

THE MUSIC LIBRARY AND AUTOMATION*

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The decision made at the University of Toronto to become the first major library to close its card catalogue, and rely completely on alternate computer output for control of newly-recorded bibliographic data is the real subject of this discussion of automation, since the effects on information about its music collection, a large and quite valuable one, will be significant for librarians and teachers across the country. I hope to be able to place that decision in a context, and describe a point of view from which the effects might be seen without too much obstruction.

In 1973, a directory published under the auspices of the American Music Library Association listed 41 projects involving music libraries and computers. The University of Toronto was not included. Library uses, modelled I suspect on the computer applications commonplace in the business world, involved support of particular mechanical procedures such as acquisitions, cataloguing, and circulation.

How much help had the computer given to the library administrator? For libraries in general, machine technology plus electronic communications systems had seemed to offer a way to realize a century-old vision--a universal system in which a book would be catalogued only once, and other libraries acquiring the same title would simply use the original cataloguing, avoiding duplication. Further, an escape seemed available from those library tasks and concepts (including the card catalogue) which in large institutions could only continue to respond to the needs of their users by maintaining really cancerous growth rates.

What had actually been produced by the middle '60's was a proliferation of practical, function-oriented automated systems based on minimal formats, and programmes structured to provide one kind of bibliographic information. The most famous, long-lasting, and highly popular is the Ohio College Library Centre which supplies catalogue cards for 670 U.S. libraries by on-line request from terminals linked to the Centre by telephone; examples in Canada were the Ontario New Universities Library Project book catalogues, and circulation systems, specialized catalogues or serials lists at half a dozen Canadian universities. And at the other end of the spectrum, the American Library of Congress had developed by late 1966 the text of the first of the machine-readable cataloguing (MARC) formats which were to become by default the established standards for bibliographic description.

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Except for projects which did not involve bibliographic information, collections of musical resources were not well served by either of these directions in development. The minimal formats used in the function-oriented systems simply would not accommodate the bibliographic descriptions of scores and recordings with their uniform titles for musical works, their unbooklike physical forms, their need for extensive analysis, etc. The LC MARC office, on the other hand, aware of its responsibilities to the library community in general, of the need of the already-established function-oriented systems for higher-quality formats to upgrade the usefulness of their data bases, and also aware of the complexities of music cataloguing, put the establishment of a MARC format for music at the bottom of its list of priorities.

A format is a rule-book of types of information that may be entered in a computer-held record, including a machine-oriented code labelling each type of information. Its significance is obvious - in the machine world you literally only get out what you put in. When the LC MARC for music and later music and phonorecords finally appeared in draft forms from 1971 through 1973 there were accordingly passionate exchanges within the American Music Library Association about what had been left in, and what had been left out. As a result, while LC had been since 1967 circulating MARC tapes of its cataloguing to institutions with computer facilities (University of Toronto among them) of a growing number of categories of library materials, music was not included, and a much-revised music MARC is just now about to become operational.

Meanwhile, back at the U of T, not much appeared to be happening. The U of T had its own computer facility since 1965, but it operated as a semi-independent concern, directed toward becoming financially self-sustaining. So the U of T Library Automation Systems had been producing catalogue cards and other bibliographic devices for local public libraries, community colleges, and other universities from Quebec to the Lakehead. However, all bibliographic data from the U of T Catalogue Department was being stored in machine-readable form on tape, as well as in conventional form on catalogue cards. And a theory opposed to the function-oriented management approach to machine-readable bibliographic records was being developed. This theory holds that bibliographic information in itself is of central significance; that the multitude of functional applications will be possible after the establishment of as full as possible a body of identifying data; that information about a book (or score) is what is basic, and that information can then be modified to show progress of the item through ordering, cataloguing, circulating, etc. Energy was directed to building up a large machine-readable data base, rather than to making available any particular products.

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This state of affairs might have continued, with the few unconverted sections of the catalogue being integrated into the machine file, and records expanded as LC MARC formats appeared for specialized areas such as music. But a little over a year ago, two things happened. First, the U of T Library realized that as an institution it had by far the largest machine-readable data base on the continent, and second, the University budget entailed severe cutbacks in library expenditures. Library cutbacks are usually made first in technical services, to preserve the book budget and public services. Accordingly, a decision was made to discontinue the publication of bibliographic data in catalogue card form, eliminating certain staff and large material expenses. This data would continue to be stored, as it had since 1965, in machine-readable form, and public access to it created.

In the way that Gutenberg's first printed books have a strong resemblance to contemporary manuscripts, computer output in other application has often appeared in forms similar to familiar printed objects - cards, lists, book catalogues. For a data base the size of the U of T's, nearly one and one-quarter million bibliographic records, these forms would be unworkable; on-line access at CRT terminals, which will be available immediately to some extent, and more widely if costs go down as predicted, still requires a back-up system in case of overloads or breakdowns. The "new catalogue environment" will be dominated by directly-produced computer output microforms, which are quite startlingly cheaper and more compact alternatives to the card catalogue. A COM copy of the U of T data base representing most of the Library's holdings can be duplicated for a couple of hundred dollars.

Printed music and books in the Faculty of Music Library are catalogued by the University Library, are in the machine readable data base, and information about new acquisitions after this summer will be available only in computer output forms. The formatting will be a UTL synthesis of available LC MARC and CANMARC ideas. I feel that the U of T's total dedication to standardization with MARC formats is reassuring; printed music cataloguing at U of T will be built on solutions already worked out by the Library of Congress and the National Library of Canada.

Money and imagination will be the limiting factors on the manipulation of this data base. In a card catalogue, access is by main entry (over which many person-hours can be spent in agonizing decision), and by as many other additional entries as current cataloguing rules permit. With all data elements available in machine-readable form, programmes could be written to extract lists, for example, of the library holdings of all compositions for a particular

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ensemble, of all books on popular music written after 1950, or of all scores published in Iceland in 1970. The point is however, that even if money and imagination are not immediately forthcoming for the realization of glamorous retrieval operations, using Boolean search techniques, creating user profiles, even if potential remains just that for some time, bibliographic information about books and scores will be recorded and publicly available in at least as full a form as previously offered by catalogue cards, and will be accessible in an increased and theoretically unlimited number of locations. The most noticeable effect at first, of automation at the University of Toronto Music Library may be in the manner in which the librarian speaks. But even if UTLAS and OULCS agree on a format for UNICAT/TELECAT involving CRT communication with LC which may by then have absorbed OCLC and BALLOTS along with NELINET and SLICE, and progressed through modification by CANMARC, past minMARC to SUPERMARC and INTERMARC, the English language, which has undergone even more severe upheavals, will emerge triumphant I'm sure, although perhaps not unmarked.

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President's Annual Report for 1975/76

As last year's Annual Meeting was held on August 22nd, the past year has been a rather short term of office. The executive met, therefore, on September 20th at the McGill Faculty of Music Library in order to organize immediately the year's activities and to plan the budget. Unfortunately communication thereafter was hampered by a long mail strike. The executive met again on December 6th in Montreal and the evening of January 30th in Ottawa.

On Saturday January 31st a workshop was held at the National Library of Canada. It was well attended and very stimulating. A tour of the Music Division was held in the morning, followed by a luncheon. In the afternoon Dr. Stephen Willis, Music Manuscript specialist of the National Library, spoke on "Organizing a music manuscript collection," followed by Dr. Helmut Kallmann, Chief of the Music Division of the National Library, who presented the "Data-Sheet Project" in a talk entitled "From CMLA centennial project to union catalogue of early Canadian music," and lastly there was an open forum on the National Library's proposed survey of music library resources in Canada.