# PITCH SYMMETRY IN MARTIN BRESNICK'S MY TWENTIETH CENTUTY AND MEDEN AGAN FOR CHAMBER ENSEMBLE

#### by

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#### **AND**

#### MEDEN AGAN FOR CHAMBER ENSEMBLE

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University of Pittsburgh, 2012

The analysis component of this dissertation focuses on the pitch world and harmonic language in Martin Bresnick's *My Twentieth Century* for sextet. The surface-level harmony consists solely of major and minor triads, while the underlying structure relies on a pitch-class axis of symmetry.

Bresnick crafts a pitch world that balances diatonicism with pitch symmetry by unifying salient aspects of both. First, he uses a four-note diatonic segment ([0 2 3 5] or tone-semitonetone) as his primary melodic unit. He then builds chord progressions from such segments using only major and minor triads; this creates phrases that each contain exactly four chords. To derive a harmonic progression for the consequent phrase, he takes the pitch-classes from the initial four-chord phrase and reflects them about a C# - G axis of symmetry. Finally, he adds drone pitches on C# and G, serving as aural reference points and making the axis of symmetry explicit.

By choosing to use reflected pitch structures sequentially rather than simultaneously, Bresnick avoids mirrored melodies in which two voices begin in unison, move equal distances in contrary motion, and return to the starting pitch. (Such melodies are common to the symmetrical structures found in works of Bartók and Ligeti.) Instead, by creating a series of four triads in one phrase and then reflecting those triads in the next phrase, he creates an audible link between the two without simple transposition, inversion, or retrogression.

This paper is an in-depth analysis of *My Twentieth Century*, focusing on pitch symmetry and harmonic language. Bresnick's adherence to his plan is so rigorous that the analysis accounts for every pitch in the piece.

The composition component of this dissertation, *Meden Agan* for chamber ensemble, explores the idea of creating two disparate musical ideas and amalgamating them as the piece unfolds. The title derives from the Ancient Greek idea of balancing the Dionysian (excess) and the Apollonian (moderation). Musically this unfolds by alternating episodes of wild, heterophonic woodwind-led music with calm, exacting polyphony led by the strings. Gradually, each group takes on ideas of the other until they are fused and indistinguishable in the end.

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#### 1.0 INTRODUCTION

I first heard Bresnick's *My Twentieth Century* in 2009 performed by the Verge Ensemble. I was immediately struck by the seemingly simultaneous use of diatonic and non-diatonic elements, which were woven together into a unified harmonic language. Analyzing this revealed a pitchworld based entirely on symmetry: Bresnick takes a simple, four-note diatonic segment, harmonizes it in various ways, then flips those pitches over an axis of symmetry to create new harmonies. The driving rhythms of the piece provide the forward momentum needed to cycle through these rotating harmonies of the same melodic fragment, and as the harmonies slowly change, the resulting soundscapes wax and wane like the gradual changing of seasons.

Martin Bresnick (b.1946) is a composer from New York City and currently a professor of composition at the Yale School of Music. Completed in 2002, his composition *My Twentieth Century* is a work for a chamber sextet consisting of flute, B-flat clarinet, violin, viola, cello, and piano. (Optionally, the viola part may be performed on marimba, so as to make the piece accessible to the common Pierrot-plus-percussion ensemble.) The text of "My Twentieth Century", a poem by Tom Andrews, is spoken by the instrumentalists. The setup for performance of this piece includes two microphones; the instrumentalists leave their chairs and speak into the microphones throughout the piece. Initially, only four instrumentalists play their instruments at any one time, while the other two speak into the microphones. The instrumentalists rotate the speaking roles over the course of the piece until finally, in the coda, all six players play together. The program notes for the piece explain:

Tom Andrews and I got the idea for 'My Twentieth Century' during our shared time at the American Academy in Rome in the Fall of 1999. 'My Twentieth Century' is a descendant of Arnold Schoenberg's Pierrot Lunaire - without the chanteuse and in a more vernacular musical and poetic idiom. According to our plan, I have integrated Tom's text within the musical architecture of the composition by having the performers occasionally leave their accustomed roles as musicians and speak the lines of the poem to us, and to each other, as if in a heightened conversation. Tom completed the poem 'My Twentieth Century' shortly before he died suddenly in July of 2001. 'My Twentieth Century' is dedicated to his memory.

#### 1.1 **OUEVRE**

Influenced by composers such as György Ligeti, Béla Bartók, Alban Berg, and even J.S. Bach, Bresnick came to incorporate symmetrical structures into different aspects of his compositions. Pitch symmetry in particular plays an important role in Bresnick's music from about 1987 through 2006<sup>1</sup>. *My Twentieth Century*, completed in 2002, comes towards the end of this time period, and is an example of a piece where symmetry controls every pitch, yet the meaning in the work does not derive from the fulfillment of this mathematical property. Rather, Bresnick fully

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<sup>&</sup>lt;sup>1</sup> Bresnick, Martin. Interview by author. Telephone interview. Pittsburgh, PA., November 12, 2010.

integrates pitch symmetry into the structure of the work and uses it as backdrop for the dramatic progression of the text of the poem.

Bresnick uses symmetry in differing degrees and in different aspects of composition in the piece written throughout this time period. As of the time of this writing, there are only three published analyses of specific works of Martin Bresnick; each analysis discusses symmetry in some aspect of the piece. The *Piano Trio* (1988) relies heavily on symmetrical structures and palindromes not just in pitch, but also in rhythm and dynamics<sup>2</sup>. In *String Quartet #2*, palindromes "appear throughout the work, and are used to derive aspects of melody, rhythm, and, to a lesser extent, formal design.<sup>3</sup>" Other pieces, such as *For the Sexes: The Gates of Paradise* (2001), use many symmetrical pitch structures within a more through-composed framework<sup>4</sup>. The remaining pieces written during this time period also make use of pitch symmetry to some degree, including *String Quartet #3* (1992), *Grace* (2000), *Pine Eyes* (2006), and a series of works for varied instrumentations under the collective title *Opere della musica povera*, written between 1990 and 1999. In my analysis of *My Twentieth Century*, every pitch in the piece can be accounted for using just the triadic harmonization of a four-note motive and its symmetrical inversion around an axis of symmetry.

Bresnick's music is often described as "diatonic" and "minimalistic," though neither of these adjectives applies completely<sup>5</sup>. Bresnick uses diatonic elements within a larger pitch paradigm, and he uses repeated, driving rhythms in a way associated with minimalism; this can

<sup>&</sup>lt;sup>2</sup> Justin Tierney, "Symmetry in the First Movement of Martin Bresnick's Piano Trio," published on the website of Martin Bresnick, <a href="http://www.martinbresnick.com/works.htm">http://www.martinbresnick.com/works.htm</a>

<sup>&</sup>lt;sup>3</sup> O'Brien, Michael and Matt Pickett, "Beating a Dead Horse: An Analysis of Formal and Motivic Significance in Martin Bresnick's Second String Quartet," published on the website of Martin Bresnick, <a href="http://martinbresnick.com/deadhorse.htm">http://martinbresnick.com/deadhorse.htm</a>

<sup>&</sup>lt;sup>4</sup> Robert Auler, *Martin Bresnick's* For the Sexes: The Gates of Paradise: *Analysis of a Multi-Media Composition*, D.M.A. diss., University of Cincinnati, 2006.

<sup>&</sup>lt;sup>5</sup> Allen Gimbel, "Bresnick: Grace; Tent of Miracles; Songs of the Mouse People; Willie Dixon Fantasia; My 20<sup>th</sup> Century," *American Record Guide 69*, no. 1 (Jan/Feb 2006): 92.

lead listeners to hear surface-level similarities to that school of composition. But Bresnick uses elements from a wide variety of sources which he crafts together into a coherent approach as each new composition demands.

#### **1.2 TEXT**

The poem *My Twentieth Century* contains seven stanzas of four lines each. The first six stanzas are identical; the first three lines contain anecdotes ending with the words "...in the twentieth century" while the final line is always "My brother died in the twentieth century." The seventh stanza changes the tone of the poem, where instead of listing memories, the author confronts them.

#### My Twentieth Century

I played hopscotch at twilight in the twentieth century. I lived in a country of fireflies in the twentieth century. I saw the moon shipwrecked in the twentieth century. My brother died in the twentieth century.

I wore ridiculous clothes in the twentieth century.

I danced like a sumac tree in the twentieth century.

I went to a sensitivity workshop and had my umbrella stolen in the twentieth century.

My brother died in the twentieth century.

I wasted three years on geometry in the twentieth century. I was anesthetized through most of the twentieth century. I loved Kawasaki in the twentieth century. My brother died in the twentieth century.

I ate sweet apples in the twentieth century.
I ate my peck of dirt in the twentieth century.
I ate my words in the twentieth century.
My brother died in the twentieth century.

I wrote passionate letters in the twentieth century.

I was incapable of keeping silent in the twentieth century.

I shed pints of blood in the twentieth century.

My brother died in the twentieth century.

I leaned like a lampshade over my life in the twentieth century.

I prayed to the Son of Man in the twentieth century.

It was nearly possible to live in the twentieth century.

My brother died in the twentieth century.

There was something very obvious in the twentieth century

I could never see or understand.

The dead knocked on the door of my life in the twentieth century.

Who's there? I said.

— Tom Andrews

(adapted by Martin Bresnick)

The anecdotes listed throughout the poem run the gamut from mundane to meaningful to profound. As they always end with "...in the twentieth century," they seem to describe a series of unrelated events and memories as they occur over a long period of time. Bresnick's approach to proportion and form heightens this sense of the passage of time; the piece consists of a series of episodes of equal length, with each episode having its own unique soundscape that seems to arise organically from the previous episode. The overall effect of the poem's text and the episodic nature of the piece create a feeling of gradually changing seasons, the arrow of time, and nostalgia. The fixation on "My brother died in the twentieth century" gives a sense of returning to the same moment again and again, like an anniversary amid the otherwise routine clockwork.

The first three stanzas contain humorous, clever, and nostalgic anecdotes. In the fourth stanza, there is a turn towards the more serious: "I ate sweet apples.../I ate my peck of dirt.../I ate my words..." The final three stanzas focus more on deep-seeded feelings than specific memories. The final stanza violates the pattern set up by all the previous lines; instead of listing

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events, memories, and feelings, the author confronts them: "The dead knocked on the door of my life in the twentieth century. Who's there? I said." Bresnick mimics this progression in the form of the piece: the music during the first three stanzas follows a simple pattern which shows a transition during the fourth stanza. The music during the last three stanzas begins breaking the patterns set up at the beginning, until during the final stanza, all expectations are dashed.

The poem's text is spoken by each member of the ensemble; the players rotate speaking and playing roles. This helps create a sense of conversation and a collective memory rather than a single person speaking a poem; this helps engage the audience and makes the listener feel like part of that collective whole. This communal sentiment, along with the fact that Bresnick alternates episodes that contain text with purely musical episodes, mimics the formal layout of a Bach cantata, which featured hymns (which the congregation could join in on) interspersed with choruses, arias, and recitatives.

#### 1.2.1 Delivery of the Text

One of the most striking aspects of the piece is the way in which Bresnick chooses to deliver the text; rather than using one or more dedicated speakers, actors, or singers, he asks all six of the instrumentalists to speak in turn. This creates some special effects and essentially alters the interpretation of the poem.

By having two people at the speaking stations at any given time, Bresnick immediately creates a sense of dialogue rather than monologue. By cycling each instrumentalist in and out of a speaking role, he creates a continuously-evolving conversation. But as one experiences the piece, questions arise: who is speaking? Are these different people, all of whom had brothers who died in the twentieth century? (No.) Are they different voices of the same person? (Yes.)

One important aspect of the delivery is that the text is spoken by instrumentalists, not trained vocalists, speakers, or actors. By essentially giving the speaking roles to untrained speakers, the result is the voice of an everyman, furthering the effect of a collective memory rather than that of one specific person. Bresnick likens this to Bach cantatas, in which the audience participates by singing along with the chorales that are part of the cantata<sup>6</sup>. Rather than the audience actually participating, in *My Twentieth Century*, the audience hears one-line, select memories spoken by the six members of the ensemble.

<sup>&</sup>lt;sup>6</sup> Bresnick, Martin. Interview by author. Telephone interview. Pittsburgh, PA., November 12, 2010.

#### 2.0 OVERVIEW

This section of the dissertation will describe how I approached the analysis of *My Twentieth Century* and describe the basic building blocks of the piece. The subsequent section, "Analysis," will then describe how these elements unfold over time and create a coherent musical work.

#### 2.1 RHYTHM AND FORM

Mixed meters play a large role in the rhythm of *My Twentieth Century*. In order to first make sense of the rhythmic organization, I compared all of the mixed meter sections. Doing so revealed a system of phrases which in turn group further into episodes.

#### 2.1.1 Phrases

The phrase structure of the piece is organized around two rhythmic ostinati. They are most easily viewed in the mixed meter sections, such as the beginning of the piece to rehearsal 9. I will first discuss the mixed meter sections of the piece, which consist of a stream of dotted eighth-, eighth-, and sixteenth-notes. These sections are entirely composed of phrases that follow one of two rhythmic templates (see Figure 1).



Figure 1. Rhythmic ostinati patterns.

Both and A and B have a total duration of exactly 60 sixteenth notes. In these mixed meter sections, the texture is nearly exclusively homophonic, making these rhythmic ostinati greatly prominent and salient. Layered tetrachords, sometimes with the addition of a drone C#, follow these ostinati exactly.

The sections of the piece that are not in mixed meter use meters that are equivalent in terms of the number of sixteenth notes per bar: 12/16, 6/8, and 3/4. The texture of these regular-metered sections is polyphonic, but the rhythmic ostinato patterns are still expressed in the context of the regular meter (see Figure 2). In these sections, one or two voices (using a drone C# or a tetrachord as pitch material) will follow the ostinato patterns, while other voices (using the remaining tetrachords) introduce new, polyphonic rhythms on top of the ostinato.



Figure 2. Rhythmic ostinati expressed in 12/16 time (piano right hand, rehearsals 49-50).

Five bars of these regular meters (which all contain 12 sixteenth notes) also last exactly 60 sixteenth notes, just like the mixed meter patterns. These two rhythmic ostinati pervade the entire piece, organizing it into 60-sixteenth-note phrases, regardless of time signature. Patterns A and B seem to be unrelated; though they contain some internal repetitions, they are not retrogrades or reorderings, and they even contain different numbers of dotted-eighths, eighths, and sixteenths.

These ostinati occur both as foreground (in homophonic sections) and as background (in polyphonic sections). There are three moments in the piece where the ostinati disappear altogether, each pivotal: the transitional area between rehearsals 33 and 36 (the ostinati fade in and out from *niente* in the cello), the climax at rehearsals 55 and 56 (though the rhythms in the piano clearly follow the ostinati patterns, with the sixteenth notes extant and the remaining notes tied into longer note values), and the final phrase of the piece at rehearsal 60, where everything drops out completely except the piano's lone C#. The absence of the ostinati in these crucial moments reinforces the dramatic arc of the piece.

There is also a single exception to the ostinati patterns: there is an extra measures of 10/16 inserted just before rehearsal three, making the previous B phrase 70 sixteenth notes longer rather than 60. As this is the final phrase of the first group of phrases, and the final measure of the piano's opening solo, the repetition of the final measure seems to serve to accentuate the finality of the 10/16 bar.

#### 2.1.2 Episodes

The ostinato phrases group themselves further into larger units, which I will call "episodes." The structure of the phrases within each episode always follows one of two patterns: AABB or

ABAB. (The first two episodes are set apart slightly in that they extend these two patterns: AAABBB and AABBAB). The pitch and rhythmic content always align in these patterns as well: rhythmic pattern A has one pitch scheme and pattern B the same material reflected about the axis of symmetry.

Each episode creates a unique mood, varying orchestration, texture, rhythm, pitch content, and melody to create a distinctive soundscape.

#### 2.1.3 Texture

Each episode uses a single texture: homophonic, polyphonic, or complex. Bresnick further distinguishes these three approaches in particular ways:

Homophonic sections always use mixed meter and lack spoken text. The rhythmic pattern and chord progression of each section are the focus of the listener's attention. Because of their simplicity, the homophonic sections allow the listener to reflect on the text of the previous section.

Polyphonic sections always use a regular meter (12/16, 6/8, or 3/4) and always feature spoken text. The rhythmic ostinato is present in one or more voices, while the other voices use other rhythms on top of it, creating suspensions and anticipations within the chord progression. The harmonic motion is much slower, and, as a result, Bresnick often delays arrival on the final chord of the progression until the second iteration of a repeated phrase.

The two complex sections (episodes eleven and fourteen) do not fall neatly into polyphonic or homophonic textures. They also use a different approach to chord progressions. Rather than stating one chord progression in the A phrase, and the reflected material in the B

phrase, Bresnick interweaves chords and their reflections<sup>7</sup>. Episode eleven contains two chord schemes, neatly alternating chords with reflections. Episode fourteen contains only one chord scheme but Bresnick takes liberties with how he presents the chords and their reflections.

The texture of each episode as the piece progresses generally alternates between homophonic and polyphonic, with the complex episodes replacing one or the other (rather than being inserted into the pattern).

#### 2.2 PITCH

There are four salient pitch elements that stand out upon listening to *My Twentieth Century*: the nearly-constant C# drone in the repeated ostinato, the use of the tetrachord as the primary melodic unit, the repetition of it and other melodic units at different transpositions, and the constant presence of major and minor triads.

The pitch classes C# and G play important roles in the piece. Bresnick uses C#-G as an axis of symmetry to organize his material. These two pitch classes are the only ones used as drones. The primary tetrachord (around which the entire pitch scheme of the piece is based) begins on C#, and its reflection about the axis ends on C#. Because of this, every phrase begins or ends with a chord containing C#. The pitch class G is absent from the entire piece except episode fourteen where it appears as the new drone, briefly replacing C#. The absence of G in

<sup>&</sup>lt;sup>7</sup> Throughout this document I use "reflection" to denote taking an ordered pitch-class set (e.g. B-flat, C), reversing the order, then flipping them about the C#-G axis of symmetry (yielding, e.g., D, E). See Axis of Symmetry, p.13, for further explanation.

the bulk of the piece eliminates any triads that contain it (G major, G minor, C major, C minor, Eb major, E minor), which further limits the triads possible in each chord progression from 24 to 18. The move from a C# drone a tritone away to the missing pitch class G is exploited for its dramatic potential; episode fourteen is in fact the climax of the piece.

Bresnick uses a very strict scheme to control pitch content within each episode. Except for episodes eleven and fourteen, each phrase contains exactly four triads<sup>8</sup> created by layering three tetrachords (see Figure 3). In each episode, the triads used in the A phrases are flipped about the axis of symmetry to yield the triads used in the B phrases (see Axis of Symmetry, p.14). These triads generate all the pitch material used in a given episode: four triads in the A phrases, and four in the B phrases. (Episodes eleven and fourteen use slightly different, but related, organizations, where triads and their reflections are used within a single phrase.)



**Figure 3.** Three layered tetrachords which combine vertically to create triads (rehearsal 22).

<sup>&</sup>lt;sup>8</sup> Occasionally, Bresnick uses fewer than three melodic tetrachords, resulting in dyads or just a single line. In these instances, the triads are incomplete, but still follow (or, are derived from) the implied chord progression.

#### 2.2.1 Axis of Symmetry

Bresnick uses the C#-G axis of symmetry as a means to organize pitch throughout the piece (see Figure 4). An axis of symmetry is a dyad at the interval of a tritone. For every pitch class a certain number of semitones below C# (or G), there is a corresponding pitch class the same distance above C# (or G). (The results will be identical using C# or G.)



Figure 4. Axis of symmetry.

All pitch material that occurs in the A phrase of an episode is flipped about the axis of symmetry to yield the pitch material of the B phrase. For example, if the pitch class C occurs in the A phrase, the pitch class D will occur in the B phrase in the corresponding location.

Because the primary material always coincides with the A phrase and the reflected material with the B phrase, and because the two ostinati never occur simultaneously, a pitch and its reflection never occur simultaneously. In *My Twentieth Century*, Bresnick always uses reflected pitch structures consecutively.

The chords Bresnick chooses in this piece are always major and minor triads. The benefit of using them with an axis of symmetry is that a major chord always reflects to a minor chord and vice versa, resulting in a concise inventory of chord possibilities. The fifth of any such chord, after reflection, becomes the root of the new chord (see Figure 5).

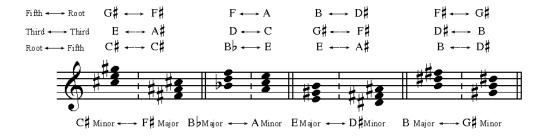
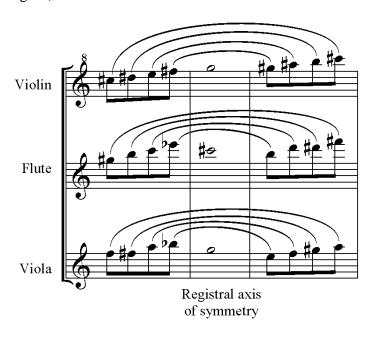


Figure 5. Triads reflected about the axis of symmetry.

This reflection scheme controls the pitch-class content for all paired A and B phrases. Additionally, some episodes organize their pitches in registral space by reflecting about a fixed axis. Figure 6 is a reduction of the pitches found in episode thirteen (rehearsals 49-52); here, the pitches of each instrumental line reflect about one specific pitch: the viola line reflects around G5, the flute around C#6, and the violin around G6. (The piano's pitch set doubles these three lines each an octave higher).



**Figure 6.** Registral axis of symmetry at rehearsals 49-52.

#### 2.2.2 Melody and Tetrachords

Within each phrase, the single-line instruments (winds and strings) use a maximum of four pitch classes. Taken in their order of appearance, I have analyzed each set as a tetrachord. This analysis yields ten types of tetrachords which comprise the melodic units of the entire piece. It then becomes clear that the piano often layers multiple tetrachords together, and that any given phrase contains a maximum of three tetrachords.

There is one linear tetrachord that is present in nearly every episode and serves as the basis for the entire pitch scheme: C#-B-A#-G# (and its reflection, F#-E-D#-C#). Bresnick uses the axis of symmetry like a mirror: the last (most recent) pitch or chord gets reflected first (see Figure 7). These two tetrachords also represent a symmetric partitioning of the C# Dorian scale<sup>9</sup>.

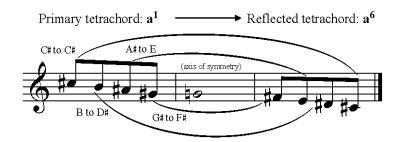


Figure 7. Primary tetrachord and its reflection.

The ubiquity of the primary tetrachord (and its reflection, transpositions, and inversions) unifies the piece melodically, harmonically, and structurally. In addition to the primary tetrachord (or its reflection), each episode contains up to two additional linear tetrachords. When the three are stacked vertically they create a chord progression; Bresnick uses eight such

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<sup>&</sup>lt;sup>9</sup> The Dorian scale is the only diatonic scale that is self-symmetrical: it consists of two disjunct tone-semitone-tone tetrachords.

progressions over fifteen episodes. Each episode contains a unique approach as to how those four-chord progressions are partitioned into three melodic tetrachords. The melodies derived from the chord progressions continue to evolve over the course of the piece, giving each episode a unique melodic profile.

The tetrachords Bresnick chooses to use are all symmetrical. When octave equivalency is taken into consideration, the following ten tetrachords (and reflections, retrogrades, and reordered versions thereof) account for every melodic unit in the piece (see Figure 8).



Figure 8. The ten tetrachords (a through j) and their variations.

Most phrases contain two or three tetrachords, though some contain one or even zero (drone only). He may even omit the primary tetrachord entirely, as he does in episodes one, two,

and fifteen. Nevertheless, though the primary tetrachord is not always present, it still clearly generates all chord progressions, and, in turn, all other pitches.

Because the reflected tetrachords are a retrogression of their parent tetrachords, and because they are symmetrical, something interesting occurs: all reflected tetrachords are also exact transpositions of their parent tetrachord. The reflected material has the same direction and contour as its parent. However, the three tetrachords that comprise a chord progression reflect at different levels of transposition, because the axis of symmetry dictates the level of transposition. Therefore, even though the individual melodic units sound like transpositions after reflection, the resulting reflected chord progression is usually not a transposition of the parent chord progression. Of the eight chord progressions used in the piece, two (chord schemes one and eight) contain transpositionally-related primary and reflected material; the remaining ones do not. Only in episode nine (using chord scheme eight) is the full A material realized as an actual transposition (down a perfect fifth) in the B material (see Figure 9).

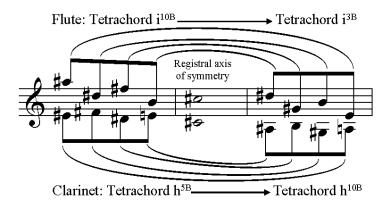


Figure 9. Reflection equal to transposition in episode nine pitch material.

#### 2.2.3 Chord Progressions

As stated earlier, the combination of three melodic tetrachords generates chord progressions in the form of a sequence of four major or minor triads. Bresnick uses a number of melodic tetrachords over the course of the piece, but the primary tetrachord (a<sup>1</sup>) and its reflection (a<sup>6</sup>) generate the harmonic material. Each chord progression consists of four chords; the first must contain the first pitch-class of the primary tetrachord (C#), the second chord must contain the second pitch-class (B), followed by the third (A#) and fourth (G#). When the reflected material occurs in the B phrase, the chord progression must follow the pitches of that tetrachord: F#, E, D#, and C#. Using only major and minor triads as possible harmonizations, the pitches of those tetrachords can occur as the root, third, or fifth of the chord, creating six possible triads for each pitch of the tetrachord (see Figure 10).

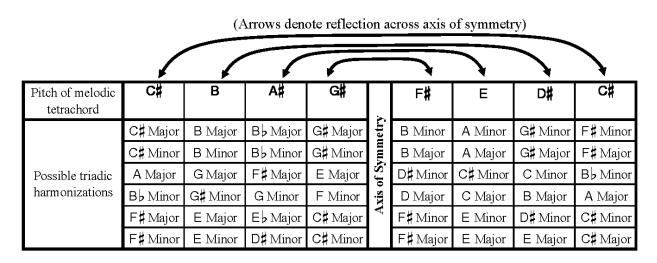
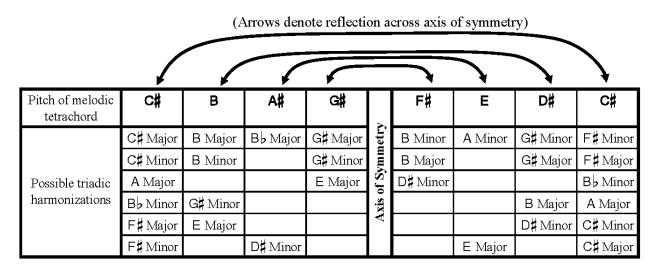


Figure 10. Possible triadic harmonizations of the primary tetrachord and its reflection.

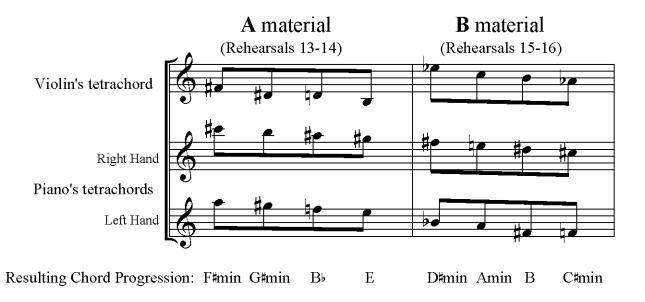
However, the strict avoidance of the pitch-class G eliminates the possibility of using any triads that contain it. Furthermore, Bresnick chooses to use the chords containing the pitch class C# only in the positions where C# occurs in the primary tetrachord. (The chords containing C# function as beginning and ending chords; they are omitted in middle positions.) Finally, he also chooses to avoid the D major triad and its reflection, F minor (possibly because of the tonal implications; see p.50). By removing those chords from the set of possibilities, the chords possible in each position of a progression are limited to those laid out in the following chart (see Figure 11). The result is fourteen unique elements that comprise a set of thirty ordered chords to create a progression.



**Figure 11.** Triads Bresnick uses in *My Twentieth Century*.

Bresnick creates eight chord progressions from the above chart by partitioning a given four-chord sequence melodically into three tetrachords. (Or, he combines three tetrachords to create a four-chord sequence which follows the above chart.) These chord progressions, plus the drone pitches C# and G, account for every pitch in the piece. A brief look at the pitch content of

episode four shows how this approach to analysis works (see Figure 12). There are three melodic tetrachords in this episode (rehearsals 13-14): one in the violin, one in the piano's right hand, and one in the piano's left hand. The piano also plays drone C#'s throughout. At rehearsal 15, the tetrachords are reflected over the axis of symmetry. Rehearsal 16 contains the same pitch-class content as rehearsal 15 but with a different orchestration. The triads that result from layering three tetrachords together follow one of the many possible paths laid out in Figure 11.



#### **2.2.4 Drones**

The near-constant C# drone has two related functions. It makes explicit the axis of symmetry; the end of a melody will always be the same number of half steps away from C# as

Figure 12. Triads and resulting chord progression in episode four.

the beginning of its reflected melody in the opposite direction. It also provides a reference point around which to relate the non-functional chord progressions.

Bresnick occasionally gives the listener a break from C# by dropping it from the texture; however, because it is also present in the primary tetrachord and its reflection, every phrase (except the first three phrases of episode fourteen) contains the pitch class C#.

The C# occurs as a drone in every episode except fourteen, where the drone moves a tritone away to the pitch-class G. Its use and function will be thoroughly examined later, but it is important to note that the G does not play a harmonic role. Instead it occurs in complete isolation (rehearsals 53-54) and as an audible pitch-space axis of symmetry (rehearsals 55-56), where the piano's right-hand dyads and triads reflect around G4, played by the left hand.

Though the drone pitches are often paired with the ostinati rhythms, this is not always the case; the drone can be expressed as long notes (episode nine, phrases one and two) as well as isolated sixteenth notes (episode fifteen, phrases three and four). In phrases that lack the drone C#, the ostinati rhythms are instead paired with one or more tetrachords.

#### 2.2.5 Register

Register also plays an important role in the trajectory of the piece. Though the relationships among the chord progressions, tetrachords, and axis of symmetry determine the pitch classes in each phrase, Bresnick chooses the specific pitches in registral space to help move the drama of the piece. Each phrase has a fixed ambitus whose range tends not to differ markedly from the surrounding phrases, creating a gradual expansion or contraction of range which ebbs and flows over the course of the piece. The highest pitches in the piece are reached immediately before and during the dramatic climax of the piece (episode fourteen). The coda (episode fifteen) contains

the lowest pitches in the piece as well as the widest range; this can be seen as a sort of consequence of the rules of the piece breaking down in episode fourteen. The following charts show how ambitus (Figure 13) and range (Figure 14) develop throughout the piece.

### **Lowest and Highest Pitches in Each Phrase**

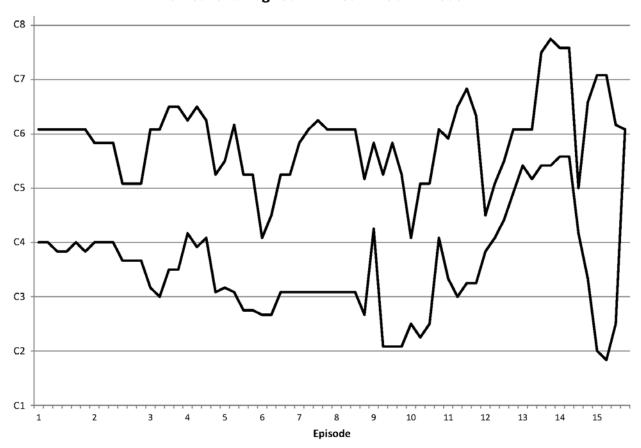


Figure 13. Ambitus.

## **Total Registral Span of Each Phrase**

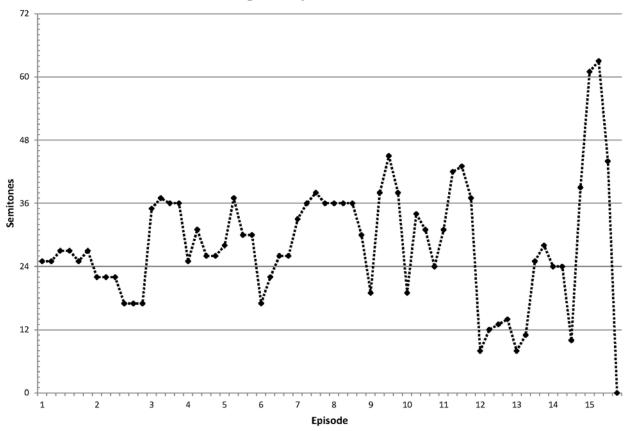


Figure 14. Range.

#### 3.0 ANALYSIS

The following chart shows how the entire piece unfolds, using the phrase as the smallest unit. By examining each aspect of the piece (melodic elements, harmonies, textures, drone pitches, rhythmic patterns, etc.), I have further grouped phrases into episodes which each have a uniting set of tetrachords, chord progressions, texture, and an internal rhythmic pattern of either AABB or ABAB. The episodes further group into larger units; the climax in episode fourteen is at the end of Part Two. By following the evolution of each aspect of the piece as it unfolds over time, the story Bresnick is telling is made clear: expectations are created in the Introduction (episodes one and two) and Part One (episodes three through eight) which begin to break down (episodes nine through thirteen) until they are completely dashed (episode fourteen) with resulting fallout (episode fifteen). This parallels the text of the poem, which follows a simple pattern until the end, where the final set of lines violates the established pattern.

In the following sections, I will describe how each musical aspect of the piece evolves through time, leading to and preparing for the climactic episode fourteen.

	ig		32	В	ae	g <sup>28</sup>	jis	Bm	Am	G#m	F#m				none					
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		Homophonic	lomo	lomo	lomo	omo		٨	<sub>t</sub> e	a <sup>5</sup>	<sup>8</sup>	#D		Вb	Ab		9#2	c#2	c#4	c#3
			53	A	$(a^1)$	a <sup>5</sup>	a <sup>8</sup>			B	٧				L	L				
			27 28	В	g <sup>e</sup>	£-	j <sup>11</sup>	8	Е	#5	Α		9#2	c#5						
		onic	_	В	ge	.i	$j^{11}$	8	В	#9	(A)			_						
	7	Polyphonic	26	A	$a^1$	0L_i	-j	Bbm	Bm	D#m	U#9	9		c#3						
		Pc	25	A	$a^1$	110		Bbm	Bm	D#m	(C##m)									
		c	54	В	( <sub>9</sub> e)	$c^{11}$	e <sup>3</sup>		_		Е					c#3				
		honi	23	В	9e	С <sup>11</sup>	e³	В	Am	В	C#m			c#5	c#4					
	9	Homophonic	22	A	a <sup>1</sup>	C <sub>10</sub>	<sub>9</sub> a	F# G#m Bb	Bb	U#⊞	5		попе							
ne		ェ	21	A	$a^1$	$c^{10}$			9		9				c#3					
Part One			20	В			h <sup>11</sup>	В	Am	Ab	Bbm	4								
٦		onic	19	В	ae	60		В	Am	Ab	(Bbm)		υ υ							
	5	Polyphonic	18	A		689	h4	A	Bm	Вb			none							
		_	17	A	a1			٧	Bm	Bb	(0#m) (m#9)									
	3 4	Homophonic	16	В	9e	e3	f <sup>10</sup>	u#a	_	Н	П	3			Γ.,	c#3				
			15 16	В					Am	8	#5				c#4	Ť				
				A	a <sub>1</sub>	<sub>®</sub> e		ε	E		Н			.,	Г	_				
			13 14	A			f³	F#m	U#9	Bb	E		9#2	c#5						
		Polyphonic	12	В		С11	d <sup>2</sup>	Bm Bm	Am	m#q	m#2	2	попе							
			11	В	9e				Am	D#m	(C#m)									
			10	٧	_			#H	ш	Bb	Ab		ž							
		_	6	A	a	C 10	<sub>e</sub> p	#4	ч	Bb	(Ab)									
П	Г	c	8	8	9e	c <sup>11</sup>	d²			Ę		2								
		phonic	2 9	$\overline{}$	(a <sub>e</sub> )	c <sup>11</sup>	q <sub>2</sub>	Bm	Am	D#m	C#m									
	2	mop	9 9	A B		$\vdash$	Н	$\vdash$	$\vdash$	Н	$\vdash$			c#2	c#4					
ion		Homo	4	A	$(a^1)$	C <sub>10</sub>	<sub>g</sub> p	£#	ш	ВЪ	Ab									
Introduction	$\vdash$	$\vdash$	2 3	ВА	(a <sup>e</sup> )	a <sup>11</sup>	p <sub>2</sub>	Вm	Am	Ab	F#	Н	$\vdash$	$\vdash$	$\vdash$	Ц				
Intro		Homophonic	2	A £	(a <sup>1</sup> ) (	a <sub>s</sub>	p <sub>4</sub>	C#m E	Bm /	Bb /	Ab									
-	1		1 ;		_	-	Н	-	-	Н	-	1	9#2	c#5						
			0 1	В	(a <sub>e</sub> )	a <sup>11</sup>	p <sub>2</sub>	Bm	Αm	Ab	F#									
		_	0 0	A	(a <sub>1</sub> )	a <sup>8</sup>	p <sub>4</sub>	ω#⊃	Вт	ВЬ	Ab									
Section	Section Episode Texture		Rehearsal	Rhythm		Tetrachords		u	oisse			Scheme	Drones							
			R			Ţ			sp	nor	1)									

			09	В									Г	c#6		_	_	_								
		ic		Ť		(age)	311g	p <sub>28</sub>	#1	Ab	Am	Bm				c#5	c#4	c#3	ĺ							
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Coda	2	nouc	2	Ĥ	(a1F)	a <sub>sk</sub>	p <sub>48</sub>	Ab	99	Bm	C#m	1		- 5	c#5	c#4	c#3	ĺ								
	15	Homophonic	28	В	e) ( <sub>9</sub> e)	a 11 a	p <sub>2</sub> p	₽m B	Am	Ab B	E# C	Γ.	C#7	c#6	Ü	Ü	Ü	J								
		Ĭ	5		(a <sup>6R</sup> ) (s	a <sup>118</sup> a	P <sub>28</sub>	B #3	Ab A	Am 4	Bm 1		3	0	c#5	c#4	c#3	ĺ								
			23	A	(a <sup>1</sup> ) (a	a a	P4 F	C#m	Bm /	/ qa	Ab		2#2	c#6	Ů	Ů	c#3 c	c#2								
Н	Н	Н	5		2)				Н	Н	$\vdash$	Н	٥	٥			٥	٥								
										26	В		full triads		E, D#m	Bb, Am	G#m, B	F#m, C#			98	53	84	83	82	
	4	Complex	-		Т			щ	Αm	8		3		_	_		Г									
	14	Соп	25	A		dyads only		E, D#m	Bb, ⊅	G#m,		,,				84										
			54	В		drone	,						£8	92	85	Г										
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		,	25	В	a1	<sub>9</sub> e	f	u#∃	0#m	qa	Э		none													
	13	honic	51	٨	89 E	e <sup>3R</sup>	fice	#3	В	Am	D#m	3				É										
	1	Polyphonic	20	В		<sub>e</sub> e	f	H#H	U#9	qя	(E)	1173		c#6												
			49	A		<sub>SE</sub> ∂	H <sub>IOE</sub>	#O	8	ΨW	(m#Q)			5												
	12	ic	48	В	<sub>T</sub> e	h4	8	٧	Bm	qя	0#m	4		c#6	c#5											
0		Homophonic	47	A	39 E	$h^{118}$	838	Bbm	Ab	Am	В															
Part Two			46	В	a,	h <sup>4</sup>		٧	Bm	qв	G⊭m		none c#4													
Ра			45	A	<sub>99</sub> e	$^{\rm H11R}$		md8	٩۴	ΜA	В															
			44	В	a <sup>68</sup> , a <sup>18</sup>	h <sup>1088</sup> , h <sup>588</sup>	38E, 108E	A, E	G#m, D#m	E, 6#m	D#m, 8bm	2,8														
	11	Complex	43	A	a's, a's	h <sup>1088</sup> , h <sup>588</sup>	1901, 1885 j	A, E	G#m, D#m	E, G#m	D#m, Bbm															
		Con	42	В	a, e, a	C118, C108	<sup>дз,</sup> д <sup>ек</sup>	C#m, Ab	D#m, Bb	Am, E	Bm, F#															
			41	A	a, e, a	C118, C168		C#m, Ab	D#m, Bb	Am, E	Bm, F#				c#5											
	П	ic	40	В	a <sub>18</sub>	sae	b <sup>4R</sup>	ΑÞ	9P	Bm	C#m			c#6												
	10	Homophoni	honi	honi	honi	honi	nohq	nohq	noho	noho	39	Ą	y9 <sup>E</sup>	ятт В	szq.	#1	ΑÞ	ш∀	шg	1			C#5	c#4		
	1		88	В	ые	38 E		q¥	98	Brn	C#m	(1				5	c#3									
			28	٨		a118		#1	qV	Αm	шg		L				Ü	L								
			36	В	9e	38	$h^{108}$	D#m	Ε	G#m	A															
ition	6	honic	32	A	a1	108	ьsе	Bbm	В	D#m	3							c#2								
Transition		Polyphonic	34	В	(ge)	BE !	<sub>801</sub> 4	D#m	3	0#m	٧	80			f#4	c#4		L								
			88	Ą	( <sub>1</sub> e)	801	<sub>ss</sub> 4	md8	8	W#Q	3				C#5											
Section	Episode	Texture	Rehearsal	Rhythm		Tetrachords		u	sk oisse	) Oro		Scheme			2	Diones										

Figure 15. Full chart showing formal layout.

#### 3.1 RHYTHM AND FORM

#### 3.1.1 Formal Design

The fifteen episodes of the piece group into five sections: introduction, part one, transition, part two, and coda. The first two episodes are set apart from the others by their lack of spoken text and extended forms; these two episodes are the only ones that contain six phrases instead of four. As the remaining episodes each have an internal phrase pattern of either AABB or ABAB, the patterns in the first two episodes can be seen (in hindsight) as extended versions of those patterns, with their initial A and B phrases each repeated (see Figure 16).

Figure 16. Form of episodes one and two, showing repeated phrases.

These two episodes otherwise present the main materials of the piece in a clear, straightforward way: the melodies are presented homophonically without text overlay or polyphony to obscure the ideas.

Part one consists of six episodes (three through eight), alternating polyphonic episodes with text, and homophonic episodes without text (each stanza begins with a polyphonic episode, but the last line elides with the beginning of the following homophonic episode). In part one, Bresnick is still laying out the rules of the piece. The linear tetrachords gradually evolve; each

phrase contains the primary tetrachord or its transposition, but he completes the partitioning with different tetrachords or tetrachord combinations in each episode. (His choice of tetrachords shows a clear evolution: see 3.2.1: *Tetrachords*, p.44.) Occasionally one tetrachord may be omitted in a phrase, but the subsequent phrase will always contain all three tetrachords. Each of these episodes has a unique chord progression. In each of the polyphonic episodes, the final chord is omitted in the first of each A or B phrase, and then completed in the subsequent phrase. The internal phrase pattern of episodes three through nine is always AABB. By strictly following these rules, Bresnick sets up expectations which begin to break down later and are ultimately dashed at the climax of the piece.

Episode nine serves as a transition; it contains aspects of parts one and two. Like part one, it contains the original primary tetrachords: a<sup>1</sup> and a<sup>6</sup> (in part two, every episode contains at least some or inverted tetrachords). Like part two and the coda, the internal phrase pattern is ABAB. This episode also contains one of only two fermati in the piece; the final chord is held to set off the rather abrupt, raucous beginning of episode ten.

Part two (episodes ten through fourteen) subverts the expectations laid in the previous sections. Episode ten begins with only one tetrachord plus the drone C#; this is the first time more than one tetrachord is omitted in a phrase. Most importantly, the tetrachord has been inverted; the tone-semitone-tone pattern ascends rather than descends. All previous episodes have used a<sup>1</sup> in the A phrases and a<sup>6</sup> in the B phrases; in part two, the pattern is reversed, pairing a<sup>6</sup> with the A phrase and a<sup>1</sup> (or, in some episodes, the original, uninverted a<sup>1</sup>) with the B phrase. The chord progressions in part two are all reordered versions of the progressions established in part one; there are no new chord schemes. Unique to part two, episodes eleven and fourteen contain two chord progressions per episode rather than one. Finally, upon reaching the

climax at episode fourteen, all tetrachords disappear and the drone pitch moves away from C# to G; this is the first and last episode to contain the pitch-class G.

The coda, episode fifteen, reworks the material from episode one by interspersing the original material (in the piano) with its inverted material (in the winds and strings). It serves as a reconciliation between parts one and two by a fusion of their ideas.

## 3.1.1.1 Symmetry within the Formal Design

Though the piece itself does not show full symmetry in its formal design and layout, there are symmetrical elements. Every phrase (except the last phrase of episode one) lasts 60 sixteenth notes. Every episode contains an equal number of A and B phrases. There is mirrored symmetry in the pattern of phrases throughout the episodes: episode one is an extended ABAB, episode two an extended AABB; episodes three through eight are AABB, and the remaining episodes ABAB.

Most importantly, though the proportions of the formal design are lopsided (36 phrases before the transition, four phrases in the transition, and 24 afterwards), the seven stanzas of the poem are laid out symmetrically within the structure (see Figure 17). The piece can be viewed as a musical introduction, three stanzas of text, a transitory section containing the fourth (central) stanza, three more stanzas of text, and an instrumental coda, following an arc form: ABCBA. The fourth stanza acts as an axis of symmetry within the poem: text before it shows memories seen from a child's naïve perspective, text after it shows memories from an adult's more serious viewpoint, and the fourth stanza itself shows a progression between these two ideas (see 4.1 *Synthesis of Text and Music*, p.60).

Episode			
1	Instru	ımenta1	Α
2	Hisu u	iiiiGiitai	A
3	Stanza 1		
4			
5	Stanza 2	Part One	В
6		rait One	В
7	Stanza 3		
8			
9	Stanza 4	Transition	С
10			
11	Stanza 5		
12		Part Two	В
13	Stanza 6		
14	Stanza 7		
15	Instru	Α	

Figure 17. Formal design showing arc layout.

Rather than devoting an equal amount of time to each of these areas, Bresnick skews the proportions towards the golden ratio. If we consider the first half of the piece to include the transition, it contains 40 phrases while the remainder contains 24, yielding a ratio of 1.666: close to the golden ratio, 1.618. A consequence of this is that stanzas six and seven occur in directly adjacent episodes; no homophonic episode buffers them. This is likely for dramatic emphasis; a text-free episode directly before episode fourteen would lessen the climactic effect.

#### 3.1.2 Orchestration

Through most of the piece, only four of the six players play simultaneously. The remaining two players leave their seats and speak the text of the poem using microphones on either side of the stage. As players leave their seats two by two, the instrumentation of each episode gradually

rotates (see Figure 18). The six players finally play together in the last episode after the text is completed in episode fourteen.

	Section	Introduction										Part One																								
	Episode	1 2									3 4 5											€	;				7		5	3						
R	ehearsal	0	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	<b>1</b> 5	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31 3
ء	Flute	Г														S						S	S			S								Г		
Instrumentation	Clarinet													S	S			S																		
in t	Violin																							S						S	S			S		
Ĕ	Viola																															S				
stri	Cello																																			
드	Piano																																			
	Section	Т	ran	sitio	n									Part Two										Coda												
П	Episode		9	9 10				11			12			13			14																			
R	ehearsal	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57		58		59		60	1			
_	Flute																																1			
Instrumentation	Clarinet																			S				S	S								]			
int:	Violin																																1			
Ě	Viola	S		S		S																											]			
stri	Cello												S					S	S			S											]			
드	Piano				S					S	S			S																			1			
S in	S indicates spoken text tacit active																																			

Figure 18. Orchestrational chart of which instruments play or speak in each phrase.

Bresnick's approach to orchestration softens the transitions between episodes; instruments tend not to enter or drop out abruptly at the beginnings or ends of episodes, rather they tend to enter and exit gradually in mid-phrase. They also tend to play for long periods without stopping. These methods maintain a high degree of timbral continuity but also allow for a gradual rotation of instrumental colors.

There is also symmetry in the speaking and playing roles. The player that begins a stanza will always speak lines one, two, and four of a stanza, then return and play. The second speaker speaks line three, remains at the microphone, and then assumes the role of the first speaker in speaking lines one, two, and four of the next stanza. As there are a total of 27 lines in the poem, each player speaks four lines, except the clarinetist, who speaks seven.

#### 3.1.3 Texture

Episodes are alternately homophonic or polyphonic in texture, for the most part. The first two introductory episode are both homophonic. The exceptions other to this pattern are the episodes whose texture I call "complex", episodes eleven and fourteen. In these episodes, the chord progressions do not follow the previously set convention whereby all A material belongs to one chord progression and all B material to its reflection. Rather, each phrase (A or B) contains both its primary and reflected material, by alternating chords from the primary and reflected chord progressions.

# 3.1.3.1 Homophonic Episodes

Each of the homophonic episodes (one, two, four, six, eight, ten, twelve, and fifteen) pairs specific members of each tetrachord with specific notes in the ostinato patterns, heard clearly in the opening piano solo in episode one (see Figure 19.) The pitches of each tetrachord (labeled 1 through 4) always occur in these specific places in the A ostinato rhythm; the pitches of the reflected tetrachord (labeled 5 through 8) likewise occur in specific places in the B ostinato rhythm. The same is true of every homophonic episode. (The climactic episode fourteen, whose texture is essentially homophonic, stands apart by not following this tetrachord-ostinato pairing.)



Figure 19. Chord placement within rhythmic ostinati (piano, pickup to bar 9).

The treatment of spoken text within homophonic episodes (when present) is always the same as well. Though each stanza of the poem begins during a polyphonic episode, the final line of stanzas one through six ("My brother died in the twentieth century.") always elides into the beginning of the subsequent homophonic episode, while the remainder of the homophonic episode lacks text. I believe these homophonic episodes allow the listener time to reflect on the text of the poem without the interference of new or more complicated musical material.

Though each homophonic episode is largely predetermined by these rules, some show slight variations (and developments) of the homophonic texture. As simple example occurs in episode four, where Bresnick overlays a violin solo above the homophonic piano; the violin's rhythm is identical except that it ties together repeated notes and adds two sixteenth note flourishes (see rehearsals 13 through 15 of the score).

In episode six, the B phrases (rehearsals 23 and 24) add suspensions to the homophony. Each time there is a repetition of the second pitch in the ostinato pattern, the clarinet (playing tetrachord c<sup>11</sup>) ties its first pitch over to where the first instance of the second pitch should occur, while the flute/viola tetrachord (e<sup>3</sup>) simply ties the two eighth notes of the second pitch together (see Figure 20). This simple manipulation of the ostinato-tetrachord pattern creates a descending 2-3 suspension, which mimics the diatonic suspensions found in the polyphonic episodes.



Figure 20. Suspensions within the homophonic framework.

Each of the remaining homophonic episodes strictly adheres to the ostinato-tetrachord pattern; however, they each introduce a new approach to the use of the tetrachords. In episode ten (the first episode of part two), the tetrachords are all inverted, following an upward trajectory rather than downward; this is the first occurrence of inverted tetrachords. In episode twelve, the

A phrases use inverted tetrachords while the B phrases use the original, uninverted tetrachords; again this is the first such occurrence. Finally, in episode fifteen, the piano plays the original tetrachords while the winds and strings play the inversions, alternately, within the same phrase. This again is unique to the piece thus far and represents a fusion of original (from part one) and inverted (from part two) material. By keeping the texture strictly homophonic throughout these episodes, the nature of the tetrachords is highlighted.

## 3.1.3.2 Polyphonic Episodes

Compared to the homophonic episodes, the polyphonic episodes (three, five, seven, nine, and thirteen) have a much slower harmonic rhythm. Each phrase contains between seven and ten chord changes, while each homophonic phrase contains twenty-one to twenty-eight chord changes. The slower change of harmony emphasizes the suspensions created in the polyphonic texture. Though the rhythmic ostinati continue unaltered through these episodes, the prevailing meters are regular, all using phrases that consist of five bars of 12/16 (or the equivalent 6/8 or 3/4). The melodies above the ostinato generally follow even subdivisions of those bars (dotted-eighths, eighths, or quarters, respectively); these regular subdivisions provide another level of contrast with the uneven rhythms of the homophonic episodes.

Generally, each polyphonic phrase contains a specific number of chord changes. The instruments that are playing the lines then follow their tetrachord through all these chord changes. Each of the instruments doing so simultaneously will follow their own rhythm through the pattern, creating an overall polyphonic texture. Often there are three polyphonic voices, two of which follow a similar or identical approach to rhythm, while the third goes its own way. For example, in episode three, the viola and cello share a similar approach to rhythm while the violin follows its own path; the piano doubles the same pitch material but uses the rhythmic ostinati

(see Figure 21). The overall effect is one of chord changes with suspensions and anticipations; in this example, the top (violin) line suspends and anticipates notes over the other voices.

The other polyphonic episodes all follow the same formula, with instruments in different roles and rhythms. (see Figure 22, Figure 23, and Figure 24).



**Figure 21.** Polyphony in episode three.

# Phrase A1 Rehearsal 17 A Bm -Bm ВЬ Bm ВЬ Phrase A2 Rehearsal 18 ВЬ G#m- $G \sharp m$ Bm -Bm-ВЬ Α A Phrase B1 Rehearsal 19 ь́7. В-В Am-Am-A۶ Am — A♭-Phrase B2 Rehearsal 20

Figure 22. Polyphony in episode five.

Am ---- A -

Выт —

В

Am—

A۶

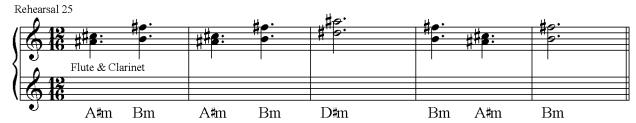
B♭m

В

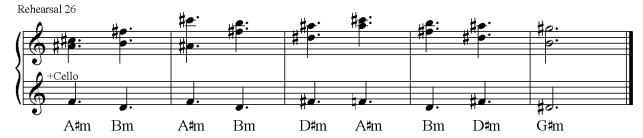
В

Am

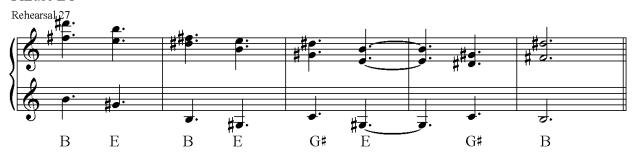
# Phrase A1



# Phrase A2



# Phrase B1



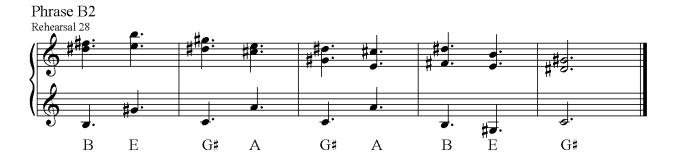


Figure 23. Polyphony in episode seven.

# Phrase A1 Rehearsal 49 § Flute & Viola Phrase B1 Rehearsal 50 Phrase A2 Rehearsal 51 2-- 3 2-3 -Violin C# D#m В C# В Am Phrase B2 Rehearsal 52 #3

**Figure 24.** Polyphony in episode thirteen.

F#m

G#m

ВЬ

F#m

G#m

(m)

Е

ВЬ

Episode nine is special in several ways, but in terms of texture it is rather different than the other polyphonic episodes. In the beginning of this episode the rhythmic ostinato is completely absent; this is the only episode where the ostinati do not continue the entire way through. The ostinato ebbs and flows in and out of the threshold of hearing in the cello's drone C#6, but does not make its first appearance until the third bar of rehearsal 34. In the beginning of

the episode at rehearsal 33, the flute and clarinet are paired in their rhythms, and because no other voices are present except for the violin's held pitch, they are essentially homophonic. It is not until rehearsal 35 that the violin introduces its unique polyphonic line against the flute and clarinet's paired rhythm (see Figure 25), making it clear that this is indeed a polyphonic episode (as expected from the pattern).



Figure 25. Polyphony in episode nine.

# 3.1.3.3 Complex Episodes

As mentioned earlier, episodes eleven and fourteen are harmonically distinct <sup>10</sup>. In terms of texture, these two episodes do not fall neatly into either category.

In the pattern of alternating homophonic and polyphonic episodes, the listener expects episode eleven to be polyphonic. Like the other polyphonic episodes, it follows a slower harmonic rhythm, and contains text. In fact, aside from the resulting texture and number of chord progressions, this episode follows the rules of the other polyphonic episodes. In terms of texture itself however, it is not truly polyphonic; there are no suspensions or anticipations, or different instruments arriving at different chords at different times. Instead, the violin and viola play the start of each chord with a single, sweeping triple- or quadruple-stop, while the winds play the ostinato rhythms using their own tetrachords. (Each chord change aligns with each sixteenth note in the ostinati.) Between each sweep, the strings play the C# drone as sustained notes at rehearsal 41. Starting at rehearsal 42, instead of playing the drone pitch, they introduce the missing tetrachord on these sustained notes.

Conversely, episode fourteen would be expected to be homophonic. While the texture itself remains homophonic, it does not follow the conventions found in all other homophonic episodes; the chord changes are not linked with the ostinati (there are fewer than ten chord changes, as in the polyphonic episodes) and the episode presents a full stanza of text.

<sup>&</sup>lt;sup>10</sup> Instead of pairing a chord progression with the A phrases and its reflection with the B phrases, Bresnick alternates primary and reflected material within the same phrase.

#### 3.2 PITCH

Two main forces drive how pitch unfolds over time within a paradigm of tetrachordal reflection: ambitus (how pitches are organized in registral space) and the idea of "fulfillment", beginning an idea that is incomplete, and then restating it in its complete form. In the following sections I will show how these ideas drive melodic units (tetrachords), drone pitches, and harmonic sequences (chord progressions).

#### 3.2.1 Tetrachords

Each tetrachord is the result of partitioning a series of four triads into three melodies. Such partitioning can result in any of a number of tetrachords, but Bresnick uses specific partitions over the course of the piece to create development in how the sets of tetrachords progress from one to another. He does this in three ways: pitch/interval content (steps vs. leaps; diatonicism vs. chromaticism), direction (ascending vs. descending), and "fulfillment:" familiar musical sets that begin as smaller subsets (whole-tone, diatonic).

# **3.2.1.1 Pitch Content**

The first tetrachords introduced are stepwise diatonic segments. Over the course of part one, as each new tetrachord appears, the evolution shows a gradual move away from stepwise diatonicism towards one of two opposite poles: chromaticism or patterns with large leaps (see Figure 26). Looking at the diatonic tetrachords (a, b, c, d, g, and i), they show an expansion that unfolds in the order they are introduced: the tetrachords with the narrowest range appear first (a and b), followed by c and d which are wider, g which is wider still, and finally i, the widest. The

chromatic tetrachords (e, f, g, and j) mostly follow a pattern of contraction, with the widest-ranged tetrachord appearing first. (Tetrachord g is narrower than j, however, so this pattern is not absolute).

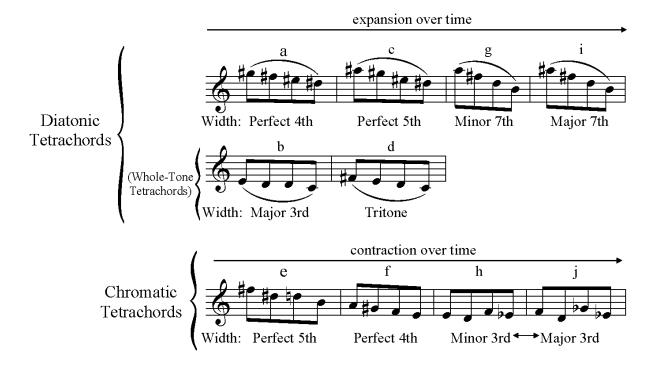


Figure 26. Tetrachord evolution.

#### **3.2.1.2 Direction**

The way in which Bresnick manipulates the tetrachords shows a clear evolution over the course of the piece. In the earliest episodes (one through four, and six), the tetrachords chosen all have a completely downward trajectory: tetrachords a, b, c, d, e, and f. The next episodes (five and seven) begin to include tetrachords that have an overall downward trajectory but each contain one upward leap: tetrachords h and j. (Tetrachord i, introduced in episode seven, also follows a completely downward trajectory.) Episodes eight and nine contain versions of previous tetrachords, reordered to create an overall upward trajectory: h<sup>B</sup> and j<sup>B</sup>. This gradual

development from descending melodic units to ascending ones prepares for the use of the inverted (completely ascending) tetrachords in part two of the piece.

By looking at the contour of the primary tetrachord and its reflection, and how it evolves over the course of the piece, the choices Bresnick makes about inversion and retrogression become clear. Episodes one through nine all follow the primary tetrachord (a<sup>1</sup>) and its reflection (a<sup>6</sup>), both of which descend. In episodes ten and eleven, this trajectory is reversed; a<sup>6R</sup> and a<sup>1R</sup> both ascend. Episodes twelve and thirteen fuse the two: a<sup>6R</sup> ascends while a<sup>1</sup> descends. Episode fourteen reverses the previous approach, using a<sup>6</sup> (descending) and a<sup>1R</sup> (ascending). Finally, in episode fifteen, the piano uses the original descending tetrachord (a<sup>1</sup> and a<sup>6</sup>) while the winds and strings use the ascending version (a<sup>6R</sup> and a<sup>1R</sup>). By alternating the ascending and descending versions within the same phrase, Bresnick creates symmetry in the contour of the combined tetrachords.

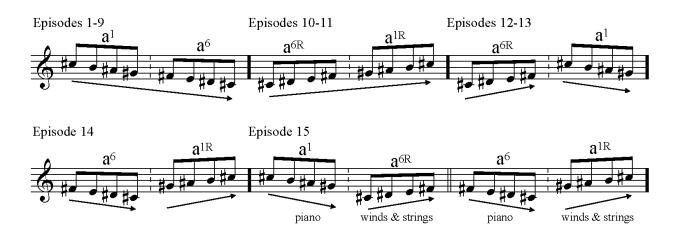


Figure 27. Contour of primary/reflected tetrachords.

#### 3.2.1.3 Fulfillment

Bresnick's manipulation of the tetrachords encapsulates the idea of fulfillment. He often chooses to use only two tetrachords simultaneously, but then adds the "missing" third tetrachord later in the episode. Episodes one and two completely lack a1/a6 until the final phrase of episode two; rehearsal eight marks the first simultaneous use of three tetrachords. Episodes six through thirteen each begin with two tetrachords (or one, in the case of episode ten) which Bresnick then completes with the remaining tetrachord(s) in subsequent phrases. This method of gradually introducing the different tetrachord layers foreshadows episode fourteen, which begins with no tetrachords present (only the drone remains), then introduces dyads in its third phrase and finally triads in its fourth phrase.

Another minute use of fulfillment occurs at the level of the pitch sets of the tetrachords themselves. Tetrachord "b" is actually a whole-tone trichord containing a repeated pitch (found in episode one). It is a subset of tetrachord d, the whole-tone tetrachord found in the next episode. Likewise, tetrachord a is a diatonic segment spanning a perfect fourth, first found in episode one. In episode two, it expands to tetrachord c: a diatonic segment spanning a fifth. The specific transpositions of these tetrachords (a<sup>8</sup>/c<sup>10</sup>, and their reflections a<sup>11</sup>/c<sup>11</sup>) are each part of the same diatonic set (see Figure 28). Though such relationships are minute and possibly coincidental, I believe they are both audible and relevant. These four tetrachords are the first to occur, and in a homophonic texture, the relationships between a and c, and b and d, would be apparent to the listener. Even if the listener is not aware that they are expansions of the same set, it is obvious that d grows organically out of b, and c out of a.

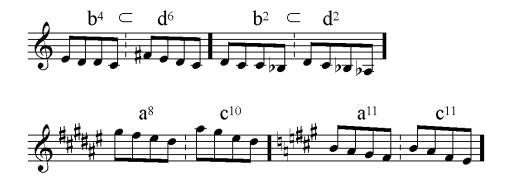


Figure 28. Relationships of the first four tetrachords.

# 3.2.2 Chord Progressions

Bresnick uses eight different chord schemes over fifteen episodes. Episodes that share a chord scheme always have different approaches to either texture (homophonic versus polyphonic) or the order of the chords presented (original versus inverted). The first nine episodes present each chord progression by harmonizing the primary tetrachord (a<sup>1</sup>) during the A phrases and the reflected tetrachord (a<sup>6</sup>) in the B phrases. Each of these episodes has a unique chord scheme (except for episodes two and three, which use the same chord scheme but different textures).

The chord schemes in part two of the piece are all reworked versions of previously-used chord schemes. While part one paired a<sup>1</sup> with the A phrases and a<sup>6</sup> with the B phrases, part two pairs a<sup>6R</sup> (the inverted reflected tetrachord) with the A phrases and a<sup>1</sup> or a<sup>1R</sup> (the inverted primary tetrachord) with the B phrases.

Episode fifteen, the coda, fuses these two approaches. All chords derive from chord scheme one and the texture is entirely homophonic. However, the piano follows the chord scheme as laid out in episode one (a<sup>1</sup> during the A phrases, a<sup>6</sup> during the B phrases) and the rest of the ensemble plays the inverted version found in episode ten (a<sup>6R</sup> during the A phrases, a<sup>1R</sup> during the B phrases).

The following chart shows each of the eight progressions in their different manifestations (see Figure 29). All chord schemes labeled "primary" harmonize the tetrachords a<sup>1</sup> and a<sup>6</sup>. The fully reversed progressions harmonize a<sup>6R</sup> and a<sup>1R</sup>. The half-reversed progressions begin with the inverted reflection, a<sup>6R</sup>, but follow up with the uninverted primary, a<sup>1</sup>. Episode fourteen is unique; here the half-reversed progression from episode thirteen is taken in retrogression, harmonizing a<sup>6R</sup> followed by a<sup>1</sup>. (The chords which are harmonizations of the pitch-class C# in the primary and reflected tetrachords are bolded for ease of comparison.)

Chord Scheme	As it occurs in episode:		zes these hords:	Relationship	Resulting Progression											
Seriettie	пт срізоче.	Α	В			ŀ	4		В							
	1	$a^1$	a <sup>6</sup>	Primary	C#m	Bm	Bb	Ab	Bm	Am	Ab	F#				
1	10	a <sup>6R</sup>	a <sup>1R</sup>	Fully Reversed	F#	Ab	Am	Bm	Ab	Bb	Bm	C#m				
	15	a¹	a <sup>6</sup>	Primary & Fully Reversed	C#m	Bm	Bb	Ab	Bm	Am	Ab	F#				
	15	a <sup>6R</sup>	a <sup>1R</sup>	Fused Together	F#	Ab	Am	Bm	Ab	Bb	Bm	C#m				
2	2, 3	a <sup>1</sup>	a <sup>6</sup>	Primary	F#	Ε	Bb	Ab	Bm	Am	D#m	C#m				
2	11	a <sup>6R</sup>	a <sup>1R</sup>	Fully Reversed	C#m	D#m	Am	Bm	Ab	Bb	Е	F#				
	4	$a^1$	a <sup>6</sup>	Primary	F#m	G#m	Bb	Ε	D#m	Am	В	C#				
3	13	a <sup>6R</sup>	a <sup>1</sup>	Half Reversed	C#	В	Am	D#m	F#m	G#m	Bb	Ε				
	14	a <sup>1R</sup>	a <sup>6</sup>	Half Reversed> Reversed	Е	Bb	G#m	F#m	D#m	Am	В	C#				
4	5	a¹	a <sup>6</sup>	Primary	Α	Bm	Bb	G#m	В	Am	Ab	Bbm				
4	12 a <sup>6R</sup>	a <sup>1</sup>	Half reversed	Bbm	Ab	Am	В	Α	Bm	Bb	G#m					
5	6	$a^1$	a <sup>6</sup>	Primary	F#	G#m	Bb	G#m	В	Am	В	C#m				
6	7	$a^1$	a <sup>6</sup>	Primary	Bbm	Bm	D#m	G#m	В	E	G#	Α				
7	8	a <sup>1</sup>	a <sup>6</sup>	Primary	C#	В	Bb	Ab	Bm	Am	G#m	F#m				
0	9	$a^1$	a <sup>6</sup>	Primary	Bbm	В	D#m	Е	D#m	Е	G#m	Α				
8	11	a <sup>6R</sup>	a <sup>1R</sup>	Fully Reversed	Α	G#m	E	D#m	Ε	D#m	В	Bbm				

Figure 29. Chord schemes and their resulting progressions.

Like the pitches of the tetrachords and the way in which the tetrachords are layered, some of the chord progressions themselves show the idea of fulfillment. In some of the polyphonic

episodes (three, five, seven, thirteen), the first A phrase and B phrase of the episode omit the final chord; the harmonic motion (which is quite slow in these episodes) never reaches it. In the second A phrase and B phrase, the final chord is included. This foreshadows the treatment of the chord progression in episode fourteen, which begins with no chords, followed by dyads derived from the chord progression (omitting the final chord), and finally the full progression in complete triads.

# 3.2.2.1 Tonal and Modal Implications

Though the chords Bresnick uses are arranged according to the harmonization of a tetrachord and the resulting reflection over an axis of symmetry, the juxtaposition of major and minor triads inherently creates hierarchies and implied relationships, especially when adjacent chords are part of the same diatonic set. An analysis of these chord progressions in tonal or modal contexts, however, is thwarted by two structural elements of the piece: reflection and the placement of chords in the ostinato patterns.

Reflection both reverses the order of the chord progression as well as turns major triads into minor triads and vice versa. This has serious ramifications for a hierarchical analysis because both direction and chord quality greatly affect how chords are heard in relation to one another. For example, the chord progression in both episodes two and three begin with the triads F-sharp major followed by E major, which in context may be heard as the I and VII chords of F-sharp Mixolydian (or V and IV of B Major). Upon reflection, this progression becomes D-sharp minor and C-sharp minor. The relationship of two minor triads a whole-step apart is far less common in either a tonal or modal setting; it may sound like ii and iii of B Major, or i and ii of C-sharp Dorian, but neither of those analyses is terribly functionally appropriate nor convincing.

The placement of the chords in the ostinato patterns, and how emphasis and reflection affects those patterns, also skews possible tonal and modal analyses. In both patterns A and B, the first and second chords of the superimposed chord progression receive a great deal of emphasis. Refer back to Figure 19, p.34. The first and second triads of pattern A (labeled 1 and 2) and the first and second triads of pattern B (labeled 5 and 6) occur far more frequently than the remaining triads. However, upon reflection, triads 1 and 2 of pattern A become triads 7 and 8 of pattern B; likewise, the emphasized triads 5 and 6 are reflections of the less-emphasized triads 3 and 4. This lopsidedness makes any such analysis of a chord progression and its reflection futile.

However, adjacent diatonic triads are present in these chord progressions, and though a complete analysis of each progression has little meaning, it is worth noting the tonal and modal functions that Bresnick does (and does not) choose to incorporate. In particular, the polyphonic episodes, because of their slower harmonic motion, allow time for the triads to be heard in such a context; the homophonic episodes faster changes tend to sound more like a stream of triads.

The first polyphonic section, episode three, contains perhaps the clearest use of modal harmony in the piece (see Figure 21, p.38). The slower chord changes linger on F# major and E major triads; combined with the C# drone, this comes across as I and VII of F# Mixolydian with a pedal on the dominant. The final two chords of that progression (B-flat major and A-flat major) also share the same relationship (two major triads a whole-step apart) and may be heard similarly (I and VII of B-flat Mixolydian), but the C# drone now clashes with that diatonic set. Upon reflection, the B-flat and A-flat major chords become B minor and A minor, and the F# and E major chords become D# minor and C# minor. Both pairs consist of two minor chords a whole-step apart; though diatonic, this relationship is not as strong as the Mixolydian reading of the first

triads. (For example, D# minor and C# minor could be analyzed as the iii and ii chords of B major, or the ii and i chords of C# Dorian, or i and vii of D# Phrygian; none of which are common relationships the ear might pick out.) Each of the other polyphonic sections (except nine) contain similar examples of adjacent triads that have momentary, functional diatonic relationships, but those relationships disappear upon reflection.

Episode nine is unique in this regard because the chord progressions in the A and B phrases are not only reflections, but also exact transpositions of each other. Furthermore, within the four triads that make up a progression, the first three share a diatonic set, and the last three share another diatonic set, allowing the middle two triads to act as pivot chords (see Figure 30). Also important to note is that the C# drone is diatonic to all of these sets. All of these factors combine to allow the triads in this episode to be heard in a functional, diatonic manner.

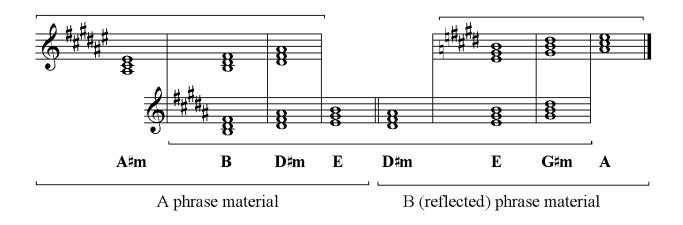


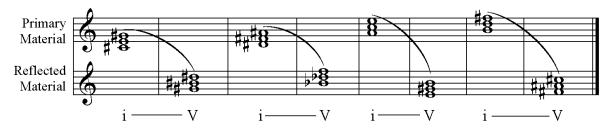
Figure 30. Overlapping diatonic sets in episode nine.

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Most of these examples of diatonicism are modal; strong functional tonal relationships are largely avoided. (Only one adjancent chord combination produces a dominant-tonic relationship: the B major and E major triads in the B phrases of episode seven. Again, here the

C# drone weakens the reading of this as a V-I progression, as does the fact that these chords are the result of the reflection of D# minor and G# minor triads, which are not heard functionally.) However, in episode eleven (the first complex episode), Bresnick manipulates his harmonic material in a remarkable way: he alternates primary material triads with reflected triads, but each reflected triad happens to be the dominant chord of each primary chord (see Figure 31). This is the only such clear, strong use of dominant-tonic relationships in the piece, and occurs in the only episode where the harmonic motion is twice as fast as every other episode. This is possible because chord scheme two uses all major triads for one phrase and all minor triads for the other phrase; in episode eleven, Bresnick rearranges these so each minor triad is followed by its major dominant triad. In the second half of this episode, Bresnick instead uses chord scheme eight, which does not allow for such clear dominant-tonic relationships in all four pairs (though it does occur in the first pair, and in the second pair with a minor dominant).

Rehearsal 41-42, alternating primary and reflected chords of chord scheme 2



Rehearsal 43-44, alternating primary and reflected chords of chord scheme 8

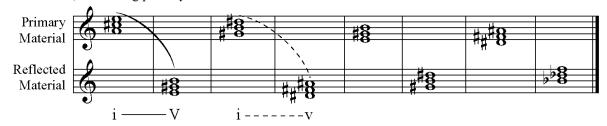


Figure 31. Dominant-tonic relationships in episode eleven.

# **3.2.3** Range

Bresnick pays careful attention to where in registral pitch he places the pitch classes that adhere to his scheme. The ambitus of each phrase changes gradually from the previous phrase; he avoids abrupt changes in register. He also avoids the registral extremes, choosing instead to focus primarily on the comfortable center; he in fact never uses the lowest octave of the piano in this piece. The shape of registral space ebbs and flows towards episode fourteen which contains the second highest pitch in the piece (G7); the highest pitch is a neighbor tone away in the previous phrase (A7 in the piano at rehearsal 52). The upward turn of the tetrachords in part two foreshadows this climb to the registral apex.

The range of pitches used in a given phrase also expands and contracts, but approaching episode fourteen, the range gets narrower. The following figure shows the highest and lowest pitches, smallest and widest ranges, as well as the lowest high pitch and highest low pitch (see Figure 32). Both of these tendencies (ascending pitches and contracting range) reach their breaking point in episode fourteen; the resulting fallout in episode fifteen includes the lowest pitch of the piece (Bb1) and the widest range of pitches (five octaves plus a minor third) found within a phrase.

Likewise, the range of the drone pitches fluctuates throughout the piece, occasionally disappearing altogether. The move of the drone from the pitch-class C#, used throughout the piece, to G in episode fourteen, is abrupt and dramatic; not only has the pitch-class G been absent in the entire piece prior to that moment, it is now the *only* pitch-class present. It is also higher in register (reaching to G7) than any of the previous C# drones, and as other instruments join the drone pitch over the course of the episode, it reaches a span of five octaves (G2 through G6); prior to this, the C# drones only ever reached a maximum simultaneous span of four

octaves (C#3 through C#6). One of the consequences of episode fourteen is the greatly expanded range that occurs in episode fifteen; this results in the widest placement of the drone pitches of the piece. The piano, with hands in the extreme registers plays C#2, C#3, C#6, and C#7, while the strings complete the middle register with C#3, C#4, and C#5.

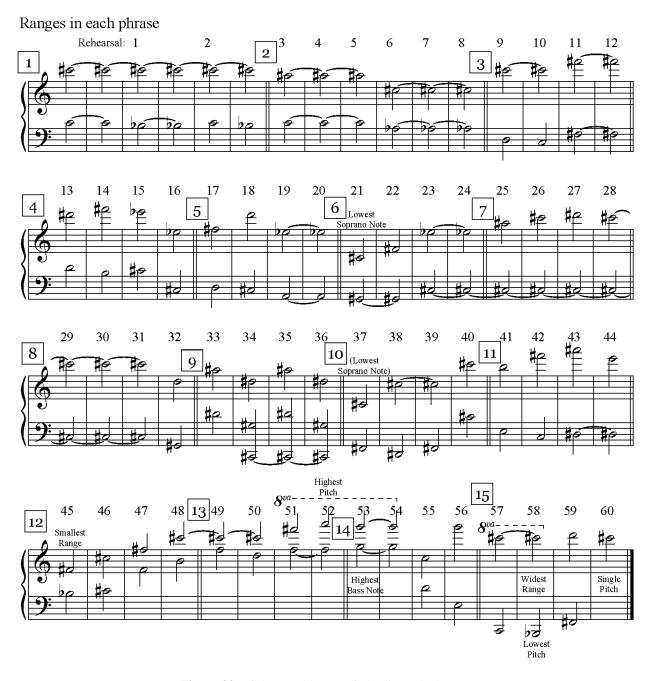


Figure 32. Highest and lowest pitches in each phrase.

#### 3.3 THE DRAMATIC ARC

In the previous sections I have shown how Bresnick sets up expectations in the first eight episodes; a few things change in episode nine, signaling a transition; and episodes ten through thirteen begin breaking rules and finally reach an apex where all expectations are defeated: episode fourteen. The uniqueness of that episode, and the consequences that follow in episode fifteen, demand their own analyses.

#### 3.3.1 The Climax

As stated before, episode fourteen contains many unique elements: the first and only appearance of the pitch-class G, replacing the C# drone; the drone occurring by itself without any tetrachords; and an extreme high register. The chord progression is based on chord scheme three; however, Bresnick manipulates this chord progression differently than he does in any other episode.

The first two phrases of this episode contain nothing but the pitch-class G; the violin and viola play the ostinati rhythms pizzicato in their extreme high registers while the piano echoes it a sixteenth-note later in its extreme high register. In phrase three, the piano moves to its middle register, playing dyads<sup>11</sup> (which always coincide with the sixteenth notes in the ostinato) and a G4 drone. These dyads derive from chord progression three, from both primary and reflected material. (The fourth chord in the progression, F#m, and its reflection, C#, are not reached in this phrase.) In phrase four, the piano plays full triads on each sixteenth note of the ostinato, and

<sup>11</sup> The pitches of the dyads and triads do not follow tetrachords in any manner similar to those seen before; as the pianist is just picking out thirds, fourths, and triads, a linear analysis as tetrachords seems irrelevant.

reaches the final chord of each progression (see Figure 33). Here, each primary chord is immediately followed by its own reflection. (The final triad that occurs two bars before rehearsal 57, F# major, is actually a reflection of the first chord in the next episode: C# minor.) In these two phrases, the pitch G4 acts as a registral axis of symmetry. If one could watch the pianist, it would also act as a visual axis of symmetry; one hand plays the G while the other hand alternates playing dyads and triads above and below that note. This is also the only phrase in the piece where chords of the primary material are immediately followed by their own reflection; the audible axis of symmetry illuminates this.

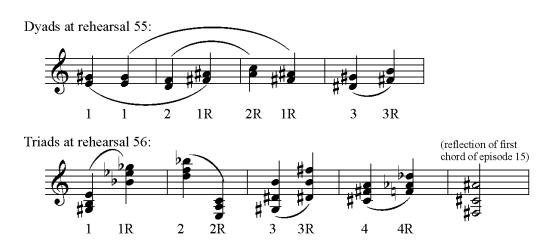


Figure 33. Piano dyads and triads in episode fourteen.

The G4 axis of symmetry expands symmetrically through rehearsals 55 and 56, adding G5 and G3 at rehearsal 56, and G6 and G2 four bars later. As the drone pitches, dyads, and triads of these two phrases are all symmetrical about the pitch G4, this is the only area of the piece where all pitches are symmetrical around a single pitch which is extant in the texture. Bresnick thus makes explicit the method he has been using throughout the piece.

#### 3.3.2 The Aftermath

Episode fifteen is a reworked version of episode one but with many unique elements; in this way the piece comes full circle but the journey leaves its mark. Like episode one, it is entirely homophonic, contains no text, uses chord scheme one, and completely omits the primary tetrachord, its reflection, or its inversion. But unlike any other episode, the range is greatly expanded, all six players perform in the same phrase, and the primary material alternates with its inverted material. To do this, Bresnick pairs the piano with the primary material (identical in pitch-class to episode one) and pairs the remaining five instruments with the inversion of that material (identical to episode ten). Each sixteenth note in the ostinato patterns triggers an alternation.

The first two phrases of episode fifteen (rehearsals 57 and 58) thus represent a fusion of the two key building blocks of the piece: the descending and ascending tetrachords (see Figure 34). In the third phrase, the winds and strings continue as before but the piano exchanges its tetrachords for isolated C#6 sixteenth notes. These C#'s follow a regular pattern of recurring every twelve sixteenth-note beats, made explicit in the final phrase (rehearsal 60), where the winds and strings drop out completely, leaving only the piano's isolated C#'s.



**Figure 34.** Reduction of the first two phrases of episode fifteen.

#### 4.0 IMPLICATIONS OF SYMMETRY

The entire pitch world in *My Twentieth Century* is generated by a simple four-note diatonic motive, its harmonic realization with major and minor triads, and the reflection of these structures over an axis of symmetry. Using only the simplest of elements, Bresnick creates a harmonic language whose elements are familiar, but whose manipulation is non-functional, non-diatonic, and engaging in its complexity. Though symmetry is manifest to varying degrees in other aspects of the piece (rhythm, form, use of inversions/reflections/retrogressions, etc.), Bresnick does not blindly follow a symmetrical model throughout. He uses symmetry as a means of generating musical material and forming coherent structures within the piece, providing a soundscape which works synergistically with the poem spoken within it.

Though pitch symmetry has been the main focus of this analysis, the text of the poem is nearly as important; the music serves to deliver the poem, rather than the other way around. After having analyzed pitch, rhythm, form, and orchestration in detail, stepping back and looking at the larger picture reveals how the text informs the music and how the music helps deliver the text.

# 4.1 SYNTHESIS OF TEXT AND MUSIC

Though the seven stanzas of the poem are quite similar in their structure, delivery, and content, the subtle differences among them show a clear form and development which Bresnick

reinforces with his music. Ultimately, Bresnick's symmetrical manipulation of his melodic and harmonic elements highlights the development in the poem.

The first three stanzas of the poem share a similar theme: the recollection of fond, child-like memories ("I played hopscotch at twilight...", "I lived in a country of fireflies...", "I danced like a sumac tree...") as well as humorous, cynical, and sarcastic anecdotes ("I went to a sensitivity workshop and had my umbrella stolen...", "I wasted three years on geometry...", I was anesthetized through most of the twentieth century."). These stanzas all occur in Part One of the piece, where the primary melodic tetrachord always descends, and the form of each episode is always AABB.

The fourth stanza, which occurs during the transitional episode nine, likewise shows a transition in the tone of the poem. It is the only stanza whose first three lines always begin with the same verb ("I ate sweet apples...", "I ate my peck of dirt...", "I ate my words...") and whose tone moves from child-like reminiscence to the realization of the complexities of adulthood. This progression also mimics the overall progression of the poem itself; the first three stanzas can be seen as the naïve memories of childhood and sarcastic comments of teenage years, while the final three stanzas are more impassioned, intense, and stark. The attributes of this stanza are mimicked by the music behind it; episode nine likewise combines aspects of the preceding music (approach to tetrachords and the use of the axis of symmetry) and the music that follows it (approach to form), as well as containing its own unique elements (fermati and disappearance of the rhythmic ostinato).

The final three stanzas concern deeper issues like love ("I wrote passionate letters...), religion ("I prayed to the Son of Man..."), life, and death ("It was nearly possible to live...), standing in stark contrast to the naïveté of the first three and altering the expectations set up.

Similarly, in Part Two, the primary tetrachord is suddenly inverted, literally turning expectations upside-down. The following diagram shows where each stanza occurs in the form of the piece, highlighting these three different sections of the poem (see Figure 35).

## My Twentieth Century

I played hopscotch at twilight in the twentieth century. I lived in a country of fireflies in the twentieth century. I saw the moon shipwrecked in the twentieth century. My brother died in the twentieth century.

Part One

I wore ridiculous clothes in the twentieth century.

I danced like a sumac tree in the twentieth century.

I went to a sensitivity workshop and had my umbrella stolen in the twentieth century.

My brother died in the twentieth century.

I wasted three years on geometry in the twentieth century

I was anesthetized through most of the twentieth century.

I loved Kawasaki in the twentieth century.

My brother died in the twentieth century.

Transition

I ate sweet apples in the twentieth century.

I ate my peck of dirt in the twentieth century.

I ate my words in the twentieth century.

My brother died in the twentieth century.

I wrote passionate letters in the twentieth century.

I was incapable of keeping silent in the twentieth century.

I shed pints of blood in the twentieth century.

My brother died in the twentieth century.

I leaned like a lampshade over my life in the twentieth century.

I prayed to the Son of Man in the twentieth century.

It was nearly possible to live in the twentieth century.

My brother died in the twentieth century.

There was something very obvious in the twentieth century

I could never see or understand.

The dead knocked on the door of my life in the twentieth century.

Who's there? I said.

**Figure 35.** Symmetry within the poem.

Seen in such a light, the poem itself can be seen as symmetrical; the first three stanzas represent a life viewed by a child, the last three by an adult, and the central (fourth) stanza acts as a prism (or axis) through which these viewpoints are refracted. The fourth stanza's function as a point of symmetry is highlighted by its use of the same verb in its first three stanzas, which themselves show a transition from child-like to serious.

The final stanza, however, breaks the expected symmetry. The formula of three lines beginning with "I..." and ending with "...in the twentieth century" is avoided, and a question is asked for the first time. This breaking of the symmetry has musical ramifications as well; the text of the final stanza comes without an intervening homophonic episode, the tetrachords disappear completely, and the drone moves a tritone away to G (a yet-unheard pitch-class). Bresnick's setting clearly follows the inherent symmetry, and breaking thereof, of the poem itself.

This is perhaps the ultimate source of Bresnick's decision to use symmetry (already a part of his compositional style) in the specific way he does in this piece. The alteration of pitch material with its reflection over an axis of symmetry accomplishes two things: it provides a musical foundation which drives the delivery of the poem, while also foreshadowing the symmetry within the poem itself (the change in tone). That change is then marked in the music by inverting the primary melody itself from a descending tetrachord to an ascending one. Bresnick's use of reflection and inversion are simple compositional tools; they appear subtle and unobtrusive as they unfold over the course of the piece, but their use reinforces the dramatic arc as well as inherent symmetry in the poem itself.

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## Meden Agan

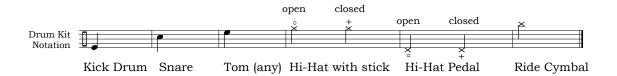
for Chamber Ensemble

# Mark S. Fromm

### Instrumentation

Flute Oboe Clarinet in A Bassoon

#### Percussion (one player): Vibraphone Drum Kit



Guitar (standard tuning)

Harp

Piano

Violin I

Violin II

Viola

Cello

Duration: ca. 15'

### Meden Agan

Full Score

for Chamber Ensemble

Mark S. Fromm (2012)



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