Faceted music: towards a model of music classification

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Abstract

The organization of music is a subject that has fascinated classification researchers and librarians alike for over a hundred years. This paper identifies five key methodological approaches undertaken by commentators on music knowledge organization, which demonstrate different interdependent relationships between musicology and classification.

Five significant themes form the main body of this paper, and these themes underpin the corpus of music classification literature. The first theme concerns the question of whether classification should divide music materials into their constituent formats. This division sets conceptual against practical. The second theme looks at facets in music classification. ‘Medium’ and ‘form’ are considered to be the most important facets for music scores; ‘composers’ are an important facet for music literature. The third theme considers the poor treatment of ‘other’ musics in knowledge organization, and notes some possible explanations. The fourth theme investigates the relationship between the classification and retrieval of music materials. This section highlights the differing needs of users and suggests how the classification of music materials is adapted accordingly. The fifth theme discusses pre-existing music classification schemes, with the large number of home-grown and special schemes highlighted.

The paper concludes that the five identified themes point towards a model of music classification. However, the model is not just concerned with facets, musics and formats; it is also based upon the relationships between various sets of protagonists, such as the librarian and the musicologist, the musicologist and the performer. Through studying these protagonists, the traditional boundaries of musicology, music librarianship and knowledge organization will be crossed.

Introduction

The classification of music has a long history of fascinating those interested in practical and theoretical aspects of classification.¹ With a diversity of topics such as faceted classification and format versus contents, it is unsurprising that knowledge organization literature devoted to the arrangement of music materials is voluminous. However, the more music classification is examined, the more questions are raised. For instance, what drove music librarians to seek a unified classification scheme for music? Why was music, in particular scores and sheet music, so ripe for faceted treatment? This paper uses highlights from a literature review of music classification to identify main trends and topics within music classification – music classification ‘themes’.² The ensuing discussion will not attempt to necessarily answer these or other questions, but will instead shine a light upon particular areas of music classification literature that form the thematic base of a classification model.

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1 This paper focuses specifically on classification, rather than general subject access. However, the topic of the paper is not limited to classification in the physical world; the findings are equally relevant to online classification, for instance browsing classmarks or shelf-listings.

2 The discussion is primarily concerned with printed items such as scores, sheet music and books. Though the arrangement of sound recordings is a matter discussed frequently in classification literature, as the quantity of literature on arranging sound recordings is large and frequently distinctive from the literature on the arrangement of other types of music materials, it is not the focus of this paper.
The paper begins with an outline of five different types of methodology evident in music classification literature. Each methodology demonstrates a different relationship between classification and musicology, becoming ever more symbiotic as the sequence progresses. Next, five of the main themes in music classification literature will be discussed: the score/literature divide, facets of music classification, treatment of ‘other’ musics, music classification and retrieval, and finally, music classification codified by classification schemes. Through these methodologies and themes, a plan for a music classification model will emerge.

Methodologies

Analysis of music classification literature demonstrates that five main methodological approaches are used by authors. A typical ‘classification scheme as textual study’ will be in tripartite form: highlights of the history of the scheme, description of the scheme, then a discussion about issues with the scheme which may be accompanied by suggested improvements. In this methodology, classification is discussed through the prism of an exemplified scheme. The ‘project approach’ focuses on classification practices in a specific library and frequently takes a narrative approach: examination of the problem, discussion about why existing schemes/practices are not suitable, description of the process of finding a solution, implementation and then a reflective evaluation. Again, the issue of classification is discussed through the lens of a practical problem, which involves the arrangement of real-life items. These two methodologies are by far the most frequently used, and both involve real-life schemes and/or real-life libraries.

The other three methodologies are conceptual and used less frequently. A number of authors use a ‘classification from a discipline source’ methodology. This method uses the structure of musicology as encoded in a particular music literature source or type of source as the basis of the music classification discussion. Sources used by authors include bibliographies (see for example Goldthwaite, 1948), textbooks (see for example Abrahamsen, 2003) and diagrams within textbooks (see for example Line, 1962). This methodology is closely related to the ‘domain analysis methodology, which considers classification within the context of the discipline. For the knowledge organization of music, the ‘domain analysis’ methodology places the organization of music within the discipline of musicology and allied subjects (Abrahamsen’s paper, 2003, is the major example). The final methodology, ‘technique from discipline to analyse classification’, uses methods from the domain of musicology to analyse music classification. Elliker’s (1994) use of Schenkarian analysis to interrogate a significant number of music classification schemes demonstrates an interesting relationship between classification and musicology. In previous methodologies the structure of musicology is used to investigate and/or create classification; however, Elliker (1994) uses a musicological method to analyse the classification. It is truly a dyadic approach.

This paper only deals with five specific themes: many more ideas were encountered in the literature which there is not space to cover in this paper. Only literature on the principles of music classification and secondary literature on specific classification schemes – such as descriptions and analyses of schemes, or classification scheme prefaces which include theoretical discussion – are considered. The primary sources, i.e. the classification schemes themselves, have not been systematically analysed at this stage in the project. Classification inherent within musicology, such as organological classification or periodic classification are also not covered, as these will form a future independent section of the overall research project.

Sometimes the tripartite approach is taken repeatedly: a chapter or article contains a succession of sections, where each section discusses a different classification scheme and is in tripartite form.

‘Musicology’ is used here in the broadest sense of the word, encompassing historical musicology, music theory/analysis, ethnomusicology and all related subjects.

Schenkarian analysis – a ubiquitous twentieth-century music analysis method of great significance – separates musical works into foreground, middle ground and background, demonstrating the overall structure of a work across a sea of notes.
Theme 1: scores and literature

The potential division of music library materials into literature and scores is fundamental to music classification discourse. For instance, Jones (1979) describes separating literature and scores as a ‘basic distinction’. Benton (1976) describes literature and scores as ‘principal categories’. The lack of division between literature and scores in older versions of Dewey Decimal Classification (DDC) is cited by commentators as one of its fundamental flaws (see for example Wursten, 1990). Furthermore, as well as being highly significant, any separation between literature and scores must also be the first division applied (Nettl, 1960).

The literature/scores debate introduces a number of important ideas about music classification. For instance, dividing literature and scores can place practical considerations in direct opposition to conceptual ones. Redfern (1978) argues that literature should be shelved alongside scores; however, for practical purposes, separating literature and scores by format is preferable. The literature/scores debate also highlights the separation of format from contents. Pethes (1967) provides a particularly illuminating visual representation of this concept, suggesting that ‘outward appearance’ adds a third dimension to the two-dimensional instrumentation/form representation of music classification.

Once the decision has been made to separate literature and scores, there are two different ways to enact the division. In the first method, literature and scores share the same set of notations; however, a symbol preceding the notation – or similar device – is used to differentiate the literature and the scores. For example, this type of division is used in later editions of DDC. On a conceptual basis, this method treats the organization of knowledge within the literature and scores as identical; the addition of a symbol separates the items physically on the shelves. The other method involves two completely different sets of notations for literature and scores. These sets of notations will often be successive – for instance, the McColvin scheme (McColvin & Dove, 1965) – whereby there is one sequence of notations for scores directly followed by a set of notations for literature, or vice versa. Conceptually, this method suggests that the classification of literature and scores are two separate parts of one whole, and it certainly allows for more radical differences in the intellectual organization of the two types of materials.

Commentators highlight various advantages and disadvantages of both systems. For example, the first method allows for a mnemonic relationship between the notations for literature and their corresponding scores (Sweeney, 1976). However, this method necessitates using the same facets for literature and scores. For instance, when conducting an initial facet analysis of music items, Redfern (1978) identifies differences between the score facets and literature facets; therefore, using the same set of notations for both sets of facets could be problematic. However, a partial solution can be found by applying different citation orders for literature and scores, and this is the solution adopted by Sweeney and Clews in the DDC phoenix schedule (Sweeney, 1976) and later 20th edition of DDC (DDC20).

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8 There are various different terms for ‘literature’ and ‘scores’. For the purposes of this work, ‘scores’ means all items which are fundamentally in musical notation; ‘literature’ is used to mean works which are primarily in written language, where the subject of the work is music.

9 The classification of music is sometimes compared to that of the other arts, especially language-literature (i.e. literature about written-language literature) and art (see for instance (Nettl, 1960) and (Mullally, 1976)).

10 ‘Instrumentation’ is equivalent to ‘medium’ – a facet that is discussed in more detail below. It is not clear whether Pethes is specifically describing the literature/scores debate or music classification more generally. Nevertheless, the principle is the same.

11 However, it is not always easy to make the distinction between literature and scores: there are certain hybrid items which could potentially live amongst both sequences. Examples include critical editions, study editions and critical series.

12 Wursten (1990) provides a useful summary of how format prefixes have been used in various editions of DDC.

The literature/scores divide is the most prolific of the format-based discussions in music classification literature; however, there are also other format-based topics, such as classifying different types of scores or issues concerning sound-recordings. Though there are multitudinous varieties of music formats to integrate into a library's organization, their placement is based around the same debates as the literature and scores divide: practical versus conceptual, content versus format.

Theme 2: facets

While many different aspects of literature and scores could be used as classification devices for arrangement, most music classification commentary focuses on a few select facets. The importance of faceted classification in the history of music classification should not be ignored: the British Catalogue of Music (BCM) classification was the first published fully faceted scheme in Great Britain (Redfern, 1978) and also formed the basis of the DDC phoenix schedule (Sweeney, 1976). Literature and scores inspire different debates within the music classification commentary: ‘medium’ and ‘form’ are the main points of interest for scores while ‘composer’ is frequently discussed in conjunction with literature.

‘Medium’ and ‘form’ are the most commonly used facets for arranging scores according to commentators. However, there is some debate over the order of these two facets. Commentators such as Line (1952) and Bryant (1985 p. 141) state that ‘medium’ is the first characteristic used in most classification schemes, with ‘form’ the second. However, Elliker's (1994) Schenkarian analysis study of a large number of different classification schemes concludes that there are two main types of organization for scores: ‘form’ then ‘medium’, or, ‘medium’ then ‘form’.

Commentators discuss various different ideas as to why ‘medium’ and ‘form’ are the most prevalent facets. Nettl (1960) suggests that ‘medium’ is the simplest facet to manage: the classifier does not need much musical expertise to decipher that the music is for one instrument or another. Line (1962) suggests that different mediums are easier to distinguish from each other than different forms. Smiraglia (2006) takes a more conceptual approach when discussing the representation of music scores in a subject catalogue: ‘form’ and ‘medium’ have to be used to arrange music as ‘form’ and ‘medium’ are music. Though discussing music in subject catalogues, Smiraglia’s argument is equally applicable to music classification.

‘Composer’ is an important facet in the classification of music literature. Commentators such as Redfern (1991) argue that the first facet for music literature should be ‘composer’; the reasons given include that a significant quantity of literature concerns composers (Clews, 1975) and the majority of enquiries are composer-based (Redfern, 1991). Certainly, ‘composer’ is an element used to judge the usefulness of a classification scheme by critics: Redfern (1991) suggests that British Catalogue of Music classification's lack of a composer facet received serious criticism.

Some commentators also discuss faceted classification ideas such as distributed relatives, order of facets and order within facets – though they rarely use faceted classification terminology for their discussions. However, space does not allow for discussions of these concepts.

‘Genre’ is another facet which is discussed by a number of music classification commentators but suffers from difficulties. What is meant by ‘genre’ is often not defined in music classification literature; its meaning and use depends on the type of music or material being discussed. In addition, popular music genres are frequently at a distance from the classification scheme authors and the ‘academy’ which informs them. It is not easy to distinguish the problems with classifying by ‘genre’ in the abstract, and those caused by the close connection of ‘genre’ to music outside of the ‘academy’.

This paper will use the term ‘characteristic’ as a loose equivalent to the technical faceted classification term ‘characteristic of division’ (also known as ‘principle of division’).

Interestingly, while agreeing that ‘composer’ should be the primary characteristic for literature – a belief backed up by the citation order chosen for the Dewey Decimal Classification (DDC) phoenix schedule – Sweeney (1976) suggests that the question is more open than the inevitable choice of ‘medium’ for scores.

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'Medium', 'form' and 'composer' are by no means the only facets or facet-related issues discussed in the literature; as well as a full spectrum of other potential music facets, authors also discuss a proposed universal system of music facets.

Theme 3: ‘other’ musics

The treatment of subjects outside the realm of Western, classical art music is an important issue to music classification authors, with the treatment of folk music, jazz and popular music cited by authors as being particularly problematic. There are a number of possible factors as to why the classification of ‘other’ musics are, and have been, so problematic.

The rapid change of musical genres within popular music and the ability of classification to keep up with these changes, is a possible explanation. Nero (2006) states that popular music genres in Trinidad and Tobago reflect the ‘dynamic cultural environment’ (p. 122) of the country, and that classification schemes need to be equally dynamic if they are to truly reflect the music they cover. In other words, traditional classification schemes cannot keep up with a music that has constantly evolving genres.

Inskip et al. (Inskip, MacFarlane, & Rafferty, 2008) deduce that issues with the classification of popular music are not just in the contents of traditional classification schemes but are also inherent within the structure; this is due to traditional classification schemes being written before popular music became embedded within musicology. Therefore, from the outset, schemes were not designed with the special requirements of popular music in mind. Langridge (1967) uses the same argument when discussing the treatment of jazz within classification schemes, using the example of performers and jazz. Western art music places a high value on the composer, and this is reflected in music classification schemes; Langridge argues that a scheme such as BCM classification fails for jazz, as it does not recognize that the jazz performer is equivalent to the Western art music composer.

Unsympathetic treatment of materials concerning non-Western art musics have consequential effects on the library, most notably on the retrieval of these items. For instance, in the case cited by Langridge (1967), the failure to recognise the importance of the performer in the arrangement of jazz materials has resulted in unwanted separations of materials which naturally belong together. Another consequence of ineffective classification for ‘other’ musics, is that frequently they are only represented by a few broad categories in classification schemes. Abrahamsen (2003) cites the Copenhagen public library as an example where the broad genre headings make retrieval of popular music difficult. Nero (2006) found that the lack of specificity in the classification of popular genres in DDC led to varied localized practice amongst Trinidad and Tobago libraries; in the absence of prescribed specific numbers for various important genres, librarians created their own. All these consequences result in poorer retrieval of ‘other’ musics materials.

Theme 4: classification and retrieval

At the heart of classification is retrieval, and music is no exception. Smiraglia (2006) describes retrieval-based classification as one of the key themes of twentieth-century literature in the bibliographic control of music. However, the relationship between classification and users is not necessarily positive: Redfern

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18 However, one generation's ‘other’ can be viewed as another generation’s mainstream. Langridge's (1967) article on the classification of jazz can be contrasted with Nero’s (2006) article written over 35 years later, which contrasts the detailed coverage of jazz in DDC with the unhelpfully scant treatment of significant new genres. It is inevitable that as yesterday’s new genre becomes part of today's mainstream, the treatment of that genre in classification schemes will improve.
(1978) suggests that far from increasing access, some schemes can make materials more difficult to find, such as the ‘obscure slots’ for jazz and popular music.

Inskip et al. (Inskip et al., 2008) suggest that different readers will have different information needs and will therefore use a collection of music materials in different ways. Commentators discuss these differences by categorizing the needs of different types of music library users. However, it can be seen that commentators don’t necessarily agree on these divisions, or the best classification for each group.

McColvin and Dove (1965) pit the ‘listener’ against the ‘user’, where a ‘user’ is defined as someone who plays an instrument or is interested in a particular type of music. The author(s) suggest that libraries should be arranged with the users in mind; listeners have alternative means of access (McColvin & Dove, 1965). This is an interesting division as it separates the readers by consumption method. However, there is a further implication to this division: the ‘serious’ musician or researcher versus the leisure-user. Authors such as Buth (1974) also imply this serious/leisure model, dividing music-library users into the ‘researcher/scholar’ (she uses these terms seemingly interchangeably) and the ‘browser’. Each has different classification needs (Buth, 1974). Interestingly, there is no consideration that a researcher could be a leisure user for some tasks and vice versa.

A number of authors comment on the differing needs of the musicologist/researcher and the performer, and Line is particularly vocal in this discussion. In his 1952 article, Line (1952) gives an even-handed account of the dichotomous retrieval needs of performers and scholars. ‘Medium’ is a particularly useful arrangement to performers, while scholars tend to find ‘form’ more useful. However, ten years later, Line (1962) argues that the arrangement of scores is better considered through the eyes of a historian rather than a performer, largely based on problems with using ‘medium’ as the most important division. For instance, the performer’s desire for arrangements of works to be filed by the medium of the arrangement means that works will be split between two different ‘mediums’; problems with ‘medium’ are compounded with pre-classical works as ‘medium’ is an unreliable dividing factor (Line, 1962).

Theme 5: classification schemes

Classification systems used in one-subject libraries can fall into one of three categories: a section of a general scheme, a special scheme for that subject or a home-grown scheme designed for an individual library. What is immediately apparent from music classification literature is the sheer volume of special...
and home-grown classification schemes for music. Some of the more prominent of the special schemes include BCM classification, Dickinson classification and McColvin classification; however, the literature reveals dozens more. The quantity of special schemes and home-grown solutions suggests two interlinked issues: first, music is fundamentally difficult to classify, probably related to issues such as multiple formats or the ‘subject-less’ music score; second, existing schemes are inadequate, a view shared by authors such as Clews (1975) and Olding (1954). After surveying the inadequacies of existing schemes, creating your own could be the next logical step.

By far the most prolific music classification scheme discussed in the music classification discourse is a general scheme: DDC. The discussion often pivots around the inadequacies of the music schedules in pre-DDC20 editions of DDC, the publication of the DDC phoenix schedule for music (1980) and the eventual incorporation of the phoenix schedule into DDC20 (1989). Unsurprisingly, the concerns of authors writing about DDC are representative of all music classification literature; for instance, commentators discuss the literature/scores issue and appraise various “solutions” to the problem of ‘other’ musics.

Conclusion

Music classification literature identifies five important themes which must inform any music classification model. First, the inclusion of various types of music materials within a classification system bring a three-dimensional approach to music classification, where format is the third dimension. Second, the ubiquitous use of ‘medium’/’form’ as the first facet in score classification, coupled with the less commonly used ‘composer’ as the first facet of literature, suggest a useful starting point for exploration of the other two dimensions. Third, the treatment of ‘other’ musics demonstrates issues with boundaries, within both music classification and musicological discourse. Fourth, retrieval is an important part of music classification, and different types of readers demonstrate different classification needs. Fifth, existing classification schemes – whether general or special, used in multiple libraries or home-grown – exemplify the theoretical discussions of the other four themes.

Furthermore, an interesting pattern emerges from consideration of the five methodologies and themes in music classification: sets of protagonists. The librarian and the musicologist are frequently aligned. For example, methodologies which borrow musicological ideas and implant them into classification or vice versa bring together the musicologist and librarian in various ways; the concerns of classification authors about format versus content echo musicological questions about defining what music is. Conversely, the performer and musicologist are usually described as opponents. The differing retrieval needs of both groups is a prominent example. This intricate web of connections between the various protagonists must also inform a music classification model. Therefore, a music classification model must accommodate various facets, musics and formats on one hand, and a diverse set of protagonists on the other. Or in other words, we are working towards a model of music classification which crosses the traditional boundaries of musicology, music librarianship and knowledge organization.

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23 Of course, the publication of the DDC phoenix schedule was specifically designed to enable librarians to test and respond to the schedule before it was fully integrated into DDC (Humphry, 1980 vii). This could be one explanation for the high volume of literature concerning the schedule.
References


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