extremely broad, ranging from departmental subject collections in college, university, and public libraries to the technical and business information centers of governments and industries.

The entries are well organized, clear, and concise, with a possible twenty-five 'points of information,' including staff names and telephone numbers, as well as a fairly detailed description of holdings. The subject index provides basic subject access and analysis to the listings and is, quite usefully, broken down geographically. While not attaining as high a level of subject refinement as Lee Ash's *Subject Collections* (5th ed., New York: R.R. Bowker, 1978), in all other respects, especially design and organization, the Youngs' massive enterprise is far superior. It is highly recommended for the quick reference area of any research library or archive, or for the library of the professional researcher.

It is unfortunate that volume two in this series, *Geographical and Personnel Indexes* (\$125.00), could not be amalgamated with volume one; a completely geographical approach to holdings is exceedingly useful. Volume three is entitled *New Special Libraries* and retails for \$135.00.

REVIEW EDITOR

Canadiana 1867-1900, Monographs: Canada's National Bibliography. Microfiche edition. Ottawa: National Library of Canada/Bibliothèque nationale du Canada, 1980- Issued quarterly until completion, \$48.00 (Canada), \$58.00 (elsewhere) ISBN 0-66-50465-0

In June 1980 the first fruits of Canada's ambitious RETRO project appeared on the market in COM microfiche. (RETRO is the code-name by which the project is better known and which is more widely used than its formal name, *Canadiana 1867-1900, Monographs*.) The quarterly issues of fiche each contain a register of all entries for the period, together with a set of indexes (A: author/title; B: chronological by year of publication; C: publisher/printer; D: place of publication/printing; and, E: subject), which cumulate and supersede the indexes of the previous issue. The last quarterly set was expected to appear by the end of 1981, but late 1982 would now seem a more realistic date for its completion. The final quarterly issue is then to be superseded by one last re-cumulation of everything – register and indexes. It is possible that regular up-dates will be prepared thereafter, as missing items are discovered and added to the data base or the criteria for entries are later altered.

Certainly, issuing the work in less costly microfiche is more sensible than producing it in that 'once and for all' hard copy, and it also helps overcome that bugbear of all bibliographers – the inevitability that, however carefully compiled, the publication will contain errors and omissions for which the issuing of later hard copy supplements provides only a partial (and annoying) answer.

The gestation period for this project has been a long one, going back to 1953, and it is a pity that the National Library did not wait just a little longer until some of the 'bugs' were eliminated from the data base before presenting the first fiche to an eagerly awaiting public; for then the credibility of the output would have been greatly enhanced. As it is, the project has already gained a rather bad name with many users that will be hard to live down.

The COM fiches (42x reduction) are produced from machine-readable records stored

in minimARC format, which the staff of the Retrospective National Bibliography Division has compiled – is, in fact, still compiling. Therein lies just one of the project's many faults – its incompleteness. Even the knowledge that the data base is yet to be completed does not stop that momentary annoyance felt when the user finds that the information desired is not yet available. After a few such experiences, he or she is inclined not to search the fiche at all.

This is not to belittle the formidable task undertaken in compiling this retrospective bibliography. Just consider that there was no 'legal deposit' requirements for much of the material included. Certainly, a great deal of research and much effort went into RETRO's compilation. Unfortunately, the methodology was faulty right from the beginning. The compilers' reliance on the catalogue entries of other libraries, many of which date from a time when cataloguing standards varied greatly or were extremely low, together with the use of other bibliographies, also with inconsistent standards, makes for a very suspect data base – error compounding error. Further, the use of the National Library's union catalogue, itself in disrepute, has not enhanced the research results. Initially it might have been more expensive to prepare this bibliography with a 'hands-on' approach, similar to that used for the Eighteenth-Century Short Title Catalogue project, but it would have saved the later costs of having to clean up all the errors input into the computer files. However, hindsight is the best sight, they say.

A large number of the problems that plague this project arise from its computerization and the lack of consideration for the machine. The computer is a literal, not literate, instrument; it only reacts to the input in relation to the commands established by its programming. If the program includes 'stop-words,' such as 'le' and 'la,' then the coders must work within this confine and ensure that a author with a name like 'Le Moine' is entered in such a way as to have it file under 'L,' where the user expects to find it, and not under 'M,' where it is currently found. Surely it is an easy matter to input 'LeMoine' as one word to ensure that the 'Le,' if separated, will not be ignored by the computer as it has been programmed to do. Similarly, if the program will not allow for 'stop-words' other than at the beginning of an entry, why has nothing been done about the title 'Sir'? It comes as a surprise to find that there are no entries under 'MacDonald, John A.,' until it is discovered that the computer has filed them under 'S' for 'Sir John A.' Would it not have been simpler to dispense with titles altogether, or at least to place them after the given names (with or without brackets) as other computerized catalogues have found necessary?

What is greatly lacking is consistency of entry and an authority system, so surprising since the staff has easy access to both the National Library and the Library of Congress authority files. Full names are sometimes given, at other times just initials. This discrepancy shows up most often between main entries and added entries. Complete dates are sometimes given for an author, sometimes not. Hyphens are sometimes used with French names, more often not. All of the above result in incorrect filing of entries because of the literalness of the computer process. 'See' references are supplied and yet entries appear under the name from which the reference is made. A much longer list of such inconsistencies could be appended; but, suffice it to say, many of these problems will be resolved over time, however, most likely not before the project loses its credibility.

Absolute completeness in a retrospective bibliography has probably never been

achieved, nor is it likely to be attained in the near future. There are materials that have been lost, never to be rediscovered, while exclusions of government documents, certain ephemera, journals, periodicals, newspapers, indexed articles from foreign publications, etc. – excluded for whatever reasons or criteria – make a complete retrospective bibliography almost an improbability. Many of these items – periodicals and newspapers, for example – may appear in their own selective bibliographies, which, when combined with other compiled by format, should make as complete a national bibliography as we can expect. The problem there, as in *Canadiana 1867-1900, Monographs*, will be whether items in these bibliographies have been recorded properly and fully or whether there are still exclusions because they too have their own criteria. Some materials may never get listed in any bibliography because they fall midway between the criteria for one selective bibliography and another.

Leroy Harold Linder, in his *The Rise of Current Complete National Bibliography* (New York: Scarecrow Press, 1959), suggests that

A good complete national bibliography, whether in a single list or in multiple parts, should include all the following types of records:

1. Books and pamphlets published and on sale
2. Books and pamphlets issued but not on sale
3. Periodical and newspaper articles
4. Maps, globes, and atlases
5. Musical works
6. Audio-visual materials
7. Theses and academic publications
8. Government publications
9. Periodical publications and newspapers
10. Art reproductions, drawings, and prints. (p. 17)

This is an impressive list, and one cannot expect that the ultimate will ever be achieved – certainly not in one complete bibliography. Many of the items noted above are missing from our retrospective bibliography. In the meantime, work proceeds on the completion of this segment of the RETRO project and on other segments covering other periods and other types of material, although the timetable of their publication has not yet been projected. In this manner, perhaps the entire range of Canada's retrospective national bibliographic needs can eventually be covered, bringing us up to 1950, and the beginnings of *Canadiana: Publications of Canadian Interest Noted by the National Library*, our current national bibliography.

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Encyclopedia of Music in Canada. Edited by Helmut Kallmann, Gilles Potvin, and Kenneth Winters. Toronto, Buffalo, and London: University of Toronto Press, 1981. xxix, 1076 p., illus., \$75.00 ISBN 0-8020-5509-5

It is not unfair to say that, of all the major arts in Canada, music has been the slowest to receive extensive historical and bibliographical research. The list of the most frequently cited books in the new *Encyclopedia of Music in Canada* barely extends