced with tight budgets, the results may be mixed in terms of collection quality; after all, not all donations may be adequate. As well, the message that such reliance on direct financial support from the immigrant community sends may not be entirely positive; after all, shouldn’t substantial base funding for ML collection development be built-in to a library’s operating budget, and shouldn’t that funding be coming from federal, provincial, and municipal coffers? When all is said and done, and given the reality of tight budgets, making decisions about how a library’s collections budget will be allocated becomes a matter of prior-

itization. Do public library systems need dozens (often hundreds) of copies of the latest English-language best-sellers? Do they need to have numerous subscriptions to English-language glossy magazines with dozens (often hundreds) of pages of advertisements? Although these may seem to be trivial questions, they nonetheless suggest the larger issue that Canadian public libraries face on a daily basis—the degree of their real commitment to making ML collections an integral and central part of their community service, as well as the degree of their commitment to asking difficult questions about how their emphasis on English-language materials detrimentally affects their ability to provide ML collections.

For instance, we noted above that the Toronto Public Library increased its French and ML materials budget to \$1.5 million, or 12% of the budget (Toronto Public Library 2001). However, according to the 1996 statistical profile for the Toronto Census Metropolitan Area (CMA) (the most recently available at the time of the writing of this article), out of a total population of 4,263,755 in the Toronto CMA, there were 1,578,080 individuals who had first learned a language or languages other than English or French, and still understood that language or languages (Statistics Canada 1996b). In addition, there were 46,065 individuals who first learned and still understand French. If these two figures are added, then 38.1% of the total population of the Toronto CMA first learned and still understands a language other than English. If figures for the City of Toronto are used, the total population of the City of Toronto is 653,730. The number of people who first learned a language other than English or French and still understand that language is 262,155. The total number of people who first learned French and still understand it is 10,445. Therefore, 41.6% of the total population of the City of Toronto first learned, and still understand, a language other than English.

Of course, other figures could be used as indications of the ML population in the Toronto area; no figures are perfect. Also, the census figures for 2001 will likely reveal a substantial increase in the number of individuals having knowledge of a non-English language because of strong rise in immigration. But the point is this: the figure of 38.1%, which represents that number of individuals who first learned (and still understand) French and other non-English languages in the broad Toronto area, is very far removed from the figure of 12% that the Toronto Public Library spends on its French and ML collections. It could therefore be argued that the Toronto Public Library has established priorities such that its expenditures on French and ML materials are substantially below the percentage of potential ML clients in its service area who may want to use French and ML materials. This may be a naïve view, but it bears thinking about.

Conclusion

As the ML population of Canada increases in the 21st century and as ML populations begin to settle in mid-sized cities and small towns, public libraries should seriously consider making a commitment to view every aspect of library work through the prism of multilingualism, just as LIS schools should restructure the contents of all their courses to ensure that ML issues, in all their myriad applications, become the focus of instruction. Certainly, the ML collections of some Canadian public libraries are, according to the results reported here, underused. But is this because the existing ML collections and services are not adequate, or is it truly because there are not enough ML speakers interested in ML collections or services? No matter the size of a public library, ML collections and services should be viewed as the cornerstone of a library's commitment to forging a sense of inclusiveness and encouraging real intercultural understanding. The package of initiatives proposed by NLC, which includes "the provision of online acquisition tools, cooperative cataloguing, access to evaluated Internet resources in heritage languages [and a] directory of multilingual collections," constitutes a tremendous asset to Canadian public libraries as they move toward expanding their ML collections (Zielinska 2002, 5). Yet, access to invaluable centralized resources should not lead to an over-reliance on such resources to the detriment of local initiatives that are driven by the immediate and unique needs of an individual immigrant community in a particular geographic location, and that involve immigrant community members in decisions affecting the scope and range of a library's ML collections. Some of the collection development methods identified in the present study (see table 9) can serve as the basis for expanding ML collections and attracting various ML populations to the public library, especially if local foreign language speakers are encouraged to work as full partners with professional library staff in making use of these selection tools and strategies. In addition, public libraries should engage in strenuous lobbying efforts at the federal, provincial, and municipal levels to ensure substantial and stable funding for ML collection development so that the quality and breadth of their ML collections are not dependent on uncertain donations and chancy funding sources that often have the effect of making ML collection development a haphazard affair and that symbolically situate it as an "extra" or "additional" activity. If public libraries succeed in making a strong commitment to professional and inclusive ML collection development based on continuous and stable funding, then they can become, in the words of Aguirre (2001), the kinds of "intellectual spaces" (69) where both young and old immigrants acquire "cultural capital" (86), as well as places where immigrant community members have a full and proudly participatory ownership stake.

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Appendix

Collection Development Survey for Canadian Public Libraries

[This is a reproduction of the Web-based survey that was used as the research instrument in this article.]

Hello! Thank you for taking the time to fill out this survey about the types of multilingual materials you have in your public library. Your help and time is greatly appreciated.

There are only 10 main categories of questions in this survey, and almost all of them can be answered by using drop-down menus and clickable multiple-choice boxes. The entire survey should take you only about 30 minutes to complete. Rest assured that all your answers will remain completely confidential and anonymous, because this survey does not ask for your name or for the name of your library. Again, we highly appreciate the time that you took to help in this project.

I understand that I am giving my consent to participate in this survey by answering the questions and pressing the SUBMIT button on the last page of this survey.

(Note: Please use the navigation buttons found on the pages to move back and forth, rather than the browser's back and forward buttons. This will allow the survey form to retain your information as move you through it, as well as allow you to go back and change information if you choose to.) [This appeared in red on the screen.]

Introductory Questions

1A. The public library where I work can best be described as a (pick one from below):

- Sole location of a public library (no branches)
- Main library of a library system that has branches
- Branch library of a library system that has 5 or fewer branches
- Branch library of a library system that has between 6 and 10 branches
- Branch library of a library system that has more than 10 branches

1B. What is the total population of the service area of the library where you work? (If you said branch in question 1A, enter the population served by your branch.)

2. In what province or territory is your library located? Choose one from below:

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Northwest Territories
- Nova Scotia
- Nunavut
- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan
- Yukon

3. Please list the three largest populations of people (linguistic groups) in your service area who have the ability to speak a language other than English or French (in this category, you may include people whose native language is not English/French, language students, foreign students, and other bilingual citizens). Beside each linguistic group, please indicate how many people you think there are who speak this language in your service area.

Largest foreign language population is _____
Approximate number is _____

Second largest foreign language population is _____
Approximate number is _____

Third largest foreign language population is _____
Approximate number is _____

4. You will notice that the 3 foreign languages that you selected in Question 3 automatically appear at the top of the answer columns for this question. Now, for each of the items listed in the extreme left-hand column (Adult fiction, Adult nonfiction, etc.), PLEASE INDICATE THE NUMBER OF ITEMS THAT YOUR SPECIFIC LOCATION CURRENTLY OWNS in the designated foreign language at the top of the column. For example, if you work at a branch, the numbers given here should refer only to your branch. If you work at the main (or sole) location, the numbers given here should refer only to the main (or sole) location. The word "All" refers to both adult and children's materials.

4A. All reference books: _____, _____, _____

4B. Adult fiction books (paperback and hardcover): _____, _____, _____

4C. Adult nonfiction books (paperback and hardcover): _____, _____, _____

- 4D. Children's books (paperback and hardcovers): _____, _____, _____
- 4E. All newspapers: _____, _____, _____
- 4F. All magazines: _____, _____, _____
- 4G. All entertainment movie videos and DVDs: _____, _____, _____
- 4H. All music CDs: _____, _____, _____
- 4I. All English-learning materials in this language: _____, _____, _____
- 4J. All computer software: _____, _____, _____
- 4K. Other—please describe: _____, _____, _____

5. What are the three biggest constraints that prevent you from having more materials in these three foreign languages?

6. You will notice that the 3 foreign languages that you selected in Question 3 automatically appear at the top of the answer columns for this question. Now, for each of the items listed in the extreme left-hand column (Adult fiction, Adult non-fiction, etc.), PLEASE INDICATE THE NUMBER OF ITEMS THAT YOUR SPECIFIC LOCATION WOULD LIKE TO OWN in the designated foreign language at the top of the column. For example, if you work at a branch, the numbers given here should refer only to your branch. If you work at the main (or sole) location, the numbers given here should refer only to the main (or sole) location. The word "All" refers to both adult and children's materials.

- 6A. All reference books: _____, _____, _____
- 6B. Adult fiction books (paperback and hardcover): _____, _____, _____
- 6C. Adult nonfiction books (paperback and hardcover): _____, _____, _____
- 6D. Children's books (paperback and hardcover): _____, _____, _____
- 6E. All newspapers: _____, _____, _____
- 6F. All magazines: _____, _____, _____
- 6G. All entertainment movie videos and DVDs: _____, _____, _____
- 6H. All music CDs: _____, _____, _____
- 6I. All English-learning materials in this language: _____, _____, _____
- 6J. All computer software: _____, _____, _____

7. Is there any other type of material in these 3 foreign languages that you would like to have in your library?

_____, _____, _____

8. This two-part question asks about electronic resources on your library's Web site. For each of the questions, choose one of the four offered choices.

8A. On your Web site, do you have links to foreign language materials (such as newspapers, magazines, government documents, etc.) that may be of interest to speakers of the top three foreign languages spoken in your library's service area?

- We have many of these (5 or more) on our Web site
- We have a few of these (less than 5), but we would like to have more
- We don't have any, but would like to have some
- We don't see a need for such things

8B. Does your library Web site utilize character encodings (e.g., Cyrillic, Chinese, Arabic, etc.) that allow people to read foreign language materials in that foreign language?

- We have many of these (5 or more) on our Web site
- We have a few of these (less than 5), but we would like to have more
- We don't have any, but would like to have some
- We don't see a need for such things

THIS NEXT SET OF QUESTIONS DEALS ONLY WITH PRINTED MATERIAL (BOOKS, NEWSPAPERS, MAGAZINES) IN FOREIGN LANGUAGES.

For these questions, we would like to know how you go about selecting (finding out about) AND then actually buying foreign language print materials. Note that we are making a distinction between selecting and buying. We're only going to ask you about the foreign language that you have the most of in your library.

Place the name of this foreign language here: _____

9. Choose the answer that best describes your use of each of the methods described in the extreme left-hand column of this question.

	I use this method to ACTUALLY PURCHASE printed material in this foreign language	I use this method to FIND OUT about printed material in this foreign language
9A. Printed catalogs of foreign language publishers:	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 7 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 4 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never
9B. Web sites of foreign language publishers:	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 7 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 4 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never
9C. Web sites that review foreign language materials:	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 7 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 4 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never
9D. Local foreign language specialty bookstores (in your town or city):	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 7 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 4 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never
9E. Foreign language bookstores that are in another North American city:	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 7 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 4 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never
9F. Bookstores in the country where this foreign language is spoken:	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 7 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 4 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never
9G. Web sites of foreign language bookstores anywhere in the world:	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 7 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never	<input type="checkbox"/> About once a month <input type="checkbox"/> About 6 or 7 times per year <input type="checkbox"/> About 3 or 4 times per year <input type="checkbox"/> About once or twice per year <input type="checkbox"/> Never

- 9H. Library staff who speak this language:
- | | | | |
|--------------------------|------------------------------|--------------------------|------------------------------|
| <input type="checkbox"/> | About once a month | <input type="checkbox"/> | About once a month |
| <input type="checkbox"/> | About 6 or 7 times per year | <input type="checkbox"/> | About 6 or 7 times per year |
| <input type="checkbox"/> | About 3 or 7 times per year | <input type="checkbox"/> | About 3 or 4 times per year |
| <input type="checkbox"/> | About once or twice per year | <input type="checkbox"/> | About once or twice per year |
| <input type="checkbox"/> | Never | <input type="checkbox"/> | Never |
- 9I. Library volunteers who speak this language:
- | | | | |
|--------------------------|------------------------------|--------------------------|------------------------------|
| <input type="checkbox"/> | About once a month | <input type="checkbox"/> | About once a month |
| <input type="checkbox"/> | About 6 or 7 times per year | <input type="checkbox"/> | About 6 or 7 times per year |
| <input type="checkbox"/> | About 3 or 7 times per year | <input type="checkbox"/> | About 3 or 4 times per year |
| <input type="checkbox"/> | About once or twice per year | <input type="checkbox"/> | About once or twice per year |
| <input type="checkbox"/> | Never | <input type="checkbox"/> | Never |
- 9J. Local people (non-library staff or volunteers) who speak this language:
- | | | | |
|--------------------------|------------------------------|--------------------------|------------------------------|
| <input type="checkbox"/> | About once a month | <input type="checkbox"/> | About once a month |
| <input type="checkbox"/> | About 6 or 7 times per year | <input type="checkbox"/> | About 6 or 7 times per year |
| <input type="checkbox"/> | About 3 or 7 times per year | <input type="checkbox"/> | About 3 or 4 times per year |
| <input type="checkbox"/> | About once or twice per year | <input type="checkbox"/> | About once or twice per year |
| <input type="checkbox"/> | Never | <input type="checkbox"/> | Never |
- 9K. Approval plans used by my library:
- | | | | |
|--------------------------|------------------------------|--------------------------|------------------------------|
| <input type="checkbox"/> | About once a month | <input type="checkbox"/> | About once a month |
| <input type="checkbox"/> | About 6 or 7 times per year | <input type="checkbox"/> | About 6 or 7 times per year |
| <input type="checkbox"/> | About 3 or 7 times per year | <input type="checkbox"/> | About 3 or 4 times per year |
| <input type="checkbox"/> | About once or twice per year | <input type="checkbox"/> | About once or twice per year |
| <input type="checkbox"/> | Never | <input type="checkbox"/> | Never |
- 9L. Other (please describe): _____
- | | | | |
|--------------------------|------------------------------|--------------------------|------------------------------|
| <input type="checkbox"/> | About once a month | <input type="checkbox"/> | About once a month |
| <input type="checkbox"/> | About 6 or 7 times per year | <input type="checkbox"/> | About 6 or 7 times per year |
| <input type="checkbox"/> | About 3 or 7 times per year | <input type="checkbox"/> | About 3 or 4 times per year |
| <input type="checkbox"/> | About once or twice per year | <input type="checkbox"/> | About once or twice per year |
| <input type="checkbox"/> | Never | <input type="checkbox"/> | Never |
10. This last set of questions asks about what you are doing to prepare your staff to deal with non-English and non-French patrons. For each individual question, check one of the four offered choices.
- 10A. Do you have any paid staff who work 20 or more hours in your library who speak any of the three foreign languages identified in question 3?
- Yes
- We're working on implementing this within the next year
- We are aware that we need to do this, but right now we don't have the time or money to do it
- There is no need and no plans for us to do this
- 10B. Do you have any library volunteers who speak any of the three foreign languages identified in question 3?
- Yes
- We're working on implementing this within the next year
- We are aware that we need to do this, but right now we don't have the time or money to do it
- There is no need and no plans for us to do this
- 10C. Has your library put together a collection of staff development resources (videos, pamphlets, etc.) on issues of diversity and multiculturalism?
- Yes
- We're working on implementing this within the next year
- We are aware that we need to do this, but right now we don't have the time or money to do it
- There is no need and no plans for us to do this
- 10D. Does your library provide diversity training sessions (at least 3 in the past year) to staff? Diversity training courses provide instruction in such things as cross-cultural communication and so on.
- Yes
- We're working on implementing this within the next year
- We are aware that we need to do this, but right now we don't have the time or money to do it
- There is no need and no plans for us to do this

- 10E. Has your library conducted a formal needs assessment study about non-English and non-French language speakers in your community?
- Yes
 - We're working on implementing this within the next year
 - We are aware that we need to do this, but right now we don't have the time or money to do it
 - There is no need and no plans for us to do this
- 10F. Has your library conducted a user-survey targeting non-English and non-French speakers in your community?
- Yes
 - We're working on implementing this within the next year
 - We are aware that we need to do this, but right now we don't have the time or money to do it
 - There is no need and no plans for us to do this
- 10G. Do you have a mechanism that allows foreign language speakers to make suggestions about how your library can improve service to them?
- Yes
 - We're working on implementing this within the next year
 - We are aware that we need to do this, but right now we don't have the time or money to do it
 - There is no need and no plans for us to do this
- 10H. Has your library developed community outreach partnerships with various non-English and non-French cultural groups to help shape collection development policy in your library?
- Yes
 - We're working on implementing this within the next year
 - We are aware that we need to do this, but right now we don't have the time or money to do it
 - There is no need and no plans for us to do this.

By pressing the submit button, you will submit your survey and see your results.

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The Répertoire de Vedettes-matière de l'Université Laval Library, 1946–92

Francophone Subject Access in North America and Europe

Robert P. Holley

In 1946, the Université Laval in Quebec City, Quebec, Canada, started using Library of Congress Subject Headings (LCSH) in French by creating an authority list, Répertoire de Vedettes-matière (RVM), whose first published edition appeared in 1962. In the 1970s, the most important libraries in Canada with an interest in French-language cataloging—the Université de Montréal, the Bibliothèque Nationale du Canada, and the Bibliothèque Nationale du Québec—forged partnerships with the Université Laval to support RVM. In 1974, the Bibliothèque Publique d'Information, Centre Pompidou, Paris, France became the first library in Europe to adopt RVM. During the 1980s, the Bibliothèque Nationale de France (BNF) created an authority list, RAMEAU, based upon RVM, which is used by numerous French libraries of all types. The major libraries in Luxembourg adopted RVM in 1985. Individual libraries in Belgium also use RVM, often in combination with LCSH.

The spread of RVM in the francophone world reflects the increasing importance of the pragmatic North American tradition of shared cataloging and library cooperation. RVM and its European versions are based upon literary warrant and make changes to LCSH to reflect the specific cultural and linguistic needs of their user communities. While the users of RVM seek to harmonize the various versions, differences in terminology and probably syntax are inevitable.

In 1946, the Université Laval in Quebec City, Quebec, Canada, started using *Library of Congress Subject Headings (LCSH)* in French. To do so, the librarians created an authority list in French, *Répertoire de Vedettes-matière (RVM)*, whose first published edition appeared in 1962 (the first edition appeared with the title *Répertoire des Vedettes-matière*). Since then, RVM has had increasing importance in providing support for subject access in francophone countries around the world as other libraries, first in Canada and then in Europe, either adopted RVM, often with some modification, for subject access or used it as a resource for creating French subject terms.

The following article will examine why and how the Université Laval adopted *LCSH* as a means to provide subject access at an acceptable cost for its own library. The next step included partnerships with the most important libraries in Canada with an interest in French-language cataloging—the

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Université de Montréal, the Bibliothèque Nationale du Canada (BNC) (the National Library of Canada), and the Bibliothèque Nationale du Québec (BNQ).

In the 1970s and the 1980s, European libraries became increasingly interested in North American library practice in the areas of cataloging and subject access. This interest sprang in part from the wish to improve subject access based upon the long-standing North American model. In addition, cooperative-cataloging resources such as OCLC, RLG, and WLN, coupled with the growth of library networks, showed that shared cataloging led to reduced costs in providing acceptable bibliographic records. Within the francophone countries, libraries turned to *RVM* as an obvious model to be considered in implementing their own subject access systems.

The spread of *RVM*'s influence began when the Bibliothèque Publique d'Information (BPI) in the Centre Pompidou, Paris, France, decided to implement *RVM* for subject access in 1974. In a similar fashion during the 1980s, *RVM* served as the basis for the system *RAMEAU*, which had widespread use in French academic and public libraries under the leadership of the Bibliothèque Nationale de France (BNF). The highpoint for cooperation occurred in the early 1990s, when the Université Laval and the Bibliothèque Nationale de France signed a cooperative agreement with the goal of coordinating their efforts. In addition, on June 1–2, 1992, 170 representatives from Belgium, France, Luxembourg, Quebec, and Switzerland attended the Principles and Practices of Subject Indexing in French-Speaking Countries of the Northern Hemisphere conference in Fribourg, Switzerland. The published proceedings of this conference provided much of the information for this article on *RVM* use outside of Canada and France in Belgium, Luxembourg, and Switzerland.

This article concludes with the 1992 conference as published material on *RVM*, *RAMEAU*, and subject access in other francophone countries is sparse during recent years. Thus, while the author is aware of some developments in Europe since 1992, a systematic updating from 1992 to the present is not possible without a trip to Europe to examine internal documents, discover references to materials in the grey literature, and interview the appropriate librarians and administrators. The IFLA archives, in particular, may include important information that is not consistently available on its Web site. In addition, this paper does not investigate the use of *RVM* in francophone countries beyond North America and Europe though Haiti and countries in francophone Africa have purchased copies or received them as gifts (Gascon 1994). Furthermore, the article concentrates on topical subject headings and does not treat authors, corporate bodies, conferences, and geographic names used as subject headings.

In conclusion, the library of the Université Laval has served as a bridge for North American library practice

(*LCSH*) in the area of subject access with libraries in francophone Canada and Europe.

Methods

The following article is based primarily on secondary sources that have appeared almost exclusively in French with one major exception (Jouguelet 1983a). Gascon (1993–94) wrote the key article for the history of *RVM*, including its transfer to France while the proceedings of the 1992 Fribourg conference (Buntschu et al. 1993) provided a survey of subject heading practice in francophone Europe. The other articles, especially those by Henry (1990) and Jouguelet (1983a, 1983b, 1985, and 1989), provide supplementary information and varying perspectives. With funding from the Province of Quebec, the author spent March 2002 at the Université Laval Library where he was able to obtain additional information from the *RVM* team. Insofar as possible, he consulted the original sources as cited in Gascon. Significant archival documentation on *RVM*, however, does not exist. Claude Bonnelly, Directeur de la Bibliothèque; Jo-Anne Bélaïr, Bibliothécaire, Chef *RVM*; and Pierre Gascon, Bibliothécaire *RVM*, reviewed this article for accuracy. The author takes responsibility for the English translation of the French documents cited in this article.

Early History of *RVM*

Located in Quebec City, the Université Laval is a comprehensive research university that offers degrees, including the doctorate, in many different fields. In 2001, its library had 219 employees and a total budget of around \$19,000,000 (Canadian) including \$7,100,000 for acquisitions. The size of its collection is 3,680,568 volumes with 15,999 current serial subscriptions (Bonnelly 2001). According to the Association of Research Libraries (ARL) statistics for 2000, the library added 42,093 volumes to its collection, a large number though down significantly from the record high of 82,599 volumes in 1997 (Association of Research Libraries 2002). As a further indication of its research status, the library has been a member of ARL since 1985 (Association of Research Libraries 2002).

The Université Laval Library started crafting a francophone version of *LCSH* in 1946 when it was a much smaller library, though precise statistics are not available. Catalogers discovered that they were able to find a significant number of catalog records in the *National Union Catalog (NUC)*, published by the Library of Congress (Fournier 1978; Gascon 1993–94). Though serving a francophone clientele, the library's status as a research institution in North America meant that it purchased significant

numbers of anglophone materials published in Canada, the United States, Great Britain, and elsewhere. Furthermore, the Library of Congress, itself one of the major research libraries in the world, acquired and cataloged a significant number of francophone items and made these cataloging records available (Henry 1990).

In his history of *RVM*, Gascon (1993) correctly evaluates the problems that the library would have faced in creating a thesaurus or subject-heading list entirely on its own, especially since *LCSH* had grown to a substantial list since its first edition in 1914. Instead, “practical and prudent as they were, the [librarians] of the Université Laval tackled the task of translating [*LCSH*] according to their needs and of developing their French list while taking into account the francophone and Quebec realities often ignored or incorrectly portrayed by the American list” (129). Thus, several fundamental characteristics of *RVM* were present from its beginnings. The librarians at Laval would not attempt to systematically translate *LCSH* but would instead add French terms to *RVM* according to the principle of literary warrant as the library acquired items. They would, however, scan LC publications such as the *Weekly Lists* to discover subject headings of possible use and to make changes to existing headings (Fournier 1993a; Henry 1990). Furthermore, they would modify terms as needed to meet the requirements of a francophone, Quebec clientele as described in greater detail below.

Though the library published two mimeographed lists in 1954 and 1959 (Gascon 1993–94), the first official edition of *RVM* appeared in 1962, published by les Presses de l’Université Laval. This edition included an introduction, rules for use, subdivision tables, a bibliography, and 269 pages of subject headings in French in the traditional *LCSH* format of the period (*RVM* 1962). At an average of slightly under 40 headings per page, this first edition of *RVM* includes around 11,000 subject terms, significantly less than the approximately 50,000 terms in the seventh edition of *LCSH* of the same period (Quattlebaum 1966). (This estimate is based upon 35 headings per page and 1,432 pages.) In comparison, Fournier reported at the 1992 Fribourg conference that *RVM* included around 100,000 subject headings compared with the 200,000 in *LCSH* (1993b). (As for current growth, the *RVM* unit adds about 7,000 subject headings annually. [Gascon 2002]). The bibliography of the 1962 edition indicates that the Laval librarians also used various editions of *Biblio* and *Catholic Subject Headings* as well as several specialized lists published by the Special Libraries Association (Gascon 1993–94; *RVM* 1962). What the introduction does not say is that the first printed edition of the list does not include many medical, scientific, or forestry terms since these disciplines had their own libraries that were integrated with the main library later in 1963. Only after recataloging these materials could

RVM be properly called an encyclopedic subject heading list with the fourth edition in 1966 (Gascon 1993–94).

Francophone and Quebec Aspects of *RVM*

The Université Laval Library has taken on the responsibility of providing appropriate subject headings for its user community that is francophone and Quebecois. The library faced significant hurdles in doing so since it based *RVM* on Library of Congress (LC) subject headings that are anglophone and American. One should note here that LC has always said that *LCSH* is a subject heading system based, for the most part, upon literary warrant and that it is intended to meet the needs of its users who most often approach subject information from a United States perspective. Yet another complication is the fact that the National Library of Canada has published *Canadian Subject Headings* since 1978, so that the Université Laval Library, with its obligations toward the Canadian community, sometimes must take into account varying subject headings in English for the same concept. Finally, English and French have different linguistic structures, of which perhaps the most notable is the variation in adjective-noun placement, that affect subject heading creation and perhaps even more importantly the need for appropriate cross references (Fournier 1978 and 1993a; Jougnelet 1983a and 1983b).

Fournier, former Coordonnateur à la Normalisation de l’Indexation Matière at Laval, and Henry describe the care with which the librarians review English and French resources to determine the correct French term for the English *LCSH* term and then to create the appropriate cross references (Fournier 1993a; Henry 1990). This research may extend to consulting experts among the faculty at the Université Laval, but this occurs rarely (Gascon 2002). Bensaadi (1995) provides an excellent schematic diagram of the process.

In most cases, a one-to-one correspondence exists between the French and English terms. This is particularly important since the Université Laval uses a program, originally developed by UTLAS, the cooperative cataloging system developed by the University of Toronto, to provide automatic translation of subject headings in bibliographic records when the software finds a one-to-one correspondence in *RVM*. In some cases, however, an English or French term has more than one possible translation, in which case the indexer reviews the possibilities and makes the appropriate choice (Fournier 1993a; Henry 1990). (As of March 2002, 4,813 *LCSH* subject headings have two or more *RVM* equivalents, and 3,866 *RVM* subject headings have two or more *LCSH* equivalents [Gascon 2002]). For example, one *RVM* French heading, “Usines,” covers the two *LCSH* headings, “Factories” and “Mills and mill-work.” On the

other hand, the *LCSH* subject heading "French-Canadians" becomes either "Canadiens français" or "Quebecois" in *RVM* (Fournier 1978, 111–16 for this and other examples; also Henry 1990, 378). The creation of cross references can help solve some problems since they exist only in the authority file and in any reference structures in the *RVM* users' catalogs and do not create concerns about conflicts with *LCSH*.

The Université Laval Library also does a significant amount of original cataloging, slightly less than 20% in 1990, according to Henry (1990). While the catalogers often find an existing *LCSH* subject heading that they can add to *RVM*, they sometimes create new subject headings in French. In this case, they suggest an English-language equivalent to the National Library of Canada that in turn suggests the subject heading to LC (Henry 1990). The Université Laval Library has not asked for a privileged relationship with LC and gathers information about *LCSH* in the same way as other external users. What influence it does have comes from its partnership with the National Library of Canada. "It [Laval] uses *LCSH* like any other [library] and does not have any part in planning for changes in its American model" (Henry 1990, 375).

As will be seen throughout this article, wise use of resources has been one of the driving factors in the development of *RVM*. Fournier (1993a, 26) puts it well when he states:

The participation of the Université Laval Library within a cooperative cataloging network as well as the automatic translation of subject headings require the team responsible for *RVM* to not move away from *LCSH*. To ignore this reality would cause the library to lose the advantages of shared cataloging and indexing with libraries that follow common standards.

Cooperative Use of *RVM* within Canada

An important decision for future cooperative activities took place in 1963 when the library decided to automate *RVM*. The university computing center wrote the software that was used to create six editions of *RVM* that appeared from 1964 to 1976 (Gascon 1993–94). Catalogers at Laval, however, continued to use a manual authority file that was started sometime in the mid-1960s.

Other Canadian libraries were becoming interested in using *RVM*, as can be seen from the following quote from the seventh edition: "[A]s the different editions of *RVM* gradually appeared, librarians from other places made increasingly numerous and insistent requests that we make available to them the tool that we were slowly creating"

(*RVM* 1972, Introduction). The first partner was the library of the Université de Montréal that in 1969 began sending subject headings to Laval that it wished to see included in *RVM* (Introduction). In 1970, the Université Laval Library agreed to include these subject headings. In addition, cooperation increased between the two libraries through regular meetings and contact by mail. The Université Laval Library also sent weekly *RVM* updates to the Université de Montréal (Fournier 1978; Gascon 1993–94). In the preface to the sixth edition, Lucien Papillon, directeur des services techniques, explicitly refers to the cooperation with the Université de Montréal and states that "we are thinking about expanding this cooperation in order to make this tool increasingly useful for Canadian libraries" (*RVM* 1970, i).

The next step, cooperation with the Bibliothèque Nationale du Canada (National Library of Canada) would prove to be more difficult. Librarians were beginning to discover the power of library automation. At a 1970 Conférence Nationale sur la Normalisation du Catalogage (National Conference on Cataloging Standards), held at BNC in Ottawa, Rosario de Varennes, a systems analyst in the Université Laval Library, suggested "that the National Library of Canada arrive at an agreement with officials at the Université Laval to establish *RVM* as the official list of subject headings in French and establish a standing committee to revise and to update *RVM*" (Gascon 1993–94, 133). Though it was agreed at the conference to establish a study group in keeping with this recommendation, it was not until six years later in March 1976 that an agreement would be signed between BNC and the Université Laval. The issues, much more fully described by Gascon (1993), included the aging software at the Université Laval, budgetary restrictions, and the need to convert *RVM* subject headings to the MARC authority format. Notwithstanding the long negotiation period, in 1974 BNC began using *RVM* as the official list for French subject headings in *Canadiana*, the Canadian national bibliography. According to the 1976 agreement, the Université Laval Library would be responsible for the intellectual creation of *RVM* subject headings while BNC would manage the database and its products. In addition, the Université Laval Library agreed to provide francophone subject headings for new terms used either in *Canadiana* or to describe items within BNC's collection. Finally, the agreement included financial compensation to the Université Laval for its services. Renewed several times, this agreement remained in force during the period covered by this article.

In the late 1970s, the Université Laval Library also faced a key decision on whether to support cooperative cataloging by having *RVM* included in UTLAS. At that time, many university libraries in Ontario and Quebec used UTLAS. By participating in UTLAS, the Université Laval Library would make additions and changes to *RVM* available immediately so that libraries would no longer have to

wait months for this information. Thus, in 1979 the library signed an agreement with UTLAS though this step required significant additional costs in supporting *RVM*. This agreement continued until December 1993, when the Université Laval purchased an integrated library system that allowed it to administer *RVM* on its own (Gascon 1993–94).

The Bibliothèque Nationale du Québec became a key partner in 1976 when it began using *RVM* for its cataloging and for producing la *Bibliographie du Québec*. Soon after in February 1977, the three main Québec libraries—Laval, Montréal, and BNQ—formed a Comité Tripartite des Vedettes-matière that was joined about a year later by a BNC observer. The committee's charge included training librarians at the Université de Montréal and BNQ and overseeing the intellectual content of *RVM*. The group had many important accomplishments in this second area. The committee established written principles for the construction of subject headings, decided on difficult cases, and translated into French the introduction to the eighth edition of *LCSH*. In 1979 an even higher-level committee, le Comité de Gestion des Vedettes-matière, was formed that included the directors and heads of technical services for the three libraries. In January 1980 this committee changed its name to Comité Tripartite de Développement Intellectuel du Répertoire de Vedettes-matière de l'Université Laval and enlarged the charge of the Comité Tripartite. Nonetheless, the Comité Tripartite held its last meeting in September 1980, although it was never officially disbanded. Budget restraints from the economic crisis of the early 1980s and administrative reorganizations as well as some disagreements among the partners were the causes (Gascon 1993–94).

RVM in France

Among the European francophone countries, *RVM* has had the most influence in France. This is not surprising because France has the largest population, the most libraries, and probably the most centralized library administration of the four francophone countries in Europe. (The other three are Belgium, Luxembourg, and Switzerland.) In addition, it is the one country where French is the only language used in major libraries.

Biblio

To understand the situation in France, a little bit of history is in order. France had its own list of subject headings, *Liste des Vedettes Matière de Biblio (Biblio)*, derived from *LCSH*. Started by Denise Montel in 1933 with the support of the French publisher Hachette, the first printed edition of *Biblio* appeared in 1954. Even though a significant number of French libraries used *Biblio*, the last edition

appeared in 1971 (Gascon 1993–94). For the purposes of this article, it is interesting to note the following words of Montel as she described *Biblio* in 1941:

There is no list of French subject headings comparable to those that are well known and used daily by libraries in the United States and Canada. . . . Since the philosophy and practices of libraries across the Atlantic have taken root in France, the absence of this indispensable tool has been most heavily felt (as it should be felt perhaps even more in francophone Canada) and several attempts have been made to provide such a list for French librarians. It seemed that the fastest and most economical way would be to have my colleagues profit from the experience and work of their American counterparts by translating purely and simply the subject heading list with the best reputation, that of the Library of Congress. Several times, this translation has been started. I don't know if Canadian libraries have had the same idea, but I believe in any case that, if there have been any attempts, they have not had a better fate than the French attempts that have always failed (105–6).

She continues on, however, to say that “there is reason . . . to be pleased about this turn of events rather than to complain. Because even if this project would have been completed, such a theoretical and abstract translation would have been without value” (106). Instead, as will be the case with *RVM*, she based *Biblio* upon literary warrant with emphasis upon providing subject headings for the books published by Hachette. It is therefore more appropriate for general public library collections than for academic research libraries. While the basis for the list was *LCSH*, “we were forced to a greater or lesser extent to diverge from the American list” (107). She continues by giving numerous examples of times when she found it necessary to adapt *Biblio* to the French context though it remains very close to *LCSH*. The history of *Biblio* will serve as a model for subsequent French developments in the area of subject headings.

La Bibliothèque Publique d'Information

La Bibliothèque Publique d'Information (BPI) is part of the Centre Pompidou in central Paris and opened to the public on February 1, 1977, although it began purchasing materials for its collection in 1971 (Bpi-info 2002). Unlike the Bibliothèque Nationale de France, BPI's goal is to serve the general public, and it has built an extensive collection in multiple formats. In addition, it was felt that it was more

important to provide subject access for the general public that would have less familiarity with scholarly bibliographies. As a new library, it also had greater flexibility in choosing its rules for descriptive and subject cataloging.

BPI first attempted to provide subject access through a thesaurus constructed with the terminology found in the Universal Decimal Classification. When this proved unsatisfactory, BPI's director, Jean-Pierre Seguin, wrote in August 1974 to the Université Laval Library to see if a way could be found for BPI to use *RVM* (Gascon 1993–94; Seguin 1987). In 1974, after a positive response on the part of Laval, two librarians from BPI came to Laval for training. Upon their return, BPI officially adopted *RVM* as its subject access system and began using it to catalog on November 11, 1974. After cataloging around 8,000 items, enough problems had developed that a librarian from Laval spent nearly two months in Paris in 1975.

Efforts at systematic cooperation followed. The Université Laval Library sent updates and supplements to BPI and asked its opinion on difficult questions. In return, BPI sent corrections to Laval and proposed new subject headings from the works that it cataloged. BPI published five editions of its subject heading list, *Liste d'Autorités Matière Noms Communs*, between 1976 and 1981 (Jouguelet 1983b). With the availability of this list, other public libraries became interested in using *RVM* as modified by BPI. In a letter quoted by Gascon (1993–94), the head of subject cataloging at BPI asked the Université Laval for permission to distribute its subject heading list to public libraries who wanted to use it for their cataloging. It is interesting to note that this librarian estimated that the *RVM* had contributed more than 70% of the subject headings in this list. The Université Laval Library, in the same cooperative spirit that had guided its relationship with Canadian libraries, gave its permission but asked that the BPI make it clear that their version differed in many ways from *RVM*.

In reality, librarians at Laval were worried that the BPI subject heading practice had diverged in fundamental ways from *RVM* and *LCSH*, but they also recognized that they had not been able to keep up with integrating proposed subject headings into *RVM*. In 1982, they assigned a librarian specifically to this task. Nonetheless, contact with BPI declined significantly over the next few years, probably due to the changes in France that will be described in the next section (Gascon 1993–94).

Bibliothèque Nationale de France

When the Bibliothèque Nationale de France (BNF) decided in 1979 to close its catalog, the library went looking for another way to provide subject access to replace the current system that had become too difficult to maintain (Jouguelet 1983a and 1983b; Maury 1993). At this time, *RVM* was the

only readily available encyclopedic thesaurus in French. BNF also consulted BPI, which reported its success in using *RVM*. Thus, in fall 1979, BNF officially adopted *RVM* as its subject access system. In March 1980 a Laval librarian went to Paris while a representative from BNF came to Quebec toward the end of the same year (Jouguelet 1983a and 1983b).

Coordination became increasingly difficult between *RVM* and its two European versions because each library established subject headings as needed based upon literary warrant. In addition, differences exist in the French used in Quebec in comparison with that used in France. To give several examples, for the *LCSH* subject heading, "Literary Historians," *RVM* uses "Historiens Littéraires" while BNF has chosen "Historiens de la Littérature." While *RVM* accepts the *LCSH* English term, "House-boats," BNF uses the French equivalent, "Bateaux-maisons." The use of prepositions also varies because the *LCSH*, "Professional Education of Women," is "Enseignement Professionnel aux Femmes" in *RVM* but "Enseignement Professionnel pour les Femmes" for BNF. (See Jouguelet 1983a, 18–19, and 1983b, 385–88 for additional specific examples.) Furthermore, the perennial lack of staff and personnel changes led to differences in both syntax and vocabulary between BPI and BNF even though both were located in the same city. In addition, BPI was reluctant to make changes because it had several printed subject catalogs. Coordination between the Université Laval Library and BNF was less than ideal throughout the 1980s (Jouguelet 1983a and 1983b).

LAMECH and RAMEAU

Compared with the library situation in both Canada and the United States, France has a much stronger tradition of central control and a greater tendency to use legal requirements to enforce standards. (See Jouguelet 1985 for a fuller discussion of standards.) Thus, in 1982, le Ministère de l'Éducation (MEN) (the Education Ministry) decreed that French university libraries would use the same subject indexing system in return for funding to automate their libraries and to create a cooperative cataloging network—SIBIL-France. A working group was given the task of finding a way to provide uniform subject access for BNF, BPI, and 20 university libraries. The resulting standard, *Liste d'Autorité de Matière; Structure et Règles d'Emploi (Subject Authority List; Structure and Rules for Its Use)*, was published in 1985. As quoted in Gascon (1993–94, 27) and Jouguelet (1985, 35), the standard recommended:

using a system based upon a structure and syntax and making use of a list of subject words: the encyclopedic list of subject headings in French derived from *RVM* of the Université Laval in Quebec. . . .

Within the libraries that adopt it, indexing coherence will be made easier and thus guaranteed; and they will also avoid dispersing concepts among too many headings.

Anticipating this standard, the Direction des Bibliothèques, des Musées et de l'Information Scientifique et Technique (DBMIST) of MEN created in 1984 the Cellule Nationale de Coordination de l'Indexation-matière (CNCIM), whose task was to create and manage this list that was initially called *Liste d'Autorité de Matières Encyclopédique, Collective et Hiérarchisée (LAMECH)*. At this point, contacts with the Université Laval Library focused on technical issues, and the differences between the various versions of the authority list became greater (Gascon 1993–94).

In 1986 DBMIST signed a contract with OCLC to allow selected university libraries to use the system for their cataloging. As most of these records included *LCSH* subject headings, it became more important to find a way to have them translated into French to achieve the savings that shared cataloging makes possible. BNF therefore signed an agreement with MEN in 1987 to maintain the intellectual content of an *LCSH*-based subject heading list that was renamed *RAMEAU (Répertoire d'Autorité-matière Encyclopédique et Alphabétique Unifié)*. The majority of the subject headings in this list came from *RVM*, with the rest coming from the BNF authority file and the BPI authority list. As they began cataloging, other libraries were able to propose subject headings for validation by BNF; but “only libraries with a relatively advanced training are allowed” (Maury 1993, 41). In addition, six specialized libraries, after training by BNF, had the ability to create headings in their areas of expertise (Maury 1993).

By 1992, the use of *RAMEAU* had expanded in France to include large municipal libraries, public libraries, le Cercle de la Librairie, and la Bibliothèque de France. (Le Cercle de la Librairie had earlier supported a competing subject heading list edited by Martine Blanc-Montmayeur and Françoise Danset, *Choix de Vedettes Matières à l'Intention des Bibliothèques*, published in 1984 [Jouguelet 1985 and 1989].) In 1992, *RAMEAU* had about 56,000 topical subject headings. As with *RVM*, *RAMEAU* is based upon literary warrant, a fact that led to a lack of subject headings for science and technology as long as BNF was a largest source of headings since this library does not collect extensively in these subjects (Jouguelet 1985 and 1989; Maury 1993).

BNF has modified some Library of Congress practices but has tried to avoid extensive changes. BNF would like to see some simplification and rationalization of *LCSH* syntax, especially in the area of subdivision practice. Such a move would help resolve the other major problem, which has been training librarians outside BNF in the use of *LCSH* (Maury 1993).

Cooperative Agreement between the Université Laval and the Bibliothèque Nationale de France

During this entire period, no official agreement existed among the parties who were using the various versions of *RVM*. When MEN asked for permission to load *RVM* on the *RAMEAU* server, both sides concurred that it was time to negotiate such an agreement. The first version of this agreement was ready for signing in 1987, but major changes on the French side as DBMIST became DPDU (Direction de la Programmation et du Développement Universitaire) resulted in an additional three years of negotiations. On December 14, 1990, Laval, BNF, and DPDU signed the final agreement that would remain in effect for three years. (Freschard and Bonnelly 1993; Gascon 1993–94). This agreement included some financial compensation for the Université Laval, though this portion of the agreement was considered confidential (Freschard and Bonnelly 1993).

The most important portion of the agreement can be summarized by the following quote from the agreement as reported by Claude Bonnelly:

Considering the common origin of *RVM* and *RAMEAU* from the Library of Congress Subject Headings, considering in addition the recognition of *RVM* by the National Library of Canada as a national standard, the parties to this agreement recognize the need to pursue the goal of standardization and agree, while recognizing the autonomy of each other's work, to maintain the greatest possible compatibility between *RVM* and *RAMEAU*, to develop the two tools coherently and conjointly, and to limit as much as possible differences in regards to the content and the construction of the headings that are added to the lists (Freschard and Bonnelly 1993, 205).

The agreement went on to enumerate three mechanisms to achieve this coordination. Both parties agreed to exchange all their publications at no cost, to send each other much more regularly lists of new and updated headings, and to sponsor an annual week-long meeting that would alternate between Quebec and Paris “whose goals are to take stock of developments in *RVM* and *RAMEAU*, to share the experiences of the parties involved in the lists, to look at the differences and modifications brought about by either side and to establish the necessary dialogue in regards to the rules for establishing headings” (Freschard and Bonnelly 1993, 205).

Other Countries

The 1992 Conference on Subject Access

The 1992 conference in Fribourg, Switzerland, whose official name was "Rencontres Francophones sur l'Indexation Matière, 1er et 2 Juin 1992 à Fribourg, Suisse," included information about subject access in the three other francophone European countries. As indicated above, this conference may represent the high point in cooperation for subject access in the francophone world. Martin Nicoulin, Directeur de la Bibliothèque Cantonale et Universitaire de Fribourg, and Claude Bonelly, Directeur de la Bibliothèque de l'Université Laval, had the idea to organize this conference in 1991 as they sat on the terrace of a cafe on the Boulevard St-Germain in Paris. Pierre Buntschu and Plavio Nuvolone, two librarians from Fribourg, took care of the practical details. Pierre Gavin, Animateur des Réseaux SIBIL de Suisse, de France, et de Luxembourg, was responsible for the content of the presentations (Nicoulin 1993).

More than 170 people attended from Belgium, France, Luxembourg, Quebec, and France, though the list of attendees indicates that the vast majority came from Switzerland (Buntschu et al. 1993). The conference included a report from each country, a roundtable on multilingualism, a synthesis, and a discussion of current collaborative efforts, including the agreement between the Université Laval and BNF. The published proceedings appeared in 1993, jointly published by Les Presses de l'Université Laval, Quebec; Éditions Universitaires Fribourg, Suisse; and École Nationale Supérieure des Sciences de l'Information et des Bibliothèques, Villeurbanne/Lyon, France. The proceedings report the discussions, including the questions and answers after each presentation. (As of August 2002, *Bibliothèques et vedettes* is still available from Les Presses de l'Université Laval at www.ulaval.ca/pul/index.html.)

The conference does not provide adequate information on one aspect of subject access in francophone Europe. While the presenters from France, Belgium, and Luxembourg all indicate that public libraries use *RVM* or *RAMEAU*, their focus is almost entirely on academic and national libraries without much discussion of developments within public libraries (Clément 1993; Holley 1994; Maury 1993).

Belgium

Jacqueline Clément, Chef du Département Bibliothèque des Sciences Humaines, Université Libre de Bruxelles, (ULB) describes a complicated situation in Belgium (Clément 1993; Bonnelly 1993). In her first sentence, she says: "I wish to make it clear from the beginning that there isn't any national coordination of subject indexing in Belgium for academic libraries" (Clément 1993, 75). Subject indexing practice varies not only from university to

university but within various parts of the same university. Before giving more details about her own university, she provides the following summary for university libraries in regards to the *RVM/RAMEAU/LCSH* triumvirate:

RVM

Centre d'information et de conservation des bibliothèques de l'Université de Liège since 1980

LCSH and *RVM* with *LCSH* as the standard

Université Libre de Bruxelles since 1988 plus complete retrospective conversion
Bibliothèque Royale since 1988

LCSH and *RVM* with *RVM* as the standard

Faculté Polytechnique de Mons since 1991 (1993, 85)

Francophone public libraries are required to use *RAMEAU* in accordance with a 1987 decree, but she does not provide further details (1993).

At the Université Libre de Bruxelles, the library provides subject access in French and English (*RVM* and *LCSH*) for materials cataloged after 1986 and in English (*LCSH*) for pre-1986 items. While the goal is to provide subject access compatible with *RAMEAU*, *RVM* has remained the preferred source for subject headings: "There was therefore a political need to recognize that we were a francophone university and to ensure reasonable compatibility with *RAMEAU*" (Clément 1993, 87). She then provides various statistics about subject access, including the fact that, in the subject index, *LCSH* is the source for 153,064 entries while *RVM* provides 39,757 (Clément 1993).

For current cataloging, ULB uses OCLC. The cataloger checks first in *RVM*. If the heading does not exist or "does not appear to meet the needs of the European situation" the cataloger consults *RAMEAU* (Clément 1993, 89). For documents that treat Belgian issues, often neither authority list includes an appropriate subject term that must then be established. As was the case with France, Clément (1993) has concerns about the complexity of *LCSH* subject subdivision practice and about the difficulty in training subject catalogers.

Luxembourg

Claude Loutsch, Bibliothèque Nationale du Luxembourg (BNL) and coordinator for the SIBIL network in Luxembourg, describes the situation in the Grand Duchy (Loutsch 1993; Bonnelly 1993). All the important libraries in Luxembourg not connected with the European Union belong to the SIBIL network except for the Clervaux Abbey library. The eight member libraries collectively hold about

a million volumes, with BNL being the largest at 700,000 volumes. The public library (40,000 volumes) is a member.

Luxembourg did not have a long tradition of providing subject access, but when a subject catalog with *Biblio* subject headings as described above was made available to the public in 1973, it was heavily used. The introduction of the SIBIL system and the fact that *Biblio* was no longer updated led to the decision to implement *RVM* in 1985. The SIBIL network also considered the Swiss system, RERO, and RAMEAU. It rejected the first for three reasons: it was not a controlled vocabulary; the network did not have online access to the Lausanne catalog; and choosing RERO would have required closer coordination than was possible at the time. The advantage that *RVM* had over RAMEAU was that it provided a well-established authority list in a print format. (Loustch 1993, 66) The major intellectual modification to *RVM* was the decision to create chronological subdivisions as needed according to literary warrant.

The seven other libraries were required to adopt *RVM* as a condition of membership in the SIBIL network. While some libraries had to use very specific index terms—for example, to provide subject access to special collection materials and journal articles—Loustch (1993) is of the opinion that this has not created difficulties for general users of the online catalog. While subject catalogers continue to use the printed ninth edition of *RVM* to avoid the inconvenience of consulting the subsequent microfiche editions (Loustch 1993), they are no longer hesitant to add new terms as needed to reflect changes in knowledge. (See Bonnelly [1993] for a criticism of using the older edition.)

Switzerland

Joëlle Walther, Subject Coordinator for le Réseau des Bibliothèques Romandes et Tessinoises, describes subject access in the Suisse Romande (the francophone part of Switzerland) (Walther 1993; Bonnelly 1993). The network's libraries use their own system, RERO, which is precoordinated and also includes term switching so that all independent subject concepts become the lead term. All catalogers within the network can create headings that then receive a multilevel review before becoming officially established (Walther 1993). While one Swiss reactor, Gavin, commented that this system of review could seem overly complex and cumbersome to outsiders, he believed that the Swiss librarians felt that it worked well in practice and was the only way to assure cooperation among the very independent-minded Swiss libraries (Walther 1993). *RVM* and RAMEAU serve as resources for the creation of subject terms, second only in importance to the *Grand Dictionnaire Encyclopédique Larousse*; but RERO pays no attention to the syntax of subject headings in these authority lists (Walther 1993).

Future Plans

Proposals for the future came forward from the Fribourg conference (Gavin 1993). Several are particularly relevant to this article. First, Gavin suggested an increased informal information exchange among the francophone countries, with one organization designated as the official contact in each country to simplify matters. Second, the group hoped to hold another conference in two years; but this did not happen. The third was to pay more attention to developments within the European community in the area of vocabulary control. The last was to see whether it would be possible to provide all of the various subject-heading lists on CD-ROM.

In addition, it was suggested that Laval and BNF meet with the Library of Congress to propose changes to *LCSH* that would benefit francophone users. The main concern, as indicated above, was the simplification of syntax and the creation of clear rules for the use and order of subdivisions (Freschard and Bonnelly 1993). The French representatives in particular hoped that such changes would make it easier to train others in the use of *LCSH*. This meeting did occur on May 27–28, 1993; but its content will be part of the second article on this subject (Gascon 2002). On this subject, Devroey from Belgium quips: “We know very well that the Library of Congress will continue to change and, because it is God, won't take into account us poor mortals” (Gavin 1993, 240).

Conclusions

1. The Université Laval Library created *RVM* and has overseen its development as a pragmatic tool to meet the subject access needs of francophone libraries.

The Université Laval Library created *RVM* as an economic way to provide subject access after realizing that cataloging copy with *LCSH* was available for the majority of its cataloging. This pragmatic spirit has continued with an emphasis upon making the use of *RVM* as efficient as possible. The Université Laval has held modifications to a minimum by making changes only to account for differences between English and French and to add terms not found in *LCSH*. Unlike librarians in Belgium, France, and Luxembourg, the literature does not indicate any great desire on the part of Laval librarians to make local modifications to the syntax of *LCSH*.

2. The Université Laval Library has shown a strong desire to cooperate with other libraries and to help others adopt *RVM*.

The Université Laval Library has extended the influence of *RVM* by cooperating with other libraries, first in Canada and

then in Europe. This cooperation is another aspect of the pragmatic spirit that has been part of the cultural tradition of North American libraries. Through cooperation, libraries have been able to reduce cataloging costs by reusing bibliographic records created by others. This factor became increasingly important in the 1970s with the development of cooperative cataloging networks such as OCLC, RLG, and WLN in the United States and UTLAS in Canada. *RVM* helped resolve the important problem of cooperation in the area of subject access for francophone libraries. NLC, NLQ, and the Université de Montréal, the three other major libraries with interests in francophone cataloging, all voluntarily cooperated with LAVAL in the maintenance and enrichment of *RVM*.

The Université Laval Library has also shown great willingness to cooperate with non-Canadian libraries. As seen above, librarian exchanges to and from Europe have been part of its cooperative efforts in exporting *RVM*. Furthermore, Laval has been willing to cooperate even when it did not completely agree with the changes that other libraries were making to their versions of *RVM*. Laval has, however, received some financial compensation for its efforts.

In Europe, the principal libraries of Luxembourg have shown the same spirit of cooperation by joining the same network, SIBIL, whose cataloging standards require using *RVM* for subject access. In contrast, Belgium showed an almost complete lack of cooperation among the major libraries. In comparison, its francophone public libraries are required by law to use *RAMEAU*. In France, the French version of *RVM*, *RAMEAU*, was imposed upon the major academic libraries as a condition for receiving support from the Ministère de l'Éducation for library automation. France has a strong tradition of such legal standards, though some other libraries have voluntarily decided to adopt *RAMEAU*.

3. The relative lack of support for *RVM* has probably been a positive factor.

The author of this article is amazed that the Université Laval Library, as a midsize academic research library, has been able to accomplish so much with so few resources. The *RVM* team, which has usually numbered around six full-time employees, should be complimented on its ability to manage the intellectual content of *RVM*, including reviewing and approving proposed subject headings from its Canadian partners. The relative lack of resources has led to support for automatic translation and may be another reason, beyond the pragmatism and spirit of cooperation as given above, why Laval has not wished to make substantive modifications to *RVM* that would move it away from *LCSH* and thus require more librarian intervention in its maintenance.

4. The Université Laval Library has had less influence on *LCSH* because it is not a national library.

As seen above, NLC serves as an intermediary in proposing new subject headings to the Library of Congress, the de facto though not the de jure national library for the United States. Furthermore, national library administrators meet regularly including annual meetings at IFLA and often allow other staff to participate in IFLA Standing Committees whose activities are important for the national library. In the Division of Bibliographic Control, for example, NLC represented the interests of *RVM*. During most of the history of *RVM*, LC has considered the Université Laval Library as simply another user of *LCSH* rather than as a privileged partner, though to be fair the Université Laval Library has not asked for special status.

5. Divergences among the francophone versions of *LCSH* are inevitable.

Even with the greatest desire to coordinate the francophone versions of *LCSH*, they will continue to diverge in terminology and probably in syntax. The fact that the lists are based upon literary warrant will mean that each list will have unique terms and special areas of strength. They will probably, however, also use different terms or syntax for the same concept. Close coordination has a high overhead cost and would probably also require selecting one partner as the principal authority, a fact that goes against the stated need to preserve the autonomy of each version. In addition, the proceedings of the Fribourg conference indicate a tendency on the part of the Europeans to consider *LCSH* as the direct source for the European versions rather than to acknowledge *RVM* as an intermediary. (Belgian librarian Paula Goosens stated: "In my opinion, one solution would be to refer to *LCSH* which is the common element among the majority of the systems that have been described here") (Freschard and Bonnelly 1993, 212)

6. All libraries made the correct decision to base their francophone version of *LCSH* on literary warrant rather than to attempt a systematic translation.

All the francophone versions of *LCSH* are based upon literary warrant. Though this has led to differences in the subject headings available in each version, this decision makes great sense because each francophone authority list, in the same way as *LCSH*, includes only the terms that have been found useful for that library or network. These lists are therefore not burdened by subject headings whose importance is less for currently acquired materials or that reflect the American centric collection patterns of the Library of Congress. In addition, it is much easier to

establish the correct subject heading or to translate an LC subject heading with the document in hand.

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FRBR: Functional Requirements for Bibliographic Records

Application of the Entity-Relationship Model to *Humphry Clinker*

Edward T. O'Neill

The report from the IFLA Study Group on the Functional Requirements for Bibliographic Records (FRBR) recommended a new approach to cataloging based on an entity-relationship model. This study examined a single work, The Expedition of Humphry Clinker, to determine benefits and drawbacks associated with creating such an entity-relationship model. Humphry Clinker was selected for several reasons—it has been previously studied, it is widely held, and it is a work of mid-level complexity. In addition to analyzing the bibliographic records, many books were examined to ensure the accuracy of the resulting FRBR model. While it was possible to identify works and manifestations, identifying expressions was problematic. Reliable identification of expressions frequently necessitated the examination of the books themselves. Enhanced manifestation records where the roles of editors, illustrators, translators, and other contributors are explicitly identified may be a viable alternative to expressions. For Humphry Clinker, the enhanced record approach avoids the problem of identifying expressions while providing similar functionality. With the enhanced manifestation record, the three remaining entity-relationship structures—works, manifestations, and items—the FRBR model provides a powerful means to improve bibliographic organization and navigation.

The report from the IFLA Study Group on the Functional Requirements for Bibliographic Records (FRBR) includes a recommendation for a fundamentally new approach to cataloging (IFLA 1998, 13). It proposes an entity-relationship model, with four primary entities—*work*, *expression*, *manifestation*, and *item*—representing the products of intellectual or artistic endeavor. This shift in cataloging focus requires not simply describing the item in hand but also describing how the item relates to other members of its bibliographic family. La Boeuf recognizes that FRBR “is likely to induce profound changes in cataloguers’ landscape” (2001, 15).

The FRBR model defines three distinct groups of entities (IFLA 1998, 12):

1. The products of intellectual or artistic endeavor (a publication)
2. Those responsible for the intellectual or artistic content (person or corporate body)

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3. Those that serve as the subjects on intellectual or artistic endeavor (concept, object, event, and place)

This study focuses on the Group 1 entities. While these entities represent only one aspect of FRBR, they are the foundation of the model.

The FRBR model proposes four entities in Group 1: *works*, *expressions*, *manifestations*, and *items*. Figure 1, adapted from the corresponding figure in the IFLA report, illustrates the relationships between these four entities (IFLA 1998). Current cataloging practice focuses on a single bibliographic unit: the physical manifestation. The FRBR model, by contrast, proposes this four-level hierarchical bibliographic structure. Tillett (2001, 31) points out that, with the entity-relationship cataloging model, “The opportunity exists to move beyond the current ‘record’ structure and beyond relational and even the current object-oriented databases.” However, the FRBR model requires that the bibliographic items be analyzed in greater detail to relate them to the other members of the work.

The four Group 1 entities represent two different aspects of user interest, the intellectual endeavor and the physical manifestation. The IFLA report (IFLA 1998, 12) defined each of the entities: “*Work* (a distinct intellectual or artistic creation) and *expression* (the intellectual or artistic realization of a *work*) reflect intellectual or artistic content. *Manifestation* (the physical embodiment of an *expression* of a *work*) and *item* (a single exemplar of a *manifestation*) reflect physical form.”

None of the four FRBR entities are new—most have been discussed in the literature for years. More than 40 years ago, Verona (1959, 79) defined three objectives of the catalog as:

- the rapid location of a particular book [manifestation];
- the provision of information concerning all editions, translations, etc. [expressions] of a given work as far as they exist in the library; and
- the provision of information concerning all works by a given author as far as they exist in the library.

Four years later, Lubetzky (1963) and Verona (1963) discussed these objectives in detail, generally agreeing that using the *manifestation* as the basic entity best served the first objective, but using the *work* as the basic entity best serves the second objective. Since the card catalog could not support a hierarchical model, the selection of the basic entity for cataloging was an *either/or* decision. Most cataloging codes, including AACR, chose the manifestation as the basic bibliographic unit.

Since the Lubetzky and Verona discussion, technology has changed dramatically, with the online catalog replacing the card catalog. The online catalog does not have the same

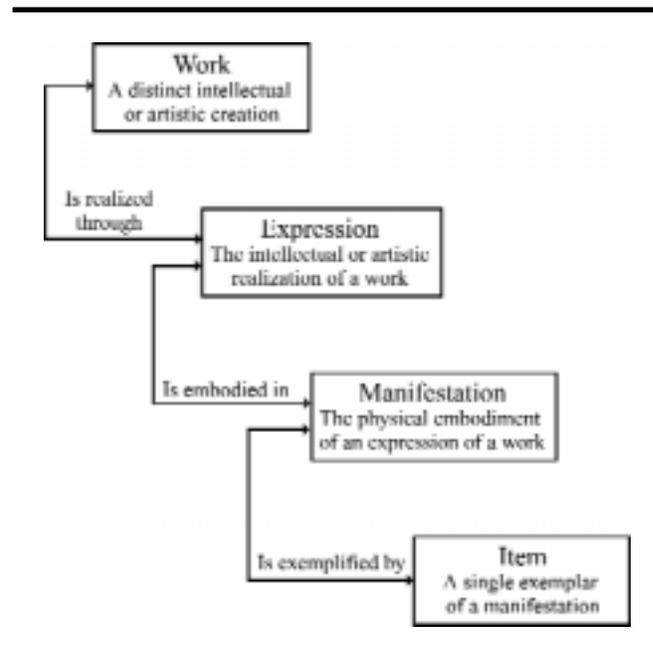


Figure 1. Entities and Primary Relationships

limitations and, thus, it is no longer an either/or choice of bibliographic unit. Online catalogs *can* support hierarchical models, thereby removing the technical barriers to implementation of an entity-relationship model such as that proposed in the FRBR model.

The IFLA report stresses that its suggested entity-relationship model is conceptual and “does not presume to be the last word on the issues it addresses” (IFLA 1998, 5). As such the discussion herein of the basic entities, while based on the FRBR model, also is heavily influenced by the other studies. Smiraglia (2001) provides a detailed review of this literature, and compares and contrasts the terminology and definitions.

A *work* is a product of the intellectual or artistic activity by a person, a group, or a corporate body that is identified by a normalized title and/or name. The FRBR report stresses that a *work* is an *abstract* entity, and recognizes that “the line of demarcation which lies between one *work* and another” is not unambiguous (IFLA 1998, 16). Modifications involving a significant degree of independent intellectual effort, such as paraphrases, rewritings, adaptations, parodies, abstracts, digests, and summaries, are considered to be different *works*.

In the literature, the term *work* is frequently used interchangeably with *title*. The *work* has received limited recognition in cataloging codes, and the uniform title is commonly used to identify manifestations of a *work*. It is often argued that the hypothetical “typical user” thinks in terms of titles, requesting, for example, *The Expedition of*

Humphry Clinker rather than a particular edition of that work. Although the concept of *work* is old, finding an acceptable definition has proven elusive. Svenonius (2000, 35) argues, "critical as it is in organizing information, the concept of *work* has never been satisfactorily defined."

An *expression* is the "realization of a work in the form of alphanumeric, musical, or choreographic notation, sound, image, object, movement, or any combinations of such forms" (IFLA 1998, 18). Like works, *expressions* are abstract entities: There is no physical referent for an *expression*. The boundaries of an *expression* are defined to exclude aspects of physical form such as typeface or page layout. The terms *text* and *edition* are commonly used to describe an *expression*, although they are often used in ways that differ from the FRBR definition.

Revisions, updates, abridgements, enlargements, and translations of an *expression* are considered new and different *expressions*. Conceptually, each unique *expression* of a work represents an intellectual or artistic activity intended to update, enhance, or otherwise modify the context of a work. All manifestations of an *expression* contain the identical content. However, the overall appearance and usability of these manifestations may differ significantly due to differences in the materials, design, and manufacturing process used to produce them. A microform reproduction certainly will have a different look and feel from the hand-printed leather-bound volume from which it was derived, even though their contents are identical.

A *manifestation* is the physical embodiment of an expression and "encompasses a wide range of materials including manuscripts, books, periodicals, maps, posters, sound recordings, films, video recording, CD-ROMs, and multimedia kits. As an entity, a *manifestation* represents all the physical objects that bear the same intellectual and physical characteristics" (IFLA 1998, 20). Changes in typeface, font size, page layout, or publisher will result in a new *manifestation*. New printings will not result in a new *manifestation* unless other changes are made. A *manifestation* may have different bindings (hardcover versus paperback), types of paper (regular or acid-free), or other variations (thumb-indexed) that do not significantly affect the printed image. The *manifestation* is roughly the equivalent to the bibliographic item that currently serves as the basis for most cataloging codes.

An *item* is single example of one, single manifestation. Changes that occur after the manufacturing process (defacement, rebinding) are considered changes to the *item* and do not result in a new manifestation. The *item* is a single logical unit but not necessarily a single physical unit. Books published in multiple volumes, for example, are a single bibliographic *item*.

The most important aspects of the FRBR model are the relationships between the entities in a group. A *work* is

realized through an *expression* . . . [or, in reverse] an *expression* is a realization of a *work*. This relationship serves as the basis for "identifying a *work* represented by an individual *expression* and for ensuring that all *expressions* of a *work* are linked to the *work*" (IFLA 1998, 58–59). Similarly, an *expression* is "embodied in a *manifestation*, or conversely that a *manifestation* is the embodiment of an *expression*." These logical connections help to identify "the *expression* of a *work* embodied in an individual *manifestation* and for ensuring that all *manifestations* of the same *expression* are linked back to that *expression*" (59). The relationship continues by connecting *manifestation* with *item*, which is a single example of a *manifestation*.

Humphry Clinker

The goal of this study was to go beyond organizing bibliographic records to organizing the bibliographic objects represented by bibliographic records. This effort focused on:

- examining the benefits and drawbacks associated with creating an entity-relationship model for a work;
- better understanding the relationship between bibliographic records and the bibliographic objects they represent;
- determining if information available in bibliographic records is sufficient to reliably identify the FRBR entities; and
- developing a data set that can be used to compare and evaluate FRBRization algorithms.

Building an FRBR entity-relationship model for a non-trivial work and studying the work in detail appeared to be the best way to meet these objectives. The work selected was *The Expedition of Humphry Clinker* by Tobias Smollett. *Humphry Clinker*, originally published in 1771, is generally considered to be Smollett's finest novel and one of the better works of eighteenth-century English fiction. The World's Classics edition of *Humphry Clinker* (Oxford University Press 1984) provides of a brief description of the novel:

William Thackeray referred to Smollett's last novel, *The Expedition of Humphry Clinker*, as "the most laughable story that has ever been written since the goodly art of novel-writing began." First published in 1771, and often regarded as Smollett's finest book, it relates, in an ingenious series of overlapping letters, the adventures of Mr. Matthew Bramble's family party as they travel through England and Scotland, visiting places such as Bath, London, Edinburgh, and the Highlands. The group includes a gouty country squire, a hus-

band-hunter, an Oxford student, and an illiterate but racy lady's maid. They recount their travelling adventures. They gossip. They tell stories of Humphry Clinker, a servant picked up *en route*, and they record their individual reactions to the tour. All is engrossing and entertaining and, at the same time, provides through the satire and wit a vivid and detailed picture of the contemporary social and political scene.

The novel takes the form of overlapping letters. A typical letter is shown in figure 2. This letter, from the semiliterate servant Tabitha Bramble, includes numerous misspellings and other grammatical errors.

Humphry Clinker was selected for this study for several reasons:

- It has been previously studied. It was first described as a work at the Conference on the Conceptual Foundations of Descriptive Cataloging held at UCLA in 1987 (O'Neill and Vazine-Goetz 1989). They reported that in OCLC's WorldCat there were "110 [bibliographic records for *Humphry Clinker*] records representing 53 different publishers over a 200-year time period."
- It is work of midlevel complexity—neither the most nor least important work, and neither typical nor atypical. Many other works, particularly literary works, exhibit similar attributes.
- It is widely held, with 179 records in OCLC's WorldCat representing more than 5,000 holdings.

It was assumed that if the FRBR entity-relationship model can be successfully applied to *Humphry Clinker*, it can be successfully applied to a broad class of similar works. Conversely, if the FRBR entity-relationship model cannot adequately represent *Humphry Clinker*, there will be many other works for which the FRBR model will also be inadequate.

In December 2001, OCLC's WorldCat was searched for all possible bibliographic records for *Humphry Clinker*. Each WorldCat record was checked to see if it was attributed to an author with a name similar to "Tobias Smollett" or if it had a title similar to "The Expedition of Humphry Clinker." This initial search resulted in very high recall but low precision. Using the FRBR definition of a *work*, the results were extensively reviewed to remove records that were not part of the *Humphry Clinker* work. This resulted in 179 records being identified, including 14 records for microforms and eight records for translations. This set of 179 bibliographic records and supporting data are available for review on the project Web site (OCLC 2002). Identifying the bibliographic records associated with

To Mrs GWYLLIM, house-keeper at Brambleton-hall

MRS GWYLLIM,

I can't help thinking it very strange, that I never had an answer to the letter I wrote you some weeks ago from Bath, concerning the sour bear, the gander, and the maids eating butter, which I won't allow to be wasted.— We are now going upon a long journey to the north, whereby I desire you will redouble your care and circumflexion, that the family may be well managed in our absence; for, you know, you must render account, not only to your earthly master, but also to him that is above; and if you are found a good and faithful sarvant, great will be your reward in haven. I hope there will be twenty stun of cheese ready for market by the time I get huom, and as much owl spun, as will make half a dozen pair of blankets; and that the savings of the butter-milk will fetch me a good penny before Martinmass, as the two pigs are to be fed for baking with bitchmast and acrons.

I wrote to doctor Lews for the same porpuss, but he never had the good manners to take the least notice of my letter; for which reason, I shall never favour him with another, though he beshits me on his bended knees. You will do well to keep a watchful eye over the hind Villiams, who is one of his amissorries, and, I believe, no better than he should be at bottom. God forbid that I should lack christian charity; but charity begins at huom, and sure nothing can be a more charitable work than to rid the family of such vermine. I do suppose, that the bindled cow has been had to the parson's bull, that old Moll has had another litter of pigs, and that Dick is become a mighty mouser. Pray order every thing for the best, and be frugal, and keep the maids to their labour.—If I had a private opportunity, I would send them some hymns to sing instead of profane ballads; but, as I can't, they and you must be contented with the prayers of

Your assured friend,
London, June 14. T. BRAMBLE

Figure 2. Example of a Letter from Humphry Clinker

Humphry Clinker did not pose a significant problem. Hickey, O'Neill, and Toves (2002) found that bibliographic records contain sufficient information to reliably identify works.

The Evolution of *Humphry Clinker*

Prior to FRBRizing *Humphry Clinker*, the work was studied to achieve an understanding of its evolution. For this purpose, it would have been ideal to collect all manifestations to permit detailed examination and side-by-side comparisons. However, this was impractical as many of the manifestations were in rare book collections or in poor physical condition. They were scattered over a large number of libraries with no single library holding a significant proportion of the different manifestations. The various manifestations had to be examined separately and enough information captured to permit later comparisons.

To capture as much information as possible about the book examined, a digital camera was used to photograph key pages. This proved to be very effective: It was more convenient, less expensive, and easier on the books than using a

copier that could have damaged many of the older books. Key pages that were photographed included the title page, verso, the first page of the text, a particular preselected letter, the last page, the first page of any supplemental matter, illustrations, and other pages that could help differentiate between similar manifestations. In all, 38 books were examined and almost 600 digital photographs were taken.

After a review of the content of the bibliographic records, the examination of the books, and the review of the digital images, it became clear that, except for the translations, the original text of *Humphry Clinker* had not been significantly changed. Changes to the original text involved correcting minor errors, repositioning the date on letters, moving chapter headings to the top of the page, and replacing the “f” (the long “s”). *Humphry Clinker* was originally published with the long “s” as in “The pills are good for nothing—I might as well fwallow fnowballs.” The long “s” was not observed in any editions published since 1800. Except for replacing the long “s,” most readers would probably not notice these changes. Applying a strict definition of *expression*, any of these changes may be sufficient to create a new *expression*. However, the use of the long s could be considered as simply a typeface and, since the other errors were created during the typesetting phase of the manufacturing process, it can be argued that they would produce a new *manifestation* rather than a new *expression*.

Unlike these minor changes, the other revisions were intentional and, therefore, should be considered different *expressions*. Most of the intentional changes occurred by supplementing the original text with additional material. Clearly, some of these additions are more significant than others. However, the addition of any supplemental material is sufficient to create a different expression. The following additions were observed in the sample:

- Acknowledgment
- Bibliography
- Biographical note
- Adding chapter titles
- Chronological table
- Dedication
- Glossary
- Illustrations
- Introduction and/or forward
- List of illustrations
- Map(s)
- Notes
- Publisher's note
- Table of contents
- Textual notes
- Reproduction of original title page
- Reviews

The significance of supplemental material varied considerably. Some supplemental material is relatively minor in importance, such as the dedication “To Mary, with love” (University of Georgia 1990). Other than Mary, few readers are apt to seek out this particular edition solely because of its dedication. In other cases, such as 22 pages of notes (Oxford University Press 1998), the supplemental material provides extensive assistance to the reader and some readers will seek this edition specifically for the notes. Some supplemental material, like a chronological table, could assist some readers. However, it is unlikely that many readers would seek out a particular edition because of a chronological table. Features of these types are rarely, if ever, reflected in the bibliographic records. Yet, under the strict interpretation of FRBR, the addition or change to any of this supplemental material is sufficient to create a new expression.

Introductions, forewords, notes, and other similar supplements were the most significant and were generally attributed to an editor. At least 23 different editors have contributed to *Humphry Clinker*, only 14 of which were used as added entries in any of the bibliographic records. The other editors were identified either by looking at other fields in the bibliographic record, notably the statement of responsibility, or by physically examining the books. Even the editors who were identified in some records were not necessarily identified consistently. An editor may have been explicitly identified with an added entry in one bibliographic record but not in a different record for a book for which the editor played the identical role.

Many of the *Humphry Clinker* illustrators are respected artists, and their contributions certainly are important to some readers. As a group, these illustrators are well recognized—at least seven of the nine have established entries in the NACO name authority file. Identifying the illustrators was particularly problematic. Sixty-seven English-language bibliographic records were identified as illustrated in the physical description (300) field. While the physical description was found to be reliable, no dependable way was found to identify the particular illustrator. Less than a third of records for the illustrated editions identified the illustrator. Unless the illustrator is explicitly listed on the title page, it is unlikely that an added entry was created. As with editors, the practice of creating added entries for illustrators was inconsistent, even when the illustrator was explicitly listed on the title page.

Bibliographies are another common significant supplement and were frequently noted in a bibliography note. However, bibliographic records rarely contained sufficient information to determine if the bibliographies in different manifestations were the same, and the bibliographer was rarely identified. Three Oxford University Press editions illustrate the problem of identifying changes in bibliographies. The bibliographies from the equivalent sections of

the three editions are shown in figure 3. Between the 1972 and the 1984 editions of *Humphrey Clinker*, the Thomas Nelson and Sons, the Dolphin Books, and the reprint of the Everyman Edition editions were dropped from the bibliography, and eight other editions were added. Details on the editors also were added. Between the 1984 and the 1998 editions, the bibliography was updated to include four new editions. The problem in identifying the differences is compounded by the fact that the last two editions had identical pagination (xxiv, 375). For readers interested in the bibliography, these updates are important but are not reflected in the bibliographic record. Even a side-by-side comparison of the 1984 and the 1998 editions initially failed to recognize that these were different expressions.

These apparent inconsistencies in the bibliographic records are a serious impediment to identifying expressions. There are a variety of reasons for these observed inconsistencies. The books were published and cataloged over several centuries under various cataloging rules and much of the cataloging occur prior to MARC, AACR2, or the common use of shared cataloging. Some aspects of AACR2 (1988) seem to contribute to the inconsistencies by emphasizing relative, rather than absolute, significance in determining when to create entries for editors, illustrators, and other contributors.

Rule 21.30A1 limits the number of contributors to three—a single entry is specified if there are four or more contributors. This “rule of three” can result in an entry for an editor being made in one case but not in another even when the editor’s contribution, e.g., a foreword, to both is identical. In such cases, it is implied that the other contributors reduce the relative significance of the foreword. For *Humphrey Clinker*, the rule of three’s impact was significant. All of the records had Tobias Smollett as the main entry leaving no more than two other entries available for contributors of the supplemental material.

Rule 21.30K2 provides guidance on when to make an added entry for illustrators. While there are three conditions specified in this rule, the only condition applicable to *Humphrey Clinker* is that an added entry should be made if “the illustrations are considered to be an important feature of the work.” In the case of *Humphrey Clinker*, this rule is difficult to apply consistently. Since the majority are not illustrated, it is difficult to argue that the illustrations are an essential feature. However, the illustrations enriched the novel and would be considered important by many readers.

The FRBRization of *Humphrey Clinker*

After completing the broad overview of the *work*, the next step was to identify an *expression* and a *manifestation* for each of the *Humphrey Clinker* bibliographic records. The

1972: Recent editions in English include the following: 1929, Modern Library; 1936, Thomas Nelson and Sons, Limited; 1943, Everyman’s Library, No. 975, ed. Charles Lee (cited as “Lee”); 1950, Rinehart and Co.; 1954, in Collins Classics Series; 1955, Folio Society; 1960, Dolphin Books, C. 120; c. 1961, Reprint of Everyman Edition, No. 975.

1984: Some recent editions in English: 1925, World’s Classics, ed., L. Rice-Oxley; 1929, Modern Library, ed. A. Machen; 1943, Everyman’s Library, No. 975, ed. H. M. Jones and C. Lee (cited as “Lee”); 1950, Rinehart and Co., ed. R. G. Davis; 1954, Collins Classics Series, ed. V. S. Pritchett; 1955, Folio Society; 1960, Signet Classics, C.D. 30; 1966, Oxford English Novels, ed. L. M. Knapp, reprinted 1972 as Oxford University Press paperback, and 1984 by World’s Classics (revised and updated by P.-G. Boucé); 1967, Penguin English Library, ed. A. Ross (cited as “Ross”); 1968, Riverside Editions, ed. A. Parreaux (cited as “Parreaux”); 1968, Heron Books.

1998: Some recent editions in English: 1925, World’s Classics, ed., L. Rice-Oxley; 1929, Modern Library, ed. A. Machen; 1943, Everyman’s Library, No. 975, ed. H. M. Jones and C. Lee (cited as “Lee”); 1950, Rinehart and Co., ed. R. G. Davis; 1954, Collins Classics Series, ed. V. S. Pritchett; 1955, Folio Society; 1960, Signet Classics, C.D. 30; 1966, Oxford English Novels, ed. L. M. Knapp, reprinted 1972 as Oxford University Press paperback, and 1984 by World’s Classics (revised and updated by P.-G. Boucé); 1967, Penguin English Library, ed. A. Ross (cited as “Ross”); 1968, Riverside Editions, ed. A. Parreaux (cited as “Parreaux”); 1968, Heron Books; 1983, Norton Critical Editions, ed. J. L. Thorson; 1985, Penguin Classics, ed. A. Ross; forthcoming late 1990, in *The works of Tobias Smollett* (Athens: University of Georgia Press), ed. T. Preston, the standard and definitive edition; 1991, World’s Classics ed., revised and updated by P.-G. Boucé.

Figure 3. Selected Sections of the Bibliographies from Three Oxford University Press Editions

original, unaugmented *expression* was identified as the “original.” The other expressions were named for the editor(s) or illustrator(s). When, as occurred once, there were multiple expressions with the same editors, edition numbers were also used. *Manifestations* were named for their publisher and, if necessary, the date of publication. Combining the surnames from the added entries created the initial expression name, with the publisher being used for the manifestation name. For example, the edition edited by Robert Gorham Davis and published by Holt, Rinehart, and Winston was identified as the *Davis expression* and the *Holt, Rinehart, and Winston manifestation*.

Of the 179 sample records, after excluding the translations and microforms, there were 157 English language print editions. These 157 records were analyzed, and all relevant details for each record were entered into a spreadsheet. The initial spreadsheet was created by automatically extracting the relevant information directly from the bibliographic records. Relevant information included added entries, publisher, pagination, date and place of publication, statement of responsibility, and other similar information. Based on physical examinations, the spreadsheet was updated to reflect the new observations. Using the filtering

and sorting functions permitted easy clustering of the records using any the attributes. A copy of the spreadsheet, along with the bibliographic records and the page images, is available on the project's Web site (OCLC 2002).

All the records were reviewed to correct for insignificant differences in the form of entry, e.g., *Holt, Rinehart, and Winston* versus *Rinehart*. The statements of responsibility were examined to identify additional editors or illustrators. For example, it was determined that *Robert Gorham Davis* edited a book only by examining the bibliographic record, which lacked an added entry but included the statement of responsibility: *Edited with an introd. by Robert Gorham Davis*.

In a separate study, Delsey extensively analyzed the MARC format "to clarify the relationships between the data structures embodied in the MARC formats and FRBR and AACR models" (Delsey 2002, 5). He developed a detailed table that associates the various elements in the MARC record to the attributes of works, expressions, manifestations, and items. In principle, this table should be able to be used to determine, based on their bibliographic records, whether two different bibliographic items are members of the same work, expression, or manifestation. For example, the statement of responsibility (245 field, subfield c) is identified as a manifestation attribute (Delsey 2002). Therefore, if two records have significantly different statements of responsibility, they must represent different manifestations.

The use of Delsey's table was expected to assist in identifying the elements in the MARC record that can distinguish between expressions. To facilitate the use of the table, field and subfield statistics for all 157 English language *Humphry Clinker* records were compiled. Table 1 shows the number of times a field occurred and all of the subfields that were used. For example, the 100 field occurred in all 157 sample records, and the only subfields used were "a" (Personal name) and "d" (Dates). The entries in table 1 were compared to the entries in Delsey's table to identify common elements. The surprising result was that, except for language, there were no common elements. Since none of the expression attributes from Delsey's table occurred in the *Humphry Clinker* bibliographic records, the table could not be used to identify expressions.

When it was difficult to determine if the differences between bibliographic records were real differences or simply differences in cataloging practice, an attempt was made to physically examine one or both of the books. Not all of the books could be obtained since many were either in too poor a physical condition to loan, considered a rare book, or otherwise unavailable for borrowing. In these cases, information was obtained where possible, usually via e-mail directly from one of the holding libraries. It is doubtful that the failure to obtain these books for direct examination had a significant impact on the results, although there may have

been a few changes in the assignment of the records to particular expressions.

Results of the analysis are shown in table 2. The 48 different expressions fell into four distinct groups: the original, the edited, the illustrated, and the translated expressions.

Table 1. Fields and Subfields Used in the English Languages Editions

Tag	Field Frequency	Subfields Used
10	22	az
15	12	a
19	7	a
20	15	ac
29	10	ab
35	158	a
40	157	abcde
49	157	a
50	22	ab
82	16	a2
90	85	ab
92	21	ab
100	157	ad
240	4	a
245	157	abcn
246	11	a
250	21	ab
260	157	abc
263	1	a
300	156	abc
440	27	av
490	58	av
500	79	a
504	21	a
510	5	ac
600	2	adtx
650	15	avxyz2
651	12	avxy
653	7	a
655	14	a2
700	62	adeqpt45
740	50	a
752	1	abd
800	10	adftv
830	2	a

Table 2. FRBRization Results

Type of Expression	No. of Expressions	No. of Manifestations	No. of Bibliographic Records	No. of Duplicate Records
Unaugmented	1	43	49	6
Translations	8	8	8	0
Edited	15	24	39	15
Illustrated	13	21	34	13
Edited and Illustrated	11	18	35	17
Totals	48	114	165	51

Most of the expressions were created as the result of an editor adding an introduction, notes, or a bibliography; the addition of illustrations; or both. The original expression had 43 manifestations, far more than any of the other expressions. These manifestations were the result of the expression either being published by a new publisher or being republished with the type being reset. There were eight translations into seven languages, each with a single manifestation. Except for these translations, the 39 new expressions were the result of either editors or illustrators.

The results shown in table 2 were quite different than the initial version derived solely from the information in the bibliographic records. In attempts to FRBRize *Humphry Clinker* based only on the bibliographic records, the most reliable indication that two records represented different expressions was that their added entries were different. The occurrence of an added entry indicated that that edition had been edited, translated, or illustrated.

Of the 157 English language records analyzed, 44 had one or more personal name added entries. An additional 32 edited or illustrated records were found by examining the statement of responsibility, and two more were identified through the notes. Twenty more records were identified as being edited or illustrated by examining the books themselves. Some illustrators were identified from their signed illustrations. Many of these signatures, such as Cruikshank's seen in figure 4, are brief and can be difficult to read. Overall, 108 of the English language records represented edited and/or illustrated editions, but only 44 (41%) could be easily identified from the bibliographic records. Any simple algorithmic approach would incorrectly treat these hard-to-identify expressions as the original expression. More importantly, these unidentified expressions would effectively be lost—undifferentiated from the original expression.

Based on the examination of many of the books and the comparison of a book to its bibliographic description, it became clear that bibliographic records simply do not contain sufficient information to reliably identify expressions. Distinctions based solely on the content of bibliographic records will fail to identify a significant number of expressions and create duplicate expressions based on differing cataloging practice rather than any real differences between the books. For *Humphry Clinker*, expressions identified solely from bibliographic records were unreliable and could impede the navigation process they were designed to assist.

In applying the FRBR entity-relationship model to bibliographic records, the study identified several ambiguities that confounded the FRBRization process. The FRBR report provides an unambiguous definition for *expression* and then proceeds to allow for flexible interpretations. For example, the report states, "if a text is revised or modified, the resulting *expression* is considered to be a new *expres-*



Figure 4. Example of Cruikshank Illustration

sion, no matter how minor the modification may be" (IFLA 1998, 19). Although difficult to implement, this statement is clear and unambiguous. However, in the next paragraph, the report states "On a practical level, the degree to which bibliographic distinctions are made between variant *expressions* of a *work* will depend to some extent on the nature of the work itself, and on the anticipated needs of users." This second statement contradicts the earlier definition by implying that a standard far more flexible than *no matter how minor* can be employed.

While sufficient flexibility to respond to the needs of various user communities is arguably desirable, the IFLA report does not adequately consider the impact of such flexibility in a shared cataloging environment. In a shared cataloging environment, *consistency* is arguable more important than *flexibility*. While duplicate records can be a problem in any catalog, they are a bigger problem in the shared cataloging environment.

With the FRBR model, the potential for duplicates would exist at three levels—works, expressions, and manifestations. While it would be naïve to assume that duplicates can ever be completely eliminated, the hierarchical FRBR model increases the potential to create large numbers of duplicate records. At the *manifestation* level, duplicates are expected to present similar problems to those currently encountered. However, the problem of duplicate records for manifestations is already serious—more than

30% of the *Humphry Clinker* records appear to be duplicates by virtue of their manifestations. By introducing *works* and *expressions*, the FRBR model compounds the duplicate problem. Potentially there can be duplicate records for works that can, in turn, include duplicate records for expressions, which contain duplicate records for manifestations. The problem is further compounded by inconsistent or ambiguous definitions. A large number of duplicate records potentially could limit functionality of the FRBR entity-relationship model.

Are Expressions Valid Entities?

Identifying expressions was problematic and raised the question of whether they are valid entities. Generally, entities are required to be discrete identifiable objects—not something as vague as expressions. While some expressions, e.g., translations, are distinct and identifiable, most of the expressions observed for *Humphry Clinker* were not. Determining if two manifestations embody the same expression proved to be very difficult. Bibliographic records rarely contained sufficient information to reliably distinguish expressions, making it frequently necessary to do either side-by-side comparison or to compare one manifestation to an extensive set of photographic images of the other manifestation.

Delsey's analysis of the bibliographic format also raises questions as to whether expressions should be considered entities. None of MARC elements that Delsey identified with expressions occurred in any of the bibliographic records for the English-language editions of *Humphry Clinker*. This lack of expression-related elements reinforces the difficulty of using bibliographic records to identify expressions and helps to explain the difficulties observed.

Is the difficulty of identifying expressions a result of an overly strict definition? Conceptually, considering any modification to the content *no matter how minor* to result in a new expression makes sense. The work is a distinct intellectual creation, the expression is the set of all items with identical content, and the manifestation is a distinct physical unit. In practice, however, it is extremely difficult to determine if two manifestations have identical content. Even if it could easily be determined when the content was identical, the result would have an overly fine granularity—in many cases the distinction between expressions and manifestations would be lost. New expressions would be created from changes so minor that they would be unnoticed by most readers.

Changing the definition of expression to require that the changes be significant would reduce the problem of trivial expressions but would likely raise other problems. For example, notes, introductions, forewords, bibliogra-

phies, and illustrations are significant to some but not all readers. Some contributors may be identified in the statement of responsibility, others may have “signed” contributions, and others may be completely anonymous. Add the translations to the mix and the difficulty of finding a way to equate the variety of changes becomes very complex, if not impossible. However, unless these changes are equated in a meaningful way, moving beyond the *no matter how minor* standard would be difficult. Building an entity-relationship model that includes expressions may be neither practical nor conceptually sound.

What are the alternatives to expressions? If expressions were dropped from the FRBR model, the model would be greatly simplified but with a significant loss of functionality. There are alternatives that address the same needs that expressions address but are simpler and more responsive to user needs. For *Humphry Clinker*, the increased use of added entries appears to be an effective way to identify expression-like changes. Added entities with the role of the contributor explicitly identified would effectively differentiate among manifestations with different supplemental material. The inclusion of an added entry for all identifiable contributors would require minimal extra effort and, at least for *Humphry Clinker*, would meet the need served by expressions. In effect, expressions could be created dynamically in response to particular user interests.

A reader interested in illustrations could be presented with an expression-like view identifying the illustrator with the number of manifestations illustrated, such as:

1. Allen, Joseph, 1770–1839 (3)
2. Browne, Hablot Knight, 1815–82 (8)
3. Corbould, Richard, 1757–1831 (4)
4. Cruikshank, George, 1792–1878 (21)
5. Harris, Derrick, 1919–60 (1)
6. Holloway, Edgar (2)
7. Richards, Frank (8)
8. Rowlandson, Thomas, 1756–1827 (8)
9. Unidentified illustrators (19)

This one-dimensional, illustrator-centric approach presents a clear picture of the illustrators who contributed to *Humphry Clinker* without confounding the bibliographic record with editors, translators, or other contributors. Similar customized views could be constructed for editors and translators.

Replacing expressions with additional manifestation attributes works well in this case for several reasons: It eliminates the difficulty of identifying expressions, it is easier to implement, and it provides the information necessary to dynamically generate custom expression-like bibliographic record displays. For *Humphry Clinker*, replacing the expression in the FRBR model with additional mani-

festation attributes simplifies the model without any loss of functionality.

Conclusions

The FRBR model provides a powerful means to improve the organization of bibliographic items, particularly for large works such as *Humphry Clinker* where there is no way to navigate easily within the work. Works are a valuable concept and provide a means by which to aggregate bibliographic units and simplify database organization and retrieval. It appears that works can be reliably identified from existing bibliographic records. Identifying expressions, however, is far more problematic. In the example of *Humphry Clinker*, the set of expressions created from the existing bibliographic records is very different from the set based on the physical examination of the books themselves. The detection of subtle differences, such as an updated bibliography, requires the actual copy of at least one of the books. Existing bibliographic records simply do not contain sufficient information to consistently associate the records with expressions. Attempts to create FRBR expressions from existing records are often futile. If expressions are replaced with manifestation records that included added entries explicitly identifying roles of the contributors, the problem of identifying expressions is avoided without loss of functionality. The remaining entity-relationship structures—works, manifestations, and items—provide a powerful means to improve bibliographic organization and navigation.

The study reported herein developed a data set for a single work, *The Expedition of Humphry Clinker*, and applied the FRBR model to that work. Any conclusions based on a single work are risky and lack statistical justification. However, it is extremely unlikely that the problems encountered with *Humphry Clinker* are unique. Clearly, many of the difficulties are the result of the size of this work—smaller works are likely to present far fewer problems. The irony is that the FRBR model provides minimal benefits to the small works that can be reliably FRBRized, but fails on the large and complex works where it is most needed.

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Compiled by Edward Swanson

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The following types of entries are included:

- a. authors—of articles, reviews, and letters
- b. titles—of articles and of articles about which letters were published
- c. subjects—of articles and of books reviewed

Subject entries for individuals are identified by “(about)”; letters are identified by “(c)”.

Reviews are indexed by name of reviewer and by subject of the work reviewed, identified by “(r)”. They are also listed by title under the heading “Books reviewed”.

Entries are arranged word by word following the “file-as-spelled” principle. Numbers are arranged before alphabetical characters; acronyms without internal punctuation are arranged as words.

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