Bibliographical Databases for Music Research

Májor Bibliographical Databases

Cooperative bibliographical projects organized on national and international lines have produced enormously large compilations of material. Much of this data is now stored in machine readable form. As computers become more widely available and computer software becomes more sophisticated, these large bibliographic databanks can be expected to play an increasingly important role in musicological research.

This year's *Directory* presents reports on four of the major bibliographic projects currently in progress. Of this group, one is concerned entirely with the cataloguing of primary sources (music prints and manuscripts) and three are concerned principally with cataloguing secondary source material (books, scores, recordings). Besides their differences in focus, there are also important differences in design: the RISM A/II project is intended to serve as a stellar databank from which satellite bibliographies on specific topics can be culled, while RLIN, OCLC and BLAISELINE are chiefly intended for online consultation.

The Répertoire International des Sources Musicales (RISM) is an international music cataloguing effort, the origins of which date back to the 1950's. While RISM's many published catalogues of printed music (Series A/I) and categorically arranged source material (Series B) are familiar to most music scholars, its long-standing effort to catalogue all seventeenth- and eighteenth-century music manuscripts is one that has until recently been of low visibility. RISM director Joachim Schlichte and US RISM Coordinator John Howard explain what RISM A/II is all about and where its work currently stands in the lead article of this *Directory*.

While RISM is concerned exclusively with musical material, national bibliographical networks support general reference activities. The Research Libraries Information Network (RLIN) and the Online Computer Library Center, Inc. (OCLC) serve complementary groups of libraries in the United States and overseas. Both are cooperative schemes originally designed to support cataloguing, interactive searching, and interlibrary lending of materials. Reports compiled by Kären Nagy, Music Librarian at Stanford University, and David Fenske, Music Librarian at Indiana University, on RLIN and OCLC respectively have been supplemented with information provided by John J. Hughes, Jeanette Drone, and Mark Crook. The material on the British Library's BLAISELINE service for music bibliography was compiled by May Katzen for the Humanities Communication Newsletter No. 10 (1988).

Bibliographical Retrieval Services

Certain kinds of bibliographical material can be searched by users subscribing to commercial retrieval services. Such services offer access to many unrelated bibliographical databases. Most services currently operating are designed for business and institutional use. We have made no effort to list all of these, since many provide little of relevance.

Individual access is becoming increasingly available, although in some cases the range of information available is limited to high-demand items. The associated costs are scaled

differently from service to service, and estimates are difficult to make without some experience in using the system. Some of the same bibliographies that are available online are also being provided on CD-ROMs, which in turn are sold primarily to institutions. One example is the *International Bibliography* (200,000 entries) of the Modern Language Association, which is provided by the H. W. Wilson Co. in either format and in both cases on a subscription basis.

Two of the major commercial services available in the US are BRS (Bibliographical Retrieval Services) and DIALOG. Both are designed for general reference, but both provide access to bibliographies of special interest in the field of music.

BRS

Among the materials available for searching on BRS are these:

- * The Arts and Humanities Citation Index (listing the contents of 1300 periodicals from 1980 onward)
- * Dissertation Abstracts
 (abstracts of all US dissertations from 1980 onward;
 citations for dissertations accepted from 1861 to 1980)
- * Books in Print
 (all titles from US publishers; revised at frequent intervals)
- * OCLC Easi Reference
 (books, records, and scores catalogued within the past three years)

BRS has a special service for individual users called BRS After Dark. Recent rates for connect time to BRS After Dark were \$3.30 for 15 minutes and \$101.40 for two hours. It also has a monthly minimum of \$12.00. For further information about BRS, contact:

BRS Information Technologies 555 East Lancaster Avenue, 4th Floor St. Davids, PA 19087 (800) 468-0908

DIALOG

DIALOG Information Retrieval Service provides access to such bibliographical resources as:

- * Dissertation Abstracts
- * MARC (Library of Congress accessions since 1968)
- * REMARC (Library of Congress Accessions prior to 1968)

DIALOG also provides access to RILM (Répertoire International de Literature Musicale) abstracts in print and in press (1967-1982). Recent costs for connect time to DIALOG were \$18.75 for 15 minutes and \$150.00 for two hours. For further information about DIALOG, please contact:

DIALOG Information Services, Inc. 3460 Hillview Avenue Palo Alto, CA 94304 (800) 334-2564

The Directory of Online Databases provides comprehensive information about many other services. It is published by Cuadra/Elsevier, 52 Vanderbilt Avenue, New York, NY 10017; (212) 370-5520. Two copies a year are issued.

Bibliographical Database Applications to Scholarship

While bibliographical databases can be differentiated from both structured and fulltext databases in a number of ways, some of the text search strategies developed in one quarter can be readily effective in another. Simple searches for exact matches of single words, while adequate in a word-processing environment, are often inadequate for the needs of academic research.

Some refinements of text searching for single word matches include the following:

- 1. truncation (to allow for multiple prefixes or suffixes)
- 2. wild-card searches (to allow for variable spellings)
- 3. use of authority records

In the first case, a title search for "De" would locate works containing such words as "Deus" and "Dei". The first and second kinds could be combined in a place-of-publication search for "T*rin", which should yield both "Turin" and "Torino". Authority records list all the different spellings with which the same name may appear. The Library of Congress acknowledges 40 different transliterations for "Tchaikowsky". Ockeghem's name is encountered in more than 50 spellings.

The validity of some word-search results can only be established by contextual information. Some search refinements designed to serve this end are these:

- 4. Boolean searches (specification of "AND", "OR", and "NOT" relationships in order to limit or expand the field of potential matches)
- 5. specified range searches (to determine whether one word occurs in close proximity to another and/or with one probable meaning)
- 6. embedded letter searches

In an embedded letter search, word boundaries and irrelevant letters will be ignored in seeking a sequential match. Thus "valor" would be matched not only with "valour" but also with "have all our". Such searching is useful in dealing with obsolescent and dialectal

spellings and in certain aspects of the analysis of poetry, since it is capable of retrieving related sounds quite effectively.

The techniques of bibliographical retrieval will not meet all needs. A case in point is encountered in the work of John Hill reported in the "text analysis" category of the Applications section of this *Directory*. In a study of the texts of almost 4000 arias used in works by Vivaldi, Hill has determined that neither first-line matches nor scansion-pattern matches are as effective in identifying musical parodies as are the percentages of matching word sequences within full texts. The question of which technique suits what kinds of research best will inevitably vary with the repertory, the provenance, and the period of time involved.

For the present moment, the rapidity with which information can be retrieved and the quantities of information to which access is readily available are of fundamental importance. In reviewing the material in the following pages, readers might wish to keep in mind these general points:

- 1. Cataloguing information incorporates a great deal of the factual information (names, places, dates) on which scholarship depends.
- 2. Some techniques for organizing information in ways that facilitate computer searching could be used to advantage by individual users designing their own databases.
- 3. Online systems serving large numbers of academic institutions potentially offer a vehicle for the dissemination of machine-readable data assembled by individual scholars.
- 4. Clear knowledge of the purposes, scope, and limitations of existing efforts can enable scholars to make greater use of available resources and to design projects that complement them.

Librarians' journals including Fontes Artis Musicae and Notes: The Journal of the American Music Library Association have carried any number of reports and articles on the major bibliographical databases. Readers seeking more detailed information about text searching strategies may wish to consult the recently launched journal called Literary and Linguistic Computing (published quarterly by Oxford University Press).

Répertoire International des Sources Musicales (RISM)

John Howard and Joachim Schlichte

RISM Project Background

The Répertoire International des Sources Musicales represents an international cooperative effort to compile a census of musical source materials and identify their locations. It was first proposed in 1949 by Hans Albrecht at the Congress of the International Musicological Society (IMS) at Basle and was formally instituted in 1951 as a joint project of the IMS and the International Association of Music Libraries (IAML). The original goal of RISM was to revise the two major bibliographic finding tools for musical works, then in existence—Robert Eitner's Biographisch-Bibliographisches Quellen-Lexikon der Musik und Musikgelehrten (Leipzig, 1898-1904; rpt., rev., Graz, 1959-60) and his Bibliographie der Musik-Sammelwerke des XVI. und XVII. Jahrhunderts (Berlin, 1877; rpt. Hildesheim, 1963)—both of which were incomplete, plagued by inaccuracies, and ultimately rendered nearly useless by the destruction and displacement of library collections during the two world wars.

It was decided at an early stage of the planning, however, to expand the scope of the project, so that by 1958 Friedrich Blume could describe its general plan as follows:

The RISM is intended to provide a catalogue of all available bibliographical music works, writings about music and textbooks on music from all countries of the world, including monodic music, liturgical sources, song books, treatises and methods, books and periodicals on music, from the earliest times to the year 1800.²

RISM is divided into two major series. The first, Series A, is devoted to musical works that appeared under the names of individual composers, and is subdivided into catalogues of works preserved in printed sources (Series A/I) and those preserved in manuscripts (Series A/II). The second, Series B, consists of catalogues of sources that lend themselves better to systematic (categorical) treatment, such as printed anthologies of music, theoretical writings, manuscript sources of tropes and sequences, Hebrew sources of music, etc.

For a general overview of the history of RISM see Friedrich Blume's "Foreword" to Recueils imprimés, XVIe-XVIIe siècles: Liste chronologique, ed. François Lesure, RISM B/I/1 (München-Duisberg, 1960), 23-28; idem., "Zwanzig Jahre RISM," Acta musicologica, XLIV (1972), 171-180; and Rita Benton, "Répertoire International des Sources Musicales," The New Grove Dictionary, XVIII (London, 1980), 747-49.

Blume, "Foreword," p. 27.

RISM Series A/II: Music Manuscripts 1600-1800

Of the various projects undertaken by RISM the most ambitious by far is Series A/II, an inventory by composer of musical works preserved in manuscripts written between ca. 1600 and 1800. The series is distinguished from other RISM bibliographies by the size of the repertory to be inventoried--it is estimated that over 1.5 million works will eventually be catalogued--and its format: it has been conceived as an electronic database maintained by the RISM Central Editorial Office (Zentralredaktion) at Frankfurt, West Germany.

The major consideration in the decision to automate the project has been size: publication in book form of a catalogue of more than two million works would be prohibitively expensive, and could only be achieved after the several decades the project is expected to require. By electing to treat the inventory as a database, each bibliographic record becomes available as soon as it is entered.

But other factors also argue in favor of the database format. Among these is the very nature of manuscript as a type of document. Unlike a print, every manuscript is a unique document, even when it is only one of several copies of the same piece. Moreover, manuscripts often present a complex and unpredictable myriad of bibliographic detail of potential significance in assessing their relative authority. This detail concerns physical attributes of the document (size, format, watermark information), information relevant to it origins (copyist names, former owners, provenance) and internal information regarding the music it transmits (instrumentation, key or mode, sectional organization, etc.). In evaluating a manuscript source, then, it is necessary to have access to an extremely broad range of data. And a database system can not only provide this data in the bibliographic records themselves, it can also provide access to these data by particular bibliographic or musical values, thereby opening a new set of possibilities for source-related research.

Specific criteria for inclusion of manuscripts in Series A/II concern composers' date of birth and death, not simply the date of a source, and can be summarized as follows: works by composers born after 1570 and before 1770, and who died after 1610 and before 1810 will be inventoried; this includes manuscripts written before 1600 and up to the mid-nineteenth century. RISM Series A/II will not include manuscripts notated in tablature or monophonic works such as chorales, hymns, song tunes, etc. (such manuscripts would be inventoried in Series B).

See Helmut Rösing, "Sinn und Nutzen des Versuchs einer weltweiten Erfassung von Quellen zur Musik," in Quellenforschung in der Musikwissenschaft, ed. Georg Feder, Wolfenbüttler Forschungen, 15 (Wolfenbüttel, 1982), 66; Norbert Böker-Heil, "Computer-Einsatz bei der Serie A/II RISM: Möglichkeiten, Bedingungen, Vorschläge," Fontes artis musicae, XXII (1975), 86-89; Kurt Dorfmüller, "The Changing Face of RISM," Fontes artis musicae, XXV (1978), 285-89; and Helmut Rösing, "RISM-Handschriftenkatalogisierung und elektronische Datenverarbeitung (EDV)." Fontes artis musicae, XXVI (1979), 107-09.

Bibliographic Standards and Data Format

Because of the variegated nature of music manuscripts and the special demands of music manuscript bibliography, RISM has adopted a rigorous cataloguing standard, based on the Code international de catalogage de musique, and has developed a data format and database record structure that provide optimal searching, sorting, and analytic manipulations of data. The various bibliographic categories covered by the standard and the corresponding data elements have been arranged in the form of a "Checklist." Example 1 reproduces the Checklist, and also indicates which data elements are indexed."

Project Methodology and Status

RISM Series A/II is being compiled through contributions organized and directed through each participating country's RISM coordinating group. Bibliographic data is compiled with reference to the RISM Checklist, then submitted to the Central Editorial Office for processing. The working methods of the various national groups varies: some prepare handwritten or typescript bibliographic descriptions, while others, including France, Great Britain, Italy, and the United States, are exploring the possibility of submitting data in electronic format while maintaining individual national databases.

Once received by the Central Editorial Office, however, all data is subject to a systematic editorial process that makes full use of electronic resources to guarantee a high level of data validity and consistency. The process involves the following steps:

See Helmut Rösing, "Zur Katalogisierung von Musikdrucken und Musikhandschriften der Serie A: Konzept und Realisation der Series A/II des Internationalen Quellenlexikon der Musik," Acta musicologica, LI (1979), 184.

See volume II of the code, Rules for Full Cataloguing, ed. V. Cunningham (Frankfurt, 1971), and vol. IV, Rules for Cataloguing Music Manuscripts, ed. M.L. Göllner (Frankfurt, 1975).

Concerning the design rationale of the RISM Series A/II database see Helmut Rösing, "Zur Katalogisierung von Musikdrucken und Musikhandschriften der Serie A: Konzept und Realisation der Serie A/II des Internationales Quellenlexikon der Musik," Acta musicologica, LI (1979), 184,

- Preparation of data for input (standardization of names, identification of compositions, enhancement of records through additional research, encoding of musical data, etc.)
- Data entry
- Data verification (data-entry program verifies characteristics of various data elements, e.g., string length, valid or invalid characters, etc.; a post-processor verifies forms of personal names against the RISM authority file (a separately maintained, linked database), verifies thematic catalogue abbreviations, etc., and verifies the syntax of encoded music incipits)
- Database processing (processing of the record structure, rebuilding of tree-structured data-sets, etc.)

To date, more than 280,000 cataloguing records have been contributed to the Central Editorial Office. Of these, some 60,000 have been processed and reside in the database.

Uses of the Database, Access, Published Products

Various uses of the database have already been indicated: as a finding tool, the system has already become an indispensable resource for musicians and scholars. But its potential for research extends far beyond this basic bibliographic function. For example, the ability of the system to isolate repertories of works by copyist, provenance, genre, etc., and to provide comparative statistics on their size and distribution, will undoubtedly be exploited to serve the growing interest in studying the sociological aspects of music. Another example concerns genre terms. Two genre categories exist in the RISM Checklist: original genre terms (category 192) and standardized genre codes (category 194). The latter employs the two-letter genre codes used in the US-MARC scores format (MARC fields 008/18-19 and 047) and can be used to locate works by broad generic categories. This ability has obvious utility for historical studies of genres or in locating works for performance. Used in conjunction with category 192, however, it can also provide significant data for the study of musical terminology.

The ability of the RISM Series A/II database system to manipulate specifically musical data--namely, encoded musical excerpts from the beginning of each work--represents perhaps its most exciting potential use. One of the lingering problems of music manuscript studies of the period 1600-1800 is the identification of the vast numbers of musical works which have been handed down without composer attributions or with ascriptions to the wrong composer. In the case of the classical symphony, for example, it has been estimated that misattributions affect about 7 percent of all known sources, or nearly 900 compositions from that repertory. With the development of software to compare encoded musical incipits, RISM has begun to place this aspect of manuscript stud-

Jan LaRue, "Symphony, I, §1-2: 18th Century, Introduction and Sources." New Grove Dictionary (London: Macmillan, 1980), XVIII, 438-39; see also Jan LaRue, "A Union Thematic Catalogue of 18th Century Symphonies," Fontes artis musicae, VI (1959), 18-20.

Example 1. RISM Series A/II Checklist

Category	Index	Description
000	x	RISM record number
[001]		[reserved for future use]
002	X	Main entry: Composer name
004		Life dates
012	X	Uniform title
014	X	Instrumentation, general description
022	X	Thematic catalog
024	X	Opus number
026	X	Key or mode
032		Title transcription
042	X	Text author
044	X	Arranger/Collaborative composer
046	X	Performer
048	X	Dedicatee
052	X	Autograph Ms or copyist's Ms
054	X	Date of Ms
056	X	Copyist name
062		Collation
072		List of parts
082		Size of ms. in centimeters
		Format
		Manuscript type
		Watermark description
092		Sections of pieces or Ms contents
102	X	Text incipits
112	X	Music incipits
122	X	Solo voices, SATB
124	X	Other solo voices
132 134	X X	Choir voices, SATB
142	X	Additional choir voices
152	x	Solo instruments
154	x	String instruments (vl 1, 2, vla, vlc, cb) Woodwinds (ob, fl, cl, fag)
156	x	Brasses (cor, trp/clno, trb)
158	x	Additional instruments
162	x	Bass, keyboard, and accompanying instruments
172	•	Variant composer name from source
182	x	Variant title
192	X	Original genre names
194	X	Standardized genre codes
202	X	Character names, dramatic roles
212	X	Provenance, personal names
214	X	Provenance, corporate names
216	X	Manuscript atelier
218	X	Place of origin, place names
222		Internal cross-references, As collections
232		Former call number
242		Date references
252		References to other RISM series
262		Other information from the source
272		Information from secondary sources
282	X	RISM country siglum
284	X	RISM library siglum
292		Call number
302	X	Composer cross-references
312	X	Other names cited in the source

ies on a level unattainable hitherto.

The first trials of this program have had intriguing results. Approximately 2,000 bibliographic records representing Czechoslovak manuscripts were compared among themselves. Surprisingly, about ten percent of the music incipits in the sample found "matches," of three distinct kinds: (1) Identical music incipits from manuscripts of different provenance and with attributions to the same composer--a result that can lead to a more precise identification of works and a more complete view of their bibliographic history. (2) Identical music incipits from manuscripts in which the identity of the composer in one or more of the sources was questionable, again yielding a significant improvement in the bibliographic control of manuscript sources in general. (3) Identical music incipits, but in sources where attributions are in conflict. In such cases, conflicts can only be resolved through further musicological and bibliographic investigation.

It is clear from the trial, then, that the database will, indeed, play a major role in identifying the composers of works transmitted without attributions. It also indicates, however, that the problem of conflicting attributions might be more common than previously assumed, and that borrowing of material among composers was perhaps more widespread than research has indicated to date. In other words, the program should be able to solve certain problems of attribution, but it also raises specifically musical questions which must be addressed through further research.

Direct access to the Series A/II database is currently possible only at the Central Editorial Office. The office, which recently relocated from Kassel to Frankfurt, welcomes visitors and accepts inquiries from the international musical community. Inquiries should be sent to:

Internationales Quellenlexikon der Musik (RISM) Zentralredaktion an der Stadt und Universitätsbibliothek Sophienstrasse 26 D-6000 Frankfurt am Main 90 Federal Republic of Germany Telephone: (49) (069) 70 62 31

Long-term planning calls for a gradual but steady broadening of access to the data-base. While significant technical questions remain to be resolved, the Central Editorial Office has long had the goal of providing direct access to RISM Series A/II data via networked bibliographic systems. In the interim, a provisional means of access to a selected subset of information in the database is provided by the RISM Series A/II microfiche, produced by RISM and distributed internationally by the Bärenreiter Verlag. This computer-output microfiche includes the following data elements: composer name and life dates (002, 004), uniform title, instrumentation, thematic catalogue references, opus number, key/mode (012, 014, 022, 024, 026), location (282, 284), call number (292), and RISM record key (000). It offers, then, a basic means of locating sources, as well as for requesting further information from the database. A sample page from the microfiche is reproduced as Example 2.

Example 2. RISM Series A/II Microfiche Database Index: Enlarged Section.

Cherubini, Luigi			
Deux journées ou le porteur d'eau, Le Selections D-ddr Bds Slg.Spiker 100,1	s. 0021715	Litanies. V (4), orch, org. — F CS Pnm XXXVIII B 40 Lodoiska	0019131
4 Duetti. V (2), pf CS BER HU 509	0019134	CH Bu kr I hoch a No.35 (Ms.547)	0006390
Ecce panis angelorum, S, orch. — B' CS ND III/64-200	0019123	Lodoiska D-ddr WRdn Op.73,SM 103	0021708
Eliza D-ddr LEm PM 4704	0021700	Lodoiska. Arr. winds H KE 2056	0001553
Evviva Bacco. V (X), pf A RB R 65,66,67	0033444	Lodoiska, Arr. winds I BGc E.2.19	0047128
Faniska D-ddr Dl. Mus. 4011 F 32	0021701	Lodoiska, Excerpts, V (2), strings, wind H Bb 1221	ds 0030148
Faniska H Bb 1235	0030147	Lodoiska, Excerpts, orch. — D CH W Dep.MK 747 (Ms.7764)	0014971
Faniska S St. No signature indicated	0000052	Lodoiska, Excerpts T, orch. — E ^b D-ddr WRdn Op.73 hoch 3	0021712
Faniska, Excerpts, S, orch. — F D-ddr RUh, RH-C 25	0021703	Lodoiska, Excerpts, T, orch. — E ^o D-ddr WRdn, Op.73 hoch 1	0021714
Faniska, Excerpts, V (3), orch. — A D-ddr ZI Sig.Exner	0021702	Lodoiska, Excerpts, V (2), choir, orch. D-ddr WRdn Op.73 hoch 2	- C 0021713
Faniska, Excerpts, V (5), orch. — C D-ddr ZI Sig.Exner	0021704	Lodoiska. Excerpts. orch CS CH S-40-73-1298	0019117
Faniska, Excerpts, orch. — F CH W. Dep.MK 463 (Ms.7693)	0014974	Lodoiska, Excerpts, Arr. fl, strings D-ddr ZI, Sig, Exner	0021710
Faniska, Selections, Arr. fl (2) D-brd BFb C-he 82	0002989	Lodoiska, Excerpts, Arr. pf 4hands. — D-ddr HAu 12 C 57	D 0021711
Graduals, T, orch. — B° CS POa DU 229	0019119	Lodoiska, Excerpts, Arr. winds D-ddr ZI, SIg.Exner	0021709
Hôtellerie portugaise, L' D-ddr Bds Slg.Spiker 99	0021705	Lodoiska, Selections, Arr. ff (2) D-brd BFb, C-he 82	0002988
Hotellerie portugaise, L'. Excerpts. ord CH W. Dep.MK 462 (Ms.7692)	0014972	Masses, V (3), orch. – A D-ddr DI Mus. 4011 D 7	0021687
Hôtellerie portugaise, L'. Excerpts. V (î — Eº B. 4da 7t. Cla Fuana		Masses, V (3), orch. — A D-ddr DI Mus. 4011 D 7a	0021688
D-ddr ZI Sig.Exner Ifigenia in Aulide. Excerpts. V (3), orch.		Masses. V (3), orch, org. — F CS ND I/119	0019127
D-brd BFb: C-he 60 figenia in Aulide. Excerpts. V (3), orch.		Masses. V (4), choir, orch. — d CS ND 1/120	0019128
D-ddr Bds Slg.Spiker 101 ste dies. V (2), orch B ^b	0021707	Médée, Excerpts, orch. – f CH W Dep.MK 461 (Ms.7691)	0014975
BGc 305.20 Lauda anima mea. S, orch. — E ^c CS ND III/65-201	0047124	Médée. Excerpts. orch. — f S St. No signature indicated	0000054
Lauda Sion. V (2), orch. — B ^b D-ddr ZI Slg.Exner	0021691	Mille volte mio tesoro. V (2), orch. — A D-brd BFb C-he 65	0002983
Laudate dominum. S, choir, orch	0029623	Miserere. V (6), org. — c I Fa 247-2429	0046237
Laudate dominum, S, choir, orch. — C CS Pnm XXXVIII A 365	0019129	Nel lasciarti idolo amato. S, orch. — A D-brd BFb. C-he 75	0002987
Litanies. V (4), orch, org. — c CS Pnm XXXVIII B 39	0019130	Non mi negate, V (X), pf. — B ^c A RB R 65,66,67	0033444
Litanies. V (4), orch, org. — A CS Pnm XXXVIII B 42	0019133	O deus ego amo te. A, strings. — E ^c CS ND III/66-202	0019125
.itanies. V (4), orch, org. — E ^c CS Pnm XXXVIII B 41	0019132	O salutaris hostia. V (2), orch. — E ^t I Rrostirolla MS MUS 562	0046708

Diverse possibilities exist for the production of other types of formatted output from the database. The indexing of the database and its searching and sorting possibilities enable the compilation of specialized bibliographies, e.g., catalogues of works by names (composers, librettists, etc.), genre, or location. A concrete example of the latter type has, in fact, already been prepared and published in printed form: the catalogue of the Benedictine Abbey at Ottobeuren, West Germany, compiled by Gertraut Haberkamp. A sample page from the catalogue is provided as Example 3. Examples 4 and 5 select a single entry from this page--Honorat Reich's Mass in C--and show, respectively, illustrations of the original document and the bibliographic data in RISM standard format.

Technical Description

Computing hardware employed at the Central Editorial Office is manufactured by Computer-Technik Müller (CTM) and consists of a CTM 9000 computer accessing two CTM magnetic disk drives (one @ 80 megabytes, one @ 96 megabytes), CTM magnetic tape drives, four terminals, and high-speed printers; a Tandon Plus microcomputer has also been installed for use in maintaining RISM authority records and in terminal-emulation mode with the CTM minicomputer. Further use is made of IBM mainframe computing equipment (IBM 4381-M02) at the Gesellschaft für Information und Dokumentation at Frankfurt/Main; this equipment is used for preparation of computer-output microfiche and the preparation of catalogues in conjunction with a Siemens/Hell Digiset 40T20 photo-typesetter capable of printing music in conventional staff notation.

Software has been developed for CTM machinery by programming consultant Volker Kube in the CTM MASS 70 (macro assembler) programming language; mainframe operations employ the IBM STAIRS data-retrieval system in conjunction with custom software written in PL1.

Excursus: Processing of Music Incipits

With respect to software, the treatment of musical data demands particular attention. Each bibliographic record includes one or more music incipits--a melodic excerpt from the beginning of the musical work of sufficient length to be of value in identifying

Die Musikhandschriften der Benediktiner-Abtei Ottobeuren: Thematischer Katalog, Kataloge Bayerischer Musiksammlungen, 12 (München: G. Henle, 1986).

Example 3. Sample page from Die Musikhandschriften der Benediktiner-Abtei Ottobeuren, ed. Gertraut Haberkamp (Munich: G. Henle, 1986; used by permission).

0810

0811

[Pruneder, Franz]

VSol 1111, orch 11001, keyb; org Ge: Missa Schreibervermerk am Ende einiger Stimmen: descripsit F. Augustin Bayrhamer Prof. Ottob. D-brd. OB. MO 298 - RISM: 0050774

Double; 5. Gigue Elusdem; 6. Allemanda; 7. Elusdem Authoris / Le Double; 8. Corrente / Eiusdem - Siehe H. Tilsen, Eine Musik-Handschrift des Benediktiner-Klosters Ottobeuren aus dem Jahre 1695, Dissertation, München 1925 coll: 0051157 D-brd. OB. MO 1037 - RISM: 0051163

[Pruneder, Franz] 1692-1764

Masses. V (4), strings, org. - D Without title

Ms. 1750c 8 parts: 4, 5, 5, 5; 4, 4, 5, 5f - S, A, T, B; vl 1, 2, org (2x) 29,5 x 22 cm

1.1: T. Allegro



VSol 1111 orch 11000 keyb: org D-brd. OB. MO 996 - RISM: 0050775

Ramer

8 Dances. org. - A; A; a; a; a; a; a; a [Nr. 1:] Gigue Di Sign. / Ramer Ms. 1695. Reich, H[onorat] 1 part: p91-94 — org

33 x 21,5 cm. wm: OB 55 2 gigues, 1 dance without designation, 1 sarabande, 2 doubles, 1 allemande and 1 courente

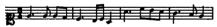
1.1: org. Gigue



2.1: ora.



3.1: org. Sarabanda

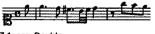


4.1: org. Double



5.1: org. Gigue





7.1: org. Double



8.1: org. Corrente



keyb: org

Ge: Gigue; Sarabanda; Double; Allemanda; Corrente Nur ein Stück (Nr. 2) ohne Überschrift, die übrigen mit Kopftitel versehen: 1. Gigue Di Sign. / Ramer; 3. Sarabanda Eiusdem; 4. Le

Reich, Honorat 1677-1750

0812

Masses. V (8), orch, org. - C

MISSA / IUBILAEI SACERDOTIS / à 20. Voc. / Ad Solennes Secundas Primitias / GORDIANI / Rev:mi / Ampl:ml S. R. J. Praelati. / ac Domini Lib: & Imp: Moñrii Ottob: / Abbatis Vig:mi Sacerdotis Jubilael Vener:mi / Domini, Patris gratios:mi Observandiss.mi / Composita, ac demissis:me / oblata / å P. Honorato Reich eiusdem / Moñrij Professo & c. / 1710 / 1. Jan:

De: Scherrich, Gordian

Au. 1709. Reich, Honorat 22 parts: 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 3, 3; 1, 1, 1, 1, 1, 1; 1f — \$1, 2, A, 1, 2, T, 1, 2, B, 1, 2; vI, 1, 2, vIa, t-vIa, b-vIa, org (2x); Conci-cino 1, 2, ad lib: cino 1, 2, tr 1, 2; timp 39 x 25 cm. wm: OB 7

1.1: S. Allegro



VSol 2222, orch 11300, orch 060, orch; timp, keyb; org

Datierungen am Ende einiger Stimmen: 1709 30 1obr, 31 1obris D-brd. OB. MO 41 - RISM: 0050778

[Reich, Honorat] 1677-1750

0813

Pieces, sacred. V (X), bc

BASSUS / CHORALIS / Vocibus Psallentium / In Templo Ottoburano / ACCOMMODATUS / ANNO MDCCI.

?Au?. 1701. ?Reich, Honorat? score: 83p 29,5 x 20 cm. wm: OB 1b

VSol 000X. bass: bc

Prov: Jordan, P. Ambrosius; Ottobeuren, Chor - olim: Ott.K.3 Besitzvermerk: Dono dedit monasterio Ottoburano P. Ambrosius Jordan O. S. B. et Beneficiatus Mindelheimi. 1858.- Das Manuskript enthält Messen, Hymnen usw. in Choralnotation mit bc

D-brd. OB. MO 41a - RISM: 0051187

Reich, Honorat 1677-1750

0814

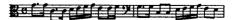
Vesperae. Excerpts. V (4), orch, org. - C

Domine Dixit / & / Magnificat / A / 4 voc: 2 Violinis, 2 Violis / 2 Clar: Ex C. Tymp: con org: et Violone / Authore / P. R. P. Honorato Reich

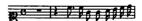
Ms. 1736

17 parts: 1, 1, 1, 1; 1, 1, 1, 1; 1, 1, 1, 1, 1; 1, 1; 1f - Conc: S, A, T, B; Rip: S, A, T, B; vi 1, 2, via, t-via, vine, org; clno 1, 2; timp 35 x 21 cm. wm: OB 1

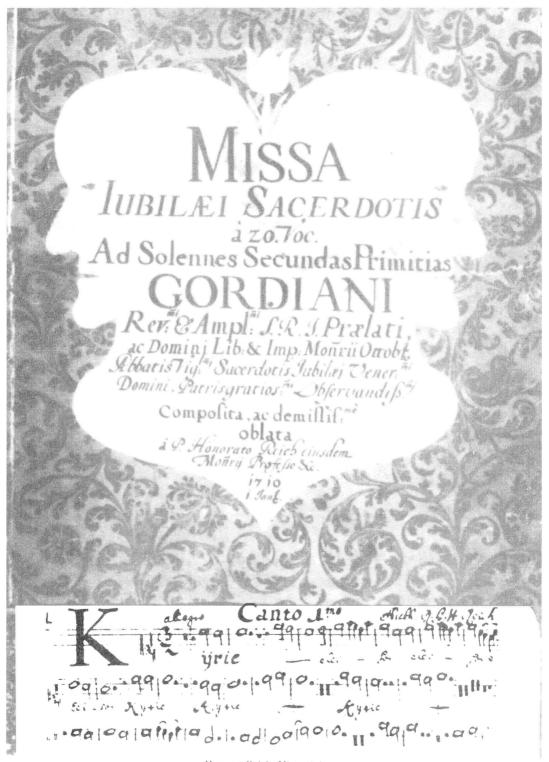
Domine ad adiuvandum (1.2); Dixit dominus (2.2); Magnificat (3.2)



1.2: S.



Example 4. Honorat Reich: Mass in C Major Cover and p. 1 from D-brd:OB, Ms. MO 41.



Example 5. Honorat Reich: Mass in C Major Bibliographic Record in RISM Standard Format

Category	Data
000	0050778
002	Reich, Honorat
004	1677-1750
012	Masses
014	V (8), orch, org
026	c
032	MISSA / IUBILAEI SACERDOTIS / à 20. Voc. / Ad Solennes Secundas Primitias / GORDIANI / Rev:mi / Ampl:mi S. R. J. Praelati / ac Domini Lib: & Imp: Moñrii Ottob: / Abbatis Vig:mi Sacerdotis Jubilaei Vener:mi / Domini, Patris gratios:mi Observandiss.mi / Composita, ac demissis:me / oblata / â P. Honorato Reich eiusdem / Moñrij Professo & c. / 1710 / 1. Jan:
048	Scherrich, Gordian
052	Au
054	1709
056	Reich, Honorat
062	*22 parts: 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 3, 3; 1, 1, 1, 1, 1, 1; 1f
072	S 1, 2, A 1, 2, T 1, 2, B 1, 2; vl 1, 2, vla, t-vla, b-vla, org (2x); Conc: clno 1, 2, ad lib: clno 1, 2, tr 1, 2; timp
082	39 x 25 cm. wm: OB 7
112	→1.1: S. Allegro%C-1@3/2 9 = 2/2-''C'B/''1C2-/=/2-''ED/1C
122	VSoI 2222
152	orch: 11300
156	orch: 060
158	orch: timp
162	keyb: org
192	Missa
194	ms
262	Datierungen am Ende einiger Stimmen: 1709 30 10br, 31 10bris.
282	D-brd
284	OB
292	MO 41

the work. At the early stages of project planning, a decision was made to adopt the "Plaine and Easie Code" developed by Barry S. Brook and Murray Gould. The code's major advantages are its simplicity and its use of conventional text-characters: it is therefore easily learned and interpreted, and can be used in building a tree-structred data-set according to conventional principles of database indexing. Searching the database by specifically musical criteria is therefore not problematic. The code, however, does not possess two qualities desirable in a system of encoding music electronically: a syntax that allows melodies to be sorted readily by melodic or rhythmic criteria and the ability to drive a type-setting or graphics output device. The reason for this is that the code is context-sensitive: symbols used to encode pitch register and rhythm remain in effect for all subsequent pitches until a change of octave register of rhythmic value occurs.

In order to acquire qualities that enable effective sorting or printing in staff notation, this context-sensitivity must be removed. This is accomplished at the RISM Central Editorial Office by the processing of music incipits in the Plaine and Easie Code into another coded value--a "Meta-Code"--using algorithms developed by Norbert Böker-Heil. This computer-generated code permits the sorting of incipits and successfully drives the Siemens/Hell type-setter used by RISM for the production of printed catalogues. Examples 6-9 offer four examples, illustrating music incipits in the Plaine and Easie Code, in the Meta-Code, and in staff notation (type-set from the Meta-Code).

See Barry Brook and Murray Gould, "Notating Music with Ordinary Typewriter Characters (A Plaine and Easie Code System for Musicke)", Fontes artis musicae, XI (1964), 142-55, and "The Simplified Plaine and Easie Code System for Notating Music: A Proposal for International Adoption," Fontes artis musicae, XII (1965), 156-60. The version of the code currently used by RISM incorporates numerous modifications, the majority of which are described by Norbert Böker-Heil, "Erläterungen zur Codierung der Musikincipits," in "Fürstlich-Hohenlohe-Langenburg'sche Schlossbibliothek: Katalog der Musikhandschriften, Fontes artis musicae, XXV (1978), 408-11.

Example 6. G. Latilla [?]. In te spero o sposo (RISM 0050623)

a) Plaine and Easie Code

%C-1\$bB@c#'4.F8Bq''6C\BA&4A''8D/Cq'6B\BA3GF&\8.G3AB&8A

b) Meta-Code

hA1 ivG----- j044W a4TpDwL(I\$ a5UpGvL(I\$ d6UqAwL(I/ a6UpGvL=I\$ a4UpFwL(I\$ a5UqBwL(I\$ k1 a5UqAwL(I\$ d6UpGvL(I/ a6UpFwL=I\$ a7UpEwL:I\$ a7UpDwL,I\$ a5TpEwL=I\$ a7UpFwL:I\$ a7UpGvL,I\$ a5UpFwL(I\$

c) Staff notation



Example 7. W.A. Mozart. Così fan tutte: Il core vi dono (RISM 0050615)

a) Plaine and Easie Code

%F-4\$bB@3/8#'8C/C.6.3\$,BA&\$,B'C&/,8A'D6(-)D/,8G'8.C,6B/8AF

b) Meta-Code

hD4 ivG----- j035 a5UpAwL(I\$ k1 a5UpAwL(I\$ a6ToGvL=I\$ a7UoFwL,I\$ a6ToGvL=I\$ a7UpAwL,I\$ k1 a5UoFwL(I\$ a5UpBwL(I\$ b6U(I\$ \$----% a6UpBwL(I\$ k1 a5UoEwL(I\$ a5TpAwL(I\$ a6UoGvL(I\$ k1 a5UoFwL(I\$ a5UoDwL(I\$

c) Staff notation



Example 8. Sartini. Kyrie in D (RISM 0050813)

a) Plaine and Easie Code

%G-2\$xFC@c#6A/\$''8D6-'A&q8G\$G6ED&8A\$''6E'A&\$''F'A''G'A&/\$''8F6GE&

b) Meta-Code

hE2 ixDA----- j044W a6UpFwL(I\$ k1 a5UqBwL = I\$ b6U:\$ a6UpFwL,I\$ d5UpEwL(I/ a5UpEwL = I\$ a6UpCwL:I\$ a6UpBwL,I\$ a5UpFwL(I\$ a6UqCwL = I\$ a6UpFwL,I\$ a6UqDxL = I\$ a6UqEwL:I\$ a6UpFwL,I\$ k1 a5UqDxL = I\$ a6UqEwL:I\$ a6UqEwL:I\$ a6UqEwL:I\$ a6UqEwL:I\$

c) Staff notation



Example 9. A. Neckh. Stabat mater (RISM 0050718)

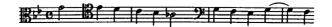
a) Plaine and Easie Code

%C-3\$bBE@c#'2G*%C-4*ED/C,B2bA*%F-4*/4GFEG+/GF

b) Meta-Code

hA3 ivGC----- j044W a3UpEwL(I\$ hA4 a4UpCvL(\$I a4UpBwL(I\$ k1 a4UpAwL(I\$ a4UoGvL(I\$ a3UoFvL(H\$ hD4 k1 a4UoEwL(I\$ a4UoEwL(I\$ a4UoEwJ(I\$ k1 a4UoEwJ(I\$ k1 a4UoEwJ(I\$ k1 a4UoEwM(I\$ a4UoDwL(I\$ a4UoEwJ(I\$ k1 a4UoEwJ(I\$ k1 a4UoEwM(I\$ a4UoDwL(I\$ a4UoEwJ(I\$ k1 a4UoEwJ(I\$ k1 a4UoEwM(I\$ a4UoDwL(I\$ a4UoEwJ(I\$ k1 a4UoEwJ(I\$ k1 a4UoEwJ(I\$ k1 a4UoEwM(I\$ a4UoDwL(I\$ a4UoEwJ(I\$ k1 a4UoEwJ(I\$ k1 a4UoEwJ(I\$ k1 a4UoEwJ(I\$ a4Uo

c) Staff notation



Research Library Information Network (RLIN)

Compiled by Kären Nagy

The Research Libraries Group (RLG) is a non-profit corporation owned and operated by member universities and research institutions. RLG operates an integrated set of cooperative library programs in collection development and management, shared resources, preservation, general bibliographic access and control, and access to and management of specific forms of research information. RLG's automated information system, RLIN (the Research Libraries Information Network), supports the consortium's activities. A nationwide (U.S.) network with some overseas users, RLIN provides services to both RLG member and non-member users, including all types of libraries and archives.

Online Bibliographic Information

The RLIN database is an online union catalogue of library materials held by the main and special libraries and archives of RLG's 88 member institutions and of more than 100 additional academic, public, corporate, and other special libraries. It includes listings for books, serials, sound recordings, musical scores, maps, visual materials, computer files, archival/manuscript materials, and "special databases". Researchers interested in Arnold Schoenberg, for example, can find cataloguing for books by and about him in several languages, journals devoted to his work, his musical scores and recordings, photographs and films connected with him, collections of his personal correspondence and papers, and even his annotated atlas of maps of Vienna.

The main database within RLIN contains nearly 30 million cataloguing records; included in that number (as of May 1988) are records for over 430,000 musical scores and over 200,000 recordings. In addition to members' cataloguing, Library of Congress music cataloguing is regularly added to RLIN. Cataloging for special scholarly efforts, such as the U.S. RISM projects (Series A/II), is being added to the database as well. A core of information in RLIN dates back to the early 1970s, but many member institutions began contributing to the database as they joined RLG in the late 1970s and early 1980s. Most libraries have therefore begun retrospective conversion projects to transfer the older information in their card catalogs into the new online environment.

Information retrieval in RLIN was designed with scholars and researchers in mind. The system's indexing features allow users to search according to these categories:

Personal names
Title words (in any order)
Conference titles
Corporate [institutional] names
Subject headings
More than 40 additional indices (e.g., music publishers' and record manufacturers' numbers)

In addition, search results can be limited by language, place and date of publication, and holding library. Boolean operators permit selective and combination searches. Word or phrase truncation permits searching with incomplete information. Subject searching by keyword means that access is provided not just through Library of Congress subject headings but through words and phrases in the titles of materials as well.

Special Databases

Several special databases offer access to scholarly information in specific subject areas within RLIN. Currently available are the On-line Avery Index to Architectural Periodicals, the Eighteenth Century Short Title Catalogue (ESTC), and SCIPIO, an art sales catalogue database. The Music Program Committee, organized by Michael Keller in 1981 and now chaired by Edwin Quist, serves as an evaluation panel and advocate for databases in music. It is currently considering several special databases within the subject area. Lynne Toribara serves as liaison between RLG and the RLIN Music Committee.

To provide illustrations for this report, the Center used the Eighteenth Century Short Title Catalogue, which contains bibliographical records for publications printed from 1701 to 1800 in Great Britain and its colonies, as well as publications in English from any other part of the world. Officially, the ESTC excludes musical scores, but we found that many were listed. Within the context of genre searches, the "song" category (s) offers access to information about printed song texts. On the following two pages we have indicated some of the available search categories, results of searches for broad categories of information, results of highly selective searches, and a few notes on how the results compared with similar searches in widely used hardcopy reference works.

Questions about the Eighteenth Century Short Title Catalogue may be directed to either of the following addresses:

ESTC Editorial Office Humanities and Social Sciences The British Library Great Russell Street London WC1B 3DG UK ESTC/NA
College of Humanities and Social Sciences
Sproul Hall
University of California
Riverside, CA 92521-0132 USA

The prospect of an RLIN special database of Beethoven bibliography is near at hand. The database would include more than 12,000 records amassed by the American Beethoven Society and currently maintained by the Ira S. Brilliant Beethoven Center in San Jose, CA.

Cooperative Projects

Several major cooperative projects are broadening the access that RLIN can provide for its users. The Linked Systems Project (LSP) presently being tested will allow RLIN direct linkage with other similar bibliographic utilities including OCLC. This project will also allow an online exchange of authority work, i.e., the researched verification of personal names and uniform titles that produces uniformity and cross-references in our library

RLIN Search Categories: Eighteenth Century Short Title Catalogue

tw	Title word
tp	Title phrase
pn	Personal name
pe	Personal name, exact form
cw	Corporate name word
ср	Corporate name phrase
gnr	Genre
ngw	General note word
ipl	Place of publication [Imprint Place]
iyr	Date of publication [Imprint Year]

Searches can be refined by the use of Boolean operators (AND, OR, NOT) and can be conducted using truncations of various kinds. Proper nouns that are not personal names may be found under several categories; users gain insights into searching strategies by using the system.

Sample Searches--General Results

1. fin cw Haymarket

51 results

Obviously an incomplete listing of activities at the Haymarket Theatre, but an interesting miscellany.

2. fin pn Jennens

49 results

Most listings are for reprints and revisions for Handel's Messiah, for which Charles Jennens was the librettist.

3. fin pn Avison

13 results

Eight of the 13 citations for Charles Avison were of period prints of his music.

4. fin cp Ancient Music

10 results

These listings included specific dates and titles of works performed before the Academy of Ancient Music. There is no entry under 'A' in The New Grove.

5. fin ngw Concert

3430 results

A rich miscellany of information principally about special occasions.

Sample Searches--Specific Results

Searches combining parameters yield very specific information. Here are some examples:

1. fin pn Jennens and iyr 1740

1 result

Jennens, Charles, 1700-1773.

Saul, an oratorio; or sacred drama. Set to music by Mr. Handel, and perform'd by the Academy of Ancient Music, on Thursday, April 24, 1740. London, printed in the year, 1740.

This performance is listed neither in the Handel work list in <u>Grove</u> nor in the more extensive list of 'remarks' in the Baselt <u>Verzeichnis</u> (HWV 53).

2. fin cp Ancient Music and iyr 1753

1 result

Esther: an oratorio, or sacred drama. Set to music by Mr. Handel. And performed by the Academy of Ancient Music, on Thursday, Feb. 22, 1753. London, printed in the year, 1753.

The libretto only, sometimes attributed to John Arbuthnot and Alexander Pope, with additions by Samuel Humphreys.

Such a performance is absent from the Grove work list and the Baselt catalogue (HWV 50a, b).

3. fin gnr s and iyr 1740: Selected items

39 results

A new song, in praise of the Greenland fishery. To the tune of Alley Croaker. London, Printed and sold in Grub-Street, 1740.

Amidst the arts which on the ice appear, To tell the wonders of this icy year, ... [London], Printed on the ice of the River Thames, February 13, 1740.

The Bishop of Hereford's entertainment by Robin Hood, and Little John, &c. in merry Barnsdale. To an excellent new tune. London, printed and sold by William Dicey and Company in Bow church-yard, and at their warehouse in Northampton, [1740?].

Fair Margaret's misfortunes: or, sweet William's frightful dreams on his wedding night. With the sudden death and burial of those noble lovers. London, Printed and sold by William and Cluer Dicey, London, 1740.

Jones, Mary, Miss, of Oxford. The lass of the hill. London, 1740.

The wanton wife of Bath. Tune of, The Flying fame, &c. Newcastle upon Tyne, 1740.

catalogues. A number of member libraries are currently using the RLG LSP link to contribute authority records online to the Library of Congress.

A major national cooperative retrospective conversion effort is currently underway for music materials. This project is of particular interest to scholars because it includes an agreement to have the resulting cataloguing appear in both RLIN and OCLC, thereby providing much broader access to unique older materials.

Non-bibliographic Research Information

In 1985, RLG initiated a program in the area of non-bibliographic research information. The Program for Research Information Management (PRIMA) fosters activities that encourage the organization and computerization of new data resources. Four pilot projects are currently in operation. One of these is a research-in-progress database undertaken in collaboration with the Modern Language Association.

Access to RLIN

Both RLIN and OCLC operate on a membership basis. Prospective non-institutional users of RLIN pay a fee of \$135 a year for membership in RLIN's subsidiary, CLASS, an annual search fee (\$175 for the first year and \$50 a year thereafter), an hourly connect time fee (\$45 an hour), an hourly Telenet network charge (\$10), and a monthly Telenet access charge (\$4). The amounts in parentheses represent recent quotations; local variations may occur and price increases are anticipated. The fee scale was designed for institutional users. When users do not have direct access to RLIN, library reference staff will usually be glad to do such searches on their behalf. Many academic libraries that are not RLG members have "search only" accounts for RLIN. Questions regarding RLG or RLIN access through CLASS may be addressed to:

The Research Libraries Group, Inc.

Jordan Quadrangle - Oak
Stanford, CA 94305-4124
(415) 328-0920

CLASS
1415 Koll Circle, Suite 101
San Jose, CA 95122-4698
(408) 289-1756

RLG is currently supporting a pilot effort, called the Research Access Project, to provide scholars with direct access to the RLIN database. Several member institutions are offering special RLIN searching accounts to individual scholars who have computers with modems in their offices or at home. For \$99 an individual can have 10 hours of connect time for searching RLIN. In some instances this cost is being absorbed by institutions for their scholars and in other instances it is being paid for by individuals. In an attempt to offer this service to a group of scholars outside the RLG membership, it has been extended to members of the American Society for Eighteenth Century Studies as well, since the special Eighteenth Century Short Title Catalogue database supports their work strongly. The success of this pilot project may encourage even broader direct access to RLIN for scholars in the future.

Online Computer Library Center (OCLC)

Compiled by David Fenske

The Online Computer Library Center (OCLC), founded in the late 1960's, is the oldest national bibliographic network in the United States. It now holds almost 18 million discrete bibliographical records. These have been contributed by 7900 libraries in the United States, Canada, the Far East, and Western Europe. New records are contributed daily to the Online Union Catalog (OLUC). While this is a database serving all academic disciplines, there are nearly 400,000 records for musical scores and nearly 600,000 for sound recordings. Roughly 500,000 books about music are integrated in the main book listing.

Searching Capabilities

OCLC data can be searched by the following elements of information:

Title (first four words)
Name/Title
Personal name
Corporate [institutional] name

In a database with 18 million records, the search result can sometimes overwhelm the system. It may be usual in such cases to further limit the search by such considerations as the following:

Type (books, maps, scores, etc.)
Form of reproduction (e.g., microfiche)
Date of publication

The system does not yet support subject searches.

Special Projects in Music

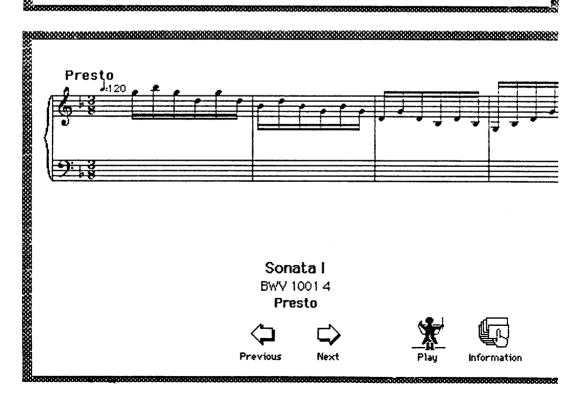
OCLC has recently demonstrated, as a sample Hypermedia project, a "see and hear" subset of bibliographical entries from the Schmieder catalogue of the works of J. S. Bach. The Hypermedia Music Reference System, designed to run on an Apple Macintosh with MIDI output, has been developed by a team consisting of Jeanette Drone, Mark Crook, Duane Rice, and Craig Henderson. It was demonstrated at the annual meeting of the Music Library Association in Minneapolis in February 1988. The music information is managed by a commercial product, Concertware+MIDI (produced by Great Wave Software). Sample screens are shown in the accompanying illustration.

Several additional "drop out" bibliography projects in music are under discussion.

OCLC Hypermedia Reference System

Sample screen displays for BWV 1001/4

Title	Sonata I			
Scoring	violine			
3WV	BWV 1001 4			
Cey	G minor			
Part	Presto			
Jniform				
	Title **Sonaten und Partiti		Conata, \$n no.	1
	Title **Sonaten und Partiti		Conata, \$n no.	1
Variant 7	Title **Sonaten und Partiti		ionata, \$n no.	1
Uniform Variant T ARN ARCN	Title **Sonaten und Partiti Titles 1447927JMD004		Sonata, \$n no.	1



Access to OCLC

OCLC access is regulated by subscription. OCLC membership, which is currently \$200 a year, is limited to libraries and academic institutions. The system can be accessed with IBM PC-type microcomputers; no special communications software is required, although OCLC markets a product called Terminal Software Version V (\$250), which is specially designed for using the system. Use charges are by the record (\$1.39 during prime time; \$1.17 at other times). Further information about OCLC may be obtained at the address below:

OCLC Online Computer Library Center, Inc. 6565 Frantz Road Dublin, OH 43017 (614) 764-2026 TWX 81-339-2026

Many educational institutions make the OCLC database available to the public through dedicated terminals in libraries. Some are making the database available through campus computing networks. At many universities, faculty members are now able to complete bibliographic searches in either of these ways and thus to capture information directly for use in word processing programs and personal databases.

Certain portions of the OCLC database are available through the commercial firm Bibliographic Retrieval Services (BRS). Material entered within the past three years, for example, is available under the title "OCLC Easi Reference". Books, scores, and recordings are incorporated in this listing, which is searchable by subject. A subset of the book database has recently been released on compact disk. Through participation in the linked systems project, OCLC and RLIN records may one day become mutually accessible.

BLAISELINE

The United Kingdom's first online database for music bibliography has recently been made available via the British Library's BLAISELINE service. The database includes more than 12,000 catalogue records for printed music published since 1981 in the U.K. and overseas. The Music Database is the online equivalent of the printed British Catalogue of Music since 1981.

Users can trace material for a specific instrument or by a particular composer and can differentiate between multiple versions of the same piece (e.g., between parts and a score). During the coming year the coverage will be extended to include unpublished music offered by publishers' hire libraries and microfilmed by the British Library.

In other developments in the United Kingdom, the possibility of closer bibliographic cooperation among the 30 member institutions of JANET (the Joint Academic Network) is being explored. A one-year study of potential bibliographical uses of the French Teletel service by British universities was initiated in March 1988.