Automated Cataloging of Rare Books: A Time for Implementation

Susan A. Massey, University of North Florida
Automated Cataloging of Rare Books: A Time for Implementation
Susan A. Adkins
1991

Abstract. Progress in the development of standards for cataloging rare books in an automated environment are reviewed, focusing on provisions for the special access files of importance to rare book collections. Suggestions are made for the transfer of data to machine readable formats and methods of storing and retrieving records. A list of reference tools for the automated cataloging of rare books is included.

Rare book librarianship in the technological age continues to perform its customary role as a liaison between the tradition of humanistic scholarship and the rigors of modern research methodology. Writing in 1957, Thomas R. Adams described the rare book collection as "a place where books with special virtues would receive care from men with special bibliographical talents."1 Aside from the artifactual value of the rare book, the practice of housing homogenous collections has established rare book libraries as important research centers vital to the support of scholarly studies in the United States.2 Furthermore, the increasing incidence of the removal of deteriorating materials from the general stacks of research libraries for storage in rare book rooms to facilitate preservation has broadened the scope of the responsibility of rare book librarians to include preventing the loss of more modern works3 Because rare collections and the individual items within them are by nature unique, the holdings of rare
book libraries can and should be considered a national resource rather than an institutional or local treasure. The Association of College and Research Libraries Standards for Ethical Conduct for Rare Book, Manuscript, and Special Collections Libraries states that “Rare book, manuscript, and special collections librarians hold positions of trust, involving special responsibilities for promoting scholarship by preserving and providing access to the records of knowledge in their care.”

The importance of "providing access" is further explained by a reference to a prior document, the Joint Statement on Access to Original Research Materials, which emphasizes that “since the accessibility of material depends on knowing of its existence, it is the responsibility of a repository to inform researchers of the collections and archival groups in its custody.”

The advent of automated library systems in recent years has greatly increased the possibility of making the fullest use of the exceptional qualities of rare book collections, while at the same time posing problems in description and access related to the special nature of the items and their uses in scholarship. In the process of transferring the cataloging data of general collections into machine readable format, the unique bibliographic characteristics and extra access points of value to rare book catalogs have sometimes been overlooked or lost, and in consequence the utility of the records in the very research for which the collections have been developed is reduced. Although major steps have been taken in the past ten years to create rules and standards for the cataloging of rare books, some problems are still unresolved. Much remains to be done,
especially in the current dissemination of information regarding rules and standards, and in implementing them in cataloging at the local level. With the proliferation of integrated automated systems in larger research institutions, the special access points of the rare book collection may remain an obscure anomaly during the initial stages of an overall system design. Rare book librarians must promote awareness of their special needs and educate their related institutions concerning the national role of special collections in research, so that future losses in access to information that may result from poor planning for automated bibliographic control can be prevented.

Normal cataloging practice assumes that a rare book is a book and can therefore be described using standard cataloging conventions. Although special attention is paid to certain aspects of the description and many treatises have been written concerning controversies over bibliographic standards for title page transcription, collation, etc., the focus of the difficulty with the automated bibliographic control of rare books does not lie in descriptive cataloging. The problem with the nature of the rare book as a research entity is that the description itself may also be a major access point of interest to the user. Researchers utilizing rare book collections may not be concerned with only the content of the works where the cataloging and classification scheme act as an identifying and locating device, but in any aspect of the book as an artifact, such as genre and illustrative technique. Dunkin suggests that since rare books are kept in closed stacks, subject classification is not even necessary, and instead books should be grouped according to characteristics
important to the collection, for example: special format, private donor, or relationship to a bibliography. In such cases, the collection itself becomes an access point that deserves more attention than simply a locator code for shelving purposes. Bibliographic citations in the cataloging description act as important aids in the identification of particular editions and could be used for access as well. In addition, rare book libraries routinely maintain "special files" that allow access to books by provenance, donor, printer, publisher, binder, place of publication, and chronology of publication date. Extra holdings or accession files for reference or acquisitions purposes may be needed to include uncataloged single issues of serials or other ephemera pertaining to a specific collection. With the increasing role of the rare book library as a center for preservation efforts, temporary files may be required to flag items for restrictions on use based upon fragility, microfilming, deacidification, or other conservation projects. In view of the complexity of providing adequate access to their collections, rare book librarians involved in automation projects need to be aware of the limitations of machine readable cataloging and the standards established for its application to rare books so that access to special files can be incorporated into the system.

**DEVELOPMENTS IN RARE BOOK CATALOGING IN THE 1980's**

Current bibliographic standards for automated systems were developed in response to the need for some level of consistency in book description at an international level, and this was made possible by the publication in 1969 of the *International Standard Bibliographic Description* (ISBD)
code. With the realization that the ISBD code for monographs was developed with current materials in mind, the International Federation of Library Associations and Institutions (IFLA) Committee on Rare and Precious Books was formed to develop the International Standard Bibliographic Description for Older Monographic Publications (Antiquarian) (ISBD[A]), which was completed in 1979. During this period of attention to descriptive standards for cataloging rare materials, National Endowment for the Humanities funds were provided for the development of major national automated research databases such as the Eighteenth Century Short Title Catalog (ESTC) and the North American Imprints Project (NAIP). These projects underlined the difficulties involved in converting special collections records into machine readable format as well as the need for a national rare book cataloging code. The Library of Congress responded to the necessity of coordinating ISBD(A) with AACR2 by issuing its Bibliographic Description of Rare Books code in 1980. Concurrently, the Independent Research Libraries Association (IRLA) formed the Ad Hoc Committee for Standards for Rare Book Cataloging in Machine Readable Form to study the use of the MARC record format for the automated cataloging of rare books. In a 1979 report issued by the committee, fifteen proposals were outlined dealing mainly with additional access points and standards for terminology and authority information. These were reviewed by the Library of Congress Automated Systems Office and then submitted to the American Library Association's Committee on Representation in Machine-Readable Form of Bibliographic Information (MARBI). The resulting approved updates to the use of the USMARC format are summarized in Appendix A. The new MARC
fields that were added and the new uses allowed for previously existing fields standardized the ability of rare books libraries to provide "special files" access through computer records by intellectual genre, place of publication, names of publishers and printers, copy-specific names (donor, provenance, binder), and physical printing and publishing descriptors useful to book historians.

An adjunct development from the IRLA Ad Hoc Committee's report was the recognition of the need for standardized rare book descriptive terminology for the new MARC fields, including a list of standard bibliographic citations related to rare books to be used in the recently updated USMARC field 510. This challenge was met by the formation in 1979 of the Standards Committee of the Rare Books and Manuscripts Section of the Association of College and Research Libraries (ACRL/RBMS). This group has been responsible for the compilation and publication of thesauri for genre terms (used in MARC field 655), printing and publishing evidence (MARC field 755), binding terms (MARC field 755), relator terms (for use in MARC fields 700-710) to designate the function of a person associated with a book, and a standard format for bibliographic citations (MARC field 510). A list of these and other cataloging documents is provided in Appendix B.

Prior to the advent of standardized automated cataloging procedures, rare book libraries were largely isolated in the local methods used to afford access to materials, and in the ability of researchers to locate and utilize their collections. Because of the specialized nature of rare book holdings, less duplication of items can be expected
between libraries than will normally be found in general collections. Automation has made increasing cooperation between institutions possible, and at the same time promoted optimal research use and preservation of rare book resources. If libraries with automated systems are to be able to communicate effectively with each other electronically, a high degree of consistency must be established in the format for recording bibliographic data. In the interests of providing access to collections, it is the ethical responsibility of rare books libraries to insure that machine readable records are created that will be compatible with those of other institutions for maximum participation in future cooperative research efforts.

Despite its possible limitations and drawbacks as a format for online applications, the USMARC format currently remains the acceptable national standard for machine readable databases in libraries. Regardless of the extent and anticipated use of the cataloging records created by an individual institution, automated cataloging of rare books should be USMARC format compatible and adhere to the AACR2 style indicated in *Bibliographic Description of Rare Books*. Furthermore, conformance to the descriptive terminology provided in the recommended thesauri is essential to participation in national database networking. If descriptors are not standardized, the use of computers in the identification and collocation of materials is impeded and one of the major advantages of automated cataloging is therefore lost. Computers cannot make logical leaps in meaning, but must rely on the matching of exact character strings for index searching. As a result, even minor variations in spelling (such as "catalogs" versus "catalogues") can, depending on the search keys utilized, reduce access to individual records. Although online
searches using the special access fields approved for rare book cataloging are not currently available through the major bibliographic utilities, the possibility that this capability may exist in the future lends impetus to the use of national standard thesauri. In addition, the use of already established standards reduces the need to create local thesauri when automating. Developments in rare book cataloging during the 1980s have provided the rare book librarian with many of the tools needed to convert records to machine readable format without sacrificing the special access points important to the full use of collections.

PRACTICAL CONSIDERATIONS IN AUTOMATED CATALOGING

A major reason for local library automation is the gain in the speed of information retrieval from an increased number of access points, as well as the integration of acquisitions, cataloging, circulation and administrative functions. Rare book libraries have great potential for exploiting the computer's ability to create specialized databases and compile bibliographic lists for the purposes of printing and publishing catalogs of special collections materials. Furthermore, automation allows rare book libraries to participate in the formation and use of national research databases.

At the practical local level, the decision to automate should involve a complex analysis of what an automated catalog can do that is not already being accomplished by existing files. This would involve local rare book libraries in "a careful self-study of their users, collections, services,
publications program, and institutional objectives.\textsuperscript{28} Size of the collection to be brought under automated bibliographic control will be a factor, since the efficiency of an automated system is only cost-effective if the number of documents to be stored exceeds 5,000.\textsuperscript{29}

Once the decision is made to automate rare book cataloging, establishment of an editorial policy will guide the choice of file design. This policy addresses the completeness of the records required, the degree of their consistency, and the complexity of the search capabilities needed for system use.\textsuperscript{30} It is at this point that the level of AACR2 cataloging to be used for most records should be considered; since variations may occur between the identification needs of specific groups of items within the collection, the most complete and minimal levels of cataloging desired must be determined. In addition, the inclusion of full MARC records and search support for the input fields necessary for access to rare book special files should be specified. The fields to be searched in conjunction with the availability of thesauri will affect the degree of consistency required in the records. The type of searches to be performed by the end user will also affect the design of the files. The use of a controlled vocabulary for search terms will enable large files to be searched by indexing rather than performing full-text searches.\textsuperscript{31} This is an important consideration in the design of larger library systems, since the use of inverted indexes is advised to provide efficient access to records.\textsuperscript{32} However, a large capacity for file storage is necessary for indexed searching, and the index files require constant updates if large numbers of new records are added on a regular basis.\textsuperscript{33} Alternately, text-scanning for retrieval of matched terms is
only appropriate for small files of short records with limited vocabularies.34

Other considerations in choosing an automated system are the methods to be used in data entry and data storage/archiving of records.35 These questions are related to decisions concerning the choice of software and hardware such as cost, user compatibility, output medium, and training needs.36 The nature of the material in the collections will also be a factor in data entry requirements, since many rare books call for the use of special character sets for foreign languages in the form of an extended ASCII (the ALA character set).37 Availability of the character set depends upon specialized hardware or programming support.38

Retrospective conversion of existing records into machine-readable format should also be guided by the editorial policy developed for data entry. The level of cataloging required, the degree of editing for bibliographic consistency, and enhancements or additions of information to be made to the records will aid in determining whether conversion must take place in-house or can be performed by an outside vendor. If records are to be generated by a vendor, data entry in special fields and subfields must be specified. Moreover, the nature of the collections to be converted will affect the choice of a bibliographic vendor, both for retrospective conversion and as an ongoing source for cataloging copy. Since most rare book collections consist of large numbers of older materials, the availability of resources such as the ESTC database and REMARC (Library of Congress pre-1956 imprints) in the vendor's files will greatly enhance the "hit
rate" of records for retrospective conversion and reduce the ongoing need for original cataloging. In addition, participation in bibliographic utilities that support shared records from member institutions with rare book collections will increase the probability of locating cataloging copy as well as promoting research networking between collections.

Once the database has been established, a number of options exist for record retrieval and access to special files. If the rare book library is part of a larger institution that is automating, regular MARC cataloging may be implemented online, while extra cards are requested for the manual maintenance of special files. The drawback to this method is that it fails to bring the total record for an item under automated bibliographic control, which precludes the possibility of using the approved rare book cataloging fields to search the online catalog in the future. Another alternative is the creation of a standard MARC record for network purposes, while the record downloaded into the local system is enhanced by the rare books library to include special fields and expanded bibliographic descriptions for local use. Again, the archiving of the more detailed record is important to consider, as this approach prevents the use of rare book cataloging fields in the future as access points for shared network searching of the library's holdings. In order to facilitate record storage and the local online search capabilities of special files, some libraries have utilized local subject fields (MARC tags 69x) for special file designations. Unfortunately, special files often involve personal names related to rare books in a variety of ways that cannot be considered subject entries, and this
practice does not conform to currently accepted standards for MARC format use. The use of local notes fields (MARC tags 59x) also prevents indexing and access to special files online for many systems.

The ideal solution to problems of retrieval is to use full MARC records for cataloging to the extent they are available to the institution, including the fields currently designated for special rare book files and description, and to develop local access indexes as possible. An acceptable alternative might be to seek vendors who can offer special files access online or through microcomputer software. Bibliographic utilities may be able to archive full MARC records, but are not useful in supporting online retrieval for special files since many of the specialized access points are not indexed in their systems. Larger local online public access catalogs (OPACs) are usually developed for the needs of general collections and are not designed to index special fields or subfields for special file searching. Rare book libraries automating in conjunction with a larger institution OPAC may consider downloading locally produced and archived full MARC records specific to their collections into a microcomputer system equipped with database software that will allow in-house searching of special fields and the generation of bibliographic lists and printed catalogs. Vendors of online text retrieval systems with multiple search capabilities which offer cataloging copy services (such as BRS, Wilsonline, and DIALOG) may also offer storage and access to archival tapes for local institutions. This option can be attractive to an independently automating rare book library without access to the hardware support necessary for a complicated OPAC. Finally, vendors of some computer services offer
offline (batch) processing of already produced archival tapes that may include database maintenance, special searches, and the production of printed products such as bibliographies and microfiche catalogs. These services may be attractive to institutions whose major purpose in automating is not online retrieval but the ease of producing collection catalogs.

**FUTURE DIRECTIONS FOR AUTOMATED RARE BOOK CATALOGING**

A brief historical survey of the field reveals that major developments in rare book automation standards have occurred only within the last decade. During this period, the ACRL/RBMS Standards Committee has carried out the original 1979 IRLA proposals. Additional standards work remains, along with the need for new proposals to meet the special needs of rare book collections. With the inclusion of new MARC format fields for rare book cataloging, a standard is needed for minimal level completeness and full level cataloging guidelines to facilitate consistency and database sharing on a national and international basis. The proposal of conservation advocates to include a standardized field and terminology for preservation information in the MARC record requires attention in order to reduce the duplication of costly conservation efforts and encourage network sharing of materials preserved in non-book format. Also, input standards need to be developed for the major bibliographic utilities if the concept of a national database is ever to become a reality. These input criteria should focus on inclusion of newly standardized access points and consistency in the handling of copy specific information.
The current master record structure of OCLC and lack of consistency in RLIN copy-specific access points, if continued, may preclude the exchange of this type of information in the future. Standards work in thesauri production also needs to progress for provenance evidence, papermaking, etc.

Further research needs to take place in "the feasibility of developing truly nationwide research tools for special research materials." This should include proposals for greater access to MARC records using the new rare book fields for indexing and retrieval capabilities.

At the local level, rare book libraries using bibliographic utilities for cataloging support need to routinely include USMARC special access points and copy-specific information in their records to support the possibility of future cooperative research efforts. Further, local cataloging practices should be modified to adhere to the standards already established for rare book cataloging. Since some of the initial problems in dealing with the automated bibliographic control of rare book collections have been solved, a period of consolidation of gains and education of local catalogers may be necessary before addressing the remaining issues. Publication of a single cataloging tool containing instructions for using the MARC format fields for special files access, along with all the currently available related thesauri, would be an asset in disseminating information concerning rule decisions and their application. The time for implementation of the newly existing standards has arrived.
2. Ibid., p. 430.
8. Melissa C. Flannery, "A Review of Recent Developments in Rare Book Cataloging." Cataloging & Classification Quarterly 7 (Fall 1986): 55.
13. Ibid., p. 56.
20. Davis, "Bibliographic Control of Special Collections," p. 113.
21. Ibid., p. 118.
23. Davis, "Bibliographic Control of Special Collections," p. 119.
27. Davis, "Bibliographic Control of Special Collections," p. 120.
30. Ibid., p. 4-5.
31. Ibid., p. 12.
33. Ibid., p. 245.
34. Ibid., p. 255.
38. Ibid., p. 266-67.
39. Davis, "Bibliographic Control of Special Collections," p. 117.
46. Davis, "Recent Work in Automation," p. 117.
48. Davis, "Bibliographic Control of Special Collections," p. 112.
50. Davis, "Bibliographic Control of Special Collections," p. 117.
51. Ibid., p. 122.
52. Ibid., p. 116.
53. Ibid., p. 122.
55. Davis, "Bibliographic Control of Special Collections," p. 121.
57. Davis, "Bibliographic Control of Special Collections," p. 118.
58. Ibid., p. 112.

REFERENCES


Flannery, Melissa C. "A Review of Recent Developments in Rare Book Cataloging." *Cataloging & Classification Quarterly* 7 (Fall 1986): 55-62.


<table>
<thead>
<tr>
<th>Field Tag</th>
<th>Content Designation</th>
<th>Special File Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>510</td>
<td>Citation/Reference Note</td>
<td>Bibliographic citations of book bibliographies</td>
</tr>
<tr>
<td>655</td>
<td>Index Term--Genre/Form</td>
<td>Intellectual genre</td>
</tr>
<tr>
<td>700</td>
<td>Added Entry--Personal Name</td>
<td>Provenance, donors, illustrators, printers, binders</td>
</tr>
<tr>
<td>710</td>
<td>Added Entry--Corporate Name</td>
<td>Publishers, printers, binders</td>
</tr>
<tr>
<td>752</td>
<td>Added Entry--Hierarchical Place Name</td>
<td>Place of printing/publications</td>
</tr>
<tr>
<td>755</td>
<td>Added Entry--Physical Characteristics</td>
<td>Publishing or printer terms; binding styles</td>
</tr>
</tbody>
</table>
APPENDIX B
Publications List of Tools for Automated Rare Book Cataloging


Van Wingen, Peter and Stephen Davis. *Standard Citation Forms for Published Bibliographies and Catalogs Used in Rare Book Cataloging*. Washington, DC: Library of Congress, 1982.