I, Yu-Wen Yang, hereby submit this original work as part of the requirements for the degree of Doctor of Musical Arts in Piano.

It is entitled:
Metrical Dissonance in Selected Piano Pieces by Johannes Brahms, with Implications for Performance

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Metrical dissonance in Selected Piano Pieces by Johannes Brahms, with Implications for Performance

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by

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Abstract

Ambiguity in Brahms’s music is often the result of discrepancies between notated and perceived meters. Music theorists have referred to these situations as metrical dissonances. The abundance of metrical dissonance in Brahms’s music confuses the listener’s perception of meter and creates problems for a performer in determining how to shape musical phrases. The purpose of this document is to apply Harald Krebs’s analytical system to discuss metrical dissonances in Brahms’s late piano pieces, including Op. 116, nos. 1, 5, and 7, Op. 117, no. 1, and Op. 118 no. 4. Krebs’s analytical notation will provide a solution to the confusion arising from the many conflicts between notation and perception in these pieces. The role of tonal, motivic, and formal structures in these metrical conflicts will be addressed, and performance implications will be discussed.
Acknowledgements

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Chapter 1

Introduction

During the nineteenth century, Johannes Brahms was known as a conservative, based largely on his reliance on Baroque and Classical forms. Yet the century following his death has seen a reassessment of his work and his place in the history of Western music. Ambiguity is a word that is frequently used to describe Brahms’s music. In the introduction of his book, titled *Structural Ambiguity in Brahms*, Jonathan Dunsby writes:

“The concern running through all the studies [Brahms Variations on a Theme by Handel, op.24, Brahms Piano Quartet in C Minor, Op. 60, First Movement, Brahms Symphony No. 4 in E Minor, Op 98, First Movement, and Brahms Intermezzo, Op. 119, No. 1] is musical ambiguity. Brahms’s music is characterized by an avoidance of straightforward relationships…At some level of the structure, however, Brahms usually creates a functional ambiguity, giving his music its typically elaborate and complex character.”¹

Some scholars, though, feel that the word “ambiguity” is rather contentious. Kofi Agawu says that the word “ambiguity” suggests that “two (or more) meanings are comparably or equally plausible, leaving the listener undecided about their future significance.”² Agawu asserts that such competing meanings can lead to a “violent hierarchy,” but if a hierarchy is acknowledged, the event is no longer ambiguous. Thus, a truly ambiguous musical event remains so even after

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David Epstein also weighed in on this debate, opining that ambiguity in Brahms’s music is often the result of the composer’s most distinguishing characteristic—a complex relationship between notated meter and heard rhythm.

“No musician can deal with the music of Brahms without encountering these ambiguities. In their most common form they involve a disparity between how the music is heard and the way it is embodied in score. Rhythmically strong points of phrases, for example, felt as downbeat articulations, are often notated on weak portions of bars.”

In other words, Brahms often delights in placing rhythmic downbeats of a phrase on the notated weak beats. Even Arnold Schoenberg, one of the revolutionaries of the twentieth century, observes that the measure lines in Brahms’s music are mobile. The discord between notated and perceived meters has given rise to the term “metrical dissonance,” and these “dissonances” can affect how a certain phrase or passages comes across to the audience.

The document will discuss metrical dissonances in Brahms’s late piano pieces, specifically his Op. 116, Nos. 1, 5, and 7; Op. 117, No. 1; and Op. 118, No. 4. The role of key, form, and motivic elements will be addressed, and suggestions and implications for performance

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will be provided. The word “ambiguity” will be used only to describe a rhythmic event at first may confuse the interpreter, leading to two or more meanings that are equally valid, even if later events clarify the structure.

Like most successful composers in Western music, Brahms received his musical training first on the piano, and this instrument remained his favorite medium for personal expression and the development of his craft. Brahms produced three lengthy piano sonatas (1852-1853), each of which indulges in remarkable expansion of form. In the 1860s, he retreated to sets of variations, and in the 1890s, near the end of his life, he turned to the character piece. His last four piano sets, Opp. 116 to 119 (1892–1893), are very different from the energy, virtuosity, and technical obstacles of his earlier efforts. They are reflective, introspective, and for their brief playing time, startlingly profound. They are culminations of a compositional philosophy that Brahms worked on his entire career, and for which he would unintentionally influence many of the composers of the next century: economy of melodic figures, flexibility of phrase structure, developing thematic variation, blurring of harmonic structure, and complex metrical activity.

This study, however, will focus on rhythmic events. Let us consider here a few examples.

In Op. 116, No.1, Brahms undermines the notated downbeats of the opening, creating structures

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that are in conflict with the written meter. In the first eight measures of the Op. 116, No. 1, for instance, Brahms transfers the expected placement of the melody with textural and articulation accents so that the third beat comes across as the downbeat (Example 1.1).

Example 1.1: Brahms Op. 116, No. 1, mm. 1-8

Later, from measure 140 to measure 145, every two measures of triple meter are dislocated by a duple grouping, leading to a hemiola (Example 1.2). These conflicts propel the music forward, and they are not resolved until the last three measures of the piece.

Example 1.2: Brahms Op. 116, No. 1, mm. 140-145

The opening of Op. 116, No. 5, even more problematic in its rhythmic conception, is a conundrum for many keyboardists. From the very first eighth note, written as an anacrusis, the music immediately dives into a phrase structure that is largely unclear (Example 1.3). Does the
performer follow the notated meter and place an agogic accent on the strong beats, or does the performer follow the slurs and place an agogic accent on the pick-up note?

**Example 1.3:** Brahms Op. 116, No. 5, mm. 28-32

![Example 1.3](image)

In another case, the middle sections of the Op. 116, No. 7 and the Op. 117, No. 1, present metrical ambiguity through the displacement of the melodic line and the contrast of that line with notated strong beats (**Example 1.4**).

**Example 1.4:** Brahms Op. 116, No. 7 and Brahms Op. 117, No.1, middle sections

Op. 116, No.1, mm. 29-32

![Example 1.4](image)

Op. 117, No.1, mm. 21-23

![Example 1.4](image)
These passages and many others need not be a collection of notes and confusing rhythmic episodes that enter and exit the listener’s ear without meaning. The performer who wishes to give shape and significance to the music can overcome these metric obstacles through an analysis that links the rhythmic structures to form, melody, and harmony. In this vein, Brahms becomes a composer whose complexity was not for its own sake, but purposeful in its quest to bring about an emotional response in the audience.

Related Studies

Although there are many analyses of Brahms’s late piano pieces, most focus on formal, thematic, motivic, source issues, and performance-practice issues.\(^6\) Studies that do analyze meter and rhythm are mostly rather general. For instance, Camilla Cai’s discussion of rhythmic subtleties in Opp. 116 to 119 is more descriptive than analytical, merely pointing out the various

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levels of rhythmic activities. Bernice Feinstein’s examination of seven capriccios, including the three from Op. 116, provides a summary of rhythmic activities but no actual analysis per se. Her approach focuses more on form, structure, style, and interpretation. John S. Rink explores the relationship between musical analysis and performance, asserting that tempo acts as a structural framework for Op. 116, but his rhythmic analysis emphasizes tempo ratios within movements and between movements rather than the conflict between notated meter and heard rhythm.

Richard Domek’s study is the most comprehensive analysis of the rhythmic activities in the late piano works, employing a syntactic approach based on linguistic models to explore rhythm and meter in Opp. 116 to 119. However, the linguistic models Domek uses produce a highly complicated set of criteria that, in the end, fail to adequately inform pianistic phrasing and are not connected to the other musical domains.

Other theorists have analyzed metric-rhythmic issues in other works of Brahms that will be important for my discussion. Christian Kent Ellenwood discusses the function of metrical

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10Richard Charles Domek, Jr., “A Syntactic Approach to the Study of Rhythm Applied to the Late Piano Works of Johannes Brahms” (Ph.D. diss., Indiana University, 1976), 1-27.
displaced passages within the form of the first movement of Brahms’s Clarinet Quintet, Op. 115 and employs techniques used by Leonard Meyer, Grosvenor Cooper, and Joel Lester to analyze the rhythmic complexities. Ryan C. McClelland explores the interaction among metrical, harmonic, motivic, and formal structures in scherzo-type movements. Samuel Ng adopts Schoenberg’s Grundgestalt (basic shape) concept to meter and describes how in some of Brahms’s music, metric Grundgestalt serves as the basis for the development of meter and rhythm. All three of these dissertations provide helpful analyses concerning interactions among metrical, harmonic, and formal domains, including those with metric dissonances. Four theoretical books on rhythmic studies are useful for this document. Grosvenor Cooper and Lenonard Meyer divide rhythmic groupings into five basic categories to organize rhythmic progressions from the small detail to the whole piece. However, their analytical notation (Table 1.1) is too reductive to show the conflict between meter and rhythm.

Table 1.1 Grosvenor Cooper and Lenonard Meyer’s analytical notation for five basic rhythmic groupings

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<tr>
<td>a.</td>
<td>Iamb: weak-strong  ○–</td>
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<tr>
<td>b.</td>
<td>Anapest: weak-weak-strong  ○○–</td>
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Wallace Berry, Structural Functions in Music (Englewood Cliffs, N.J.: Prentice-Hall, 1976);


c. Trochee: strong-weak – ○

d. Dactyl: strong-weak-weak – ○○ ●

e. Amphibrach: weak-strong-weak ○ – ○

Although Joel Lester’s analytical notation is also reductive, the author clearly defines seven factors that give rise to accent and gives clearly examples to illustrate. Thus, Joel Lester’s seven factors will be employed to analyze how these accents lead to different rhythmic layer in the following chapters. Wallace Berry’s discussion is more focused on the metrical conflict, and his definition on rhythmic concepts as well as demonstration of the process involving metrical conflict is helpful for understanding the concepts in the rhythmic field. However, among these theoretical books, it is in Harald Kreb’s analysis of Schumann’s character pieces that I find a theoretical framework for dealing with metrical dissonance that can most aid a performer’s phrasing.

Krebs employs precise mathematical terms to describe the relationship between metrical layers and his categorization of metric structure forms the central part of the analyses. The interaction of metric states with the other domains is also important. For Krebs, there are some situations: a change in metrical state highlights a formal boundary; metrical dissonance can serve not only to separate sections from each other, but also to create links between sections, be they adjacent or nonadjacent; when metrical dissonance is associated with a formal dividing point, it

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17 Harald Krebs’s methodology of analyzing metrical dissonance will be discussed in detail in chapter 2.
is likely to be linked with a significant harmonic event (a cadence); and a composer can coordinate not only analogous states, but also analogous processes, in the domains of pitch and meter, such as the simultaneous resolution of dissonances.\textsuperscript{18}

In my document, I will analyze the rhythmic complexity in Brahms’s music and employ Krebs’ analytical system to discuss metrical dissonances in relation to metrical consonance, “C.” Then, I will demonstrate the interactions between metrical states with other musical structures. By applying Kreb’s approach to these pieces and demonstrating how performers can interpret the music based on this analytical system.

\textit{Organization}

This document consists of five chapters: the present Introduction; the concepts and techniques of Harald Krebs; the Op. 116, No. 1, 5, and 7; Op. 117, No. 1 and Op. 118, No. 4; and a conclusion. Chapters 3 and 4 will employ Krebs’s analytical system to discuss metrical dissonance in relation to metrical consonance. Each Brahms selection will be accompanied by a table that displays the interaction between metrical states and other musical structures. As such, this study endeavors to be a future resource for keyboardists who wish to transcend the knotty complexities of Brahms’s late piano music and communicate more directly with their audiences.

\textsuperscript{18}Harald Krebs, \textit{Fantasy Pieces}, 143-156.
Chapter 2
A Theoretical Model

As an isolated subject, rhythmic activity can spark enough interest and fascination, but in the context of performer interpretation, other domains demand equal attention. Specifically, how does rhythmic activity interact with these other domains to create an emotional response? The following theoretical model is taken from Krebs’s procedure in his 1999 book *Fantasy Pieces: Metrical Dissonance in the Music of Robert Schumann*. In this volume, Krebs draws a number of links between pitch and rhythm, and in doing so, he applies the terminology of pitch to meter. A number of these pitch-analogous terms will be employed in the rhythmic analysis, namely “metrical consonance,” “metrical dissonance,” “metrical process,” and “metrical progression.”

Krebs divides metrical dissonances into two different types: grouping and displacement dissonances. He then delves into the differences between each type of dissonance, especially with regard to intensity. They will be discussed later in this document through a table that compares these rhythmic events with form, motive, melody, and harmony. Before a thorough exploration can begin, however, the definition of basic rhythmic terms is necessary to avoid confusion.
Rhythmic Definitions

Rhythm

In his book *Structural Functions in Music*, Wallace Berry writes that:

“All element-process are rhythmic. In an important sense, the study of rhythm is thus the study of all musical elements, the actions of those elements producing the effects of pace, pattern and grouping which constitute rhythm.”

In other words, no simple definition of rhythm exists. Rhythm can be thought as “a generic class of pacing, patterning, and partitioning events in music,” meaning tempo, durational pattern, pacing, accent, meter, pulse, grouping, and “the profiles expressed in element-changes.” This last phrase refers to the pattern and rate of changes in music, namely melodic rhythm, textural rhythm, and hypermeter--large-scale groupings where measures act as beats. But rhythm can also be worded as “the way in which one or more unaccented beats are grouped in relation to an accented one.” Although both definitions are workable, the former is broad and the latter is narrow. While the former aims to be inclusive, the latter address only the subject of grouping, and while grouping is surely important, it should not supersede the other aspects. Thus, for the purposes of this study, the former will be employed.

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19Berry, 303-04
20Ibid., 306.
**Pulse**

Pulse, often employed synonymously with the word “beat,” refers to recurring groupings in the flow of measured time. Pulse in music is akin to the tick of a clock, a delineation of equal articulations in the temporal continuum. The sense of pulse can be rather subjective; once a regular pulse established, it tends to continue in listener’s mind, even after the sound ceases. Human beings from all cultures and ethnic groups strive to organize pulse into regular groupings, and when these groupings are accompanied by clear or implied accents, it might be represented by a numeric meter. Before coming to a definition of meter, however, accent and its working factors must be addressed.

**Accent**

Joel Lester describes accent as a “point of initiation” that marks the beginning of a musical event. Lester outlines seven factors that lead to accent and I will apply these factors to Brahms’s music in the following examples:

1. Long Durations
   When shorter durations are followed by longer durations, the longer ones are accented. Take measure 1 to 4 from Brahms’s op. 116, no. 2 as example, the longer notes are accented and Brahms’s dynamic marking in mm. 1 and 2 proves the longer

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23 Lester, 16-38.
notes naturally get the accent (Example 2.1).

**Example 2.1:** Brahms Op. 116, No. 2, mm 1-4, durational accents

(2) New Events

Any change in pitch, harmony, or texture receives an accent. Referring back to example 2.1, the harmonic accent happens on the 2nd beat in both mm.1 and 2 (Example 2.1).

(3) Textural Accents

Heavier texture is accented in relation to the lighter texture. Moreover, textural accents often take place with the appearance of a new voice or a new register. In the middle section of the Brahms Op. 118, No. 4, the fugue produces a heavily contrapuntal texture (Example 2.2). Textural accents occur when the first voice enters in the second beat of measure 91, and again when a new voice (the second voice) enters on the first beat in the left hand of measure 92 (the E natural) and so forth. Brahms, though, leaves nothing to chance; he articulates the entrance of each fugal voice with clearly marked accents from measures 94 to 97.

**Example 2.2:** Brahms Op. 118, No. 4, mm. 91-97
(4) Contour Changes
The high or bottom notes of the melodic contour receive accents.

(5) Dynamics
A loud dynamic change often brings about an accent, and the resultant volume may indicate the high point of a crescendo, or special emphasis on single notes. Example 2.1 also shows the dynamic accent on the second beat in the first two measures.

(6) Articulation
Accents naturally occur with the beginning of each slur. In the middle section of the Brahms Op. 116, No. 7, the rhythmic contour should lead the beginning of each slur gets an accent (Example 2.3).

Example 2.3: Brahms Op. 116, No. 7, mm. 86-89

(7) Patterns
The beginning of each pattern or motivic grouping warrants an accent.
Lester’s seven factors that produce accent can work independently or in combination. In the first four measures of the Brahms Op. 116, No. 2, for instance, three factors come together: long durations, new events, and dynamics (Refer back to Example 2.1). These three factors influence the perception of metric grouping, and while Berry, Lester and Krebs agree that a recurring metric grouping could be represented by a time signature. However, when the accents do not support the notated meter any more, a new metric structure would be implied. Thus, a discrepancy between the notated meter and sounding meter arises. The following section will define meter and then discuss the discrepancy between what the listener hears and how the rhythm is actually written.

**Meter**

Lester describes meter as the interaction of different metric levels. Krebs, however, has a more precise definition: the union of three layers of motion. These are the pulse layer, the micro-pulse layer, and the interpretative layer. The pulse layer consists of “the most quickly moving pervasive series of pulses.” The micro-pulse layer includes “more quickly moving layers” than the pulse layer and it “may intermittently be woven into the metrical tapestry of a work.”

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24 Berry, 303; Lester, 45; Krebs, 23.
25 Lester, 45-50.
26 Krebs, 23.
The interpretive layer consists of how the listener groups the pulse layer into larger units.\textsuperscript{27}

In his 2005 doctoral dissertation, Samuel Ng explains the Krebs definition of the micro-pulse:

    It is impossible to have a layer moving more quickly than the most quickly moving layer. The key to avoiding such a logical impasse...lies in the designation that the pulses in the pulse layer are pervasive, whereas the micro-pulses are intermittent."\textsuperscript{28}

The pulses of the interpretive layer may be subsumed in a constant number (an integer) of pulse-layer attacks, and Krebs designates this integer as the “cardinality” of the layer.

He then refers to the interpretative layer as an “n-layer.” The interpretative layers are produced by “a regularly spaced succession of accents” which may be derived from Lester’s seven factors of accent previously discussed.

    In most tonal music, more than one interpretative layer acts at once. In the first three measures of the Brahms Op. 117, No. 1, the notated meter suggests a 6-layer in the eighth-note pulse, but the accents on last beat of each measure imply another 6-layer texture (Example 2.4). These accents are in Lester’s terminology, “new harmonic event” accents. As such, the two different layers act simultaneously, causing a discrepancy between what the listener perceives and what the composer has actually written.

\textbf{Example 2.4:} Brahms Op. 117, No. 1, mm. 1-3 two six-layer textures (one layer equals one eighth note)

\textsuperscript{27}Ibid., 23.
\textsuperscript{28}Ng, 11.
In the Brahms Op. 116, No. 5 textural and articulation accents produce a 3-layer out of the eighth-note pulse. This runs against the notated meter, and as such, the conflict results from a non-alignment of the metric layers (Example 2.5).

**Example 2.5:** Brahms, Op. 116, No. 5, mm. 1-4, 3-layer texture (1=8th note)

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**Metrical Consonance and dissonance**

In the vocabulary developed by Krebs, the alignment of interpretative layers is called “metrical consonance,” and the non-alignment of interpretative layers is called “metrical dissonance.” When one of the interpretative layers becomes a referential point for the listener, its pulse becomes the meter of the given work. This is known as the primary metrical layer, which
may or may not be indicated by the time signature. The consonance produced by the interaction with the primary metrical layer is then regarded as the “primary consonance.” But Krebs is not the first scholar to apply the nomenclature of pitch to time. In the early nineteenth century, Hector Berlioz already employed this metaphor in his writings on rhythm:

> Combinations of this sort constitute in the domain of rhythm clusters and progressions analogous to the clusters and progressions that make up chords, melodies and modulation. There are such things as rhythmic dissonance; there are rhythmic consonances; there are rhythmic modulations.

**Metrical Consonance**

In Krebs’ system, the cardinalities of metrical consonance are multiples or factors of each other, the highest number stated first. The notated meter of a work functions as the normative consonance, and to illustrate this, Krebs takes three-four meter, six-eight meter, and nine-eight meter as examples. Thus, in three-four meter, the normative metrical state consists of a nested 6-layer and a 2-layer; six-eight meter consists of a nested 6-layer and a 3-layer; and nine-eight meter containing of a nested 9-layer and a 3-layer.

To give the Krebs description greater clarity, Samuel Ng in his doctoral dissertation offers

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29Krebs, 30.  
31Krebs, 30.
a table to illustrate the three metric consonances (Table 2.1). The table displays the Krebs cardinality of all layers by multiple and factor.

Table 2.1 Samuel Ng: Three Metric Consonances

\[^{32}\text{Ng, 13.}\]
Krebs defines two types of metrical dissonances: grouping, represented by a “G”; and displacement dissonances, represented by a “D”. In his book “Fantasy Pieces”, Krebs uses these metrical terms to analyze mainly Schumann’s pieces. In this section, I am going to apply Krebs’s analytical system to discuss metrical dissonances in Brahms’s late piano pieces, and the following examples would show how Krebs’s theory works for Brahms’s pieces.

Krebs employs precise mathematical terms to describe the relationship between interpretative layers. In Krebs’s words, grouping dissonance arises from the “association of nonequivalent groups of pulses.” It usually consists of a metrical layer and a conflicting interpretative layer, causing dissonance between the metrical and the anti-metrical. Krebs notates grouping dissonances with a “G” followed by a ratio (X/Y) of the cardinalities of involved layers (X>Y).

33Krebs, 31.
The Brahms Op. 117, No. 1 is an excellent example for this method. In measures 13-16, the composer writes a flowing eighth-note passage that suggests a 3-layer interpretation, yet the quarter notes in both hands imply a 2-layer interpretation (Example 2.6). Since the 3-layer and the 2-layer do not align with each other, Krebs marks the passage as a grouping dissonance (G$_{3/2}$), and the metrical layer and anti-metrical layer of grouping dissonance invariably align at some point after a number of pulses. For instance, in example 2.6, the 2-layer and 3-layer meet in the downbeat of every measure.

Example 2.6: Brahms Op. 117, No. 1, mm. 13-16, G$_{3/2}$ (1=8th)

Displacement dissonance, by contrast, involves “the different positioning of congruent layers,” and like grouping dissonance, most displacement dissonance involves a metrical layer and an anti-metrical layer. Unlike grouping dissonance, though, the conflicting layers never meet.

34Krebs, 34-35.
and as such, the metrical layer and the anti-metrical layer share the same cardinality. Krebs follows his designation of “D” with an equation of “x+a” or “x-a.” The “x” stands for the share cardinality, and the “a” is the displacement index—“the amount of displacement measured in pulse-layer attacks.” Meanwhile, the “+” implies forward motion and “-” implies backward motion. Most displacement dissonances are considered as a forward motion, but some can be viewed in a backward direction whose anti-metrical layer is the early onset of the following referential pulse.\textsuperscript{35} In his Op. 116, No. 1, Brahms writes two 2-layers that are separated by one eighth-note pulse (Example 2.7). The referential metrical layer begins on the downbeat, setting a forward direction for the displacement; as a result, Krebs marks the passage as “D\textsubscript{2+1}”.

\begin{example}

\textbf{Example 2.7}: Brahms Op. 116, No. 1, mm. 21-24, D\textsubscript{2+1}

\end{example}

\textit{Intensity of Dissonance}

\textsuperscript{35}Ibid., 35.
Much like the realm of pitch, different types of dissonance lead to various degrees of intensity. Krebs maintains that the intensity of a grouping dissonance is determined by its length of cycle; the longer the cycle, the more intense the dissonance will be.\textsuperscript{36} Thus, \( G_{6/5} \), which has 30 pulses, is more dissonant than \( G_{3/2} \), which has 6 pulses. Because grouping dissonance involves some alignment of attacks after a number of pulses, the cycle is a product of the cardinalities of the dissonances. The cycle for dissonance \( G_{3/2} \), for example, is 6; after every 6 pulses, an alignment occurs. But if the layers have a common factor, the equation proceeds differently. That is, in a grouping dissonance \( G_{x/y} \), whereby “x” and “y” have the common factor “z”, the cycle will be \((xy)/z\). As such, the cycle the dissonance \( G_{9/6} \) will be 18.

The intensity of displacement dissonance is determined by the proximity to the consonance. Krebs states that “the more closely a given dissonance approaches a state of alignment, the more strongly dissonant it is.”\textsuperscript{37} Dissonances such as \( D_{x+1} \) or \( D_{x+(x-1)} \) are more intense than the other displacement dissonances. The intensity of dissonance can be produced not only from the inherent property of dissonance itself, but through its “manner of presentation,” known as “contextual intensity.” The determination of contextual intensity depends on the prominence of anti-metrical layers, and the more apparent the anti-metrical layer is, the more intense the dissonance. As the rhythmic structure varies, the dissonance becomes as expressive as other

\textsuperscript{36}Krebs, 31-32.
\textsuperscript{37}Krebs, 57.
musical domains. The composer creates periods of tension and relaxation through changes in the
degrees of intensity or alternating metrical states.

**Metrical Progression**

The succession of rhythmic consonance and dissonance is known as “metrical progression.”
Much as pitch dissonance in a tonal work is a temporary deviation from consonance, rhythmic
dissonance is a brief departure from the expected and the comfortable. Krebs identifies two types
of metrical progressions within the consonance-dissonance-consonance (CDC) paradigm:
neighbor tone and passing tone. Each one begins with the metrical consonance C and moves
through metrical dissonance D to a different metrical consonance C—that is, C→D→C.\(^{38}\)
A given metrical progression (C-D-C) consists of three narratives: a C to D process (consonance
to dissonance), a D-process (procedures within a dissonant state), and D to C process (dissonance
to consonance). The consonance to dissonance (C-D) and dissonance to consonance (D-C)
processes may be abrupt or gradual, the latter of which Krebs refers to as “preparation.” He
explains that:

> “Metrical preparation generally takes the form of the suggestion of an
anti-metrical layer by just one or two pulses—not enough pulses securely to
establish a layer and a metrical dissonance, but certainly enough to prepare a

\(^{38}\)Krebs, 83-84.
In his Op. 117, No. 1 Brahms demonstrates the consonance to dissonance (C-D) process (Example 2.8). Specifically, he paves the way for the grouping dissonance $G_{3/2}$ at measure 21 through early allusions. The music in measures 13-15 hints at $G_{3/2}$, but this reference is quickly followed by several consonant measures (Example 2.8a). At measure 20, the $G_{3/2}$ returns, but when it fully blossoms in the next three measures, the listener is ready for it (Example 2.8b).

Example 2.8: Brahms, Op. 117, No.1, gradual process from consonance to dissonance

a. mm. 13-20 with hint of $G_{3/2}$ in m. 15

b. mm.21 to 23, $G_{3/2}$

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\[39\text{Ibid.},

\[87.\]
Procedures within a dissonant state (the D-process) may proceed in one of three ways: the adjustment of the intensity of the dissonance without a change in its identity; the transformation of one dissonance into another; and the move from a given displacement dissonance to a looser or tighter relative. 40 As Krebs lays out in his book, the displacement dissonances $D_{x+a}$, $D_{nx+a}$, $D_{nx+(a+(n-1)x)}$, for instance, belong to the same family, and of the three, $D_{x+a}$ is the tightest relative. 41 Not surprisingly, the dissonance to consonance (D-C) process is called “resolution.” Krebs writes the abrupt resolution can be subdivided into two conditions:

“Those that occur by the abandonment of one of the layers of motion contained within the dissonance, and those that occur by the establishment of a consonance none of whose layers were contained within the dissonance. The latter class of resolution is rare.” 42

No matter the infrequency of the second condition, Brahms finds it useful in his Op. 116, No. 5 (Example 2.9). From measures 32-34, the two 3-layers lie one eighth-note pulse apart, yet the

\[\text{Example 2.9}\]

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40 Krebs, 91-107
41 Ibid., 41-44.
42 Ibid., 109.
music clearly underlines the anti-metrical layer, resulting in D_{3+1}. In measures 35-39, the composer abandons the anti-metrical 3-layer for the primary consonant 3-layer.

Example 2.9: Brahms Op. 116, No. 5, mm. 32-39, abrupt resolution of the D-C process

The gradual resolution of dissonance to consonance (D-C) process has several possibilities. One of the most common is the de-intensification, loosening, or stripping away of compound dissonances, leaving only one consonant layer. In most cases, this is the primary consonant layer. In his Op. 116, No. 1, Brahms employs the loosening process to great effect (Example 2.10).

From measure 140 to measure 148, both D_{2+1} and G_{3/2} are in the listener’s ear (Example 2.10a), but in the following measures (mm. 148-164), the composer eliminates the 2-layer and keeps the 3-layer, resulting in D_{3+1} (Example 2.10b). Thus, the compound dissonances D_{2+1} and G_{3/2} are “gradually resolved” into D_{3+1}. In measures 164-169, Brahms does away with the displaced
3-layer and articulates the primary metrical layer with dynamic accents, resolving the $D_{3+1}$ (Example 2.10c).

**Example 2.10**: Brahms Op. 116, No. 1, mm. 140-169, gradual resolution of dissonance

a. compound dissonance $D_{2+1}$ and $G_{3/2}$ in mm. 140-148

b. $D_{3+1}$, mm. 148 to 164
c. metrical consonance in mm. 164 to 169

The journey from one metrical state to another gives rise to periods of tension and relaxation in the music, much like the manipulation of harmony, dynamics, and scoring. Sometimes a composer will combine this rhythmic stress and release with other elements to heighten the emotional impact. In the following two chapters, the interaction of the rhythmic domain with the other aspects of a composition will be discussed.
Brahms finished his late piano pieces in his last summer at Bad Ischl, his favorite resort town in the Austrian mountains. He first played them for a small gathering of friends, and their character reflects their intended performance atmosphere. They are intimate and reflective, exploring the expressive possibilities of the small form as opposed to the larger forms of his youth. They do not impress with grandeur and virtuosity; rather, they condense complex ideas and profound emotion into a narrow space and time. With the exception of the Op. 116, No.1, which the composer casts into a large-scale sonata-rondo form, all of the selections in this document are in small forms. Camilla Cai says that renditions of the Brahms late piano pieces require demanding attention to detail. She writes that “the overall design must be quickly comprehensible, contain enough common elements to foster unity, and yet have space for features of contrast.”

This chapter will discuss Op. 116, Nos. 1, 5, and 7. It will address how Brahms manipulates elements within small form, but with a particular eye toward rhythmic activities; their interaction with other domains; and their relationship with the larger structure. The organization of each

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analysis will proceed as thus: a discussion of form; rhythmic analysis and summary; and some pieces will be ended with suggestions for an effective performance.

Op. 116, No. 1  
Formal and Tonal Structure

Op. 116, No. 1 is a curious departure from the composer’s late piano oeuvre. Rather than dwelling within the personal setting of the small form, the capriccio is a hybrid of two large-scale structures: the sonata and the five-part rondo. In their 2006 book Elements of Sonata Theory, James Hepokoski and Warren Darcy state the following about the sonata-rondo: “A piece or movement should not qualify as a (full-scale) sonata-rondo, or Type 4 sonata, unless its first rotation is structured as the exposition of a sonata (P TR ’ S / C), and a later rotation either recapitulates this expositional pattern (the strong norm) or recomposes the pattern in what may still be reasonably (and flexibly) considered to be recapitulatory space.”

Op. 116, No. 1 conforms to this definition with two exceptions (Table 3.1). With respect to sonata form, the first exception is that the first rotation doesn’t contain a closing area. At mm. 53 to 55 the secondary-theme area ends with PAC; however, instead of proceeding to closing area, Brahms employs P^rf theme. The second exception is a truncated recapitulation which does not contain T and S area.

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45 The designation “P^rf” refers to “the specialized P-theme with a Type 4 sonata… that also functions as a recurring refrain theme with rondo character…” see James A Hepokoski and Warren Darcy, xvi.
Table 3.1: Brahms Op. 116, No. 1, formal diagram\textsuperscript{46}

<table>
<thead>
<tr>
<th>Presto energico</th>
<th>Exposition (Rotation 1)</th>
<th>Development (Rotation 2)</th>
<th>RT</th>
<th>Recapitulation (Rotation 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theme</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sonata-like</td>
<td>P</td>
<td>T</td>
<td>S</td>
<td>P</td>
</tr>
<tr>
<td>Rondo-like</td>
<td>A</td>
<td>T</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Harmony (dm)</td>
<td>i</td>
<td>V/III</td>
<td>III</td>
<td>i</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>#VII-VI</td>
</tr>
<tr>
<td>Metrical states</td>
<td></td>
<td>D\textsubscript{3/2} \rightarrow C</td>
<td>D\textsubscript{3/1} \rightarrow C</td>
<td>D\textsubscript{3/2}</td>
</tr>
<tr>
<td>Metrical progression</td>
<td>Dissonance \rightarrow</td>
<td></td>
<td></td>
<td>Consonance</td>
</tr>
</tbody>
</table>

\textsuperscript{46}Samuel Ng, 365.
The first twenty measures of the Brahms Op. 116, No. 1 consists of two versions of the primary theme (Theme A) followed by a bridge connecting the primary theme to the transition (Example 3.1). The material in the bridge derives from the end of the primary theme.

**Example 3.1:** Brahms Op. 116, No. 1, primary theme (Theme A)

Theme A, mm. 1-8, the metrical state is $D_{3+2}$

```
\begin{figure}
  \centering
  \includegraphics[width=\textwidth]{example31.png}
\end{figure}
```

Theme $A^1$, mm. 9-16, the metrical state is displacement dissonance $D_{3+2}$

```
\begin{figure}
  \centering
  \includegraphics[width=\textwidth]{example31.png}
\end{figure}
```

Measures 17-21, the bridge connects the primary theme to the transition

```
\begin{figure}
  \centering
  \includegraphics[width=\textwidth]{example31.png}
\end{figure}
```
In the sonata-rondo form, elements vary as to whether they suggest sonata form or rondo form. One of the central markers for sonata form is the transition, which leads to other features of the structure. In the Brahms Op. 116, No. 1, measures 21-37 act as the transition to the secondary theme (Example 3.2). This secondary theme (Theme B) is a module of the exposition that contrasts with the primary theme in tonality and rhythmic activity (Example 3.3).

**Example 3.2:** Brahms Op. 116, No. 1, mm. 21 to 37, transition to the secondary theme (Theme B)

The metrical state is $D_{2+1}$ plus $G_{3+2}$

![Example 3.2: Brahms Op. 116, No. 1, mm. 21 to 37, transition to the secondary theme (Theme B)](image)

**Example 3.3:** Brahms Op. 116, No. 1, mm. 37-40, secondary theme (Theme B), the metrical state is $D_{3+1}$

![Example 3.3: Brahms Op. 116, No. 1, mm. 37-40, secondary theme (Theme B)](image)
However, instead of proceeding to the closing area, a P$_\text{ref}$ theme comes back at measure 59, where Brahms deploys the recurring primary theme, suggesting rondo form. The development section begins with material from the primary theme (Theme A) in the dominant key and the remainder of the development employs materials from Theme B and transition. The development also reflects the composer’s fondness for third relationships: A minor to C-sharp minor to B-flat minor to B-flat major. The development section ends with another retransition, which acts as a dominant preparation for the return of the tonic P-refrain. Since the secondary theme and transitional material are developed in rotation two, instead of repeating all the expositional materials, the recapitulation starts with the primary theme, leaving out T and S area, and ends with closing area which was missing in the exposition and finally comes back in the recapitulation. As such, Op. 116, No.1 qualifies as a hybrid of rondo form and type-3 sonata form.

Although Brahms was often criticized by his contemporaries for his utilization of Classical forms, his manipulation of anticipated thematic and harmonic events puts a new spin on old designs. But what really sets Brahms apart from his colleagues is his treatment of rhythm, a practice that drew admiration from some of the most noted revolutionaries of twentieth-century music.
**Rhythmic Analysis**

In sonata form, the development and the various transitions are the most unstable, and in these regions of his Op. 116, No.1, Brahms allows very little metrical consonance. The harmonic ambiguity and the rhythmic dissonance together create unusual friction, and in the transition area of the Op. 116, No. 1, Brahms executes two types of metrical dissonances simultaneously, namely D$_{2+1}$ and G$_{3/2}$. Moreover, in the development, he employs three types of metrical dissonance, none of which are resolved until the very end of the development. Here, all the dissonant metrical states resolve in twelve measures (mm. 164-176) before the arrival of the primary theme (Example 3.4). The changes in harmony in each measure underline the primary metrical layer, and as a result, the metrical dissonance resolves before the harmonic tension does. But the early finish of the rhythmic conflict allows the harmonic resolution to take center stage, as the dominant gives way to the tonic from measures 170-176. When the primary theme comes back in measure 176, Brahms highlights its final arrival with two metrical dissonances, D$_{3+2}$ and G$_{3/2}$, both of which drive the music to the end.

**Example 3.4:** Brahms Op. 116, No.1, mm. 164-176, metrical consonance
The most distinctive feature of the Brahms, Op. 116, No. 1, however, is how each theme is represented by different metrical states. The metrical state of Theme A consists of textural, articulation, and dynamic accents—notably the *sforsando* from mm. 4-6—all of which emphasize the third beat, producing a 3-layer (1=8\textsuperscript{th} note). Since the primary metrical layer suggests another 3-layer, the two 3-layers are separated by two eighth-note pulses, leading to the displacement dissonance $D_{3+2}$ (*Refer back to Example 3.1*).

By contrast, the metrical state of the transition consists of two 2-layers separated by one eighth-note pulse, creating the displacement dissonance, $D_{2+1}$. The melodic attack and textual
accents enunciate the 2-layer, but the primary metrical layer, a 3-layer, is weakly articulated, so that the resultant dissonance is $G_{3/2}$ (Refer back to Example 3.2). In Theme B, the change of the melodic contour accents the anti-metrical 3-layer against the primary metrical 3-layer, and these two 3-layers are separating by one eighth-note pulse, producing $D_{3+1}$ (Refer back to Example 3.3).

In summary, Theme A, appearing in the primary theme area and closing theme area, is represented by $D_{3+2}$; the transition is represented by $D_{2+1}$ plus $G_{3+2}$; and Theme B, the secondary theme, is represented by $D_{3+1}$. Brahms also reinforces tonal instability with metrical intensity. Among the three thematic areas in the exposition, the tonality of the transition is most unstable, and the compound metrical tension of the transition is the most rhythmically dissonant.

While metrical dissonance penetrates almost all of the Brahms Op. 116, No. 1, the composer does allow fleeting periods of rhythmic consonance, often at the end of phrases to give some sense of relief or resolution. The displacement dissonance $D_{3+2}$ that initiates the primary theme area, for example, briefly resolves to consonance at mm. 17-21, the finish of the primary theme. The same event occurs in mm. 53-59—the resolution of metrical dissonance $D_{3+1}$ marks the end of a formal unit.

**Op. 116, No. 1**

**Summary**

1. The principal recurring dissonances are $D_{2+1}$, $D_{3+1}$, $D_{3+2}$, and $G_{3/2}$. 
2. The resolution of a metrical dissonance reinforces the close of a phrase or a formal unit.
3. Brahms aligns metrical dissonance with harmonic ambiguity to build tension in the transition areas and the development section.
4. The resolution of the metrical dissonance in the Op. 116, No. 1 arrives earlier than the harmonic resolution.
5. The metrical intensity reflects the tonal instability.

**Performance Suggestion**

Harald Krebs gives advice on how to render grouping dissonance and displacement dissonance, but he does not provide suggestions on how to unite them, how to connect them to other domains, or even how they fit within an overall interpretation of the piece. As previously discussed, the excitement in the Brahms Op. 116, No. 1 arises from the interaction of metrical dissonance with form, melody, and harmony. In the development section, specifically measures 123-137, the metrical state moves from $D_{3+1}$ to $D_{2+1} + G_{3/2}$. Because the composer does not lay out a transition between these three metrical states, the performer must emphasize the notated downbeat of measure 132 so that the listener has some sense of structure (Example 3.5).

Additionally, in measures 132-137, two different metrical dissonances ($D_{2+1}$ and $G_{3/2}$) appear simultaneously, further obscuring the listener’s grasp of time. Although the metrical states stay the same, performers need to consider the interactions among metrical domains to decide which notated downbeat should receive special prominence. In measures 136-137, the harmonic

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[^47]: Krebs, 177-186.
progression from ii/VI resolving to V/VI, plus the implication of the dynamic-hairpin, suggest that the downbeat of mm. 137 should be articulated (Example 3.5).

**Example 3.5:** Brahms Op. 116, No. 1, mm. 123-137

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**Op. 116, No. 5**

*Form and Tonal Structure*

Among the late piano sets of Brahms, the Op. 116, No.5 is widely regarded as the most forward-looking. Although it has only thirty-nine measures, it has an unusual amount of compositional devices, including ternary form, harmonic deception, and symmetry (Table 3.2).
Brahms casts his Op. 116, No. 5 in rounded binary form---A B A\(^1\). In the traditional practice of rounded binary form, the B section concludes with a half cadence in the original key, and it acts as a dominant bridge to A\(^1\), which reintroduces the tonic. In his Op. 116, No. 5, though, Brahms casts the A\(^1\) section into the subdominant, and he reinforces the surprise with a pianissimo dynamic. Even more startling, the “wrong” key does not reverse course; rather, it travels to a more distant key, the Neapolitan. Near the end, however, Brahms decides that he has wandered far enough. Through a Neapolitan seventh chord, he writes a strong dominant-to-tonic progression and he finishes the piece with a bright Picardy third (N\(^7\)→V→I).

The A and A\(^1\) sections reflect the composer’s trademark work with rhythm. The harmonic consonance falls on the upbeat to the next measure which makes the upbeat sounds like a downbeat. In the words of Walter Frisch, Brahms reverses “traditional metrical procedures of

<table>
<thead>
<tr>
<th>Section</th>
<th>A</th>
<th>B</th>
<th>A(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmony E minor</td>
<td>i→V</td>
<td>V</td>
<td>iv→N→N(^7)→I</td>
</tr>
<tr>
<td>Metrical states</td>
<td>D 3-1</td>
<td>Consonance→ prepare dissonance at mm. 25 to 29</td>
<td>D3-1</td>
</tr>
<tr>
<td>Metrical progression</td>
<td>D</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Mm</td>
<td>1-11</td>
<td>11-29</td>
<td>29-35</td>
</tr>
</tbody>
</table>

Table 3.2: Brahms Op. 116, No. 5, Structure
associating weak-strong with dissonance-consonance," which confuses listener’s perception of meter (Example 3.6a).

Example 3.6: Brahms Op. 116, No. 5

a. mm. 1-6

Furthermore, a reduction of the first six measures reveals that the chord in the right hand mirrors the chord in the left hand (Example 3.6b); a foreshadowing of the strict symmetry that Second Viennese School composer Anton Webern would make an important feature of his music.


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Example 3.6: Brahms Op. 116, No. 5

b. the chord in the right hand in the first six measures mirrors the chord in the left hand

\[\text{Example 3.7: Brahms Op. 116, No. 5, mm. 1-4, D}_{3.1}\]

Rhythmic Analysis

Next to the noteworthy compositional mechanisms, the rhythm in the Brahms Op. 116, No. 5 is rather uniform, with only one type of metrical dissonance taking place. This dissonance takes place only in the outer sections, giving way to consonance in the B section, and then resolving with the strong dominant-to-tonic progression at the end of the piece. Specifically, in A and A\(^1\) section all musical features support the anti-metrical layer, and no features support the primary metrical layer; thus a D\(_{3.1}\) (1= 8\(^{th}\) note) arises (Example 3.7). The deleted 3 in example 3.7 is taken from Krebs’s notation, meaning the expected 3-layer is not supported by musical features. In the B section, by contrast, the harmonic accent produces a 3-layer aligned with the primary 6-layer, and the consonance 3/6 results (Example 3.8).
But the most interesting parts of the piece are the two metric transitions that Brahms constructs to proceed from consonance to dissonance, and then dissonance to consonance. The first one occurs before the return of A\textsuperscript{1} section. Here, Brahms writes a five-measure passage (mm. 25-29) that takes the listener from the consonance of the B section to the dissonance of the A\textsuperscript{1} section. In addition, it makes allusions to the upcoming dissonance (Example 3.9).

Yet the metrical state of this transition is hard to pinpoint, and for the interested performer,
two interpretations work. On one hand, the articulation of right hand and the second pedal indication suggest that the anti-metrical 3-layer in measure 25 starts at the third beat as well as the sixth beat. In this case, the anti-metrical three-layer is the early onset of the following metrical layer, and the dissonance $D_{3-1}$ makes the most sense (Example 3.9a). On the other hand, the harmonic accent and the written articulation of the left hand in measures 26-29 imply that the anti-metrical 3-layer in measure 25 begins on the second beat and the fourth beat, giving way to $D_{3+1}$ (Example 3.9b).

**Example 3.9:** Brahms Op. 116, No. 5, mm. 25-28, two different metrical interpretations

a. $D_{3-1}$

![Example 3.9a](image)

b. $D_{3+1}$

![Example 3.9b](image)
The second metric transition takes place in the A\textsuperscript{1} section five measures from the final bar. In measure 35, Brahms abandons the anti-metrical 3-layer in favor of the primary consonant 3-layer. From a rhythmic standpoint, the dissonance D\textsubscript{3-1} is abruptly resolved, but through unsettled harmonies and rhetorical reinforcement, he makes measure 35 an important structural post. The crescendo from measure 33; the sequence of unresolved Neapolitan chords; the \textit{sforzando} on the downbeat of measure 35—the loudest dynamic marking in the A\textsuperscript{1} section—all combine to make measure 35 the preparation for the climax. With the rhythmic dissonance resolved, Brahms in the next measure (m. 36) has the listener’s full attention as he directs the chromatic harmony into the dominant-to-tonic progression that brings about the end of the piece.

\textbf{Example 3.10:} Brahms Op. 116, No. 5, mm. 32-39
In effect, the Brahms Op. 116, No. 5 is a fusion of the familiar and the experimental. While the listener takes comfort in the form, uniform rhythm, and recognizable motives, Brahms jolts him or her through subverted expectations, restless harmony, and a disjunction of metric and harmonic resolutions. That he achieves all this in only 39 measures is not only remarkable for his time, but worthy of making scholars reconsider his “conservative” label.

Op. 116, No. 5

Summary
1. The principal metrical dissonance is $D_{3-1}$.
2. Brahms employs different metrical states to reinforce the form. The dissonance $D_{3-1}$ represents the A and A$^1$ sections, and the metrical consonance $3/6$ represents the B section.
3. At measure 35, the sudden rhythmic dissonance-to-consonance (D-C) paves the way for the climatic harmonic resolution in the final measures of the piece.

Performance Suggestion

The metrical dissonance at the very beginning of Op. 116, No. 5 suppresses the primary metrical layer, creating an immediate dilemma for the attentive keyboardist. But the performer need not worry about bringing out this layer because the composer’s intent is to obscure the time signature in the A sections and create contrast in the B section with rhythmic calm. Rather, the trickiest passage is from measure 25 to measure 29 (Example 3.9). The articulation in each hand; the implied harmonic accents; the carefully indicated pedal markings in measure 25; and the two types of metrical dissonance make two interpretations possible. I feel that the performer should
strive to emphasize the D₃₋₁ dissonance. First, a D₃₋₁ rendition makes the transition from measure 25 to measure 29 smoother because the following section is also D₃₋₁. Second, the second pedal marking on the last beat of measure 25 signifies the beginning of a new phrase and the early onset of the new metrical layer. The first pedal marking, by contrast, simply blurs the true time signature. Even if the first pedal marking is used to highlight D₃₊₁, Brahms in measure 25 would likely have placed the second pedal indication on the fifth beat. As such, the keyboardist who endeavors to communicate a D₃₋₁ interpretation should enunciate in the right hand the starting note of each slur in order to bring the anti-metrical layer to the forefront.

**Op. 116, No. 7**

**Form and Analysis**

The Brahms Op. 116, No.7 is the last piece that Brahms titled “Capriccio.” It is notable for its frequent change of time signature; complex rhythmic activity in the middle section; and what Edward T. Cone calls “harmonic congruence.” Cone defines harmonic congruence as a texture in which both melody and harmony employ the same pitches. That is, a singular arpeggio can be heard both as the theme and its accompaniment (Example 3.11). From a structural standpoint, Op. 116, No. 7 is cast in a slightly expanded ternary form: A, B, re-transition, A¹ and coda.

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(Table 3.3). The opening A section, which is shot through by a singular diminished seventh chord, can be broken into two parts: $a$ (mm. 1 to 10) and $a^1$ (mm. 11 to 20). Both $a$ and $a^1$ employ the same motive, but $a^1$ directs the motive into a syncopated rhythm.

**Example 3.11:** Brahms Op. 116, No. 7, mm. 5-8, “harmonic congruence”
Table 3.3: Brahms Op. 116, No. 7, Structure

<table>
<thead>
<tr>
<th>Section</th>
<th>A</th>
<th>B</th>
<th>Transition?</th>
<th>A¹</th>
<th>Coda</th>
</tr>
</thead>
<tbody>
<tr>
<td>theme</td>
<td>a</td>
<td>a¹</td>
<td>b</td>
<td>c</td>
<td>b¹</td>
</tr>
<tr>
<td></td>
<td>Based on a material</td>
<td>A</td>
<td>Based on a material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tonality (d)</td>
<td>i-----→V</td>
<td>i-----→V</td>
<td>V</td>
<td>V/V</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>i</td>
<td>i</td>
<td>---</td>
<td>V</td>
<td>i</td>
</tr>
<tr>
<td>Metrical states</td>
<td>D₂+₁(1=quarter) →C</td>
<td>D₄+₁(1=16th) →C</td>
<td>D₆+₁ plus G₃/₂</td>
<td>Consonance, but with stretto</td>
<td>D₂+₁(1=quarter note) →D₂+₁(1=16th note)</td>
</tr>
<tr>
<td></td>
<td>D₂+₁(1=16th)</td>
<td>D₄+₁(1=16th)</td>
<td>D₂+₁(1=16th)</td>
<td>C</td>
<td>G₃/₂ →C</td>
</tr>
<tr>
<td>Time signature</td>
<td>2/4</td>
<td>6/8</td>
<td>2/4</td>
<td>2/4</td>
<td>3/8</td>
</tr>
<tr>
<td>Metrical progression</td>
<td>D</td>
<td>D</td>
<td>C</td>
<td>D</td>
<td>C-------→D-------→C</td>
</tr>
<tr>
<td>Mm</td>
<td>1-10</td>
<td>11-20</td>
<td>21—28</td>
<td>28—36</td>
<td>37—46</td>
</tr>
</tbody>
</table>
The B section, cast in a related dominant key, stands in contrast to the previous A section with a quieter character, soft dynamic marking, driving hemiolas, and three substructures that together can be seen as a rounded binary form: $b$, $c$, and $b^1$.

The passage that follows the B section has sparked much debate among scholars. This sequence of measures (mm. 47-61) does not fit neatly into ternary form, and from a performer’s view, it almost threatens to distort the balance of the larger structure (Example 3.12). Bernice Feinstein regards this passage as a measured cadenza; Camilla Cai views it as added measures that pave the way for the A$^1$ section; and Eugene Alcalay considers it a long transition in which the sonority of the diminished seventh chords is expressed melodically rather than vertically. The term “transition” may not be necessary to account for the modulation. According to James Hepokoski and Warren Darcy, such a short tangent—consisting of only fifteen measures—could be regarded as nothing more than a linking passage whose rhythmic verve and harmonic action drive one well-defined section toward another. Nevertheless, Alcalay has reason to believe that Brahms places structural importance on these measures. The passage recalls material from the first A section, and through rhythmic contraction and tightening,

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Brahms builds the requisite intensity to drive the music to the A\textsuperscript{1} section.

**Example 3.12:** Brahms Op. 116, No. 7, mm. 47-61

After the A\textsuperscript{1} section, Brahms writes a seventeen-measure coda (mm. 76-92) that is a thematic transformation of the A sections. The singular diminished seventh chord that permeates the A sections turn from arpeggios into block chords, and through hemiola, Brahms directs the music to the final measure, where he brings about a triumphant finish with metrical consonance.
and a ringing Picardy third.

*Rhythmic Analysis*

Much like the Brahms Op. 116, No. 1, the Brahms Op. 116, No. 7 calls upon different metrical states as a way to articulate the larger structure of the piece. The A section employs two dissonant states: $D_{2+1}$, which represents the $a$ segment (mm. 1-10); and $D_{4+1}$ which represents the $a^1$ segment (mm. 11-20). In the $a$ segment (mm. 1-10), Brahms creates the dissonance $D_{2+1}$ in two parts, separated by two measures of metrical consonance (mm. 7-8). In measures 1-6, the notated slur, durational accent, and new-event accent generates two 2-layers one quarter note apart; and in measures 9-10, the melodic contour suggests two 2-layers one sixteenth note apart. The metrical progression is $D_{2+1}$ (1=quarter note, mm. 1-6); temporary resolution to consonance (mm. 7-8); and $D_{2+1}$ (1=sixteenth note, mm. 9-10) (*Example 3.13a*).


a. mm. 1-10, $D_{2+1}$ (1=quarter note) $\rightarrow$ consonance $\rightarrow$ $D_{2+1}$ (1=sixteenth note)
In the $a^1$ segment (mm. 11-20), Brahms tightens the metrical dissonance from $D_{4+1}$ to $D_{2+1}$.

In the first six measures of the segment (mm. 11-16), the durational, dynamic, and articulation accents all emphasize in each measure the second sixteenth note, producing an anti-metrical 4-layer. Since the primary metrical layer is another 4-layer, and the two layers are separated by a sixteenth-note, the displacement dissonance is $D_{4+1}$.

After two measures of consonance (mm. 17-18), Brahms introduces a simpler metrical dissonance, albeit still on the displacement of a sixteenth note (mm. 19-20). Even through the marked decrescendo, the performer should bring out the metrical conflict in order to keep tension in the music (Example 3.13b).


b. mm. 11-20, tightening of metrical dissonance from $D_{4+1}$ to $D_{2+1}$
In the B section (mm. 21-47), the metrical activities are even more active, as two different metrical dissonances present simultaneously. The moving melodic line suggests a 2-layer while the accompanying eighth note implies a 3-layer, and the resulting grouping dissonance is $G_{3/2}$ ($1=8^{\text{th}}$ note). At the same time, the moving eighth note establishes the primary metrical dissonance as a 6-layer, and because the melodic line is an eighth-note apart from it, the displacement dissonance is $D_{6+1}$ (Example 3.14).

**Example 3.14:** Brahms Op. 116, No. 7, mm. 21-25
The role of the following passage (mm. 47-61) in the larger ternary structure may be in dispute among scholars, but the metric state is consonant, even if Brahms contracts the rhythm. In measures 48-51, the descending two-note motive appears as two quarter notes every other measure, but in measures 52-53, it becomes on every measure a dotted eighth note with a sixteenth note on the downbeat. In measures 54-57, the two-note motive emerges as a quarter note to eighth note sequence (Refer back to Example 3.12). This steady compression gives the music the needed thrust to make advent of the A₁ section a stirring recapitulation.

The metrical progression of the A₁ section is as same as that of the first A section: dissonance (D₂+₁, 1=quarter note); brief metrical consonance; and a return to dissonance (D₂+₁, 1=sixteenth note). Brahms reinforces the tightening of the dissonance, from one layer equals quarter to one layer equals sixteenth note with a steady increase in volume, and he matches the resolution of the dissonance D₂+₁ at measure 76 with the end of the formal unit (Example 3.15).
Example 3.15: Brahms Op. 116, No. 7, mm. 66 to 75, tightening of the metrical dissonance

In the coda (mm. 76-92), Brahms continues the metrical consonance through measure 82, but from measures 82-90, the harmonic and articulation accents suggest an anti-metrical 2-layer that conflicts with the primary metrical 3-layer. This produces the grouping dissonance $G_{3/2}$, and with a slow and unremitting crescendo, Brahms creates a bubbling tension that pushes the music to the final measures. At measure 90, the metrical resolution of $G_{3/2}$ and the resonant Picardy third combine for an exciting finish (Example 3.16).
Example 3.16: Brahms Op. 116, No. 7, mm. 76-92, coda

Summary of Rhythmic Analysis

1. The principal metrical dissonances are $D_{2+1}$ and $G_{3/2}$.
2. In the coda section, the resolution of the metrical dissonance aligns with the resolution of a formal unit.
3. Brahms employs different metrical states to mark off each section.
4. Despite temporary metrical consonance, the metrical dissonance is key, playing an important role in pushing the music forward and into the final measure.
**Performance Suggestion**

In the Brahms Op. 116, No. 7, the two most challenging places are the middle B section (mm. 21-47) and the often debated transition section (mm. 47-61). The rhythmic activity of the B section is highly complex—although the melodic line is cast in triple time, the accompaniment is written as compound 6/8 meter. The performer should highlight the duple versus triple conflict and maintain the friction of the various metrical dissonances without a relaxation of intensity.

While most keyboardists will naturally emphasize the melody, the addition of an accent on the first beat of every measure will draw the listener’s attention to the clash between the anti-metrical layer and the primary metrical layer. In the following transition section, the performer should underlining the rhythmic compression, especially in measures 56-57, where the two-note motive (F-E) hiding behind the thick chords requires clear articulation.
Chapter 4

Op. 117 no. 1 and Op. 118 no. 4

The Three Intermezzi, Op. 117, is a departure from the other late Brahms piano pieces in that it remains homogenous rather than combining different genres. The work underscores the composer’s love of the lullaby, in which a slower tempo and a quieter character prevails. In fact, in a conversation with his longtime friend Rudolf von der Leyen, the elder Brahms referred to the Three Intermezzi as “three cradle songs of my sorrows.”55 The composer prefaces the first intermezzo with a quotation Scottish ballad translated by the late eighteenth-century German philosopher and theologian Johann Gottfried Herder:56

Schlaf sanft, mein Kind, schlaf sanft und schön!
Mich dauert’s sehr, weinen sehn.

(Below, my babe, lie still and sleep!
It grieves me sore to see thee weep.)

Of the three miniatures, the outer two are similar to each other in terms of atmosphere; simple ternary design; and middle sections that contain syncopated figures and complex rhythm.

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56Ibid., 238-239.
Op. 117, No. 1
Formal Analysis

Brahms casts the first intermezzo of his Op. 117 into ternary ABA form with almost perfect symmetry. The first A section has sixteen measures and a four-measure transition; the middle B section has fifteen measures and a two-bar re-transition; and the returning A¹ section has sixteen measures and a four-measure codetta (Table 4.1).

Table 4.1: Brahms Op. 117, No. 1, structure

<table>
<thead>
<tr>
<th>Section</th>
<th>A</th>
<th>transition</th>
<th>B</th>
<th>retransition</th>
<th>A</th>
<th>Codetta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsection</td>
<td>a</td>
<td>b</td>
<td>a</td>
<td>a</td>
<td>C</td>
<td>c</td>
</tr>
<tr>
<td>Tonality (E flat major)</td>
<td>I</td>
<td>V/iv (\rightarrow) iv</td>
<td>(i)</td>
<td>i</td>
<td>V/iv--</td>
<td>I---------- (\rightarrow) V</td>
</tr>
<tr>
<td>Metrical states</td>
<td>D(_{6\downarrow1})</td>
<td>G(_{3/2})</td>
<td>C (\rightarrow) G(_{3/2})</td>
<td>G(_{3/2\downarrow1})</td>
<td>G(_{3/2})</td>
<td>D(_{6\downarrow1})</td>
</tr>
<tr>
<td>Metrical progression</td>
<td>D</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mm</td>
<td>1</td>
<td>5</td>
<td>9</td>
<td>15</td>
<td>17</td>
<td>21</td>
</tr>
</tbody>
</table>

Brahms uses the parameters of ternary form to create contrast and to foster unity. The first A section breaks into four subsections (abaa); its theme is song-like and in a stable tonality; and its texture consists of mostly block chords. The B section is very different—it has only two subsections (cc); its theme is more fragmented and in more ambiguous tonality; and its texture consists mostly of arpeggio. In the A section, the E-flat pedal persists in the right hand through...
almost the entire episode, and the sharing of common tones brings about a secure harmonic configuration (Example 4.1).

**Example 4.1:** Brahms Op. 117, No. 1, A section, mm. 1-5,

The B section takes the listener to the parallel minor, but the key does not take hold until the middle of the episode. In measure 29, a strong dominant-to-tonic cadence in E-flat minor not only marks the midpoint of the piece, but implies that E-flat never left (Example 4.2).\(^{57}\)

**Example 4.2:** Brahms Op. 117, No. 1, B section, mm. 21-29

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At the same time, the A section and the B section share motivic units and the E-flat pedal.

The descending stepwise motive that permeates the A section makes appearances in the B section at measures 26, 28, 34 and 36-37, and while the B section employs the E-flat pedal for shorter periods of time, it still maintains a powerful connection with the section previous and the section to come. In between these episodes, Brahms writes two transitions, and he follows the A\textsuperscript{1} section with a codetta.
**The Transitions and the Codetta**

The first transition takes place from measures 16-20, and it immediately evokes the same descending stepwise motion and E-flat pedal note that define the A section. The tonality begins to stray from E-flat major, passing through A-flat minor (iv), but the pedal keeps the harmonies from straying too far. Whether in root position or inversion, the minor subdominant sets up the appearance of the parallel minor (E-flat minor) in the subsequent episode (**Example 4.3**).

**Example 4.3:** Brahms Op. 117, No.1, first transition, mm. 16-20

The second transition occurs in measures 36-37, taking the listener from the end of the middle B section to the reprise of the A section. While its brevity qualifies it more accurately as a “re-transition,” its content is unusually interesting. The melodic contour is identical to measure 28 (B section) (**Example 4.4a**), but Brahms writes in a *ritardando* by way of augmentation, and the descending stepwise quarter notes remind the listener of the A section (**Example 4.4b**).
**Example 4.4:** Brahms Op. 117, No. 1

a. measure 28

![Example 4.4: Brahms Op. 117, No. 1, measure 28](image)

b. Second transition, mm. 36-37, the melodic contour is identical to measure 28

![Example 4.4: Brahms Op. 117, No. 1, mm. 36-37](image)

The codetta occupies the last five measures (mm. 53-57), but even within its small frame, Brahms makes room for a false climax and a satisfying ending. On the sixth beat of measure 53, Brahms delivers his strongest dynamic (rf) on a deceptive cadence. The dominant seventh chord makes a surprising turn to the subdominant, and in the next measure, the inner voice in the right hand leads the listener back to the dominant seventh amidst a quick decrescendo. In measure 55, Brahms quietly resolves to the tonic, and he underlines the principal key with two additional measures of E-flat major (**Example 4.5**).

**Example 4.5:** Brahms Op. 117, No. 1, mm. 53-57, codetta
Rhythmic Analysis and Other Interactions

In the Brahms Op. 117, No. 1, each section is represented by a different metrical state. In the A section, the accents in the melodic contour of the left hand lead to an anti-metrical 6-layer (1=eighth note), and the primary metrical layer suggests another 6-layer. The two 6-layers are separated by one eighth-note, and the anti-metrical layer is the early onset of the following primary metrical layer. The result is a displacement dissonance in a backward direction, D₆₋₁. Brahms maintains this dissonance for almost the entire A section, essentially disallowing the listener to grasp any realistic time signature (Example 4.6).

Example 4.6: Brahms Op. 117, No. 1, A section, mm. 1-16
In the final substructure of the A section (mm. 13-16), Brahms employs grouping dissonance. The moving eighth-note suggests a 3-layer interpretation, and the moving quarter notes imply a 2-layer interpretation. Brahms sustains the resulting $G_{3/2}$ dissonance for four measures, and while he resolves to metrical consonance for a few measures, the $G_{3/2}$ dissonance appears again at measure 20, immediately before the advent of the B section (Refer back to Example 4.3). As such, the $G_{3/2}$ dissonance paves the way for the metric conflict in the middle B section.
The B section has more complex rhythmic activity than the A section. The left hand articulates the primary metrical 3-layer, and the right hand suggests a 2-layer, giving way to another $G_{3/2}$ dissonance. At the same time, Brahms displaces the melody of right hand, causing the two 6-layers to be one eighth note apart, resulting $D_{6+1}$. Together with the ambiguous tonality, these two simultaneous metrical dissonances, $G_{3/2}$ and $D_{6+1}$, bring about an atmosphere of anxiety and precariousness. But Brahms keeps an optimistic tone; in measures 26, 28, and 34, he fuses the descending stepwise motive with harmonic resolution and metrical consonance. At measures 26 and 28, the music progresses resolve from V/V to V, and at measure 34, V to (Example 4.7).

**Example 4.7:** Brahms Op. 117, No. 1, B section, mm. 21-35
Rhythmic Activity in the Transitions and the Codetta

The term “transition” usually entails active passages that push the music forward through harmonic action or rhythmic verve. In the Brahms Op. 117, No. 1, the two transitions do both;
not only do they change key, but they also change metrical state. At measure 17, the beginning of
the first transition, the rhythmic dissonance of the A section resolves, and in measures 19-21, the
metrical state changes to \(G_{3/2}\) (1=quarter note), which prepares the later appearance of \(G_{3/2}\) in
the B section, even though the pulse here in based upon the eighth note.

The second transition, or “re-transition,” is a pair of tightly-packed measures that displays
the composer’s superb economy of material. In measures 36-37, Brahms writes out a ritardando
through an expansion of the dissonance \(G_{3/2}\), from one layer equaling one eighth note to one
layer equaling one quarter note. In essence, the compound metrical dissonances (\(D_{6+1}\) plus \(G_{3/2}\))
in the B section dissolve into one metrical dissonance (\(G_{3/2}\)), and the return of the A section is not
one of triumph, but rather of calm and peace.

The codetta, measure 53 to the end, has transition-like qualities. Brahms saves his strongest
dynamic (rf) for the deceptive cadence on the sixth beat of measure 53, but the dynamic accent
makes it comes across to the listener as a downbeat.\(^{58}\) Moreover, on the downbeat of measure 56,
the final dominant chord and rhythmic dissonance resolve concurrently (Refer back to ex. 4.5).

**Op. 117, No. 1**

*Summary of Rhythmic Analysis*

1. The principal metrical dissonances are \(D_{6-1}\), \(D_{6+1}\), and \(G_{3/2}\).

\(^{58}\)Cai, 399.
2. Each section is represented by a different metrical state.
3. The resolution of the metrical dissonance aligns with the resolution of the harmony.
4. In the A section, the metrical dissonance $D_{6-1}$ permeates nearly the entire episode.
5. In the B section, Brahms combines two different metrical dissonances, $D_{6+1}$ and $G_{3/2}$, with harmonic ambiguity to build tension.
6. Both transitions and the codetta display both intrinsic harmonic and rhythmic functions.

**Op. 118, No.4**

*Formal, Tonal, and Motivic Structures*

Op. 118, No. 4, also known as the Intermezzo in F minor, displays the composer’s contrapuntal mastery. Each section of the ternary form (ABA) includes canonic writing, and much of the music is cast into double canon. Brahms also writes passages of “mirror symmetry,” a device that he employs in his Op. 116, No. 5. In the Op. 118, No. 4, this symmetry principally concerns the trading between hands of a triplet figure in free inversion, at first conventionally (*Example 4.8a*) and later in arpeggio (*Example 4.8b*). Through the piece, the imitation occurs at an intervallic distance of only one beat, often leading to a nervous and complicated dialogue. This blurring of melody and accompaniment not only makes a puzzle as to which line is more important, it creates an intensity that is at once restless and mysterious.

**Example 4.8:** Brahms, Op. 118, No.4

a. mm. 1-7, mirror symmetry: the triplet figure trades between hands in free inversion
Brahms writes his Op. 118, No. 4 into ternary form (ABA) with a varied return of the

A section (Table 4.2). The first A section (mm. 1-51) has three subsections: $a$ (mm. 1-15); $b$ (mm. 16-38); and $a$ again (mm. 39-51). The first subsection $a$ stays entirely within the tonic, but it has two important ideas. The first one opens with a double canon: one between the soprano line and the tenor line, exchanging dotted quarter notes at the octave; and the other between the alto line and the bass line, trading triplet figures in free inversion (Refer back to Example 4.8a).

At measure 8, the double canon melts into a single canon. At that point, the bridge or second
idea begins, and at measure 13, the double canon resumes (*Example 4.9*). In the reprise of the

A section, the principal motive of the bridge—two eighth notes followed by a triplet—returns in

an altered character.

*Example 4.9*: Brahms Op. 118, No. 4, mm. 7-12, bridge motive
### Table 4.2: Structure of Brahms Op. 118, No. 4

<table>
<thead>
<tr>
<th>Section</th>
<th>A</th>
<th>B</th>
<th>Retransition</th>
<th>A</th>
<th>Codetta</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Substructure</strong></td>
<td>a</td>
<td>Bridge a</td>
<td>b</td>
<td>a</td>
<td>Varied a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>bridge</td>
</tr>
<tr>
<td><strong>Tonality</strong></td>
<td>i</td>
<td>V-----→i</td>
<td>III→IV-V</td>
<td>i</td>
<td>V</td>
</tr>
<tr>
<td><strong>F minor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>iV→V</td>
</tr>
<tr>
<td><strong>Metrical</strong></td>
<td>D_{2/1}</td>
<td>C and G_{3/2} alternate</td>
<td>D_{2/1}</td>
<td>D_{2/1}</td>
<td></td>
</tr>
<tr>
<td><strong>states</strong></td>
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<td><strong>Progression</strong></td>
<td>D</td>
<td></td>
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</tr>
<tr>
<td><strong>Mm</strong></td>
<td>1</td>
<td>8</td>
<td>16</td>
<td>38-51</td>
<td>51</td>
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<td></td>
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<td>67</td>
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<td>91</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>99</td>
</tr>
</tbody>
</table>
The following subsection b (mm. 16 to 38) departs from imitative counterpoint and harmonic stability for a lean melodic line and harmonic wandering. This episode uses the parallel major and relative major (F major and A-flat major) as portals to B major (or C-flat major), yet another harmonic relationship by the interval of a third. In measure 39, chromatic motion (C to D-flat) leads to a German sixth chord that ushers the return of the opening canon in the home key of F minor. In the B section, Brahms explores the third relationship even further—the music moves from A-flat major to E major (F-flat major) and finally to C major, the dominant lock for the home key (F minor). Despite changes in texture, elements of the double canon are still present, through the whole B section where Brahms alternates single notes with chords. Example 4.10 illustrates the double canon alternates between chords with single notes (Example 4.10).

Example 4.10: Brahms Op. 118, No.4, mm. 51-55, double canon alternates between chords with single notes

The re-transition in measures 91-99 displays Brahms’s manipulation of motive. Its theme
derives from the first two measures of the piece (m. 1-2), where Brahms employs three intervals: the second; the third; and the fourth (or fifth) (Example 4.11a). In the re-transition, though, Brahms draws them out in an eight-measure phrase (Example 4.11b), and this passage takes the music to the reprise of the A section at measure 99.

Example 4.11: Brahms Op. 118, No. 4

a. mm. 1 to 2, three intervals: the second, the third, and the fourth (or fifth)

b. mm. 91 to 95, the re-transition: the second, the third, and the fifth (or fourth)

In the returning A section, the opening material has a different structure and character.
Brahms omits subsection \( b \); expands the bridge; and releases an intense outpouring of emotion that does not subside until the last five measures.

**Rhythmic Analysis**

Since the metrical states are limited by the imitative texture, it stays almost uniform. The prevailing canon creates a displacement dissonance at a distance of one quarter note, and the dynamic accents and new event accents produce an anti-metrical 2-layer (\( 1 = \) quarter note). The two 2-layers lie one quarter note apart, and because the anti-metrical layer is an early onset of the following metrical layer, the resulting dissonance is \( D_{2:1} \) (**Example 4.12**).

**Example 4.12**: Brahms Op. 118, No. 4, mm. 1-11, dynamic accents and new event accents, \( D_{2:1} \)
Brahms also writes intriguing hemiola. In measures 18-28, the grouping dissonance $G_{3/2}$ is produced through a 2-layer (1=one triplet eighth note) and a referential 3-layer, and its resolution corresponds with the resolution of the harmonic tension (Example 4.13).

Example 4.13: Brahms Op. 118, No. 4, mm. 18-28, hemiola passages

a. mm. 18 to 20, $G_{3/2}$, the resolution of $G_{3/2}$ associates with the resolution of harmonic dissonance

\[
\begin{align*}
G_{3/2} & \text{ resolves to metrical consonance} \\
\begin{array}{c}
\begin{array}{c}
\text{f: } V \rightarrow I \text{ (Harmonic resolution)}
\end{array}
\end{array}
\end{align*}
\]

b. mm. 22 to 24, the resolution of metrical dissonance associates with harmonic resolution

\[
\begin{align*}
G_{3/2} & \text{ resolves to metrical consonance} \\
\begin{array}{c}
\begin{array}{c}
\text{Ab: } V \rightarrow I
\end{array}
\end{array}
\end{align*}
\]
c. mm. 26 to 28, the resolution of metrical dissonance associates with harmonic resolution

G₃/₂ resolves to metrical consonance

\[
\begin{array}{c}
\text{B: V} \rightarrow \text{I} \\
\end{array}
\]

**Summary of Rhythmic Analysis**

1. The principal metrical dissonances are D₂₋₁ and G₃/₂.
2. The resolution of the metrical dissonance aligns with the harmonic resolution.
3. The metrical states are mostly uniform.

**Performance Suggestion**

The keyboardist who accepts the challenge of the Brahms Op. 118, No. 4 must be aware of the intricate canonic texture. Because the canon begins on a weak beat, the performer may find difficulty in deciding which beat of the measure to bring out. Camilla Cai suggests that the imitative triplets belong on the secondary level and that they should never cover the octave canon in dotted rhythm.⁵⁹ Eugene Alcalay disagrees; he asserts that most of the triplet figures fulfill more of a harmonic role than an accompaniment role.⁶⁰ Lisa Kinzer discusses voicing

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and tempo, and she makes a list describing how various performers emphasize these facets of the music differently.\footnote{Lisa B Kinzer, “Performance Practices in Brahms’s ‘Klavierstuecke’, Op. 118: A Survey of Recording from 1903-1997” (D.M.A. diss., University of North Carolina at Greensboro, 1999), 89-99.} But with the exception of Camilla Cai,\footnote{Camilla Cai, “Brahms’s Short, Late Piano Pieces - Opus Numbers 116-119: A Source Study, an Analysis, and Performance Practice” (Ph.D., diss., Boston University, 1986), 382.} none of them mention which beat of the measure should be highlighted, probably due to the fact that the principal focus of the Brahms Op. 118, No. 4 is not rhythm, but counterpoint. As previously mentioned, the rhythm is mostly homogenous, and the metrical states usually stay at $D_{2.1}$. Nevertheless, Cai states that the performer should bring out the left hand entrance of each canon, and this articulation of the strong beat should establish a sense of meter crucial to listener perception. It will also create sharp tension between the primary metrical layer and the anti-metrical layer, a conflict that plays just as important a role in the expressive character as any other aspect of the music.
Chapter 5

Conclusion

While Brahms’s handling of rhythm will always be a source of interest for scholars and performers, the late piano pieces are a reminder that Brahms does not manipulate rhythm as a purely intellectual exercise. Rather, his fusion of metric activity with other domains indicates that, in the realm of personal expression, rhythm is just as integral to him as any other aspect. In his Op. 116, No. 1, No. 5, and No. 7, Op. 117, No. 1, as well as the Op. 118, No. 4, the casting of each section in a different metrical state reinforces the structure of the music. Through a careful employment of metrical consonance and dissonance, the sonata-rondo form of the Op. 116, No. 1, the rounded binary form of the Op. 116, No. 5, and the expanded ternary form of the Op. 116, No. 7, and the ternary form of the Op. 117, No. 1 and the Op. 118, No. 4 all reach the listener with greater clarity and importance.

In the Op. 116, No. 1 and the Op. 117, No. 1, the brief periods of metrical consonance occur at the resolution of a phrase, providing relief from the metrical dissonance that permeates the piece, and the metrical dissonance in the central section underscores the harmonic turbulence. In the closing measures of the Op. 116, No. 5, the sudden switch from metrical dissonance to metrical consonance is a key emotional moment in the climax, yet in the Op. 116, No. 7, the
metrical dissonance is the component that pushes the music toward a satisfying finish.

If, as the late David Epstein states, the work of Brahms cannot be fully grasped without engaging in the conflict between how the music is heard and how the music is written, the keyboardist who undertakes the composer’s late piano pieces would do well to study the complex rhythmic activity and to welcome further analysis. A thorough understanding will aid phrasing, dynamics, accent, color, and other expressive devices vital to artistic communication. Moreover, a profound appreciation of Brahms’s craft will help to throw new light on his reputation as a conservative torch bearer of the Romantic period. Perhaps, over the course of the next few decades, knowledgeable performers will influence the writers of history to dispense with labels and to portray Brahms as he really was—a composer part of and ahead of his time.
1. Books


2. Scores


3. Articles in periodical or articles in the collection of essays


4. **Doctoral theses, documents and dissertations**


Ng, Samuel. “A Grundgestalt Interpretation of Metric Dissonance in the Music of Johannes