

## CHAPTER IV

### ANALYSIS OF DAVID SHAW'S SYMPHONY NO. 1

Symphony No. 1 by David Shaw has the same instrumentation as Mennin's Symphony No. 5: piccolo, two flutes, two oboes, two B-flat clarinets, two bassoons, four F horns, three C trumpets, three trombones, four timpani, percussion (snare drum, bass drum, cymbal, and suspended cymbal), violin I, violin II, viola, violoncello, and contrabass. Like Mennin's work, this symphony also has three movements and a similar duration of about twenty-one minutes. The first movement, *Con vigore* ( $\text{♩} = 126$ ), lasts about seven minutes and contains 216 measures. The second movement, *Canto* (*Andante Arioso*,  $\text{♩} = 66-72$ ), lasts about six and one-half minutes and contains ninety-eight measures. The third movement, *Allegro tempestuoso* ( $\text{♩} = 126-132$ ), lasts about seven and one-half minutes and contains 543 measures.

The following analysis consists of a discussion of Shaw's Symphony No. 1 in terms of its rhythm and meter, orchestration, harmony, and form. A thorough thematic analysis of each movement then follows.

#### Rhythm and Meter

Following Mennin's work, Symphony No. 1 uses standard meters. All three movements stay in their initial time signatures:  $\frac{4}{4}$ ,  $\frac{4}{4}$ , and  $\frac{2}{4}$ , respectively, except for the second and third movements, which have occasional meter changes. The second

movement has four additional measures of  $\frac{3}{4}$  and one measure each of  $\frac{2}{4}$ ,  $\frac{5}{4}$ , and  $\frac{6}{4}$ .

The third movement has five additional measures of  $\frac{1}{4}$  and one measure of  $\frac{3}{4}$ . These meter changes alter the length of a phrase's time and align subsequent phrases to the first beat of their measure (see Ex. 87).

The musical score for measures 15-18 of Symphony No. 1, Movement II, illustrates a complex meter change. The score is written for a full orchestra, including Flute I, Oboe I, Horn in F (1st), Trombone, Tuba, Timpani, Violin, Viola, Cello, and Contrabass. The key signature has one sharp (F#). The time signature changes from 4/4 in measure 15 to 3/4 in measure 16, and then back to 4/4 in measure 17. The music features various dynamics, including *pp* (pianissimo), *mf* (mezzo-forte), *f* (forte), and *p* (piano). The Flute I and Oboe I parts have melodic lines, while the Horn in F (1st) part has a more active role, marked with *f* and *mf*. The Trombone and Tuba parts provide harmonic support, with the Tuba marked *mf*. The Timpani part has a rhythmic pattern, marked *pp* and *f*. The Violin and Viola parts have a melodic line, marked *p*. The Cello and Contrabass parts have a harmonic line, marked *p*. The score is marked with *A2.* above the Horn in F (1st) part in measure 16.

Ex. 87. Meter change in the second movement. Symphony No. 1, Movement II, mm. 15-18.

Following Mennin's example, the rhythms in Symphony No.1 are fairly traditional. There are no unusual figures except for occasional irregular divisions at the beginning or ending of phrases (see Ex. 88).



Ex. 88. A sextuplet used in the first movement. Symphony No. 1, Movement I, mm. 25-27.

Rhythmic motives play an essential role in this symphony. As illustrated in the text below, the first and third movements extensively use recurring rhythms to connect their components.

### Orchestration

Following Mennin's approach, there is no special notation used in this work, nor are there any unusual orchestral effects or playing techniques. The major sections of the orchestra (winds, brass, percussion, and strings) are treated as groups that usually play the same material together. Correspondingly, the low-pitched instruments of the groups (bassoon, tuba, double bass, and sometimes the third trombone and cello), normally play the bass part together (see Ex. 89).

The musical score is presented in two systems. The first system covers measures 535 to 540, and the second system covers measures 541 to 543. The instrumentation is listed on the left of each system: Piccolo, Flutes, Oboes, Clarinets; Horns, Trumpets, Trombones; Violins, Violas; and Bassoons, Tuba, Cellos, Contrabasses. The key signature is one flat (B-flat), and the time signature is 2/4. The score illustrates the distribution of notes among the different sections of the orchestra, with the Piccolo and Flutes playing the highest notes, followed by the Oboes and Clarinets, then the Horns, Trumpets, and Trombones, and finally the Violins, Violas, Bassoons, Tuba, Cellos, and Contrabasses playing the lowest notes. The notation includes various musical symbols such as notes, rests, and dynamic markings.

Ex. 89. Material divided among the different sections of the orchestra. Symphony No. 1, Movement III, mm. 535-543.

Symphony No. 1 follows Mennin's scoring method, with the notes of chords distributed from highest to lowest starting from the first chair of each section and working down. Likewise, the horns follow the standard scoring technique of overlapping parts so that the first and third horns take the two highest notes and the second and fourth

take the two lowest. However, the score ordering of horn parts in Symphony No. 1 has the first and third horns on one staff and the second and fourth horns on another. This technique allows for a consecutive distribution of horn notes in the score (see Ex. 90) and is specifically useful when notating a doubled part (see Ex. 91).



Ex. 90. Consecutive distribution of notes because of horn part arrangement. Symphony No. 1, Movement I, mm. 111-115.



Ex. 91. Simplified notation of doublings because of horn part arrangement. Symphony No. 1, Movement II, mm. 69-73.

Symphony No. 1, like Mennin's Symphony No. 5, contains a piccolo part separate from the two flute parts, requiring three performers total (see Ex. 92).

Piccolo

Flute 1

Flute 2

Bassoons

Timpani

Violins

Violas Cellos

*mp*

*p*

Ex. 92. The independent piccolo part. Symphony No. 1, Movement I, mm. 7-11.

The percussion section consists of five parts (timpani, snare drum, bass drum, cymbal, and suspended cymbal) divided among four players. The use of percussion is mainly for punctuating musical accents. The only percussion solo occurs in the third movement at measures 454-461 (see Ex. 93).

Timpani

Snare Bass Drum

Cymbals

*ff*

Ex. 93. Percussion solo. Symphony No. 1, Movement III, mm. 454-461.

### Harmony

The harmony in Symphony No. 1 is predominantly chromatic, often produced through twentieth-century counterpoint. Contrapuntal writing in this symphony includes canonic, fugal, and multi-thematic techniques, as well as standard developmental techniques such as rhythmic augmentation.

Measures 52-58 of the second movement contain an example of canonic counterpoint (see Ex. 94).

The image displays three systems of musical notation for a woodwind ensemble, illustrating canonic counterpoint. The instruments are Flute 1, Oboe 1, Bassoon 1, and Bassoon 2. The music is in common time (C) and features a series of eighth-note patterns that enter in succession, creating a canon. The first system shows the initial entries with a forte (*f*) dynamic. The second and third systems continue the canon, with the Bassoon 2 part showing a final forte (*f*) dynamic. The notation includes various musical symbols such as notes, rests, and dynamic markings.

Flute 1

Oboe 1

Bassoon 1

Bassoon 2

Fl. 1

Ob. 1

Bsn. 1

Bsn. 2

Fl. 1

Ob. 1

Bsn. 1

Bsn. 2

Ex. 94. Canonic counterpoint. Symphony No. 1, Movement II, mm. 52-58.



This example contains a unison theme offset by three beats. The prevalence of cross-relations and dissonant intervals reveals the modern nature of this counterpoint.

Measures 158-165 of the first movement illustrates the use of fugal (transposed) counterpoint (see Ex. 95).

The image displays two systems of musical notation for Example 95. The first system features three staves: Oboes (top), Horn in F $\frac{1}{3}$  (middle), and Trombones (bottom). The Oboes staff begins with a melodic line marked with accents and slurs. The Horn staff starts with a rest, followed by an entry marked *ff* and an interval of a major second (a2) above the Oboe's line. The Trombone staff also begins with a rest. The second system shows a continuation of the fugal texture with the Oboe (Ob.), Horn (Hn.  $\frac{1}{3}$ ), and Trombone (Tbn.) parts. The Horn and Trombone parts show entries marked with *f* and *ff* respectively, maintaining the descending minor third interval and two-measure offset.

Ex. 95. Three-voice fugal counterpoint offset by descending minor thirds and two measures each. Symphony No. 1, Movement I, mm. 158-165.

This three-voice example combines a theme at the intervals of descending minor thirds and rhythmically offset by two measures. The next example (Ex. 96) combines a theme that is transposed by a major second and also demonstrates the offsetting of a transposed theme by more than an exact number of measures (four and a quarter in this case).

The image displays three systems of musical notation for Flute 1 and Oboe 1. The first system shows the Flute 1 part starting with a melodic line in measure 8, marked *mf*, while the Oboe 1 part is silent. The second system shows the Oboe 1 part entering in measure 11 with a lower melodic line, also marked *mf*, while the Flute 1 part continues its melody. The third system shows both instruments playing together, with the Flute 1 part continuing its melody and the Oboe 1 part providing a counterpoint. The notation includes various musical symbols such as notes, rests, accidentals, and dynamic markings.

Ex. 96. Fugal counterpoint offset by a major second and four and a quarter measures.  
Symphony No. 1, Movement II, mm. 8-16.

All three movements contain multi-thematic counterpoint that polyphonically combines multiple themes, as seen in the following example from the third movement (see Ex. 97).

Flute 1  
Theme 3C3  
*ff*

Oboe 1  
Theme 3C2  
*ff*  
8va-----

Oboe 2  
Theme 3C1  
*ff*

Fl. 1

Ob. 1

Ob. 2  
8va-----

Ex. 97. Multi-thematic counterpoint. Symphony No. 1, Movement III, mm. 239-253.

The previous example is also a demonstration of polyphonic pandiatonicism, since all three themes share the same scale but do not consistently create triadic harmony.

Symphony No. 1 makes extensive use of thematic development, altering themes in standard ways to match the linear counterpoint. For example, the following demonstrates rhythmic augmentation (see Ex. 98).

Original theme in G minor (measures 8-13):

Flute 1 *mf*

Fl. 1

Transposed theme with rhythmic augmentation (measures 23-33):

Cello. *f*

Vlc.

Vlc.

The image displays two musical excerpts from a symphony. The first excerpt, labeled 'Original theme in G minor (measures 8-13)', features Flute 1 playing a melody in G minor with a mezzo-forte (*mf*) dynamic. The second excerpt, labeled 'Transposed theme with rhythmic augmentation (measures 23-33)', shows the same theme transposed and rhythmically augmented for Cello and Violoncello (Vlc.) in a forte (*f*) dynamic. The notation includes various musical symbols such as notes, rests, accidentals, and dynamic markings.

Ex. 98. Original theme and theme with rhythmic augmentation. Symphony No. 1, Movement II, mm. 8-13 and 23-33.

Symphony No. 1 contains homophonic writing, particularly at structural strong points such as near cadences or at the beginning and ends of phrases (see Ex. 99).

Picc.  
Fl.  
Ob.  
Cl.  
Vln.  
Vla.

Hn.  
Tpt.

Bsn.  
Tbn.  
Tba.  
Vlc.  
Cb.

The musical score for measures 1-3 of 'The Rose Tree' is presented in three staves. The top staff is for Piccolo, Flute, Oboe, Clarinet, Violin, and Viola, featuring a melodic line with various ornaments and a forte (ff) dynamic. The middle staff is for Horn and Trumpet, showing a harmonic accompaniment with a forte (ff) dynamic. The bottom staff is for Bassoon, Trombone, Tuba, Violoncello, and Contrabass, providing a bass line. The key signature is one flat (B-flat), and the time signature is 4/4. The notes for measures 1-3 are: D/F#, G-, Eb, C-, F, F#°, G-, Db, C-, B-, G-7, F#-/G.

D/F# G- Eb C- F F#° G- Db C- B- G-7 F#-/G

Ex. 99. Homophonic and pantriadic writing at the end of the first movement. Symphony No. 1, Movement I, mm. 206-212.

The majority of homophonic writing occurs in the second movement, particularly as part of the movement's main and recurring harmonic progression (see Ex. 100).

Violin 1  
Violin 2  
Viola  
Cello  
Contrabass

*mp* *mf* *mp* *mf* *mp* *mf*

Eb2 D7#9 Dbsus4b5 C-7b6 Eb2 D7#9 Dbsus4b5 Ab-/Ddb C-7b5 D°/C C°

Vln. 1  
Vln. 2  
Vla.  
Vlc.  
Cb.

*f* *mf* *f* *mf* *ff* *f*

B/D# A B/D# F B/D# A B

Ex. 100. Homophonic, pantriadic, and polychordal writing at the beginning of the second movement. Symphony No. 1, Movement II, mm. 1-8.

The symphony's homophony is often pantriadic and polychordal, such as in the previous example. Following Mennin's approach, the polychords in this work usually consist of disparate triads and bass notes, as opposed to stacked triads.

The second movement also contains numerous examples of pedal point, and in particular, pantriadic writing with pedal point (see Ex. 101 and Ex. 102)

The musical score for Ex. 101 is arranged in a system with seven staves. The instruments are Flute 1, Flute 2, Clarinet 1 in Bb, Clarinet 2 in Bb, Bassoon 1, Bassoon 2, and Strings. The key signature is one flat (Bb) and the time signature is common time (C). The score spans four measures. The strings play a continuous pedal point on E, indicated by a horizontal line with the label 'E pedal' below it. The notes on the pedal line are E, D, E, Bb, E, D, E. The dynamics for the strings are *pp* in the first measure, *mf* in the second measure, and *p* in the third measure. The woodwinds have various melodic lines with dynamics ranging from *mp* to *f*. The Flute 1 part has a dynamic of *mp* in the first measure, *f* in the second, and *mp* in the third. The Flute 2 part has a dynamic of *mp* in the first measure, *f* in the second, and *mp* in the third. The Clarinet 1 part has a dynamic of *mp* in the first measure. The Clarinet 2 part has a dynamic of *mp* in the first measure. The Bassoon 1 part has a dynamic of *f* in the second measure. The Bassoon 2 part has a dynamic of *mp* in the first measure.

Ex. 101. Pantriadic writing with pedal point. Symphony No. 1, Movement II, mm. 94-98.

The image displays a musical score for Trombones and Tuba/Trombones. The top system features Trombones and Tuba staves. The Tuba part has a chromatic pedal point in the bass line, starting on Ab and moving chromatically through Bb, B, G, Eb, Gb, Db, Ab, Gb, Db, and Ab. The Trombone part provides harmonic support with chords. The bottom system features Tbn. and Tba. staves. The Tbn. part has a chromatic pedal point in the bass line, starting on E- and moving chromatically through Bb, B, D, Eb, B, Gb, Db, and Ab. The Tba. part provides harmonic support with chords. The score is marked *mf* and includes various musical notations such as slurs, ties, and accidentals.

Trombones

Tuba

*mf*

Ab- B<sup>b</sup> B G Eb Gb Db Ab Gb Db Ab

Eb

Tbn.

Tba.

E- B<sup>b</sup> B D<sup>b</sup> Eb B Gb- Db Ab

Db Eb

Ex. 102. Chromatic pedal point. Symphony No. 1, Movement II, mm. 17-23.

Additionally, Symphony No. 1 contains many non-tertiary techniques, such as tone clusters (see Ex. 103), tone clusters through polyphony (see Ex. 104), quartal and secundal chords (see Ex. 105), modal ostinatos (see Ex. 106), mixed modal ostinatos (see Ex. 107), and overlapping modal and chromatic ostinatos (see Ex. 108).



Horn 1 in F 3  
 Horn 2 in F 4  
 Trumpet 1 in C  
 Trumpet 2 in C 3  
 Trombone 1  
 Trombone 2 3

Sord.  
*pp*  
 Sord.  
*pp*  
 Sord.  
*pp*  
 Sord.  
*mf*  
 Sord.  
*mf*

Hn. 1 3  
 Hn. 2 4  
 C Tpt. 1  
 C Tpt. 2 3  
 Tbn. 1  
 Tbn. 2 3

*f*

Ex. 103. Tone clusters. Symphony No. 1, Movement III, mm. 306-328.

Violin 1

Violin 2

Viola

Cello

Contrabass

*f*

*Pizz.*

*ff*

Vln. 1

Vln. 2

Vla.

Vlc.

Cb.

Ex. 104. Tone clusters through polyphony. Symphony No. 1, Movement III, mm. 115-122.

Piccolo

Flute 1

Flute 2

Oboe 1

Oboe 2

**ff**

**ff**

**ff**

**ff**

**ff**

Quartal root: D D F G D F G C D C G C D C C C

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

**ff**

**ff**

**ff**

**ff**

**ff**

Quartal root: D D F G D F F G G

Ex. 105. Quartal and pandiatonic harmony (C Aeolian because of low brass parts).  
Symphony No. 1, Movement I, mm. 38-43.

Violin 1

Violin 2

Viola

Cello

*f*

E phrygian

E phrygian

Vln. 1

Vln. 2

Vla.

Vlc.

E phrygian

E phrygian

Vln. 1

Vln. 2

Vla.

Vlc.

Ex. 106. Modal ostinatos. Symphony No. 1, Movement III, mm. 94-110.

The image displays two systems of musical notation for Violin, Viola, and Contrabass. The first system is labeled with 'Violin', 'Viola', and 'Contrabass' on the left. The Violin part consists of sustained chords in the right hand and a rhythmic pattern in the left hand. The Viola part features a complex rhythmic pattern with slurs and accents. The Contrabass part is marked 'Pizz.' (pizzicato) and 'f' (forte), with a tempo marking 'A Phrygian' and a key signature 'E Phrygian'. The second system is labeled with 'Vln.', 'Vla.', and 'Cb.' on the left. The Violin part continues with sustained chords. The Viola part continues with a complex rhythmic pattern. The Contrabass part continues with a rhythmic pattern, marked with slurs and accents.

Ex. 107. Mixed modal ostinatos. Symphony No. 1, Movement III, mm. 199-206.

[illegible]

Ex. 108. Overlapping modal and chromatic ostinatos. Symphony No. 1, Movement III, mm. 329-346.

## Form and Themes

The three movements of Symphony No. 1 do not conform to traditional symphonic forms; each one follows its own thematic and contrapuntal development. The following section analyzes each movement's themes, paying particular attention to their

interplay and key relations. To understand better the overall thematic form, the end of each section contains a graphic overview of the analysis.

### Movement I

Following the first movement of Mennin's Symphony No. 5, Shaw's first movement contains one motive ("Main Motive"), and three themes ("1A," "1B," and "1C") which are all developed, passed throughout the orchestra, and treated in counterpoint to each other. Additionally, the movement similarly treats exact retrogrades of the first and third themes, designated Themes "1A-R" and "1C-R."

Movement I begins with a timpani ostinato, and a high G octave and a fifth played on harmonics by the violins. Next, the bassoons, cello, and viola enter and add to this emerging G Phrygian modality (see Ex. 109).

Bassoon 1  
 Bassoon 2  
 Timpani  
 Violin 1  
 Violin 2  
 Viola  
 Cello

*pp*  
*ppp*  
*ppp*  
*mp*  
*p*

Ex. 109. The beginning of Shaw's Symphony No. 1, Movement I, mm. 1-8.

At measure seven, the piccolo and flutes play the first iteration of the movement's "Main Motive." This motive changes harmonically and somewhat rhythmically throughout the movement, but generally follows the rhythmic pattern of two sixteenths and three eighths (see Ex. 110).



Piccolo

mp

Flute 1

mp

Flute 2

mp

Quartal root: G C G C G D C G G G G C D C G C G

Ex. 110. The quartal and pandiatonic “Main Motive” played by piccolo and flutes. Symphony No. 1, Movement I, mm. 7-9.

The previous example is quartal and pandiatonic in G Phrygian because of the timpani and string parts. After the “Main Motive” develops and builds, the high winds, brass, and strings burst in with the first theme, “1A,” at measure twenty-six (see Ex. 111).

Picc.

Fl.

Ob.

Cl.

Hn.

Tpt.

Tbn.

Vln.

Vla.

f

Ex. 111. Theme “1A” played by the high winds, brass, and strings. Symphony No. 1, Movement I, mm. 26-31.

Theme “1A” is chromatic, but sounds as though it centers on a G tonality, because of the previous section. The “Main Motive” immediately follows, played now by the trumpets (see Ex. 112) in C Aeolian due to the supporting harmony.

Trumpet in C 1

*fff*

Trumpet in C 2

Div.

*fff*

Ex. 112. The “Main Motive” played by the trumpets. Symphony No. 1, Movement I, mm. 32-34.

Next, the texture thins following a crescendo, and the first trombone introduces Theme “1B” supported by just the other trombones and tuba (see Ex. 113).

The musical score consists of three staves. The top staff is for Trombone 1, the middle for Trombone 2/3, and the bottom for Tuba. All staves are in bass clef with a common time signature (C). Trombone 1 plays a melodic line starting with a forte (ff) dynamic. Trombone 2/3 and Tuba provide harmonic support with sustained notes and chords. The Tuba part includes a crescendo hairpin.

Ex. 113. Theme “1B” supported by trombones and tuba. Symphony No. 1, Movement I, mm. 36-41.

In the middle of Theme "1B," the piccolo, flutes, oboes, and trumpets intersperse developed versions of the “Main Motive” (see Ex. 114).

Piccolo *ff*

Flute 1 *ff*

Flute 2 *ff*

Oboe 1 *ff*

Oboe 2 *ff*

Trumpet in C 1 *fff*

Trumpet in C  $\frac{2}{3}$  *fff*

Ex. 114. A developed version of the "Main Motive." Symphony No. 1, Movement I, mm. 38-39.

Another statement of the chromatic Theme "1A" then follows, though transposed up a fourth to imply a relation with the previous C tonality (see Ex. 115).

Picc.  
Fl.  
Ob.  
Cl.  
Hn.  
Tpt.  
Tbn.  
Vln.  
Vla.

*f*

Ex. 115. Theme "1A" transposed. Symphony No. 1, Movement I, mm. 44-49.

Next, the first and third horns enter with Theme "1C" in C Aeolian (see Ex. 116).

Horn in F  $\frac{1}{3}$

*ff*

Hn.  $\frac{1}{3}$

Hn.  $\frac{1}{3}$

Ex. 116. Theme "1C" played by the horns. Symphony No. 1, Movement I, mm. 51-60.

Halfway through this theme, the bassoons enter with a repeated two-measure ostinato which is related to Theme "1B" and used later in the work and also in the third movement (see Ex. 117 below and Ex. 142, page 179).

Bassoons

*ff*

Ex. 117. Ostinato related to Theme "1B" and played by the bassoons. Symphony No. 1, Movement I, mm. 55-56.

The next section consists of the combination of Themes "1A" and "2A" and the ostinato, each played by the piccolo, first trombone, and bassoons, respectively (see Ex. 118).

The musical score is arranged in three systems. The first system includes Piccolo, Oboe I, Bassoons, and Trombone I. The second system includes Picc., Ob. I, Bsn., and Tbn. I. The third system includes Picc., Ob. I, Bsn., and Tbn. I. The music is in 2/4 time and includes dynamic markings like *f* and *ff*. The score features Themes "1A" and "1B" and an ostinato.

**System 1:**

- Piccolo:** Rests.
- Oboe I:** Rests.
- Bassoons:** Play a rhythmic pattern of eighth notes.
- Trombone I:** Play Theme "1B" starting with a *ff* dynamic.

**System 2:**

- Picc.:** Play Theme "1A" starting with a *f* dynamic.
- Ob. I:** Rests.
- Bsn.:** Play an ostinato pattern starting with a *ff* dynamic.
- Tbn. I:** Play Theme "1B" continuing from the first system.

**System 3:**

- Picc.:** Play Theme "1A" continuing from the second system.
- Ob. I:** Play Theme "1A" continued starting with a *ff* dynamic.
- Bsn.:** Play the ostinato pattern.
- Tbn. I:** Play Theme "1B" continuing from the second system.

Ex. 118. Themes "1A" and "1B" and ostinato together. Symphony No. 1, Movement I, mm. 61-70.

Next, the accompaniment thins with a stop-time accompaniment as the violins and violas present "1A" in retrograde (designated Theme "1A-R"), augmented by the piccolo, flutes, and clarinets playing the "Main Motive" (see Ex. 119).



Violins  
Violas

Picc.  
Flutes  
Clarinets

Horns  
Trombones  
Tuba  
Cellos  
Contrabasses

Vln.  
Vla.

Picc.  
Fl.  
Cl.

Hn.  
Trb.  
Tba.  
Vc.  
Cb.

*f*

*fff*

*fff*

*Cresc.*

C- A- Ab Db-

D Gb- Db C- A-

Gb- Ab Db-

Ex. 119. Retrograde of Theme "1A" played by the violins and violas, stop-time accompaniment played by the brass and low strings, and "Main Motive" played by the piccolo, flutes, and clarinets. Symphony No. 1, Movement I, mm. 71-78.

The pantriadic accompaniment of this section also marks the transition from a C tonic to a D-flat tonic.

After another statement of the "Main Motive" by the trumpets, the first and third horns play Theme "1C," this time in D-flat Aeolian with major tonic chords. Next, woodwinds, brasses, and violins play Theme "1A" while the horns and violas add a countermelody (see Ex. 120).

The musical score for Example 120 is presented in two systems. Each system contains two staves. The top staff of each system is labeled 'Woodwinds', 'Brasses', and 'Violins' on the left. The bottom staff is labeled 'Horns' and 'Violas' on the left. The key signature has two flats (B-flat and E-flat), and the time signature is common time (C). The top staff begins with a forte (f) dynamic marking. The bottom staff begins with a fortissimo (ff) dynamic marking. The music features a melodic line in the upper staves and a countermelodic line in the lower staves, with various musical notations including notes, rests, and slurs.

Ex. 120. Theme "1A" in the woodwinds, brasses, and violins with countermelody played by the horns and violas. Symphony No. 1, Movement I, mm. 93-102.

The trombones then play Theme "1B" in D-flat Aeolian and the high winds develop the "Main Motive" (see Ex. 121).

The image displays three systems of musical notation for Ex. 121. Each system consists of two staves: 'High Winds' (treble clef) and 'Trombones' (bass clef). The key signature is D-flat major (three flats), and the time signature is 2/4. The first system shows the High Winds playing a 'Main Motive' (a series of chords) and the Trombones playing Theme '1B' (a rhythmic pattern). The second system continues this pattern, with a forte (ff) dynamic marking. The third system shows the High Winds playing a 'Main Motive' and the Trombones playing Theme '1B'.

Ex. 121. Theme "1B" in the trombones with the "Main Motive" in the high winds.  
Symphony No. 1, Movement I, mm. 103-110.

The broken rhythm of this section, along with the loud "Main Motive" lead to the violins playing Theme "1A-R," this time harmonized in D-flat Aeolian. Then, the violins, piccolo, and flutes restate it, though harmonized with major tonic chords and in counterpoint with the horns and first trombone playing Theme "1C" (see Ex. 122).

The image displays three systems of musical notation for Ex. 122. Each system consists of two staves: the top staff for Piccolo, Flutes, and Violin I, and the bottom staff for Horns and Trombone I. The music is in 2/4 time and features a key signature of two flats (B-flat and E-flat). The first system begins with a forte (*f*) dynamic for the strings and a fortissimo (*ff*) dynamic for the horns. The second system continues the counterpoint between the woodwinds and strings. The third system shows a more complex contrapuntal texture with various articulations and dynamics.

Ex. 122. Theme "1A-R" in counterpoint with Theme "1C." Symphony No. 1, Movement I, mm. 119-127.

After a climatic statement of Theme "1A" with increased harmonic motion, the texture dramatically thins and just the flutes play "1A-R" with a chromatic accompaniment by only the second oboe and clarinets. This leads to a quiet contrapuntal section, starting first with Theme "1A" against a retrograde of itself (see Ex. 123).

Flutes  
Oboes

Violin 1

*mp* *mf*

*f*

Ex. 123. Theme "1A" in counterpoint with a retrograde of itself. Symphony No. 1, Movement I, mm. 144-151.

Continuing this quiet section, the bassoons play Theme "1A" while the first trumpet, first horn, and first trombone contrapuntally play the accompanying bass line offset by two beats each at various intervals (see Ex. 124).

Horn in F  $\frac{1}{3}$

Trumpet in C 1

Trombone 1

*fff* *mf* *f*

Ex. 124. Counterpoint of the bass line to Theme "1A." Symphony No. 1, Movement I, mm. 152-155.

Finally, Theme "1A" plays in counterpoint with itself three times, offset by descending minor thirds and eight beats each (see Ex. 125).

The musical score for Ex. 125 is divided into three systems, each showing four staves: Oboe 1, Horn in F 3, Trombone 1, and Tuba. The music is in 3/4 time and features three-voice counterpoint of Theme "1A".

- System 1:** Oboe 1 plays a melodic line starting with a forte (*ff*) dynamic. Horn in F 3 and Trombone 1 are silent, while the Tuba plays a lower melodic line, also marked *ff*. The Horn in F 3 has a second ending marked *a2* and *ff*.
- System 2:** The Oboe 1 continues its melodic line. The Horn in F 3 plays a melodic line. The Trombone 1 and Tuba play a lower melodic line, marked *ff*.
- System 3:** The Oboe 1 plays a melodic line, marked *f*. The Horn in F 3 plays a melodic line. The Trombone 1 and Tuba play a lower melodic line, marked *f*.

Ex. 125. Three-voice counterpoint of Theme "1A," offset by descending minor thirds and two measures each. Symphony No. 1, Movement I, mm. 158-167.

The final section of the movement consists of just Themes "1A" and "1C." First, the horns present "1C" in octaves supported by the strings and interspersed with fragments of the "Main Motive" by the flutes and piccolo. Next, the second and fourth horns and first trumpet repeat "1C," though now transposed up a minor second, while the violins play Theme "1A-R." The rest of the strings accompany with pantriadic harmony and a seemingly "walking" bass line (see Ex. 126).

The image displays two systems of musical notation for string instruments. The first system includes Violin 2 (labeled 'Div.'), Violas, Cello, and Contrabass. The Violin 2 part features a series of chords, with a dynamic marking of *f*. The Cello and Contrabass parts play a 'walking' bass line. Below the first system, a series of chord symbols are listed: Db-, A-, Bb-, A-7, D-, G-, Eb, G-, D, B-. The second system includes Violin 2 (labeled 'Vln. 2') and Viola (labeled 'Vla.'). The Violin 2 part has a series of chords, and the Viola part has a series of chords. Below the second system, a series of chord symbols are listed: Db, Bb, G-, A, D-.

Ex. 126. Pantriadic harmony and a "walking" bass line in the strings. Symphony No. 1, Movement I, mm. 177-186.

The trombones and bassoons then reverse "1C" (now designated Theme "1C-R"), and the oboes and first violins reverse Theme "1A-R" (simply designated Theme "1A" again). The two themes play together with a stop-time accompaniment. Next comes the final mixing of "1A-R" and "1C," this time with an accompaniment based on the reversed previous stop-time pattern.

The final iteration of Theme "1A" has the fastest harmonic motion yet and leads to the closing section which consists of G-minor seventh and F sharp minor chords over a G pedal. The movement ends on an open fifth G chord.

Piccolos  
Flutes  
Oboes  
Clarinets

Bassoons

Horns in F

Trumpets

Trombone 1

Tuba

Timpani

Snare Bass Drum

Cymbals

Violins  
Violas

Cellos  
Contrabasses

G-7 F#-/G G-7 F#-/G G-7 F#-/G G-7 F#-/G G (no 3)

Ex. 127. The concluding measures of the first movement. Symphony No. 1, Movement I, mm. 212-216.



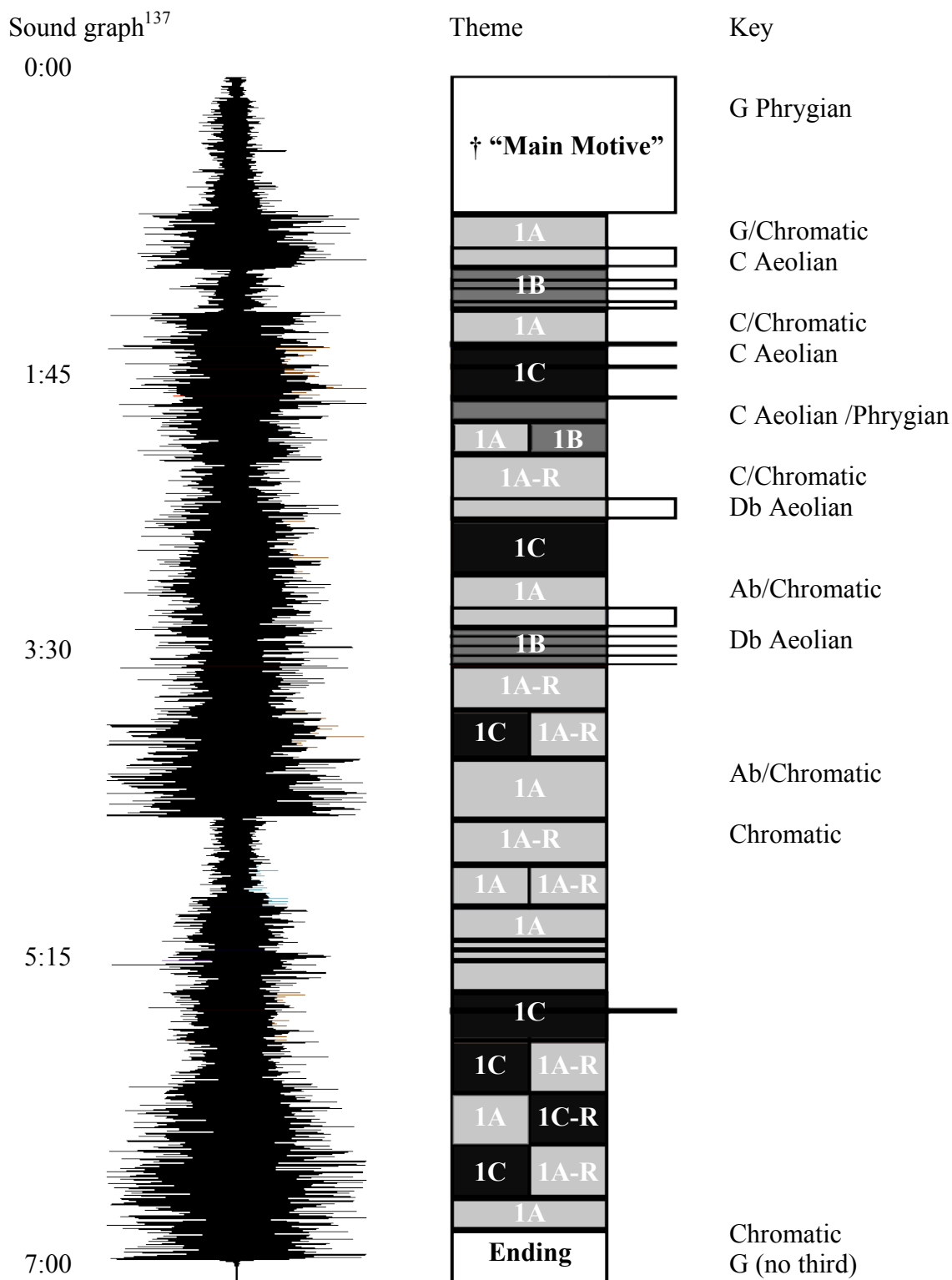


Figure 4. Sound graph, thematic use, and keys in Shaw, Symphony No. 1, movement I.  
 † A long box denotes strong use of the “Main Motive” (fourteen total).

<sup>137</sup> A digital waveform image of a computer rendition of the score.

## Movement II

Following Mennin's three-movement symphonic plan, the second movement of Shaw's Symphony No. 1 is slow and lyrical. Like Mennin's second movement, this one contains one recurring chord progression (“Main Progression”) and two main themes, both of which develop throughout the movement.

The movement begins with the strings quietly playing the “Main Progression,” which is a chromatic chord series starting on E-flat major and ending on B major (see Ex. 128).

Violin 1  
Violin 2  
Viola  
Cello  
Contrabass

*mp* *mf* *mp* *mf* *mp* *mf* *mp* *mf*

Eb2 D7#9 Dbsus4b5 C-7b6 Eb2 D7#9 Dbsus4b5 Ab-/Db C-7b5 D°/C C°

Vln. 1  
Vln. 2  
Vla.  
Vlc.  
Cb.

*f* *mf* *f* *mf* *ff* *f*

B/D# A B/D# F B/D# A B

Ex. 128. The "Main Progression" and opening measures of the second movement.  
Symphony No. 1, Movement II, mm. 1-8.

After this introduction, a solo flute presents the first theme, "2A," accompanied by the strings playing the "Main Progression." Four and one quarter measures later the first oboe begins its own sounding of the first theme, though transposed up a minor third (see Ex. 129).

Flute 1

Oboe 1

Fl. 1

Ob. 1

Fl. 1

Ob. 1

*mf*

*mf*

Ex. 129. Theme "2A" played by the first flute in counterpoint with itself by four and a quarter measures, played by the first oboe. Symphony No. 1, Movement II, mm. 8-16.

Delaying this second entrance of Theme "2A" by an uneven number of measures inverts the phrase's rhythm and hides its identity, making it sound more like a countermelody than an echo of the first theme.

Next, the first and third horns present the second theme, "2B," accompanied by the low brass and timpani (see Ex. 130).

Horn in F  $\frac{1}{3}$

*f*

Hn.  $\frac{1}{3}$

Ex. 130. Theme "2B" played by the horns. Symphony No. 1, Movement II, mm. 16-23.

Although this theme is in E-flat minor with occasional major third intervals, the harmony is pantriadic and combined with various pedals (see Ex. 131).

Trombones

Tuba

*mf*

Ab- B° B G Eb Gb Db Ab Gb Db Ab

Eb

Tbn.

Tba.

E- B° B D° Eb B Gb- Db Ab

Db Eb

Ex. 131. Pantriadic pedal point to Theme "2B." Symphony No. 1, Movement II, mm. 17-23.

Next, the cellos play a rhythmically augmented version of "2A," which serves as the bass line to a homophonic accompaniment by the trombones and first violins (see Ex. 132).

Ex. 132. Theme "2A" with rhythmic augmentation played by the cellos. Symphony No. 1, Movement II, mm. 23-33.

As more brasses enter, this section grows into the "Main Progression" and becomes the first climax of the movement (see Ex. 133).

Ex. 133. Development of the "Main Progression." Symphony No. 1, Movement II, mm. 34-38.

After the luftpause, the texture thins to just the first oboe playing "2B" in B-flat minor and supported by the strings. The string accompaniment at this point is very different from the previously homophonic texture (see Ex. 134).

The image displays a musical score for four string instruments: Violin 1, Violin 2, Viola, and Cello. The score is written in B-flat minor (three flats) and common time (C). The tempo/mood is marked *mp* (mezzo-piano). The score consists of four measures, numbered 39 to 42. Each instrument part features a rhythmic pattern of eighth notes, with the Viola and Cello parts showing a more complex, arpeggiated texture characteristic of an Alberti-style accompaniment. The Violin parts play a simpler, more melodic line. The overall texture is homophonic and supports the first oboe's melody.

Ex. 134. Alberti-style string accompaniment. Symphony No. 1, Movement II, mm. 39-42.

This quasi-Alberti figure transfers to the woodwinds in F minor and then moves back to the strings in E-flat minor, where it then accompanies Theme "2A" played by the first oboe. This section leads into a four voice contrapuntal setting of "2A" played by the first flute, first oboe, and both bassoons. This section of counterpoint is at the interval of a unison, and delayed by three beats for each entrance (see Ex. 135).

The image displays three systems of musical notation for woodwind instruments, specifically focusing on a three-beat counterpoint of Theme "2A." The notation is arranged in three systems, each containing four staves: Flute 1, Oboe 1, Bassoon 1, and Bassoon 2. The key signature is one flat (B-flat), and the time signature is common time (C). The first system shows the initial entry of the counterpoint, with dynamic markings of *f* (forte) for Flute 1, Oboe 1, and Bassoon 1. The second system continues the counterpoint, with the Bassoon 2 staff also marked *f*. The third system shows the counterpoint concluding with a final note in the Bassoon 2 staff.

Flute 1

Oboe 1

Bassoon 1

Bassoon 2

Fl. 1

Ob. 1

Bsn. 1

Bsn. 2

Fl. 1

Ob. 1

Bsn. 1

Bsn. 2

Ex. 135. Three beat counterpoint of Theme "2A." Symphony No. 1, Movement II, mm. 52-60.



Next, the basses and cellos take the lead with Theme "2A" harmonized by the oboes, clarinets, and the rest of the strings. This proceeds into the second and final climax of the movement performed by the brasses with embellishments by the piccolo, first flute and first and third horns (see Ex. 136).

Piano Reduction

*ff*

Eb-#5 A/B G/B Gb-7 Ab° E-(M7) C7b5 Ab7/C Dbsus Ebsus/Ab

Piano Reduction

Db/F G Db/F B Db/F G Db/F B Gb-7 *sfz*

Ex. 136. The second climax of the second movement. Symphony No. 1, Movement II, mm. 66-73.

A final playing of Theme "2B," now centered on F-sharp, leads to a recapitulation of previous material, by way of a series of suspensions (see Ex. 137).

Piccolo

Flute 1

Horn in F  $\frac{1}{3}$

Horn in F  $\frac{2}{4}$

E° F# D D<sup>4-5</sup> G<sup>2-1</sup> D<sup>4-3</sup> C#-4-3 G<sup>6-5</sup> D E A D#° E

Ex. 137. A series of suspensions. Symphony No. 1, Movement II, mm. 82-84.

The recapitulative section repeats the four-and-a-quarter measure counterpoint of Theme "2A" all up a perfect fourth. The final measures consist of the second half of the "Main Progression" quietly played over an E pedal point and then an E major triad played only by the strings and timpani (see Ex. 138).

Flute 1 *mp* *f* *mp*

Flute 2 *mp* *f* *mp*

Cl. in Bb 1 *mp*

Cl. in Bb 2 *mp*

Bassoon 1 *f*

Bassoon 2 *mp*

Timpani *mp* *mp*

Violin 1 *p*

Violin 2 *pp* *p*

Viola *pp* *p*

Cello *pp* *p*

Contrabass *pp* *mf*

E D E Bb E D E

E pedal

Ex. 138. The concluding measures of the second movement. Symphony No. 1, Movement II, mm. 94-98.

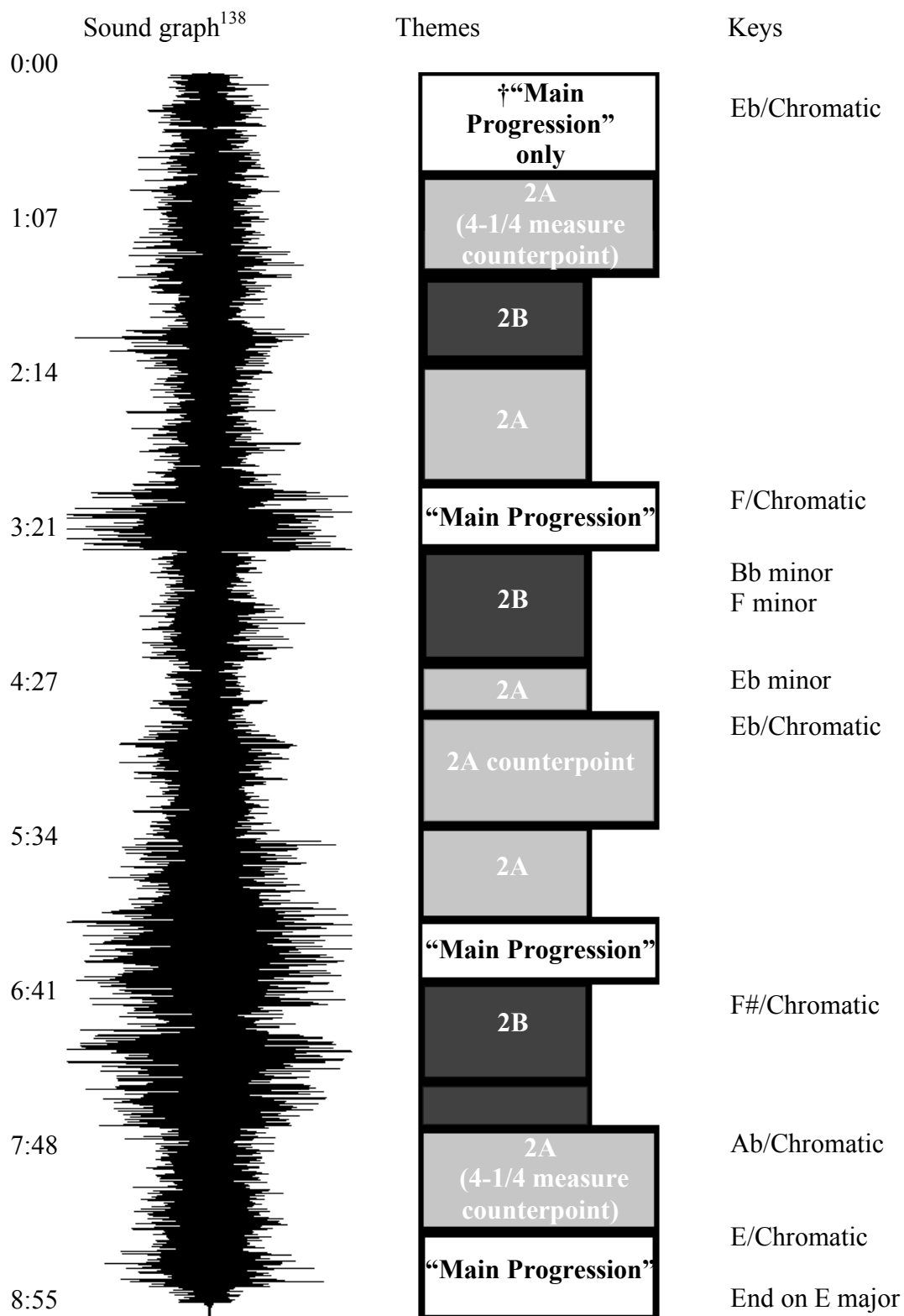


Figure 5. Sound graph, thematic use, and keys in Shaw, Symphony No. 1, movement II.  
 † A long box denotes strong use of the “Main Progression” (seven total).

<sup>138</sup> A digital waveform image of a computer rendition of the score.

### Movement III

The third and final movement of Symphony No. 1 is quick, dynamic, and the most dissonant. It contains six themes, all of which develop and pass throughout the orchestra. Unlike the first two movements, the third does not contain a “Main Motive” or “Main Progression” to tie the themes together. To unify the work, though, it uses a recurring, syncopated, dotted-quarter-eighth figure (designated the “Main Rhythm”).

This movement moves at a frantic pace and has four contrasting sections, with the first and last being similar. Each section treats various themes in different ways and against various accompaniment textures.

The movement begins with a loud, sforzando-like swell in the brasses and timpani (see Ex. 139).

The image displays a musical score for the opening of Movement III, featuring four staves: Horns in F, Trumpets in C, Trombones, and Timpani. The time signature is 2/4. The Horns and Trumpets staves are in treble clef, while the Trombones and Timpani staves are in bass clef. The Horns and Trumpets staves show a dynamic swell from *pp* (pianissimo) to *mf* (mezzo-forte). The Trombones staff shows a dynamic swell from *pp* to *ff* (fortissimo). The Timpani staff shows a dynamic swell from *pp* to *f* (forte). The score includes a crescendo hairpin for the brasses and a similar hairpin for the timpani, indicating a powerful, sforzando-like swell.

Ex. 139. Opening sforzando in the brasses and timpani. Symphony No. 1, Movement III, mm. 1-2.

These dissonant swells occur frequently in the movement and add to its frantic nature.

The preceding example consists of a respelled fully diminished chord starting on A-flat with an added major ninth.

Immediately after the brasses begin playing, the flutes, oboes, and clarinets burst in with the first theme, "3A" (see Ex. 140).



Ex. 140. Theme "3A" played by the flutes, oboes, and clarinets. Symphony No. 1, Movement III, mm. 1-9.

The basis of this theme is G minor with alternate intervals. However, the strings provide a chromatic accompaniment by playing two opposite polychords in a pattern which contains the movement's syncopated "Main Rhythm" of a dotted quarter and an eighth (see Ex. 141).

The image displays two systems of a musical score for a string ensemble, specifically Violin 1, Violin 2, Viola, Cello, and Contrabass. The music is in 2/4 time and features a syncopated 'Main Rhythm' consisting of a dotted quarter note followed by an eighth note. The first system (mm. 1-9) begins with a forte (*f*) dynamic marking. The second system continues the pattern. The chords indicated at the bottom of the first system are G/Ab, Ab/G, Ab/G, Ab/G, G/Ab, and Ab/G. The chords indicated at the bottom of the second system are Ab/G, Ab/G, G/Ab, Ab/G, Ab/G, Ab/G, and G/Ab.

Ex. 141. Strings playing an accompaniment to Theme "3A," containing the movement's syncopated "Main Rhythm" of a dotted quarter and an eighth. Symphony No. 1, Movement III, mm. 1-9.

After Theme "3A" and another brass swell, the bassoons play an ostinato borrowed from the first movement (see Ex. 142 below and Ex. 117, page 152).

The image displays two staves of musical notation in bass clef, 2/4 time. The top staff is labeled 'Bassoons' and the bottom staff is labeled 'Bsn. 1'. Both staves play a rhythmic ostinato. The Bassoons part begins with a rest followed by a triplet of eighth notes (G2, A2, B2) marked with a forte (ff) dynamic. The Bsn. 1 part begins with a triplet of eighth notes (G2, A2, B2) marked with a forte (f) dynamic. The notation includes various accidentals (sharps, flats, naturals) and slurs to indicate the specific notes and phrasing of the ostinato.

Ex. 142. Ostinato borrowed from the first movement. Symphony No. 1, Movement III, mm. 9-17.

Although the notes of the ostinato mostly fit into G Phrygian, the strings continue to accompany it with their chromatic, polychordal material. Additionally, the percussion enter to accentuate the pulse. After another brass swell, the flutes, oboes, clarinets, and now bassoons, play "3A" once more to the same accompaniment, including percussion.

Next, the strings continue their polychordal texture, but with new chromatic harmony (see Ex. 143); this sets up the second theme, "3B," played by the piccolo, flutes, and first oboe (see Ex. 144).



The image displays three systems of musical notation for a string quartet (Violin 1, Violin 2, Viola, and Cello/Contrabass). The music is in 2/4 time and features a syncopated "Main Rhythm." The first system shows a melodic line in the Violin 1 and Viola parts, with the Cello/Contrabass providing a rhythmic accompaniment. The second and third systems show a more complex rhythmic pattern with various chords and dynamics.

**System 1:**

- Violin 1:  $F\#-7$   $Ab/G$   $F\#-7$   $Bb-/A$
- Violin 2:  $F\#-7$   $Ab/G$   $F\#-7$   $Bb-/A$
- Viola:  $F\#-7$   $Ab/G$   $F\#-7$   $Bb-/A$
- Cello/Contrabass:  $F\#-7$   $Ab/G$   $F\#-7$   $Bb-/A$

**System 2:**

- Vln. 1:  $F\#-7$   $Ab/G$   $F\#-7$   $Bb-/A$   $F\#-7$   $Ab/G$   $G/Ab$   $Ab/G$
- Vln. 2:  $F\#-7$   $Ab/G$   $F\#-7$   $Bb-/A$   $F\#-7$   $Ab/G$   $G/Ab$   $Ab/G$
- Vla.:  $F\#-7$   $Ab/G$   $F\#-7$   $Bb-/A$   $F\#-7$   $Ab/G$   $G/Ab$   $Ab/G$
- Vlc. Cb.:  $F\#-7$   $Ab/G$   $F\#-7$   $Bb-/A$   $F\#-7$   $Ab/G$   $G/Ab$   $Ab/G$

**System 3:**

- Vln. 1:  $G...$   $G/Gb$   $F...b9$   $A\ min/E$   $E-7$   $Bb-/F$   $E-7$   $Bb-/F$
- Vln. 2:  $G...$   $G/Gb$   $F...b9$   $A\ min/E$   $E-7$   $Bb-/F$   $E-7$   $Bb-/F$
- Vla.:  $G...$   $G/Gb$   $F...b9$   $A\ min/E$   $E-7$   $Bb-/F$   $E-7$   $Bb-/F$
- Vlc. Cb.:  $G...$   $G/Gb$   $F...b9$   $A\ min/E$   $E-7$   $Bb-/F$   $E-7$   $Bb-/F$

Ex. 143. Strings playing an accompaniment to Theme "3B," containing the movement's syncopated "Main Rhythm." Symphony No. 1, Movement III, mm. 25-44.

Piccolo  
Flutes  
Oboe 1

Picc.  
Fl.  
Ob. 1

Picc.  
Fl.  
Ob. 1

Ex. 144. Theme "3B" played by the piccolo, flutes, and first oboe. Symphony No. 1, Movement III, mm. 34-50.

Theme "3B" is less melodic, but more harmonic than the first theme; its linear notes generally outline pantriadic harmony.

Theme "3A" plays one more time as before and then the string accompaniment changes (see below). A single oboe plays the next theme, "3C1" (see Ex. 145), which is part of a group of three related themes ("3C1," "3C2," and "3C3") that play against each other later. These themes also generally have the same accompaniment.

Oboe 1

Ob. 1

Ex. 145. Theme "3C1" played by the first oboe. Symphony No. 1, Movement III, mm. 59-74.

Theme "3C1" is in C Dorian, but is harmonized against a monophonic, though pantriadic, line by the violas and cellos (see Ex. 146).

Viola  
Cello

*f*

CM7 Eb(add 9) DM7 F(add 9) CM7 Eb(add 9) DM7 F(add 9)

Ex. 146. Accompaniment to Theme "3C1" played by the violas and cellos. Symphony No. 1, Movement III, mm. 58-65.

Theme "3D" follows, played by the brasses (see Ex. 147).

Trumpets  
Horns

*f*

E F# E C E C# G# D#

F

Tpt.  
Hn.

Tbn.  
Tba.

E F# E C E C# G# D#

F

Ex. 147. Theme "3D" played by the brasses. Symphony No. 1, Movement III, mm. 74-90.

Theme "3D" is a pantriadic, chordal theme over a chromatic pedal with every other measure matching the "Main Rhythm." Meanwhile, the violas and cellos have been continuing their previous pantriadic accompaniment.

Next, the violas continue without the cellos and the piccolo, and the bassoons briefly play the ostinato borrowed from the first movement. Afterwards, the cellos and contrabasses rejoin the accompaniment of the viola. Also, the first trumpet presents Theme "3C2" in C Dorian (see Ex. 148), but with the continued chromatic accompaniment.



The image displays a musical score for two brass sections: Trumpets/Horns and Trombones/Tuba. The music is in 2/4 time and features a chromatic pedal line. The notes for the pedal are Db, Eb, Db, A, Db, Bb, F, and C. The top system is marked *ff* (fortissimo). The bottom system shows the continuation of the pedal line. The score is for Ex. 149, which is a transposed version of Theme "3D" with a changed chromatic pedal.

Ex. 149. Transposed Theme "3D" with a changed chromatic pedal. Symphony No. 1, Movement III, mm. 114-130.

As the brasses play Theme "3D" transposed, the string accompaniment merges in Theme "3B" and grows into a pattern of tone clusters produced through individual lines (see Ex. 150).

The image displays a musical score for five string instruments: Violin 1, Violin 2, Viola, Cello, and Contrabass. The score is written in 2/4 time and features a key signature of one flat (B-flat). The first system (measures 115-122) includes dynamic markings such as *f*, *Pizz.*, and *ff*. The second system (measures 123-130) continues the polyphonic texture. The notation shows complex rhythmic patterns and tone clusters across the staves.

Ex. 150. Tone clusters based on Theme "3B" and produced through polyphony.  
Symphony No. 1, Movement III, mm. 115-122.

Next, to round off this movement's first section, all the woodwinds play Theme "3A" twice, first transposed up a major third to B minor, and then from there transposed down a perfect fifth. Theme "3B" follows also transposed up a major third.

As a transition to the movement's second section, the driving rhythm stops and the brasses play a large, dynamic polychord (see Ex. 151).

The musical score for Ex. 151 is written for a full orchestra. It consists of six staves: Horns/Trumpets, Trombones/Tuba, Timpani, Cymbals, Violin/Viola, and Cello/Contrabass. The music is in 2/4 time. The brasses (Horns/Trumpets and Trombones/Tuba) play a large, dynamic polychord, with dynamics ranging from *pp* to *ff*. The timpani and cymbals provide a rhythmic accompaniment, with the cymbals playing a *f* dynamic. The strings (Violin/Viola and Cello/Contrabass) play a sustained accompaniment, with the cello/contrabass playing a *mf* dynamic. The score includes various dynamic markings and articulations, such as *pp*, *ff*, *ppp*, *f*, and *mf*.

Ex. 151. Transition to the second section. Symphony No. 1, Movement III, mm. 171-175.

This dissonant structure gives way to the new string accompaniment pattern consisting of two ostinatos in E Phrygian (see Ex. 152), which supports most of the second section.

Violin 1

Violin 2

Viola

Cello

*f*

E phrygian

E phrygian

Vln. 1

Vln. 2

Vla.

Vlc.

E phrygian

E phrygian

Vln. 1

Vln. 2

Vla.

Vlc.

Ex. 152. Two ostinatos in E Phrygian. Symphony No. 1, Movement III, mm. 183-198.

As the string accompaniment continues, a solo flute plays Theme "3A" in A minor (matching the accompaniment's E Phrygian). Next, the first trumpet plays the same



theme up a perfect fourth while only the upper part of the accompaniment changes to match keys (see Ex. 153).

The musical score for Ex. 153 is presented in two systems. The first system includes parts for Trumpet in C 1, Violin, Viola, and Contrabass. The second system includes parts for C Tpt. 1, Vln., Vla., and Cb. The Violin and Viola parts feature sustained chords, while the Contrabass and Cb. parts feature rhythmic patterns. The Trumpet and C Tpt. 1 parts play the Theme '3A'.

Ex. 153. Theme "3A" in the first trumpet and mixed modal ostinatos in the strings.  
Symphony No. 1, Movement III, mm. 199-206.

The accompaniment then moves to D Phrygian and the piccolo and first oboe play Theme "3C1" in that key. Halfway through this theme, the bassoons join in and the first violins integrate a fragment of Theme "3A" (see Ex. 154).

Second half of Theme "3C1"

Piccolo  
Oboe 1  
Bassoon 1

*ff*

Theme "3A"

Violin I

*mf*

Viola

Cello  
Contrabass

The image displays a musical score for a symphony. The top system includes staves for Piccolo, Oboe 1, Bassoon 1, Violin I, Viola, and Cello/Contrabass. The key signature has one flat (B-flat), and the time signature is 2/4. The Piccolo, Oboe 1, and Bassoon 1 parts play a melody marked *ff* (fortissimo). The Violin I part plays a melody marked *mf* (mezzo-forte). The Viola and Cello/Contrabass parts provide a rhythmic accompaniment. The bottom system continues the same instrumentation, with the Piccolo, Oboe 1, and Bassoon 1 parts playing a sustained chord. The Violin I part continues its melody, and the Viola and Cello/Contrabass parts continue their accompaniment.

Ex. 154. Second half of Theme "3C1" with Theme "3A." Symphony No. 1, Movement III, mm. 215-222.

Afterwards, the accompaniment returns to E Phrygian and the first trumpet introduces a new theme, "3C3," in that key (see Ex. 155).

Trumpet in C 1

*ff*

C Tpt. 1

Ex. 155. Theme "3C3" played by the first trumpet. Symphony No. 1, Movement III, mm. 223-238.

Next, the first flute and oboes play Themes "3C1," "3C2," and "3C3" together, creating pandiatonic counterpoint in the key of D Phrygian. However, in conjunction with these three themes, the strings play a chromatic accompaniment based on, and including, Theme "3B" (see Ex. 156).

Flute 1  
Theme "3C3"  
*ff*

Oboe 1  
Theme "3C2"  
*ff*

Oboe 2  
Theme "3C1"  
*ff*

Violin 1  
Theme "3B"  
Pizz.  
*ppp*

Violin 2  
Viola  
Pizz.  
*ppp*

Fl. 1  
*ff*

Ob. 1  
*ff*

Ob. 2  
*ff*

Vln. 1  
*mp*

Vln. 2  
Vla.  
*mp*

Ex. 156. Combination of Themes "3C1," "3C2," "3C3," and "3B." Symphony No. 1, Movement III, mm. 239-254.

Halfway through this combination of themes, the clarinets, bassoons, cellos, and contrabasses integrate the "Main Rhythm."

Finally, to end this second section of the movement, Theme "3D" returns twice, first in the woodwinds and then joined by the brasses. The first time through, the strings accompany with the polyphonic tone clusters based on Theme "3B." The second time, they play the opening accompaniment material to Theme "3A" (see Ex. 157).

The image displays three systems of musical notation for a symphony. Each system includes staves for Woodwinds, Brasses, and Strings. The music is written in 2/4 time and features a complex, rhythmic pattern. The woodwinds and brasses play a series of chords and single notes, while the strings provide a continuous accompaniment. The notation includes various musical symbols such as notes, rests, and dynamic markings. The first system shows the initial development of the theme, with the woodwinds and brasses playing a series of chords. The second system shows the theme being developed further, with the woodwinds and brasses playing a series of chords and single notes. The third system shows the theme being developed further, with the woodwinds and brasses playing a series of chords and single notes.

Ex. 157. Development of Theme "3D" by the woodwinds and brasses combined with string accompaniment, all punctuating the "Main Rhythm." Symphony No. 1, Movement III, mm. 270-286.

Tone clusters then help make the transition to the third section (see Ex. 158).

The musical score for Ex. 158 is written for a full orchestra. The key signature is one sharp (F#) and the time signature is 2/4. The score is divided into two systems of staves. The first system includes Piccolo Flute, Oboe, Clarinet in Bb, Bassoon, Horn Trumpet, Trombone, Timpani, Snare Bass Drum, Cymbals, Violin Viola, and Cello Contrabass. The second system includes the same instruments. The music features various dynamics and articulations, including *ff*, *sffz*, *pp*, *cresc.*, *f*, *ppp*, and *sfz*. The Piccolo Flute and Oboe parts are marked *ff* and *sffz*. The Clarinet in Bb and Bassoon parts are marked *ff*. The Horn Trumpet and Trombone parts are marked *pp*, *cresc.*, *f*, and *ppp*. The Timpani part is marked *sfz*. The Snare Bass Drum part is marked *f*. The Cymbals part is marked *f*. The Violin Viola and Cello Contrabass parts are marked *f*.

Ex. 158. Tone clusters in the transition to the third section. Symphony No. 1, Movement III, mm. 296-299.

Tone clusters also occur later, played by muted brasses (see Ex. 159).

The musical score is divided into two systems. The first system includes the following parts:

- Horn 1 in F 3
- Horn 2 in F 4
- Trumpet 1 in C
- Trumpet 2 in C 3
- Trombone 1
- Trombone 2 3

The second system includes the following parts:

- Hn. 1 3
- Hn. 2 4
- C Tpt. 1
- C Tpt. 2 3
- Tbn. 1
- Tbn. 2 3

Dynamic markings and other annotations include:

- pp* (pianissimo) for Horn 1, Horn 2, Trumpet 1, and Trombone 1.
- mf* (mezzo-forte) for Trombone 2 3.
- f* (forte) for Trombone 2 3.
- Sord.* (Sordina) for Horn 1, Horn 2, Trumpet 1, and Trombone 1.
- p* (piano) for Trumpet 2 and Trombone 1.

Ex. 159. Tone clusters in the muted brasses. Symphony No. 1, Movement III, mm. 306-328.

Next, various instruments play multiple theme fragments. The accompaniment to this develops into overlapping modal and chromatic ostinatos played by the strings above an E pedal (see Ex. 160).

The musical score for strings in Symphony No. 1, Movement III, mm. 329-346, is presented in two systems. The first system includes Violin 1, Violin 2, Viola, Cello, and Contrabass. Violin 1 plays a sustained E pedal. Violin 2, Viola, Cello, and Contrabass play overlapping modal and chromatic ostinatos. The Viola part is marked 'Pizz. p' and 'Chromatic'. The Cello and Contrabass parts are marked 'E Aeolian with alteration' and 'Chromatic'. The Violin 2 part is marked 'Pizz.' and 'Chromatic'. The Viola part is marked 'p' and 'Chromatic'. The Cello and Contrabass parts are marked 'Chromatic'.

The second system includes Violin 1, Violin 2, Viola, Cello, and Contrabass. Violin 1 plays a sustained E pedal. Violin 2, Viola, Cello, and Contrabass play overlapping modal and chromatic ostinatos. The Viola part is marked 'Chromatic' and 'mp'. The Cello and Contrabass parts are marked 'E Aeolian with alteration' and 'Chromatic'. The Violin 2 part is marked 'Chromatic' and 'mp'. The Viola part is marked 'Chromatic' and 'mp'. The Cello and Contrabass parts are marked 'Chromatic'.

Ex. 160. Overlapping modal and chromatic ostinatos in the strings. Symphony No. 1, Movement III, mm. 329-346.



The first full theme to play in this section is "3C2" by the first oboe. Its notes are in C Dorian, but the harmony centers on an E-natural pedal. A muted first trumpet then plays Theme "3C1" in the same mode and is joined later by the flutes.

Next, the piccolo and first oboe contrapuntally play fragments of Theme "3A," separated by one beat and the interval of a minor second. The first clarinet and bassoon then do the same, though separated by the interval of a major third (see Ex. 161).

The image displays a musical score for four instruments: Piccolo, Oboe 1, Clarinet in Bb 1, and Bassoon 1. The score is organized into two systems. The first system shows the Piccolo and Oboe 1 staves with a one-beat counterpoint of Theme "3A" in a minor second interval, marked with *ff*. The Clarinet in Bb 1 and Bassoon 1 staves show the same counterpoint in a major third interval, also marked with *ff*. The second system shows the Piccolo and Oboe 1 staves with whole rests, while the Clarinet in Bb 1 and Bassoon 1 staves continue the counterpoint. The Bassoon 1 staff has a triple marking over the final measure.

Ex. 161. One beat counterpoint of Theme "3A." Symphony No. 1, Movement III, mm. 375-384.

After this, the first trumpet and horns alternate playing parts of Theme "3C2" while the first trombone integrates fragments of the ostinato borrowed from the first movement (see Ex. 162).

The musical score for Ex. 162 is divided into three systems, each spanning four measures. The key signature has two flats (B-flat and E-flat), and the time signature is 2/4.

- System 1:**
  - Trumpets/Horns:** Trumpet 1 plays Theme "3C3" (labeled *ff*) in the first measure, while Horns play Theme "3C2" (labeled *ff*) in the fourth measure. Both are marked "Senza sord." (without mutes).
  - Trombone 1:** Plays a sixteenth-note ostinato pattern starting in the third measure, labeled "Ostinato Fragments".
  - Violin 2/ Viola:** Play a sixteenth-note arpeggiated pattern, marked "Arco" and *f*.
  - Cello/Contrabass:** Play a sixteenth-note arpeggiated pattern, marked *ff*.
- System 2:**
  - Trumpet 1:** Plays Theme "3C2" (labeled *ff*) in the fourth measure.
  - Trombone 1:** Continues the ostinato pattern, marked *ff*.
  - Violin 2/ Viola:** Continues the arpeggiated pattern.
  - Vlc. Cb.:** Continues the arpeggiated pattern, marked *ff*.
- System 3:**
  - Trumpet 1:** Continues Theme "3C2" (labeled *ff*).
  - Horns:** Play Theme "3C2" (labeled *ff*) in the fourth measure.
  - Trombone 1:** Continues the ostinato pattern.
  - Violin 2/ Viola:** Continues the arpeggiated pattern.
  - Vlc. Cb.:** Continues the arpeggiated pattern, marked *ff*.

Ex. 162. Chromatically rising Theme "3C2" and ostinato. Symphony No. 1, Movement III, mm. 385-403.

The harmony to this part chromatically climbs from a center of E to a center of G and leads to another blending of Themes "3C1," "3C2," "3C3," and "3B."

The conclusion of this section begins with Theme "3B" in the piccolo, flutes, first oboe, and first violins, with a syncopated, chromatic accompaniment by the second violins and violas. This theme repeats in retrograde ("3B-R"), as does its accompaniment, which then grows into a retrograde of the original accompaniment to "3B " (now with a reversed "Main Rhythm"). At the same time, the bassoons and brasses add chromatically rising harmony (see Ex. 163).

The image displays three systems of musical notation for an orchestral score. Each system consists of multiple staves for different instruments. The first system includes Piccolo, Flute, Oboe 1, Horn, Trumpet, Trombone, Violin, Viola, Bassoon, Tuba, Cello, and Contrabass. The second system includes Piccolo, Flute, Oboe 1, Horn, Trumpet, Trombone, Violin, Viola, Bassoon, Tuba, Cello, and Contrabass. The third system includes Piccolo, Flute, Oboe 1, Horn, Trumpet, Trombone, Violin, Viola, Bassoon, Tuba, Cello, and Contrabass. The score features a retrograde of Theme '3B' and its accompaniment, with chromatically rising harmony in the bassoons and brasses. Dynamics include *ff*, *f*, and *sfz*. The notation includes various musical symbols such as notes, rests, and dynamic markings.

Ex. 163. Retrograde of both Theme "3B" and its accompaniment, and chromatically rising harmony in the bassoons and brasses. Symphony No. 1, Movement III, mm. 436-453.



Theme "3C2"

Trumpet in C 1

Trumpet 2 in C 3

Violin (15 va.)  
Viola (15 va.)  
Trombone

Tuba  
Cello  
Contrabass

**Bb: I** **vii°** **iii** **V42** **vi9** **I64** **iii** **I64**

C Tpt. 1

C Tpt. 2

Vln. (15 va.)  
Vla. (15 va.)  
Tbn. 1

Tba.  
Vlc.  
Cb.

**I** **I6** **vi7** **ii9** **V** **V42** **iii** **ii6** **V64**

C Tpt. 1

C Tpt. 2

Vln. (15 va.)  
Vla. (15 va.)  
Tbn. 1

Tba.  
Vlc.  
Cb.

**IV6** **ii64** **V** **iii** **ii64** **ii** **vi** **ff** **vi65**

Ex. 165. Diatonic brass fanfare of Theme "3C2." Symphony No. 1, Movement III, mm. 495-510.



This driving accompaniment continues as the violins and woodwinds play two repetitions of Theme "3A" that are a perfect fifth apart and again connected with elision. The movement concludes with a repeated two-measure motive of "3A," building to the final G-minor chord. The movement ends loudly and suddenly (see Ex. 167).



Piccolo  
Flutes  
Oboes  
Clarinets

Horns  
in F

Trumpets

Trombones

Violins  
Violas

Bassoons  
Tuba  
Cellos  
Contrabasses

Piccolo  
Flutes  
Oboes  
Clarinets

Horns  
in F

Trumpets

Trombones

Violins  
Violas

Bassoons  
Tuba  
Cellos  
Contrabasses

Ex. 167. The concluding measures of the third movement. Symphony No. 1, Movement III, mm. 535-543.

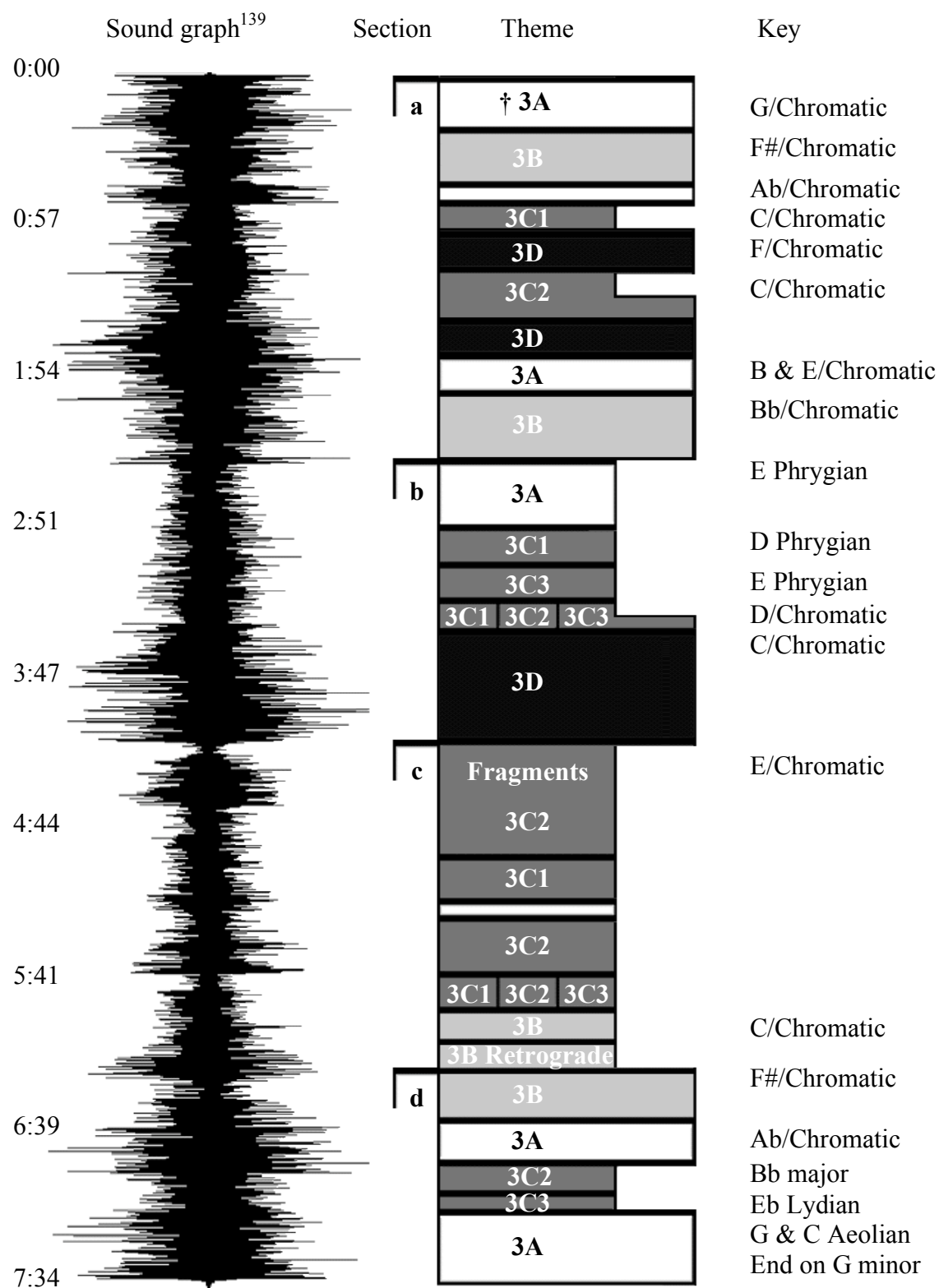


Figure 6. Sound graph, thematic use, and keys in Shaw, Symphony No. 1, movement III.  
 † A long box denotes strong use of the "Main Rhythm" (thirteen total).

<sup>139</sup> A digital waveform image of a computer rendition of the score.