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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

RHYTHM AND METER AS TEXT EXPRESSION:
JAKE RUNESTAD'S *COME TO THE
WOODS*

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Music

Samantha L. Brewer

Performing and Visual Arts
School of Music
Music Theory

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This Thesis by: Samantha L. Brewer

Entitled: Rhythm and Meter as Text Expression: Jake Runestad's *Come to the Woods*

has been approved as meeting the requirement for the Degree of Master of Music Theory in College of Performing and Visual Arts in School of Music, in Program of Music Theory

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ABSTRACT

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Core to Western music education curriculum is the teaching and history of “word painting,” or text expression particularly as it pertains to the sixteenth-century madrigal. This approach to text expression is explored primarily through the lens of melodic and harmonic movement through a vocal line and the manner in which the line allows for better portrayal of the text or poem. The purpose of this thesis is to take a new approach to text expression in contemporary choral literature through the viewpoint of rhythm and meter. In this thesis, various analytical techniques from decades past and present are applied to Jake Runestad's 2015 choral work *Come to the Woods*, composed of text samplings from naturalist John Muir. The thesis explores rhythmic and metric analytical methods outlined by Harald Krebs, Christopher Hasty, Wallace Berry and Godfried T. Toussaint and applies them to Runestad's choral work, subsequently demonstrating the distinct purpose each method possesses for the utmost portrayal of Muir's text.

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CHAPTER I

INTRODUCTION

Goals of Thesis: Rhythm and Meter as Text Expression

Text painting, or word painting, is a compositional technique most notably associated with the sixteenth-century madrigal style, and one particularly popular among English and Italian composers of the time period.¹ Despite its strong connection with music of the Renaissance, text painting is a device commonly utilized in the present day in the composition of both solo vocal repertoire and choral literature, albeit different and evolved from text painting exhibited in the sixteenth century. “When composers create music for singers, they sometimes use musical effects to make a word or phrase sound like its meaning... The music then metaphorically paints the meaning of the text; the word is sung in a way that sonically demonstrates its meaning.”² The “musical effects” being referred to by Beach and Bolden are most commonly devices related to melodic and harmonic motions in the vocal line. As a singer performs a text expressing a bird taking flight, so the vocal line is composed in ascending melodic motion. However, the Western teachings of text painting, being thoroughly focused on literature of the sixteenth century such as the madrigal, are exclusionary and neglect numerous other intricacies of composition which aid in expression of a text, such as rhythm and meter.

G1 The goal of my thesis is to examine the manners in which text painting and text expression are achieved in Jake Runestad’s (b. 1986) contemporary choral

¹ Derek R. Strykowski, “Text Painting, or Coincidence? Treatment of Height-Related Imagery in the Madrigals of Luca Marenzio,” *Empirical Musicology Review* (Vol. 11/No. 2, 2017), 109-119.

² Pamela Beach and Benjamin Bolden, “Word Painting: Using a Musical Technique to Enhance Vocabulary,” *The Reading Teacher* (No. 6, 2019), 751.

composition *Come to the Woods* (2015) through various rhythmic and metric devices.³

Background of the Composition, Composer, and Poet

Come to the Woods is a 2015 choral composition for SATB, commissioned by Craig Hella Johnson to be composed by award-winning composer Jake Runestad (2018 recipient of the Raymond W. Brock Commission from the American Choral Directors Association).⁴ Runestad holds a Master's degree in composition from the Peabody Conservatory at John's Hopkins University, where he received mentorship from famed composers such as Kevin Pits and Libby Larsen.⁵ Runestad's biographical information on his website states, "Having collaborated with leading ensembles and organizations around the globe, Jake has a versatile and prolific career creating works for orchestra, wind band, chorus, chamber ensembles, and opera... Steeped in a belief that music has the power to initiate positive change, Jake creates musical works that are socially conscious and explore authentic human emotions and experiences."⁶ The young composer's desire to address musical topics of human emotion and experience is precisely why I have chosen *Come to the Woods* to be the piece addressed in my thesis, as its text possesses great opportunity to be expressed musically through rhythmic and metric devices.

The work explores text samplings from famed naturalist and conservationist John Muir, and the wonder he experiences amongst nature: a consistent theme throughout not only his writings, but one indicative of the human existence amongst the natural world. In addition to Muir's famed career as a naturalist and poet, he was an experienced botanist and geologist, who

³ Jake Runestad, *Come to the Woods*, Vocal Score (JR Music (ASCAP), 2015).

⁴ Jake Runestad, "About," Jake Runestad, Last Modified 2023. Accessed September 2023. <https://jakerunestad.com/about/>.

⁵ Ibid.

⁶ Ibid.

recognized the human existence as a small part of the whole, and the vital relationship which entwines both ourselves and the natural world. He argued that our “physical, spiritual, economic, and cultural survival depended upon natural resources – our wilderness.”⁷ Having believed nature to be an essential aspect of the human existence, “Muir lobbied for inhabitants of wilderness to become ‘citizens’ protected by national laws. Muir infused wilderness into the nation’s understanding of its own value.”⁸ Muir wrote of his various experiences living amongst the natural world, but the particular instance in which the title text for Runestad’s composition is built upon states, “Come to the woods, for here is rest. There is no repose like that of the green deep woods. Here grow the wallflower and the violet. The squirrel will come and sit upon your knee, the logcock will wake you in the morning. Sleep in forgetfulness of all ill. Of all the upness accessible to mortals, there is no upness comparable to the mountains.”⁹

The text with which Runestad chose to base his choral work *Come to the Woods* upon is befitting of his personal composition style. In a 2019 *Choral Journal* interview with Jonathan Talberg, Runestad states, “I think I’m keen to the energies and connections among things, people, trees, water, and it fills me in a very deep way. I search for those experiences to connect with the world around me.”¹⁰ Given Runestad’s assertions regarding his connection with aspects of the natural world, coupled with John Muir’s poetic samplings, *Come to the Woods* represents a world of opportunity to conduct an analysis of text painting.

G2 I will apply various rhythmic and metric analytical tools to outline instances wherein Runestad achieves optimal expression of the text, aside from the

⁷ Barbara Mossberg, “If Trees Are Us: A Relativity Theory Showing the Genius of John Muir’s Domestic Vision of Nature for Public Policy and the National Ethos,” *John Muir: Family, Friends, and Adventures*, (Albuquerque, NM: University of New Mexico Press, 2005), 170.

⁸ *Ibid.*, 172.

⁹ SoCal Hiker, “Muir Monday: Come to the Woods, for Here is Rest,” SoCal Hiker, Last Modified December 16, 2013, Accessed September 21, 2023. <https://socialhiker.net/muir-monday-come-to-the-woods-for-here-is-rest/>.

¹⁰ Jonathan Talberg, “Jake Runestad, An Introduction to the Composer, Interview and Preview of the 2019 Raymond W. Brock Commission, *A Silence Haunts Me*,” *The Choral Journal* (Vol. 59/No. 7, 2019), 13.

traditional means of text painting such as melodic and harmonic shifts. Although melody and harmony play a crucial role in the depiction of any poetic text in tonal music, rhythm and meter are underrepresented techniques of achieving artistic word painting, and Runestad deliberately employs said techniques in a manner most illustrative of Muir's text.

The devices I will utilize to analyze text painting in *Come to the Woods* include Harald Krebs' notions of *displacement and grouping dissonance* (1999), Christopher Hasty's notion of the *bar-measure* (1997), Wallace Berry's *Internal Structure of the Metric Unit* (1985), and Godfried T. Toussaint's geometric and mathematical approach to rhythmic events as *timelines* (2020).¹¹ The manner in which I apply the techniques listed above will delve into the issue of text painting as it pertains to rhythmic and metric events in the work, and the precise ways Runestad achieves optimal portrayal of the John Muir text samplings depicted throughout the work.

Chapter II: Application of Rhythmic and Metric Dissonance in *Come to the Woods* for Purposes of Text Expression

In Chapter II of my thesis, I will primarily examine the manner in which Runestad achieves optimal expression of Muir's text through the lens of Harald Krebs's notions of *grouping* and *displacement* dissonance (1999). My analysis will coincide with two distinct moments of *Come to the Woods* where each of the metric dissonances are most prevalent and serve as the primary vehicle for text painting. In his publication *Fantasy Pieces: Metrical Dissonances in the Music of Robert Schumann*, Krebs defines metrical dissonance and the two distinct types as, "conflict against the primary meter as it is represented by the bar lines and the

¹¹ Harald Krebs, *Fantasy Pieces: Metrical Dissonances in the Music of Robert Schumann*, (New York, NY: Oxford University Press, 1999), 183; Christopher Hasty, "Just in Time for More Dichotomies – A Hasty Response," *Music Theory Spectrum*, (Vol. 21/No. 2, Fall 1999), 284; Wallace Berry, "Metric and Rhythmic Articulation in Music," *Music Theory Spectrum*, (Vol. 7, Spring 1985); Godfried T. Toussaint, *The Geometry of Musical Rhythm*, Edition 2, (Boca Raton, FL: Taylor & Francis Group, LLC, 2020).

time signature... Displacement dissonance involves the association of congruent but nonaligned durational layers, and grouping dissonance, which arises from the association of different groupings of pulses, that is, the association of incongruent layers.”¹² For the purposes of my analysis, I find it easier to define the two metrical dissonances in a simpler language. In the *Cambridge Companion to Rhythm* (2020), Ryan McClelland defines displacement dissonance as one or more layers which shift the strong beat from its “expected” location, and grouping dissonance as one or more layers which project a group of beats non-congruent with the prevailing meter.¹³

In my analysis of *Come to the Woods*, I will apply Krebs’ notion of displacement dissonance to two distinct moments in the piece wherein metrical dissonance serves as the primary vehicle for text expression. The primary example occurs only 15 measures into the work, and exhibits displacement dissonance in a very cut-and-dried manner, whereas the second example occurs much later in the work and is an example of displacement dissonance at work with an aleatoric passage of music. Subsequently, I will similarly analyze two distinct passages of Runestad’s work wherein grouping dissonance is implemented for the purpose of text expression. Both of the examples of grouping dissonance occur rather early in the work and set the standard for rhythmic and metric pertinence to continue throughout the remainder of the piece. Krebs himself utilized the two forms of metrical dissonance to explore emotion and intention in various works of Robert Schumann stating, “The frequent, extensive, and violent conflicts against the notated meter and the subsequent resolutions of these conflicts infuse this music with obvious curves of tension and relaxation... By abandoning metrical dissonance, then,

¹² Krebs, *Fantasy Pieces*, 183.

¹³ Ryan McClelland, “Rhythm in Western Music: Concepts and Literature,” *Cambridge Companion to Rhythm*, (Cambridge, UK: Cambridge University Press, 2020), 48.

Schumann deprived his music of a highly effective expressive device.”¹⁴ Metrical conflict served an expressive purpose in the music of Schumann, but the question arises as to *how* a listener perceives the metric activity and the weight it carries in truly altering perception of the text, or bringing the text to the forefront.

In a 1985 study conducted by Dirk-Jan Povel and Peter Essens for *Musical Perception: An Interdisciplinary Journal*, participants were studied on their ability to recall and replicate various rhythmic stimuli (some isochronous, and some non-isochronous, or regular and irregular).¹⁵ Povel and Essens determined the listeners were operating from an “internal clock” of sorts and concluded, “We have argued that the part of the process in the perception of temporal patterns consists of the generation of an internal clock, to some degree determined by these local accents. Once an internal clock has been established it will in turn cause those events coinciding with clock ticks to be perceived as accented.”¹⁶ Given the accents coinciding with the “internal clock” are perceived as accented, the opposite must be true: accents *not* coinciding with the clock are perceived as unaccented, or irregular. The irregular accents will, in turn, stand out to the listener as different, and subsequently be perceived as such. The moments in which the irregular accents occur in the music can aid in the expression of a text, as continuity (the prevailing meter) is being disrupted, granting passages composed in such a manner more prominence. This assertion is supported by Leonard Meyer’s statements regarding meter and its meaning in music: “Meter is a product of the division or a given time span into parts of equal duration but unequal accentuation... This does not mean that rhythm and meter are completely independent of one another. A change which alters the position of an accent in relation to other accents will

¹⁴ Krebs, *Fantasy Pieces*, 185.

¹⁵ Maury Yeston, *The Stratification of Musical Rhythm*, (New Haven, CT: Yale University Press, 1976).

¹⁶ Dirk-Jan Povel and Peter Essens, “Perception of Temporal Patterns,” *Music Perception: An Interdisciplinary Journal*, (Vol. 2/No. 4, 1985), 429.

obviously affect both rhythm and meter.”¹⁷ The metrical dissonances Harald Krebs’ speaks of in his research serve to affect the rhythm and meter of a musical work. The primary focal point of Chapter II of my thesis serves to explore Krebs’ notions of displacement and grouping dissonance and the specific ways in which the dissonances affect the perception of the music for the overall purpose of text expression.

In addition to my exploration of metrical dissonance in Chapter II, I will apply Christopher Hasty’s notion of the *bar-measure* to a distinct phrase in *Come to the Woods* wherein Runestad composes groupings of voices with their own sense of “measure.” In a 1999 response article to a review conducted by Justin London on Hasty’s *Meter as Rhythm*, Hasty defines the bar-measure as such: “If a measure in fact corresponds to the notated bar, I call it a *bar-measure*... A *measure* may be defined as a durational quantity that, when completed and past, can influence the emerging duration of a present even permitting us to anticipate how long the new event is likely to last.”¹⁸ Hasty’s definition of the term “measure” is distinctly different than how we understand it to operate as a notational device. “Measure” here is more akin to the common definition of a musical phrase. However, for the purposes of my analysis, I will be utilizing the term “measure” as Hasty does.

With regard to the bar-measure’s application to *Come to the Woods*, I will analyze a distinct passage in which Runestad composes the alto and bass voices to have their own sense of measure, while the soprano and tenor have a separate one. The most prominent point I will analyze in regard to the passage, however, is the *lack* of bar-measure in either of the groupings of voices; neither grouping’s measure coincides with the notated bar line. Given the lack of bar-

¹⁷ Leonard Meyer, *Emotion and Meaning in Music*, (Chicago, IL: The University of Chicago Press, 1956), 115.

¹⁸ Hasty, “Just in Time for More Dichotomies,” 284.

measure presence, and the repetition of the phrase two times, there are great implications to the text during what I consider to be a moment of great transition in the music as well as the story John Muir is depicting. Given the phrase repeats itself (with slight alteration on the second repetition) a sense of *mensural determinacy* is present, or as Hasty defines it, “The present relevance of a past durational quantity for the becoming of a present duration... There is a great range to which the durational quantity of a past event can influence our expectation for the duration of a present event.”¹⁹ The initial statement of the phrase provides mensural determinacy for the forthcoming repetition and subsequent statement of a new stanza of poetic text, thus holding great implication to the illustration of Muir’s story. Runestad’s decision to compose the two groupings of voices with their own sense of measure *without* exhibiting Hasty’s bar-measure is certainly a product of modern and post-tonal composition but is nevertheless done deliberately for purposes of text expression.

Although *Come to the Woods* was composed in 2015, discussion of the usage of measure amongst post-tonal compositions has been a topic of discussion for several decades. In their 1960 book *The Rhythmic Structure of Music*, Cooper and Meyer explore the idea stating, “The use of the bar line by modern composers has not been uniform. Some composers use bar lines in the traditional way, to mark the beginning of metric units... Other composers seem currently to be using the bar line to mark off the limits of melodic, harmonic, or rhythmic groups rather than to designate the beginning of metric units.”²⁰ Runestad’s composition choice and avoidance of the bar-measure as it is pertinent to text expression is of course influenced by other elements of the music, as Hasty himself states in *Meter as Rhythm*, “Measure can also be regarded as a medium

¹⁹ Hasty, “Just in Time for More Dichotomies,” 284.

²⁰ G.W. Cooper and L.B. Meyer, *The Rhythmic Structure of Music*, (Chicago, IL: The University of Chicago Press, 1960), 89.

for properly rhythmic events and as a more or less autonomous principle of articulation – the automatic unit for the measurement of a musical time diversified by actual musical content.”²¹ It is precisely Runestad’s lack of bar-measure being diversified by musical content which aids in the perception and illustration of Muir’s text during the phrase, which is why I chose to analyze the passage thoroughly in Chapter II.

Chapter III: Meter as Phrasing of Text in *Come to the Woods*

Chapter III will be dedicated solely to my application of Wallace Berry’s *Internal Structure of the Metric Unit* as outlined in his 1985 *Music Theory Spectrum* article, “Metric and Rhythmic Articulation in Music.”²² Berry argues a single “metric unit” consists of four distinct parts: “The initiative, or downbeat is a point of action (a)... The other functional impulses are currents, typically comprised of lower-level attacks: the anticipative *to* (b), the reactive *from* (c), and the conclusive final dispersal (d) of the initiative accent with which the metric unit begins.”²³ In my analysis of *Come to the Woods*, I will apply Berry’s metric unit structure to a distinct phrase in the work wherein the four distinct components of the unit are indeed present, however, at the conclusion of the phrase (the “conclusive final dispersal”) Runestad implements phrase *elision*, thus slightly altering Berry’s metric unit model for the purposes of text expression. After properly labeling the four distinct components of the unit as they appear in the score, I will conduct a harmonic analysis of the manner in which the components’ locations are directly supported by surrounding harmonic and melodic context and tonal motion. Following my analysis of the phrase and application of the model, I will work backwards to the phrase prior in order to provide context, both by applying Berry’s model and conducting another harmonic

²¹ Christopher Hasty, *Meter as Rhythm*, (New York, NY: Oxford University Press, 1997), 13.

²² Berry, “Metric and Rhythmic Articulation in Music.”

²³ *Ibid.*, 10.

analysis, to illustrate that my analysis is supported by previously established material in the piece.

I chose to analyze a phrase in which Runestad does not strictly adhere to the guidelines of Berry's *Internal Structure of the Metric Unit* due to its complexity, yet distinct ability to portray Muir's text most properly. Berry himself, in the same article in which the metric unit structure is outlined states, "In any individual structure, one acknowledges as well some ultimate rhythmic composite of all events in all operable elements, one that must typically be, in interesting pieces, a rhythm of bewildering complexity."²⁴ Although I would not consider the phrase I will analyze to be one of "bewildering complexity," it certainly does not adhere to our strict expectation of what a "musical phrase" exactly is. In his 1989 book *Phrase Rhythm in Tonal Music*, William Rothstein addresses said expectation in his introductory chapter stating, "Defining a phrase is not a matter of counting measures. There are many four-measure phrases in tonal music... A phrase cannot be defined by some a priori measure count; it is a fundamentally different sort of unit."²⁵ Rothstein's insights are relevant to my analysis because Berry's metric unit model does not place any constraints on the phrase length itself, such as confining the phrase to an "expected" four-bars. Thus, the model is perfectly applicable to a composer such as Runestad, as he has developed a unique modern compositional style which does not adhere to expectations, but rather to the text being portrayed. Relevant to the idea of a metric unit structure here and its relation to text expression is the necessity for the composer to elevate textual stanzas. As Edward Cone states, "To a great deal of music, beginnings and ends (let us call them extremes) not only are not essential, but are simply necessary interruptions... If a piece is to qualify as a *work of art*, that is to say, as a real *composition*, not only must it have extremes, but these must be generated by the

²⁴ Berry, "Metric and Rhythmic Articulation," 7.

²⁵ William Nathan Rothstein, *Phrase Rhythm in Tonal Music*, (New York, NY: Schirmer Books, 1989), 7.

music itself, and not solely by the exigencies of an external function.”²⁶ Runestad’s interruptions and extremes, or lack thereof in his demonstration of phrase elision, are composed deliberately to portray the text of John Muir in the most appropriate and illuminating fashion, and my analysis demonstrates the extremes spoken of by Cone and Berry.

Chapter IV: Cyclical Timeline
Representation of Rhythmic
Events in *Come to the
Woods*

In the fourth chapter of my thesis, I will apply an approach to the analysis of rhythm in music of the present day. The foundation of my analysis rests in Godfried T. Toussaint’s research of *rhythmic timelines* as outlined in his 2020 publication *The Geometry of Musical Rhythm*.²⁷ Toussaint introduces timelines by stating, “In much traditional, classical and contemporary music around the world, one hears a distinctive, repetitive, and characteristic rhythm that appears to be an essential feature of the music... These special rhythms are customarily called *timelines*. Timelines should be distinguished from the more general term *rhythmic ostinatos*.”²⁸ Toussaint’s timelines are illustrated in a cyclical manner, wherein beats, or *pulses* are depicted through smaller circles moving in a clockwise manner, and I will illustrate the timelines in great detail in Chapter IV.

For the purposes of my analysis, I chose two distinct moments in *Come to the Woods* where the “characteristic rhythms” appear and subsequently have great implication to John Muir’s text. The primary example will include the depiction of two rhythmic timelines composed from two groupings of voices, first soprano and first alto being one, and second soprano and alto

²⁶ Edward Cone, *Musical Form and Musical Performance*, (New York, NY: W.W. Norton & Company Inc., 1968), 12-13.

²⁷ Toussaint, *The Geometry of Musical Rhythm*.

²⁸ *Ibid.*, 11.

being the second grouping. I will first demonstrate what the two timelines appear as separately, and then overlay the two. It is in the overlay of the two timelines where the implications of the *pulse onset* motion will be the most concrete and have the most visual impact of the text expression occurring during the measures of music in question. For my secondary example of rhythmic timeline application to Runestad's piece, I refer back to the first section of the work I analyzed in the context of displacement dissonance (Chapter II) and construct two timelines, one of the soprano voice, and one of the alto. The timeline construction will reveal the two timelines exhibit rotational symmetry by an axis of 90 degrees. In order to further validate the identical nature of the two timelines, I will construct *beat class vectors* which, again, will be explained in great detail in Chapter IV. Most pertinently, however, will be my explanation of just how the rotational symmetry of the identical timelines possesses great merit in terms of Runestad's expression of the text.

The rhythmic timelines I explore and illustrate in Chapter IV are consistent with pivotal moments in the work; the introductory moment of new text and a transitional period wherein Muir's story is taking a turn. The moments I have chosen are pertinent to the audience's *neural entrainment* to the rhythms being presented, given timelines are a distinctive and characteristic rhythm in a piece of music.²⁹ In a study published in 2020 in the *Cambridge Companion to Rhythm*, Daniel Cameron and Jessica Grahn discuss the manners in which individuals perceive rhythmic events, and the subsequent implications the perception has to the music itself. Cameron and Grahn argue, "Neural oscillations synchronize, or entrain, with auditory rhythms."³⁰ As the audience's neural oscillations entrain with the music, the text must do so by proxy. The

²⁹ Toussaint, *Geometry of Musical Rhythm*, 11.

³⁰ Daniel Cameron and Jessica Grahn, "Perception of Rhythm," *The Cambridge Companion to Rhythm*, (Cambridge, UK: Cambridge University Press, 2020).

pertinence of the rhythmic patterns I will analyze have great implications to the text, and Runestad has composed the rhythms in tandem with the text deliberately. In addition to the rhythmic patterns themselves, within said patterns exist accents, or stress given to certain words. The accents also aid in the portrayal of the text and subsequent neural entrainment by the audience. Referring once again to the 1985 study conducted by Povel and Essens in regard to the “Perception of Temporal Patterns,” it is argued, “We think that accents play a decisive role in inducing the internal clock... We think that the finding of accented and unaccented events perceived within sequences consisting of identical tones is vital for an understanding of how these patterns are processed.”³¹ Runestad’s ability to pair accented text with moments of distinctive and characteristic rhythm in *Come to the Woods* exhibit his ability to express poetic text in a manner which will most likely be perceived by an audience, granting the utmost importance to the foundation of the piece: Muir’s writings.

Recapitulation of Thesis Goals and Preparation of Analysis

Ultimately, the goal of my thesis is to take a new approach to the analysis of text expression and text painting through the lens of rhythm and meter. I have chosen Jake Runestad’s *Come to the Woods* because it is an upstanding example of an instance wherein a contemporary composer deliberately applies various rhythmic and metric devices in order to portray a text to its fullest extent. Additionally, my forthcoming analyses apply various tools, from decades past to the present day, in order to provide a thorough walkthrough of available analytical means and provide insight into how rhythm and meter can be valuable tools for the analysis of text painting, beginning with Harald Krebs and metrical dissonance.

³¹ Povel and Essens, “Perception of Temporal Patterns,” 438.

CHAPTER II

APPLICATION OF RHYTHMIC AND METRIC DISSONANCE IN *COME TO THE WOODS* FOR PURPOSES OF TEXT EXPRESSION

A Brief Introduction to Grouping and Displacement Dissonance

Chapter three, as outlined previously, will explore the manners in which Runestad applies concepts of metrical dissonance as a vehicle for text expression in *Come to the Woods*. However, I feel it pertinent to place several means of metric dissonance into context prior to engaging with Runestad's work.

Harald Krebs first introduced the phenomena of "grouping" and "displacement" dissonance in his award-winning 1999 book *Fantasy Pieces: Metrical Dissonance in the Music of Robert Schumann*. Central to the compositional style of Robert Schumann is a sense of "metrical conflict," or as Krebs addresses it, "metrical dissonance: conflict against the primary meter as it is represented by the bar lines and the time signature."³² Krebs argues Schumann achieves metrical dissonance through two compositional technical means: displacement dissonance and grouping dissonance. Displacement dissonance involves "the association of congruent but nonaligned durational layers."³³ An excellent representation of displacement is observed in Steve Reich's *Clapping Music* (1972)³⁴. Although having been heavily analyzed in the context of rhythm and meter, *Clapping Music* serves as the primary vehicle to begin my

³² Harald Krebs, *Fantasy Pieces*, 183.

³³ *Ibid.*, 183.

³⁴ Steve Reich, *Clapping Music for Two Performers*, (London, UK: Universal Edition, 1980).

discussion of displacement dissonance as it pertains to a larger-scale contemporary choral work such as *Come to the Woods*.³⁵ Both “durational layers” in Reich’s piece begin with congruent *and* aligned durational layers, directly opposing displacement dissonance. Following the 12th repetition of the first pattern, Reich shifts the voice (or layer) notated as “Clap 2” forward one eighth note duration, which is to say the first eighth note (or eighth rest) of the pattern is shifted to the end. As the percussive pattern of Clap 2 begins to shift, the aural phenomenon of displacement dissonance occurs, as the listener has been entrained with the meter of the first pattern.³⁶ Subsequent patterns are altered to skew the sense of downbeat.

To define exactly what I mean when I address Reich “shifting” the pattern of Clap 2 forward one eighth note duration, Godfried Toussaint’s circular notation of *timelines* from *The Geometry of Musical Rhythm* serves as a more adequate visual representation than the score itself.³⁷ Toussaint defines *timelines* as, “distinctive, repetitive, and characteristic rhythm(s) which repeat throughout most if not the entire piece.”³⁸ In the case of *Clapping Music*, the timeline is demonstrated in the first bar. The timeline is maintained throughout the entirety of the work in the part delineated as Clap 1. Figure 2.2 depicts the timeline established in Clap 1 in Toussaint’s circle notation, alongside the first *shift* (here as counterclockwise) in pattern in Clap 2. Each *small* circle is representative of the prevailing eighth note pulse. If the circle is filled in, a clap, or onset, is sounding. Conversely, if the circle is empty, there is no clap sounding and is thus an offset. The larger empty circle encompassing the smaller circle at point zero demonstrates the notated downbeat. The original and prevailing timeline exhibited in Clap 1, *always* begins with its first onset at point zero, or the downbeat. Clap 2 is shifted counterclockwise (when using

³⁵ Toussaint, *The Geometry of Musical Rhythm*.

³⁶ Cameron, Grahn, “Perception of Rhythm,” 74.

³⁷ Toussaint, *The Geometry of Musical Rhythm*, 11.

³⁸ *Ibid.*, 11.

circle notation) with each subsequent alteration in pattern, thus creating a displacement dissonance. The listener has entrained to the timeline in the m. 1, played 12 times in unison amongst both parts.³⁹ With each shifting pattern of Clap 2, the listener has to re-entrain with the new pattern being presented, and until they do, a profound sense of displacement dissonance is occurring.

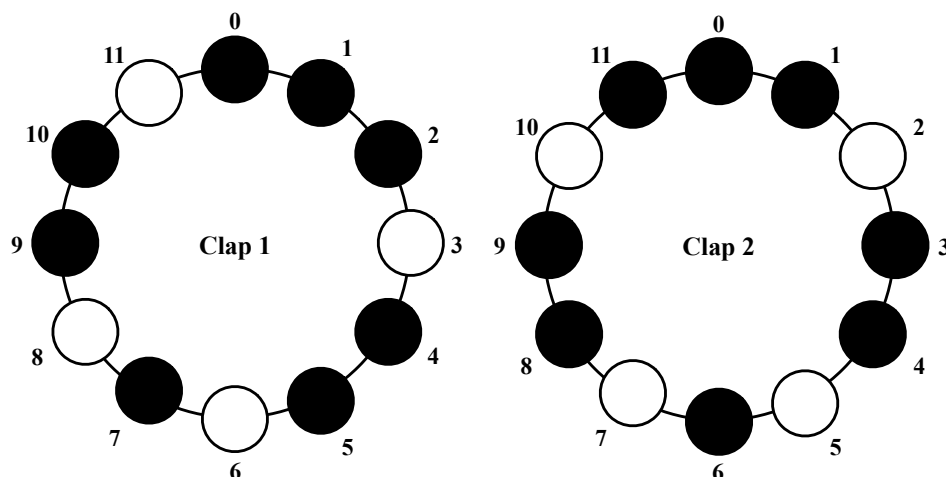


FIGURE 2.1 *Clapping Music* first pattern shift (m. 2)

Reich's exploration of rhythm in the percussion exercise of *Clapping Music* achieves Krebs' notion of displacement dissonance to the highest degree. With every 12th repetition and subsequent new measure, a new level of metric dissonance is achieved, or is rather evolved, particularly for the individual(s) assigned to "Clap 2."

In regard to Krebs' second means of metrical dissonance, grouping dissonance, he defines it as arising from, "the association of different groupings of pulses, that is, the association of incongruent layers."⁴⁰ In *The Cambridge Companion to Rhythm*, Ryan McClelland concisely phrases it to mean, "one or more layers in the music project[ing] a grouping of beats that is non-congruent with that of the prevailing meter."⁴¹ To zero the focus on contemporary choral

³⁹ Cameron, Grahn, "Perception of Rhythm," 74.

⁴⁰ Krebs, *Fantasy Pieces*, 183.

⁴¹ McClelland, "Rhythm in Western Music," 48.

literature and to frame grouping dissonance in such a context, the piece “Gaudete” from Steven Sametz’ *Two Medieval Lyrics* will serve as my example⁴². Set to a traditional Latin liturgical text, Sametz places “Gaudete” in a modern choral context with rapid meter changes and, most importantly, voices exhibiting grouping dissonance against one another.

When particularly examining at the soprano and alto lines against one another, in the notated $\frac{5}{8}$ meter, the soprano is most clearly demonstrative of said prevailing meter. Sametz has set the line with traditional groupings of two eighth notes followed by three. Conversely, the alto line maintains a steady pulse of quarter notes as if to be in a duple meter until the phrase reaches a cadential point.

To put it concisely in its application to grouping dissonance, the alto line serves as the layer in which non-congruence with the prevailing meter is present. More pertinent, however, is the relevance the grouping dissonance has to the text, similarly to Runestad’s *Come to the Woods*. The soprano is repeating the word “Gaudete” meaning “rejoice” while the alto voices enter in mm. 43 with new text: “Ergo nostra concio, psallat jam in lustro,” meaning “Therefore let our assembly now sing, sing the Psalms to purify us.”⁴³ The text “Gaudete,” aside from being the title of the work, repeats with great consistency throughout the piece, and serves as refrain material. However, beginning in m. 43, the alto line presents new text that has yet to be stated up until this point in the piece. Sametz has set the alto in grouping dissonance with the soprano in order to draw attention to the new text. The alto’s non-congruence with the prevailing meter allows the text to come to the forefront in mm. 43-48 as its melodic line stands out as different amongst the recurring “Gaudete” refrain.

⁴² Steven Sametz, “Gaudete,” from *Two Medieval Lyrics*. (New York, NY: Oxford University Press, 2000).

⁴³ Sametz, “Works, Choral, Gaudete,” Last Modified 2023, Accessed March 20, 2023, <https://stevensametz.com/composer/works/info/gaudete/>.

Displacement Dissonance in *Come
to the Woods*

In the case of Jake Runestad's *Come to the Woods*, displacement dissonance occurs almost immediately, following the introductory material of the work, with the "layers" being demonstrated in the soprano and alto voices. Example 2.4 illustrates the displacement dissonance occurring.

EXAMPLE 2.2 Jake Runestad, *Come to the Woods*, mm. 15-16⁴⁴

The musical score for Example 2.2 shows measures 15 and 16 of Jake Runestad's *Come to the Woods*. The tempo is marked "Joyfully" with a quarter note equal to 80 beats per minute. The score includes four vocal parts: Soprano 1 (Sop 1), Soprano 2 (Sop 2), Alto, and Bass, along with piano accompaniment. The lyrics are "day. Glo - ri - ous day, glo - ri - ous day, glo - ri - ous day, day. Glo - ri - ous day, glo - ri - ous day, glo - ri - ous day, glo - ri - ous day." The piano part has a dynamic marking of *p* (piano). The score is in 12/8 time, and the tempo is marked "Joyfully" with a quarter note equal to 80 beats per minute.

A prominent display of displacement dissonance occurs between the soprano and alto voices in mm. 15-16. Runestad remains consistent with the expected and traditional groupings of eighth notes to be seen in a $\frac{12}{8}$ time signature, the soprano and alto voices enter on what I will call the "primary motive" during the introductory section of the piece. The repeated phrase

⁴⁴ Runestad, *Come to the Woods*, mm. 15-16.

“glorious day” in both voice parts is notated identically, both rhythmically and expressively. Both voices receive the same notated stress with accents on the words “glorious” and “day,” but are offset by one beat, with the alto entering on beats two and four, and the soprano on beats one and three. Referring back to Harald Krebs’ definition of displacement dissonance, it is visually evident the two “layers” are congruent and nonaligned.⁴⁵

When taking into consideration the text aside from the music, the word “glorious” or, more specifically, the syllable “glo” is most likely to be emphasized in the cadence of spoken American English in the phrase, “Glorious day.” With speech taken into consideration, the soprano line most accurately aligns with the notated meter, both visually and aurally, meaning the cadence of Muir’s spoken poetry aligns most consistently with soprano voice with the phrase beginning on the downbeat of each measure. However, the alto line’s alteration of the same phrase, with “glorious” falling on beats two and four (not notated “strong beats”), is how Runestad achieves Krebs’ notion of displacement dissonance. The two layers – voices – are congruent in phrase length and accentuation but are nonaligned. Should Runestad have wanted the soprano to be most clearly demonstrative of the prevailing meter and metric stress, perhaps the voice part would have been notated and composed differently in order for the expected metric stress to remain of utmost clarity. The repetitive phrase in the alto voice is granted the same prominence in dynamics, word stress and length by Runestad as the soprano voice, granting less distinction as to where the notated metric stress is to fall aurally. Thus, referring back to Krebs’ definition of metric dissonance, the alto voice is creating the “conflict against the primary meter.”⁴⁶

⁴⁵ Krebs, *Fantasy Pieces*, 183.

⁴⁶ Krebs, *Fantasy Pieces*, 183.

A second and certainly more prominent example of displacement dissonance occurs at the conclusion of *Come to the Woods*, in which Runestad achieves displacement dissonance at the highest level: full aleatory. In a 2013 *Choral Journal* article, Richard Stanislaw discusses the challenges of performance practice in regard to aleatory in his article “Aleatory Listening.” Stanislaw argues, “Aleatory music, and its cousin dodecaphonic music, was intended to force a kind of discipline on undisciplinedness. Musicians seem to need instructions about how to operate outside instruction.”⁴⁷ The sheer existence of *zero* instruction in regard to tempo, precise rhythm and timing in aleatory provides the space for grouping dissonance to exist without fail, due to its entropic nature.⁴⁸

The aleatory in *Come to the Woods* begins gradually and becomes increasingly more entropic. The bass and tenor voices enter in m. 141 with the title text of the piece, “Come to the woods, for here is rest,” (Example 2.5).

EXAMPLE 2.3 *Come to the Woods*, mm. 141-145⁴⁹

Tenor 1 & 2 switch parts each repetition.

141 *pp*
Come to the woods, for here is rest.

pp
Come to the woods, for here is rest.

p

⁴⁷ Richard Stanislaw, “Aleatory Listening,” *The Choral Journal*, (No. 10, 2013), 63.

⁴⁸ Toussaint, *Geometry of Musical Rhythm*, 93.

⁴⁹ Runestad, *Come to the Woods*, mm. 141-145.

After several repetitions of the text and an identical musical gesture, the soprano and alto voices subsequently begin staggered aleatoric statements (the statements to be repeated are boxed in on their respective staves, but are repeated at random) in m. 154, with the first statement being in the first soprano. Over the span of mm. 154-157, the remaining upper voices (second soprano, and first and second alto) enter with an aleatoric melodic line, one measure after another. The aleatoric statements are depicted in Example 2.6. Please note there is a system and page break between mm. 155 and mm. 156.

EXAMPLE 2.4 *Come to the Woods*, mm. 154-155⁵⁰

* Each treble singer chooses one of the noxed motives to sing at random occurrences but still within the meter. Repeat the motives ad lib. and keep the sound constant. The singer should hold the pre-box pitch until beginning the series. Each voice's entrance should be sprinkled in and not all begin at once. Individual pitches may be held throughout the series before continuing the sequence.

⁵⁰ Runestad, *Come to the Woods*, mm. 154-158.

EXAMPLE 2.4 cont. mm. 156-158⁵¹

The musical score for Example 2.4 (measures 156-158) is in G major and 4/4 time. It consists of five staves. The top two staves are for vocalists (Soprano and Alto), the next two for vocalists (Tenor and Bass), and the bottom staff is for piano accompaniment. The vocal parts include lyrics: "Come to the woods, for here is". The piano part features a persistent triple-gesture accompaniment. The score includes dynamic markings like "cresc. poco a poco" and "mf", and performance instructions such as "ah" and boxed motives for the vocalists.

The aleatoric lines are composed in direct opposition to the prevailing meter, as they are comprised of persistent triple gestures in an otherwise duple meter, $\frac{4}{4}$. In the excerpt demonstrated in Example 2.6, the piano is most precisely demonstrative of said prevailing meter, given its persisting groupings of four sixteenth notes.⁵² The aleatory soprano and alto statements sound overtop the tenor and bass melody and are accompanied by a footnote included by Runestad that states, "Each treble singer chooses one of the boxed motives to sing at random occurrences but still within the meter. Repeat the motives ad lib. And keep the sound constant. The singer should hold the pre-box pitch until beginning the series. Each voice's entrance should be sprinkled in and not begin all at once. Individual pitches may be held throughout the series

⁵¹ Runestad, *Come to the Woods*, mm. 156-158.

⁵² McClelland, "Rhythm in Western Music," 48.

before continuing the sequence.”⁵³ Referring back to Stanislaw’s *Choral Journal* statement regarding aleatoricism, there *does* in fact exist a degree of instruction for the musicians here, given Runestad’s performance note. However, despite Runestad’s request for the motives be sung “within the meter,” the utter randomness at which they are chosen to be sung by individual performers within said meter creates an entropic nature to the section of the work and thus creates displacement dissonance at the highest level: congruent layers, but as unaligned as possible.⁵⁴

The displacement dissonance beginning in mm. 154 is particularly heightened during moments in which the tenor and bass are holding out notes for a considerable duration (i.e., mm. 159-160). With the absence of the metric pulse created by the tenor and bass voices in such an instance as mm. 159, the soprano and alto’s aleatory triple gestures come to the forefront. For just a moment as then tenor and basses hold out the word “rest,” an incredibly high level of displacement dissonance is achieved in the upper voices, as they are the primary movement and sound against the piano’s steady pulse in the prevailing meter, while simultaneously existing in a localized pocket of complete randomness.

Displacement Dissonance as Text Expression

The most prominent analytical point I make with the presence of displacement dissonance in mm. 15-18 is how each instance serves as a means for Runestad to express Muir’s poetic text. In the primary example (Example 2.4), the extensive repetition of “Glorious day” in the soprano and alto voices, in nonaligned durational layers with recurring accentuation exhibits the unadulterated joy Muir is expressing in being present amongst the wilderness. In the 2005

⁵³ Runestad, *Come to the Woods*, Composer Performance Note, m. 154.

⁵⁴ Krebs, *Fantasy Pieces*, 183.

ethnographic novel *John Muir: Family, Friends, and Adventures*, Ronald Eber addresses Muir's expansive adoration for nature and natural conservation in his chapter, "Wealth and Beauty: John Muir and Forest Conservation." Eber states Muir's, "first essays and articles on the forests of the Sierra were descriptive of the trees and set forth Muir's great love for his new home in the wilderness. To Muir, mountain wilderness was a sacred place – to be revered rather than destroyed."⁵⁵ The repetition of the phrase, "Glorious day" in grouping dissonance (in which the sense of the notated downbeat is skewed) provides a sense of unfettered joy. The soprano and alto voices bounce off of one another in a chaotic sort of echo; echoing off of the trees and vast landscape described in Muir's poetry. The text is thus *governing* the manner in which Runestad composes his music, rather than the music being imposed upon the text.

In regard to the concluding passage of *Come to the Woods* (Example 2.5), displacement dissonance plays a rather different role in portrayal of the text. For the first time in the piece's performance the title text is stated in the tenor and bass: "Come to the woods, for here is rest." Given the text is being stated repeatedly in the tenor and bass until the conclusion of the piece, it is only fitting the tenor and bass lines be granted the most prominence among the other voices, thus where displacement dissonance comes into play by Runestad. The tenor and bass melody serves as a metric time-marker among the other voices; the only steadfast line until the piece's completion – even the elaborate piano accompaniment alters its figures throughout the passage. Atop the melody, the soprano and alto voices break into four layers, non-congruent with the prevailing meter, specifically through aleatoric statements.⁵⁶ Harald Krebs describes the phenomenon occurring here in his article, "Expressive Rhythm and Meter in the German Lied,"

⁵⁵ Ronald Eber, "Wealth and Beauty: John Muir and Forest Conservation," *John Muir: Family, Friends, and Adventures*, (Albuquerque, NM: University of New Mexico Press, 2005), 106.

⁵⁶ Krebs, *Fantasy Pieces*, 183.

in *The Cambridge Companion to Rhythm* (2020). Although Krebs is addressing the German Lied specifically, his insights have great merit when examining many vocal works. In reference to the interplay of hypermeter and hypermetric *displacement* Krebs states, “When this common large-scale meter, however, is associated with a displaced ‘shadow meter,’ or when hypermeter becomes irregular or ambiguous, a link between the resulting structures and a given poem may well become apparent.”⁵⁷ The “structures” Krebs refers to in his writing is representative of the interplay between the soprano and alto aleatory statements and the tenor and bass chorale melody. The ethereal, unstructured spiral of the upper voices atop the melody displays the freedom Muir is experiencing in nature, and not only grants repose to the work in its entirety, but to the storm’s aftermath and the beautifully calm woods.

Exploration of Grouping Dissonance in *Come to the Woods*

Runestad employs grouping dissonance immediately in *Come to the Woods*, in direct coincidence with the first full stanza of Muir’s poetic text. The introductory measures of the piece (mm. 1-4) state, “Another glorious day” in repetition, as if to set the scene of the wilderness to be explored further throughout the course of the work. The first full stanza of text begins in m. 5: “The air as delicious to the lungs as nectar to the tongue” in grouping dissonance against previously stated material (Example 2.7).

⁵⁷ Harald Krebs, “Expressive Rhythm and Meter in the German Lied,” *The Cambridge Companion to Rhythm*, (Cambridge, UK: Cambridge University Press, 2020), 204. See also the concept of “shadow meter” in Frank Samarotto, *Schenker Studies* Edition 2, (Cambridge, UK: Cambridge University Press, 1999), 235.

EXAMPLE 2.5 *Come to the Woods*, mm. 4-6⁵⁸

f *molto rit.*

an oth-er glo-ri-ous day the

an-oth-er glo-ri-ous day the

an-oth-er glo-ri-ous day the

an-oth-er glo-ri-ous day the

f *molto rit.*



mp with a lilt *Flowing* ♩ = 66

air as de-li-cious to the

air as de-li-cious to the

air as de-li-cious to the

air as de-li-cious to the

mp *Flowing* ♩ = 66

⁵⁸ Runestad, *Come to the Woods*, mm. 4-6.

EXAMPLE 2.5 cont. *Come to the Woods*, mm. 7-9⁵⁹

7

lungs as nec - tar to the

lungs as nec - tar to the

lungs as nec - tar to the

lungs as nec - tar to the



8

accel. Joyfully ♩ = 88

tongue. An-oth-er glo - ri-ous

tongue. An-oth-er glo - ri-ous

tongue. An-oth-er glo - ri-ous

tongue. An-oth-er glo - ri-ous

accel. Joyfully ♩ = 88

mf

⁵⁹ Runestad, *Come to the Woods*, mm. 7-9.

Ryan McClelland’s definition of grouping dissonance seems to fit most accurately in the instance of mm. 5-8. In *The Cambridge Companion to Rhythm* (2020), McClelland identifies Krebs’ definition of grouping dissonance, but words it himself to mean, “One or more layers in the music project[ing] a grouping of beats that is non-congruent with that of the prevailing meter.”⁶⁰ The prevailing *notated* meter in mm. 5-8 is $\frac{4}{4}$ however, all four vocal lines are composed in direct opposition to it. In their statements of the new text, “The air as delicious to the lungs as nectar to the tongue,” the vocal lines exhibit numerous triple gestures in an otherwise duple meter (i.e., the eighth plus quarter note triplets in m. 6). The triple-against-duple notation creates a direct conflict against the prevailing meter, consequently creating the metric dissonance – grouping dissonance. Grouping dissonance is also present in the piano accompaniment throughout mm 5-8 as well. The piano exhibits rapidly ascending sextuple figures; triple gestures in an otherwise duple context. The triple gestures in the piano not only serve as another means to create metric dissonance, but most importantly provide reinforcement to the dissonance already being created in the vocal lines.

With Runestad’s introduction of grouping dissonance in m. 5, the first full stanza, or sentence, of text is brought to the forefront. The stark metric shift from $\frac{7}{8}$ to $\frac{4}{4}$ in m. 5 establishes the change is in fact occurring and lays the groundwork for the new text to be granted prominence against the previously repeated, “Another glorious day” material in the introductory four bars. Runestad further explores the emphasis of the new text statement by implementing grouping dissonance simultaneously with the notated metric shift. Further aiding in said emphasis of Muir’s text is the notation “molto rit.” beginning in m. 5 which slows the tempo

⁶⁰ McClelland, “Rhythm in Western Music,” 48.

from 88 beats per minute (BPM) to 66 BPM. All of the metric and rhythmic alterations occurring at this particular juncture in *Come to the Woods* all simultaneously aid in creating a point of prominence in the music in direct correlation with the introduction of the first new poetic text.

Another prominent example of grouping dissonance is featured shortly after the previous. Following the entrance of the primary motive in the soprano and alto voices in m. 15-16, the tenor and bass voices enter with the main melodic material in m. 17, exhibiting the type of metric dissonance which Krebs labels as grouping dissonance, or “the association of different groupings of pulses, that is, the association of incongruent layers” against the prevailing meter.⁶¹ In mm. 17-18 (depicted in Example 2.8), the piano is most demonstrative of the prevailing meter, $\frac{12}{8}$, playing in four groupings of three eighth notes, while the soprano and alto voices serve as a pulse-keeping accompaniment (still exhibiting displacement dissonance) to the tenor and bass melody. The melody presented in the tenor and bass voices possesses a stark contrast to the already-stated material of the soprano, alto and piano lines. Also composed through many duple gestures, which are in direct conflict with how Runestad has chosen to establish the triple meter, the line is incredibly demonstrative of grouping dissonance. The tenor and bass voices act in direct conflict against the prevailing meter as an “incongruent layer” with triple gestures having been prominently established in all other voices.

⁶¹ Krebs, *Fantasy Pieces*, 183.

EXAMPLE 2.6 *Come to the Woods*, mm. 17-18⁶²

17 *p* *rit.*

glo - ri - ous day, glo - ri - ous day, glo - ri - ous day. glo - ri - ous. ah

p *mf*

day glo - ri - ous day glo - ri - ous day glo - ri - ous day ah

mf

The day was full of spark ling sun - shine and at the

The day was full of spark ling sun - shine and at the

rit.

What makes the duplets in the tenor and bass voices stand out, however, is the manner in which they are set in the context of the notated bar lines and respect to downbeats (the strongest beat). The phrase begins in m. 17 with the text “The day was full of sparkling...” and while the phrase enters immediately with a rest plus eighth note duplet, the remainder of m. 17 is composed with quarter plus eighth, followed by three eighth notes – a typical rhythmic motion in the notated meter of $\frac{12}{8}$. While grouping dissonance is already present, it becomes most obvious in the subsequent measure with the text, “Sunshine, and at the...” due to the manner in which Runestad has entirely abandoned conventional compound-meter divisions and has relied solely on duplets. The contrast between the duplets in the tenor and bass and the prevailing meter most clearly demonstrated in the piano accompaniment has only become all the more prominent in m.

⁶² Runestad, *Come to the Woods*, mm. 17-18.

18. The displacement dissonance then begins to taper off at the end of the bar, as the alto voices join in with a congruent, duple gesture, as the voices move in unison rhythm to establish a new key area.

Runestad has meticulously set the upper and lower voices against one another in the context of meter for a brief moment, just two measures, in order to more prominently highlight the new text being stated in the tenor and bass voices. But just before moving all voices and the piano accompaniment from G major to C minor, he joins the alto voice with the tenor and bass to create aural continuity amongst all voices to better establish the movement to a new key area, and subsequent introduction of new poetic text.

Grouping Dissonance as Text Expression

Grouping dissonance, in both sections previously examined, serves as an important vehicle for expression of the text. In mm. 5-8 (Example 3.7), Runestad rhythmically sets the vocal parts against the piano accompaniment, thus creating a metrically dissonant association between two incongruent layers.⁶³ The first new text aside from “Another glorious day” is stated in m. 5: “The air as delicious to the lungs as nectar to the tongue” and the single line of poetic text is drawn out over the course of four measures, in tandem with a stark tempo change from the previous measures. With these compositional features in mind, there is a sort of pause in the music; a shift from excitement to adoration, from giddiness to admiration. The piano accompaniment maintains some sense of the excitement in its rapid sextuplet ascending lines, as if to allude to the return of “Another glorious day,” while all vocal lines sing in elongated, legato quarter plus eighth note triplet gestures. The grouping dissonances between the accompaniment

⁶³ Krebs, *Fantasy Pieces*, 183.

and vocal lines are a clear demonstration of Runestad's ability to bring "various rhythmic and metric features into play... for purposes of text expression."⁶⁴

Similarly, the introduction of the tenor and bass melody in grouping dissonance with the established meter in m. 17 grants it prominence against the soprano and alto pulse-keeping motivic material (Example 3.8). A new stanza of text is being introduced: "The day was full of sparkling sunshine," and Runestad employs Krebs' notion of grouping dissonance to allow it to stand out as a new and important statement. In his 1968 pamphlet *Focus on... Mixed Meter Music and Line in Choral Music*, Leland Sateren states, "No serious composer changes meters meretriciously. On the contrary, he will not change unless he believes it fundamental to the flow of the music, and if a choral composer, to the weight of the syllables he is setting."⁶⁵ Although Sateren's publication contains a degree of opinion and certainly outdated language, his statement is true in regard to mm. 17-18 in *Come to the Woods*. Despite a lack of change in *notated* meter, Runestad composes the tenor and bass melody against the prevailing one.⁶⁶ Should Runestad have set the tenor and bass line congruent with the prevailing meter, the introduction of the new melody would not have stood out to be quite as prominent, and given the text has been unstated until m. 17, it deserves to be heard as such.

Introduction to Christopher Hasty's Notion of the "Bar-Measure"

Christopher Hasty is a renowned theorist, particularly in regard to his contributions to the field of rhythm and meter in music in the late twentieth century. His 1997 book *Meter as Rhythm*, the recipient of the Wallace Berry Award from the Society of Music Theory for the

⁶⁴ Krebs, "Expressive Rhythm and Meter," 180.

⁶⁵ Leland Sateren, *Focus on... Mixed Meter Music and Line in Choral Music*, (Minneapolis, MN: Augsburg Publishing House, 1968), 9.

⁶⁶ Sateren, *Focus on...*, 9.

Outstanding Music Theory Book of the Year, introduces complex notions and definitions of measure, meter and rhythm, and will serve as the framework for my forthcoming analysis.⁶⁷ In *Meter as Rhythm*, Hasty provides his own definitions for meter and measure. He defines a musical measure to be, “Itself an event – the measure happens *in* time. But measure can also be regarded as a medium for properly rhythmic events and as a more or less autonomous principle of articulation – an automatic unit for the measurement of a musical time diversified by an actual musical context.”⁶⁸

Prior to engaging with Hasty’s ideas on meter, it is of utmost importance to understand his thoughts on *projection*. He addresses a musically perceptive phenomenon he names *projective potential*, or “The potential for a present event’s duration to be reproduced for a successor. This potential is realized if and when there is a new beginning whose durational potential is determined by the now past first event.”⁶⁹ Drawing upon a definition of meter presented earlier in the book by Hasty: “Meter is, nevertheless, limited in its effectiveness by our ability to perceive definite durational quantity,”⁷⁰ Hasty compares meter to *projection* and argues, “projection is nothing other than meter – that projection and meter are one.”⁷¹ In summary, meter is defined by Hasty as a perceptive phenomenon detected by the listener based solely on previously established rhythmic events; it is a perceptive device rather than one that adheres strictly to the notations in a score.

In a follow-up *Music Theory Spectrum* article, “Just in Time for More Dichotomies – A Hasty Response” (1999), Hasty addresses concerns brought to light by Justin London regarding

⁶⁷ Harvard University, “People, Faculty, Christopher Hasty,” Last Modified 2023, Accessed April 7, 2023. <https://music.fas.harvard.edu/people/faculty/christopher-hasty/>.

⁶⁸ Hasty, *Meter as Rhythm*, 13.

⁶⁹ *Ibid.*, 84.

⁷⁰ *Ibid.*, 34.

⁷¹ *Ibid.*, 91.

confusion in semantics in *Meter as Rhythm* (“Hasty’s Dichotomy,” *Music Theory Spectrum*, 1999).⁷² In Hasty’s response article, the definition of the *bar-measure* is brought to the forefront, and will serve as the primary analytical device for the remainder of the chapter. Hasty states, “If a measure in fact corresponds to the notated bar, I call it a *bar-measure*... I have identified bar-measures, two-bar measures, quarter-note measures, and half-note measures.”⁷³ I believe Hasty’s definition of bar-measure has more to do with the perception of a musical phrase as it corresponds to the perceived meter, rather than a measure of music as we understand it to appear in notation. However, the term bar-measure will be used from here forth in my analysis.

Prior to engaging with *Come to the Woods*, I feel it pertinent to place the bar-measure into context. Franz Schubert’s “Geheimes” Op. 14 No. 2 (1821) provides a clear and very concise example of the bar-measure, which is introduced at the top of the piece and persists in the vocal line throughout the remainder of the work.

EXAMPLE 2.7 Franz Schubert, “Geheimes” Op. 14 No. 2, mm. 1-15⁷⁴

(Orig. As dur.) Franz Schubert
Op. 14 No. 2

Etwas geschwind, zart.

Mit Verschiebung.

Ü - ber mei - nes

sempre *pp* *fp* *fp* *pp* *pp*

9

Lieb - chens Äu - geln stehn ver - wun - dert al - le Leu - te;

⁷² Justin London, “Hasty’s Dichotomy,” *Music Theory Spectrum* (Vol. 21/No. 2, 1999).

⁷³ Hasty, “Just in Time for More Dichotomies,” 284.

⁷⁴ Franz Schubert, “Geheimes” Op. 14 No. 2 (1821), Edition Peters, mm. 1-15.

In measure 7 (Example 2.8), the vocal line enters with the text, “*Über meines Liebchens Äugeln.*” Said phrase begins on the downbeat of m. 7 and concludes on the downbeat of m. 10. Given the phrase falls directly within the notated framework of a measure (or series of them), it can be categorized as a bar-measure. More specifically, in reference to Hasty’s definition of the bar-measure, mm. 7-10 of “Geheimes” would be categorized as a four-bar measure.⁷⁵ The presence of a four-bar measure in Schubert’s work is prototypical of the Late Classical and Early Romantic period, given “Geheimes” was composed in the fall of 1821.⁷⁶ Another instance of the four-bar measure is present beginning on the downbeat of m. 12 and concludes on the downbeat of m. 15 (“*stehn verwundert alle Leute*”). Schubert’s “Geheimes” displays an incredibly unveiled and concise persistence of Hasty’s bar-measure, however, when examining Runestad’s *Come to the Woods*, the presence of the bar-measure becomes a bit more elusive. Instead of adhering to the bar-measure, Runestad often deviates from it for the purpose of illuminating the text.

Application of the “Bar-Measure” in *Come to the Woods*

In mm. 72-75 of *Come to the Woods*, around the middle of the work, the alto and bass voices have their own sense of measure, while the soprano and tenor have a separate one. However, neither of these measures correspond with the notated bar line in their onsets nor offsets, thus making them non-bar-measures. The section being examined is depicted in Example 2.9.

⁷⁵ Hasty, “Just in Time for More Dichotomies,” 284.

⁷⁶ Oxford Lieder, “Songs, Geheimes (1821),” Last Modified 2023, Accessed April 11, 2023, <https://www.oxfordlieder.co.uk/song/3088>.

EXAMPLE 2.8 *Come to the Woods*, mm. 72-75⁷⁷

72 **Faster** ♩ = 88 **mp** *cresc. poco a poco*

mp *cresc. poco a poco*

mp *cresc. poco a poco*

mp *cresc. poco a poco*

Faster ♩ = 88 **mf mp** *cresc. poco a poco*

The alto and bass voices enter on beat two of m. 72 with their ascending motivic material. The simple fact of the voices entering on beat two rather than the downbeat of m. 72 already gives credence to the idea of their measures *not* adhering to Hasty's notion of the bar-measure from their onset.⁷⁸ Once the alto and bass voices reach their dotted-half note stasis on the third beat of m. 73 to conclude their ascending motive, the soprano and tenor begin their own, subsequently continuing the motion presented by the alto and bass. Similar to the alto and bass, the soprano and tenor too do not enter on the downbeat of m. 73, but rather beat three, after being propelled forward by the ascent of the alto and bass, again being indicative of a lack of bar-measure. Given neither of the ascending motives fall within the *notated* constraints of the bar in mm. 72-75, in neither their onsets nor offsets, excludes the presence of Hasty's bar-measure.

⁷⁷ Runestad, *Come to the Woods*, mm. 72-75.

⁷⁸ Hasty, "Just in Time for More Dichotomies," 284.

Only a small adjustment would need to be made for these measures to be bar-measures: the alto and bass would enter one beat earlier, and the soprano and tenor two beats earlier.

However, an important point to make regarding mm. 72-75 of *Come to the Woods* and the lack of bar-measure is the *presence* of bar-measure at a hypermetric level. Although the presence of hypermetric bar-measure goes against Hasty's description of the bar-measure ("If a measure of music in fact corresponds with the *notated* bar") its presence is undeniable in the section at hand, and worthwhile in examination.⁷⁹ William N. Rothstein addresses instances such as mm. 72-75 in his 1989 book *Phrase Rhythm in Tonal Music*. Rothstein states, "Where hypermeter exists, it need not be all-pervasive. Just as the agreement or conflict of hypermeter and phrase structure is a compositional resource, so is the contrast between metrical regularity (hypermeter) and irregularity (absence or modification of hypermeter)."⁸⁰ The alto and bass measure (phrase) falls within the hypermetric unit of beat two of m. 72 and beat four of m. 74. The soprano and bass measure subsequently falls within the hypermetric unit of beat three of m. 73 and beat three of m. 75. Thus, the ascending motivic material in mm. 72-75 would align with the modification of hypermeter Rothstein speaks of here, given the hypermetric units present do *not* align with the notated bar, and are thus indicative of hypermetric irregularity. Rothstein's idea on hypermetric irregularity and Hasty's notion of the bar-measure reinforce the musical idea occurring here in my analysis: bar-measure at the hypermetric level.⁸¹

Relevance of Bar-Measure as Text Expression

The adjustment of the bar-measure to a hypermetric level in mm.72-75 thus raises an important question: Why did Runestad compose the lines so not to correspond with the notated

⁷⁹ Ibid., 284.

⁸⁰ Rothstein, *Phrase Rhythm*, 13.

⁸¹ Hasty, "Just in Time for More Dichotomies," 284.

bar lines? Just prior to the ascending vocal measures in mm. 72-75, Muir's text states, "I should climb one of the trees for a wider look." The rapid ascensions of the vocal measures mirror Muir's own ascent of a tree to view the incoming storm in its glory. However, most prominently, the lack of presence of bar-measures, and the converse presence of *hypermetric* bar-measures aids in expressing the immediately forthcoming text in which the winds are, "bending and swirling backward and forward, round and round," as if to give them a sense of wild, free unpredictability, thus directly coinciding with the sudden approach of the storm. Harald Krebs addresses the shift in hypermeter occurring here in his *Cambridge Companion to Rhythm* article "Expressive Rhythm and Meter in the German Lied." Krebs states, "When this common large-scale meter, however, is associated with a displaced 'shadow meter,' or when hypermeter becomes irregular or ambiguous, a link between the resulting structures and a given poem may well become apparent."⁸² Runestad's decision to create irregular hypermetric bar-measures in mm. 72-75 serves as a means to achieve just what Krebs states: to establish a link between Muir's poetry and the resulting hypermetric bar-measure structures.

Having examined Runestad's ability to apply metrical dissonance in short statements for the purpose of better illuminating Muir's text in *Come to the Woods*, I will now take a broader approach to such issues of rhythm and meter in the work. In the forthcoming chapter, I will analyze metric devices and hypermetric phrasing through the lens of Wallace Berry's *Internal Structure of the Metric Unit*.⁸³

⁸² Krebs, "Expressive Rhythm and Meter," 204.

⁸³ Berry, "Metric and Rhythmic Articulation," 10.

CHAPTER III
METER AS PHRASING OF TEXT IN
COME TO THE WOODS

**Introduction to Wallace Berry's Abstract Model
of the Metric Unit and Phrase
Expectation**

As with other musical disciplines, a fundamental performance practice in choral literature is the act of phrasing, or finding appropriate emphasis and shape within the melodic line. When dealing with a text in particular, phrasing becomes all the more important for the composer in order to best illuminate the emotional content of the work. The term “musical phrase” can be a bit ambiguous, and generally requires placement in context in order to be addressed most properly. However, Wallace Berry provides an abstract model of the musical phrase in his 1985 *Music Theory Spectrum* article, “Metric and Rhythmic Articulation in Music.”⁸⁴ Berry’s model places the musical phrase into an abstract context, however, it has merit when analyzing meter and phrase structure in a piece of music. Berry addresses the model as the “internal structure of a metric unit.” The model consists of four distinct parts, which he outlines to be, “The initiative, or downbeat, is a point of action... The other functional impulses are currents, typically comprised of lower-level attacks: the anticipative *to*, the reactive *from*, and the conclusive final dispersal of the initiative accent with which the metric unit begins.”⁸⁵

⁸⁴ Berry, “Metric and Rhythmic Articulation,” 7-33.

⁸⁵ *Ibid.*, 10.

For the sake of clarity in my analysis, I feel it pertinent to place Berry's four parts of the metric unit (phrase) into more colloquial terminology. The first part, (a)⁸⁶, is self-explanatory: the downbeat. However, this is not necessarily the downbeat as we understand it in the context of a single measure, but rather the downbeat of a *phrase* as a whole. The "reactive impulse *from*," (b), signifies the continuing motion of the phrase, or notes that subsequently follow the downbeat. The "anticipative impulse *to*," (c), is also quite self-explanatory: the anacrusis, or upbeat guiding the music into the next phrase to be presented. The fourth and final part, (d), is the "final reactive impulse."⁸⁷ This terminology is ambiguous, as it can be indicative of the presence of multiple conclusive musical phenomena, such as a final cadence (of the single metric phrase in question or the piece as a whole), or even the immediate introduction of a new phrase, suggesting the presence of phrase *elision*, which I will address further in the context of my analysis of metric phrasing in *Come to the Woods*.

Prior to engaging with Runestad's choral work, it is pertinent to place Berry's internal structure of the metric unit into context to fully address each working part of the model. Ralph Vaughn Williams' 1903 composition "Silent Noon" the cycle *The House of Life* with poetry by Dante Gabriel Rossetti will serve as my example. Having performed the piece myself has given me great insight into how Berry's internal structure of the metric unit applies well to the opening phrases of the piece. Measures 1-6, or the measures of "Silent Noon" in question, are depicted in Example 3.2 along with my own annotations of the four distinct parts of Berry's model.

⁸⁶ Score example to follow for a-d.

⁸⁷ Berry, "Metric and Rhythmic Articulation," 10.

EXAMPLE 3.1 Ralph Vaughn Williams, "Silent Noon," No. 2, *The House of Life*, mm. 1-6⁸⁸

SILENT NOON

Words by D.G. ROSSETTI No. 2 Music by R. VAUGHN WILLIAMS

Largo sostenuto. (A) (B) —
mf

Your hands lie

op - en in the long fresh grass, The fin - ger

Following a two-measure piano introduction to establish not only the meter and tonal center, but the mood of the work, the vocal line enters in m. 3, thus beginning the phrase model. Annotated as (A), the vocal entrance is demonstrative of the “metric initiative accent,” or downbeat of the phrase.⁸⁹ Since there is no preceding text until m. 3, the downbeat of the phrase is all the more clear and concise and cannot be confused with a conclusion of a previous phrase. Following the downbeat and coinciding with the text, “Hands lie open in the...” we receive the reactive impulse from the downbeat, or the continuing motion of the phrase (B). The end of the

⁸⁸ Ralph Vaughn Williams, “Silent Noon,” No. 2 from *The House of Life*, (Great Yarmouth, UK: Willcocks & Co. Ltd., 1903), mm. 1-6.

⁸⁹ Berry, “Metric and Rhythmic Articulation,” 10.

reactive impulse (B) can be ambiguous and difficult to determine. However, I have chosen to conclude it at the downbeat of m. 5, as it is the aural and visual “peak” of the phrase, or the location Vaughn Williams’ music drives to emotionally prior to the conclusion of the phrase in its entirety, which brings the phrase to its anticipative impulse to its conclusion, or the anacrusis (C). The anacrusis begins on the text, “Long” and directly coincides with the descent of the phrase to its conclusion, following the emotional rise. Finally, the phrase reaches its conclusive and “final reactive impulse” (D), which brings the phrase to a close and subsequently carry the singer into the following metric unit.⁹⁰ In order to further validate the locations to which I have assigned Berry’s four components of the metric unit, it is important to examine what occurs harmonically throughout the phrase, aside from the text itself. William Rothstein addresses the pertinence of the tonal motion of a phrase in his 1989 book titled *Phrase Rhythm in Tonal Music*. Rothstein states, “The phrase is a constant motion toward a goal – the cadence. A phrase should be understood as, among other things, a directed motion in time from one tonal entity to another; these entities may be harmonies, melodic tones (in any voice or voices), or some combination of the two.”⁹¹ Given “Silent Noon” is a late-Romantic tonal composition, Rothstein’s assertion holds merit in my analysis.

Depicted in Example 3.3 is my tonal harmonic analysis of mm. 1-6 paired (below the staves) with Berry’s metric unit labels A-D above. The initiative accent of the phrase (A) directly coincides with an established statement of the tonic E flat major, reinforced by the piano introduction in mm. 1-2. Subsequently, the reactive impulse (B) is comprised heavily of passing and neighboring motion to and from the tonic, signifying the exploratory area of the phrase prior to reaching the anticipative impulse/anacrusis, or melodic and harmonic “peak” of the phrase.

⁹⁰ Ibid.

⁹¹ Rothstein, *Phrase Rhythm*, 4-5.

Once we reach the anacrusis (C), appropriately so, traditional tonal tonic-predominant-dominant-tonic motion begins. In the case of “Silent Noon,” the motion is composed as I-IV-vii^o₄-I, with the concluding statement of I coinciding with the conclusive impulse of the phrase, or cadence (D), presented as an imperfect authentic cadence (IAC).

EXAMPLE 3.2 “Silent Noon,” Harmonic Analysis, mm. 1-6⁹²

The musical score for "Silent Noon" (mm. 1-6) is presented in two systems. The first system (mm. 1-3) features a vocal line starting with "Your hands lie" and a piano accompaniment. The second system (mm. 4-6) continues the vocal line with "op - en in the long fresh grass, The fin - ger" and the piano accompaniment. The score includes dynamic markings such as *Largo sostenuto.*, *mf*, and *mp sonore*. Harmonic analysis is provided below the piano part, showing a sequence of chords: I, I⁶, I, IV, viio, and I. Specific harmonic features are labeled: "passing IV" (a chord in the piano part of m. 3), "IAC" (Imperfect Authentic Cadence at the end of m. 6), "passing" (a chord in the piano part of m. 5), and "anticipation" (a chord in the piano part of m. 5). Circled letters A, B, C, and D mark specific points in the music: A and B are above the vocal line in m. 3; C and D are above the vocal line in m. 5.

Given the four distinct components of Berry’s internal structure of the metric unit can be supported through both textual and harmonic analytical means in “Silent Noon,” proves merit in its application to musical phrasing. More importantly, however, is its ability to illuminate clear phrases which may not conform to typical four-bar phrasing commonly observed in vocal or

⁹² Vaughn Williams, “Silent Noon,” mm. 1-6.

choral literature through said analytical means. Rothstein addresses this issue of musical phrasing in *Phrase Rhythm in Tonal Music* in stating, “Defining a phrase is not a matter of counting measures. There are many four-measure phrases in tonal music, but not every segment of four measures describes a *tonal* motion with beginning, middle and end... A phrase cannot be defined by some a priori measure count; it is a fundamentally different sort of unit.”⁹³ Given Rothstein’s observation of phrasing in tonal music, and my analysis of Vaughn Williams’ “Silent Noon,” there is context to now properly engage with Berry’s metric unit model in regard to Runestad’s *Come to the Woods*.

Application of Berry’s Phrase Model to the Piece: Runestad’s Interpretation

The primary example I would like to address in *Come to the Woods* of which Berry’s internal structure of the metric unit is pertinent does not necessarily conform entirely to the phrase model, but rather expands upon its conclusion. Though the phrase begins quite conventionally, in relation to Berry’s standards, the conclusion of the passage features *elision* into the subsequent phrase. Referring back to Figure 3.1, as one “phrase” elides into the next, Berry’s metric cycle begins again; the final reactive impulse (d) of the first phrase directly coincides with the downbeat of the next (a).⁹⁴

⁹³ Rothstein, *Phrase Rhythm*, 7.

⁹⁴ Berry, “Metric and Rhythmic Articulation,” 10.

EXAMPLE 3.3 *Come to the Woods*, mm. 41-46⁹⁵

A
B

poco rit.

p

41

they touch eve - ry

they touch eve - ry

they touch eve - ry

they touch eve - ry

they touch eve - ry

(A)
B

pp

poco rit.

eve - ry

eve - ry

⁹⁵ Runestad, *Come to the Woods*, mm. 41-42.

EXAMPLE 3.3 cont. mm. 43-44⁹⁶

a tempo
B cont.

C **D**

43 *mp*
tree

mp
tree

mp
tree

mp
tree

p
tree.

p
tree.

a tempo

⁹⁶ Runestad, *Come to the Woods*, mm. 43-44.

EXAMPLE 3.3 cont. mm. 45-46⁹⁷

The musical score consists of five systems. The first system (measures 45-46) shows vocal lines with lyrics: "not one is for - got - ten" and "Not". It includes dynamic markings *mp* and *mf*, and tempo markings *rit.* and *a tempo*. A red oval highlights a melodic phrase in the vocal line. The second system continues the vocal lines with the label "B cont." and a circled "A". The third system shows piano accompaniment with the label "B cont." and a circled "A". The fourth system continues the piano accompaniment with the label "A" and a circled "A". The fifth system shows the piano accompaniment with the label "A" and a circled "A". It includes dynamic markings *mp* and *mf*, and tempo markings *rit.* and *a tempo*. The piano part includes the instruction "Pedal freely".

The concept of elision as it pertains to meter and metric articulation is addressed by William E. Benjamin in his 1984 article in *Music Perception: An Interdisciplinary Journal* titled "A Theory of Musical Meter." Benjamin defines elision as an instance, "whereby a metric span is made to overlap with the succeeding span (metric or not), some initial subspan of the second serving, as well, as the terminal subspan of the first... In fact, far from distorting meter, group overlap may be heard, at times, to give rise to intensifying accents that help to create a metric

⁹⁷ Runestad, *Come to the Woods*, mm. 45-46.

level.”⁹⁸ Although Berry’s abstract model of the metric unit does not necessarily account for the presence of elision, it does retain merit when elision is introduced. Example 3.4 depicts mm. 43-46 of *Come to the Woods*, with labels above the staves in accordance with Berry’s four distinct components of the internal structure of the metric unit.⁹⁹

On beat two of m. 42, the soprano and alto voices present the “metric initiative accent” or downbeat of the phrase (a), coinciding with the word “they,” with the tenor and bass voices not yet being present in the phrase, but concluding the previous one, which I will address in further context later. While the soprano and alto voices begin their “reactive impulse” (b) from the downbeat on the word “touch,” the tenor and bass voices subsequently enter on beat four of the same measure with their respective reactive impulse. Uniquely, the tenor and bass voices do not factor into the metric initiative accent of the phrase, as they are not present. However, they serve the distinct purpose to aid in the propelling of the phrase from the “metric initiative accent” into the developments occurring in the “reactive impulse,” particularly in regard to the harmonic shift occurring between mm. 42 and 43, which I will outline in my forthcoming harmonic analysis of the phrase. As the word “tree” is held out amongst all voices with alternating triplet gestures present in the soprano and alto, the “anticipative impulse” to the conclusion of the metric unit (c) begins on the downbeat of m. 44. Consequently, all four upper voices have varying “conclusive and final reactive impulses” (d) in m. 44, as they all conclude their triplet gestures on separate beats. Although the final metric impulses are staggered, they are all reached within the bounds of m. 44, granting clarity and resolution to the unit, until the bass and tenor are taken into thorough consideration.

⁹⁸ William E. Benjamin, “A Theory of Musical Meter,” *Music Perception: An Interdisciplinary Journal* No. 4 (1984), 393-394.

⁹⁹ Runestad, *Come to the Woods*, mm. 43-46.

However, at the moment the soprano and alto triplet gestures cease, the tenor and bass continue to sound beneath them. The silence in the soprano and alto and lack thereof in the tenor and bass voices is paramount to Runestad's illustration of the phrase remaining in continuation. Christopher Hasty refers to the phenomenon of musical silence as a device for outlining phrase projection in *Meter as Rhythm* (1997). Hasty states, "I shall continue to use silence as a heuristic device for testing projection, for it is in the absence of stimulus that the effect of projective duration can be most clearly isolated and tested."¹⁰⁰ What I am referring to here as a musical "phrase" is what Hasty addresses in terms of "projective duration": the means by which we are able to determine the conclusive and final reactive impulse of a phrase.

Following the continuation of the phrase as indicated by the tenor and bass in m. 44, the soprano and alto enter on beat two of m. 45 with the "metric initiative accent" (a) of an entirely new phrase, on the text "not," while the tenor and bass continue to hold over from the previous bar without change. Therefore, the tenor and bass have no clear aural indicator of an anticipative or conclusive impulse in regard to change in their melodic line. Uniquely, Runestad utilizes a quarter rest on beat three of m. 45 to emphasize the sudden change and, in the case of my analysis, provide a clear point of stark alteration to Berry's metric unit model. Referring back to Hasty's thoughts on silence in *Meter as Rhythm*, the silence in m. 45 serves as a means to determine a *change* in the projective duration of the phrase at hand. In tandem with the pause in the tenor and bass on beat three and the soprano and alto entrance on "not," an elision from one phrase into the subsequent begins. As the soprano and alto voices sing the word "forgotten" on the final triplet beat of the measure, the voices are in clear motion through their reactive impulses from the metric downbeat. On the concluding beats of m. 45, elision into the next phrase begins:

¹⁰⁰ Hasty, *Meter as Rhythm*, 90.

the soprano and alto reactive impulses from the downbeat are *also* the metric initiative accent of the forthcoming phrase. The interpretation of the elision occurring is somewhat abstract, however, it is clearly reinforced by what is composed in the tenor and bass. Following a long drone spanning mm. 43-44, the tenor and bass rest and have no clear final reactive impulse of the phrase in question. However, they clearly serve as the primary harmonic vehicle for the transition and elision of the phrase into the subsequent one beginning at the conclusion of m. 45 and beginning of m. 46. The tenor and bass voices establish a clear anticipative statement of the new key area notated on the downbeat of m. 46, thus granting further credence to the notion of phrase elision being present here, illustrating a direct modification of Berry's "internal structure of the metric unit" by Runestad.¹⁰¹

In order to fully grasp the elision occurring between the phrases I have analyzed thus far and the forthcoming phrase, as I have done with "Silent Noon," it is pertinent to engage with the harmonic activity occurring as the two phrases elide. Previously, at moments such as mm.45-46 in the piece, Runestad has made deliberate shifts in key area, occurring most prominently at moments of cadential arrival. Prior to providing such supportive context, I will begin with the measures at hand. Example 3.5 illustrates my harmonic analysis of mm. 45-46 of *Come to the Woods*. Although the piece exhibits many quintessential aspects of a post-tonal work (which it most certainly is), Runestad deliberately employs key areas to delineate between pertinent sections of the work as well as phrases. In the instance of the phrase I have analyzed, the key area is notated as and aurally reinforced as E flat major. In regard to the support the harmonic makeup of the passage gives to illustrate phrase elision occurring, I will begin with the foundation provided in the tenor and bass voices.

¹⁰¹ Berry, "Metric and Rhythmic Articulation," 10.

EXAMPLE 3.4 *Come to the Woods*, Harmonic Analysis, mm. 45-46¹⁰²

11

rit. a tempo

45 *mp* *mf*

not one is for - got - ten Not
(re) — mi

not one is for - got - ten Not
(do) — do

for - got - ten Not
(re) — sol
(re) — do

for - got - ten Not

I rit. **FM:** **I** a tempo

mp flowing

Pedal freely

On the first two beats of m. 45, the tenor voice continues its drone from the previous two bars on E flat and B flat in the first and second tenor voices, respectively. Additionally, the first and second bass voices continue their drone of E flat and G, respectively. Thus, the tenor and bass voices provide an obvious visual and aural statement of the tonic triad for E flat major. In tandem with the lower two voices enforcing the current key area, on the first and second beats of m. 45, the right hand of the piano repeats an E flat in high register with a notated *ritardando*, providing additional supportive material to the key at hand.

¹⁰² Runestad, *Come to the Woods*, mm. 45-46.

The most important point to address here is the manner in which the supportive E flat major harmonies in the tenor, bass and piano coincide with the soprano and alto beginning the elision of the phrases. While the soprano and alto begin their metric initiative accent (a) of the new phrase, rather than receiving harmonic support from the tenor, bass and piano indicative of a transition to a new key area, the opposite occurs. The lower two voices and piano accompaniment create an aural sense of phrase elision by holding the forthcoming phrase back, so to speak, in the key of E flat major rather than propelling the current phrase to an end by making a rapid transition to the new key on the downbeat of m. 46, F major.

As the elision between the reactive impulse (tenor, bass and piano) of the previous phrase and the metric initiative accent of the forthcoming phrase takes place, it is reinforced by the tenor and bass moving away from the key of E flat major and beginning *their* metric initiative accent appropriately in the key of F major. The tenor moves from G natural (mi in the previous key) to C natural, or sol in F major, on the downbeat of m. 46. Consequently, the bass serves to provide the clearest and concise motion to the new key with motion from G to F, or re to do in F major. Finally, on beat two of m. 45, the right hand of the piano presents an anticipation to the dominant of the new key before abruptly shifting into ascending melodic motion beginning on the tonic. The left hand also supports the changing key area with a clear statement of an F major triad. The oblique motion to a cadence in the tenor and bass coupled with the anticipation to the dominant in the piano finally give way to the new phrase. Overtop the cadential motion in the lower two voices and piano accompaniment, the soprano and alto also give way to the new tonic of F major, with the soprano moving from G natural to A natural (re to mi) and the alto anticipating the tonic with repeated F naturals on the concluding beat of m. 45 and downbeat of m. 46, creating an imperfect authentic cadence (IAC) with scale degree three in the soprano.

My analysis of the internal structure of the metric unit occurring in mm. 42-46 of *Come to the Woods* and the manner in which Runestad implements phrase elision in accordance with Berry's metric model, however, is not an anomaly or stand-alone event in the piece. It is the final of multiple metric unit phrase elisions occurring throughout a broader section of the work, beginning in m. 39. Christopher Hasty addresses such a musical phenomenon with his definition of *mensural determinacy* in a 1999 *Music Theory Spectrum* article, "Just in Time for More Dichotomies – A Hasty Response." Hasty outlines his principle of *mensural determinacy* in stating, "A measure could be described as the present relevance of a past durational quantity for the becoming of a present duration... There is a great range in the extent to which the durational quantity of a past event can influence our expectation for the duration of a present event."¹⁰³ Therefore, it is pertinent to examine the preceding event to the metric unit of mm. 42-46 through the same analytical means in order to demonstrate the deliberate nature of Runestad's phrase elision between the series or metric units, and to grant further credence to my analysis thus far.

Metric and Harmonic Context to
Come to the Woods Measures
42-46

Having established the prevalence of harmonic motion and the manner in which it aids in proving elision in accordance with Berry's "internal structure of the metric unit," I feel it necessary to work backwards in the piece to understand how mm. 42-46 are supported and set up metrically and harmonically for a phrase elision-driven cadential arrival.¹⁰⁴ Example 3.6 illustrates the conclusion of the previous metric unit to the one I have just analyzed, which ends in mm. 42. Upon initial visual comparison, it is evident the structure of m. 41 is nearly identical to m. 44 (Example 3.4) in accordance with Berry's metric unit model. The bass and tenor are

¹⁰³ Hasty, "Just in Time for More Dichotomies," 284.

¹⁰⁴ Berry, "Metric and Rhythmic Articulation," 10.

continuing their presentation of the reactive impulse from the metric downbeat (b) while the soprano and alto present their anticipative impulse to the conclusion of the phrase (c) on the downbeat of m. 41.

EXAMPLE 3.5 *Come to the Woods*, mm. 41-42¹⁰⁵

The musical score consists of seven staves. The top four staves are vocal parts (Soprano, Alto, Tenor, Bass) and the bottom two are piano accompaniment. The score is annotated with circled letters C, D, A, and B, and dynamic markings.

- Staff 1 (Soprano):** Starts at m. 41 with a circled 'C' above the staff. The lyrics are "they touch eve - ry" with "la" and "sol" in red below. A circled 'D' is above the staff. A circled 'A' and circled 'B' are above the staff with "poco rit." written above them. The dynamic is *p*.
- Staff 2 (Alto):** Starts at m. 41 with a circled 'D' above the staff. The lyrics are "they touch eve - ry" with "la" and "sol" in red below. The dynamic is *p*.
- Staff 3 (Tenor):** Starts at m. 41 with a circled 'D' above the staff. The lyrics are "they touch eve - ry" with "do" in red below. The dynamic is *p*.
- Staff 4 (Bass):** Starts at m. 41 with a circled 'D' above the staff. The lyrics are "they touch eve - ry" with "Eflat M: do" in red below. The dynamic is *p*.
- Staff 5 (Piano):** Labeled "B cont." above the staff. It features a circled 'A' and circled 'B' above the staff. The lyrics "eve - ry" are below. The dynamic is *pp*.
- Staff 6 (Piano):** Labeled "B cont." above the staff. It features a circled 'A' and circled 'B' above the staff. The lyrics "eve - ry" are below. The dynamic is *pp*.
- Staff 7 (Piano):** Labeled "DM: I" in red above the staff and "Eflat M:" in red above the staff. It features a circled 'A' and circled 'B' above the staff. The lyrics "eve - ry" are below. The dynamic is *pp*. A circled 'A' and circled 'B' are above the staff with "poco rit." written above them. A red oval highlights a specific passage in the piano accompaniment.

¹⁰⁵ Runestad, *Come to the Woods*, mm. 41-42.

Additionally, the soprano and alto voices all exhibit varying final conclusive impulses (d) with their varying arrivals to their respective dotted half and half note in m. 41 before moving forward into the phrase beginning in m. 42, of which I am providing context. Having established strong evidence regarding the similarities in metric unit closure between the phrase at hand and the one I have previously analyzed, I will move forth with my harmonic analysis.

Primarily, it is pertinent to note the key signature beginning in m. 41. Although the key is notated at B major, prior to m. 41, Runestad has modulated to the key of D major through the usage of accidentals rather than a key change by conventional notational standards. The key of D major is further supported by the pedal on D occurring in the left hand of the piano throughout the passage in question. Now understanding the surrounding context of D major, I am able to properly examine the harmonies occurring in the various voicings. On the downbeat of m. 41, tying over from the previous bar, the bass one and two voices are sounding on do and mi (D and F sharp) respectively, while the tenor one and two sound on sol and do (A natural and D) respectively. Referring back to Example 4.4 and the passage I have previously examined, the voicings exhibited in the bass and tenor in m. 41 are identical to those in m. 45, giving credence to the analysis I have conducted thus far. Although the piano exhibits a vastly different harmonic makeup in m. 41 than in m. 45, the harmonic makeup remains consistent. The left hand pedals on do, while the right hand extends above in triadic ascensions indicative of the tonic.

As the soprano and alto voices begin their metric initiative accent of the subsequent phrase (a) in m. 42, the bass, tenor and piano continue to hold firm in the key of D major. Again, the presentation of harmonies in the lower voices and piano accompaniment is identical to m. 45, thus indicating the beginning of an elision of metric unit structures. The soprano and alto begin their respective phrase with motion toward the new key being presented on the downbeat of m.

43: E flat major. Both soprano voices descend from la to sol in the key of E flat major, while the alto begins on do and descends to ti. The presence of sol and ti on the concluding beat of m. 42 in the upper voices indicates a dominant preparation to E flat major and the subsequent motion to said key area. Finally, on beat four of m. 42 the bass and tenor voices, having completed their reactive impulse (b) from the previous phrase, enter on ti in E flat major, thus further supporting the soprano and alto in their presentation of the dominant to the key change and concluding the elision of the two phrases.

Given the strong similarities between the phrase concluding in mm. 41-42 and the phrase beginning in m. 42 I previously analyzed, particularly in regard to the structures of the metric units and the supporting harmonies, relevant context to my analysis has been clearly established and verified. The phrase elision to which I dedicated the majority of the chapter analyzing is not an anomaly in the work but is clearly supported by its preceding phrase. Hasty addresses the relationship between the interrelated components of the two phrases in his 1984 *Journal of Music Theory* article, "Phrase Formation in Post-Tonal Music." Hasty suggests, "Musical works are customarily regarded as wholes composed of interrelated parts. Because the parts themselves must exhibit some sort of unity and may in turn be composed of smaller parts, the distinction of whole and part is replicated on different levels."¹⁰⁶ He goes on later in the article to assert, "Closure is rarely so complete as to entirely deny the future. Normally, something is left unincorporated which can engender a new phrase, or there may be residual ambiguities which are resolved by succeeding phrases... the musical phrase can serve as a useful point of departure for the investigation of broader issues of form."¹⁰⁷ In terms of the broader form of the section of

¹⁰⁶ Christopher Hasty, "Phrase Formation in Post-Tonal Music," *Journal of Music Theory* Vol. 23/No. 2 (1984), 167.

¹⁰⁷ *Ibid.*, 188-189.

Come to the Woods in question, the “residual ambiguities” present in the phrase concluding in m. 41-42 (i.e., the sudden phrase elision) can be utilized to predict the resolution of the phrase concluding in m. 46, as it is the final phrase in the series before Runestad moves forward to a new section of the work. The most important point to make in regard to the interrelated components of the work and the “ambiguous” nature of Runestad’s decision to implement elision of the metric units has entirely to do with Muir’s text being expressed properly and thoroughly. Once analyzed in such a light, Runestad’s elision choice becomes far less ambiguous, and can rather be perceived as being utilized with clear intent to uphold the integrity of the poem.

Runestad’s Elision of the Metric
Units in the Context of Text
Expression

The text being stated prior to and within mm. 41-46 is as follows: “The mountains winds bless the forests with love. They touch every tree. Not one is forgotten.”¹⁰⁸ The elision of metric phrases by the standards of Wallace Berry’s *Internal Structure of the Metric Unit* has great implication to Runestad’s depiction of the winds Muir addresses in his writings. As stated by Edward Cone in his 1968 publication *Musical Form and Musical Performance*, “To a great deal of music, beginning and ends (let us call them extremes) not only are not essential, but at best are simply necessary interruptions... If a piece is to qualify as a *work of art*, that is to say, as a real *composition*... its extremes must be respected in performance.”¹⁰⁹ Runestad limits his usage of “extremes” in mm. 41-46 by eliding the phrases one into the next, thus giving room for the music to be governed by Muir’s writings.¹¹⁰ As the music explores the emotions Muir associates with the winds “blessing the forests with love,” so does the music.¹¹¹ The elision of the metric units

¹⁰⁸ Runestad, *Come to the Woods*.

¹⁰⁹ Cone, *Musical Form and Musical Performance*, 12-13.

¹¹⁰ *Ibid.*

¹¹¹ Runestad, *Come to the Woods*.

illustrates the free-flowing motions exhibited in the winds as they dance between trees without ceasing. Should Runestad have composed mm. 41-46 sans elision, the “extremes” would not have aided in the portrayal of the text to its potential, thus granting the phrases I analyzed prominence as moments by which Runestad allows metric structures within the work to be governed by the emotions expressed by John Muir.

Having now explored rhythmic and metric devices implemented by Runestad in *Come to the Woods* from decades past, I feel it pertinent to move forward with my analysis by taking a more modern approach to rhythmic events in the piece and their implications to text expression. The research conducted by Krebs, Hasty and Berry has provided a firm foundation for my analysis of rhythm and meter in Runestad’s choral work. However, the forthcoming chapter will examine several rhythmic events in the piece through the lens of 2020 research published by Godfried T. Toussaint, and I will be taking a mathematical and geometric approach to more nuanced moments in the work, rather than examining broader sections of metric formal structure.¹¹²

¹¹² Toussaint, *The Geometry of Musical Rhythm*.

CHAPTER IV

CYCLICAL TIMELINE REPRESENTATION OF
RHYTHMIC EVENTS IN *COME TO
THE WOODS***Godfried T. Toussaint's Cyclical Timeline
Representation of Rhythmic Events
and Context**

Having analyzed various rhythmic and metric events in *Come to the Woods* through Wallace Berry and Christopher Hasty's analytical means, I now feel it pertinent to bring a modern mathematical approach to my analysis. The forthcoming analyses are conducted through the lens of Godfried T. Toussaint's notion of *rhythmic timelines* or *cyclical timelines* from his 2020 publication *The Geometry of Musical Rhythm*.¹¹³ Toussaint utilizes a quote from Friedrich Nietzsche's *The Birth of Tragedy* to outline the insights provided in such a mathematical approach to rhythm: "Music is like geometric figures and numbers, which are the universal forms of all possible objects of experience." Toussaint continues on to state, "The geometric approach used here promotes a new kind of analysis of rhythms that yields novel insights and thus augments the traditional tools utilized by musicologists... The circular notation for cyclic rhythms goes back at least to thirteenth-century Baghdad."¹¹⁴ Although the geometric methods Toussaint utilizes throughout *The Geometry of Musical Rhythm* are new and novel, they are deeply rooted in historical musical notation, which is precisely why I have chosen to apply his insights for the purposes of my own analyses. There are several moments in *Come to the Woods*

¹¹³ Toussaint, *The Geometry of Musical Rhythm*.

¹¹⁴ *Ibid.*, 31.

in which Runestad restates a particular rhythmic pattern which was heard previously, in order to allude to particular thematic material. The rhythmic patterns, or *timelines*, I will be examining further serve as an orienting device for the performers as well as the audience, and aid in bringing the prominence of themes in Muir’s poetic text to the forefront of the performance.¹¹⁵

Prior to engaging with Toussaint’s cyclic representation of rhythmic timelines in regard to *Come to the Woods*, I feel it pertinent to place such an analytical means into context. For the sake of consistency and familiarity, I will be utilizing an example explored in Chapter II: the opening phrase in mm. 7-10 of Franz Schubert’s “Geheimes” Op. 14 No. 2 (1821). Example 4.1 below depicts the phrase in question as it appears in the musical score.

EXAMPLE 4.1 Franz Schubert “Geheimes” Op. 14 No. 2, mm. 1-15¹¹⁶

(Orig. As dur.)

Franz Schubert
Op. 14 No. 2

Etwas geschwind, zart.

Mit Verschiebung.

Ü - ber mei - nes

Lieb - chens Äu - geln stehn ver - wun - dert al - le Leu - te;

¹¹⁵ Toussaint, *The Geometry of Musical Rhythm*, 11.

¹¹⁶ Schubert, “Geheimes,” mm. 1-15.

The pattern exhibited in the opening vocal phrase of “Geheimes” in mm. 7-10 is indicative of what Toussaint defines as a *timeline*. In *The Geometry of Musical Rhythm*, he classifies a timeline as being “an essential feature of the music, which stands out above other rhythms, and which repeats throughout most if not the entire piece... Timelines should be distinguished from the more general term *rhythmic ostinatos*.”¹¹⁷ The rhythmic pattern exhibited in the vocal line in mm. 7-10 is repeated throughout the remainder of Schubert’s work and serves as an indicator of a refrain of sorts, thus orienting the audience to previously stated rhythmic material.

Moving forward with my analysis of mm. 7-10, the primary step for constructing a cyclical timeline of a rhythm is calculating the *pulse number*, or total amount of beats by which the rhythm is composed.¹¹⁸ By “total” amount of beats, I am referring to the *smallest* rhythmic value utilized by the composer in order to account for all possible rhythmic onsets present in the pattern. The smallest rhythmic value utilized by Schubert in the passage is the eighth note. Given the time signature of $\frac{2}{4}$ and the passage’s span of four measures, the resulting pulse number is 16, or four measures of four eighth notes. Then comes the issue of constructing the timeline itself and placing the rhythmic onsets on the timeline accurately. For the vocal phrase at hand, each quarter note will be represented by two pulses on the timeline and each eighth note will be represented by one pulse. The resulting timeline should therefore line up exactly with the rhythmic onsets exhibited in the score with no remaining pulses left over to be utilized. Figure 4.2 below depicts the cyclical timeline representation of the rhythmic pattern exhibited in mm. 7-10 of “Geheimes” with pulse numbers labeled accordingly.

¹¹⁷ Toussaint, *The Geometry of Musical Rhythm*, 11.

¹¹⁸ *Ibid.*

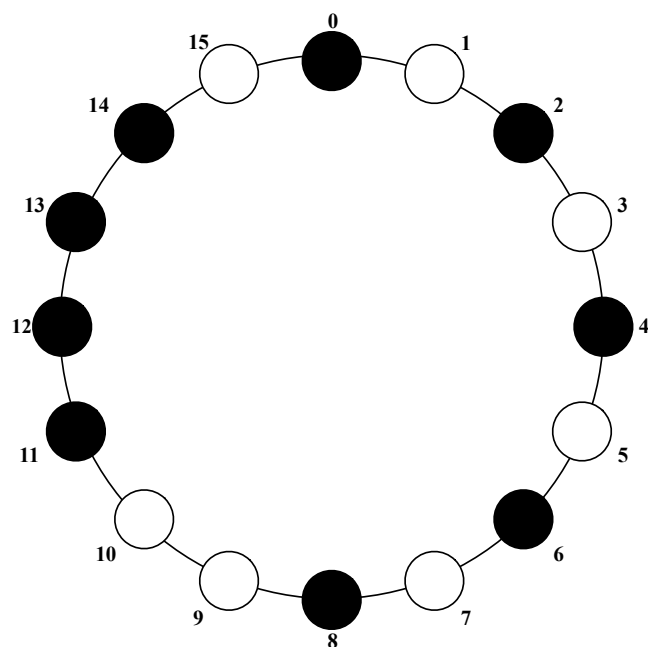


FIGURE 4.2 Timeline Representation of mm. 7-10 of Schubert's "Geheimes"

With the timeline representation of the rhythmic pattern, the distinct difference between quarter note onsets and eighth note onsets becomes clear. The first four onsets on the text, "Über meines" (mm. 7-8) are particularly evident as being comprised of two pulses, or every other onset. In stark contrast, the concluding text of mm. 9-10, "Liebchens Äugeln" exhibits much more rapid pulse onset motion, which directly coincides with the eighth notes composed in the score following one after the other with the resulting 16 eighth note pulse number of the timeline. The rapid pulse onset motion depicted in the timeline aids in achieving a cadence in m. 10, as Schubert composes the line in rapid descending melodic motion to a half cadence at the conclusion of the bar.

Now having explored the manner in which Toussaint's cyclical rhythmic timelines are constructed in context outside of *Come to the Woods*, I now explore fully the manner in which said timelines are pertinent to a rhythmic analysis of Runestad's work, and subsequent depicted of John Muir's poetic text.

Cyclical Timeline Representation
of Rhythmic Events in *Come to
the Woods*, mm. 40-41

The primary section of *Come to the Woods* which I will be applying Toussaint's cyclical rhythmic timeline representation is familiar: mm. 40-41. Contrary to the previous chapter, I will be taking a closer look at exactly what occurs rhythmically in the two bars of music, rather than the broader viewpoint of what occurs metrically. As I have demonstrated above in Example 4.1 and Figure 4.2, I will begin with a primary breakdown of what takes place rhythmically in the score and utilize the information gathered to form my cyclical timelines.

For the measures of music in question, I only examine the upper four voices: the first and second soprano, and first and second alto, as they possess the most notable rhythmic motion. From my analysis of the rhythmic events occurring in the upper voices, I will create rhythmic timelines. The most pertinent aspect of the two measures which I would like to analyze first is the time signature change between m. 40 and 41. The measures in question are depicted in Example 4.3 below. A question which may be posed is *why* exactly Runestad chose to break down the hypermetric structure of mm. 40-41 into $\frac{3}{4}$ and $\frac{5}{4}$, when it was entirely possible to divide the structure into two bars of $\frac{4}{4}$ and maintain the same number of quarter note beats. Additionally, the metric change creates difficulty in discerning whether or not a duple, triple or compound structure is present until further rhythmic events take place and provide context.¹¹⁹ According to Leland Sateren's 1968 publication *Focus on... Mixed Meter and Line in Choral Music*, "No serious composer changes meters meretriciously. On the contrary, he will not change unless he believes it fundamental to the flow of the music, and if a choral composer, to the

¹¹⁹ Cooper, Meyer, *The Rhythmic Structure of Music*, 89.

weight of the syllables he is setting.”¹²⁰ Although Sateren’s publication contains outdated language and perhaps a bold opinion on the reasons why choral composers such as Runestad may employ meter changes, it holds great merit in the context of the measures in question.

Although I will engage with the implications the meter change possesses in regard to Muir’s text a bit later, it is relevant to understand the metric change in the context of what I have already analyzed. In the previous chapter, I analyzed mm. 42-46 through the context of Wallace Berry’s notion of the internal structure of the metric unit. The phrase I am currently analyzing directly precedes the previous chapter’s analysis and in mm. 42-46, the same metric change between $\frac{3}{4}$ and $\frac{5}{4}$ is utilized by Runestad. The metric shift occurring here can be attributed to and supported by Christopher Hasty’s idea of *projective potential* or, “the potential for a present event’s duration to be reproduced for a successor.”¹²¹

¹²⁰ Sateren, *Mixed Meter and Line in Choral Music*, 9.

¹²¹ See Chapter 3, definition of projective potential explained in further detail, Christopher Hasty, *Meter as Rhythm*, 84.

EXAMPLE 4.3 Come to the Woods, mm. 40-41¹²²

36 Delicately flowing ♩ = 68 *p* as a soft breeze
 The moun - tain
p as a soft breeze
 The mount - tain

Delicately flowing ♩ = 68
 (8)

pp

38 rit. a tempo *mp*
 winds bless_ the for - ests_ with love_

winds bless_ the for - ests_ with love_

winds bless_ the for - ests_ with love_

winds bless_ the for - ests_ with love_

pp *p*
 With love_

pp *p*
 With love_

rit. a tempo *mp*
 sim.

¹²² Runestad, *Come to the Woods*, mm. 36-40.

EXAMPLE 4.3 cont. Come to the Woods, mm. 40-41¹²³

poco rit.

p

41 they touch eve - ry

p

they touch eve - ry

p

they touch eve - ry

p

they touch eve - ry

pp <

eve - ry

pp <

eve - ry

poco rit.

¹²³ Runestad, *Come to the Woods*, mm. 40-41.

Now having established context and just cause for the metric change that transpires in mm. 40-41, the primary step in my analysis determines the *pulse number*, or the smallest rhythmic value persisting throughout the rhythmic event.¹²⁴ Throughout mm. 40-41, the pulse number is the eighth note, specifically, the eighth note triplet. Given the two time signatures utilized here of $\frac{3}{4}$ and $\frac{5}{4}$, there are a total of 8 quarter note big beats in the hypermetric structure. With 8 big quarter note beats present and the smallest rhythmic value used to be the eighth note triplet, the resulting pulse number for the two measures in question will be 24. The resulting pulse number is backed directly by Toussaint's research in *The Geometry of Musical Rhythm* in his statement, "All rhythms can be classified into families described by these two numbers: the *onset number* and the *pulse number*... Among the timelines used in Western music, the [pulse number] is usually less than or equal to 24."¹²⁵

Now that the pulse number has been obtained, I am able to demonstrate the rhythmic events of the upper voices in mm. 40-41 through cyclical timeline notation. Something important to note is the identical nature of the first soprano and alto, and the nearly identical makeup of the second soprano and alto. In regard to the second soprano and alto, the lone difference lies in the second alto's straight eighth note gesture on the second eighth note of beat three in m. 41. For the purposes of my cyclical timeline representation of mm. 40-41, I will exclude the duple gesture exhibited here for continuity. The duplet will not be entirely excluded from my analysis however, as it is pertinent to Runestad's portrayal of the text, which I will examine later. Figure 4.4 depicts the resulting cyclical timelines of the upper four voices labeled accordingly.

¹²⁴ Toussaint, *The Geometry of Musical Rhythm*, 23.

¹²⁵ *Ibid.*, 23.

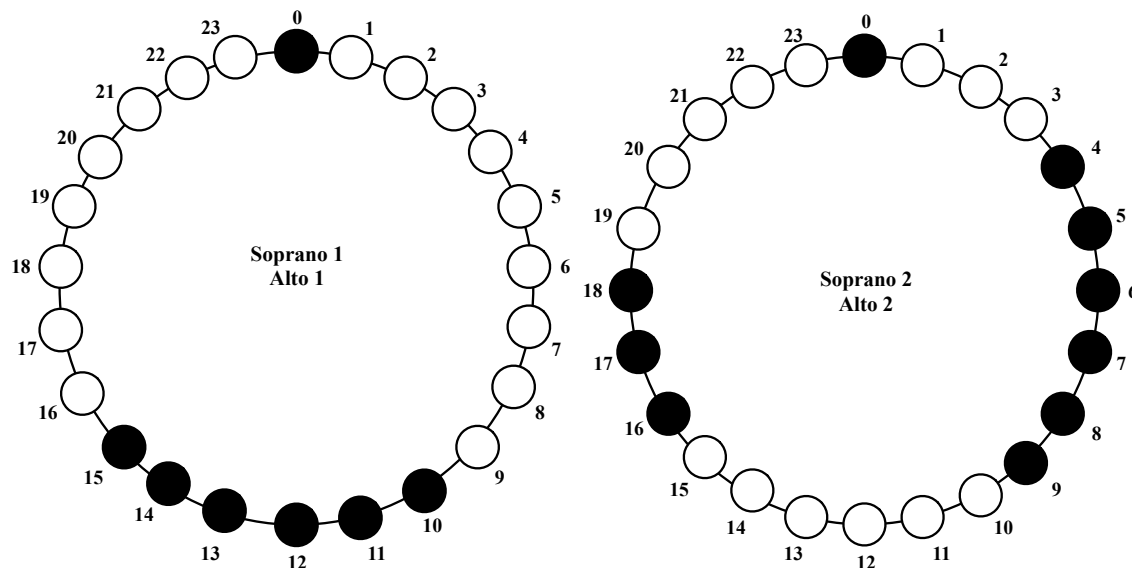


FIGURE 4.4 Come to the Woods mm. 40-41 Cyclical Timeline Representation

When comparing the score itself to the cyclical timeline representations of the rhythmic activity in mm. 40-41, a couple of important insights come to light. First and foremost is the point of departure, or the realization of both groupings of voices beginning their respective rhythmic motions on the downbeat of m. 40 or point 0 on the cyclical timelines. The beginning of said phrase can also be referred to as the *onset*. Therefore, both groupings of voices contain the same onset at the beginning of the phrase.¹²⁶ Subsequently, however, another analytical point of intrigue becomes more obvious in the cyclical timeline representation of the rhythms: with the exception of the beginning and conclusion of the two measure phrase, the first soprano and alto are complementary to the second soprano and alto (again, excluding the duplet in the second alto in m. 41). While the first soprano and alto have onsets on pulses 10-15, the second soprano and alto do not, but rather have onsets on pulses 4-9 and 16-18. Although neither grouping of voices possess onsets for pulses 1-3 or 19-23, for the bulk of the phrase in question, more specifically

¹²⁶ Richard Parncutt, "A Perceptual Model of Pulse Salience and Metrical Accent in Musical Rhythms," *Music Perception: An Interdisciplinary Journal* (Vol. 11/No. 4, 1994), 410.

the middle third, the two groupings are near direct complements of one another. Figure 4.5 below depicts the resulting timeline of all four voices combined into one circle.

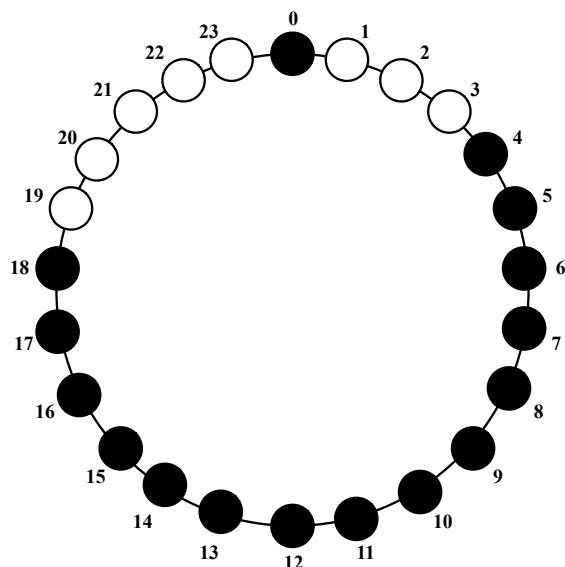


FIGURE 4.5 Come to the Woods mm. 40-41 Cyclical Timeline Overlay

Given the continuous flow of onsets throughout the two bar musical phrase, the resulting melodic material is organic as one grouping of voices seamlessly transitions to the other.

Yonatan Malin discusses the phenomenon exhibited here, or rather the opposite, in his 2006 *Music Analysis* article, “Metric Displacement Dissonance and Romantic Longing in the German Lied.” Malin states, “In standard practice, metric pulses could be thought to provide a sense of ‘present-ness;’ they initiate temporal spans that we experience as individual moments or temporal gestalts.”¹²⁷ In the case of mm. 40-41 the upper four voices truly exhibit only one metric pulse of which Malin refers to, said pulse being the downbeat or initial onset. Contrary to the remainder of his statement, the subsequent pulses are quite the opposite. Rather than creating a sense of “individual moments or temporal gestalts,” the onsets on pulses 4-18 create a sense of one-ness rather than individuality, despite the pulses sounding across four separate voice parts.

¹²⁷ Yonatan Malin, “Metric Displacement Dissonance and Romantic Longing in the German Lied,” *Music Analysis*, (Vol. 25/No. 3, 2006), 259.

The creation of the continuous motion of rhythmic pulses exhibited in Figure 4.5 possesses great implication to the text, and subsequently the text's development as Runestad's choral work progresses.

Implications of Pulse Onset Motion
in mm. 40-41 to John Muir's
Poetic Text

John Muir's text in question occurring and concluding in the phrase through mm. 40-41 states, "The mountain winds bless the forests with love," with the word "love" being the drawn out over the two full measures I have analyzed, thus granting it the most prominence. Through my analysis of the two measures through the lens of Toussaint's cyclical timeline notation, it is evident there is continuous motion, or continuous onsets of rhythmic activity, through the majority of pulses present in mm. 40-41. The continuous flow and motion can easily be attributed to the winds in question. As the storm Muir speaks of approaches, the winds grow ever present as they "bless the forests with love." The sweeping eighth-note triplet motions throughout all four upper voices are strongly indicative of the deliberate text painting being utilized by Runestad here, as he illustrates the winds' presence through the vocal lines.

Additionally, the free-flowing nature of the eighth-note triplets as they exchange back and forth amongst the voices, grants an almost ethereal feel to the music through mm. 40-41. Although the feeling present can also be attributed to the winds and Muir's attitudes regarding the beauty of nature, it is largely indicative of the word "love," the most emphasized word in the phrase. There is a lack of rigidity to the music Runestad composes here, as the triplets glide back and forth amongst the voices smoothly without ceasing, referring here once again to the cyclical timeline depicted in Figure 4.5. In regard to a lack of rigidity in rhythmic structure, it is pertinent I circle back to address the lone eighth-note duplet exhibited in the second alto in m. 41.

Although I elected not to include the duplet in my cyclical timeline representation of the rhythmic motion occurring here, it still holds great weight to the expression of Muir's text, or the forthcoming text rather. Following the events of the winds "blessing the forests with love," a great storm is to approach, and the shift from the present text to, "When the storm began to sound," occurs only 18 measures later (a rather short duration of time when examining a work of such a scale as *Come to the Woods*). The duplet in the second alto in m. 41 creates a discontinuity, albeit a small one, with the surrounding rhythmic structures, thus alluding to a forthcoming change, or forthcoming discontinuity in the story. The shift from a tranquil day amongst the woods to a ravaging thunderstorm occurs slowly but surely, with the same subtlety of the duplet in the second alto. Runestad applies the duplet to create a cognitive dissonance around the established rhythmic structure of the two measures, thus creating dissonance amongst the tranquility and love of the winds and alluding to the forthcoming storm as it disrupts the course of Muir's story.

In the section of *The Cambridge Companion to Rhythm* titled, "Composing with Rhythm," Harald Krebs outlines such rhythmic and metric techniques as those being utilized by Runestad through mm. 40-41. Krebs states, "Numerous recent writing about the Lied have revealed that composers brought various rhythmic and metric features into play for the purposes of text expression... Composers mobilize all of these rhythmic features of speech to express their interpretation of the meaning and emotional content of a poem."¹²⁸ Although *Come to the Woods* is a contemporary choral work and certainly not a German Lied, Krebs' notions on composers "mobilizing" rhythmic and metric techniques as a vehicle for better expression of text can most

¹²⁸ Krebs, "Expressive Rhythm and Meter in the German Lied," 143.

certainly be applied to more contemporary works of vocal music, such as Runestad's, and is achieved in mm. 40-41 of *Come to the Woods*.

Cyclical Timeline Representation
of Rhythmic Events in *Come to
the Woods*, mm. 16-17

The next section of the work I would like to examine through the context of Toussaint's cyclical timeline representation also draws upon previous analysis conducted: mm. 16-17.¹²⁹ However, in addition to the timeline representation already explored, I will be taking a more mathematical and geometric approach to the analysis of the measures at hand. Once the timelines are constructed, I will analyze the symmetry exhibited by the timelines and subsequently construct "beat class vectors" of the rhythmic activity at hand. I will delve more into the manner in which said vectors are created later in the chapter. As I have done previously in the chapter, I will begin with a primary score analysis of the soprano and alto voices in mm. 16-17 of *Come to the Woods*. As established in Chapter II, the soprano and alto voices in mm. 16-17 serve as the pulse-keeping material here, with the repetition of "Glorious day." Since I have already reviewed and analyzed the passage previously, I will not go into much detail here regarding the manner in which Runestad sets the rhythms in context with the remainder of the score. The main concern at hand in the current analysis is exactly *how* the rhythms presented in the soprano and alto voices appear in cyclical timeline notation and, consequently, the implications both the timelines and the beat class vectors have to the expression of Muir's text.

The repeated pattern of "Glorious day," begins with consistency across both the soprano and alto voices once the soprano concludes its duple gesture on the final beat of m. 15. Example 4.6 below depicts the two measures in question for the forthcoming analysis.

¹²⁹ See Chapter 2, analysis of displacement dissonance.

EXAMPLE 4.6 Come to the Woods, mm. 15-18¹³⁰

Joyfully ♩ = 80

Sop 1

Tutti

15

day. Glo - ri - ous day, glo - ri - ous day, glo - ri - ous day,

day. Glo - ri - ous day glo - ri - ous day glo - ri - ous day glo - ri - ous

day.

day.

p

p

Joyfully ♩ = 80

17

p rit.

glo - ri - ous day, glo - ri - ous day, glo - ri - ous day. glo - ri - ous. ah

p day **mf** glo - ri - ous day glo - ri - ous day glo - ri - ous day ah

The day was full of spark ling sun - shine and at the

mf The day was full of spark ling sun - shine and at the

rit.

¹³⁰ Runestad, *Come to the Woods*, mm. 15-18.

Similar to my analysis of mm. 40-41, the primary step in creating a cyclical timeline representation of the rhythms present in the soprano and alto is to determine the *pulse number*. Given the present time signature for mm. 16-17 is $\frac{12}{8}$, and the smallest rhythmic value present is the sixteenth note, the resulting pulse number for a single bar will be 24. From here forward, I will conduct my analysis through the lens of a single bar – either m. 16 or 17 – given they are identical in their rhythmic makeup. Now having established the overall pulse number as 24, my timelines can be created. Figure 4.7 below depicts the rhythmic timelines for the soprano and alto voices in m. 16-17 labeled accordingly.

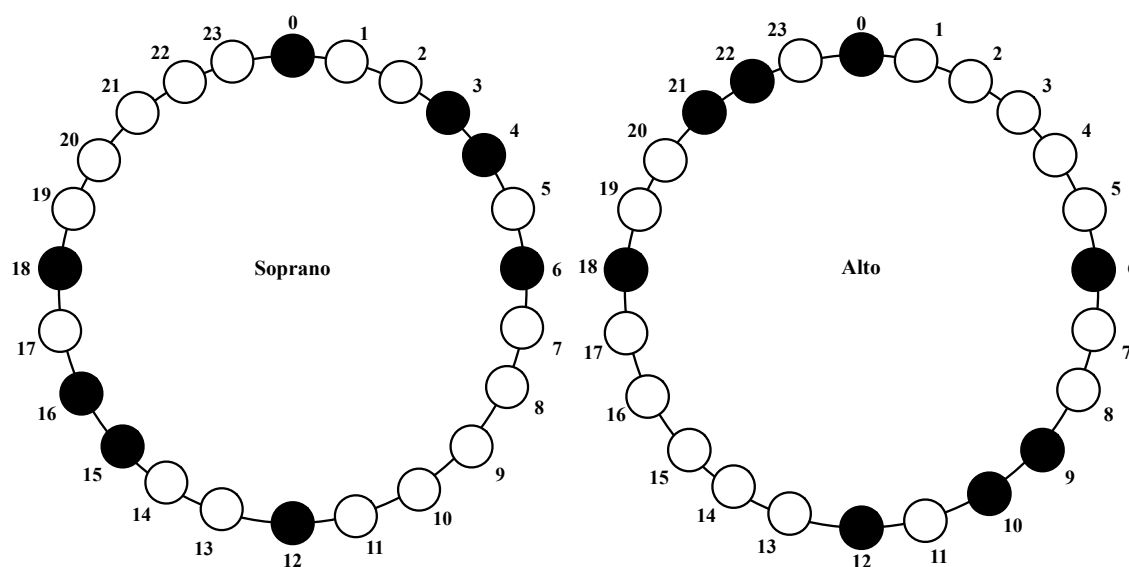


FIGURE 4.7 *Come to the Woods*, mm. 16-17 Cyclical Timeline Representation

Despite the already apparent similarities between the two rhythms when glancing at the score, the timeline representation depicted in Figure 4.7 yields a more striking result. It is evident the two rhythmic timelines have a rotational symmetry, thus making them identical rhythmic events occurring offset from one another by one “big beat,” or a grouping of three eighth-notes. In *The Geometry of Musical Rhythm*, Toussaint refers to the two timelines above as being representative of the same “necklace.” He states, “The interval contents of these two durational

patterns are identical... In the mathematical field of combinatorics, the two rhythms are said to be instances of the same *necklace*. In the pitch domain in music theory, a necklace corresponds to a *chord type*... Two necklaces are considered to be the same if one can be rotated so that the colors of its beads correspond, one-to-one, with the colors of the beads of the other necklace.”¹³¹

Figure 4.8 depicts a more clear representation of the soprano and alto rhythms as necklaces of one another, as the soprano rhythm has simply been rotated 90 degrees, or again, one “big beat” in the measure, thus becoming identical with the rhythm presented in the alto voice.

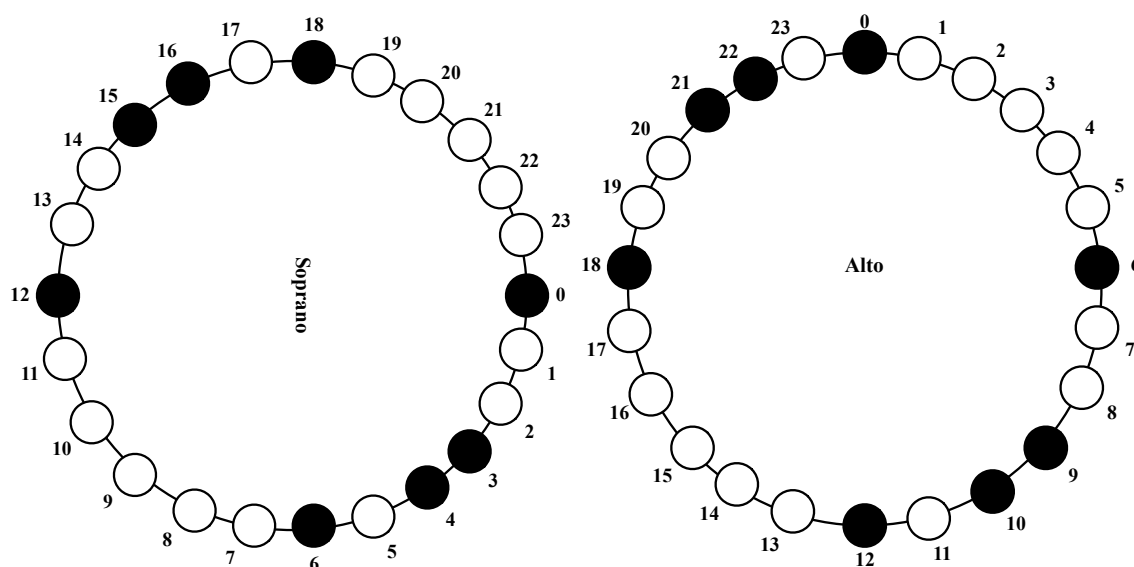


FIGURE 4.8 mm. 16-17 Cyclical Timelines as Necklaces

Aside from simply rotating the rhythmic timeline of the soprano voice 90 degrees, another mathematical method can be implemented to prove the two rhythms are identical to one another. It is Toussaint’s statement regarding the interval contents of the two durational patterns being identical which led me to the subsequent portion of my analysis: the “beat class vectors.” Similar to the manner in which an interval vector is created from a set of pitches, a beat class vector can be created from analyzing the total number of intervals between pulse onsets in a

¹³¹ Toussaint, *The Geometry of Musical Rhythm*, 65.

rhythmic pattern. Figure 4.9 below demonstrates all possible intervals between the pulse onsets of the soprano and alto rhythms in m. 16-17, as well as the beat class vector calculations. The soprano is represented in the top timeline, with the alto on the bottom.

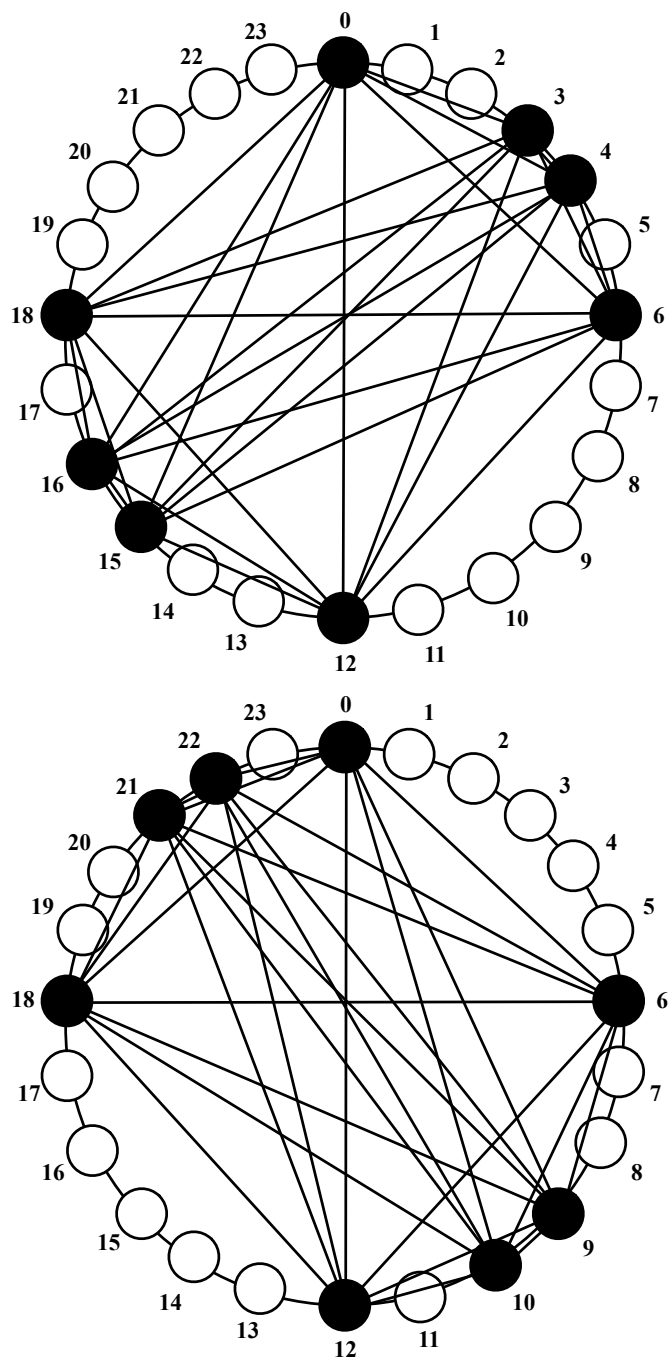


FIGURE 4.9 mm. 16-17 Beat Class Vector Timelines and Calculation

SOPRANO	ALTO
Intervallic Distances Present	Intervallic Distances Present
1 pulse: 2	1 pulse: 2
2 pulses: 2	2 pulses: 2
3 pulses: 4	3 pulses: 4
4 pulses: 2	4 pulses: 2
5 pulses: 0	5 pulses: 0
6 pulses: 4	6 pulses: 4
7 pulses: 0	7 pulses: 0
8 pulses: 2	8 pulses: 2
9 pulses: 4	9 pulses: 4
10 pulses: 2	10 pulses: 2
11 pulses: 2	11 pulses: 2
12 pulses: 4	12 pulses: 4
Resulting Beat Class Vector	Resulting Beat Class Vector
[224204024224]	[224204024224]
OR	OR
[112102012112]	[112102012112]

FIGURE 4.9 cont.

Similar to the manner in which a pitch class vector is calculated, the primary step is to establish all of the possible distances between onsets throughout the measure of music in question, or the rhythmic event being analyzed. Following the calculation of all possible interval onset distances (demonstrated in list format in Figure 4.9 above), the vector can be constructed. For each resulting total of distances present for one pulse, two pulses, etc., the vector is created from left to right. Important to note here is the manner in which the vector can be reduced or simplified by a common divisor of 2 across all distances between pulse onsets. The simplification of the vector can be viewed as if the rhythm had taken place in a timeline of 12 pulses rather than 24. The beat class vector remains the same for both the soprano and alto rhythms and can be displayed in both ways.

Now having established a beat class vector for both the soprano and alto voices, further proof is established of the voices being a part of the same “necklace.”¹³² The voices have an

¹³² Toussaint, *The Geometry of Musical Rhythm*, 65.

identical makeup of intervallic distances between pulse onsets, resulting in identical beat class vectors of [224204024224] or [112102012112] when reduced by a divisor of 2. The geometric approach taken by Toussaint in *The Geometry of Musical Rhythm* not only yields further evidence of identical rhythmic activity occurring in the score but provides new insights and tools for the manner in which we interpret and analyze rhythms as they appear against one another in a score such as *Come to the Woods*. Although the two rhythms are identical and additionally exhibit rotational symmetry, the manner in which Runestad offsets the rhythms against one another in mm. 16-17 is how the true illustration of John Muir's poetic text is best achieved.

Implications of Rotational Symmetry
and Identical Rhythms to Muir's
Poetic Text in mm. 16-17

As I have previously explored in Chapter II, the manner in which Runestad rhythmically sets the text of John Muir in mm. 16-17 is critical to its expression.¹³³ However, in the context of the analysis conducted in the current chapter, new insights regarding text expression can be brought to light. Prior to engaging with the new insights, I would like to reiterate a point illustrated in Chapter II: the manner in which "Glorious day" in the soprano and alto voices serves as pulse-keeping material against the surrounding rhythmic activity in the piano accompaniment and other voices. When the soprano and alto cyclical timelines are overlaid, the concept of the pulse-keeping becomes concrete. The overlay of the two timelines is illustrated below in Figure 4.10.

¹³³ See Chapter II, text analysis of mm. 16-17 of *Come to the Woods*.

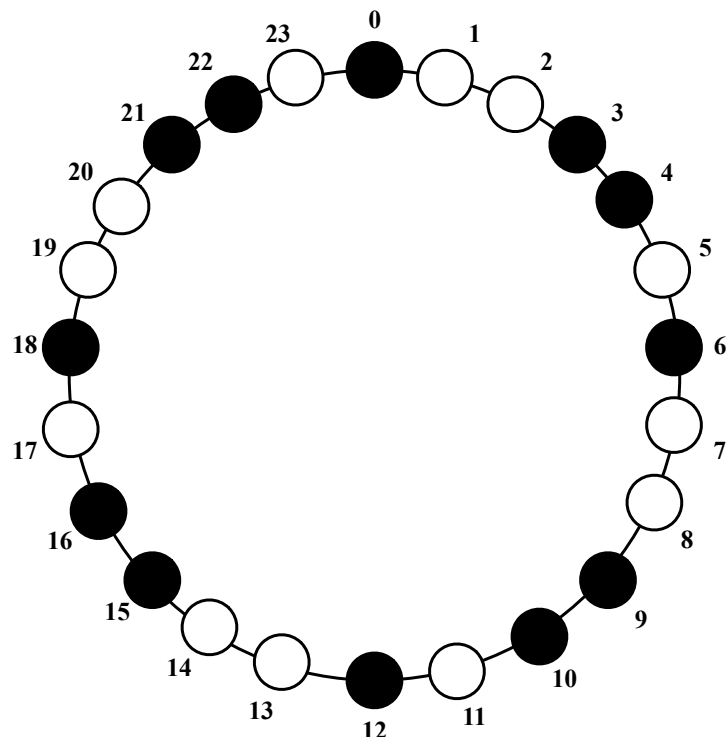


FIGURE 4.10 mm. 16-17 Soprano and Alto Timeline Overlay

When the two timelines are superimposed onto one another, the manner in which the pulse-keeping is achieved becomes visually apparent. Occurring on each “big beat,” or every 6 pulses on the timeline, the word “Glorious” is stated, thus creating a constant recurrence of the word throughout the entirety of mm. 16-17. The pulse-keeping displayed here can be referred to as the “internal clock” of sorts in which the listener neutrally entrains themselves too, be it consciously or subconsciously.¹³⁴ In a 1985 research study, Dirk-Jan Povel and Peter Essens examined the notion of the internal clock in which listeners entrain themselves to. The pair analyzed the ability of various research subjects, some musically-trained and some not, to recall rhythms presented to them and concluded, “Time, and therefore sequences of temporal intervals, can only be assessed by means of a clock, since this cannot be an external clock we assume the subject has access to an internal clock of some kind. Even the simplest clock consists of a

¹³⁴ Cameron, Grahn, “Perception of Rhythm.”

periodic pulse and a counter.”¹³⁵ Toussaint’s cyclical timeline representation of rhythms not only resembles a clock, but also provides a means by which the internal clock listeners entrain themselves to become *external* through mm. 16-17. Most pertinently however, is the text in which the listener entrains to: “Glorious.” The consistent repetition of the word “Glorious” serves to outline the joy Muir is expressing in his writings of the wilderness, and particularly the day on which the writings Runestad has chosen take place. However, the word would not be highlighted in such a prominent manner had Runestad not rhythmically set the text in the way he has chosen to. The meter is established by the punctuation or accentuation of the word “Glorious” on each big beat of mm. 16-17.¹³⁶ The stress of the text would not be nearly as prominent if the rhythms composed in the soprano and alto voices were not identical, and subsequently able to be repeated overtop one another with consistency in their repetition. It is precisely the deliberate nature in which the composer has set the text *rhythmically* which affords it the utmost prominence against the surrounding melodic and harmonic occurrences in the score.

Conclusions of My Analysis

Now having applied a more current and mathematical approach to several places of rhythmic prominence in *Come to the Woods*, the intricacies of the rhythms Runestad composes in order to highlight John Muir’s text comes into focus. Regardless of whether one chooses to analyze the rhythmic activity in the piece through the lens of analytical tools developed in the 1980s or Toussaint’s mathematical approach from the present day, it remains clear Runestad has deliberately composed the rhythmic activity of the various voices throughout *Come to the Woods* in order to best illuminate the text of the poet. The analyses I have presented in the current chapter and chapters previous serve as a means to examine choral music in a more in-depth

¹³⁵ Povel, Essens, “Perception of Temporal Patterns,” 413.

¹³⁶ Berry, “Metric and Rhythmic Articulation,” 7.

manner, moving from text painting as it relates to the melodic and harmonic makeup of the work into more minute details and aspects of meter and rhythm. Text painting remains a fundamental practice in choral literature, and the analyses I have conducted serve as a vehicle for continuing the analysis of text painting through various means of rhythmic and metric analytical tools.

CHAPTER V

CONCLUSION

**Recapitulation of Thesis Goals and
Concluding Remarks**

Come to the woods, for here is rest. There is no repose like that of the green deep woods.
Here grow the wallflower and the violet. The squirrel will come and sit upon your knee,
the logcock will wake you in the morning. Sleep in forgetfulness of all ill. Of all the
upness accessible to mortals, there is no upness comparable to the mountains.¹³⁷

–John Muir

The writings of John Muir which inspired the title for Jake Runestad’s choral composition *Come to the Woods* warrants restatement, as I have now concluded my analysis of the various rhythmic and metric techniques the composer utilizes throughout the course of the work. The text by which the piece is written highlights the insight and attention to rhythmic and metric detail possessed by Runestad to express Muir’s emotions and admiration for the natural world all “mortals” have access to.¹³⁸ I have drawn upon decades of analytical tools from my predecessors: Berry’s *Internal Structure of the Metric Unit* (1985), Krebs’ Displacement and Grouping Dissonance and Hasty’s *bar-measure* (1999), and Toussaint’s cyclical timeline representation of rhythmic events (2020), all of which are applied with precision by Runestad to produce the utmost expression of John Muir’s poetic text.¹³⁹

In the second chapter and preliminary analysis chapter of my thesis, I elected to examine various locations of intrigue in *Come to the Woods* wherein Runestad applies Harald Krebs’

¹³⁷ SoCal Hiker, “Muir Monday,” Accessed September 21, 2023.

¹³⁸ Ibid.

¹³⁹ See bibliography. All sources consulted by Krebs, Hasty, Berry and Toussaint are cited.

notions of grouping and displacement dissonance, in addition to Christopher Hasty's determination of the *bar-measure*.¹⁴⁰ Following a contextualization of displacement dissonance, I analyzed two sections of the work where displacement dissonance plays a pertinent role in text expression and subsequently followed the same format for grouping dissonance's role in the piece. The insights gained through my application of grouping and displacement dissonance as related to text expression, though new and novel, are supported by previous literature and research. In a 2006 *Music Analysis* article titled, "Metric Displacement Dissonance and Romantic Longing in the German Lied," Yonatan Malin states,

Displacement dissonances may create a sense of separation, or distance... Harald Krebs, for example, has shown that displacement dissonances in Schumann's music actually express or symbolize a variety of affects, including disquiet, excitement, conflict (inner or outer), madness and humor, not to mention suspended or even dreamlike states.¹⁴¹

My analysis is directly supported by such assertions as Malin's. Runestad's implementation of displacement dissonance in *Come to the Woods* possesses great import to the feelings of excitement in the repetition of "Glorious day," and subsequently the dreamlike wonder of the aleatory exhibited near the conclusion of the piece.¹⁴²

In regard to the grouping dissonance exhibited in the composition, similar assertions are made to support my claims of its ability to aid in expression of a text. In Leonard Meyer's 1956 publication *Emotion and Meaning in Music*, he states, "Where the introduction of polyrhythm interrupts the rhythmic process, it may play a vital role in articulating the musical form and, consequently, in shaping emotional response to the music... It also create what, for want of a better term, we shall call 'character' or 'spirit.'"¹⁴³ Although Meyer utilizes the term

¹⁴⁰ Hasty, "Just in Time for More Dichotomies," 284. Krebs, *Fantasy Pieces*, 183.

¹⁴¹ Malin, "Metric Displacement Dissonance and Romantic Longing," 252.

¹⁴² Ibid. See analysis of displacement dissonance as text expression in Chapter II.

¹⁴³ Meyer, *Emotion and Meaning in Music*, 122.

“polyrhythm” in lieu of “grouping dissonance” (Krebs’ term did not come for another thirty years), the statement serves to support my analysis. Polyrhythm is observed in the sections of *Come to the Woods* I analyzed to exhibit grouping dissonance. The excerpts I analyzed possess triple gestures in an otherwise duple meter and vice versa, thus being indicative of polyrhythmic features aiding in the portrayal of grouping dissonance as text expression. The grouping dissonance aids in the “character” of the piece Meyer is referring to by directly highlighting moments in the text wherein Muir is expressing admiration for the forest surrounding him, or shifts in the poetic narrative and emotion.¹⁴⁴ Runestad applies displacement and grouping dissonance deliberately in order to achieve the utmost illustration of Muir’s text in the specific moments I analyzed in Chapter II, and both are supported by previously conducted research on rhythm and meter in vocal literature.

Following my analysis and application of grouping and displacement dissonance to *Come to the Woods*, I conducted an analysis of Runestad’s application of Christopher Hasty’s notion of the *bar-measure*, or lack of adherence to such a structure.¹⁴⁵ With the alto and bass having their own sense of measure, and the soprano and tenor a different one, came great implications to Muir’s text during a pivotal moment in the story being depicted.¹⁴⁶ Important to note is Runestad’s decision to compose the two groupings of ascending vocal lines with neither beginning nor ending in correspondence to the notated bar line. In Cooper and Meyer’s 1960 book *The Rhythmic Structure of Music*, the pair discuss the phenomena present in Runestad’s work by stating, “Before the seventeenth century the bar line did not have the metric significance it later acquired... The use of the bar line by modern composers has not been uniform. Some

¹⁴⁴ Ibid.

¹⁴⁵ Hasty, “Just in Time for More Dichotomies,” 284

¹⁴⁶ See Chapter II analysis of bar-measure and implications to text expression.

composers use bar lines in the traditional way, to mark the beginning of metric units... Other composers seem currently to be using the bar line to mark off the limits of melodic, harmonic or rhythmic groups.¹⁴⁷ Runestad indeed utilizes the bar line in a manner not uniform throughout the entirety of *Come to the Woods*. The instance I analyzed in Chapter II wherein a *lack* of bar-measure exists, but a *hypermetric* bar-measure is present, serves as a testament to the composer's ability to manipulate his usage of the bar line in favor of the text. When examining the surrounding context, Runestad's lack of bar-measure has great implications to Muir's story, as it is in a moment of transition from tranquility to chaos, from calm to storm. The composer's ability to incorporate such a metric event with great fluidity to the surrounding music proves his desire to express the text to its utmost potential and is supported by previous research such as Cooper and Meyer's.¹⁴⁸

Following my introduction and contextualization of Wallace Berry's *Internal Structure of the Metric Unit*, Chapter III explores a single phrase in the work wherein Runestad's composition exhibits the structure clearly, but with slight alteration in its conclusion.¹⁴⁹ The fourth and final component to Berry's metric unit structure is defined as, "the conclusive final dispersal of the initiative accent with which the metric unit begins" or, in other words, a cadential arrival.¹⁵⁰ Across a six-voice split with soprano and alto being in divisi of two, Runestad adheres to a quite concise phrase structure, one which certainly aligns with Berry's metric unit. However, in the phrase's conclusion, elision into the next occurs.¹⁵¹

¹⁴⁷ Cooper, Meyer, *The Rhythmic Structure of Music*, 89.

¹⁴⁸ Ibid.

¹⁴⁹ Berry, "Metric and Rhythmic Articulation," 10.

¹⁵⁰ Berry, "Metric and Rhythmic Articulation," 10.

¹⁵¹ See Chapter III, application of Berry's metric unit structure to mm. 42-46 of *Come to the Woods*.

Demonstrated with an analysis of rhythmic events and a harmonic analysis, alongside context provided by the previous phrase, the elision between units is composed deliberately by Runestad in order to achieve optimal expression of Muir's text. Berry's metric unit structure possesses clear implication of a hypermetric structure being at play and Runestad's disruption and elision of such a hypermetric structure serves a pertinent role in text painting. In his 1989 book *Phrase Rhythm in Tonal Music*, William Nathan Rothstein states, "Where hypermeter exists, it need not be all-pervasive. Just as the agreement or conflict of hypermeter and phrase structure is a compositional resource, so is the contrast between metric regularity (hypermeter) and irregularity (absence or modification of hypermeter)."¹⁵² The elision between phrases implemented by Runestad is indicative of the conflict Rothstein addresses in his book. Hypermetric structures are indeed present, however, Runestad applies elision between the metric units and creates "irregularity" and "modification" of the hypermeter in order to express the text appropriately.¹⁵³ The text during mm. 41-46 of *Come to the Woods* addresses the winds present in the forest Muir speaks of, and the motions exhibited by the winds as they "Bless the forests with love. They touch every tree. Not one is forgotten."¹⁵⁴ For Runestad to elide metric units in tandem with text such as Muir's being stated here, is to give room for the text to drive the music and not the opposite. Should Runestad have created rigidity between the units would have been to rob the winds of their freedom of motion. The hypermetric structure provides a framework wherein Runestad's melodic and harmonic gestures thrive; however, it is his ability to bend and alter said metric structures in favor of the text which elevate the musicality of a work such as *Come to the Woods*.

¹⁵² Rothstein, *Phrase Rhythm in Tonal Music*, 13.

¹⁵³ Ibid.

¹⁵⁴ Runestad, *Come to the Woods*.

The fourth chapter of my thesis is dedicated to a modernized approach to the analysis of rhythmic events in a piece of music. Godfried T. Toussaint's 2020 book *The Geometry of Musical Rhythm* outlines a geometric and mathematical approach to the analysis and visualization rhythmic activity, specifically through Toussaint's application of cyclical *timelines*.¹⁵⁵ Rhythmic timelines are composed by calculating the total number of pulses throughout the rhythmic event and outlining via a clock-like notation the moments in which pulse-onsets are occurring. Toussaint defines a timeline as, "a distinctive, repetitive, and characteristic rhythm that appears to be an essential feature of the music, which stands out above other rhythms, and which repeats throughout most if not the entire piece."¹⁵⁶ I elected to analyze two distinct moments in *Come to the Woods* where the application of timelines creates the greatest implication to Muir's text being expressed. The primary example, contrary to Toussaint's definition of a timeline, does not repeat throughout the entirety of the work, but rather only two phrases.¹⁵⁷ However, constructing a timeline of the rhythmic activity yielded striking results as to the rhythm's implication to text expression. The continuous motion exhibited when overlaying the timelines of the first soprano and alto, and second soprano and alto revealed an organic flow of continuous rhythmic stratum indicative of the winds "blessing the forests with love" in its eighth-note triplet movement.¹⁵⁸ In a 1994 *Music Perception: An Interdisciplinary Journal* article, Richard Parncutt addresses the rhythmic phenomenon displayed in mm. 40-41. Parncutt states, "The widespread use of *rubato* (especially in Western classical music) indicates that a musical beat need not be exactly isochronous, or equally spaced in time,

¹⁵⁵ Toussaint, *Geometry of Musical Rhythm*.

¹⁵⁶ *Ibid.*, 11.

¹⁵⁷ See Chapter IV, analysis of pulse onset motion in mm. 40-41 of *Come to the Woods*.

¹⁵⁸ Runestad, *Come to the Woods*.

to be strongly felt... However, stricter timing tends to induce a stronger feeling of pulse.”¹⁵⁹ In the case of mm. 40-41 of *Come to the Woods*, although the timeline is composed across four different voicings, it is still isochronous, thus creating a stronger feeling of pulse. The isochrony exhibited by Runestad in the passage aids in the audience’s ability to feel the pulse, and consequently the text at hand.

The second section of analysis in Chapter IV consisted of a passage I had previously analyzed through the context of Harald Krebs’ notion of displacement dissonance: mm. 16-17.¹⁶⁰ Although the timelines exhibited in the soprano and alto voices are composed in displacement dissonance against one another, they are identical in rhythmic content. After exploring the rotational symmetry between the two voices, I constructed beat-class vectors of the two timelines. The construction of the beat-class vectors serves to further validate my analysis of the two timelines displayed in mm. 16-17, as well as to provide a modern and geometric approach to my analysis. Given the rotational symmetry of the two timelines and their identical beat-class makeup, I overlaid the soprano and alto into one timeline, following the same process as my analysis of mm. 40-41, and the result was striking. When corresponding the pulse onsets of the timeline overlay with the text being stated, the result is a repetition of the word “glorious,” four times per measure. Runestad’s decision to compose the soprano and alto rhythms in such a manner provides the utmost stress on the word “glorious” and serves to enhance the emotions John Muir is expressing in his writings among the woods. In his 1968 publication *Focus on... Mixed Meter Music and Line in Choral Music*, Leland Sateren states, “Perhaps the more important reason so far as choral music is concerned is the desire of composers to ‘exalt text’; and this can be done not only by fitting music (music, that is, whose mood seems appropriate to

¹⁵⁹ Parncutt, “A Perceptual Model of Pulse Salience,” 410.

¹⁶⁰ Krebs, *Fantasy Pieces*.

the spirit of the words), but also by faithfulness to verbal accents.”¹⁶¹ Runestad’s “faithfulness’ to the accentuation of the first syllable of the word “glorious” demonstrates his uncanny ability to compose rhythmic gestures within the piece in favor of the text.¹⁶² The timeline representation of rhythmic activity in *Come to the Woods* serves to illustrate a modern mathematical approach to Runestad’s composition and only provides further validation of how a composer can utilize rhythm and meter as a primary vehicle for text expression.

In recapitulation, the goal of my thesis was to embark on a new approach to text expression and word painting; one not delineated by melody and harmony, but by rhythmic and metric events. Through three chapters of analysis, I have proven my approach to be relevant, new and one possessing the ability to yield striking insights into text expression in choral literature. For Runestad to take writing samples from such an advocate for natural preservation as John Muir and be able to express the writings and sentiments so articulately through rhythmic and metric gestures is remarkable. The excerpts I chose to analyze for my thesis serve as upstanding examples of not only Runestad’s ability to compose intricate rhythm and meter to serve as an aid for word painting, but as glimpses into the sentiments expressed by Muir. In a 2005 publication *John Muir: Family, Friends, and Adventures*, Barbara Mossberg quotes Muir himself: “Happy the man to whom every tree is a friend – who loves them, sympathizes with them... with their brave struggles... and in joyous, triumphant exuberance... One touch of nature makes the whole world kin.”¹⁶³ However, and more pertinent are Jake Runestad’s *own* sentiments on composing choral literature and the approach he takes to various texts. In a 2019 *Choral Journal* interview with Jonathan Talberg, Runestad states, “I hope they (singers) know how much care I take with

¹⁶¹ Sateren, *Mixed Meter Music and Line in Choral Music*, 9.

¹⁶² *Ibid.*

¹⁶³ Mossberg, “If Trees Are Us,” 169-170.

the texts, and subsequently, the music. I hope they pay close attention to each and every phrase and its shape, and to bringing out the important words... I'm really trying to illuminate the text and not force my music on it."¹⁶⁴ Runestad's care with John Muir's writings certainly remains at the forefront of *Come to the Woods* and, based on the findings of my analysis, is particularly made prominent through the composer's application of rhythmic and metric devices in faithfulness to the emotional content of Muir's texts.

¹⁶⁴ Talberg, "Jake Runestad," 14.

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APPENDIX A

PERMISSION FROM COMPOSER TO USE MUSICAL
EXAMPLES AND EXPLANATION OF
PUBLIC DOMAIN EXAMPLES

10/7/23, 4:23 PM

Mail - Brewer, Samantha - Outlook

Re: Using Musical Examples for Master's ThesisAnna Osterman <info@jakerunestad.com>

Fri 6/2/2023 1:48 PM

To: Brewer, Samantha <brew4834@bears.unco.edu>

Samantha,

Thank you for providing more context. As long as the entirety of the piece is not being used and is limited to these excerpts, Jake has given permission for use.

Good luck on your thesis!

--

Anna Osterman

Assistant to Jake Runestadjakerunestad.com

On Fri, Jun 2, 2023 at 2:44 PM Brewer, Samantha <brew4834@bears.unco.edu> wrote:

Hi Anna,

Thank you for getting back to me so quickly, and I appreciate the congratulations!

I am analyzing Come to the Woods through the lens of rhythm and meter, and how Mr. Runestad achieves text expression through such means. I obtained a copy of the piece during my undergrad at Colorado State University, where the piece was purchased. Here is the list of specific excerpts to be included in the Thesis:

mm. 4-9

mm. 15-18

mm. 43-45

mm. 72-75

mm. 141-145

mm. 154-158

Please let me know if I can answer any other questions. Thank you!

Best,

Samantha Brewer

Get [Outlook for iOS](#)

From: Anna Osterman <info@jakerunestad.com>

Sent: Friday, June 2, 2023 1:31:40 PM

To: Brewer, Samantha <brew4834@bears.unco.edu>

Subject: Re: Using Musical Examples for Master's Thesis

Hi Samantha,

10/7/23, 4:23 PM

Mail - Brewer, Samantha - Outlook

Congratulations on entering into the Thesis process! Could you give a little bit more detail? For example, how many excerpts and how long (Specific examples would be great!) the excerpts are?

--

Anna Osterman

Assistant to Jake Runestad

jakerunestad.com

On Thu, Jun 1, 2023 at 1:56 PM Samantha Brewer <brew4834@bears.unco.edu> wrote:

Name

Samantha Brewer

Email Address

brew4834@bears.unco.edu

Subject

Using Musical Examples for Master's Thesis

Did you check the FAQ first? It's very likely your answer is there!

Yes!

Message

Hello!

My name is Samantha Brewer and I am a second year Master's of Music Theory at the University of Northern Colorado, and I am currently completing my thesis. I am asking permission to use score examples of Come to the Woods in my thesis. I have obtained a legal copy of the score through Colorado State University, and have type-set the examples into Sibelius myself, exactly as they are in the original score. I am analyzing the piece through the lens of rhythm and meter as text expression, and would need your permission for copyright legality. Please let me know as soon as possible. Thank you!

Best,
Samantha Brewer

EXAMPLE 2.8 is in the public domain and full citation is given in references.

EXAMPLE 3.2 is in the public domain and full citation is given in references.