In April 1996, I reviewed in these pages the activities of the National Library of Canada’s Music Division in the 25 years since its founding in 1970, and closed with some dreams for the future. Among the latter was the hope “to exploit new digitizing technologies to make collection elements and access tools available on the Internet.” Little did I realize the extent to which that hope would be fulfilled. As the new millennium dawns, we at the Music Division are already digitization veterans, and the scope and complexity of our projects have increased as the technology has evolved. In fact, digitization has been the Division’s major story of the past five years, as this article will show.

Early Web Activities

Our first World Wide Web initiative was a small collaborative project in 1995, when the NLC created bilingual Web pages highlighting the achievements of Women in Canadian Life, Society, Music, and Literature (<http://www.nlc-bnc.ca/digiprog/women/ewomen95.htm>). Six of the 21 honoured were musicians: the opera singer Emma (Lajeunesse) Albani, the singer-songwriter Mary Travers (aka La Bolduc), the folklorist and folksong collector Helen Creighton, the violinist Kathleen Parlow, the composer Barbara Pentland, and the violinist-conductor Ethel Stark. Archival materials of Albani, Parlow, Pentland, and Stark are preserved at the NLC, and we also hold most of La Bolduc’s recordings.

Following this introductory experience, the NLC committed resources in 1996 for several modest digitization projects, two of which involved the Music Division: the conversion of a card file to a textual database that became the Canadian Music Periodical Index (CMPI); and the creation of a “virtual” exhibition that recycled captions, interpretive texts, and graphics from the NLC’s Glenn Gould exhibition, which had toured across Canada and abroad in the early 1990’s.

The Canadian Music Periodical Index (<www.nlc-bnc.ca/wapp/cmpi>) holds approximately 30,000 bibliographic records of articles covering all aspects of musical activity in Canada published in 475 Canadian music journals, newsletters, and magazines, some dating back to the mid-19th century.¹ Launched on the Web in 1996,

CMPI searches yield basic bibliographic records, though the issue of enhancing the database with at least a selection of full texts has been discussed with the NLC’s Digital Library Task Force. Still, judging by the statistics, “CanMus” scholars are taking full advantage of this Web resource: CMPI currently averages about 3,000 page requests per month. The periodicals containing the texts in question can be borrowed through interlibrary loan. Indexing of about 200 current Canadian music periodical continues and new records are uploaded to the database several times per year.

The Glenn Gould Archive (<www.gould.nlca-bnc.ca>) is a multifaceted Web site which evolved from the initial 1996 “virtual” exhibition drawn from Gould’s archival papers. Following tremendous public interest in the early version of the site, the Music Division added databases of the contents of Gould’s archival fonds, audio files, research tools (including a discography), writings by and about Gould, works of art and poetry inspired by him, information on Gould conferences and symposia, links to other Gould Web sites, and more. The original Web product was thus transformed in 1998 into the NLC’s first large-scale Web site, and set the standard for future “archival” sites at the Library. The site currently receives an average of 15,000 page requests per month.

Discographical Web Sites

Two more ambitious digitization projects undertaken in the late 1990’s created Web sites containing databases about Canadian sound recordings: Disc-O-Logue and The Virtual Gramophone.

Disc-O-Logue (<www.nlca-bnc.ca/discologue>) is a database of information on 90,000 mainly French-language popular songs released on disc in Canada between the late 1950’s and the mid-1980’s. The data includes song title, composer, performer, label, release and deletion dates, copyright holders, and other details. It was originally compiled on index cards by a Quebec record retailer, Louise Lamothe, who later founded SDRM (now SODRAC), a Quebec-based agency that collects and distributes royalties related to the mechanical reproduction rights for sound recordings. The NLC acquired Mme Lamothe’s card catalogue in 1986 and the Music Division converted it to digital form and mounted it on the Web in 1997.

This importance of this database to Canadian discography cannot be overstated. Since Canadian legal deposit regulations were belatedly applied to commercially produced sound recordings in 1969, no comprehensive catalogue (or collection) of pre-1970 Canadian discs exists anywhere. Disc-O-Logue provides definitive information on French-language popular-music record production and distribution in Canada for much of the 45- and 33.3-rpm era, and has been of immense help to the NLC in its retrospective collecting efforts. While an analogous cache of information about Canadian English-
language popular music released on disc in the same era has not yet come to the our attention, we are hopeful that such a gold mine exists and will eventually find its way to the NLC.

The Music Division’s other sound-recording digitization project of the late 1990’s created The Virtual Gramophone (<www.nlc-bnc.ca/gramophone/ >), a Web site that is proving to be of great interest to discographers as well as winning praise from institutions such as the Library of Congress and the British Library. The site is devoted to the 78-rpm era in Canada, which ran from 1900 to about 1955, and takes its name from the Berliner Gramophone Company of Montreal, the world pioneer in flat-disc audio technology. Benefiting from technological advances and from the NLC’s investment in Oracle software, The Virtual Gramophone was conceived as a multimedia, as opposed to a purely textual, database.

Still at a relatively early stage of its development, the VG Web site already features comprehensive data on 6,000 of the earliest Berliner, Victor, His Master’s Voice, and Columbia recordings released in Canada. In addition, there are scanned images of all the record labels, digital audio files of 1,000 recordings with Canadian-content (those featuring Canadian artists, composers, or arrangers), photos and biographies of Canadian stars of the 78-rpm era, chronologies of recording technology, histories of the major record companies, and links to related Web sites. To date, the site covers from 1900 to the 1920’s. The next phase of development is targeting record releases of the Depression era in Quebec. The VG database will eventually hold detailed information on the NLC’s complete collection of Canadian 78’s, which currently totals about 50,000 discs. In 2000, the VG Web site received 153,400 page requests and 47,000 audio-streaming requests.

“Virtual” Exhibitions

Since completing work on the Glenn Gould Archive Web site in early 1998, we have mounted smaller “virtual” exhibitions drawn from the archives of the composers, Sir Ernest MacMillan (<www.nlc-bnc.ca/events/macmill/home.htm>) and Claude Champagne (<www.nlc-bnc.ca/champagne/ >). Our most recent “virtual” exhibition was launched July 1, 2000, along with a traditional exhibition mounted in the NLC’s main exhibit hall, both celebrating the 75th birthday of the Canadian jazz icon, Oscar Peterson (<www.nlc-bnc.ca/oscarpeterson>). This Web site, entitled Oscar Peterson: A Jazz Sensation, includes an extensive array of photos, concert posters, and documents from the NLC’s Oscar Peterson fonds, as well as audio files and an archival finding aid. It is already averaging over 15,000 page requests per month.

Current Web Activity

The Music Division’s latest Web projects, undertaken in collaboration with the NLC’s Digital Library Task Force and underwritten with special digitization funds provided by the Department of Canadian Heritage, are two new multimedia databases, one devoted to historical Canadiana sheet
music and the other to an on-line music encyclopedia.

The Web site devoted to Sheet Music from Canada’s Past (<http://www.nlc-bnc.ca/sheetmusic/>) is based on the NLC’s collection of about 20,000 pieces of sheet music published 1759-1950. This collection comprises mainly Canadian imprints but includes some foreign items that have a Canadian connection. As a prelude to creating the database, the Music Division arranged for much of its manual union catalogue of Canadiana sheet music to be converted to AMICUS records by contractors from the Canadian Musical Heritage Society between 1995 and 2000. Since the autumn of 2000, segments of the sheet music collection dating from the pre-Confederation and First World War eras have been scanned, and work has begun on music from the intervening period.

This site will grow in multiple phases, as has been the case with our other large Web projects. In addition to bibliographic data, the multimedia database currently includes images of each page of music (in the public domain or for which copyright clearance can be obtained), cover illustrations and advertisements, audio files, and background material on Canadian music publishers of the pre-Confederation and First World War eras. Details about noted composers, lyricists, and illustrators, and ancillary information will be added in a future phase.

In anticipation of a collaborative effort to produce a new edition of the Encyclopedia of Music in Canada (EMC), the NLC’s Digital Library Task Force has created a multimedia database which could serve as the technological backbone for a Web-based EMC3 or a continuously updated EMC-e. The EMC board of directors is currently fund-raising in the hopes of assembling a new editorial team to update this important reference tool, and the NLC Music Division looks forward to developments on that front. Meanwhile, as a service to “CanMus” scholars and under the guidance of the Music Division, the second edition of the Encyclopedia (EMC2), published in English in 1992 and in French in 1993, will be offered on the NLC’s Web site (<www.nlc-bnc.ca/emc>).

**Web Publications**

Besides creating “virtual” exhibitions and “archival” Web sites, and providing access to “CanMus” research tools and segments of Canada’s musical and recorded-sound heritage via the Internet, the Music Division has also been very active in both traditional and Web publishing over the past five years.

An updated catalogue of the Music Division’s archival holdings was published on the Web in 2000: Music Archives at the National Library of Canada: A Guide <http://www.intranet.nlc-bnc.ca/pubs/fonds/epgtitre.htm> We anticipate publishing the Guide in hard copy soon. Entries in the Web version will be revised as new archival accessions are made, and hyper-linked to individual archival finding aids, as these are created and mounted on the Web. This will permit a range of access to NLC’s music archives from cursory to detailed, depending on researchers’
individual requirements. Finding aids to various music archives are already available in hard copy and as PDF files on the Web. Recent examples include:


### Exhibits and Exhibitions

Although digitization has been the focus of the past five years, the traditional work of the Division continues. We prepare a number of minor exhibits each year, some of which are displayed at venues outside the NLC, including the National Arts Centre (NAC). These exhibits celebrate such diverse topics as “Music from 100 years ago” and “Canadian Women who Rock the World.” On occasion they complement cultural events in the national capital, such as the NAC’s celebrations for the composer Malcolm Forsyth’s 70th birthday in 1996 and the composer-arranger Robert Farnon’s 80th in 1997, or other events like the Canadian figure skating championships held here in 1999.

Music Division staff also prepare celebratory exhibits for Order of Canada recipients and memorial exhibits for deceased composers and musicians. In the latter category, Louis Applebaum, Violet Archer, Jean Coulthard, Jean Papineau-Couture, Barbara Pentland, and Louis Quilico were all honoured in 2000. We routinely collaborate with other institutions, and have contributed items from our collections for recent exhibits mounted by the Vancouver and Montreal branches of the Canadian Music Centre, the Canadian War Museum, the National Capital Commission, and the National Library of Australia, to name a few.

Periodically the Music Division is privileged to have the full resources of the NLC put at its disposal for the
preparation of a major exhibition. The Library's millennial exhibition, which opened July 1, 2000 and will run until Sept. 4, 2001, is “Oscar Peterson: A Jazz Sensation.” The most ambitious exhibition yet produced at the NLC, it includes audio, video, posters, programs, photos, press clippings, sound recordings, awards, fan letters, and many other items drawn from the rich archive this Canadian jazz icon has been donating to the NLC since 1991.

Outreach

Members of the Music Division contribute their time and expertise to the governance, conferences, and publications of numerous bodies that share the Division’s mandate or interests, including l'Association des archivistes du Quebec, the Association for Recorded Sound Collections, the Audio Engineering Society, the Canadian Association of Music Libraries, the Canadian Institute for Arts Education, the Canadian Musical Heritage Society, the Encyclopedia of Music in Canada, the Glenn Gould Foundation, the International Association of Music Libraries, the International Association of Sound and Audiovisual Archives. We also assist the Department of Canadian Heritage and organizations such as the AV Preservation Trust in the development of new strategies to preserve and disseminate elements of our cultural heritage.

Books and Articles

Since 1995, members of the Music Division have edited two anthologies in the Canadian Musical Heritage series, and MusiCanada 2000: Essays in Honour of the Canadian Music Centre's 40th Anniversary. Some have contributed entries to the Canadian Encyclopedia, the New Grove Dictionary of Music and Musicians, and Women in World History; while others have published articles and reviews in the CAML Newsletter, Fontes Artis Musicae, the National Library News and National Library Bulletin, and the journals of the Australian and New Zealand Branches of the International Association of Music Libraries. We also wrote articles for publications that target a more general readership, such as Classical Music Magazine, The Ongakugendai (Music Journal, Tokyo, Japan), and Music Forum (published by the Music Council of Australia).

Providing research and other support for GlennGould magazine, various Gould monographs, and CD-ROM productions relating to Gould and Oscar Peterson has been another part of our activities of the past half-decade.

Audio Conservation

Increasingly, the work of the Division’s audio conservator, Gilles St-Laurent, takes place in the digital domain. Over the last five years, the NLC has made a major commitment to enhancing the studio’s capabilities by

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adding a Digital Audio Workstation, Computer Enhanced Digital Audio Restoration (CEDAR) modules, RealAudio streaming technology, and the capacity to convert analogue audio signals to digital. At the same time, custom-made equipment such as pre-amps, a cylinder player, and an “archival” turntable have taken their places alongside new professional amplifiers, speakers, and a recording console, thereby significantly upgrading the studio’s analogue equipment chain.

In addition to transferring the contents of analogue sound recordings to newer supports for conservation or dissemination purposes (e.g., mounting audio files on our Web sites), the Music Division creates high-quality dubs of historic recordings in the NLC collection at the request of broadcasters and record companies. Such collaborations have given new life to numerous older recordings in the NLC’s collections, among which a few notables are:

- live performances by the tenor Raoul Jobin and the contralto Portia White, the former preserved on flaking acetate discs, the latter on fragile 78-rpm discs;
- acetate discs of live radio broadcasts by the young Glenn Gould; and,
- pioneering experiments in electronic music spliced together in the 1940’s and 50’s by Hugh Le Caine on now-deteriorating magnetic tape.

We also contributed to a series of recordings documenting Quebec’s folk music heritage.

**Recent Acquisitions**

In the print domain, we acquired the Hough collection of Whaley, Royce documents, including proof copies of over 400 sheet-music publications. A special gem that came our way was a concert program of the five-year-old Glenn Gold (before the family changed its name to Gould) performing for the first time in public on June 5, 1938 with his parents at Uxbridge United Church. This was an item we did not previously have.

In the area of sound recordings, we acquired the Michel Picard Collection of 2,800 Québécois 78-rpm discs, the Ralph Gustafson Collection of historic piano recordings, the Perry Collection of almost 1,000 Henry Burr recordings, several hundred Guy Lombardo recordings donated by the Thacker Family of Toronto, and hundreds of Berliner, Columbia and other recordings from the collection of Claude Seary of Victoria. Among the recorded rarities acquired in the last five years were early recordings (ca. 1904) by Emma Albani, Russian pressings of LP’s by Glenn Gould, Lois Marshall, and Ida Haendel, and lesser-known LP’s by many Canadian artists, including Anne Murray, the Guess Who, Les Classels, and thousands of local rock groups, and church and school choirs, who all contribute to Canada’s musical heritage.

Among the archives acquired by the Music Division in the last five years are those of the composers Murray Adaskin, Victor Davies, Harry Freedman, Jacques Hétu, Otto Joachim, Alfred Laliberté, Clarence Lucas, Robert McMullin, and André Prévost; the performers Paul...
Bley, Greta Kraus, Lois Marshall, John Newmark, Louis Quilico, and the Toronto Mendelssohn Choir; the singer-songwriters Bryan Adams, Wade Hemsworth, Dan Hill, Sarah McLachlan, and Eddie Schwartz; the jazz writer Gene Lees and the opera writer-broadcaster Ruby Mercer; the record producers Bruce Fairbairn and Jim Vallance; and the music-industry executive, Lee Silversides. In addition, we have acquired corporate archives including A & F Music (the largest talent agency and tour management company in Canada), the Encyclopedia of Music in Canada, and Rosnick-Blum-Morris-MacKinnon, a major jingle-producing company in Toronto.

Conclusion

The pace of our digitization activities has surprised us all, but we look forward to maintaining or even surpassing it in the future. We have other Web proposals awaiting funding, including a Canadian Concert Program Index to provide remote access to the NLC’s collection of over 70,000 programs covering concert activity in Canada from the mid-1800’s to the present day. This, too, would ideally be a multimedia database, with cataloguing information linked to images of the programs, photos and bios of celebrated musicians, audio files featuring the identical repertoire and performers as highlighted in selected programs, information about historic instruments and venues, and more. Another proposed project would see many of the approximately 60,000 historic photographs held by the Music Division scanned and mounted on the Web.

National libraries owe it to their citizens to promote their heritage and make their treasures accessible. Both Canada’s Heritage Minister, the Honourable Sheila Copps, and the National Librarian, Roch Carrier, have expressed their strong desire to exploit the Internet’s possibilities to make Canada’s cultural heritage available to Canadians and the world. As the NLC Music Division enters its fourth decade, we reflect with satisfaction on our many accomplishments and look forward to the challenges ahead.