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The Functional Requirements for Bibliographic Records (FRBR) proposes a four-tier hierarchy to describe relationships between works and their derivations. Most scholarship on FRBR and musical works has concentrated on classical music within the Western canon, and little attention has been paid to other genres of music.

This study takes a bipartite content sample of both classical and non-classical musical works, investigating the issues with both using the FRBR framework. Results indicate there is a blurring of the roles within popular music that can call into question the boundaries of “work” and “expression.” The examination of the pieces within the classical canon revealed many FRBR-specific relationships, but also the existence of relationships with no FRBR equivalent, and the examination of non-classical works revealed even more relationships that were either ambiguous or non-existent in the FRBR framework. The study concludes that there may be significant problems trying to tackle non-classical musical works and their mutations with a strict hierarchical model such as FRBR.

Headings:

FRBR (Conceptual model)

Cataloging of music

Cataloging of sound recordings

THE APPLICATION OF FRBR TO MUSICAL WORKS

by
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Table of Contents

Background Statement:	2
Purpose:	3
Literature Review:	4
The “work” and the musical arts	4
FRBR and “the canon”	8
Outside the canon – performers and recordings	12
Going Forward	19
Research Questions	20
Research Design and Methods	20
Data Analysis	22
1. Classical Music in the FRBR framework	23
1.1. “The Lark Ascending,” by Ralph Vaughan Williams	24
1.2. Adagio in G minor, by Remo Giazotto	27
1.3. Symphony No. 7 in A Major, Ludwig van Beethoven	32
1.4. Richard Strauss’ Salome	41
Discussion	49
2. Non Classical Music in the FRBR framework	51
2.1. “My Favorite Things” –Rogers & Hammerstein and John Coltrane	51
2.2. Dark Side of the Moon	57
2.3. Miles Davis’ “Bitches Brew”	61
2.4. “Come Out” by Steve Reich	65
2.5. “Since I Left You” by The Avalanches	69
2.6. Beastie Boys – “Shake Your Rump”	74
Discussion	80
1) The confusion between composer, performer, and creator	81
2) Playback Works	82
3) Mutations of popular works	85
Full conclusions	86
Bibliography	92

Background Statement:

The 1997 report on the Functional Requirements for Bibliographic Records (FRBR) was written to deal with perceived ambiguities in current cataloging practice. By differentiating between a work, expression, manifestation and item, such standards are meant to clear up much of the complexity surrounding such issues as translations, new editions, and the distinction between content, carrier and medium. Musical works specifically benefit from FRBR guidelines. The work of Beethoven's 5th Symphony, for example, can find expression in a musical performance, or a written score. Likewise, the expression of a recording of Beethoven's 5th Symphony can be manifested in monophonic or stereophonic sound, on a CD, an LP, or a streaming MP3 file, and so on.

But while FRBR standards give music catalogers many different levels with which to work, the complexity of musical relationships is not always easily mapped into the FRBR model. It is often difficult to determine which aspects of music correspond with the work, expression, manifestation, or item level. Additionally, the existence of both a composer and a performer calls into question the true "creator" of a musical work.

The situation is even fuzzier when one looks outside the canon of Western classical music. While music catalogers have traditionally dealt with music within the classical tradition, the field of musicology is beginning to recognize folk, rock, jazz, hip hop, and electronica as valid genres of academic study. A quick glance

between the second (1983) and third (1997) editions of the American Library Association's *A Basic Music Library: Essential Scores and Sound Recordings* reveals a large increase in the number of recommended pieces of music that lie outside the traditional "canon" of classical music. (For the purposes of this paper, the "canon" will be defined as the "classical" music performed in concert halls – the music that is connected to the larger European tradition that dates back to the "classical" era of the late 18th century). While classical music has always been a thorny problem for the FRBR model, musical works from other genres complicate these issues even further. The simple entity-relationship model of "creator" and "work" breaks down when it comes to folk music, for example, in which a song may have no known composer but hundreds of performers. Jazz music often features extended improvisational solos, in which it is difficult to distinguish whether a performance constitutes a new work or merely a variation of an existing work. The rise of the recording industry has led to remastered recordings, remixes, and sampling, none of which are directly addressed in the FRBR report.

Purpose:

The purpose of this current study is to investigate what sort of bibliographic relationships exist between musical works, and how these relationships might be mapped using the FRBR framework. While there have been many top-down studies on the larger effects of FRBR rules, there is a sizable gap in the literature when it comes to examining specific bibliographic relationships in certain fields of cataloging. Vellucci (1997) conducted a pre-FRBR study specifically on musical

scores, but did not take into account the relationships of musical *works*, which would include scores as well as sound recordings. Richard Smiraglia (2001a) comments on Vellucci's study, writing that, "much more research is called for. In particular, scholars should follow Vellucci's path and examine specific disciplinary literatures and document-types for more predictive characteristics."

Building on Smiraglia's (2012) notion that the FRBR model has not undergone enough empirical testing, this study will select a content sample of a variety of musical works, and map the full extent of their bibliographic relationships. This will enable a full investigation as to whether or not these relationships are applicable to the FRBR model.

Examining these relationships may necessitate examining what the definition of a "work" is when it comes to music. The definition of a "work" has always been somewhat muddled in library scholarship, and the advent of FRBR has muddled it further. The results presented in this paper will assist the library science community by presenting an thorough empirical investigation into the idea of a musical "work" and its bibliographic relationships, especially for those pieces outside the classical canon.

Literature Review:

The "work" and the musical arts

The concept of the "work" in library literature can be traced back to the early codification of cataloging rules outlined by Charles Cutter. However, the first modern identification of the bibliographic work can be found in Seymour Lubetzky's report on the principles of cataloging (1969). Here, Lubetzky outlines his two

functions of the catalog, the first being to find a particular item, and the second being “to reveal to the catalog user what other editions, translations, or representations the library has of the work, and what works it has of the author.” Lubetzky’s distinction between finding a specific item and finding a manifestation of an abstract work is an important one, and one that prefigures much of the cataloging literature of the late 20th and early 21st century.

While collocation of multiple editions of a work had always been an important goal of the library catalog, there has been very little agreement as to a definition for the “work.” In an oft-cited statement, Svenonius (2000) states that, “Critical as it is in organizing information, the concept of *work* has never been satisfactorily defined,” before going on to elaborate that the concept of a work is “intuitively satisfactory” but less helpful in actual practice.

Martha Yee’s four-part investigation titled “What is a work?” (1995) provides a good analysis of the myriad of different possibilities of defining a work. She rejects many of these definitions, before settling on a work as an abstract entity with concrete manifestations. Yee allows for multiple creators, translations of text, and changing titles, but draws the line at crossing mediums, asserting that a film adaptation of a book would be a new work.

Smiraglia’s *The Nature of “a Work”* (2001a) provides the most substantive discussion on the ontology of works as pertains to librarianship. Here, Smiraglia defines the “work” specifically as, “a signifying, concrete set of ideational conceptions that finds realization through semantic or symbolic expression.” The distinction between ideational content (abstract ideas and concepts) and semantic

content (text and symbolic images) parallels FRBR's distinction between the conceptual entities of works and expressions, and the physical entities of manifestations and items. Smiraglia also stresses that works will mutate over time, evolving both ideational and semantic content to eventually transform into new works.

More recently, Smiraglia (2003) has identified twelve different definitions of the work, spanning from 1841 to 2001, and traces how recent empirical research has yielded different definitions than in the past. In another article (2002), Smiraglia summarizes what he sees as the three major trends in the literature on works:

1. The "work" is conceptual, and to some extent is considered to be abstract;
2. Any change constitutes a new related work; and,
3. There is a set of such related works associated with the original work's citation.

The concept of mutations and related works emphasizes another important point in the literature - works do not exist in a vacuum, but rather interact with other works through a myriad of different relationships and connections. It has been commonly accepted throughout the history of cataloging literature that works could be linked together by many different relationships, but it was not until the common practice of computerized catalogs that this was practical at any larger level. Tillett (1987) and Smiraglia (1992) both conducted large studies that demonstrated the massive quantity of bibliographic relationships that might exist in a library catalog, both mapped and unmapped. Their scholarship demonstrates the existence of a large network of relationships that has only been possible to map since the rise of the information age.

Confronting the “work” and its relationships in the performing arts remains a murkier issue. Svenonius (2000) writes that defining such common terms as “work” and “edition” for non-book items “strikes at ontological commitment and shakes theoretical foundations.” Other authors, if not as apocalyptic in tone, raise similar worries about the application of the work to non-textual items.

Music in particular raises certain complications. Due to its inherently temporal existence, a musical work is more difficult to “capture” than a novel or a poem. Krummel (1976) was one of the first to make the distinction between music’s existence as notation on paper and its performance. Many also now consider recording as a third element of musical existence, alongside written notation and live performance. Smiraglia and Thomas (1998) discuss the dual existence of musical scores and performances, concluding that one does not take precedence over the other, and there is no concrete *urtext* for a musical work. “We must realize,” the authors conclude, “that no single instantiation can ever be equated fully with the work.”

The question of bibliographic relationships between musical works also lends itself to a unique set of complications. Sherry Vellucci’s book *Bibliographic Relationships in Music Catalogs* (1997) concluded that an astonishingly high number of musical items – over 94% – have existing relationships with other musical items in the catalog. Compare this to Bennett (2003), who concludes that 78% of works in WorldCat consist of only a single manifestation; clearly music has a much higher rate of multiple manifestations than other subjects. This signals that relationships

between musical works may in fact need to have different definitions and stipulations than other works in a library catalog.

FRBR and “the canon”

The International Federation of Library Association’s (IFLA) report on FRBR was first published in 1997. While it has not been accepted in the cataloging community without complaint, it has given scholars and librarians a universal standard for bibliographic relationships to examine more specifically. FRBR’s explication of the work-expression-manifestation-item model has been covered extensively elsewhere, but these guidelines have been ambiguous enough in terms of music and the arts that catalogers and librarians are still debating how, exactly, these entities and relationships are defined.

The FRBR report defines a work as “a distinct intellectual or artistic creation. A work is an abstract entity; there is no single material object one can point to as the work.” This definition is nebulous, and open to interpretation, which may have been intentional. The report adds that, “when the modification of a work involves a significant degree of independent intellectual or artistic effort, the result is viewed, for the purpose of this study, as a new work.” While relatively straightforward in theory, these definitions have proven to be quite thorny in practice, and much of the literature post-FRBR concerns applying these standards to the performing arts. There remains considerable debate about both the definition of a “work” and how much intellectual or artistic effort is needed to create a “new” work as opposed to a derivative one.

The FRBR guidelines as apply to music have been troublesome for a number of reasons. Music's existence in several mediums, including notated score, live performance, and playback recording, muddle the standard definitions of "expression" and "manifestation." Cover songs, variations, and improvisations on a "theme" also blur the line between derivation and an entirely new work. The performer can often add or embellish material provided by the composer, calling into question the true "creator" of the work.

Yee (2002) points out that the standard rules of "author as creator" do not necessarily apply when it comes to music. While the author of a text is inarguably its creator, the issue is more complicated for musical works. The composer of a piece of music is rarely the one who brings it to life as an aural entity; numerous performers can take a composition and interpret it different ways. An opera, for example, might have a composer, a librettist, a conductor, vocal soloists, instrumental performers, as well as stage managers, costume designers and choreographers, all who can lay some claim to being the artistic vision behind the work. Yee refers to the performer a "conduit" that allows the work to pass from composer to audience.

Schmidt (2012) considers Jimi Hendrix' famous performance of the "Star-Spangled Banner" on electric guitar at Woodstock. While the piece performed is easily recognized as the national anthem of the United States, Hendrix undeniably makes the piece his own, by adding feedback, using the guitar to create percussive noises, and inserting references to other works (such as "Taps") into the song. Is the final result a derivation of Francis Scott Key's original song? A new work by Hendrix? Or something in between? FRBR offers no clear answer.

Miller and LeBoeuf (2005) investigate the application of FRBR to the entirety of the performing arts. The authors here note the role of sound editing in regards to recorded performances, and question the role of the editor in recorded works of music and theater. The article concludes that adapters of works for performance should be viewed as creators of works in their own right, including choreographers of ballet and stage directors of plays. There is also a call to provide for more leniency for “works of mixed responsibility” when it comes to cataloging.

Vellucci (2007) sees the widespread acceptance of FRBR as a good thing for the collocation of musical works, even if the FRBR model is slightly more complicated when it comes to music. She discusses several issues with musical works, including the fact that they are both commonly aggregated in anthologies and separated into smaller movements and excerpts. She also points out that FRBR is not necessarily restricted to four levels. Many musical works, for example, might have multiple “expression” levels. An arrangement of a Beethoven symphony for piano is itself one kind of expression, but this arrangement can also then appear as several “subexpressions” of different performers playing this transcription. Another example is a performance of a work captured both on audio and video tape; the performance itself is one expression, realized in the “subexpressions” of two different mediums. Ayres (2005) has also documented the issues with “expressions of expressions.”

Vellucci also highlights problems with texts set to music, and how the integration of music and text can confuse the issue of the “work.” However, she concludes that:

the conceptualization of the expression entity in the FRBR model...remains one of the most important contributions to music cataloging, for it provides a logical foundation for better understanding the music bibliographic universe and a meaningful basis for clustering music catalog record displays.

Not all authors have been as optimistic regarding the adoption of FRBR, however. Patrick LeBouef (2005) discusses some of the possible shortcomings of the FRBR guidelines when applied to music. LeBouef is quick to point out that the *performance* element of musical works lends a distinct dimension to them that often does not exist elsewhere – how does the performer function in lending creative expression to a work? LeBouef does not settle the question, but urges catalogers to consider musical works in larger “galaxies” of three dimensions, rather than the strict hierarchical two-dimensional model that FRBR provides. Meanwhile, Smiraglia (2012) has cautioned the cataloging community that FRBR’s strict hierarchies are too limiting, and that there is not yet enough empirical research to justify the system’s widespread adoption.

Iseminger (2012) is skeptical about the application of FRBR in the RDA cataloging guidelines, especially to musical works. The author here makes the case that FRBR and RDA do not provide enough derivative relationships with which to catalog an “expression” of a musical work, and doubts that RDA will necessarily lead to a better mapping of bibliographic relationships between musical items. The article concludes with a call for RDA to radically revise its provisions for access points on both the work and expression level.

Some writers have built on Smiraglia and Thomas’ (1998) call for a multi-dimensional mode of works, and concluded that “superworks” may be necessary to

map the relationships between all the possible instantiations of musical works in particular (Picco and Respiso 2012). Superworks are defined as encompassing multiple related bibliographic items that don't necessarily fit together in the usual FRBR framework. Smiraglia (2007) points out that the FRBR guidelines make no explicit reference to superworks, but their existence is implied by the mention of "work-to-work" relationships. He suggests the superwork of *Brokeback Mountain*, consisting of the original short story, the novel, the film, the film's soundtrack, and the written screenplay, all distinct works that are tied together through bibliographic relationships outside the FRBR framework. Similar superworks could be surmised for many musical resources, including operas (with related choreographies, libretti, and set designs).

Outside the canon – performers and recordings

Most scholarship on FRBR's relevance to musical works focuses on the music of the Western classical canon. This makes a certain amount of sense; not only does this canon of music receive the most amount of academic attention in the colleges and conservatories that are most likely to feature substantial music libraries, but it also remains the music that has been most widely disseminated according to the FRBR hierarchy. The work – expression – manifestation – item clustering can intuitively fit into a classical piece (work) recorded on staff notation (expression), printed as a large conductor's score (manifestation), and procured as a library copy (item). Many introductions to FRBR use music as an example of the WEMI categories, perhaps due to the fact that most classical music works have at least two expressions – score and recording – or perhaps because of Vellucci's findings that

musical works are more likely to have derivative relationships than the works of other genres.

However, FRBR has barely been applied at all to music outside the traditional canon. One of the few references to bibliographic relations and non-classical music at all comes from Smiraglia (2001b), who points out that the low barrier of entry for electronic music has seen a larger number of mutated works in the forms of DJ remixes and cover songs. He does not pursue this avenue of thought further, nor does he explicitly mention FRBR, but the suggestion that this genre of music might have different definitions of the “musical work” is a point well taken.

Musicologists, while seemingly unfamiliar with the library and information science community, have been discussing issues of the musical work for decades. While their terminology is different, many of the questions – the ontology of a musical work, the conflict between performance, score and recording, the composer and performer as creators – are nearly identical to the issues raised above. Musicologists have also recently started to discuss non-canonical musical works as worthy of study, and tend to lend more attention to “popular” music than catalogers and librarians. Kaufman, writing in 1983, points out that “public libraries have large collections of popular music, while courses in jazz and rock music have become a normal part of academic music curricula,” and these trends are likely to have only increased in the ensuing time period.

Pietras and Robinson (2012) integrate some of this outside literature into their investigation of FRBR as applies to music. The authors hash out three definitions of the musical work from three different disciplines – the “conceptual,”

as used by philosophers and musicologists, the “editorial,” as used by the publishing industry, and the “bibliographic,” as used by the library and information science community. The authors conclude that each definition should be informed by the others, and librarians in particular should be talking with both publishers and musicologists in order to look at the idea of a “musical work” beyond the confines of the FRBR model. The authors cite Ingarden (1986), who writes that a musical work is something abstract, with no “original object,” and makes the case that the work can only be manifested in score or performance – an argument that hits especially close to FRBR’s definition of the work.

One of the central problems throughout the history of music cataloging has been the issue of the performer, who is seen as contributing some intellectual activity to the creation of the work, although not as much as the composer. Standard practice in both musicology and librarianship is to attribute the authorship of the work to the composer; however, this is increasingly problematic as one moves farther from the classical canon.

Recently, Cook (2003) has argued that musicology needs to move back toward a performance-oriented model. Cook claims that too often musicologists approach music from the perspective of a philologist, attempting to retrieve the original *urtext* that has been corrupted from the composer’s original vision over years of performance. Instead, Cook makes the case that performers can be viewed as creators in their own right, and performances do not necessarily have to bear fidelity to the original composition in order to be seen as “authentic.” Kivy (1995) supports a similar conclusion, seeing the performer as an artist, and the pursuit of

“historical authenticity” in music as something ultimately damaging. Kivy claims this comes from the mistake of viewing music as a linguistic entity, and instead tries to frame it as an “art of decoration” in which each performer can add his or her own content to the work in question.

Schmidt (2012), though coming from the library science community, approaches music cataloging from a perspective outside the canon. He writes about jazz works as an instance of the performer-as-creator problem in FRBR. With improvisation and variation being central aspects of jazz music, it is difficult to delineate between “works” and “expressions” under the FRBR model. Schmidt advocates for jazz improvisations to be treated as new works under FRBR, arguing that the medium is performance-based, with each new jazz performer bringing a significant amount of creativity to the performance of a standard work.

In addition to the issue of performer-as-creator problem, the ubiquity of sound recordings also muddles the traditional FRBR framework as applies to music. One problem comes from the fact that the FRBR model assumes the work is an abstract *urtext* that can never fully be realized. But there *is* an *urtext* for recorded works – there is only one master tape for Pink Floyd’s seminal album *The Dark Side of the Moon*, for example, and all performances and covers of this album are mere manifestations of the original master recording. Would an artist’s cover of the album be treated as an expression with equal weight to the original? What about remastered editions or the increasingly common “remix”? Additionally, both avant-garde and popular music often rely on the recording studio as an instrument in its own right. Much like opera and ballet, works recorded in a studio can be claimed by

multiple creators, including producers and sound mixers who often exert a creative presence on a work.

Chanan (1995) writes in a history of recorded music that sound mixing is what separates “popular” from “classical” music, and discusses the various ontological difficulties in addressing as a work a track that was constructed from several takes edited together. “Multitrack recording puts the producer and recording engineer firmly in charge of the studio,” Chanan writes, “but it also creates new musical possibilities; the new mode of production therefore begins to turn the recording engineer – the mixer – into a musical creator of a new kind.” Similarly, Ashby (2010) discusses how, in the last half-century, the standard conception of “music” has shifted from a score-based definition to a performance-based or recording-based one. This has been due in large part to the increasing popularity of genres such as rock and jazz, which are created without the construction of a notated score.

Gracyk (1996) identifies the central problem with recorded music – unlike classical music, which relies on the reproduction of a notated score, recorded rock music relies on the reproduction of a *sound*. This sound often includes elements of feedback and distortion that cannot be incorporated into traditional musical notation. Gracyk distinguishes between autographic works – in which the exact object can be preserved – and allographic works – an abstract notion akin to FRBR, in which “all correct performances are genuine instances of the work.” Paintings are autographic, with one “correct” item that is prone to forgeries and reproductions. Music and literature are largely allographic, although Gracyk argues that many rock

works can be seen as autographic. He cites the 1975 Bruce Springsteen album *Born to Run*, and argues that, if all copies of this recording were lost, a mere musical score of the work would not be enough to recover the full “work”; the notated score could not convey the intricacies of recorded sound. “When music is conceived as a recording and not merely as a performance that happens to be recorded,” Gracyk argues, “traditional ontology does not have a place for the musical work.” He goes on to make a case for a recording-based definition of a musical work.

Davies (2001) takes the opposite side of Gracyk’s argument. While Davies admits that rock and jazz works are complicated by the element of recording, he still views such recordings as the record of a specific performance in the studio, and argues that rock music is very much still a performance-based medium. Rock artists, according to Davies, are doing their best to create a recording that simulates the experience of a live performance. He calls this a “work for studio performance,” and argues that most popular recorded music falls under this title. Davies sidesteps the question of rap and hip-hop music, much of which is based on studio sounds that cannot be manipulated in a live event, and still argues that the performance of a rap artist in some ways simulates a live event.

According to Davies, there is little autographic music – only *purely* electronic music could be granted this title. While viewing most works as something meant to be treated as a performance, he does argue for a continuum between “thick” and “thin” works:

If it is thin, the work's determinative properties are comparatively few in number and most of the qualities of a performance are aspects of the performer's interpretation, not of the work as such. The thinner they are, the freer is the performer to control aspects of the

performance. Pieces specified only as a melody and chord sequence are thin...By contrast, if the work is thick, a great many of the properties heard in a performance are crucial to its identity and must be reproduced in a fully faithful rendition of the work. The thicker the work, the more the composer controls the sonic detail of its accurate instances.

“Thick” and “thin” are distinctions that have little precedent in the FRBR community, which tends to treat all works equally. However, Davies’ point is a powerful one, as there is an obvious difference between the thick musical work, such as a symphony, that can only be authentically expressed in a meticulously notated score or a professional-grade performance, and a thin musical work, such as “Happy Birthday,” which finds authenticity in any number of arrangements and harmonizations, so long as the basic melody and lyrics stay the same.

Kania (2006) attempts to explore a middle ground between Gracyk’s definition of popular music as recording-based, and Davies’ argument that it is performance-based. Kania agrees with Gracyk as to the supremacy of the recording, but also acknowledges Davies’ point that performance is an essential part of the musical landscape. He adopts Davies’ distinction between thick and thin works, and proposes a three-tiered hierarchy in which rock *tracks* (thick works) express rock *songs* (thin works) that can be manifested in rock *performances*. This track-song-performance hierarchy is not unsimilar to FRBR.

But while Kania’s work seems to have mapped out rock music fairly well, he has acknowledged in other works (2005; 2009) that jazz music and avant-garde electronic music presents its own issues that are not so easily solved. In his dissertation (2005), he goes so far as to admit that “jazz is a tradition without

works,” and that its emphasis on improvisatory performance makes it impossible to define a jazz “work.”

None of the musicologists cited above make any reference to the library and information science community. Their questions about the definition of a musical work tends to be more theoretical, without the practical implications for entity mapping and collocation that are present in the world of cataloging. Nonetheless, the musicologists make some good points, especially about popular music, that are often overlooked in the work-centric field of FRBR. The presence of performers as creators, the primacy of recording in popular music, and the bifurcation between live performances and recorded studio pieces are all issues which have received scant attention in the library science community, in which every work is considered equal no matter how strange or difficult to peg into the FRBR model.

Going Forward

Looking at the points brought up by musicologists outside the library science community, we can see a clear need for research into FRBR and musical works, especially as applies to non-classical works. While music has been featured as an example in many larger pieces on FRBR, there have been very few lengthy studies of specifically musical works as apply to FRBR, and absolutely no works that investigate FRBR’s application outside the Western canon.

There has been some anecdotal evidence that the FRBR model has serious shortcomings when it comes to music outside the canon of Western classical (Riley 2008; Schmidt 2012). But there has been little serious academic study as to the application of FRBR to the large amount of music that exists outside of the canon.

Most articles describing FRBR's relationship to musical entities focus only on classical works (Vellucci 2007; IFLA 1997). However, there is significant musicological research that indicates that non-classical musical works may be operating under different parameters than classical music and, at the very least, is treated differently by its respective communities. There a clear lack of empirical evidence when it comes to the applicability of FRBR to musical works outside the canon. This paper is an attempt to at least partially rectify that lack.

Research Questions

This study will address the issue of employing FRBR on musical works by asking several smaller research questions, including:

- 1) Is there a clear definition of a musical "work" that can be applied in the music cataloging community?
- 2) Is there a difference in the suitability of FRBR for the canon of Western classical music, and its suitability for other types of music?
- 3) What types of relationships can be mapped between musical works?
- 4) Is the current FRBR framework suitable for mapping these relationships?

Research Design and Methods

To examine the above questions, a content analysis was pursued. This method was selected as the best way to examine the above questions and get a sense of the large number of possibilities inherent in cataloging musical works. The study necessarily looks at a large scope of both classical and non-classical musical works in order to garner the broadest perspective on the issues.

The research design is descriptive in nature. Data collection involves applying FRBR to musical works (in particular, those manifested as sound recordings). The research consisted of two selective samples – one sample of four works from the “traditional” Western canon, and one sample of six musical works that are generally accepted as existing outside the classical canon. The first sample was smaller in size because “classical” works have already been dealt with quite heavily in other literature on FRBR. This sample was selected largely to showcase how FRBR has already been consistently applied to classical music, and the use of the FRBR hierarchies for various mediums within the canon, such as opera and multi-movement symphonic works.

The non-classical sample was chosen specifically for the works’ complexity and ambiguity under the current FRBR framework, and to highlight specific problems that emerged from the literature review. This sample was larger to due the lack of FRBR studies on non-classical music and deliberately encompasses music from a variety of different genres, ensuring the broadest possible exploration of the FRBR principles. This included jazz, rock, hip hop, electronic, and avant-garde sound recordings that fall outside the Western classical framework. “Simple” sound recordings without complex bibliographic relationships have already been addressed extensively in the literature on FRBR, so this paper instead looks at those “problem” items whose issues have largely been avoided so far.

Each item in the sample was addressed in two stages. First, a FRBR hierarchy was created for the work in question. Secondly, this paper addresses the bibliographic relationships that could not be adequately mapped according to the

current FRBR framework. It also discusses the specific stipulations of the FRBR model that prevent these bibliographic relationships from being represented accurately.

In order to “map” the FRBR hierarchies, the holdings of UNC-Chapel Hill’s extensive music library were used as a starting point. Searches for related manifestations and works were conducted first in the “name” and “title” fields, and then a keyword search was conducted to find any records that were not generated with these first searches. Utilizing UNC’s holdings allows the FRBR models to adequately reflect the actual holdings of an academic library. In some cases, the “map” extended outside of UNC’s holdings in order to demonstrate further relationships between works. Some additional research regarding the specific sound recordings was necessary in order to identify certain relationships.

Data Analysis

The study sought to identify trends in FRBR-izing musical works, and compare and contrast the FRBR model for musical works that exist in and outside the canon of Western classical music. The research highlighted certain aspects of bibliographic relationships that are not easily tackled under the current FRBR framework. This added to the knowledge about FRBR, exposing possible shortcomings. This study also sought to determine the definition of a “musical work” in various genres. This is a definition that FRBR specifically mentions is community-specific, so further exploration into the meaning of a “work” in various musical communities will be beneficial.

Assessing the validity of the results may prove difficult; cataloging is an art as much as a science, and every cataloger will cataloger certain items differently. Additionally, the guidelines of FRBR are abstract enough to occasionally make drawing concrete conclusions difficult. Frequent references to the IFLA report were made, as well as the FRBR examples used in that and other library science literature.

1. Classical Music in the FRBR framework

Four works belonging to the classical canon were “FRBR-ized” according to the hierarchical structures and relationships as explained in the IFLA report. Following the examples provided in Section 3.2.2 of the IFLA report on FRBR, one can see that each separate performance of a musical work is considered a separate expression, with the performing body realizing the work in each performance. Scores from various publishers are also different expressions; while they may not feature different printed notes, they often involve different realizations of the staff notation, as well as different fingerings and tempo and dynamic markings.

The expressions for sound recordings were detected using the information on performer, conductor, and recording date, found in 245, 511, 518, and various 500 MARC fields present in the UNC-Chapel Hill catalog. The expressions for scores were determined using the publisher information in the 260 field. The manifestations for sound recordings and scores were determined using the publication, copyright, or phonogram date in the 260 field. The item level was determined using call numbers or, for electronic resources, a unique bibliographic

identifier provided by the UNC catalog. The FRBR tables below are not an exhaustive account of all expressions and manifestations of a work, but instead the expressions and manifestations found in the UNC catalog.

1.1. “The Lark Ascending,” by Ralph Vaughan Williams

In order to demonstrate how smoothly a classical piece can fit into the framework offered by FRBR, the author chose to examine “The Lark Ascending,” a 1920 piece for violin and orchestra by the British composer Ralph Vaughan Williams. The piece has become a popular one among audiences, and as a result there have been many performances and recordings since its initial appearance.

Searching on the uniform title “The Lark Ascending” and Ralph Vaughan Williams in the “author” field revealed that the libraries at UNC-Chapel Hill possessed a variety of expressions and manifestations of the piece. Twenty-five expressions of the work were identified, including twenty-two separate sound recordings of the original work, one sound recording of an arrangement for organ, and two scores. For the purposes of organization, we can group expressions together by medium, resulting in Table 1.1.

The twenty-two different expressions that are sound recordings of the original arrangement are distinguished by the ensemble, conductor, and performance date listed in the catalog record. Expression E23 is a sound recording of “The Lark Ascending” that has been arranged for solo organ. Per Section 5.3.2 of the IFLA report, this exists not only as a realization of the work, but also as an entity in an “expression-to-expression” relationship with the scores of the original

Table 1.1

Work	Medium	Expression	Manifestation	Item
<i>The Lark Ascending</i>	Original arrangement, sound recording	E1 - London Chamber Orchestra, Christopher Warren-Green, cond., ?	M1 - Elec. Res., EMI/Alex. St., [2005]	I1 - b7279772
		E2 - Utah Symphony Orchestra ; Maurice Abravanel, cond., ?	M1 - LP, Candide, [1971?]	I1 - 11,249 LP
		E3 - English Chamber Orchestra; Daniel Barenboim, cond., ?	M1 - LP, Deutsche Grammophon, [1977]	I1 - 11,003s
			M2 - LP, Deutsche Grammophon, p1975	I1 - 8137 ST
		E4 - City of Birmingham Symphony Orchestra ; Simon Rattle, cond., 1997	M1 - Elec. Res., EMI/Alex. St., [2005]	I1 - b7279729
			M2 - Elec. Res., EMI/Alex. St., c2002	I1 - b7235220
		E5 - London Symphony Orchestra ; Sir Colin Davis, cond., 2003	M1 - CD, Deutsche Grammophon, p2004	I1 - CD-12,819
		E6 - Academy of St. Martin-in-the-Fields; Neville Marriner, cond., ?	M1 - Elec. Res., ASV/Alex. St., p1984	I1 - b6057594
		E7 - BBC Symphony Orchestra ; Andrew Davis, cond., 1990	M1 - CD, Teldec, p1991	I1 - CD-19,797
		E8 - Israel Philharmonic, Dalia Atlas, cond., ?	M1 - CD, Stradavari Classics, p1989	I1 - CD-24,906
		E9 - English Northern Philharmonia ; David Lloyd-Jones, cond., 1995	M1 - CD, Naxos, p1997	I1 - CD-22,393
		E10 -Liverpool Philharmonic Orchestra ; Malcolm Sargent, cond., [ca. 1943-1947]	M1 - CD, Dutton, p1995	I1 - CD-6008
		E11 - London Philharmonic Orchestra ; Andrew Litton, cond., 2007	M1 - CD, Deutsche Grammophon, p2007	I1 - CD-23,432
		E12 - London Philharmonic Orchestra ; Vernon Handley, cond., 1985	M1 - CD, EMI, p1985	I1 - CD-22,574
		E13 - Manhattan School of Music Chamber Sinfonia and Opera Theater; Glen Barton Cortese, cond., ?	M1 - CD, Phoenix, p2000	I1 - CD-8796
		E14 - London Philharmonic ; Adrian Boult, cond., [ca. 1949-1953]	M1 - LP, His Master's Voice, p1985	I1 - 21,893
		E15 - Northern Sinfonia of England, Richard Hickox, cond., [ca.1983-1987]	M1 - CD, EMI Classics, p2002	I1 - CD-8742
			M1 - Elec. Res., EMI/Alex. St., [2003]	I1 - b7279841

		E16 - Academy of St. Martin-in-the-Fields; Neville Marriner, cond., ?	M1 - LP, Argo, p1972	I1 - 6841 ST
		E17 - London Philharmonic Orchestra, Sir Adrian Boult, cond., [ca. 1952-1975]	M1 - CD, EMI Classics, p2001	I1 - CD-14,289
		E18 - London Philharmonic Orchestra ; Bernard Haitink, cond., 1994	M1 - Elec. Res., EMI/Alex. St., p2003	I1 - b7279309
		E19 - New Philharmonia Orchestra, Adrian Boult, cond., [ca. 1967-70]	M1 - Elec. Res., EMI/Alex. St., p1987	I1 - b7279313
			M2 - LP, Angel, [1968]	I1 - 11,995s
		E20 - English String Orchestra ; William Boughton, cond., ?	M1 - CD, Nimbus, 1989	I1 - CD-21,223
		E21 - Royal Philharmonic Orchestra ; André Previn, cond., 1986	M1 - CD, Telarc, p1987	I1-CD-16,662
		E22 - London Festival Orchestra ; R. Pople, cond., ?	M1 - CD, Academy Sound and Vision, p1994	I1 - CD, 4195
	Organ arrangement, sound recording	E23 - Richard Morgan, organist, ?	M1 - LP, AFKA, p1981	I1 - 21,209
	Original arrangement, score	E24 - Min. score, Eulenberg	M1 - Eulenberg, [1982], c1925	I1 - M1012.V3 L3 1982
		E25 - Min. score, Oxford	M1 - Oxford University Press, c1925	I1 - M785.3 V371L

versions. The final two expressions are written scores of the work; each score was edited separately, and therefore each exists as a separate expression.

A few of the sound recordings resulted in multiple manifestations, due to their multiple releases in different formats. However, for the most part, the FRBR-ization of this piece is tidy, with clear distinctions between the expressions and a strict hierarchy from the work to the item level. All twenty-five expressions are clearly realizations of the work in question; the twenty-two recordings of the original arrangement are *performances* of the scores, while the organ rendition is an *arrangement* of the scores. One could argue that organ arrangement is slightly more removed from the authentic “work” than the original arrangements, but all expressions easily fulfill their FRBR roles with little ambiguity.

1.2. Adagio in G minor, by Remo Giazotto

A 1958 work by the Italian composer and musicologist Remo Giazotto was the second work that was FRBR-ized for this study. Searches for this work were conducted in the UNC catalog using the uniform title “Adagio, String Orchestra, G minor,” as well as “Trattenimenti armonici per camera. N.2; arr.” (The piece was originally thought to be an arrangement of the latter title by Tomaso Albinoni, although most scholars agree that the piece was largely written by Giazotto himself, with little or no material supplied by Albinoni). The results of this search can be found in Table 1.2; the catalog contained records for thirty-one expressions and thirty-five separate manifestations of the piece, including two expressions of printed scores, seventeen expressions of a sound recording of the original orchestration,

and twelve expressions of sound recordings of different arrangements for various instruments.

Like “The Lark Ascending” on Table 1.1, many of the relationships of Glazotto’s Adagio are also self-evident and easily defined. The score is clearly a written expression of the work, and the sound recordings of Glazotto’s orchestration (classified as E1 through E17) are aural realizations of the same work. The differences in manifestation largely come from different audio formats, including LP, CD, and streaming digital audio files.

Expressions E20 through E31 somewhat complicate matters, however. Each of these is an arrangement of Glazotto’s work, and therefore an expression of the original work. However, the large number of sound recordings of the arrangements almost outnumbers the number of sound recordings of the original orchestration. Some forms of the arrangement also receive more than one expression – E30 and E31, for example, are both arrangements of the work for trumpet and piano. Because they are two separate performances by different musicians, they would be classified as two separate expressions, yet clearly they share a commonality that is unable to be mapped within the FRBR framework.

The issue comes from the inability of FRBR to group together different expressions. Musical works in particular are bound to have a large number of expressions, especially as FRBR considers every separate performance of a work as an expression. The twenty-nine different recorded performances of Glazotto’s Adagio in UNC’s catalog are a testament to this. Current FRBR arrangements would place each of these sound recordings in the classifications as a separate expression,

Table 1.2

Work	Medium of Exp.	Expression	Manifestation	Item
Remo Giazotto, <i>Adagio in G Minor</i>	Sound recording, Original arrangement	E1 - Berlin Philharmonic, cond. By Herbert von Karajan, ?	M1 - LP, Deutsche Grammophone, 1973	l1 - 8456 ST
			M2 - LP, Deutsche Grammophone, 1984 (413 309-1)	l1 - 21,775
			M3 - CD, Deutsche Grammophone, 1991 (415 301-2)	l1 - CD-2229
		E2 - Ensemble Instrumental de France, 1984	M1 - Electronic resource, Alexander Street Press, 2009	l1 - b6012094
		E3 - Orchestre de Chambre Jean-Francois Paillard, ?	M1 - LP, Musical Heritage Society, [1964]	l1 - 4632 STLP
		E4 - English Chamber Orchestra, Johannes Somary, cond., ?	M1 - LP, Vanguard, 1975 (SRV 344 SD)	l1 - 9369 ST
		E5 - Capella Istropolitana, Richard Edlinger, cond., 1993	M1 - CD, Naxos, 1997 (8.552244)	l1 - CD 22,001
		E6 - Academy of St. Martin in the Fields, Sir Neville Mariner, cond., ?	M1 - Electronic resource, Alexander Street Press, 2010	l1 - b7279742
		E7 - Orchestra de Chambre de Toulouse, ?	M1 - CD, EMI, 1994 (724356533721)	l1 - CD 23,642
			M2 - Electronic resource, Alexander St. Press, 2005	l1 - b7279660
		E8 - Royal Philharmonic Orchestra, Charles Rosekrans, cond., ?	M1 - CD, Telarc, 2001 (CD-80562)	l1 - CD-21,529
		E9 - Guildhall String Ensemble, 1992	M1 - CD, BMG, 1993 (09026-61275-2)	l1 - CD-5925
		E10 - Orpheus Chamber Orchestra, rec. 1989	M1 - CD, Deutsche Grammophon, 1990	l1 - CD-19,581
		E11 - Stuttgarter Kammerorchester, Karl Münchinger cond., ?	M1 - CD, London Jubilee, [1979]	l1 - CD-20,983
		E12 - London Chamber Orchestra, perf., ?	M1 - CD, Virgin, 1989	l1 - CD-1259
			M2 - CD, Virgin, 1990 (VC 791199-2)	l1 - CD-24,211
		E13 - Philharmonia Virtuosi of New York, ?	M1 - LP, Columbia, 1977 (MX 34544)	l1 - 10,622s

		E14 - English String Orchestra, 1985	M1 - CD, Nimbus, 1985 (NI 5032)	I1 - CD-1134
		E15 - I Musici, ?	M1 - CD, Philips, 1983 (6514 370)	I1 - CD-22,176
		E16 - Ensemble d'archets Eugène Ysaÿe, Lola Bobesco, cond., ?	M1 - LP, Deutsche Grammophon, 1972	I1 - 7519 ST
		E17 - Budapest Strauss Ensemble, 1992	M1 - CD, Naxos, 1993 (8.550790)	I1 - CD-1264
	Score, Original Arrangement	E18 - Score, orchestrated by Amable Massis	M1 - Score, Editions Musicales Transatlantiques, 1959	I1 - M1005.A373 T74
		E19 - Score, (Ricordi)	M2 - Score, Ricordi, 1958	I1 - M1160.A373 T74
				I2 - M1160.A373 T74 c.2
	Sound recording, Choral arrangement	E20 - Choir of New College, Oxford, 1998	M1 - CD, Erato, 1998	I1 - CD18,688
	Sound recording, Flute/Orchestra arr.	E21 - Jean-Pierre Rampal, flute, ?	M1 - LP, Quintessence, 1980	I1 - 22,502
	Sound recording, Piano, violin, cello, arr.	E22 - Eroica Trio, rec. 1999	M1 - CD, EMI, 1999 (724355687326)	I1 - CD-4121
	Sound recording, piano arr.	E23 - Gabriel Montero, rec. 2007	M1 - Electronic resource, Alexander Street Press, 2007	I1 - b7234973
	Sound recording, 2 guitars, arr.	E24 - Ida Presti, rec. 1965	M1 - CD, Philips, 1989 (422 285-2)	I1 - CD-5106
	Sound recording, brass ensemble, arr.	E25 - Canadian Brass, ?	M1 - CD, CBS records, 1984 (MK 39035)	I1 - CD-22,875
		E26 - Fine Arts Brass Ensemble, rec. 1999	M1 - CD, Nimbus, 2000 (NI 5651)	I1 - CD-16,746
	Sound recording, flute and orch., arr.	E27 - Gunilla von Bahr, various flutes ; Stockholm Chamber Ensemble	M1 - LP, Bis, 1977-78 (LP 100, LP121)	I1 - 13,058, 20,186
	Sound recording, saxophone quartet, arr.	E28 - San Francisco Saxophone Quartet, rec. 1990	M1 - CD, EMI, 1991 (CDC 7 54132 2)	I1 - CD-3387
	Sound recording, guitar, arr.	E29 - Angel Romero, perf., ?	M1 - CD, Telarc, 1988 (CD-80134)	I1 - CD-16,185
	Sound recording, trumpet and organ, arr.	E30 - Hakan Hardenberger, perf., rec. 1990	M1 - CD, Philips, 1992 (434 074-2)	I1 - CD-15,244
		E31 - Bryan Pearson, Donald Tison, perf.	M1 - LP, Crystal, 1982 (S-661)	I1 - 17,216s

leading to an unwieldy amount of expressions for popular performance pieces such as this one. FRBR also fails to distinguish between a performance of Giazotto's original orchestration, and a performance of a later arrangement; both are equal expressions in the FRBR hierarchy, even though one is clearly more "authentic" to the original work than the other and should most likely be given preference when it comes to relevance ranking in searches.

Table 1.2 above has somewhat mitigated the issue by adding a fifth level to the FRBR hierarchy, between work and expression. This is the "medium of expression" column, which allows one to differentiate between the sound recordings, scores, and different arrangements. This allows one to group together specific arrangements, and prevents a user from becoming confused by the unwieldy number of expressions stemming from this work. While perhaps unnecessary to add a fifth level to the FRBR hierarchy, library catalogs could consider employing facets in order to achieve this level of medium-specific organization.

The large number of differing expressions also demonstrates the necessity in distinguishing between expressions in the new cataloging framework. RDA's interpretation of FRBR does not necessarily call for the cataloger to distinguish between different expressions and arrangements of the work. As Iseminger (2012) points out, the rules of Resource Description and Access (RDA), based on FRBR, call for all arrangements of a work to be contained under a single access point. Current RDA interpretations such as the MLA-BCC's "Best Practices (2013) defer the issues; the PCC's "Access Points for Expressions Task Group" report (2012) acknowledges

that musical expressions may necessitate more flexibility, but does not provide any specific recommendations. There needs to be a clear way to distinguish not only between printed score and sound recording expressions, but also which expressions are arrangements, as well as a way to group like arrangements together by medium.

1.3. Symphony No. 7 in A Major, Ludwig van Beethoven

The third piece from the classical canon that was examined through the lens of FRBR was Ludwig van Beethoven's Seventh Symphony. The popularity of this work was evident by the sheer number of items present in UNC's catalog; there were over 102 records that had "Symphonies, no. 7, op. 92, A major" in a title heading. It is likely that there are many more manifestations of the work in UNC libraries, in editions of Beethoven's complete works, as well as larger compilations of all or some of the symphonies of Beethoven. However, the ability to track down every manifestation of the symphony was deemed outside the scope of the study; Table 1.3 represents the manifestations of Beethoven's Seventh Symphony that have the appropriate uniform title in UNC's catalog.

As can be seen, the FRBR-ization of Beethoven's work is massive; UNC possesses eighty-three expressions and ninety-six manifestations of the Seventh Symphony, including fifty-four expressions of sound recordings, four expressions of videos, ten expressions of a printed score, and one expression each of a nineteenth-century copyist's manuscript and a transcription of period sketches of the work. In addition to simply having more extant expressions and manifestations than "The Lark Ascending" or Giazotto's Adagio, Beethoven's Seventh Symphony also has a wider range of expressions. Printed music is represented in full score as well as sets

Table 1.3

Work	Medium of Exp.	Expression	Manifestation	Item
Symphony No. 7 in A Major	Sound recording, original arrangement	E1- Royal Philharmonic Orch., Thomas Beecham cond., 1959	M1 - CD, BBC Legends, 1999	I1 - CD-18,935
			M2 - Elect. Res., EMI Classics, Alex. St. Press, 2005/2012	I1 - b7279499
		E2 -Chicago Symphony Orchestra, Carlo Maria Giulani, cond., ?	M1 - Electronic resource, Alexander St. Press, ?	I1 - b7279608
		E3- Berliner Philharmoniker, Daniel Barenboim cond., 1989	M1 - CD, Sony Classical, 1989	I1 - CD-1479
		E4 - Danish National Radio Symphony Orch., King Frederick IX cond., [ca. 1949-1954]	M1 - CD , Dacapo, 2000	I1 - CD-20,601
		E5 - Boston Symphony Orch., Leonard Bernstein cond., 1990	M1 - CD, Deutsche Grammophon, 1992	I1 - CD-20.090
		E6- Philharmonia Orchestra of London, Vladimir Ashkenazy, cond., 1983.	M1 - CD, London, 1984	I1 - CD-158
				I2 - CD-158 c.2
		E7 - Hanover Band, Roy Goodman, cond., 1988	M1 - CD, Nimbus, 1988	I1 - CD-1017
		E8 - London Classical Players, Roger Norrington, cond., 1988	M1 - CD, EMI, 1989	I1 - CD-1292
			M2 - CD, Virgin Veritas, c1997	I1 - CD-24,104
		E9 - Chicago Symphony Orch., Fritz Reiner cond., 1955	M1 - CD, RCA Victor, 1998	I1 - CD-20,701
		E10 - Czech Philharmonic Orch., Paul Kletzki cond., [ca. 1964-1968]	M1 - CD, Supraphon, 2000	I1 - CD-17,048
		E11 - Berliner Philharmoniker, William Fürtwangler, cond., ?	M1 - CD, Rodolphe, 1989	I1 - CD-15,831
		E12 - Norddeutscher Rundfunk Symphonie Orchester, Günter Wand, cond., 1986	M1 - CD, EMI, 1988	I1 - CD-19,298
		E13 - Berliner Philharmoniker, Herbert van Karajan, cond., ?	M1 - CD, Deutsche Grammophon, [1986]	I1 - 65-CD454
		E14 - New York Philharmonic, Leonard Bernstein, cond., 1964.	M1 - CD, Sony Classical, [1999]	I1 - CD-8950
		E15 - NBC Symphonic Orchestra, Arturo Toscanini, cond., 1951	M1 - CD, RCA Red Seal, p.1986	I1 - CD-23,835

E16 - Nicolaus Esterházy Sinfonia ; Béla Drahos, cond., 1995	M1 - CD, Naxos, p1997	I1 - CD-17,894
E17 - Berliner Philharmoniker, Herbert van Karajan, cond., 1983	M1 - CD, Deutsche Grammophon, p1985	I1 - 65CD-27
E18 - Vienna Philharmonic Orchestra ; Wilhelm Fürtwangler, cond., 1950	M1 - Elec. Res., EMI/Alex. St., 2005/2012	I1 - b7279466
E19 - Philharmonia Orchestra ; Otto Klemperer, cond., 1955	M1 - Elec. Res., EMI/Alex. St., 2005/2012	I1 - b7279467
E20 - Concertgebouw Orchestra, Bernard Haitink, cond., 1985	M1 - CD, Philips, p1987	I1 - CD-160
		I2- CD-160 c.2
E21 - Leningrad Philharmonic Orchestra; Evgeny Mravinsky, cond., 1974	M1 - CD, Erato, p.1992	I1 - CD-6763
E22- Wiener Philharmoniker ; Carlos Kleiber, cond., 1976	M1 - CD, Deutsche Grammophon, [1995], p1975	I1 - CD-12,861
	M2 - LP, Deutsche Grammophon, p1976	I1 - 19,740
E23 - Berlin Philharmonic Orchestra ; Wilhelm Furtwangler, cond., 1943	M1 - CD, Classica d'Oro, [2001]	I1 - CD-21,931
E24- Cleveland Orchestra ; Christoph von Dohnányi, cond., 1987	M1 - CD, Telarc, p1988	I1 - CD-19,795
E25 - Philharmonia Orchestra of London, Christian Thielemann, cond., 1986	M1 - CD, Deutsche Grammophon, p1996	I1 - CD-16,080
E26 - Wiener Philharmoniker ; Wilhelm Furtwängler, cond., 1951	M1 - CD, EMI, p1988	I1 - CD-22,472
	M2 - Elec. Res., EMI/Alex. St., [2004]/	I2 - b7235026
E27 - Philharmonia Orchestra of London, Benjamin Zander, cond., 1998	M1 - CD, Telarc, p1999	I1 - CD-17,712
E28 - Warsaw Philharmonic Orchestra ; Peter Tiboris, cond., 1993	M1 - CD, Albany, [1993]	I1 - CD-17,289
E29 - Berlin State Opera Orchestra ; Richard Strauss, cond., 1928	M1 - CD, Naxos Historical, p2000	I1 - CD-21,326
E30 - London Symphony Orchestra ; Pierre Monteux, cond., ?	M1 - LP, RCA Victrola, [1964]	I1 - 24,424

E31 - London Symphony Orchestra, Colin Davis, cond. ?	M1 - LP, Philips, p1976	I1 - 9458 ST
	M2 - LP, Angel, [1974]	I1 - 6743 ST
E32 - New Philharmonia Orchestra; Leopold Stokowski, cond., ?	M1 - LP, London, p.1975	I1 - 9274 ST
E33 - Detroit Symphony Orchestra; Paul Paray, cond., ?	M1 - LP, Mercury, [1953]	I1 - 65-LP2052
E34 - Columbia Symphony Orchestra; Bruno Walter, cond., ?	M1 - LP, Columbia, [1959]	I1 - 65-LP1491
		I2 - 1198
E35 - London Symphony Orchestra ; Edouard van Remoortel, cond., ?	M1 - LP, Vox Productions, 1967	I1 - 14,919s
E36 - Dresden Philharmonic ; Herbert Kegel, cond., 1981	M1 - LP, ProArte, p1983	I1 - 20,134
E37 - Academy of Ancient Music ; Christopher Hogwood, cond., 1989	M1 - CD, Editions l'Oiseau-Lyre, p1989	I1 - CD-1650
E38 - Royal Promenade Orchestra ; Alfred Gehardt, cond., ?	M1 - CD, Quintessence, p1985	I1 - 65-CD169
E39 - Indianapolis Symphony Orchestra ; Raymond Leppard, cond., 1993	M1 - CD, Koss Classics, p1994	I1 - CD-5150
E40 - NBC Symphony Orchestra, Arturo Toscanini, 1939	M1 - LP, Olympic, [196-?]	I1 - 7546 ST
E41 - New York Philharmonic, Leonard Bernstein cond., ?	M1 - LP, Columbia, [1970]	I1 - 3850 STLP
	M1 - LP (complete set), Columbia, [1970]	I1 - A 868 STLP
E42 - Orchestre de la Suisse Romande; Ernest Ansermet, cond., ?	M1 - LP, London, ?	I1 - 1300 LP
E43 - Concertgebouw Orchestra ; Willem Mengelberg, cond., 1940	M1 - CD, Philips, [1987]	I1 - 65-CD28
		I2 - CD-16,781
E44 - Philadelphia Orchestra ; Riccardo Muti, cond., ?	M1 - CD, EMI Classics, [1997]	I1 - CD-21,478
	M2 - Elec. Res., Alex. St. Press, [1999]	I1 - b7235012
E45 - Nashville Symphony ; Kenneth Schermerhorn, cond., 1996	M1 - CD, Magnatone, p.1996	I1 - CD16,008

		E46 - English Chamber Orchestra ; Michael Tilson Thomas, cond., ?	M1 - CD, CBS Records, p1987	I1 - CD-22,157
		E47 - Marlboro Festival Orchestra; Pablo Casals, cond., 1969	M1 - CD, CBS Records, [1981], p.1975	I1 - CD-22,738
			M1 - CD, Sony Classical, [1990], p1975	I1 - CD-22, 712
		E48 - Tonhalle Orchestra Zurich ; David Zinman, cond., 1997	M1 - CD, Arte Nova, [1998], p1997	I1 - CD-24,007
		E49 - Orchestre national de Lille ; Jean-Claude Casadesus, cond., ?	M1 - Elec. Res., Alex. St., ?	I1 - b6248066
		E50 - Tafelmusik Baroque Orchestra ; Bruno Weil, cond., 2008	M1 - Analekta, p2008	I1 - CD-23,133
		E51 - Wiener Philharmoniker ; Georg Solti, cond., 1958/59	M1 - CD, Decca, [2001]	I1 - CD9867
		E52 - Royal Concertgebouw Orchestra ; Wolfgang Sawallisch, cond., ?	M1 - Elec. Res. Alex St., (EMI), [2005]	I1 - b7279494
	Sound recording, "original instruments"	E53 - Collegium Aureum, Franzjosef Maier, cond., ?	M1 - LP, Deutsche Harmonia Munda, p.1981	I1 - 17252
		E54 - Orchestra of the 18th Century ; Frans Brüggen, cond., 1988	M1 - CD, Philips, p1990	I1 - CD-17,461
	Video recording, original arrangement	E55 - Chicago Symphony Orch., Fritz Reiner cond., 1954.	M1 - VHS Tape, Video Artists Intl., 1999	I1 - VC-397 v.1
		E56- Berliner Philharmoniker, Daniel Barenboim cond., 1989	M1 - Laserdisc, Sony Classical, 1989	I1 - VD-68
		E57 - Wiener Philharmoniker, Leonard Bernstein, cond., 1978	M1 - Laserdisc, Duetsche Grammphon, p1988	I1 - VD-136
		E58 - Concertgebouw Orchestra, Carlos Kleiber, cond., 1983	M1 - Laserdisc, Philips, p.1988	I1 - VD-15
	Printed score	E59 - Score, Breitkopf and Härtel	M1 - Score, Breitkopf & Härtel, c1994	I1 - M1001 .B423 op.92, 1994
			M2 - Miniature score, c1997	I1 - M1001 .B423 no.7 1997
		E60 - Score, Bärenreiter	M1 - Score, Bärenreiter, c2000	I1 - M1001 .B423 no.7, D4, 2000

				I2 - M1001 .B423 no.7, D4, 2000, c.2
			M2 - Complete set, Bärenreiter, c1999-2001	I1 - M1001.B423 D4 1999
		E61 - Score, Dover	M1 - Min. score, Dover, 1998	I1 -M1001 .B4 op.92, L5, 1998
			M1 - Comp. score, Dover, 1989	I1 - M1001 .B423 no.5-7, 1989
		E62 - Score, Heugel	M1 - Min. score, Heugel, [1951]	I1 -M1001 .B4 op.92, H4, 1951a
		E63- Score, Cranz	M1 - Score, Cranz, n.d.	I1 - M785.11 B41s7
		E64 - Original Score, S.A. Steiner, [1816]	M1 - Microfilm of Munich Library ed., 35mm, 1977	I1 - 55-M674
		E65 - Score, Eulenberg	M1 - Min. score, Eulenberg, 19--?	I1 - M1001 .B4 op.92, U5, 1900z
			M2 - Complete set, Eulenberg, 19--?	I1 - M1001.B4 U5
		E66 - Score, Kalmus	M1 - Min. score, Kalmus, 196-?	I1 - M1001.B4 K31
				I2 - M1001.B4 K31 c.2
		E67 - Score, Marks	M1 - Score, E.B. Marks, 19--?	I1 - M785.11 B41s 19--
	E68 - Score, Henle	M1 - Critical edition, Henle, 1961	I1 - M3 .B44, Abt. 1	
	Printed parts	E69 - Original parts, S.A. Steiner, [1816]	M1 - Microfilm of Vienna Library ed., 35mm, 1977	I1 - 55-M658
			M2 - Microfilm of British Library ed., 35 mm, 1977	I1 - 55-M673
	Copyist's Manuscript	E70 - Copyist's Manuscript, ?	M1 - Microfilm of Bonn Beethovenhaus, 35mm, 1977	I1 - 55-M675
	Arrangements (sound recordings)	E71 - Wind octet arr., Netherlands Wind Ensemble, 1995	M1 - CD, Chandos, p1996	I1 - CD-17,547
		E72 - Liszt's piano arrangement, Cyprien Katsaris, piano.	M1 - LP, Teldec, p1985	I1 - 22,051
		E73 - Wind nonet arr., Octophoros, 1984	M1 - LP, Accent [1984 or 1985]	I1 - 21,969

		E74 - Wind nonet arr., Les vents de Montréal, Andree Moisan, cond., 1997	M1 - CD, ATMA, p1997	I1 - CD-8170
		E75 - Liszt's piano arr., Konstantin Scherbakov, piano, 2002/2004	M1 - CD, Naxos, p2006	I1 - CD-2194 v.23
	Arrangements (printed score)	E76 - Wind nonet arr., Compusic, 1989	M1 - Score, Compusic, 1989	I1 - M959 .B43 op.92, 1989
		E77 - Piano arrangement, Schott	M1 - Score, Schott, [1835], photocopy	I1 - M35 .B43 op.92, 1835a
	Sketches (score)	E78 - Knowles transcriptions of sketches	M1 - Microfilm, 35mm, 1984	I1 - 55-ML906
	Double bass parts	E79 - Parts, double bass and cello	M1 - Zimmerman, c1970	I1 - MT331.B44 Z5
Whole/Part: Allegretto	Sound recording	E80 - Unknown recording	M1 - Alex. St. Press/EMI, 2012/2005	I1 - b7279772
		E81 - Seattle Symphony Orchestra ; Michael Kamen, cond., ?	M1 - CD, London, p1995	I1 - 65CD1678
Whole/Part: Allegro con brio	Sound recording. Arrangement.	E82 - Arrangement for 40-hand pianos; Joan Berkhemer, cond., 1993	M1 - CD, RN Classics, p1995	I1 - CD-15,215
Whole/Part: Poco sostenuto	Sound recording. Arrangement.	E83 - Arrangement for orchestra, ?	M1 - Lp, Knapp, 1969	I1 - 27,345

of orchestral parts (in which each part carries the music for one instrument and none of the others).

As with the previous two works, the different expressions of Beethoven's Seventh Symphony have been organized by medium of expression. UNC's holdings of this work include sound recordings, video recordings, full scores, full sets of parts, the individual bass part, the copyist's manuscript, a set of early sketches, printed scores and sound recordings of various arrangements (for solo piano, as well as wind nonet), and sound recordings of individual movements, as well as recordings of arrangements of individual movements. Organizing by medium of expressions is helpful, due to the massive number of expressions of this work. However, due to the complexity of bibliographic relationships surrounding this symphony, even adding this extra layer of FRBR still presents some difficulties for the collocation of like works.

For example, one of the most famous and acclaimed performances of the work is one conducted by Daniel Barenboim in West Berlin in 1989, at a concert for guests from the collapsing country of East Germany. UNC owns two manifestations of this performance – one on CD, and one on laserdisc.

There is some controversy on how to handle this situation. Yee (2007) points out that film catalogers are more likely to view this video as a new work (as the video has a director, cameramen, editors, etc., that add new content to the piece). This seems a bit of a stretch – would Yee cite every sound recording as a new work because of the content added by sound mixers and studio technicians? But Yee also acknowledges that music catalogers would view the video as an expression of the

musical work. This seems more in line with what a library patron would be looking for; the standard user seems more likely to search for the video as the creative effort of Beethoven, rather than the film's director.

One might even consider the audio and video recording to be the same expression; after all, they are recordings of the same performance. However, the change in medium seems to certainly indicate that the two are different expressions, as indicated by section 4.3.2 of the IFLA report ("Form of expression"). The two are recordings of the same ensemble, conductor, and concert, and contain the same ideational and semantic content. However, the addition of moving images on the laserdisc makes it a new expression, and even collocation by medium provides no good way to place these two works together in a FRBR framework. A patron who, hearing the audio recording, wanted to find a video of the same performance would have to resort to other search techniques. For two manifestations of the same concert, this seems strange, and a possible failing of the FRBR guidelines as apply to music. Vellucci (2007) suggested "subexpressions" as a way to deal with this situation, but this does not seem to have caught on within the literature.

The problem is not limited to recordings. The same issues might arise from a patron who listened to the wind nonet arrangement of the Seventh Symphony, and wanted to find a score for this arrangement. Though the score and sound recording of the nonet interpretation represent the same arrangement, there is no way to collocate the two expressions. The patron would have no obvious way of noting that expressions E74 and E76, though two different mediums, are in fact different realizations of the same expression. The existence of expressions that share

commonality of interpretation despite the difference in medium seems to add an extra dimension that FRBR has no way to account for.

Finally, the existence of whole/part relationships (as evidenced by the smaller, independent movements expressed in E80, E81, E82, and E83) confuses the FRBR framework a bit as well. According to section 5.3.1.1. of the IFLA report, these movements would exist as *dependent* works in a whole/part relationship with the entire Seventh Symphony. Vellucci (2007) confirms that movements of a larger work that are not supposed to exist independently of the work should be considered dependent works. The issue arises from how to collocate these new “works” with the progenitor work from which they came. Mapping some kind of work-to-work whole-part relationship seems to be the best way to accomplish this.

1.4. Richard Strauss’ *Salome*

The last work examined from the classical canon was the 1905 opera *Salome*, by the German composer Richard Strauss. Examining this opera adds additional complications to FRBR, in the form of vocal scores and libretto. The libretto for this work was actually written by Oscar Wilde, and translated into German by Hedwig Lachmann. These expressions and manifestations were found in the UNC catalog by conducting a search on “Salome” in the title field, and “Strauss, Richard” in the author field; the results are in Table 1.4.

The FRBR-ization of UNC’s holdings of *Salome* yielded forty-six different expressions, fifty-two separate manifestations, and fifty-six separate items. Expressions are once again organized by medium, which helps clean up the otherwise daunting list of expressions and place them easily into “video,” “sound

Table 1.4

Work	Medium of Exp.	Expression	Manifestation	Item
Salome	Video	E1 - Orchestra of the Royal Opera House ; Philippe Jordan, cond., 2008	M1 - DVD, Opus Arte, c2008	I1 - DVD-464 I2 - b7324477
		E2 - Orchestra of the Royal Opera House, Covent Garden; Christoph von Dohnányi, cond., 1997	M1 - Elec. Res.; ArtHouseMusik, 2003 M2 - DVD, Decca, c1997	I1 - b6752496 I1 - DVD-175
		E3 - Orchestra of the Royal Opera House ; Edward Downes, cond., 1992	M1 - DVD, Kultur, [2001], c1992	I1 - DVD-173
		E4 - Libretto w/IPA translations, Marcie Stapp, ed., Nico Castel, trans.	M1 - Leyerle, c2002	I1 - ML49.S76 C37 2002
	Libretto	E5 - Libretto w/English trans.,	M1 - Calder, 1988	I1 - ML50.S918 S32 1988
		E6 - Libretto w/English and French trans.	M1 - Press of U. of Montreal, 1985	I1 - ML50.S918 S32 1985 I2 - ML50.S918 S32 1985 c.2
		E7 - Libretto - English trans., Charles Polachek	M1 - G. Schirmer, [1964]	I1 - ML50.S918 S32 1964
		E8 – Libretto - English and German.	M1 - Boosey & Hawkes, c1943	I1 - ML50.S918 S32 1943
		E9 – Libretto - Spanish.	M1 - Librería General de V. Suárez, 1910.	I1 - ML48 .T442 v. 20, no. 7
		E10 - Libretto - German	M1 - Fürstner, c1905	I1 - 822 W67sXL I2 - 822 W67sXL c.2
		E11 - Orchester der Deutschen Oper Berlin ; Giuseppe Sinopoli, cond., 1990	M1 - CD, Deutsche Grammophon, p1991	I1 - CD-6824
	Sound recording	E12 - Vienna Phikharmonic Orchestra; Herbert von Karajan, cond., 1977	M1 - LP, Angel, p1978	I1 - 12,112a
		E13 - London Symphony Orchestra; Erich Leinsdorf, cond., ?	M1 - LP, RCA Victor Red Seal, [1969]	I1 - A 2050 ST

			E14 - Vienna Philharmonic Orchestra; Georg Solti, cond., ?	M1 - LP, London, [1962]	I1 - 65-LP1406
					I2 - A518
		Full Score	E15 - Vienna Symphony Orchestra ; Rudolf Moralt, cond., ?	M1 - LP, Columbia, [195-?]	I1 - A 487 LP
			E16 - Fürstner edition, 1905	M1 - Reprint, Dover, 1981	I1 - M1500.S88 S3 1981
			E17 - Boosey & Hawkes edition	M1 - Boosey and Hawkes, [c1943]	I1 - M1500.S88 S3 1943
		Vocal score	E18 - arr. by Otto Singer	M1 - Boosey and Hawkes, c1954	I1 - M782 S9115saxL
				M2 - Boosey and Hawkes, 1943	I1 - M782 S9115saxL 1943
			E19 - arr. by ?	M1 - Kalmus, 197-?	I1 - M1503.S916 S3 1970z
		Selections: Salome's Tanz	E20 - Orchestre de l'Opéra de Lyon ; Kent Nagano, cond.	M1 - CD, Virgin Classics, [2004], p1989	I1 - CD-12,772
			E21 - Staatskapelle Dresden ; Rudolf Kempe, cond., 1970	M1 - Elec. Res., Alex St./EMI, p2002	I1 - b7235370
				M2 - Elec. Res., Alex St/Emi, p2001	I1 - b7235388
			E22 - Chicago Symphony Orchestra ; Fritz Reiner, cond., [ca. 1954-56]	M1 - CD, RCA Victor, [1997], p1986	I1 - CD-15,903
			E23 - Berliner Philharmoniker ; Herbert von Karajan, cond., ?	M1 - CD, Deutsche Grammophon, [1996?]	I1 - CD-23,818
				M2 - LP, Deutsche Grammophon, 1975	I1 - A1559 ST
				M3 - LP, Deutsche Grammophon, p1973	I1 - 7293 ST
			E24 - Minnesota Orchestra; Eije Oue, cond., 1996	M1 - CD, Reference Recordings, p1996	I1 - CD-15,158
			E25 - Cincinnati Symphony Orchestra ; Jesús López-Cobos, cond., 1994	M1 - CD, Telarc, p1995	I1 - CD-22,010

		E26 - Stadium Symphony Orchestra of New York, Leopold Stokowski, cond., ?	M1 - CD, Everest, p1994	I1 - CD4561
		E27 - Wiener Philharmoniker ; André Previn, cond., 1992	M1 - CD, Deutsche Grammophon, p1993	I1 - CD-19,864
		E28 - Staatskapelle Dresden ; Rudolf Kempe, cond., 1970	M1 - CD, EMI Classics, p1992	I1 - CD-2395
			M2 - LP, EMI, p1975	I1 - A1670 ST
		E29 - Seattle Symphony Orchestra; Gerard Schwarz, cond., 1987	M1 - CD, Delos, p1987	I1 - CD-581
		E30 - Berlin Philharmonic Orchestra, Richard Strauss, cond., [ca. 1913-1933]	M1 - LP, Deutsche Grammophon, p1982	I1 - 18,249a
		E31 - Dresden State Orchestra; Rudolf Kempe, cond., ?	M1 - LP, Seraphim, [1978], p1974	I1 - 11,799s
		E32 - Minneapolis Symphony Orchestra, Paul Paray, cond., ?	M1 - LP, Mercury, 197-?	I1 - 6504 ST
		E33 - Cincinnati Symphony Orchestra ; Thomas Schippers, cond, 1976	M1 - Elec. Res., Alex. St./ArkivCD, p200-?	I1 - b6012026
	Salomes Tanz, piano arr., sound rec.	E34 - Richard Strauss, piano, [ca. 1905-1914]	M1 - LP, Intercord, p1985	I1 - 23,502
	Salomes Tanz, band arr., sound rec.	E35 - United States Air Force Tactical Air Command Band.	M1 - CD, Mark, 198-?	I1 - CD-24, 064
	Salome's Dance, trumpet part	E36 - Trumpet part, Hickman, 2005	M1 - Score anthology, Hickman, [2005]	I1 - MT446 .E85 2005
	Salome's Tanz, score	E37 - For orchestra	M1 - Boosey and Hawkes, c1943	I1 - M785.1 S912s
Selections: Ah! Du wollest mich!	Ah! Du wollest mich!, sound recording	E38 - Symphony Orchestra of the Bavarian Radio ; Sir Richard Armstrong, cond., 2003	M1 - Elec. Res., Alex. St./EMI, p2004	I1 - b7235309
		E39 - Israel Philharmonic Orchestra ; Zubin Mehta, cond., 1997	M1 - CD, Sony Classical, p1998	I1 - CD-18,027
		E40 - Chicago Symphony Orchestra ; Fritz Reiner, cond., 1954-56	M1 - CD, RCA Victor, [1997], p1986	I1 - CD-15,903
		E41 - Leontyne Prince, Boston Symphony Orchestra; Fausto Cleva, cond., [ca. 1965-1973]	M1 - CD, RCA Victor, [1990]	I1 - CD-4270
		E42 - Eva Marton, soprano ; Toronto Symphony ; Andrew Davis, cond., 1981	M1 - CD, CBS, p1989	I1 - CD-16,169

		E43 - Anja Silja, soprano; Vienna Philharmonic Orchestra; Christoph von Dohnányi, cond., 1976	M1 - LP, Decca, p1974	I1 - 7369 ST
		E44 - Ljuba Welitsch, soprano; Orchestra of the Metropolitan Opera Association; Fritz Reiner and Max Rudolf, cond.	M1 - LP, Odyssey, [1968]	I1 - 11,111s
Selections: Jochanaan	Selections - Jochanaan, ich bin verliebt.	E45 - ?	M1 - LP, Opus Musicum, c1981	I1 - 19.495
Selections	Selections - Salomes Tanz and other songs	E46 - Orchestre national de France; Leonard Bernstein, cond., ?	M1 - LP, Deutsche Grammophon, p1978	I1 - 12,306s

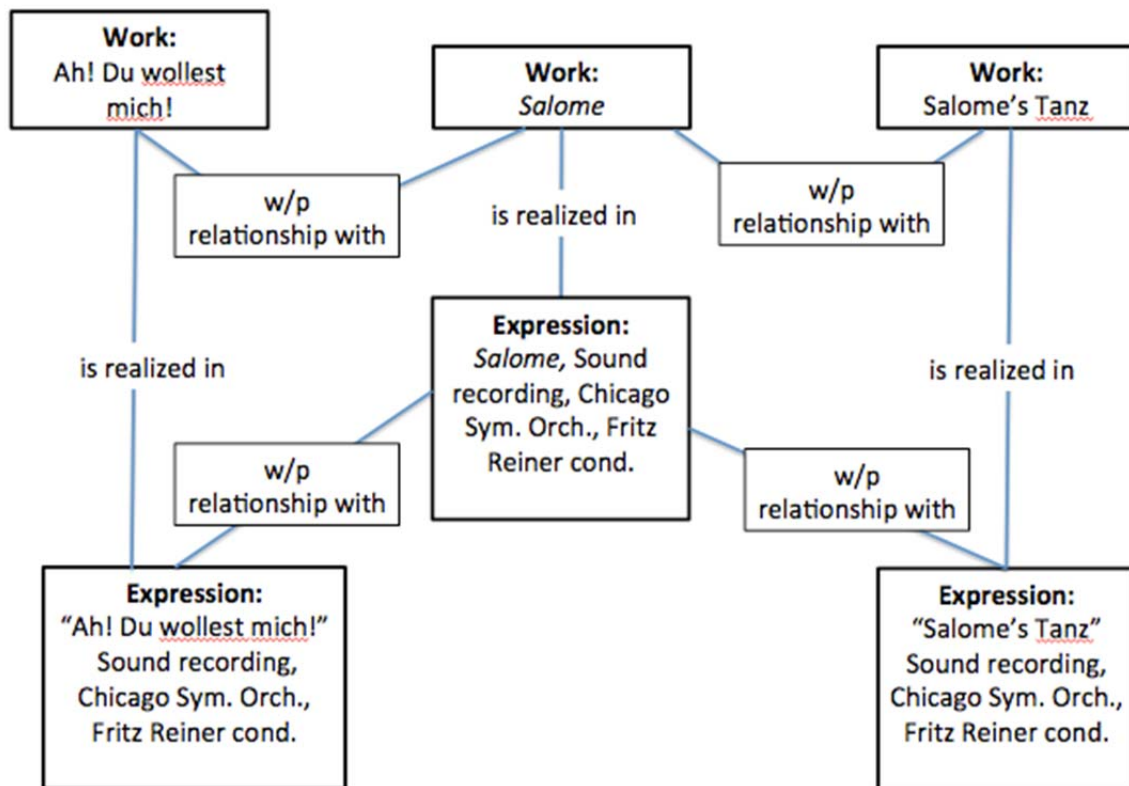
recording” and “score” categories, among others. Searching on “Salome” and “Strauss” also yields five separate *works* – the entire opera, as well as four sections of the opera that exist as independent arias. As Vellucci (2007) points out, operatic arias are able to exist as a complete unit outside of the context of the opera, and therefore should be considered independent works, in a “work-to-work” whole/part relationship with the progenitor work (in this case, the entire opera of *Salome*). As shown above with Beethoven’s Seventh Symphony, a method would have to be found to map these whole/part work-to-work relationships so the patron searching for *Salome* would not only find Strauss’ complete opera, but also each of its pieces that exist as independent works.

The addition of text in this musical work also adds the mediums of expression of “libretto” and “vocal score,” both of which are new to the samples examined so far. (A libretto consists of only the text of the opera; a vocal score consists of the vocal lines, as well as a piano (as opposed to full orchestral) accompaniment). This yields additional confusion when it comes to the FRBR-ization of the work, not the least because three “creators” are involved in different stages of the opera. The initial text was written in English by Oscar Wilde; it was translated into German by Hedwig Lachmann, and set to music by Richard Strauss. Oscar Wilde would thus be considered the “librettist,” with Hedwig Lachmann only contributing to the expression level of translation. Yet Strauss’ opera is based on Lachmann’s translation, not Wilde’s original. Should Oscar Wilde’s *Salome*, originally constructed as a play, be considered the same work at all? The text remains largely the same, but the musical setting seems to be enough of an addition of content to

merit a new work. The FRBR report names librettos and musical settings as *complementary works* (Section 5.3.1), indicating that libretti should be considered a separate work entirely.

Additionally, there are issues of translation. While Lachmann translated Wilde's play for use in Strauss' opera, others have translated Lachmann's work back into English (see Charles Polachek's translation, classified as E7). Translations of operas, in particular, often strive to keep the same number of syllables per line in order to preserve the musical renditions of the texts. Polachek's translation of Lachmann's translation is a translation-of-a-translation, or an expression-of-a-expression. This represents the various hierarchical levels nestled within FRBR that may go deeper than the basic four levels, and necessitates a more complex system of mapping said relationships.

Finally, the whole/part works on the above Table 1.4 yield some interesting relationships. The performance of "Salome's Tanz" (E22) and the performance of the aria "Ah! Du wollest mich!" (E40) both come from the same performance of the complete *Salome*, conducted by Fritz Reiner and performed by the Chicago Symphony Orchestra. However, UNC Libraries does not own the expression of this complete work. Expressions E22 and E40 are both expressions of separate works, which in turn stem from the same expression of the same progenitor work, like so:



As seen above, there are actually two levels of whole-part relationships present in UNC's holdings. The whole opera *Salome* exists in whole-part work-to-work relationships with the smaller sections of "Salome's Tanz" and "Ah! Du wollest mich!" Meanwhile, the expression of *Salome* performed by Fritz Reiner and the Chicago Symphony orchestra also exists in a whole-part expression-to-expression relationship with the expressions of "Salome's Tanz" and "Ah! Du wollest mich!" that come from that performance. Each expression also exists in a work-to-expression realization with its work progenitor. The multiple hierarchies and parts involved demonstrate the complexity of the FRBR framework in a work with independent parts.

Discussion

In conclusion, we can see that FRBR guidelines are largely suited for canonical classical music. The four levels of the system are very useful for many pieces, and help differentiate not only content and carrier, but also between scores, videos, and sound recordings. FRBR's method of organization also brings a level of order to the large number of expressions and manifestations that musical works often yield.

However, there are also a few problems with FRBR and classical music that seem to grow with the amount of holdings a library has of a specific work. The "medium of expression" problem is the most obvious. There should be some way to group expressions by medium (score, sound recording, etc.). Because famous musical works may have dozens, or even hundreds of expressions in a local catalog, this further organization seems necessary.

The problem of arrangements yields another layer of complexity that goes beyond the four tiers of WEMI. There may be multiple arrangements of a musical work, and there may be multiple sound recordings of each arrangement. Yet FRBR offers no way to connect the specific performance to the arrangement; all expressions exist on an equal level. The FRBR report, and others (Vellucci 2007) have emphasized that the WEMI roles are deeper than the initial four tiers, and further levels can be employed if necessary, but there is little literature on how this might happen. Extending WEMI beyond the standard four-tiered structure may be necessary in the case of musical works.

Most of the problems with musical works and WEMI stem from the fact that musical expressions exist in at least three overlapping dimensions – the medium of expression (score, sound recording, or video), the mode of expression (arranged or original orchestration), and the particular expression itself (including date of expression, performer of expression etc.). Theoretically, one performance could be expressed in multiple media (such as a sound recording and a video) or one arrangement could be expressed in multiple performances (a piano arrangement performed by several different ensembles). The WEMI hierarchies are unclear in these cases. Vellucci (2007) points out that:

It can be problematic if the FRBR Group 1 entities are interpreted literally as representing a single tier for each entity type because the model does not restrict the structure in that respect. A better way to view the model is as having four primary entity levels, with some entity levels capable of having subentities. This allows for a much richer structure that better accommodates the musical bibliographic universe and still remains with the boundaries of the original model.

But the problem remains of how to map the subentities. Should musical expressions be grouped by medium (which would separate expressions of the same performance) or specific arrangement (which would separate like mediums)?

Finally, the fact that music yields large numbers of independent and dependent parts means that there are additional complications to consider. Many operas can be broken down by aria, and nearly all multi-movement works can be performed by isolating a single movement. While FRBR indirectly addresses these relationships, a more concrete method of mapping this may be necessary.

2. Non Classical Music in the FRBR framework

Various works from outside the standard canon of Western classical music were chosen to be “FRBR-ized.” These works were chosen specifically for their complexity under the FRBR framework. The process is similar to the FRBR-ization of the classical pieces; however, at a certain point, standard MARC catalog records did not describe all the inherent relationships in many of the chosen works. Therefore, while some works were examined again using their holdings in the UNC-Chapel Hill catalog, other works were FRBR-ized utilizing outside research that is discussed below.

2.1. “My Favorite Things” –Rogers & Hammerstein and John Coltrane

“My Favorite Things” is the classic song from the 1959 musical *The Sound of Music* composed by Richard Rodgers and Oscar Hammerstein II. The musical was later adapted into a film. Further complicating matters, the saxophonist John Coltrane released a jazz instrumental version of the piece on his 1961 album of the same name; this piece would later be performed live by Coltrane and recorded in several contexts.

The issue of Coltrane’s jazz improvisation brings up the classic debate about whether the performer can be considered a “creator,” and whether the piece in question should represent a new work. Coltrane’s *My Favorite Things* still lists Rodgers and Hammerstein as the composers and still employs the same basic chords and melodies. However, Coltrane’s version also features extended solos not present in the original, and there is inarguably substantial addition of content.

Table 2.1 showcases UNC-Chapel Hill's holdings of all musical items that appear in a title search on "My Favorite Things." Rather than adhering strictly to FRBR, extra layers to the hierarchy were added in order to sort expressions in a logical manner. The table is organized first by medium and "creator of expression" – did Rodgers & Hammerstein create this expression of the work, or did John Coltrane? These are further sorted by arrangement – was this version arranged for different instrumentation? Finally, these are sorted by actual expression, using the date of the performance and the names of the performers.

The biggest issue presented by the Table 2.1 is that all expressions are classified under the one large "work" of Rodgers and Hammerstein's "My Favorite Things." However, it is not clear if this should be the case; in addition to the Rodgers and Hammerstein version of the song, there are also jazz improvisations by both John and Alice Coltrane. In the case of John Coltrane, there is a recorded version of his "My Favorite Things" as well as live versions recorded at different venues, many of which feature substantial changes in content.

Schmidt (2012) writes that "realization of a musical work through performance is unambiguously included as a type of expression when it involves music in the Western canon. There is room for interpretation, however, as to whether an improvisation in jazz or rock constitutes an expression, or a new work with each performance." Such is the case here, and FRBR is perhaps purposely ambiguous; Chapter 3.2.1 lists musical arrangements as expressions of works, but variations as new works. But jazz music is not mentioned in the document at all, and

Table 2.1

Work	Creator of expression	Arrang. of Expression	Expression	Manifestation	Item
My Favorite Things, Rogers & Hammerstein	Sound recording - Rogers/Hammerstein version	Original cast arr.	Original cast - Mary Martin ; Theodore Bike	CD, Sony Broadway, [1993]	CD-21,182
				CD, Sony Classical, p1993	CD-20,711
				CD, Columbia, [198-?]	CD-7347
				LP, Columbia, [1973]	6471 ST
		Original film cast arr.	Original soundtrack - Andrews and Plummer	Cincinnati Pops Orchestra ; Erich Kunzel, cond	CD, Telarc, p1988
					CD-17,657
					CD, RCA Victor, p1995
					CD-7567
	Sound recording - John Coltrane version	Three sopranos/orchestra	Hollywood Festival Orchestra ; Marco Armiliato cond	CD, Atlantic, p1996	CD-3072
		Big band arr.	Kenny Clarke-Francy Boland Big Band	LP, MPS Records, [1972]	FC-19062 Items1
		John Coltrane - saxophone	10/21/1960 (studio)	CD, Atlantic, [1988], p1961	CD-1349
					CD-1349 c.2
					65-CD1082
				LP, Atlantic, [1961]	Record CX C72m
					7686 ST
					FC-18304
			5/28/1966 (live at Vanguard)	LP, Impulse, [1966]	Record CX C72c4
					FC-21697
				CD, Impulse, p1997	CD-13,406
			7/2/1965 (live at Newport)	CD, Impulse, p2000	CD-5465
			7/7/1963 (live at Newport)	LP, Impulse, p1978	13,374a
		McCoy Tyner - piano	11/11/1972 (studio)	LP, Milestone, p1974	8196 ST
		Stephen Hough, piano	Recorded in Theresa Kaufman Concert Hall	CD, Musicmasters, 1988	CD-1004
				CD, Virgin Classics, p1998	CD-20,928

	Sound recording - Alice Coltrane version	Alice Coltrane and Frank Lowe	?	LP, Impulse, [1972?]	FC-21661
	Score - Rogers and Hammerstein version	Piano arrangement	Stephen Hough, arr.	London, c1998	M34.R63 H6 1998
			Philip Keverin, arr.	Hal Leonard, [2002?]	M33.5.R63 K4 2002
		Jazz soloist	Mark Alan Taylor, arr.	Hal Leonard, c2010	MT68 .J39 2002 v.115
				Hal Leonard, [2002]	MT68 .J39 2002 v.15
		Piano, vocal, guitar	Arranger?	Hal Leonard, c2003	M1507.R7 R5 2003
			(same arranger?)	Hal Leonard, c2002	M1507.R7 W48 2002
			(same arranger?)	Hal Leonard, c1990	M1507.R7 R5 1990
			(Different arranger)	Chappell, 1973	M1507 .B47
		Piano, vocal	Arranged by Richard Walters, low voice	Hal Leonard, 2002	M1507.R7 W3 2002, low
			Arranged by Richard Walters, high voice	Hal Leonard, 2002	M1507.R7 W3 2002, high
			Trude Rittman, arr.	Williamson, c1995	M1503.R684 S55 1995
			Didier Deutsch, ed.	Hal Leonard, 1998	M1507.R7 U5 1998
			Albert Sirmay, ed.	Williamson, [1960]	M1503.R684 S55 1960
					M1503.R684 S55 1960 c.2
		Jazz lead sheet	Jamey Aebersold ed.	Jamey Aebersold, c1981	MT68 .J37 v. 25
	Score – John Coltrane version	Arranged for solo sax	Arranged by ?	[2009], Hal Leonard	MT505.C65 B4 2009
		Transcription - tenor sax	(Transcribed by Ronny Schiff)	[2000?], Hal Leonard	M106.C65 C65 2000
			(Transcribed by Carl Coan)	c1995, Hal Leonard	M106.C65 C6 1995
					FC784.7 C72j

it is unclear if a jazz performance such as Coltrane's represents an arrangement (and therefore expression) or a variation (and therefore a new work).

Coltrane's version of "My Favorite Things" could be considered both. The piece begins with the melody and chord structures of Rodgers and Hammerstein's work, perhaps indicating the performance is an arrangement. However, his performance soon goes into variations far beyond anything written by Rodgers and Hammerstein, indicating a new work.

However, if Coltrane's 1961 album recording of "My Favorite Things" is considered a new work, what does this mean for his live performances of the same piece? Table 2.1 features three live performances by Coltrane of this work; though each one of these is clearly related to Coltrane's studio recording, each one also contains substantially different material. If we are to consider Coltrane's performance of "My Favorite Things" a separate work from the Rodgers and Hammerstein version, does this make every live improvisation Coltrane performed a new work? The question then becomes not if Coltrane provided significant creative content in the performance of the work, but whether he provided enough significant creative content in *each performance* (through improvisation and extended solos) to merit calling it a new work. Either way, the fact that each of Coltrane's performances contains altered content and new materials presents a problem for FRBR, whether it be a large number of arranged expressions, or a large number of individual works, each with the name "My Favorite Things."

To further complicate matters, John Coltrane's multiple performances of "My Favorite Things" have yielded further derivative relationships. At least two pianists

recorded piano arrangements of Coltrane's version of the song; there have also been scores published of direct transcriptions of Coltrane's album performance. Theoretically, one could record a performance based on the notated transcription of Coltrane's version of Rodgers and Hammerstein's piece – four derivative relationships in one! When things become this complicated, the strict hierarchy of FRBR starts to break down; one is reminded of Smiraglia's idea of "mutation" (2001) – the process in which works slowly morph into different works over time. "My Favorite Things" provides an excellent example, and also backs up Smiraglia's point that it is difficult to draw a boundary in which a "new work" is birthed from the old.

Is Coltrane's "My Favorite Things" a new work under the FRBR model? That would perhaps depend on the community in question; one writing a history on the arrangement of Broadway tunes might say "no," while a jazz scholar investigating live improvisations might willingly call each Coltrane performance a new work. One is reminded of Davies' distinction between "thick" and "thin" works. All the previous classical works examined in Section 1 were "thick" works that could not deviate from a specific notated arrangement. If one considers "My Favorite Things" to be a similarly "thick" work, then Coltrane's performance could be seen as a new work, as his jazz arrangements and new solos deviate substantially from Rodgers and Hammerstein's original arrangement. However, if one considers the song to be a "thin" work, more decisions are open to the performer, and each of Coltrane's performances would be of the same work; though substantially different, the "thin" chord structure and melody still remain.

Even removing Coltrane from the equation, Table 2.1 presents all the other problems with music examined earlier. There are a large number of expressions stemming from different arrangements and transcriptions of the piece, and there are also multiple expressions of the same performance (the original soundtrack recording, and the film itself, for example). But the addition of Coltrane, the nature of jazz improvisation, and the question of the performer as a central “creator” of the work are what truly complicate the FRBR-ization of jazz recordings.

2.2. Dark Side of the Moon

Though not as improvisatory as jazz pieces, rock songs feature a substantial performance element, and also complicate standard FRBR hierarchies. However, rock also differs from jazz in that many consider it primarily to be a “playback” based artform, rather than a “performance” based one (Gracyk 1996). Though performance is clearly a substantial element of the rock genre, by the late 1960s and early 1970s, studio experimentation and new recording technologies had yielded a kind of music that was primarily made to be listened to on a recording, rather than in a concert setting.

The progressive rock band Pink Floyd’s famous album *The Dark Side of the Moon* fits into this category. Though *Dark Side* can and has been performed in concert, the 1973 studio album release is considered the “authentic” version of the work. The album not only features the standard rock set up of guitar, bass, drums and keyboard, but also elements that are difficult to replicate in performance, such as *musique concrète* sound effects (ticking clocks, ringing cash registers, helicopter sounds) and snippets of pre-recorded interviews with studio technicians (the album

begins with a recorded voice announcing, “I’ve always been mad” over the din of sound effects, before seguing into the actual music). Because of the large number of added sounds and studio effects that cannot be properly replicated, *Dark Side* seems to fit Gracyk’s (1996) notion of rock music as primarily a recording-based “playback” work. As stated previously, Gracyk believes that if the master tapes of the *Dark Side* studio album were lost, the entire “work” would be lost; live performances and notated scores of the work are at best indirect expressions of the work that fail to encapsulate the piece in its entirety.

Pink Floyd did perform the album many times live, including the 1974 performance at Wembley noted below on Table 2.2. According to FRBR guidelines, these live performances would be considered expressions of the *work* of *Dark Side of the Moon* on par with the studio album. However, this does not truly express how most rock fans experience this music. For Pink Floyd fans (and arguably fans of album-based rock in general), the studio album represents a kind of *urtext* that does not exist for classical music. Beethoven’s Seventh Symphony does not have a single exemplar of the work; it exists in a multiplicity of scores, recordings, and performances. *Dark Side of the Moon*, on the other hand, does exist in such an exemplar – the master tapes chosen by the band to represent this work. FRBR seems to assume a musical “work” is primarily for performance, and therefore lacking such an exemplar, but musical works primarily for playback challenge the idea of a “work” as something necessarily abstract.

These master tapes have been remixed and remastered over the years; a remastered LP was released in 1979, and a superaudio SACD format was released in

Table 2.2

Work	Performer of Exp.	Expression	Manifestation
<i>Dark Side of the Moon</i>	Pink Floyd	<i>Dark Side of the Moon</i> , studio album	CD, Capitol, 1984
			LP, Capitol, 1973
			LP, Capitol, 1979 (remastered)
			SACD, Capitol 2003
	Flaming Lips	<i>The Flaming Lips...Doing The Dark Side of the Moon</i> , studio album	CD, Capitol, <i>Dark Side of the Moon</i> immersion box set, 2009
			CD, Warner Bros., 2009
			LP (green), Warner Bros., 2009
			LP (clear), Warner Bros., 2009
	Easy Star All-Stars	<i>Dub Side of the Moon</i> studio album	CD, Easy Star Records, 2003
			LP, Easy Star Records, 2003
		<i>Dub Side</i> live performance	DVD, Easy Star Records, 2006
		<i>Dubber Side of the Moon</i> , remix album	CD, Easy Star Records, 2010
	Billy Sherwood	<i>Return to the Dark Side of the Moon</i> studio album	CD, Purple Pyramid, 2006

2003. These could perhaps be considered “expressions” of the original work, as they represent the same content, with only sound mixing tweaked. However, just like with Coltrane, there is a real question as to whether or not live performances would represent the same work, or different works altogether. Though Pink Floyd’s live performances do not contain the substantial improvisations of John Coltrane, neither do they completely duplicate the studio recording.

Even if Pink Floyd’s live performances are considered different expressions of the same work, what about those versions of *Dark Side* that stem from performers apart from Pink Floyd? The “cover song” has a long history in popular music, especially with an album as famous as *Dark Side*. The neo-psychedelic rock band the Flaming Lips released a cover of the complete album in 2009. Billy Sherwood organized a “tribute” to the album by released a collection of cover songs in 2006. Finally, the Easy All-Stars released a Jamaican-influenced version of the album entitled *Dub Side of the Moon*, which was later released under a different mix as *Dubber Side of the Moon*.

According to the FRBR model, Pink Floyd would be the composer of *Dark Side*, and therefore the creator of the work. However, Pink Floyd, the Flaming Lips, Billy Sherwood, and the Easy All-Stars would all be performers of expressions of *Dark Side*. This doesn’t seem to make sense for the rock community, which primarily identifies the performer as the “main” creator over the composer, that each of these expressions would be on the same level. Rather, it seems more likely that Pink Floyd’s original studio album would be recognized as the “authentic” expression, followed by live performances by Pink Floyd, with performances by other artists

existing as expressions slightly lower on the hierarchy. *Dubber Side of the Moon*, a remix, would perhaps exist as a sub-sub-expression, as it stems from *Dub Side of the Moon*, itself a subexpression of the original 1973 release of *Dark Side of the Moon*.

There are two main takeaways from the *Dark Side of the Moon* example. One is that the existence of master tapes, and an identifiable “authentic” urtext of a sound recording, challenges the FRBR notion that an entity on the “work” level must necessary be abstract. The creation of the “work” of *Dark Side of the Moon* was intrinsically tied not just to the ideational content of the music, but the specific semantic content of the sound recording, including the sound effects and studio mixing. All other expressions are not an attempt to realize the ideational content of *Dark Side of the Moon*, but also to realize the semantic content recorded on the original release.

The second takeaway is that not all communities necessarily give precedence to composer over performer. The rock music community, especially, primarily identifies the performer as the creator (Elvis Presley, for example, is regularly identified as the “creator” of songs he did not write). Perhaps it is incorrect to classify the covers of *Dark Side* as expressions, and instead classify them as new works, despite the fact they stem from the same composer. In this case, perhaps the presence of a new *performer* would be enough to classify a piece as a new work.

2.3. Miles Davis’ “*Bitches Brew*”

Miles Davis’ avant-garde jazz album *Bitches Brew* represents similar problems in FRBR to “My Favorite Things” and *Dark Side of the Moon*. Like “My Favorite Things,” *Bitches Brew* is a jazz performance made up of improvisatory solos.

It was later performed live, with the solos often featuring substantially different content. Like *Dark Side of the Moon*, there is a master recording of *Bitches Brew*, and many of its sounds are dependent on the studio effects that were added by the sound editor Teo Macero after the instrumental recording. Using Davies' terminology, *Bitches Brew* is both a "thick work" (in that it is intrinsically associated with very specific studio effects) and a "thin work" (in that it can be represented in live performance with substantial alterations of content, and still be recognizable as the same work).

Table 2.3 shows an attempt at the FRBR-ization of *Bitches Brew*. One of the striking aspects about this work is the original sound mix created by Macero, which involved extensive post-production effects; the first song on the album, "Pharoah's Dance," alone features eighteen separate takes edited together, and many effects such as echo, reverberation, and tape delay are applied to the music (Freeman 2005; Tingen 2001). A very real case could be made for Macero as a type of creator here; while Davis and the other musicians "composed" the music (though largely improvised) and performed it, it was Macero who spliced together the multiple takes in order to create the avant-garde electronic jazz of *Bitches Brew*, and his name is intrinsically tied to any discussion of the album. Like *Dark Side*, *Bitches Brew* represents an electronically-produced work that is available primarily in playback form; later live performances could not match the studio effects that Macero added to the mix.

Table 2.3

Work	Expression	Subexpression (?)	Manifestation
<i>Bitches Brew</i>	E1 - Original Release	E1a - Original master	M1 - LP, 1970
			M2 - LP, [1987]
			M3 - CD, 1999
		E1b - Remixed release	1998 - Mark Wilder
		E1c - Transcription	M1 - <i>Originals</i> , Hal Leonard, [2002?] (note-for-note transcription)
	E2 - Live performances	E2a - 3/7/1970, Fillmore East	M1 - CD, <i>Live at the Fillmore East</i> , Columbia, 2001
		E2b - 1969/1970, Newport and Isle of Wight	M1 - CD, Sony/Legacy, 2011, <i>Bitches Brew Live</i>
	E3 - Alternate takes	E3a - Studio recordings, 1970	<i>Bitches Brew 40th Anniversary Collector's Edition</i>
	E4 - Lead sheet		M1 - <i>Miles Davis Real Lead Book</i> , Hal Leonard, [2003?]

Bitches Brew was remixed by Mark Wilder and Bob Belden in 1998, and subsequently rereleased. However, Wilder and Belden did not have access to the original mixing equipment (Tingen 2001), and thus the new mix is different in several respects. Most Miles Davis aficionados were incensed at these major changes applied to the work (an audiophile providing an online review refers to the work as “Butchered Brew”¹).

Aesthetic judgments aside, it seems clear that the remix represents a substantial change to listeners in the jazz music community. It raises the question as to whether or not a remix should be considered an expression of the same work, or a separate work. The rise of headphone culture has seen a large number of remixes of classic works, with sound levels changed in order to suit headphones over large speakers. *Bitches Brew* is obviously one of the more substantial changes, but other remixes have also received considerable attention. Other aspects of the recording process, such as recording in monophonic or stereophonic sound, also call attention to the large number of changes that can occur even to a “master” recording; the music is not necessarily set in stone, and mutations can arise.

The above Table 2.3 is an attempt to FRBR-ize *Bitches Brew*. The original master, the remix, and a note-for-note transcription of the album are considered “subexpressions” of the “expression” of the album release of *Bitches Brew*. Each live performance is considered a “subexpression” of the “expression” of live performance. The alternate takes of the studio session, which were not used on the album or its remix in any capacity, are considered a separate expression, as is a lead

¹ <http://forums.stevemhoffman.tv/threads/miles-davis-bitches-brew.147601/>

sheet that provides chords and structure for jazz performers who are going to improvise based on the work.

The above table assumes that each of these expressions and subexpressions are all part of the same work. This makes sense, for the most part, as a jazz fan would probably consider each of these pieces *Bitches Brew*, even while acknowledging the differences between them. However, if one wanted to account for the specific FRBR guidelines, the studio album of *Bitches Brew* would be considered one work, and each live performance would be considered a separate work. FRBR provides no stipulations for post-production editing of sound recordings; again, it seems to assume that every musical work is primarily for *performance*, and does not account for pieces like *Dark Side of the Moon* or *Bitches Brew* that are primarily for *playback*.

2.4. “Come Out” by Steve Reich

“Come Out” is a 1967 avant-garde electronic piece by the famed composer Steve Reich. It takes many of the problems inherent in *Dark Side of the Moon* and *Bitches Brew* and raises them to another level. While *Dark Side* and *Bitches Brew* consisted primarily of instrumental performances that were later manipulated using studio recording technology, “Come Out” consists almost completely of studio manipulation.

The piece consists of a simple phrase spoken by a street preacher, “Come out to show them,” taken, repeated, and then looped upon itself. Reich first starts repeating the taped phrase again and again, and then gradually sets up shifting sounds in which two versions of the quote fall in and out of sync with each other,

exposing the sonic qualities inherent in the recording. The original semantic content in the piece is only a few seconds long, but Reich extends it over ten minutes by manipulating this sliver of a recording in a variety of different ways.

The following Table 2.4 is an attempt to FRBR-ize “Come Out.” However, implementing the FRBR model with this work is problematic in a number of different ways.

Table 2.4			
Work	Expression	Manifestation	Item
Come Out - Steve Reich	Electronic recording	LP, Odyssey, [1967]	11,427s
		CD, Elektra/Nonesuch, p1987	CD-347
		CD, Nonesuch, p1997	CD-12,321
		CD, Nonesuch, p2006	CD-14,950
Come Out - Camper van Beethoven	Studio recording	CD, Vanguard, 2004	X

The biggest issue is that it is unclear if an expression can exist at all for “Come Out.” All “authentic” performances of the piece would seem to be tied to the original master tape. The composition itself comes from the studio post-processing applied by Reich to a found sound; there is absolutely no performance element at all to the work. While *Dark Side* and *Bitches Brew* consisted of studio performances that were later manipulated – performances that *could* be repeated live in concert – “Come Out” is intrinsically tied to Reich’s edit of the recording. The ideational content and the semantic content here are one and the same; there is no way to separate Reich’s idea for the work from the actual sounds that he manipulated. To take another sound and apply the same effects would create a different work; so

would taking the same recording and applying different studio effects. “Come Out” would appear to be a “thick” work in the most specific sense, and seems immune to the kinds of mutation that Smiraglia posited that many famous works go through.

Possibly the only expression of “Come Out” that is not the original recording would be a transcription of the work, if a scholar somehow found a way to notate the sounds that Reich created. However, there does not seem to exist a transcription at present, and Reich’s sound recording seems to be the only expression attached to this work. This is not specifically unusual; there are likely many works that exist in only a single expression. However, as seen from every example above, it is rare for music to exist only in a single expression.

Additionally, this is the first work examined in which the “work” is not just tied to ideational content, but also semantic content. The “work” of Steve Reich’s “Come Out” is not just his ideas, but the specific sounds he used. This inverts Smiraglia’s model of ideational and semantic content; most works begin as idea, and then find life as semantic content. “Come Out” began as semantic content (the recording of the street preacher), and Reich brought ideational content in order to manipulate these sounds.

The alternative rock band Camper van Beethoven did “cover” the song to a degree, in a short studio performance meant to imitate Reich’s original recording. This is clearly a new work, but it does suggest that there are work-to-work relationships even with works such as this one that are intrinsically tied to specific recordings of semantic content.

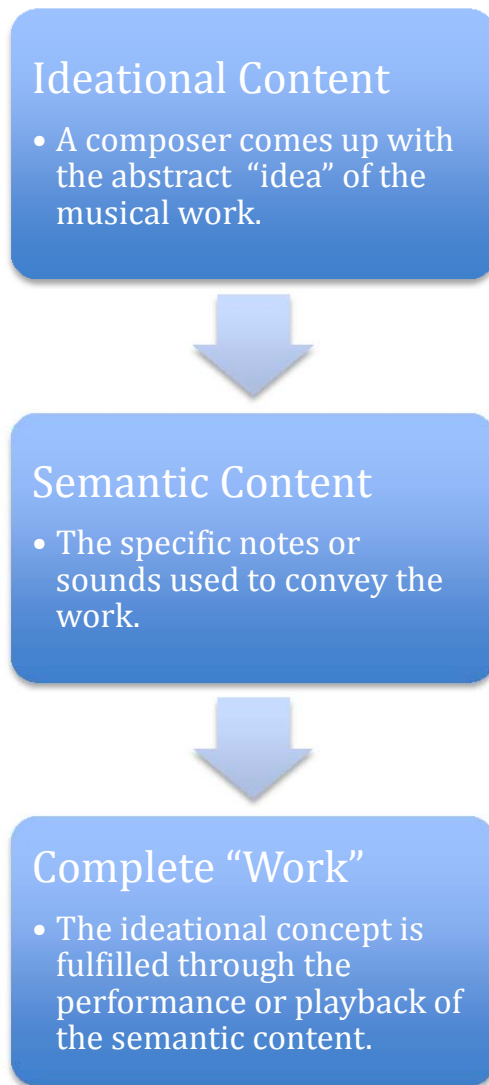


Figure 1 - Smiraglia's Model

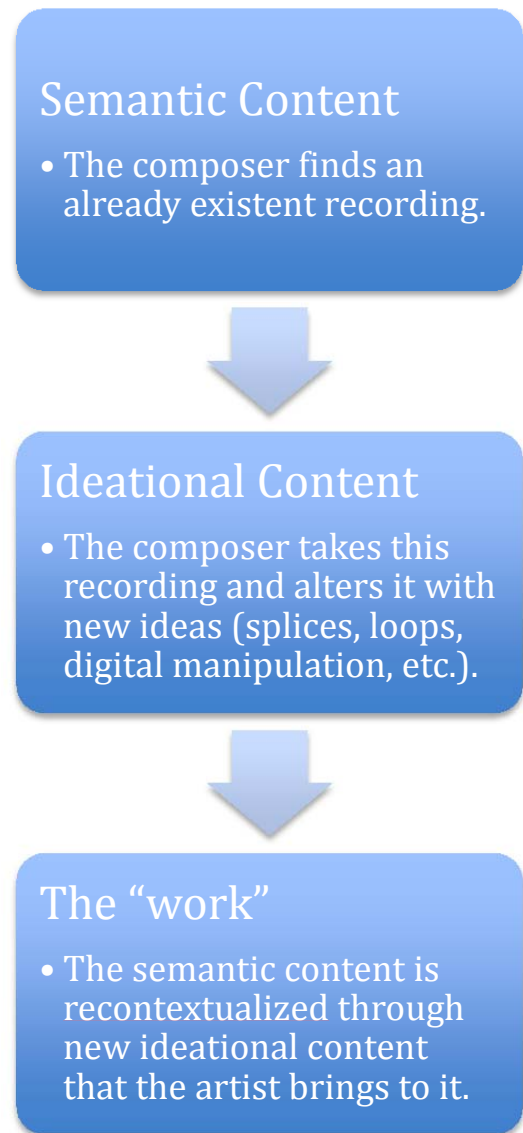


Figure 2 - Inversion of Smiraglia's Model

2.5. “Since I Left You” by The Avalanches.

“Come Out” represents a work that consists solely of sounds that existed before Steve Reich “composed” the piece. However, the speech samples on “Come Out” would not be considered a creative “work” in their own right; it is only Reich’s addition of ideational content that forms these found sound clips into what we would recognize as a musical work.

Reich was arguably one of the first in what would be a growing trend. Since the 1970s, more and more music has begun to feature samples of previous recordings. This postmodern remix culture began with the advent of hip-hop music, which in its nascent days featured a DJ physically manipulating records while an MC rapped over top the music. The advent of digital recording and playback technology has led to more sophisticated samples, and now most are largely constructed on computers.

Recently, DJing has become a genre in and of itself, with DJs now melding together dozens or even hundreds of previously recorded samples together to create dense sound collages. The mapping of these works is complex; some DJs create mixes on the fly, cuing up samples live while “performing” in a nightclub or dance setting. Others release “remix” recordings, which feature complex sampling techniques that might not be able to be replicated in a live setting, such as intricately synchronizing two separate recordings, or changing the tempo and pitch of an existing recording.

Since I Left You, a 2002 album by the Australian group the Avalanches, represents one of the latter kinds of sampling. *Since I Left You* is nearly an hour long,

but features no content that had not previously been released in some prior capacity. It is estimated that over 3,500 separate samples are meshed together on the album (Pytlik 2002), creating the impression of a postmodern sound collage that flits from genre to genre, while somehow still maintaining some sense of internal structure.

Like “Come Out,” the ideational content of *Since I Left You* comes not from the musical notes, but from how the Avalanches mix together the different samples that they have compiled. In this case, they are acting as creators, not in a musical capacity, but as DJs, exercising their creativity through their ability to select and mix sounds together. Unlike “Come Out,” however, the Avalanches are sampling existing *works*, not merely snippets of sound that were never featured in an artistic or creative context. *Since I Left You* takes samples of previously released musical materials, and arranges them in new musical ways, creating a new “work” in the process. The samples don’t just involve reusing the *idea* of a musical work – they involve reusing that actual recording, including both its ideational *and* semantic content.

Composers have long sampled one another’s ideational content – “theme and variations” is a musical form with a long history of composers taking and changing one another’s musical works. Works like *Since I Left You* differ, however, in that the creators are not just sampling the ideational content (melodies, harmonies, chord patterns), but the semantic content itself. When the Avalanches sample Madonna’s song “Holiday,” they are not performing their own version of the work. They are taking an extant manifestation of Madonna’s “Holiday” and quoting it exactly, so that the sample is tied to the semantic content of that particular manifestation.

This sampling of specific semantic content is not something that the FRBR model is prepared to deal with. FRBR does allow for “expression-to-work” relationships; while not explicitly defining sound sampling as one of these relationships, this would seem to be the best option. Table 2.5 is an attempt to FRBR-ize the title track of *Since I Left You*, which is constructed of seven prominent samples (the track features snippets of other samples that have yet to be recognized or linked to their original material). As can be seen, the only way to map the bibliographic relationships here is to show how the original sounds – here referred to as *proto-works* – are merged together to form the entirely new work of *Since I Left You*.

Table 2.5

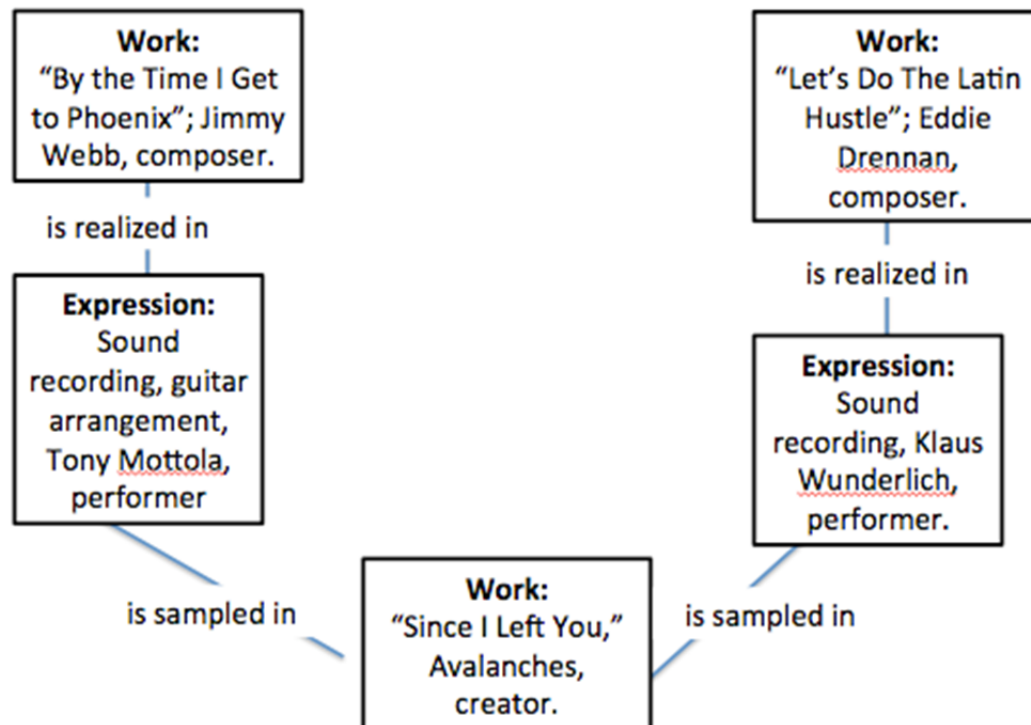
Proto-Work (Expressions)	Work	Expression	Manifestation
"Everyday" - the Main Attactions	"Since I Left You" - The Avalanches	<i>Since I Left You</i> studio release	CD, Modular, 2001 (American)
"Let's Do the Latin Hustle" - Klaus Wunderlich, <i>Sud Americana 3</i>			
"By the Time I Get To Phoenix" - Guitar arrangement, Tony Mottola			
"Daddy Rich" - Rose Royce			CD, Modular, 2001 (Australian)
"Anema E Core" - Tony Mottola			
"The Sky's the Limit" - The Duprees		<i>Gimix</i> EP remix bootleg	CD, Modular, June 2001
"Take Off Your Makeup" - Lamont Dozier			

The seven samples listed in the “proto-works” column are not works themselves. After all, it is not as if the Avalanches are using the *work* of any of these sampled recordings. They are using the specific expression. For example, they are

not just sampling any recording of “By the Time I Get To Phoenix”; they are specifically using the expression arranged for guitar and recorded by Tony Mottola.

Table 2.5 also lists two “expressions” of “Since I Left You.” Both feature the same sound samples; however, the mixing of these samples is slightly different. In this case, the version of “Since I Left You” on the *Gimix* EP was a work-in-progress, later realized as a “complete” version on *Since I Left You*. The various levels of remixing and post-production technical changes that can be applied to sound recordings mean that not even works such as “Since I Left You,” constructed entirely of samples of other expressions, are immune to having multiple expressions, and even mutating themselves.

The use of these samples demonstrates that musical works are not necessarily birthed *sui generis*. Rather, it has always been common for musical works to borrow ideational content (such as themes and melodies), and it is increasingly common for musical works to borrow semantic content as well. See the figure below to understand how “Since I Left You” as a work is reliant on the existence of previous works and expressions.



The use of samples in works such as “Since I Left You” seem to be very literally fulfilling Smiraglia’s theory that works will mutate over time. “Since I Left You,” however, represents not just one work mutating into another, but thousands of works all mutating into one work. The construction of a work such as “Since I Left You” fully from musical samples calls into question the ontological status of a “work,” and challenges the FRBR notion that a work is birthed from the ideational content of the creator. In this case, the creator (the Avalanches) did provide ideational content but, like “Come Out,” semantic content existed first and arguably provided the “idea” that the creators then sprang upon to use. It is interesting to note, then, that under the FRBR model, “creation” can come not just from writing or composing, but also from recontextualizing and splicing. The Avalanches are inarguably the creators of “Since I Left You,” even if they did not “write” a single note of it.

Section 3.2.1 of the FRBR report states that the boundary of a work will be determined by the specific cultural group that is using the resource. Keeping this in mind, it will be interesting to track the status of a “work” as applies to the sampling community; their construction of sound collages and heavily sampled works already challenges the Romantic notion of an artist creating a work solely through mental effort. A growing online community that seeks to track and identify these samples indicates a sizable interest in the subject, even if that interest has yet to translate into academic literature. As this community grows, the LIS community may find it advisable to incorporate the sampling culture’s ideas of a “work” into the bibliographic literature.

2.6. Beastie Boys – “Shake Your Rump”

The Avalanches’ “Since I Left You” is an excellent example of an electronic musical work that is built solely through samples of other existing works. Yet there is a substantial chunk of electronic music that incorporates samples into a larger musical tapestry. Lots of rap music begins with a “beat” constructed from a mix of samples; a performer might then use this as a musical foundation to rap overtop of. Many early rap groups were collaborations between the DJ (who created the beat through samples) and the MC (who added rap vocals to the mix). The names of these groups – Eric B. & Rakim, and Run-D.M.C., to name two examples – demonstrate that the hip-hop community sees rap music as a collaboration between the DJ and MC in equal measure. Many prominent hip-hop “performers” – such as the DJ Grandmaster Flash – have never actually contributed any vocals to the music; their sole contribution comes from the construction of a beat through samples. Much like

classical opera seemingly has two primary creators – the composer and the librettist – hip-hop music has two primary creators in the DJ and MC (or, as they are commonly referred to nowadays, the producer and the rapper).

The 1989 album *Paul's Boutique* is considered one of the most significant intersections of producer and rapper. Though credited to the Beastie Boys, the trio of Brooklyn rappers who provide the irreverent rap vocals on the album, equal credit to the album's aesthetic success is often given to the Dust Brothers, a group of Los Angeles-based DJs who constructed the dense collages of samples that provide the record's backing beats. Many of the Dust Brothers' beats are as dense and sophisticated as the Avalanches, only *Paul's Boutique* has the added creative element of the Beastie Boys' raps layered overtop of this music.

The intersection of structured beats and vocal rapping leads to interesting questions about the nature of the work. Like the Avalanches' "Since I Left You," *Paul's Boutique* challenges the notion that all works are initially created using solely ideational content. The following FRBR-ization in Table 2.6 traces the sources of the song "Shake Your Rump" from the album.

As can be seen, the Dust Brothers utilized fourteen samples from previously released recordings in order to create their work "Full Clout" – a samples-only dance work that is a collage similar to the Avalanches' work investigated earlier. To this work, the Beastie Boys recorded the vocals for "Shake Your Rump." The beats of "Full Clout" were combined with these vocals in order to create the version of "Shake Your Rump" as featured on *Paul's Boutique* (LeRoy 2006).

With a work such as this one, tracing the mutations that led to the initial creation of the work becomes an increasingly complicated problem. Unlike other FRBR tables, it is not enough to begin with the work-level “Shake Your Rump”; the work is actually dependent on the earlier samples-only work “Full Clout” by the Dust Brothers, which in turn is dependent on the fourteen sampled expressions recorded in the leftmost column. Like “Since I Left You,” “Shake Your Rump” is not a work that began as abstract ideational content. Rather, it is another inversion of Smiraglia’s model in which semantic content was taken and reshaped; the ideational content comes from the recontextualization provided by the Dust Brothers, and additional ideational content comes from the lyrics that the Beastie Boys add to the work.

Once the “work” of “Shake Your Rump” is defined, its FRBR-ization is not particularly difficult. It was released as two separate sound recordings – the original 1989 edition, and the later remaster for the 20th anniversary release in 2009. The manifestations of these releases appeared on vinyl LP, cassette, and compact disc. However, the mutations involved in the creation of “Shake Your Rump” are rather complex. The information as to what works and expressions acted as progenitors seems important to the hip-hop community; there are many online websites devoted to tracking the use of samples in music. It is unclear, however, how one might chart both the “work-to-work relationship” between “Shake Your Rump” and the earlier “Full Clout,” as well as the expression-to-work relationship between “Shake Your Rump” and the fourteen samples it utilizes. The sheer number of samples involved in a full-length album such as *Paul’s Boutique* is massive, and if a

Table 2.6

Manifestations (sound recordings)	Playback Works (sampled)	New Work	Expression	Manifestation
"Holy Ghost," the Bar-Kays	"Full Clout," Dust Brothers	"Shake Your Rump," Beastie Boys	Sound Recording	LP, Capitol, 1989
"That's The Joint," Funky 4+1				
"8th Wonder," Sugarhill Gang				
"Jazzy Sensation," Afrika Bambaataa				CD, Capitol, 1989
"Good Times Bad Times," Led Zeppelin				
"Dancing Room Only," Harvey Scales		"Shake Your Rump," Beastie Boys	Sound Recording	Cassette, Capitol, 1989
"Funky Snakefoot," Alphonze Mouzon				
"Tell Me Something Good," Ronnie Laws				
"Unity," James Brown and Afrika Bambaataa				CD, Capitol, 2009
"No Matter What Sign You Are," Diana Ross and the Supremes				
"6 O'Clock DJ," Rose Royce				
"Born to Love You," Rose Royce				
"Yo Yo," Rose Royce				
"Super Mellow," Paul Humphey, Willie Bobo, Shelly Manne, Louis Bellon				
	"Shake Your Rump," Beastie Boys (vocals)		Re-Mastered Sound Recording	

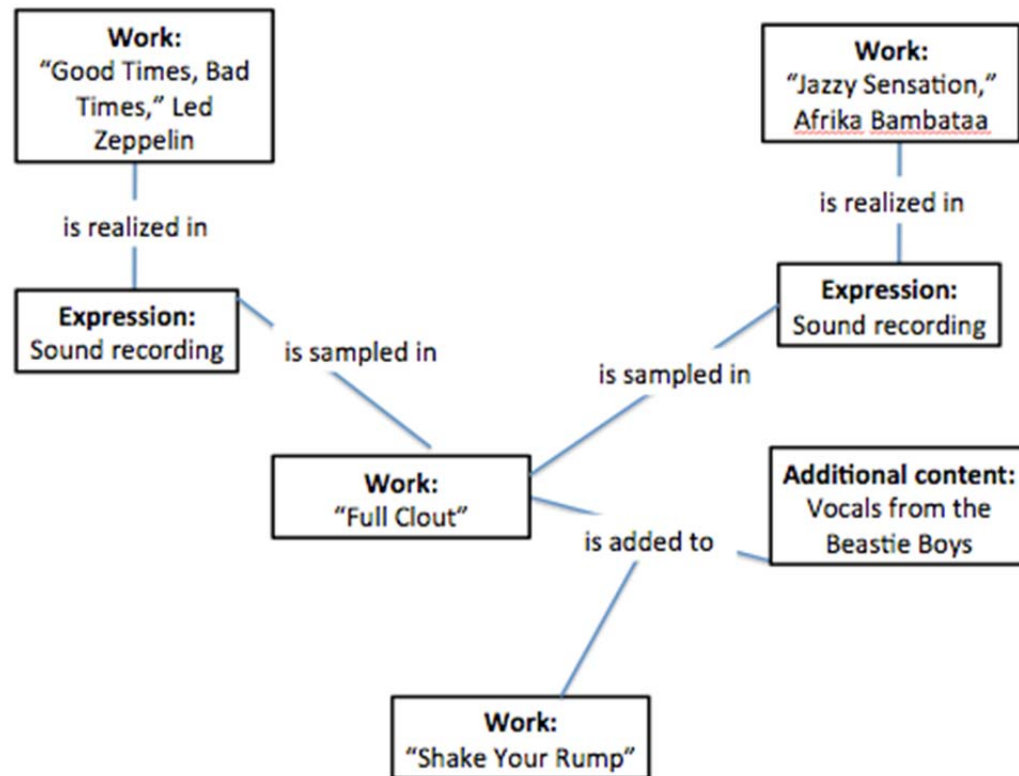
system began to map all relationships between recordings and sample uses, the network would grow almost prohibitively complex.

Additionally, the creative effort extended by both the producer and rapper in this context is hard to map. Which artist is the primary creator? Both the Dust Brothers and the Beastie Boys seem equally important to the creation of “Shake Your Rump.” Can the same rap be applied to a restructured beat with changing the work? What if the same beat was taken, but a different rapper applied vocals to be layered overtop? Like other playback works, “Shake Your Rump” seems incapable of being performed by others; the semantic content it is tied to prohibits it and the use of other samples would make it a different work. Because of this, one might consider it a “thick” work, yet the possibility exists for new vocals to be applied overtop. Would this create a new work, or merely prove that “thin” versions of sampled hip-hop can be created?

The large number of mutations and bibliographic relationships present in “Shake Your Rump” might argue against using a hierarchical model in order to map said relationships. As works are sampled, shuffled, and resampled in the postmodern musical environment of sampling culture, it becomes clear that there are not necessarily hierarchical layers of mutations. The FRBR model is predicated on the ability to track higher to lower level entity relationships; a *work* that encompasses all *expressions* that make up every *manifestation* and so on. But perhaps this hierarchical model is not the best fit for the sampling community. Rather than putting a work using sampling in a vertical hierarchy *beneath* the work from which it drew its sample, perhaps it is better to draw upon Smiraglia’s concept

of the “bibliographic family,” in which works sit side by side in coequal horizontal, rather than vertical, relations. The idea of mutations and horizontal (rather than vertical) relationships between works is relevant here (Smiraglia 2001a; Thomas 1998).

“Shake Your Rump,” for example, utilizes samples from Led Zeppelin’s “Good Times Bad Times,” and Afrika Bambataa’s “Jazzy Sensation.” Rather than placing “Shake Your Rump” as beneath those two songs in a derivative relationship, a horizontal bibliographic family model might place “Shake Your Rump” in a relationship with these two songs that puts them on an equal level. “Shake Your Rump” is not participating in a traditional derivative relationship, in which ideational content taken and mutated using new semantic content (arrangements, different instrumentation, etc.). Instead, “Shake Your Rump” is taking specific semantic content from Led Zeppelin and Afrika Bambataa, and mixing in new ideational content (in the form of both recontextualization and added lyrics). Such a work might also be attributable to multiple “authors,” which fits in with Yee’s ideas that the modern definition of a work should also encompass “changing authorship, multiple authorship, and mixed authorship.” (1995)



The above diagram showcases a flowchart that tracks the mutations of works into “Shake Your Rump.” These relationships are not necessarily hierarchical; none of these works are quite *derived* from one another in the way that Tillett (1987) would describe. Instead, the works of “Good Times, Bad Times,” “Jazzy Sensation,” “Full Clout” and “Shake Your Rump” exist coequally on horizontal plane, mutating in a myriad of different ways in order to morph into new works. They are the “bibliographic family” championed by Smiraglia and Thomas (1998).

Discussion

While this is only a minute sample of the large amount of non-classical music that might find its way into a library catalog, these six works are nonetheless a clear indicator of the problems that can arise in applying FRBR principles to such music.

The fact that these selected pieces come from a variety of different genres, including jazz (John Coltrane and Miles Davis), rock (Pink Floyd), avant-garde art music (Steve Reich), electronica (the Avalanches) and hip-hop (the Beasties Boys) indicate that the problems are not inherent in one specific genre. Rather, *classical* music, with its elevation of the composer over all other roles and its extremely “thick” works (performances are often note-for-note identical), seems to be the exception to the rule.

The works discussed above do stem from a myriad of different genres, and it is also important to consider the limitations of the study. The content sample was selected specifically to take into account a broad range of problems that might arise in non-classical works. As a result, the reader should keep in mind that these represent some of the thornier problems out there, and may veer toward the difficult side of spectrum. Nonetheless, there are some recurring themes that we can summarize in order to indicate some of the major problems with the application of FRBR to non-classical music.

1) The confusion between composer, performer, and creator

In classical music, the composer is rarely the performer of his or her own work. In all of the classical pieces we examined above, the closest thing to this was Richard Strauss conducting a 1928 performance of his opera *Salome*. Classical music largely consists of a separation between the mental effort of the composer and the physical results of the performer. Classical performers are also expected to adhere to the authority of the written score; there is little room for improvisation.

Outside the sphere of classical music, however, these roles grow a bit more blurred. Improvisation is much more common, and the music is often not committed to a visual score. As a result, it is often difficult to distinguish between composer and performer, and when one work mutates into another. We saw this with John Coltrane's variations on Rodgers and Hammerstein's "My Favorite Things"; while Coltrane was performing the melody and chords written by Rodgers and Hammerstein, he was also composing his own variations on the musical themes. The fact that no two jazz improvisations are exactly the same indicates the large amount of creative force that a jazz performer brings to a work. The performer plays a similar role in rock music; while Pink Floyd may not improvise to the extent that John Coltrane does, their live performances are going to be very different from the "autoplay" performance on their studio album.

Classical music is not immune to the multiple-creator syndrome. As seen above, classical pieces feature performers, conductors, and librettists in addition to composers. All of these roles exercise creative effort on a musical work. Outside of classical music, though, performers (and here we must consider vocalists, instrumentalists, and even producers and DJs) often have considerable more freedom to mutate a work, confusing the line between "performance" and "composition." This confuses the FRBR model, in which "composer" is solely associated with a work, while "performer" is associated with an expression.

2) Playback Works

The classical pieces examined in Section 1 all had plenty of recordings as expressions. However, these were nearly all recordings of live performances of the

music. This is the sort of recording that FRBR assumes to be the case; sound recordings are listed as expressions of works, with each recording of a different performances acting as a different expression.

What FRBR fails to take into account, however, are the issues surrounding the many choices made by recording technicians and audio engineers. These are not unknown in the classical recording industry, though their influence may not be as immediately noticeable. Classical recordings can still go through post-production manipulation, including the mixing or splicing of different tracks. Many classical recordings may actually feature two movements recorded on two separate days, put together in the same “work” (Kania 2009). Often this post-recording tinkering is not even mentioned, and impossible for a cataloger to identify.

However, post-production sound editing is much more noticeable on non-classical pieces, to the point that several producers of popular music – Phil Spector and Dr. Dre, to name two examples - are nearly as famous as the performers with whom they work. As discussed above, works such as *Dark Side of the Moon* and *Bitches Brew* feature sound editing techniques that are impossible to replicate in live performance. “Come Out,” *Since I Left You* and “Shake Your Rump” feature so much sound editing and manipulation that they would be impossible to recreate in live performance at all.

This creates a problem for the work under the FRBR model. FRBR assumes that a “work” is solely ideational content, and only once it is expressed and manifested does it assume semantic content. Section 3.2.1 of the FRBR report states that “there is no single material object once can point to as the *work*.” However, this

is clearly not true for popular music; pieces such as *Dark Side of the Moon* would have a “master tape” that is just that – a physical manifestation that represents the entire “work.”

One could argue that the master tape for a rock album or an electronic piece could be just one expression among many possible. But when people talk about *Dark Side of the Moon*, they are not discussing the abstract *idea* of the work in the way that people talking about Beethoven’s Seventh Symphony would. Rather, they are discussing the specific expression of the master tape released on studio album. All “scores” of *Dark Side of the Moon* are not parallel expressions, but a derivative description of this master recording, and all live performances and covers will be compared to this release.

This gets back to Gracyk’s (1996) distinction between “allographic” and “autographic” works. Most classical works are allographic – like novels and plays, there is no way to possess the original *urtext* of the work. Often times there may not even be such an exemplar to compare manifestations to. FRBR assumes works to be allographic, which is why the “work” is defined as something necessarily abstract.

But there are also autographic works, such as paintings, sculptures and, arguably, popular music. These are pieces in which there *is* an exemplar of the work. This is not the *only* manifestation; after all, there are many copies of the *Mona Lisa* floating around. However, they will all be compared to the original *Mona Lisa* painted by Leonardo da Vinci, which is considered to be the “authentic” manifestation of the work. Similarly, the master recording of a rock album such as

Dark Side of the Moon would be considered the “authentic” autograph of the work, with all other manifestations either being replications or imitations of the original.

Autographic works involve a co-existence of semantic and ideational content that does not quite work in the FRBR system, which assumes an abstract work consisting of ideational content only. But as many popular music works are bound to specific electronic processes caught on master tape, this definition of a “work” may not suffice.

3) Mutations of popular works

The FRBR model assumes a vertical hierarchy between work, expression, manifestation, and item. As evidenced in our examination of classical works, not all music necessarily fits into the four-level model, due to the large number of arrangements that may take place. However, Vellucci (2007) proposes that the FRBR hierarchies need not be limited to a mere four levels, which allows for more complex classical pieces to still fit into this vertical model.

But many popular pieces seem to eschew the vertical model entirely. As evidenced with the sample-heavy works such as “Since I Left You” and “Shake Your Rump,” it is not so easy to map bibliographic relationships between these works in a purely vertical manner. Modern “remix” culture has led to a plethora of works that are sampled and resampled, mixed and remixed, to the point that it is difficult to trace the relationships. When the Avalanches meld over three thousands samples to create a new work, it becomes difficult and infeasible to claim that *Since I Left You* exists in a derivative relationship with three thousand other works.

Sample-heavy piece of popular music might be better suited for Smiraglia's horizontal model of bibliographic relationships (2001a). In his 2012 article on the shortcomings of FRBR, Smiraglia's criticized the "presumption of hierarchical priority" inherent in the model. Tracing vertical hierarchies of relationships between sampled works does not seem to be the best way to truly represent a map of their relationships.

Full conclusions

The goals of this study were to examine the applicability of the FRBR model to musical works. Due to a perceived difference between "classical" and "non-classical" pieces, the study examined both fields of music, investigating specific musical works that fall under each category. The investigation of non-classical musical works was particularly valuable, as little research had been conducted on the subject so far, leading to the exposition of many possible problems with the FRBR model and popular music that had not been adequately addressed in previous literature.

One should keep in mind the limitations of the study, particularly the small and deliberate sample of musical works. The study deliberately looked for the most problematic musical works, and aimed to encompass a broad range of musical genres. This highly specialized sample did allow for an in-depth investigation of some of the more complicated problems that can stem from musical works.

The study examined four central research questions, and determined the following conclusions:

1. Is there a clear definition of the musical work that can be applied in the music cataloging community?

Our examination of the ten musical works in this study found that there was a remarkable breadth of content across the selection. It remains unclear if there is a suitable definition of a “musical work” that can incorporate each piece used in the sample. In terms of classical music, the cataloging community has become remarkably adept at identifying new works, to the point that the FRBR report even has specific rules on what constitutes a new work (variations on a theme) and what constitutes an expression of the same work (an arrangement of a theme for different instruments).

However, the rules are less cut and dry for music that falls outside the classical canon. As stated in the discussion of non-classical works, the presence of the performer as creator confuses things. While FRBR explicitly defines a *work* as coming from a composer and an *expression* as coming from a performer, the blurring of the roles within popular music can call into question the boundaries of “work” and “expression” as well. The musical community may need to reconsider FRBR’s categories when it comes to popular pieces in which the performer adds substantial content.

2. Is there a difference in the suitability of FRBR for the canon of Western classical music, and its suitability for other types of music?

The results of the study clearly demonstrate that it is easier to organize works of classical music under the FRBR model than it is for works outside the classical canon. While classical music works did bring some of their own problems,

most notably with arrangements and the medium of expression, they generally fit into the four-tiered structure of FRBR. Non-classical works, on the other hand, were much more difficult to match to the hierarchy of FRBR. The presence of the performer-as-creator confused FRBR's roles for "work" and "expression," and master tapes of playback works created an authentic *urtext*, which FRBR doesn't appear to acknowledge. As shown in the above study, it is possible to divvy up these works and their manifestations according to the FRBR model, but many times the definitions of the FRBR categories were stretched in order to accommodate the works (for example, the remixed and remastered versions of playback works were considered different expressions of the same work, but an argument could be made that they should be considered separate works, or even just manifestations of a single expression).

It is an open question as to whether classical music is better suited for a framework such as FRBR, or if FRBR was constructed specifically with classical music in mind, leading to a better fit. Regardless, at the very least some of the definitions in the FRBR report need to be revised or updated to discuss musical works and their mutations that occur outside of the classical canon.

(3) and (4) What types of relationships can be mapped between musical works? and Is the current FRBR framework suitable for mapping these relationships?

The study revealed both relationships inherent in the FRBR framework (work to expression, expression to expression, derivative, supplemental, and others) as well as relationships that are not necessarily addressed within the FRBR framework. The examination of the pieces within the classical canon revealed many

FRBR-specific relationships, but also the existence of relationships with no FRBR equivalent, such as two expressions of the same performance. The examination of non-classical works revealed even more relationships that were either ambiguous or non-existent in the FRBR framework, including works that sample other works, expressions that have been “remastered,” and expressions of expressions. More research should be gathered to examine not only what relationships are prevalent in musical works, but what relationships are important to the users of different musical communities. It is only with this information that the library science community can discuss new relationships that should be mapped.

Directions for Future Research

In documenting the recent history of the idea of the “work,” Smiraglia (2003) addresses the postmodern conception that “there is no single and unique order of knowledge and documents.” Rather, each successive generation has to find specific rules that work for their current situation. Perhaps it is time for the music cataloging community to reconsider their own assumptions. The above study shows that there is not necessarily a single definition of a “work” that fits all piece of music. Rather, there is at least a sizable distinction between “classical” and “non-classical” pieces, and very likely distinctions of what constitute a “work” within smaller communities such as jazz, rock, and hip-hop.

Much of the literature on FRBR has advocated the model as a universal system for cataloging works, which seems to stand in contrast to FRBR’s insistence that the definition of a “work” may vary between communities. This “one-size-fits-all” mentality will be put to the test with the implementation of RDA in 2013. RDA is

explicitly modeled on FRBR structures, but it is unclear if one “flavor” of FRBR can be adopted for RDA to tackle every kind of work that a cataloging librarian might come across.

One example of an impending problem is RDA’s treatment of musical expressions. As demonstrated above, one music work can yield hundreds of expressions, especially due to FRBR’s rules that each performance constitutes a new expression. Yet the current Library of Congress guidelines for RDA stipulate that musical expressions should not be differentiated between arrangements (LC-PCC PS 6.28.3). This means that each separate arrangement of Beethoven’s Seventh Symphony would exist under one access point, netting the organ arrangement and the piano arrangement together. Even stranger would be the separate performances of *Dark Side of the Moon*, for example, that exist under one access point. Would the Flaming Lips version of the album, and the reggae-inspired *Dub Side of the Moon* really both be filed under the access point “Dark Side of the Moon, arranged”?

The Music Library Association’s Best Practices for RDA document (2013), as well as the Program for Cooperative Cataloging policy statement, both recommend waiting on further rulings from the PCC Access Points for Expressions Task Group. This task group has currently released a document (2012) that acknowledges that, “music resources have multiple expressions,” but only weakly offers that “more specific guidelines should be offered here.” All of these groups – the Library of Congress, the PCC, and MLA – through their current confusion on the subject, acknowledge that there does not seem to be an easy solution between merging all

music expression access points, or welcoming a potentially infinite number of them, including one for each separate performance of a work.

As RDA implementation continues, and the cataloging community is forced to confront the practical implications of FRBR's theoretical model, it might be time to reconsider the bibliographic relationships for musical works. As this study shows, there is a significant difference between "classical" and "non-classical" works. While not necessarily a cut-and-dry bifurcation, perhaps treating these two musical communities differently would be a step in acknowledging that not all works are created equally, and that works in different genres and mediums may require a different approach.

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