Music: special characteristics for indexing and cataloguing

Jane A. Myers

Describes how the indexing and cataloguing of music can be affected by issues of subject access, format, genre, responsibility, language, alternate titles, excerpts, and the use of computer databases.

Music can be a challenge to librarianship, especially for indexers and cataloguers. Access is needed for composers, titles, variant titles, soloists, conductors, performing groups, form of music, nationality, or period. Subject cataloguing is difficult or impossible; form and format offer infinite variety; the language of access is inconsistent. In addition, the complexities of access and format make it difficult to search successfully for a known item without the aid of indexing and cross references.

In Indexes and indexing, Collison wrote, 'There are three types of material which last longer and keep in better condition the less they are handled: these are music, recordings and films. . . . Whereas it is quite simple to glance along a row of books and read their titles without actually touching one of them, this is an impossible method in the case of most music.'

Sheet music, instrumental parts, anthems: all are quite fragile, with no protective covers. Indexing is especially important for these kinds of items because it gives safe access to a collection by reducing the wear and tear of manual searching.

Redfern describes some types of users seeking musical materials. Scholarly users may search by composer; performers search by type of instrument or voice; teachers are interested in type of instrument and level of difficulty. Groups of performers have varying interests, depending on the size of the group. General listeners frequently search by performer, while general readers use many differing approaches. For jazz and popular music, performers and genre, followed by composer, were ranked as important access points.

Computers are helping to solve some of the difficulties inherent in this field, and will be more helpful in the future, when software is perfected to search thematic subjects as well as traditional subjects.

Special characteristics

It has been said that the medium is the message: form is inseparable from the content. This is certainly true of music. The message, or use of a musical item varies considerably: the purposes of a score, a recording, and a libretto are different but all may represent the same work.

Imaginative works are created primarily to entertain or inspire, rather than to convey information. Yet the information is still there and searchers will still want subject access. As in fiction subject headings, subject headings for these works may suggest topical themes, settings or some concept, such as patriotism or jealousy.

Printed music titles may come in varying editions, in anthologies, as sets of parts, as arrangements for various combinations of instruments and voices, as texts with no music, as music with no text, or as music with text. Recorded music has a variety of forms, including cylinders, films, disks of varying speeds and playback technologies, audio and video tapes on reels, cartridges, and cassettes. Access is necessary by all formats: the searcher has particular needs, and equipment, and the item may or may not be appropriate. Similarly, it is important to distinguish between music, and literature about music; between performance scores, methods and exercises. Non-European traditions may require new subject terms, as well.

Buth listed eleven characteristics to be considered: size, format, alphabetical arrangement by composer, medium of performance, form of composition, subject content, character content, language, geographical orientation, style, and opus or thematic numbers.

Smiraglia lists the following: discipline, topic, intellectual form, physical form, and intended audience. In the most recent Dewey revision of the music schedules seven facets were considered to be important: theory (such as psychology of music), elements (such as tonal systems), techniques, character (such as period or style), forms, executant and composer.

Music is considered to be a universal language, but its access points can only be in one language at a time. At the local level, this may not be a problem, but with the possibility of internationally shared cataloguing it becomes a major concern.
Computers have made access to materials of all kinds both easier and faster. As to the music itself, Miller and Miller believe that "of all the humanities, music lends itself most to computer applications; music is precise and based upon mathematics". However, search mechanisms must be carefully designed to avoid problems caused by the complexities of access required.

Indexing problems

Subject access

Is it possible using words to express aboutness of a work in a wordless medium? Subject indexing works best when a language is used, whether verbal, textual, or aural, and presupposes that what is depicted can be named. Music can be said to be about many things, but this is an aspect which must consider local needs. A teacher looking for examples of music describing a storm will want detailed indexing. Someone looking for a Beethoven symphony will merely want the title and composer. Of course, many works will not have a traditional subject no matter how creative the indexer.

Svenonius says that it is stretching language to say that an index of musical themes is a subject index. Classical musicians would disagree: the musical theme is referred to as a subject. According to the Harvard Dictionary of Music, a subject is "a melody which, by virtue of its characteristic design, its prominent position, or its special treatment, becomes a basic factor in the structure of the composition". Current print indexes of musical subjects leave much to be desired, but the potential for quick access by this access point should not be overlooked. Sometimes it is the only way to distinguish one work from another, when composer and title are the same.

The Library of Congress Subject Headings have been criticized by the Music Library Association Thesaurus Project Working Group for haphazard development of syntedic structure, for inconsistent subject headings, and for the inversion of some terms while using others in direct order. Designed for a card file with a minimal number of access points, headings in LCSH (Library of Congress Subject Headings) often limit effective subject retrieval online. Another weakness noted by the MLA group is its 'failure to allow for the description of works with multiple facets ... a multi-element work is treated as a multi-topic work'. Christmas music for guitar would be given the headings 'Christmas music' and 'Guitar music', but these don't bring out the exact relationship between these two facets.

Format and genre

Each format has its own problems, as well as sharing some in common with others. When working with manuscript copies, Young wrote that they were "usually made by lay clerks, existed for immediate use and, done hastily, contain every sort of error". It was possible to find the composer's name in different forms or even incorrectly attributed.

For jazz and popular music, genre terms change frequently, and are very important to users. But establishing these terms is difficult. Harry Price lists the bias of the cataloguers, an arrearage which has been growing steadily since 1980, and budgetary and staff limitations as factors responsible for a lack of attention to genres at the Library of Congress. Also, LC does not receive much popular material to catalogue, and if received, it is quite often not selected for cataloguing. Documentation on genres usually does not appear in books until after the genre is passe, and the cataloguers do not have access to popular music periodicals.

Bryant describes at least four difficulties with musical access points. They involve the title, the statement of responsibility, excerpts, and language.

Titles and excerpts

Music seldom has a title page. Titles appearing on covers, on list title pages, and on the first page of music are not always the same. Compact disks may have differing titles on the disk label and on the container. Titles also vary in different countries and editions. Some titles are really nicknames. Many titles are generic; you could have thousands of symphonies or sonatas, and hundreds by the same composer. If an item is from a longer work, such as an opera, a symphony, or an anthology, the searcher may be looking for only a portion of the work, which may have its own title. If one is looking for a particular song by a known composer, and it is part of a set, it will be very difficult to find. Searchers may not know the title of the work of which they are a part. (Anthologies share this difficulty.)

Rabson and Rabson describe some of the difficulties in building the National Tune Index, or NTI, a "comprehensive, multifaceted tool for research in eighteenth century American and British secular music", by quoting Lewis Carroll in Through the Looking Glass.

... The name of the song is called "Haddocks' Eyes".

'Oh, that's the name of the song, is it?' Alice said, trying to feel interested.

'No, you don't understand,' the Knight said, looking a little vexed. 'That's what the name is called. The name really is "The Aged Aged Man".'

'Then I ought to have said "That's what the song is called"?' Alice corrected herself.

'No, you oughtn't: that's another thing. The song is called "Ways and Means": but that's only what it's called, you know!'
song really is "A-sitting On A Gate": and the tune’s my own invention.’ . . .
‘But the tune isn’t his own invention,’ she said to herself: ‘it’s “I give thee all, I can no more.”’

‘With each receding decade, the documents containing popular tunes and songs become scarcer, their locations more widely scattered, and their references to previous songs, lyrics, person, events, and social customs ever more obscure.’

A particular tune can appear in many guises: as a song in a play; as a song-sheet with new verses relating to a current event; as a dance tune with an unrelated name; as the setting of an air in a ballad opera; as an instrumental piece with a name based on a line from a ballad opera air; as part of a collection of parlour songs, with verses from any of the above.

Responsibility

Responsibility can be an issue. Sometimes it is difficult to tell which of several names is the composer and which is the lyricist. There may be an arranger, as well. The performer’s name may be mentioned prominently, especially in popular music and may be responsible for some aspects of the musical content. Operas are based on librettos, which are the words only, and are almost always written by someone other than the composer. In fact, the same libretto may have been used by several composers to write operas of identical titles.

Language

Language is a potential problem, since a title may be known in several languages, and may be best known in one that is not the original. Customary usage is erratic; we use the foreign titles of many works, but not for others. Russian titles may be transliterated, or in French or English translations. In addition, the name of the composer may have many variants. Authority work is extremely important.

Musical terminology varies enough to cause problems. According to Perry, ‘Americans follow the German nomenclature (translated), while the British use a mixture of Anglicized Latin and French.’ Thus the US has whole, half, quarter, eighth, sixteenth, thirty-second and sixty-fourth notes, while the British use semibreve, minim, crotchet, quaver, semiquaver, demisemiquaver, and hemidemisemiquaver. An interesting example of migrating language occurs between the British and the French. The former call a conductor’s stick a baton, the latter, a baguette. But in France, a baton is a loaf of bread, while a baguette is a conductor’s stick. Names of instruments can be confusing, as well. In Italian, a tromba is a trumpet, not a trombone. Even numbers can cause confusion, since there are occasionally alternative numberings of pieces, as when earlier works are discovered and inserted into an already established numbering scheme.

Computer difficulties

In electronic searches where the result is a list of titles and composers, the problem of generic titles is magnified. As Miller and Miller tell us, ‘Composers are more prolific than authors, and searching by composer name sends the user thumbing through many entries . . . with the form of compositions and key being the only distinguishing feature.’

Library of Congress card numbers are not listed on musical works, and OCLC (Online Computer Library Center) numbers are not usually available. None of the usual search methods on OCLC, such as author, title, author/title are much help. Publishers’ label numbers, when available, work well.

When attempting to retrieve elements of a musical score, the speed and accuracy of the computer make it easy to retrieve some aspects, such as pitches, dynamic and other markings, singly or in groups. But other aspects require very precise definitions. To define and search for all tonic chords would be difficult since the definition of ‘tonic’ might be different in various contexts. Finding all instances of a particular bit of melody must be carefully defined if the searcher also wants slight variants as well.

Of course, when dealing with electronic versions of the actual music, whether recorded or otherwise encoded, there is an additional problem in that the music is copyrighted material. This is a problem that must be dealt with in all kinds of ‘full-text’ electronic access, and is not in any way unique to musical access.

Possible solutions or approaches

In discussing subject analysis for pictures, Shatford cites Erwin Panofsky’s three levels of meaning. These are the pre-iconographic, iconographic, and iconologic levels, ranging from generic description of objects or actions to interpretation of intrinsic meaning, which may well vary from person to person and cannot be indexed with any degree of accuracy. She also discusses the difference between of and about. Her theories can be applied to music as well. A work can describe a particular place or thing, but also be interpreted in other ways. In situations where in-depth indexing is needed to get full benefit from a collection, this kind of approach can be helpful.

For jazz and popular music, Price stresses the need to break up overly inclusive headings, to add period subdivisions, to place less emphasis on the number of performers, and to reconsider some geographical subdivisions. He cites the example of rock music, stating that there is enough mingling between the British and the Americans, especially, that adding a geographic subdivision seems odd. For jazz, he felt that the geographic information was more useful.

The Music Thesaurus Project Working Group stresses the need for a standardized vocabulary of music and music literature terms. They suggest that it
be constructed according to accepted standards; it should be capable of accommodating different indexing grammars... it should support both pre- and post-coordinate use; and it should be compatible with LCSH. Beversdorf Gabbard feels that PRECIS (Preserved Context Indexing System) has 'potentials for online catalogue use that LSCH could never hope to have in its present state.' Its language is current, and when online it will be easy to keep current, and also lends itself well to interdisciplinary searches.

For composers' names, a standard encyclopedia of music, such as Grove's *Dictionary of music and musicians,* or Thompson's *International cyclopaedia of music and musicians,* can be a guide to forms of names, in lieu of access to OCLC's authority files. A good understanding of the construction of uniform titles will improve collocation of titles.

**Special codes for music**

According to Brook and Gould in *Notating music with ordinary typewriter characters: a plaine and easie code system for musicke,* the ideal code should be:

1. speedy, simple, accurate in representation of pitch and rhythm,
2. mnemonic to music notation with no arbitrarily assigned symbols,
3. usable by non-musicians with minimal instruction,
4. easily recognizable and translatable, and
5. applicable to all music from Gregorian to modern.

Some codes already in existence are: Intermediate Music Language (IML), Plaine and Easie Code, Alphanumeric Language for Music Analysis (ALMA), Musical Information Retrieval (MIR), and Digital Alternate Representation of Musical Scores (DARMS).

Page describes the ideal solution to the encoding of music for computer databases as a 'data structure that can store a representation of the score in a form which allows diverse computer processes to operate on the data efficiently, yet which can be constructed from an encoded representation of a score.' He describes the DARMS* project of Bruce McLean, and variations by Alexander Brinkman. A disadvantage of these program-based approaches is that 'programming is a skilled technical task that most music researchers would be unable to undertake efficiently without special training.'

Miller and Miller suggest a thematic search key, that could "name that tune" and retrieve citations to a musical work. They favour a modified version of the Plaine and Easie Code. Notes are shown by letters of the alphabet; digits preceding the notes show

---

* DARMS is the Digital Alternate Representation of Musical Scores. Originally referred to as the 'Ford-Columbia Input Language', it may have been changed to DARMS in honour of a project benefactor.

---

272 The Indexer Vol. 19 No. 4 October 1995
that can be searched by composer, title, or first line. The selected piece can be played, and if desired, it can be printed out on the spot, in any key, and sometimes in a choice of arrangements. (It can also be transferred to a disk which can be played by another system.)

Carter describes a project at the University of Colorado where vocal sheet music donated to the library was finally made accessible to the public through the use of a computer database. Once decisions were made as to what should be included, arrangement on the shelf, and some tricky choices as to titles and responsibility, they put the database in multiple disks, one for each decade.  

Five years later they had progressed to the point that it was part of their online catalogue, using ‘mock MARC’ format. Now they can do keyword searches, composers who are not in the regular catalogue appear in searches in connection with the sheet music, maintenance is easier and faster, and the music is being used.

More databases are needed like the National Tune Index, which makes it easier to trace the history of popular tunes and words. It includes ‘song titles as well as tune names, first lines of text, characteristic refrain text, tune incipits in the NTI music code . . . associated composers, authors, performers, and publishers; and bibliographic information about each source, including the location of the copy used for the NTI’.  

It has made it possible to locate music mentioned in librettos, scripts, or playbills that had been thought to be lost.

Conclusion

Electronic access will make searching easier, but the MLA’s Music Thesaurus Project Working Group concludes, ‘. . . it has also necessitated greater and more efficient bibliographic control. . . . The tremendous increase in the production of books and articles during the past twenty years has created a concomitant need for improved, more thorough indexing, which in turn calls for a controlled vocabulary that is more logically structured and more easily manipulated’.  

With a good, flexible music thesaurus, a healthy set of reference books, an understanding of uniform titles, a computer to allow all needed access points to be used and searched, access to music material can only get better.

When arranging access to music, it is important to keep in mind the intended users, and to make use of those access points appropriate to their purposes. It must be done by someone familiar with the subject, and also with the intended searchers. The access points appropriate and useful for a public or an academic library would differ from those useful for a performing ensemble’s collection. Some subjects can be indexed successfully by indexers not trained in the subject. This is not one of them.

References


12. Ibid. 605.
13. Ibid. 604.

17. Price. 47.
23. Miller and Miller. 270-1.
27. MLA Music Thesaurus Project Working Group. 719.
32. Page. 359.
33. Miller and Miller. 271.
34. Miller and Miller. 273.
40. MLA Music Thesaurus Project Working Group. 714.

Jane Myers is Director of the Library at Southern Ohio College, Akron, Ohio.

**Fishing for information**

A friend has sent me a singular document. It is a photocopy of page 255 of the fourth edition of Walton’s *Compleat angler*. The lower half of the page, left blank by the printer, bears a manuscript note concerning a fish not mentioned in the text, in a late seventeenth-century hand, but whether in the hand of the master himself I cannot tell. For my present purpose I may quote him and say ‘I might prove it, but I think it is needless’. No use is made of the note in the subsequent edition, but since it may be of interest to present-day readers, I reproduce it here.

Your Information is said to take many forms, like Proteus who wrestled with Menelaus, and be hard to catch. Yet, like the eel, he may be taken in any season, if he can but be lured from the bank in which, being of timid disposition, he makes his habitation. He is reported to live in rivers and has been sought diligently in the Weaver and the Shannon. If you have a byte, and succeed in landing your Information on line or through use of the net, it may be cooked in diverse ways.

Unfortunately no more specific instructions are given. As chance would have it, I had already been reminded of Walton’s text by certain parallels I had noted in the report of an experiment to discover how readers used indexes and what factors impeded success in using the index to find information in a book. First among ‘incorrect assumptions’ said by the authors to be held by indexers is: ‘A typical back-of-the-book index is an intuitive structure which most people readily grasp’. It is also erroneously assumed, the authors go on to say, that the user frames his search for information in the index in the same way as the indexer organizes his idea of the information in the book, and that ‘syndetic and classificatory structures are the most important means for indicating relationships among concepts in an index; format is secondary. ... Users do not seem to read introductions to indexes’.

I doubt whether serious indexers do assess indexing as Venator assessed angling ‘which [the fisherman] calls an art, but doubtless it is an easy one’. Nor do I see how relationships among concepts can be shown in an index otherwise than by ‘syndetic and classificatory structures’. If a text is full of substance and complex, however clearly the index is set out, however consistent the division of topics and the use of terminology, with whatever foresight alternative approaches and directives to the user are provided, if the user does not read the introduction to the index, or does not even know the alphabet, or, as Liddy and Jorgensen report of one student taking part in their experiment, has ‘no