A COMPARATIVE STUDY ON THE THEMATIC AND MOTIVIC DEVELOPMENT OF GUSTAV MAHLER'S SYMPHONY NO. 4, FIRST MOVEMENT, AND NIKOLAY RIMSKY-KORSAKOV'S SYMPHONY NO. 3, FIRST MOVEMENT

by

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ABSTRACT

Nikolay Rimsky-Korsakov and Gustav Mahler utilize similar compositional techniques in their symphonic works but employ them in different ways. Mahler and Rimsky-Korsakov utilize compositional devices including, but not limited to, fragmentation, repetition, expansion, contraction, imitation, and inversion. This comparative analysis examines Rimsky-Korsakov's Symphony No. 3, first movement and Mahler's Symphony No. 4, first movement. The analysis also provides an insight on how development of themes and motives fit within the structure of the sonata form derived from the late classical era throughout the romantic era of music to show a framework for how themes and motives develop throughout the opening movements of both symphonic works utilizing compositional devices.

Keywords: Nikolay Rimsky-Korsakov's Symphony No. 3, Gustav Mahler's Symphony No. 4, Compositional Devices, Compositional Techniques, Thematic Development, Motivic Development, Sonata Form, Romantic Music.

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PREFACE

Musical examples are show throughout the analysis as a piano reduction and in concert pitch. Separated by symphony, the appendix lists all examples in order of occurrence in-text (see Appendix D & Appendix E).

Unless indicated otherwise, the following scores were used to extract musical examples and referenced throughout the thesis:

Nikolaj Rimskij-Korsakow

Symphony No. 3 for Orchestra

Publisher: M.P. Belaieff & Mainz

Gustav Mahler

Symphony No. 4 for Orchestra

Publisher: Dover

CHAPTER 1: OVERVIEW

Overview of a Sonata

A sonata form is a single or multi-movement work for instrumental music. “Such a movement is most often part of a multi-movement instrumental cycle such as a sonata, piano trio or quartet, string quartet or quintet, symphony, etc., or an independent movement like an overture or tone poem” (Webster). Sonata form is one of the primary instrumental movement pieces established during the classical and romantic eras of music. The sonata takes on characteristics of developing musical content throughout three major sections of the movement.

The three major sections of the sonata form consist of the exposition, development, and recapitulation. Within the three sections of the sonata form, subsections, within each section hold musical material for what will become thematic, harmonic, tonal, and rhythmic basis of the symphonic works.

The framework of a sonata composed during the romantic era contains a few key fundamental characteristics. Repetition of thematic material is pivotal in the overall form of a sonata in addition to modulation to related tonalities, variations on themes, and contrasting musical ideas. Traditionally, the exposition begins in the tonic key, moving to the dominant key. The development then shifts to a plethora of related keys in the development. The recapitulation closes in the tonic key (see Table 1).

Table 1

Sonata Form Harmonic Structure

Exposition	**Development**	**Recapitulation**
I - V	V – variety of keys	I

In a first movement sonata form, the exposition possesses two sections. Within the two sections, two themes create two parts, often contrasting one another. The "statement of first group leading into modulation ending with emphatic break" (Rosen, p. 98) builds the first section. The second section is built on the "second group, rounded off by emphatic cadential themes or themes" (Rosen, p. 98). The first group contains the first theme in the tonic key and the second group has the second theme scored in the dominant key. In a typical sonata form movement, the form is based on a binary form within the exposition, development, and recapitulation (see Table 2).

Table 2

Sonata Form Thematic and Harmonic Structure

Introduction	Optional	Tonic
Exposition	|: A :||: B :|	|: Tonic :||: Dominant :|
Development	A &/or B Variations C (optional)	Dominant + Plethora of Related Keys
Recapitulation	A B	Tonic
Coda	Optional	Tonic

The “sonata finale form” occurs when the final movement of a symphonic work is a sonata. During the “sonata finale form,” emphasis placed on tonic relationships throughout the exposition and recapitulation are essential. The harmonic and thematic language of the “sonata finale form” resembles the thematic and harmonic structure of a rondo (see Table 3 and Table 4). In “sonata finale form,” the first theme returns to the tonic with the secondary themes scored in the dominant key. Rosen lays out the expectation of the “sonata finale form” as the following on page 118:

Table 3

Sonata Finale Form

A	B	A	C	A	B	A
I	V	I	Dev.	I	I	I

Table 4

Rondo Form

A	B	A	C	A	D	A
I	V	I	V/V	I	vi	I

Multiple expectations of the sonata form derived from the late classical and early romantic era of music take on an important role in how Mahler and Rimsky-Korsakov develop themes and motives throughout the opening movements in Mahler’s Symphony No. 4 and

Rimsky-Korsakov's Symphony No. 3. The contrasting themes and harmonic language indicate the resemblance of the sonata form.

In Rimsky-Korsakov's Symphony No. 3, the formal structure of the first movement resembles a quasi-sonata form (see Table 5). The opening movement of Symphony No. 3 features an exposition unearthing two themes. Both themes are repeated at least once. Rimsky-Korsakov develops the first and second themes by taking liberties in modulation and rhythmic alterations throughout the course of the development section. The absence of the second theme breaks the traditional expectations of the recapitulation.

Table 5

Rimsky-Korsakov's Symphony No. 3, first movement Sonata Overview

Section	**Exposition**	**Development**	**Recapitulation**	**Coda**
Keys Used	C Major C Minor	Major/Minor Forms of: E, F, D, Eb, C, G, Bb, and Ab	Eb Major C Minor	C Minor
Measures	1-189	190-632	633	655
Themes /Motives	All Themes Transitional Motive Solo Motive Ascension Motive Horn-Call Motive	All Themes All Motives	First Theme	First Theme

Mahler structures Symphony No. 4, first movement with the "sonata finale form" (see Table 3). Mahler continues to outline the movement despite scoring seven themes. Mahler opens the movement using an introduction that flows into the exposition, revealing each of the seven themes.

To advance the music forward, Mahler uses multiple major and minor tonalities in the development section. With seven themes in play, the resemblance of the "sonata finale form" provides a clear depiction of how each of the seven themes move across time, specifically, with the fragmentary bits from the second and sixth themes separating the first, third, and seventh themes during the development section (see Table 6).

With two themes, the scoring indicates the use of a first movement sonata form in Rimsky-Korsakov's Symphony No. 3, first movement. Singular themes returning constantly represents the "sonata finale form." Returning to themes presents with rondo-like qualities.

Table 6

Mahler's Symphony No. 4, first movement Sonata Overview

Section	**Introduction**	**Exposition**	**Development**	**Recapitulation**
Keys Used	G Major (I)	G major (I), D major (V)	G major, G minor, A minor, A major, etc.	G major
Measures	1-3	4-101	102-237	238
Themes /Motives	"Sleighbell Motive"	All 7 Themes	First, Second, Third, Sixth, and Seventh Themes	All 7 Themes First Theme Condensed Ends with the 3rd theme varied

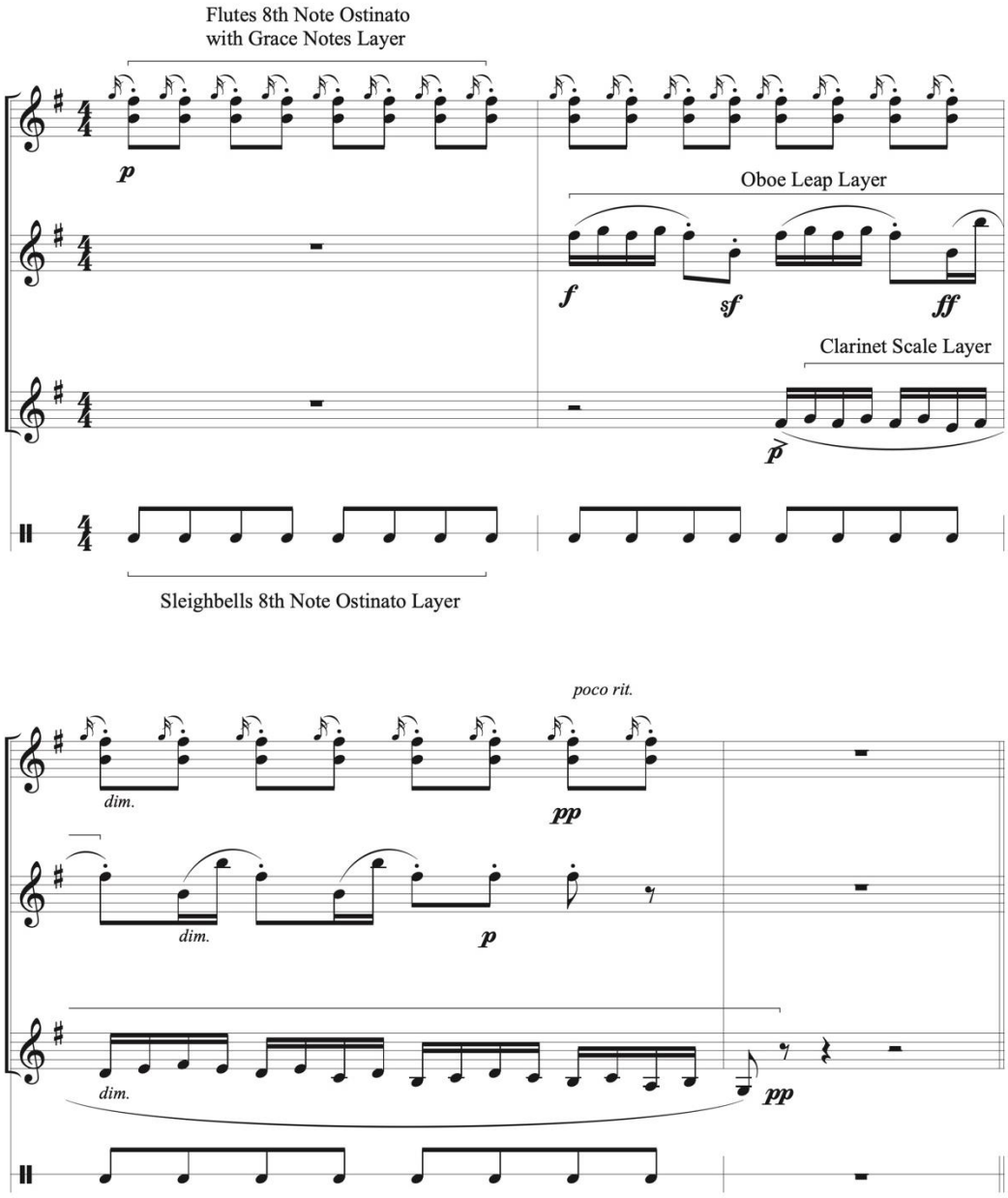
Introduction & Exposition

Introduction

The manner in which a sonata opens varies from sonata to sonata. Some sonatas open immediately with the first theme while others open with non-thematic musical material. The

presence of an introduction unfolds the harmonic language and pacing of the sonata. When no introduction is present, the sonata opens with the first theme of the sonata. Except when the repeat returns to the very beginning of the exposition, introductions of a sonata should not return during the rest of the movement.

Mahler's Symphony No. 4, first movement opens with an introduction in measure one referred to as the "sleighbell motive" (Example 1). Mahler's "sleighbell motive" resembles the opening of children's stories with the "once upon a time" line. The fairytale opening portrays a playful series of rhythmic layers. The incorporation of children's stories within Mahler's compositions occurs through the traumatic events of Mahler's youth as young Mahler would read folktales to his dying brother. In measure 72, the "sleighbell motive" returns bringing a new chapter with the continuation of the fairytale ideology (Example 62). Finally, the rhythmically energetic introduction establishes the foundation for the first major theme in measure three.



Example 1: mm. 1-4, Sleighbell Motive, Original Iteration

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Rimsky-Korsakov's does not utilize an introduction in Symphony No. 3, first movement. Instead, Rimsky-Korsakov opens with an andante variation of the first theme (Example 8). The

opening section is slow, evolving, and almost mysterious in nature before coming to life with the allegro section of the first theme in measure 50 (Example 2). In measure 50, the tempo increases, maintaining the rhythm of the first theme. With a more vigorous tempo, the intensity level of the music increases in regard to excitement, allowing for a significant contrast with the second theme

Rimsky-Korsakov takes considerable amount of time to introduce the second theme in measure 148. The exposition concludes following the only statement of the second theme.

Mahler, on the other hand, introduces all seven themes in a semi-sequential order. The first and second themes serve as transitions between other themes. Additionally, Mahler does not delay the onset towards the introduction of each theme. In the first 90 measures, Mahler scores all seven themes.

Themes

In the classical sonata form, the expectation on themes is the occurrence of two major themes, which contrast one another in any combination of tempo, volume, expression, energy, tonality, and so forth throughout the exposition section.

To break away from tradition, Mahler does not use two themes for the opening movement of Symphony No. 4. Instead, Mahler scores seven main themes. To maintain sonata expectations, Mahler does repeat themes one, two, four, and seven as foreshadow, fragmentary elements, as harmony, or as the full theme during the exposition. Mahler breaks traditional expectations by not repeating the third and fifth themes.

Additionally, each of the seven themes in Symphony No. 4, first movement, while similar to certain degrees, contrast significantly. The first theme is lyrical in nature at a brisk tempo, while the second theme is more technical, yet dance-like allowing for a contrast with the third

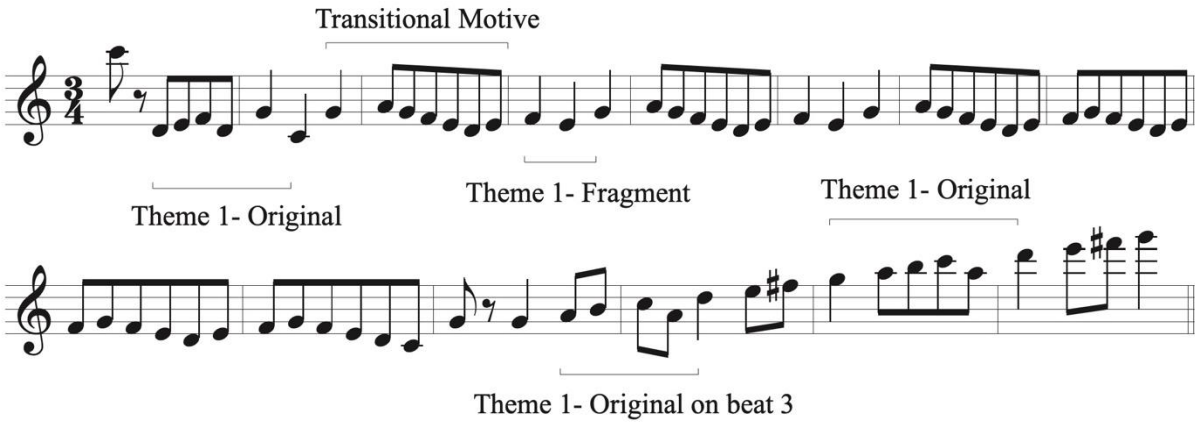
theme depicted with march-like qualities. The fourth and fifth themes are both slow and lyrical. Harmonically, the fourth and fifth themes contrast each other. The sixth theme is a quick and playful technical theme contrasting with the seventh theme, also a slow lyrical theme.

Rimsky-Korsakov does utilize the traditional approach of using two major themes throughout the exposition section. As far as contrasting themes are concerned, Rimsky-Korsakov fluctuates between utilizing fast and slow tempos between the first and second themes. The second theme, accompanied by the solo motive, are always at a more reserved tempo in comparison to the first theme, horn calls, and the ascension motive throughout the movement, showcasing contrasting styles across the two themes and motives.

Extensive development, reserved for the development, of themes from the exposition is not a prominent factor in the unfolding of the exposition. While some development of themes is natural during the exposition, Rimsky-Korsakov and Mahler execute extensive development of musical content throughout the exposition.

For Rimsky-Korsakov, development of the first theme occurs in measure 19 in the cellos and bassoons with four eighth notes occurring before the long note and leap (Example 10). A minor sixth interval replaces the perfect fifth in measure 20.

Rimsky-Korsakov continues to elaborate upon the first theme by morphing the first theme with the transitional motive, shown in measures 52, 54, and 56, creating another variation of the first theme while doubling as a variation on the transitional motive as shown in measure 50 when the tempo picks up (Example 2).



Example 2: mm. 50-60, Theme 1, Variation II

Source: Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Rimsky-Korsakov also repeats the ending of the phrase twice, building up the anticipation of the transitional motive. By reducing the rhythmic value of the half note to a quarter note on beat two of measure 51, the rhythm flows through the phrase in a technical style without dragging the first theme with longer notes at a quicker tempo. Serving as harmony, the timpani and horns acquire the sustained notes.

Mahler spends considerable time manipulating themes and motives extensively during the exposition section. One way Mahler manipulates motives during the exposition is by returning the introduction in measure 72 in an elongated phrase (Example 62). Mahler's development of themes during the exposition, the development occurs immediately following the first statement of the second theme in measure 11 with the inversion of the pitches of the antecedent of the second theme (Example 3). Mahler also utilizes foreshadowing techniques with the seventh theme to act as harmony towards the first theme, long before the introduction of the final major theme.

Example 3: mm. 11-13, Theme 2, Inverted Pitches

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Repetition

In the exposition section, repetition of the themes is a fundamental characteristic. In general, repetition is critical in the making of a sonata. However, there are no formalized ways to repeat the themes of the exposition. Repetition may occur immediately after the statement of each theme, following the second theme, or as a direct repetition of the entire exposition.

Rimsky-Korsakov treats both themes in accordance with the expectations of a sonata. The first theme in C major is more technical in nature than the lyrical second theme in E major.

Rimsky-Korsakov repeats the transitional motive and first theme extensively before the second theme comes into fruition in measure 148 (Example 11). The first time the first theme returns in the original iteration happens in measure ten. The second theme does not repeat following the original statement. Instead, Rimsky-Korsakov scores fragmentary bits from the second theme in measure 153 of Symphony No. 3, first movement.

Each theme repeats at least once in Mahler's Symphony No. 4, first movement in some capacity. Mahler rejects the expectation of repeating all themes in the exposition by not repeating the third, fifth, and sixth themes. For the first theme, the first repeat comes after the first statement of the second theme in measure 17. The first repeat of the second theme occurs immediately in measure 11. The fourth becomes harmony under the fifth theme. The seventh

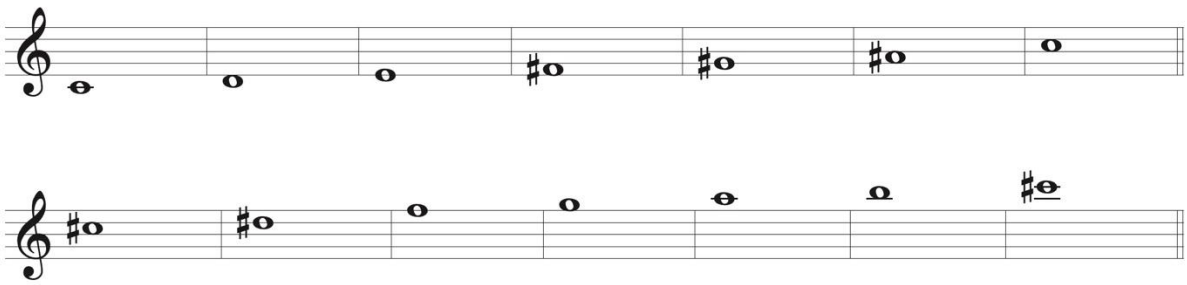
theme technically does not repeat but does occur twice as a harmonic fragmented layer to the first theme prior to the first full iteration of the theme in measures 20 and 79 (Example 43 and Example 44).

Harmony

Another expectation of the sonata movement relates to the harmonic movement during the exposition. Throughout the exposition, modulation from the tonic key to a related key, either the dominant or relative minor.

In the exposition of Rimsky-Korsakov's Symphony No. 3, first movement the harmonic fluctuation remains relatively static with a C tonality. Rimsky-Korsakov's fluctuating C tonality consist of C major and minor until the introduction of the second theme. By way of the whole-tone scale, the scoring of the second theme is in E major (Example 24). Rimsky-Korsakov utilizes the progressive and innovative scale consisting of only whole step movement between pitches, referred to as the whole-tone scale to shift smoothly from the C tonality to E major.

Rimsky-Korsakov uses the whole-tone scale in Symphony No. 3, first movement. Two permutations of the whole-tone scale exist through the whole step movement. The first variation of the whole-tone scale begins on C moving to D – E – F# – G# – A# – C and the second permutation begins on C# moving to D# – F – G – A – B – C# (Example 4). The chromatic alterations through the use of the whole-tone scale allow for E major to flow smoothly into context.



Example 4: Whole-Tone Scale

During the exposition of Symphony No. 3, first movement, Rimsky-Korsakov moves the harmony through the keys of C major, C minor, E major, and the whole-tone scale.

Mahler follows classical and romantic expectations of harmonic movement during the exposition from shifting from the tonic (G major) to the dominant (D major). Mahler then breaks the classical expectations of the harmonic movement by returning the closing statements of the exposition to G major.

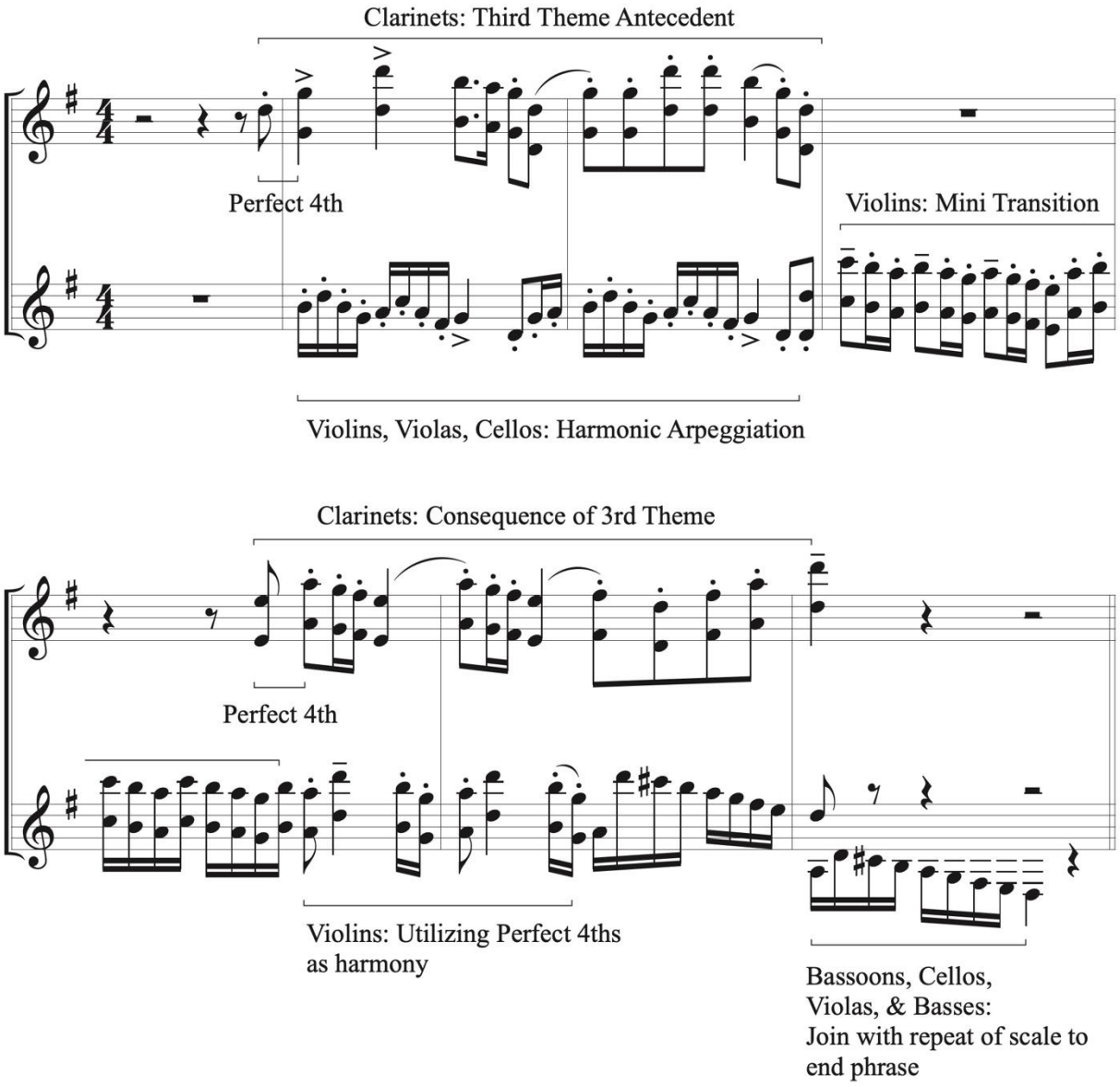
Development

The second major section of the sonata form is the development. During the development section, at least one theme must undergo variations through expansion, contraction, ornamentation, rhythmically, and harmonically. Additionally, the variations must go through a plethora of modulations to generate multiple variations of the theme(s). Major themes and motives develop in progressive ways outside of simply changing the rhythm, and key. Development occurs through breaking down the themes and motives into fragmentary bits and through expansion and contraction and through rhythm and/or tempo alterations. When the principal role of the theme and motive changes, development occurs.

During the development section of Mahler's Symphony No. 4, first movement, Mahler follows the traditional formula towards development of themes. However, Mahler begins extensive development early in the exposition through introducing variations on several of themes. Dramatic development carries throughout five of the seven themes. No development of the fourth and fifth themes occurs during the development section (see Appendix F).

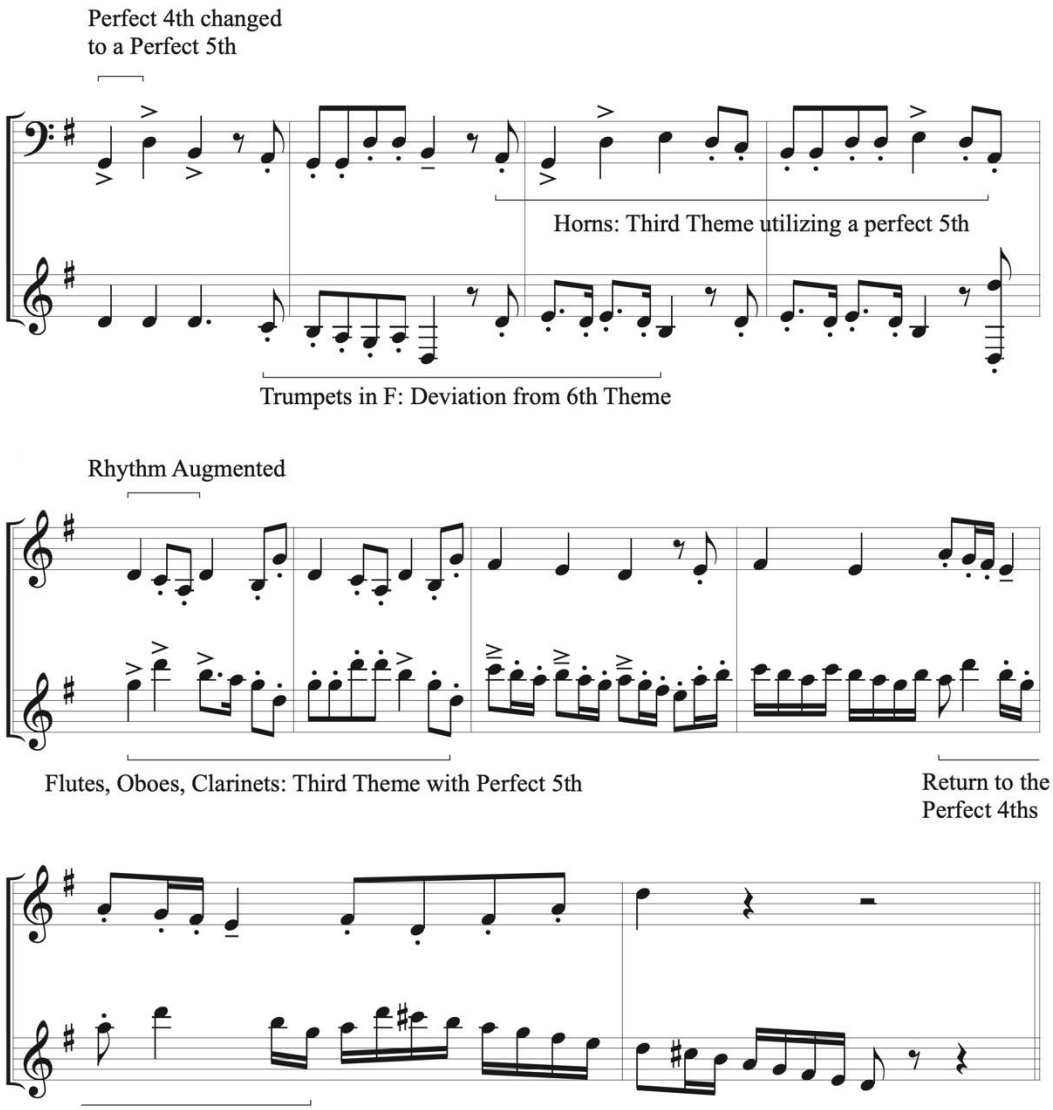
While Mahler generally maintains expectations set for the development section of a romantic era sonata, Mahler breaks away from traditional norms by continuing to repeat and utilize the "sleighbell motive" throughout the development section. In a sonata structured piece composed throughout the romantic era, the introduction is not typically rescored past the opening measures. Instead, Mahler advances the development section forward by continuing to score the "sleighbell motive" which functions as the introduction of the opening movement of Symphony No. 4. By scoring the "sleighbell motive" throughout the opening movement, Mahler is able to advance the development section forward without introducing new musical material.

The third theme, while technically varied, undergoes development primarily within the timbre by having a group with brass followed by a group with the upper woodwinds instead of only the clarinet section portraying the third theme in measure 31, showing how Mahler is able to use the orchestration to manipulate the dynamic of a theme (Example 5 and Example 6). Mahler utilizes rhythmic augmentation of the eighth note and two sixteenth note rhythm from measure 34 and doubles the values to a quarter note and two eighth notes in measure 257 in the horns and trumpets.



Example 5: mm. 31-37, Theme 3, Original Iteration

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)



Example 6: mm. 253-262, Theme 3, Variation I

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

The seventh theme also expands through rhythmic augmentation beginning in measure 127. The first, second, and sixth themes undergo multiple transformations through expansion, contraction, fragmentation, repetition, and sequencing, discussed in Chapter 3.

Harmony

Harmonically, the development typically opens in the dominant or relative major (or minor) to how the exposition opened, picking up where the exposition concluded. During the "first movement sonata form," the development has two critical events, "the return to the tonic and to some part of the material of the exposition in its original form, and a final confirming cadence on the tonic" (Rosen, p. 104). Thus, indicating the development concludes in the tonic key despite undergoing multiple tonal and harmonic shifts throughout the development section to related keys of the two preestablished tonal centers derived from the exposition section.

The development section of Mahler's Symphony No. 4, first movement generally follows the expectations of a traditional romantic era sonata by utilizing a plethora of keys such as G major, D major, and Ab major and minor in addition to many other keys. Mahler disregards traditional expectations by returning to G major for the conclusion of the exposition and start of the development section. Typically, the development section will open in either the dominant of G major, D major, or the relative minor (E minor). Mahler ignores the expected traditions of modulation entering the development section, despite introducing the key of D major during the exposition. Mahler utilizes the framework of a sonata movement through using progressive qualities to make the sonata form follow a more modern approach towards development of musical themes and motives.

In Rimsky-Korsakov's Symphony No. 3, first movement, throughout the development section, modulation occurs. Starting the development in E major, Rimsky-Korsakov then shifts to multiple ambiguous tonalities utilizing major and minor forms including F, D, Eb, C, G, Bb, and Ab. Rimsky-Korsakov also intertwines the whole-tone scale throughout the movement.

During the development section, scoring of a third theme happens on occasion. The inclusion of a third theme serves as a response to heavily elaborated themes in order to continue showing contrasting musical ideas between the original themes. Neither composer utilizes the creation of a new theme or motive during the development section to advance the symphonic works forward.

Instead of utilizing a new theme during the development section, Rimsky-Korsakov scores a new horn-call motive in measure 228, replacing the original horn-call motive from measure 99 (Example 26 and Example 27). The inclusion of a new horn call motive provides a similar advancement of the melodic progression in which the use of a new theme would have created.

Overall, development of the themes in a sonata movement lies within the overall shape of the music, where the same rhythmic figure may appear with different intervals and/or pitches. To keep the piece moving forward, manipulation of rhythm and pitch occur to establish new variations of the theme(s).

In Rimsky-Korsakov's Symphony No. 3, first movement, the two themes maintain traditional approaches. Higher and lower energy levels create instability through the placement of melodic figures within the meter. The underlying harmonies change underneath the themes.

For Rimsky-Korsakov's Symphony No. 3, first movement, both themes undergo transformation through the use of expansion and contraction, repetition and sequencing, and fragmentation. The second theme primarily uses expansion and fragmentation for thematic alterations. The first theme utilizes the use of rhythmic expansion and contraction to allow the first theme to function as harmony in addition being a theme.

Recapitulation Expectations

The recapitulation is the final section of the classical sonata form. By the start of the recapitulation, the harmonic center should have returned to the tonic tonality to allow the movement to wind down with the closing remarks. During the recapitulation, each theme established during the exposition should return as originally scored, except the second theme should modulate to the tonic key.

With the copious amounts of repetition occurring throughout the development, the return to the original forms of the major themes allows closure and resolution to the music. As the intensity level of the music decays, extensive development diminishes into the final cadence.

Occasionally, a coda incorporates a series of dominant and tonic chord changes to close out the movement. A coda resembles a short harmonic cadence to end the movement. Similar to the introduction, the use of a coda occurs once.

Rimsky-Korsakov uses a short coda to end the first movement of Symphony No. 3. Technically, Rimsky-Korsakov breaks the expectations of the sonata form through concluding the movement in C minor. The movement opens in C major with the conclusion of the recapitulation in C minor. Rimsky-Korsakov leaves the final chord open-ended with an ambiguous C and G scored across the entire ensemble. By omitting the third, Rimsky-Korsakov loosely follows the traditional norms by concluding the key of C, meaning the movement concludes in the same key in which the movement opens.

Mahler does not utilize a coda to conclude the first movement of Symphony No. 4, to conclude the recapitulation section. Instead, Mahler uses a variation of the third theme to conclude the movement. Mahler also concludes the movement in G major, the same key in which the movement opens.

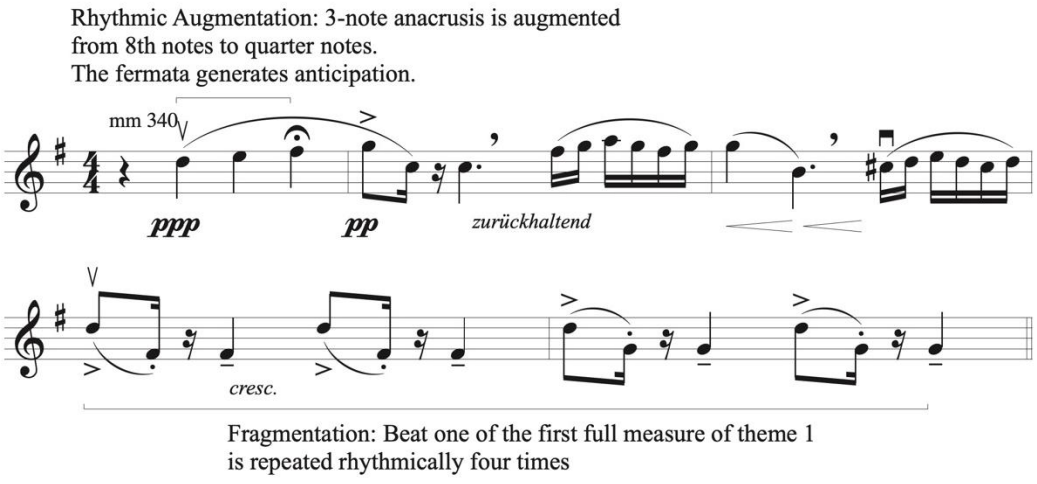
Mahler and Rimsky-Korsakov both deviates away from the traditional expectations set forth in the classic approach to the structure of a recapitulation section in a sonata movement through the omission of themes as well as continued expressive and elaborate development. At the same time, Rimsky-Korsakov and Mahler also hold true towards the skeletal framework of how the recapitulation closes the opening movement of the respective symphonic works.

In Mahler's Symphony No. 4, first movement, all themes return as expected in the recapitulation in some capacity. The fourth, fifth, sixth, and seventh themes occur similarly to the occurrences in the exposition, while the first, second, and third themes continue to undergo rhythmic, timbre, harmonic, and functionality changes throughout recapitulation.

Rimsky-Korsakov does not follow the traditional approach to the recapitulation section through the omission of the second theme. The omission of the second theme leaves the second theme unresolved. The final time the second theme occurs is in measure 519. While not in the recapitulation, the final statement of the second theme does mirror the original statement of the second theme from measure 148 in the key of Ab major (Example 21). The first theme continues to develop and expand up through the coda section of the first movement.

Overall, not all seven themes undergo development, in Mahler's Symphony No. 4, first movement, a technique in which Beethoven follows with Piano Sonata No. 2 in A Major, Op. 2, No. 2, first movement when the second theme does not return until the recapitulation. In Mahler's case, the fourth and fifth theme only return during the recapitulation, yet both the fourth and fifth themes return, unaltered in the recapitulation section by employing the same technique as Beethoven. Mahler continues to break away from the traditional expectations of a sonata by continuing to use expansive development of the major themes up until the end of the movement.

Lack of closure is how Mahler deviates away from the traditional approaches to the sonata form. Development of musical content should diminish significantly during the recapitulation as musical ideas wrap up for the final time. Mahler avoids closure by not returning the first theme in the original form through the constant use of fragmentation. Instead, the use of harmonic fragmentation of the first theme allows for Mahler to continue to avoid returning the first theme for the final time. For instance, Mahler scores fragments of the first theme during the recapitulation. Through the use of fragmentation, Mahler condenses and expands the first theme without returning the original iteration (Example 7).



Example 7: mm. 340-344, Theme 1, Fragmentation

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

The first theme becomes fragmented through beat one measure 341 (Example 7). The fragmented first theme repeats four times with alterations to the intervals in measure 343. Instead of a perfect fifth, the D down to F becomes a sixth and the D to G returns to the perfect fifth interval. Additionally, the entire statement of the first theme from measure 340 to 342 is also a

short fragment of the full theme. The first theme remains fragmented and condensed through the ending of the first movement.

Mahler ventures apart in compositional style from Rimsky-Korsakov through the treatment of omitting themes in the recapitulation. Mahler technically has all seven themes return by the end of opening movement of Symphony No. 4; however, Rimsky-Korsakov does not return the second theme at any point during the recapitulation, using a coda to conclude the movement as well. By not scoring the second theme during the recapitulation, Rimsky-Korsakov leaves the first movement of Symphony No. 3 to finish without complete resolution. A similar phenomenon occurs when Mahler opts to have the first theme of Symphony No. 4, first movement return as the whole theme and not fragmentary bits.

The overall expectations of Mahler and Rimsky-Korsakov developing and manipulating themes relates back to the overall form of the opening movements of each symphonic work. The number of variations and repetitions of each theme and motive with how musical material returns to the original states indicates a clear presence of a sonata in both symphonic pieces.

Mahler and Rimsky-Korsakov utilize similar compositional devices and techniques to advance their music forward. Mahler and Rimsky-Korsakov manipulate musical themes in similar fashions. Mahler and Rimsky-Korsakov showcase organization through the use of sonata form. Such as their treatment of the themes during the exposition, development, and recapitulation sections of a sonata form. While neither composer uses the exact same manipulations, omission of themes and motives occurs.

CHAPTER 2: RIMSKY-KORSAKOV'S SYMPHONY NO. 3, FIRST MOVEMENT

Repetition, fragmentation, sequencing, and expansion and contraction of the length of phrases lead to development of thematic and motivic material in Rimsky-Korsakov's Symphony No. 3, first movement. The components of expansion include alterations in rhythm, elongation or diminution of phrases in terms of measure length, and ornamentation. The components of expansion are flexible, allowing for simultaneous events to occur between the major themes and motives, while maintaining the original shape of each theme and motive remains static throughout the movement.

In Rimsky-Korsakov's Symphony No. 3, there are two themes and five motives scored throughout the entirety of the opening movement. On occasion, a theme or motive may be absent in one or more of the three sections of a sonata (see Table 7).

Table 7

Themes & Motives Occurrences in Rimsky-Korsakov's Symphony No. 3, first movement

Theme/Motive Name	Exposition	Development	Recapitulation
Theme 1	**X**	**X**	**X**
Theme 2	**X**	**X**	
Transitional Motive	**X**	**X**	
Horn Call Motive No. 1	**X**	**X**	
Horn Call Motive No. 2		**X**	
Ascension Motive	**X**	**X**	
Solo Motive	**X**	**X**	

Thematic Development

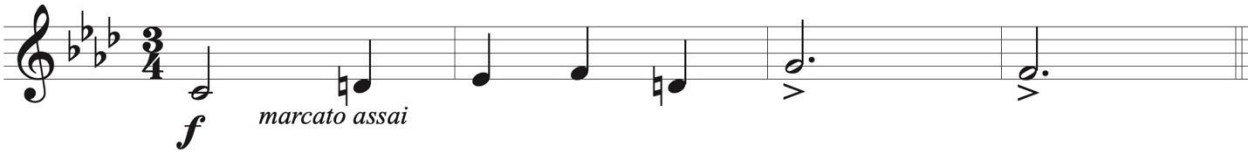
Expansion & Contraction

The expansion of thematic material includes alterations in the length of the phrases through the addition of repetition of specific fragments or through rhythmic augmentations. With Rimsky-Korsakov manipulating the length of the themes, expansion and contraction occur. With the first theme of Symphony No. 3, first movement, the melody opens as two measures consisting of a quarter note followed by four eighth notes, a quarter note, and a half note (Example 8).

Example 8: mm. 1-2, Theme 1, Original Iteration

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Another example expansion of the duration of the phrase occurs in the first theme in measure 580. The rhythm of the first theme becomes augmented from the original (Example 9). The original rhythm of the first theme is a quarter note with four eighth notes followed by a quarter note and half note (Example 8). During the horn iteration at measure 580, the rhythm doubles to a half note followed by four quarter notes and two dotted half notes. The augmented phrase allows for the first theme to double in duration. The first theme rhythmic augmentation extends the phrase from two measures in length to four measures. The elongation of the phrase allows for the reduction in the pacing of the energy level as the energy picks up again in measure 584 in building up to the recapitulation section in measure 633.

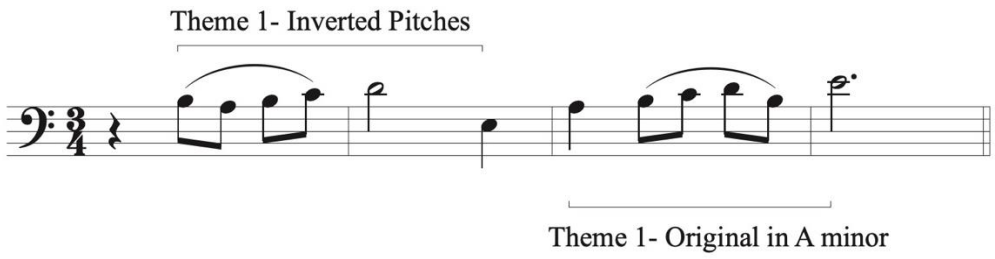


Example 9: mm. 580-583, Theme 1, Augmented

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Mahler's treatment of rhythmic alterations in Symphony No. 4, first movement, and Rimsky-Korsakov's treatment of rhythmic alterations in Symphony No. 3, first movement differ. When Rimsky-Korsakov alters the rhythmic duration of a theme, the alteration occurs across the entire phrase, unlike Mahler's handling of rhythmic alterations. In Mahler's Symphony No. 4, first movement, Mahler will manipulate only a portion of the theme or motive, not necessarily the whole phrase. Rimsky-Korsakov does not decrease rhythmic values for the entire phrase. Instead, Rimsky-Korsakov reduces note values on beats two and three of measure 279 (Example 12).

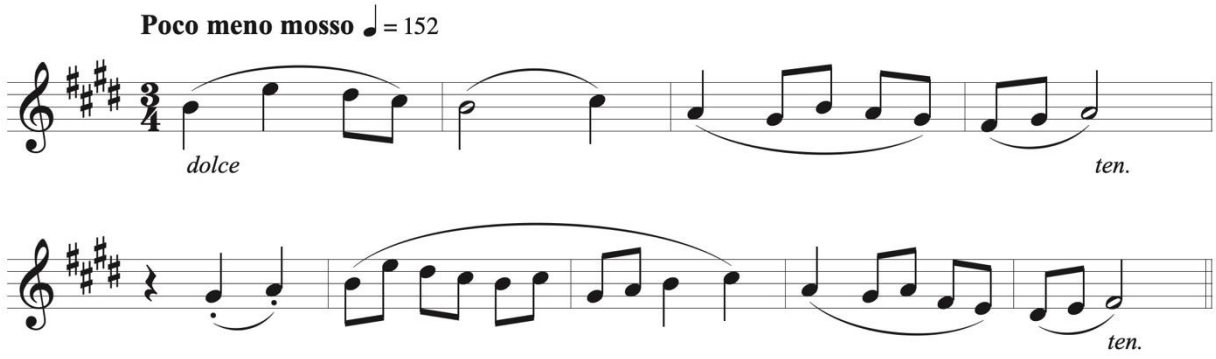
Still in the exposition section in measure 19, the first theme becomes inverted (Example 10). The result of the inverted first theme is the creation of the first variation of the first theme. Here, the rhythm of the wave retains the four eighth notes, yet a half note and quarter note rhythm precede the wave followed by the quarter note, four eighth notes, dotted half note figure derived from the original iteration in measure one. The first theme is two measures long and expands to four measures in the inverted variation in measure 19.



Example 10: mm. 19-22, Theme 1, Variation I

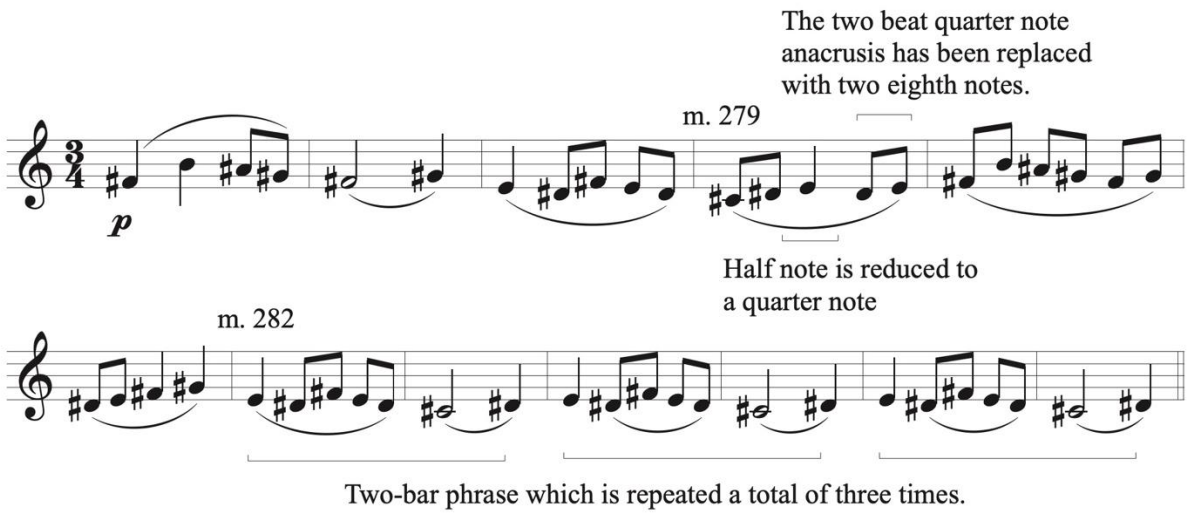
Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Expansion also takes places in the first variation of the second theme in measure 279. In the original statement of the second theme, Rimsky-Korsakov scores measure 148 with a half note, quarter note, and two eighth notes (Example 11).



Example 11: mm. 148-156, Theme 2, Original Iteration

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)



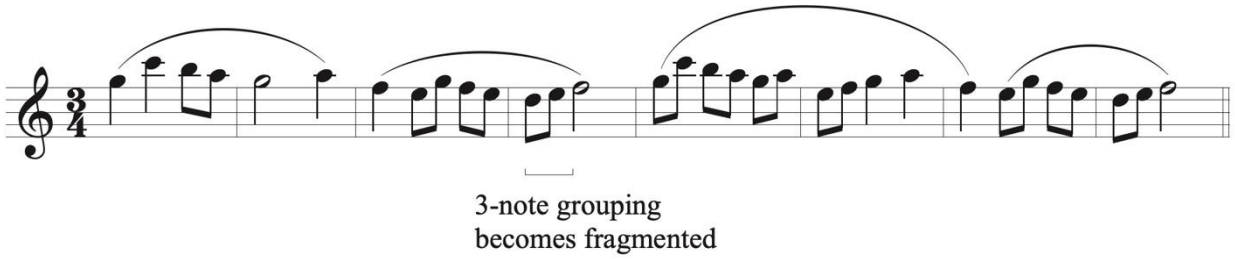
Example 12: mm. 276-287, Theme 2, Development

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Using rhythmic diminution to increase rhythmic activity, Rimsky-Korsakov scores measure 279 with two eighth notes, a quarter note, and two eighth notes instead. The original statement of the second theme is nine measures in duration. In measure 276, the second theme expands to twelve measures in length. The second theme grows by three measures from the use of a four measures phrase extension. Measures 282 and 283 generate the phrase extension from measures 284 through 287. The phrase extension continues to showcase Rimsky-Korsakov's use of expansion and contraction. Finally, the additional four measures added extend the length of the second theme from nine measures to twelve.

Contrastingly, a form of contraction of the second theme occurs when the oboe enters with the second theme in measure 356 (Example 13). The anacrusis into the repeat of the second theme result in rhythmic omission between measures 359 and 360. However, Rimsky-Korsakov omits the anacrusis from the second theme. The absence of the anacrusis changes the duration of

the second theme to eight measures, thus showing how a reduction in rhythm can have an effect on the duration of a theme.



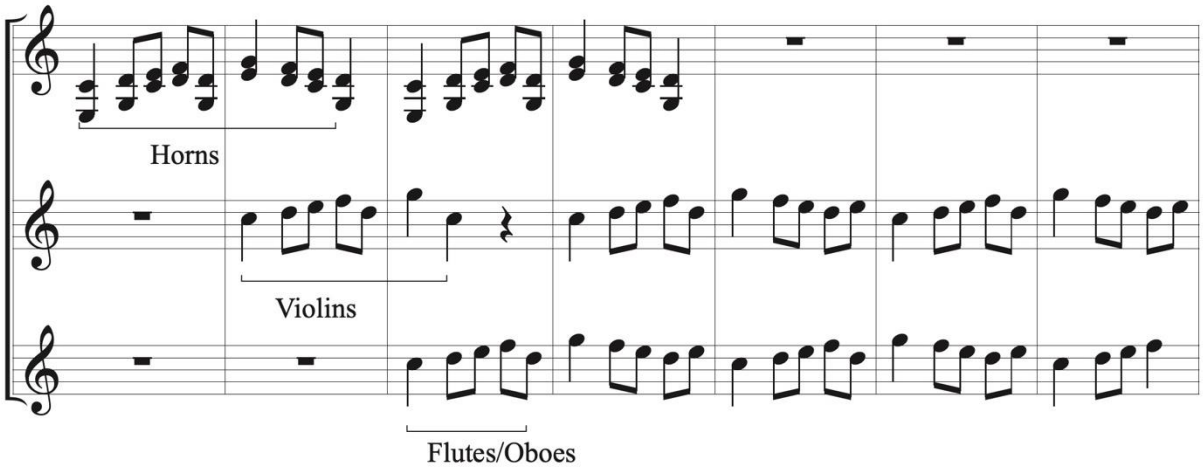
Example 13: mm. 356-363, Theme 2, Variation II

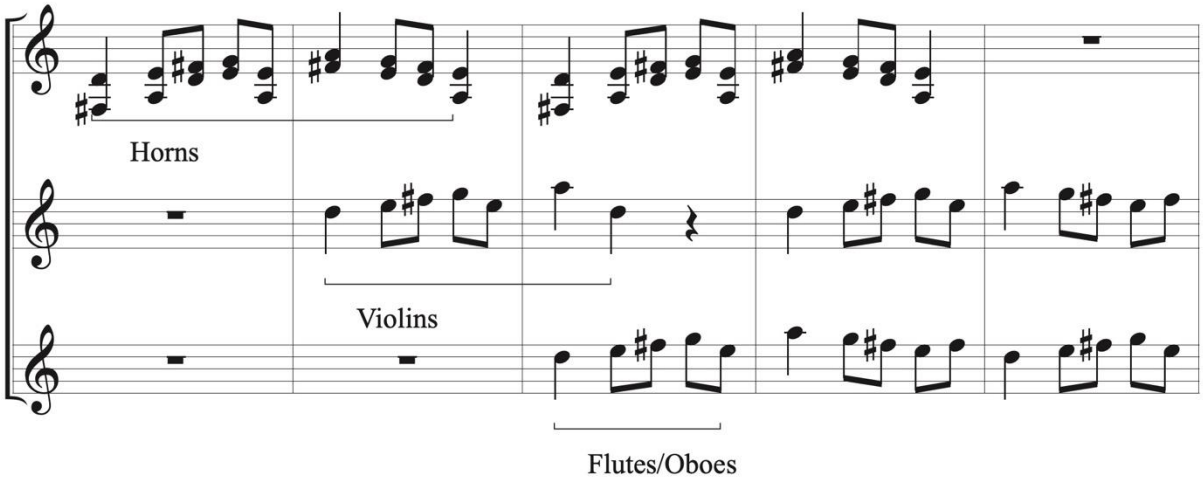
Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

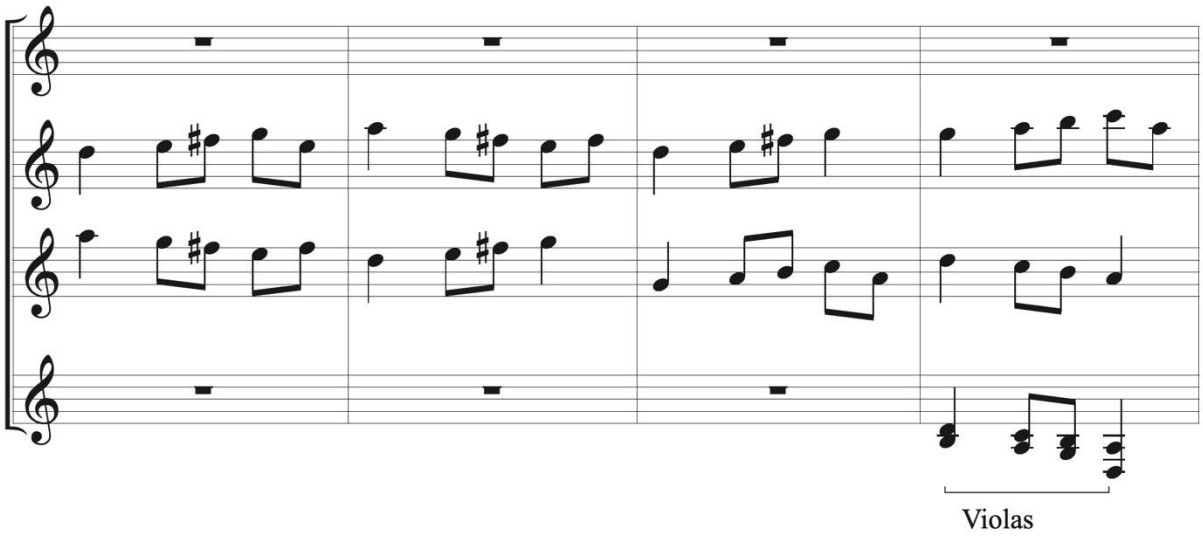
In measure 392, the first theme enters in the horns and the first violins enter in measure 393 with first theme. In measure 395, the oboes and flutes enter with the first theme as well. During the variation from measures 392 to 414, the layering of the first theme becomes contrapuntal through the use of a cannon-like moment built from the constant layering and addition of voices throughout the statement of the first theme stated in the horns at the beginning of the phrase in measure 392. By measure 408, the entire orchestra is performing pedal tones or the first theme.

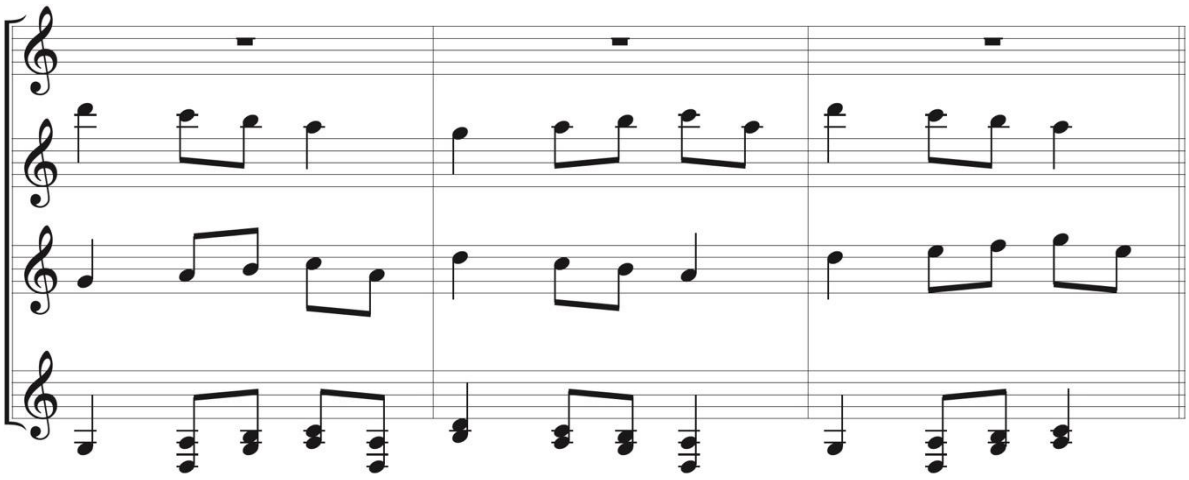
While not a true cannon, the horn, in a sense, is the "leader" to the entrances of the violins, flutes, and oboes. The deviation comes in measure 394 with the flute and oboe entrance. The entrance is the same as the horns in pitches, then in measure 395, the rhythm changes to quarter note and four eighth notes instead of a quarter note, two eighth notes, and a quarter note. Despite the rhythmic differences, the pitches are identical. The entrance of the violins in measure 395 follows identically to the flute and oboe entrance. The process starts all over again in

measure 399 in D major, with the same rhythmic alteration in the flute, oboe, and violin lines (Example 14).


Horns
Violins
Flutes/Oboes


Horns
Violins
Flutes/Oboes


Violas



Example 14: mm. 392-410, Theme 1, Canon-Like Layering

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Mahler also scores two statements of the same theme simultaneously in measures 17 through 21 with the first violins and cellos playing out of sync with each other as described in Chapter 3 (Example 47). Rimsky-Korsakov layers the first theme in multiple voices, with entrances one measure apart until the entire ensemble is playing either the first theme or pedal tones, showing how both composers are able to score a single theme at the same time to create a unique effect with thematic and harmonic layering. However, Mahler keeps the variations of the first theme similar by reducing the cello variation to end with the first violins, which is different from how Rimsky-Korsakov ends the phrase by having the flutes, oboes, clarinets, and violins carry the first theme through the 3/2 section while the rest of the ensemble functions as harmony.

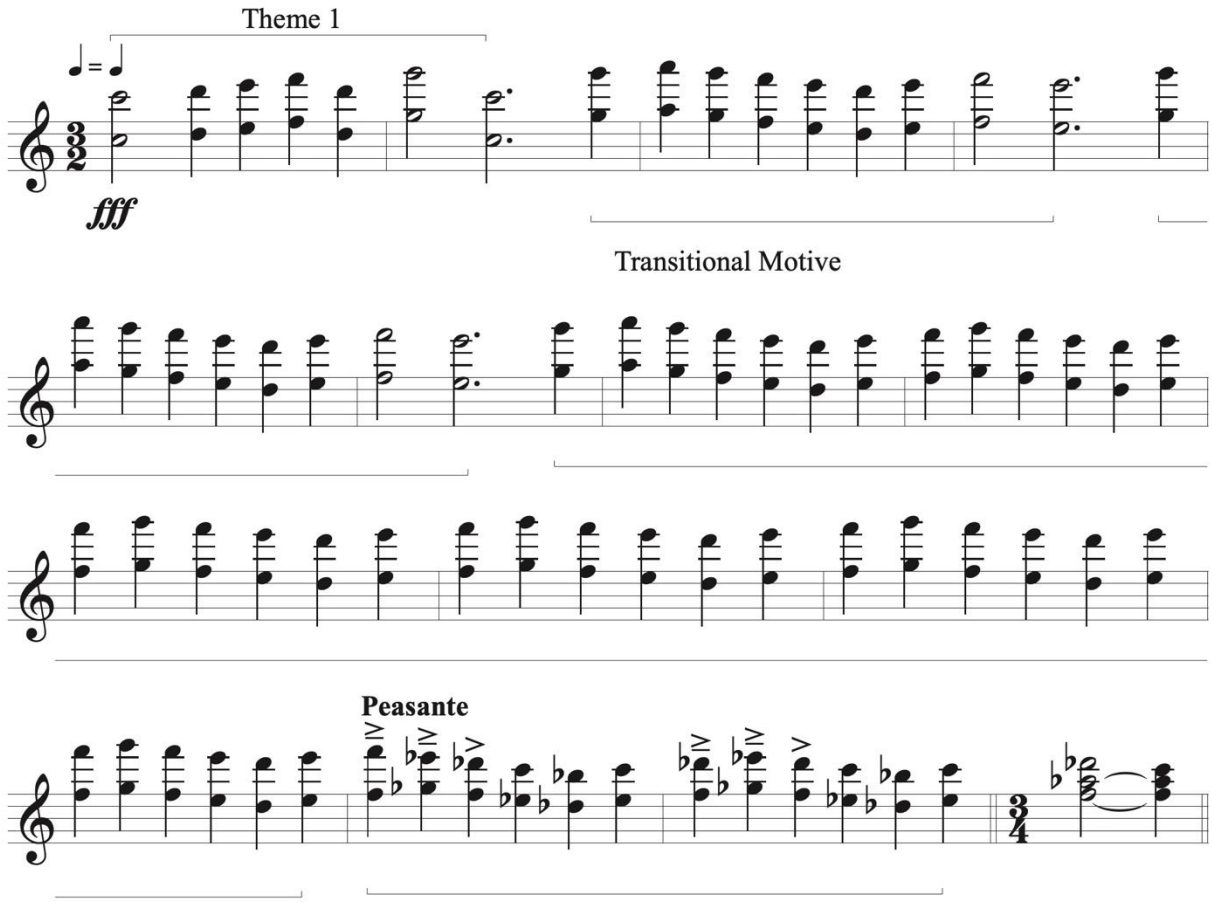
Rhythmic Expansion

In measure 426, the first theme grows into a grand wall of fluidity through doubling the meter (Example 15). In measure 426, the first theme becomes rhythmically augmented as does

the transitional motive scored in measure 428. The first movement primarily sits in 3/4 with a brief moment of 2/4 during the development section until finally growing into the 3/2 section preceding the recapitulation moment of the sonata movement.

While the appearance of the first theme rhythm shows a different rhythmic pattern, the rhythmic deviations are still technically the same through the use of enharmonic rhythms. The only alteration occurring in measure 426 is the half note receiving the beat instead of the quarter note.

During the 3/2 section, the transitional motive also becomes hyper expanded through the metric change, changing from running eighth notes to quarter notes. For both the first and theme and the transitional motive, each rhythm is enharmonically equivalent to the original, represented in a new meter to provide a clear metric representation during a heightened energy section. Continuing to show how Rimsky-Korsakov primarily applies rhythmic manipulations across the entire phrase instead of fragmentary bits.



Example 15: mm. 426-440, Theme 1 & Transitional Motive Hyper Expanded

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

The original rhythm of the first theme doubled in value during the hyper expanded section. While the rhythms appear augmented, the rhythm is still functioning exactly the same. The tempo neither increase nor decreases; instead, the pulse changes. While visually, the phrase appears much longer in duration, reaching fourteen measures before 3/4 returns. If the 3/2 section were composed in 3/4, the half notes would read as quarter notes, quarter notes would read as eighth notes, and the eighth notes would become sixteenth notes. Notation of rhythm

varies in different meters portrayed through the rhythmic examples in 3/4 and 3/2 (Example 16, Example 17, and Example 18).

Example 16: mm. 1-2, Theme 1, Rhythm

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Example 17: mm. 426-427, Theme 1, Variation III, Rhythm

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

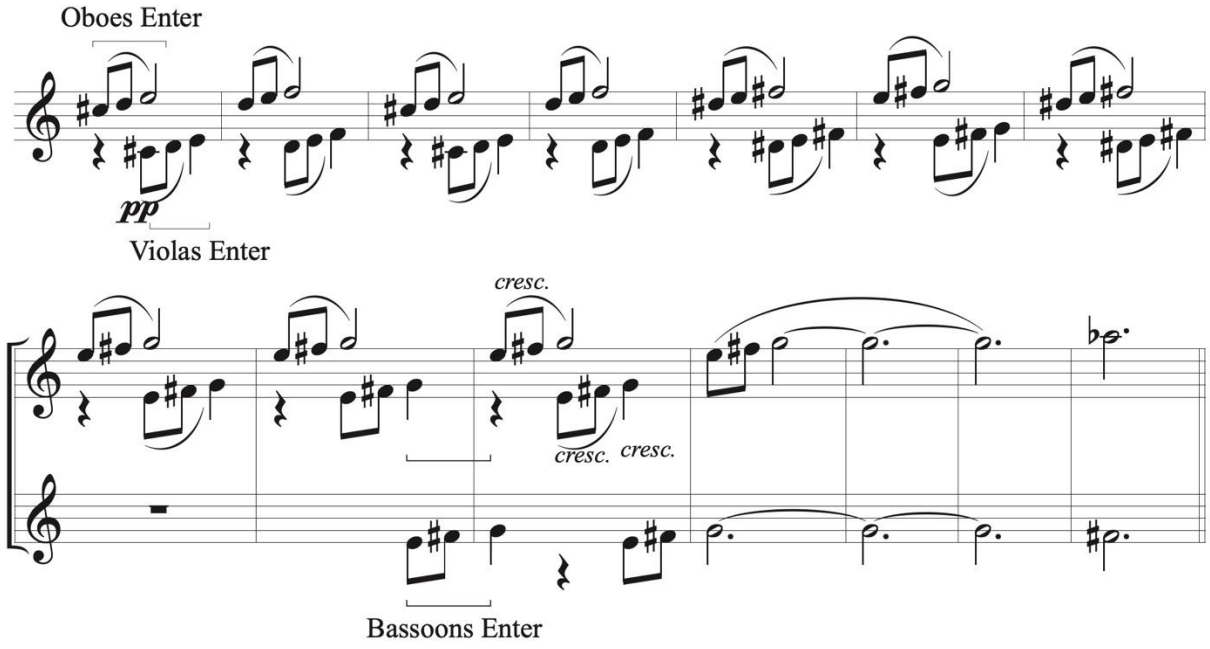
Since the pulse of the music changed, the rhythmic iteration of the first theme of the 3/2 section would read as the following in 3/4:

Example 18: Theme 1, Variation III, Rhythm in 3/4

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

By selecting the meter of 3/2, Rimsky-Korsakov maintains the integrity of the rhythm while fluctuating between a cut-time feel and a simple triple meter.

Fragmentation of the second theme occurs preceding the second variant in measure 364 in the oboe on beat one and the viola on beat two (Example 19). Through fragmentation, the second theme continues in measure 364 for an additional fourteen measures. The fragmentation establishes expansion of the second theme. Rhythmically, the bassoon and viola differ from the oboe fragment through rhythmic diminution. The oboes continue on beat one of measure 364 and the violas enter on beat two. The bassoons enter in measure 372 on beat two. In measure 364, the half note in the oboes on beat two undergoes rhythmic diminution in the violas on beat three and the bassoons on beat one of measure 373.



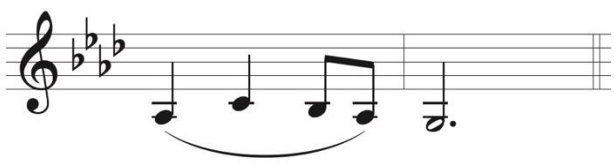
Example 19: mm. 364-377, Theme 2, Fragmentation

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Instead of being a full-fledged iteration on the second theme, the fragmented variant acts as a transition generating a build-up for the frantic nature of the first theme by measure 379. The fragmentation establishes the build up from having constantly running eighth notes when the theme would generally be solo dominated with longer sustained notes underneath it. The increase in rhythmic intensity acts as the bridge between both themes. The fragmentation forces the phrase to extend an additional fourteen measures.

Rimsky-Korsakov, unlike Mahler does not primarily use fragmentations of themes to transition from one idea to the next. Typically, Rimsky-Korsakov utilizes the motivic ideas to accomplish the transitional moments between themes, modulations, and sections of the music. On the other hand, Mahler utilizes seven major themes. Unlike Rimsky-Korsakov's use of five motives, Mahler only utilizes one motivic idea reserved for indicating key sections throughout the first movement of Symphony No. 4. To overcome introducing new musical material and overusing the "sleighbell motive," Mahler manipulates the principal roles of the major themes to transition from phrase to phrase.

A second instance of fragmentation occurs in the viola and bassoon in measures 533 through 534 (Example 20). The first two measures of the second theme in measure 519 build up the fragment in measure 532. The fragment functions as a harmonic entity combing the second theme with the solo motive. The variation in measure 532 first occurs in measure 161 in the clarinets and violas.



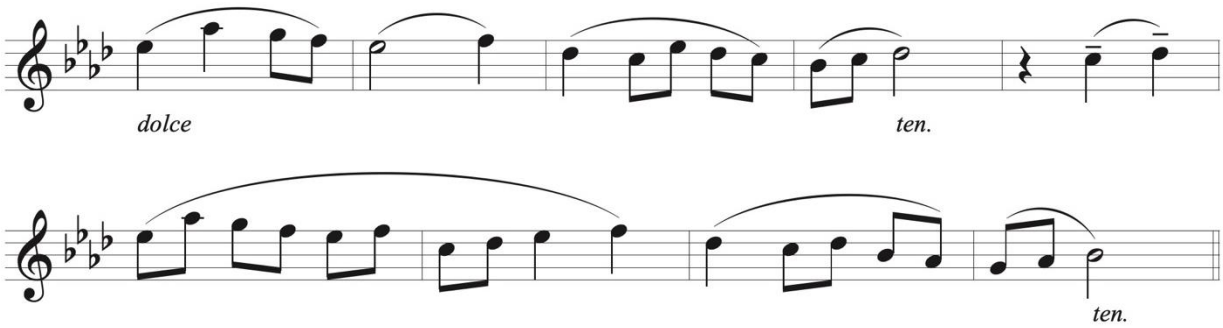
Example 20: mm. 532-533, Theme 2, Variation IV

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

The fragmentation from measure 532 relates to the first statement of the first theme from measure one from being two measures in duration with a similar shape. Additionally, the fragment of the second theme relates to the first movement through the stepwise wave motion of up and down motion, due to the rhythmic differences. The example is a deviation from the second theme, showing how Rimsky-Korsakov has similar material presented in the first and second themes, despite being contrasting from one another.

The shape similarity of the first and second theme from the second theme fragment in measure 532 is similar to how Mahler relates each of the contrasting seven themes in Symphony No. 4, first movement. During Symphony No. 4, first movement, each of the seven themes are contrasting each other. Small nuances allow for interconnection of musical themes, similar to how Rimsky-Korsakov has similar shape in both the first and second themes; however, the different rhythms and tempos allow for the distinction of each theme.

Furthermore, in Rimsky-Korsakov's Symphony No. 3, first movement, not all iterations of the themes undergo alterations generating phrases with direct repetition. Direct repetition of the original iteration of the second theme occurs in measure 519 (Example 21). Not only is the statement of the second theme an exact representation of the original scored in measure 148, the length of the phrase, rhythmic nuances, and intervals are all retained.



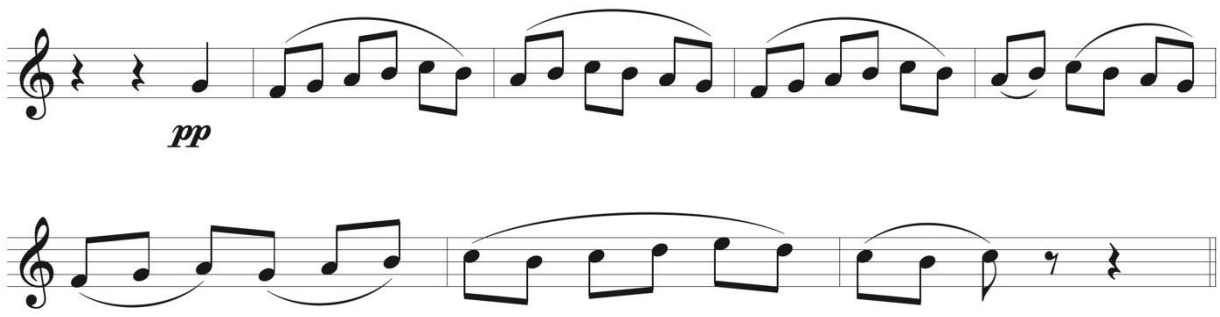
Example 21: mm. 519-527, Theme 2, Variation III

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Motivic Development

Rimsky-Korsakov uses motives as transitional material to propel Symphony No 3, first movement forward. The undeveloped motives function as transitional material, harmonic growth, and harmony to the major themes of the movement. Contrastingly, Mahler only utilizes one motive throughout the first movement of Symphony No. 4, where Mahler uses four motives to propel the music forward. The shape, rhythm, and intervals of the motives in Symphony No. 3, first movement remain constant throughout the movement providing structural integrity. Motivic development occurs through the manipulation of stagnant repetition, sequencing, and expansion. Additionally, there are instances where the motive does not develop and retains the original harmonic and rhythmic integrity of the motive.

Derived from the first theme as a phrase extension using ascending and descending eighth notes, the transitional motive occurs following the first theme in measure two as the first motive of Symphony No. 3, first movement. The transitional motive utilizes stepwise motion similarly to the first theme. The transitional motive does not use the wave shape from the first theme (Example 22).



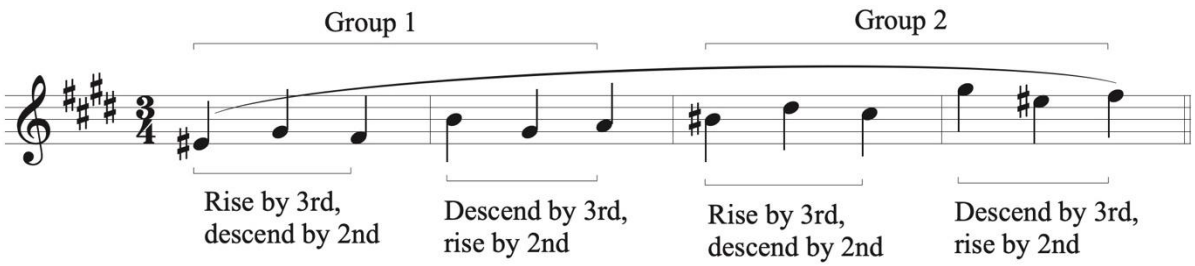
Example 22: mm. 2-9, Transitional Motive, Original Iteration

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Unlike the horn-call motives, solo, and ascension motives, the transitional motive does undergo development. In measure 580, contraction of the transitional motive occurs. The transitional motive, originally eight measures in length reduces to four measures. In measures 580 and 581, the first measure of the transitional motive contains inverted pitches, descending where the motive originally ascended in measure three. In measure 582 the transitional motive uses the original ascending figure from measure three.

By measure 583, instead of utilizing three note groupings as scored in measure seven, the scale rises in stepwise motion up a C melodic minor scale (Example 30).

Sequencing and repetition of motivic events are critical in the foundation of the first movement of Symphony No. 3. The solo motive is a six-note motive where the first three notes rise by a third then descends by a second and the second set of three notes descend by a third then rise by a second (Example 23).



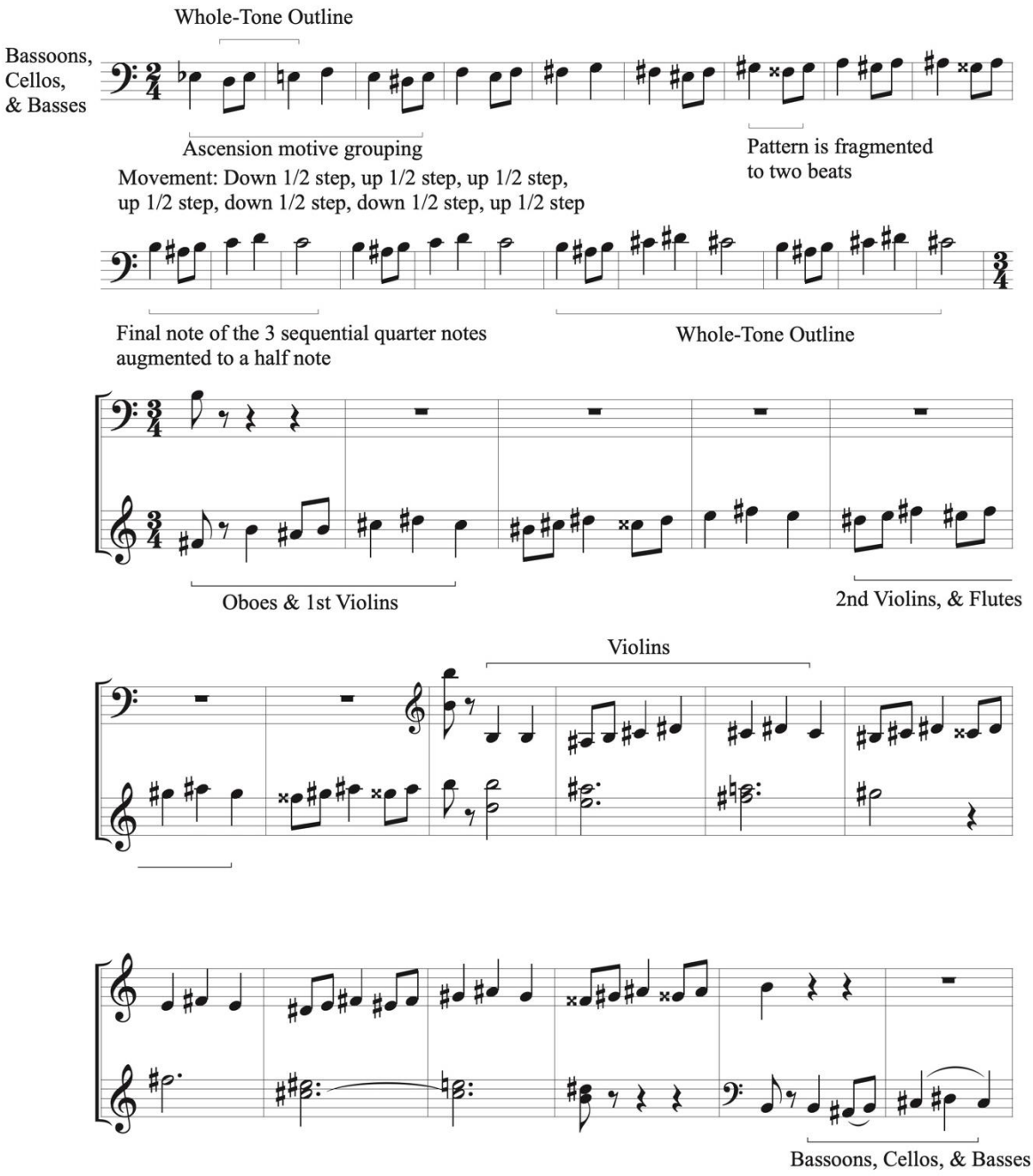
Example 23: mm. 166-169, Solo Motive, Original Iteration

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Beginning on E in measure 166, the six-note figure repeats on B# in measure 168. Each variation of the three-note figure from the solo motive follows the same intervallic and directional goal throughout the first movement.

The solo motive follows the second theme of Symphony No. 3, first movement every time. At no point does the solo motive occur without the occurrences of the second theme in some capacity. The solo motive does not undergo any development in the opening movement of Symphony No. 3.

The ascension motive first occurs in measure 101 in the bassoons, cellos, and basses following the first statement of the horn call motive. Throughout the opening movement of Symphony No. 3, first movement, the ascension motive serves as a transitional entity, separating the first theme from the second theme (measure 101) or separating the statements of the horn call motives (measure 240) (Example 24). The chromatic nature of the ascension motive allows for the harmonic language to fluctuate between tonalities and keys.


Whole-Tone Outline
Bassoons,
Cellos,
& Basses
Ascension motive grouping
Pattern is fragmented
to two beats
Movement: Down 1/2 step, up 1/2 step, up 1/2 step,
up 1/2 step, down 1/2 step, down 1/2 step, up 1/2 step
Final note of the 3 sequential quarter notes
augmented to a half note
Whole-Tone Outline
Oboes & 1st Violins
2nd Violins, & Flutes
Violins
Bassoons, Cellos, & Basses

Example 24: mm. 101-147, Ascension Motive, Original

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

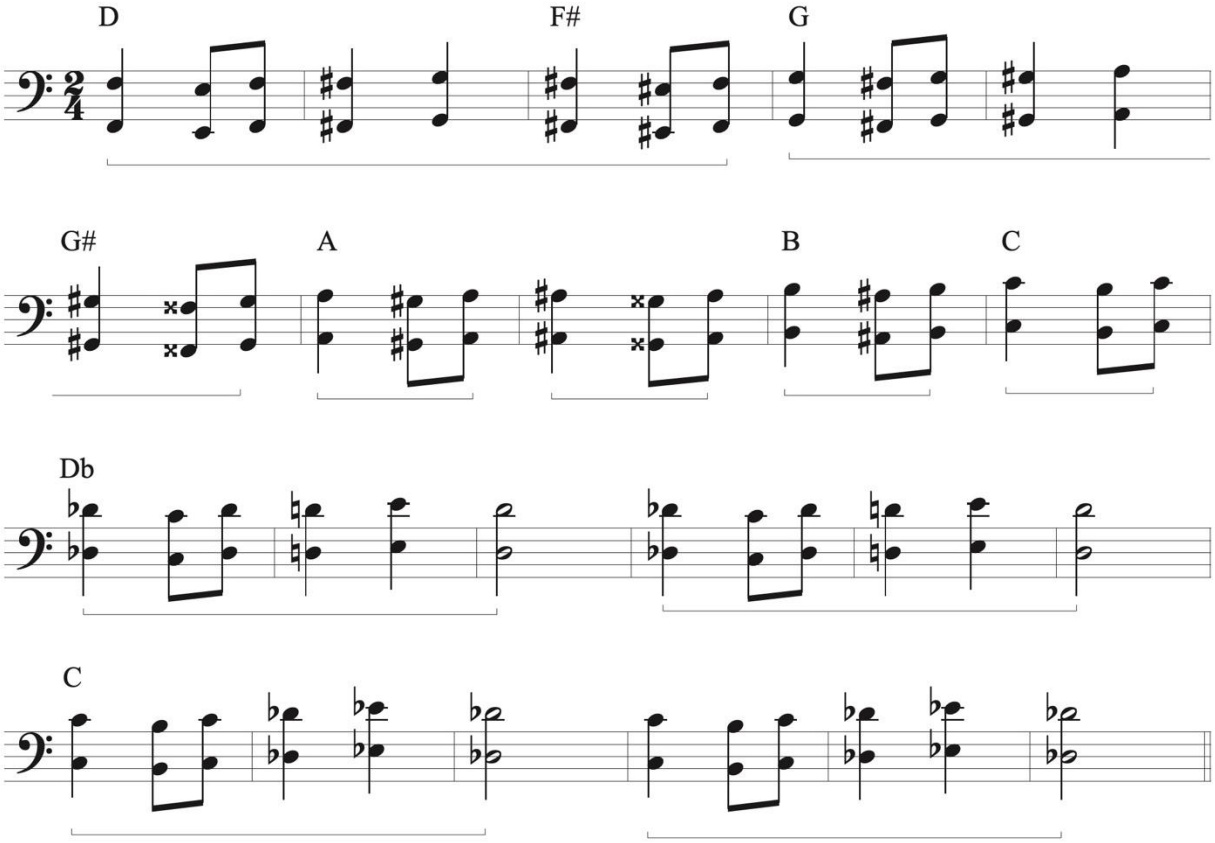
The ascension motive also brings upon metric changes, causing the weight of each grouping of quarter notes and eighth notes to fluctuate throughout the phrase from measures 101 through 147.

Similar to Mahler, Rimsky-Korsakov also uses motivic ideas as transitional material without the introduction of new musical content to advance the music harmonically or thematically. Each time the ascension motive occurs, the motive serves as a transition for the harmony and separation between the two themes and other motives scored throughout the opening movement of Symphony No. 3. Mahler uses fragmentary bits from the "sleighbell motive" throughout the opening movement of Symphony No. 4 to transition from one theme to next.

Mahler and Rimsky-Korsakov differentiate with themes functioning as transitional material. For Mahler, sequencing of fragments from elements of the second theme and sixth themes are fundamental in the structure of the transitional content throughout Symphony No. 4, first movement where Rimsky-Korsakov rarely uses thematic material as transitional material. An exception where Rimsky-Korsakov uses fragmentation of the second theme as a transition begins in measure 364 (Example 7).

The ascension motive maintains the six-beat pattern in measure 472. The statement becomes expanded with an additional measure when the three-beat fragmented group occurs four times instead of three times.

Repetition and sequencing also occur in the ascension motive in both the original statement in measure 101 and in the variation in measure 472 (Example 24 and Example 25). Throughout the phrase of the ascension motive, each statement moves chromatically in stepwise motion with each repetition, thus showing how Rimsky-Korsakov utilizes sequencing throughout the motivic events.



Example 25: mm. 472-493, Ascension Motive, Variation

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

The representation below shows the large-scale voice leading established by the sequencing of harmonic events in the ascension motive beginning in measure 472 (see Table 8).

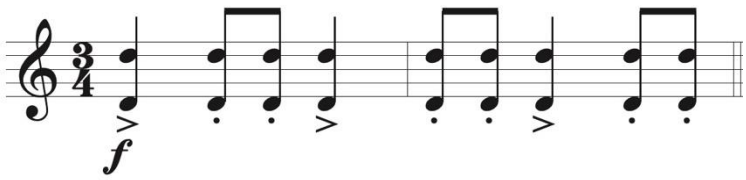
Table 8

Chromatic Voice Leading of Rimsky-Korsakov's Symphony No. 3 mm. 472-493

F	F#	G	G#	A	A#	B	C	Db	D	Db	C

The violins and clarinets continue on with the ascension motive, omitting the chromaticism. The grand scale voice leading is C – D – E – F – G – Ab – B – C. The fluctuation between chromatic and diatonic movement showcases Rimsky-Korsakov's expansion of harmony. Primarily, the harmonic motion is the direct result of voice leading resolution throughout each statement of the ascension motive. Finally, by Rimsky-Korsakov eliminating the chromaticism, contraction occurs, reducing the duration of the ascension motive.

Stagnant repetitive development occurs in both of the horn-call motives. Of the two variations on the horn-call motive, the first utilizes simple duple rhythms and the second incorporates compound rhythms. In the development section, each of the motives serves a different role. The purpose of the first horn-call motive, scored for trumpets in measure 99, moves as a transition into the ascension motive. The second and final occurrence of the first horn-call motive occurs in measure 470, also in the trumpets, scored a half step higher on E from the original statement pitched on D.

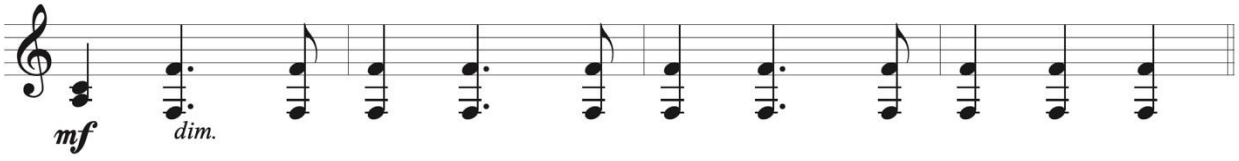


Example 26: mm. 99-100, First Horn-Call Motive, Original Iteration

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

In measure 99, the trumpets are the only voice performing, leading into an alteration in the character of the movement, an important characteristic for both of the variations on the motive. The second horn-call motive follows a different rhythmic pattern from the first horn-call

motive from measure 99 (Example 26 and Example 27). Both horn-call motives undress new sections of the first movement of Symphony No. 3, similar to how Mahler scores the "sleighbell motive" throughout the opening movement of Symphony No. 4. The "sleighbell motive" serves as the introduction to the movement, an implied repeat of the exposition, to open the development, and significant shifts in tonal centers throughout the development section.



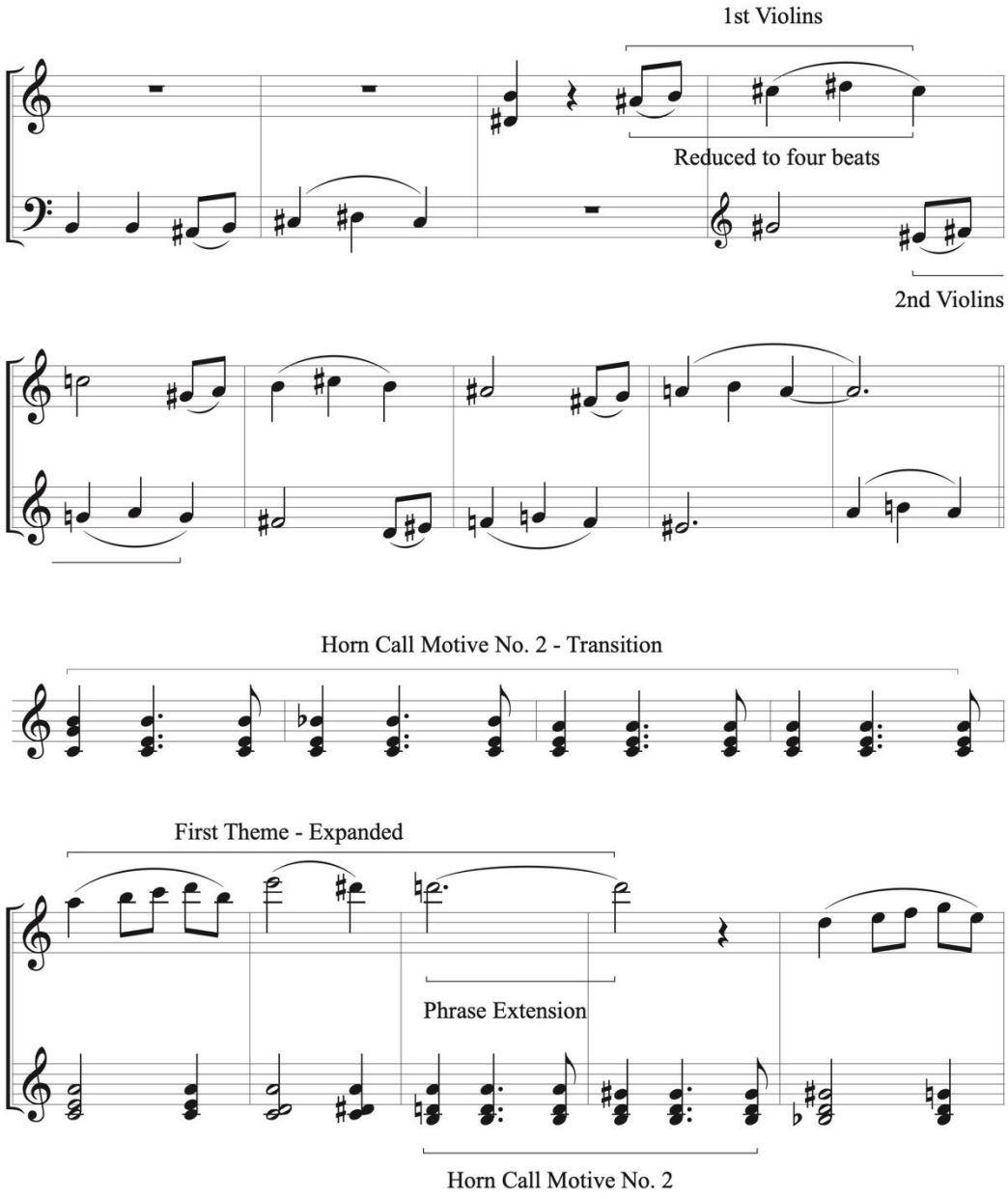
Example 27: mm. 228-231, Second Horn-Call Motive, Original Iteration

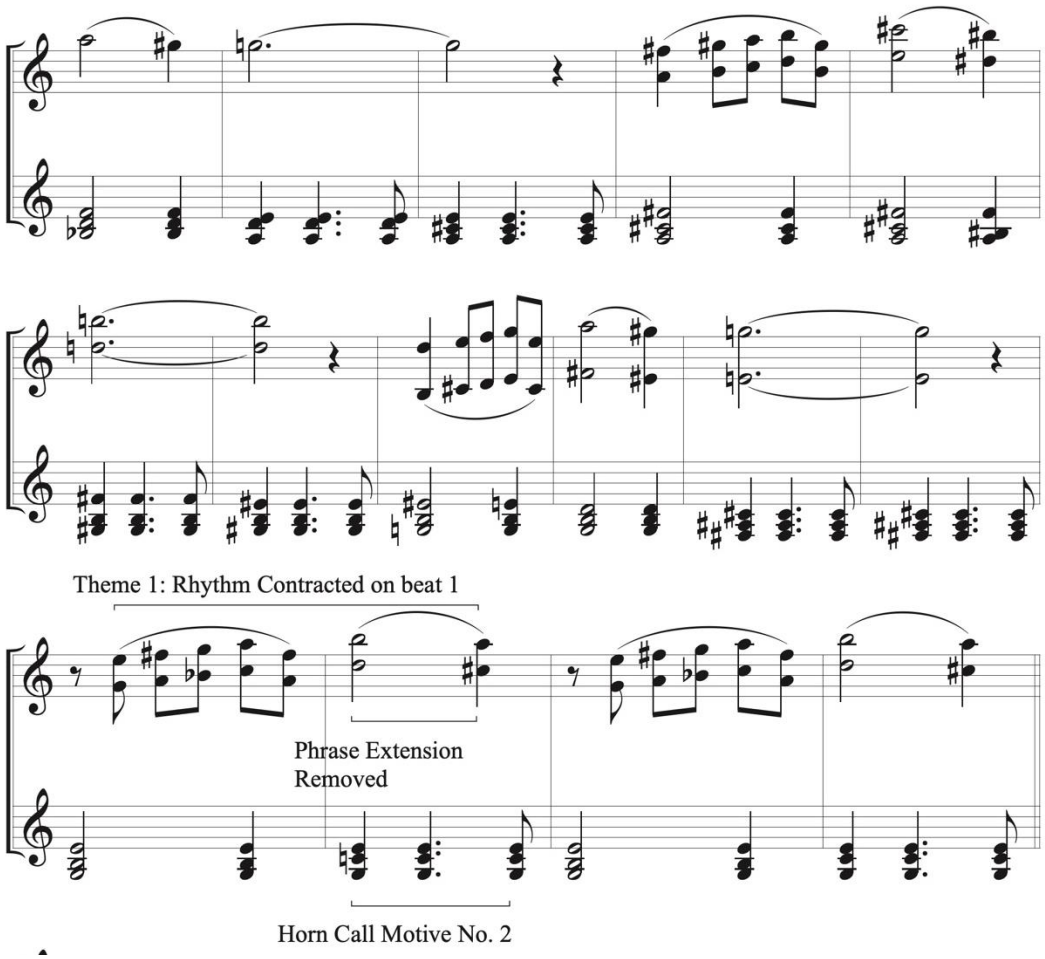
Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

The two horn-call motives differentiate in duration and roles. The first horn-call motive last two measures in duration while the second horn-call motive extends across four bars in duration. The second horn-call motive functions as harmony throughout the development section. However, both horn-call motives serve as a transitional when scored for a singular voice when the first horn-call motive only functions as transitional material during the entire movement when the second horn-call motive functions as a harmonic bassline for the bulk of the development.

In general, the first horn-call motives remain stagnant in terms of rhythmic and harmonic development while the second horn-call motive moves across the ensemble, starting in trumpets in measure 236 then down to the strings in measure 244. When the second horn-call motive migrates to the strings, the motive serves as a harmonic role to a melodic theme. The second

horn-call motive builds triadic harmony in the strings, unlike the first horn-call motive which is a unison line. From measures 228 through 276, Rimsky-Korsakov showcases the interconnection between motives and themes by scoring the first theme over the second horn-call motive.


1st Violins
Reduced to four beats
2nd Violins
Horn Call Motive No. 2 - Transition
First Theme - Expanded
Phrase Extension
Horn Call Motive No. 2



Example 28: mm. 236-267, Second Horn-Call Motive & Theme 1

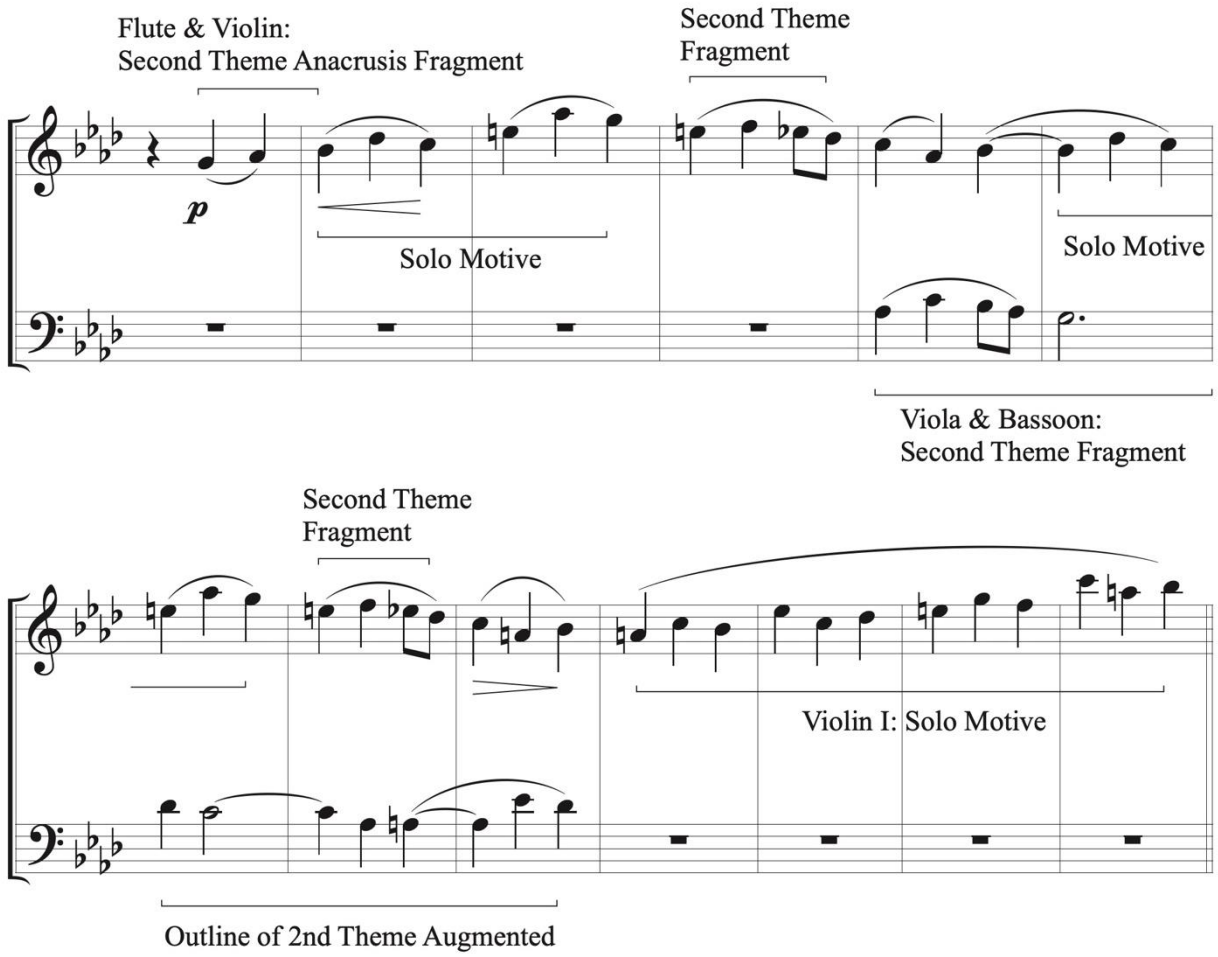
Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

The second horn-call motive and the first theme build the phrase in measure 235. The first theme receives a phrase extension of a dotted half note tied to a half note in measure 250. In measure 237, the second horn-call motive functions as harmony underneath the phrase extension of the first theme. From measures 244 through 276, the second horn-call motive moves back and forth from motive to theme, functioning as call-and-response. Each time the motive occurs, the first theme follows. In measure 264, the rhythm changes with the elimination of the phrase

extension. The first theme then returns to two measures in duration. In measure 265, the second horn-call motive continues to function as harmony underneath the first theme.

The second horn-call motive differs from the first horn-call motives through the inclusion of triadic harmony. The triadic movement results in the scoring of major sevenths, secondary dominants, and secondary leading tones. The use of secondary chords results in non-traditional resolutions. The whole-tone scale allows Rimsky-Korsakov to use non-traditional resolutions. In measure 248, the harmony of the first theme remains the same in octaves across voices. In measure 256, the harmony of the first theme changes to include sixths.

An expansion on the solo motive occurs in measure 528 when the flute and violin open the phrase with the quarter note pickups associated with the second theme. The flutes and violins in measure 529 represent the solo motive. In measure 531, the second theme undergoes fragmentation. Underneath the hybrid of the second theme and the solo motive established in the flutes and violins, the violas and bassoons tag in with a variation on the first measure of the second theme in measure 532. In measure 534, rhythmic alterations in the violas and bassoons occur through augmentation. In measure 537, the solo motive takes flight in the first violin.

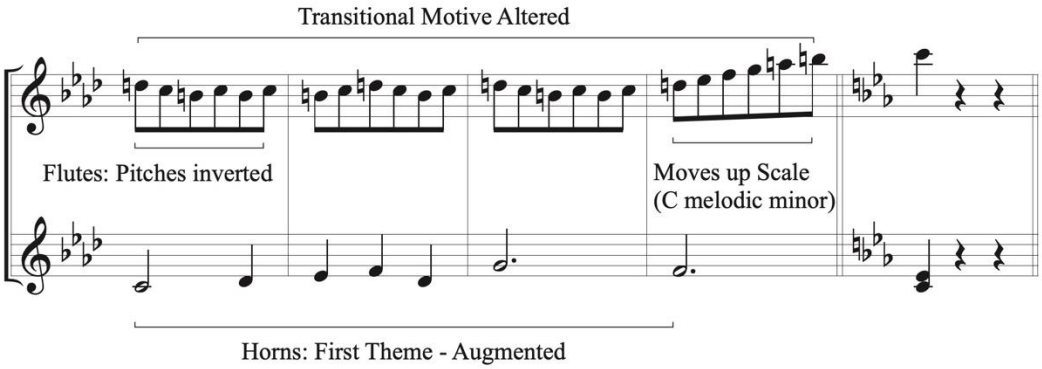


Example 29: mm. 528-540, Second Theme & Solo Motive Variation

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Rimsky-Korsakov scores motives as a singular entity as well as scoring the motives as harmony to the major melodic themes of the movement. As shown above, Rimsky-Korsakov intertwines the solo motive with the second theme from measures 528 through 540, specifically in measure 536. Rimsky-Korsakov does not score two variations of the same theme over each other the way Mahler does.

Occurring above the augmented variation of the first theme simultaneously in measure 580 is the flutes and violins with the transitional motive. Mahler also scores themes over motivic events such as in measure 102 with the “sleighbell motive” and the antecedent from the second theme occurring simultaneously, showcasing how Mahler and Rimsky-Korsakov are able to intertwine motivic and thematic entities in order to generate progressive harmonic and melodic layers without the inclusion of new musical material (Example 52).



Example 30: mm. 580-583, Theme 1 Augmented & Transitional Motive

Source: Rimsky-Korsakov, Nikolay. Symphony No. 3, first movement. (1873)

Similar to Mahler, Rimsky-Korsakov does not introduce additional materials to function as transitional material between musical events. While Mahler typically manipulates the antecedent and/or the consequence to the second theme or fragments of the sixth theme to function as transitional material, Rimsky-Korsakov uses the motives as the transitional material. However, Rimsky-Korsakov morphs together the transitional motive with the first theme. While the new thematic phrase functions as both thematic and motivic due to the unique foundation of the musical line, Rimsky-Korsakov still primarily uses the motives to move from one section to

the next where Mahler is strictly using the themes to transition when not scoring the “sleighbell motive.”

CHAPTER 3: GUSTAV MAHLER'S SYMPHONY NO. 4, FIRST MOVEMENT

Similar to Rimsky-Korsakov's manipulation of themes and motives in Symphony No. 3, first movement, fragmentation, inversion of pitches, rhythmic alterations, sequential motion, shifting of principal purposes of thematic material, and expansion and contraction also fuel the thematic and motivic development of Mahler's Symphony No. 4, first movement. Additionally, fragmentation of themes allows for harmonic and transitional shifts to connect each of the themes seamlessly throughout the first movement.

With seven thematic themes at play in in the first movement sonata form, Mahler uses fragments from the major themes as a mode to transition from one musical statement to the next. The first, second, and sixth themes develop primarily through the use of fragmentation to allow the three themes to move through transitional points as harmonic layers and as developed themes. Each theme and motive occur in different sections of the opening movement (see Table 9).

Table 9

Themes & Motives Occurrences in Mahler's Symphony No. 4, first movement

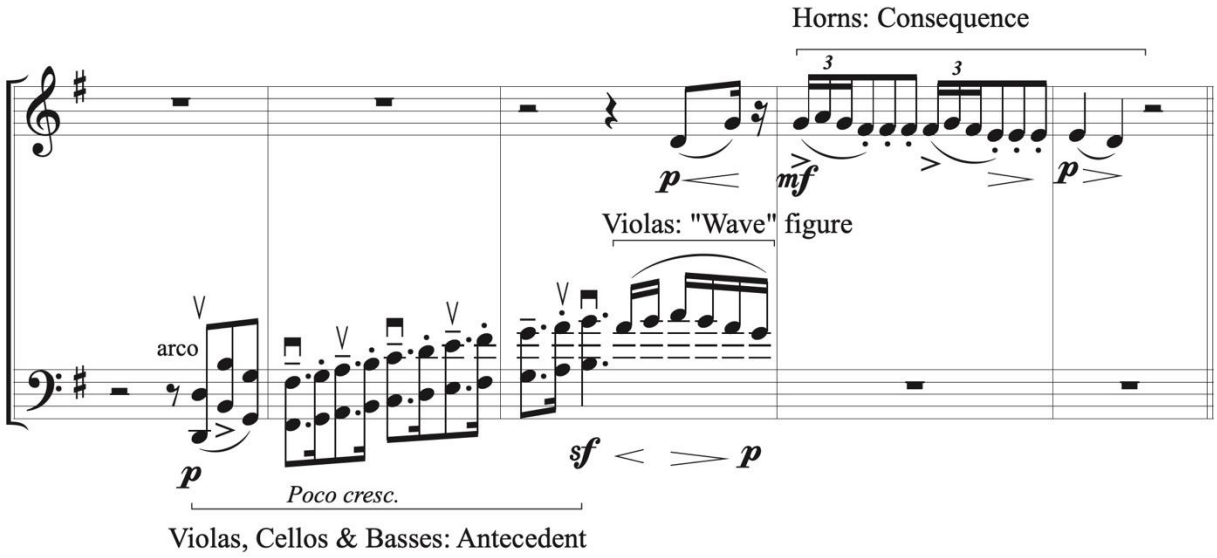
Theme/Motive Name	Exposition	Development	Recapitulation
"Sleighbell Motive"	**X**	**X**	
Theme 1	**X**	**X**	**X**
Theme 2	**X**	**X**	**X**
Theme 3	**X**	**X**	**X**
Theme 4	**X**		**X**
Theme 5	**X**		**X**
Theme 6	**X**	**X**	**X**
Theme 7	**X**	**X**	**X**

With both Mahler and Rimsky-Korsakov, it is evident how both composers are utilizing similar structural techniques derived from the sonata form built on during the romantic era. A key similarity between both composers with the overall structure of both opening symphonic movements is how Rimsky-Korsakov and Mahler both omit themes from either the development section (Mahler's Symphony No. 4, first movement) or the recapitulation section (Rimsky-Korsakov's symphony No. 3, first movement). Additionally, neither composer scores all of the melodic motives during each of the three sections.

Thematic Development

Numerous occurrences of thematic alterations occur throughout the duration of Mahler's Symphony No. 4, first movement (see Appendix A). Throughout the following analysis, discussion of each significant variation will occur. In Mahler's Symphony No. 4, first movement, thematic development begins in the second theme in measure 11. As a result, the discussion of thematic development will begin with the second theme.

The original iteration of the second theme begins in measure seven. There are three segments of the second theme proving fundamental to how the second theme interacts and develops throughout the first movement through fragmentations, rhythmic alterations, and functioning as transitional material. In measure seven, the first segment known as the antecedent opens with an arpeggio in second inversion with a rising dotted eighth note to sixteenth note pattern. The horns in measure ten receive the second segment known as the consequence and opens with a measure of a sixteenth note triplet followed by three eighth notes lasting a full measure. The third segment is the wave figure beginning on the upbeat of beat three in measure nine in the violas providing a mini transition to connect the antecedent with the consequence (Example 31).

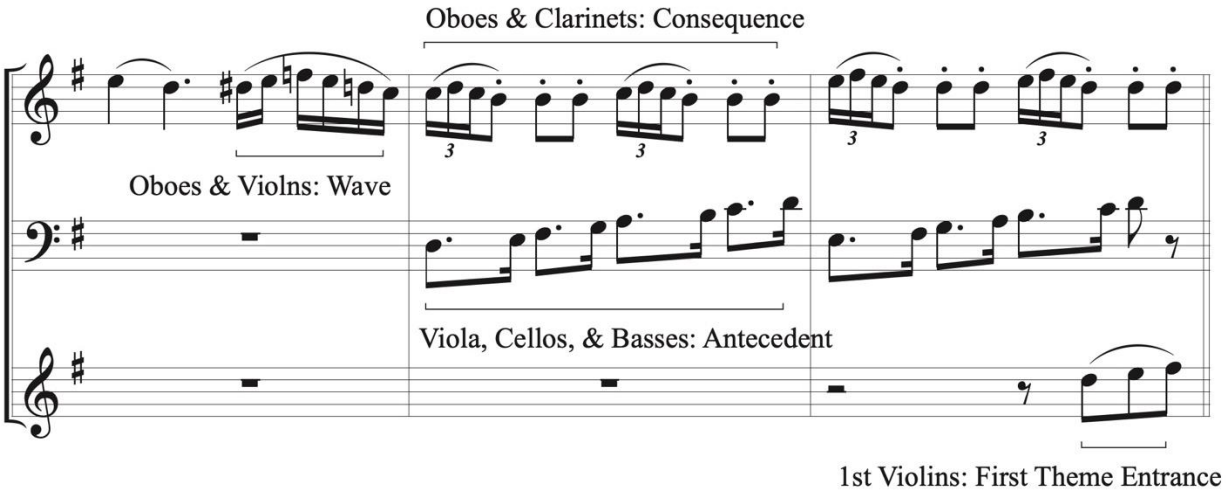


Example 31: mm. 7-11, Theme 2, Original Iteration

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Mahler treats the second theme as transitional material through using each of the three segments. For instance, the “wave figure” in the original statement of the second theme serves as a mini transition between the antecedent and the consequence.

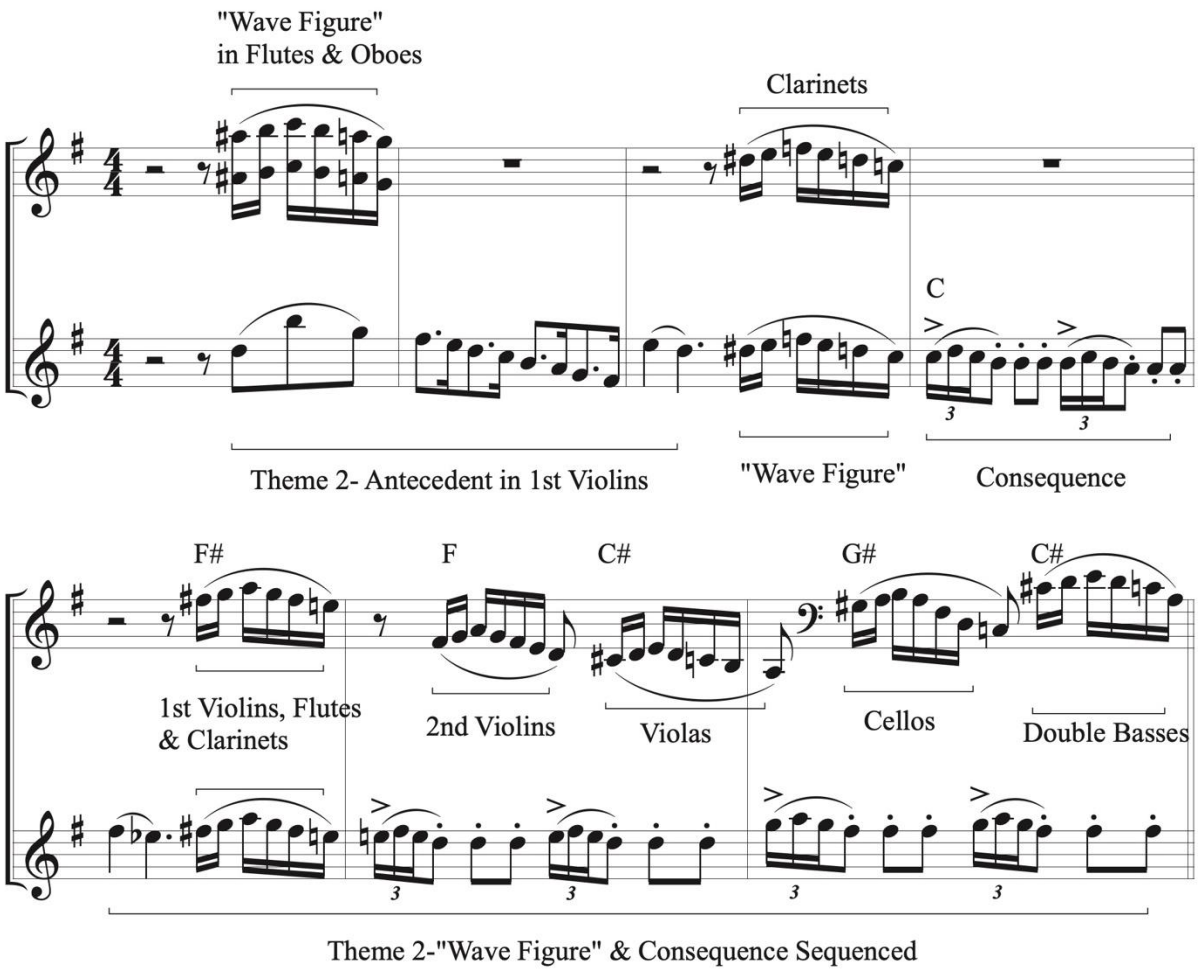
In measure 15, the second theme functions as a transition to the return of the first theme with the antecedent and consequence scored together (Example 32). The use of both halves of the second theme at the same time indicates how the antecedent and the consequence are able to work interdependently. The antecedent moves up stepwise from D to E, and the antecedent moves in thirds from C to E. The sequential motion allows for the first violin’s entrance on the upbeat of beat three in measure 17 to fall on the D.



Example 32: mm. 15-17, Theme 2, Antecedent & Consequence Simultaneous

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Contrasting from measure 15, the second theme consequence functions as a transition with the “wave figure” simultaneously moving into the third theme in measure 29 (Example 33). Beginning in measure 29, the flutes, clarinets, and violins begin the pattern with the wave with the violins taking lead on the sequenced consequence in measures 30 through 31. The “wave figure” descends to the second violins, then to the violas, cellos, and basses to end the transition. The stepwise motion of the “wave figure” changes in measure 31 to descending thirds.

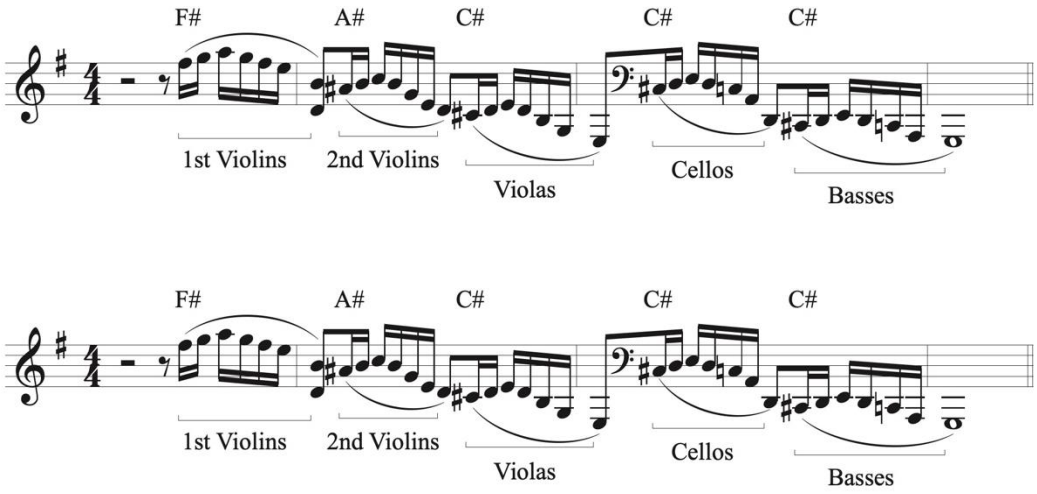


Example 33: mm. 29-31, Theme 2, “Wave Figure” & Consequence Scored Simultaneously as Transitions

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

The same transition to move into the seventh theme using the “wave figure” and the consequence fragment from the second theme occurs in measures 88 through 90. However, the oboe and clarinet parts are playing the consequence instead of the first violins and the sequencing of the “wave figure” outlines a F# major triad with C# in the violas repeated in the

cellos and double basses (Example 34).



Example 34: mm. 88-91, Theme 2, "Wave Figure" Transition Sequence

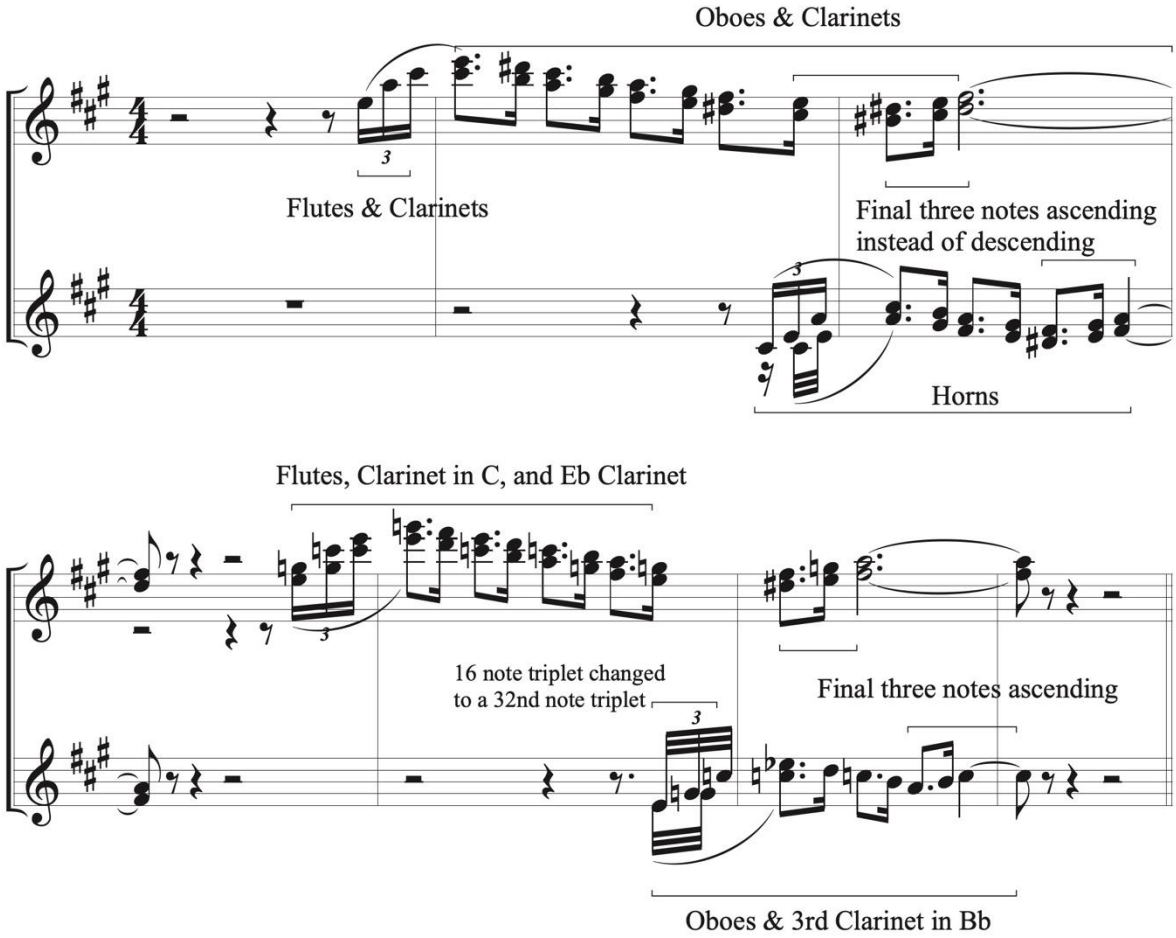
Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

In measure 147, alterations to the harmony and the direction of the pitches of the antecedent of the second theme are occurring in measures 147 through 153 in the woodwinds and horns (Example 49).

While scored as the theme during the development section in measure 147, the second theme antecedent contrast from the statement of the antecedent occurring in measure 12. In measure 147, the antecedent undergoes parallel motion while scored in thirds. In the statement of the antecedent in measure 12, the antecedent, while technically in thirds as well, moves in contrary motion between the cellos, basses, and violins.

In measure 149, the final three notes of the second theme antecedent are pitched E – D# – F#, normally descend as E – D – C# in the original antecedent. On beat three of measure 149, the

horns use the same alteration of the last three pitches rising instead of descending. The same pitch alteration occurs through measure 152 in the final three notes of the antecedent.

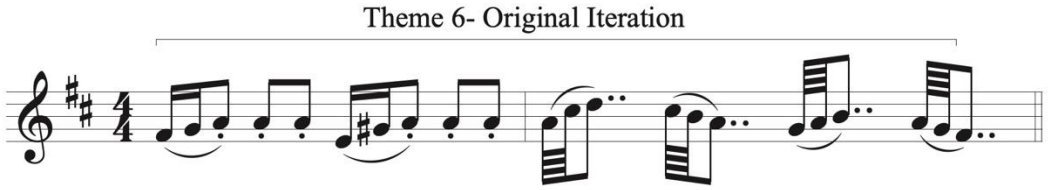


Example 35: mm. 147-153, Theme 2 Antecedent, Variation on Pitch direction & Anacrusis

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

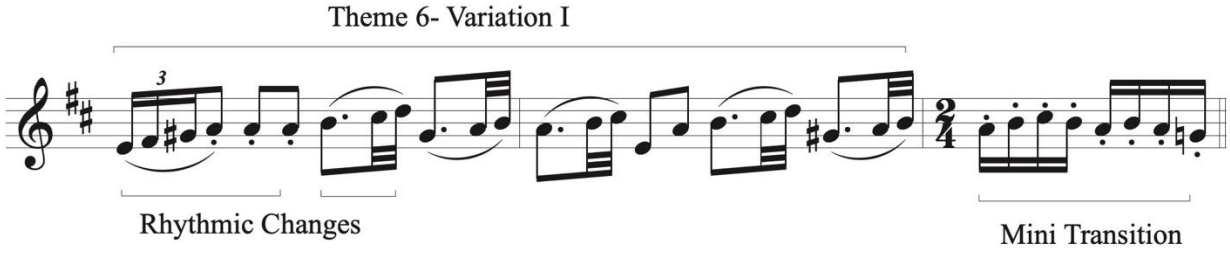
The sixth theme opens for the first time in measure 58 in the oboes, as a playful theme consisting of fast notes (Example 36). Throughout the first movement of Symphony No. 4, the sixth theme returns numerous times, primarily as transitional and fragmentary events during the

development section. Immediately in the exposition, following the original statement of the two-bar theme, Mahler ornaments the sixth theme with rhythmic changes on the downbeat of measure 60. The rhythm alterations include the sixteenth notes on beat one changing to a sixteenth note triplet on the down beat. The rhythm on beat three changes to a dotted eighth note with thirty second notes as well (Example 37). On beat three, the theme should repeat; however, Mahler takes the second increasing the sixty fourth notes from the downbeat of measure 69 to thirty second notes on the backside of the third beat. The figure carries through measure 61.



Example 36: mm. 58-59, Theme 6, Original Iteration

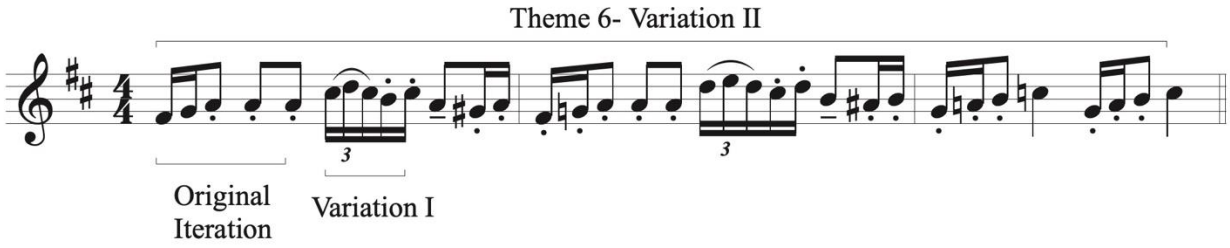
Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)



Example 37: mm. 60-62, Theme 6, Variation I

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

In measure 63, the original sixth theme is fused with the first variation of the sixth theme (Example 38). On beats one and two in measure 63, Mahler scores the original iteration of the sixth theme. On beat three, the sixteenth note triplets to two sixteenth notes to an eight note, and two sixteenth notes.

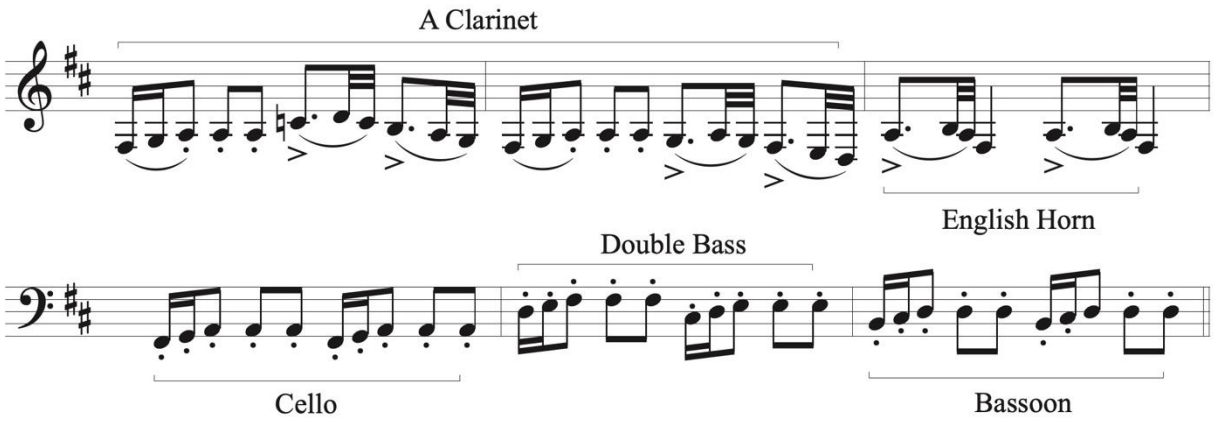


Example 38: mm. 63-65, Theme 6, Variation II

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

The fusion of the sixth theme with the consequence of the second theme result in a mini transition in measure 62. The mini transition shows interconnection between Mahler's seven themes. The sixteenth notes to the repeated eighth notes return with a twist on the consequence using moving sixteenth notes in place of repeated eighth notes with the movement from the first variation of the sixth theme on beat four. Finally, the sixth theme undergoes another rhythmic alteration with the thirty second notes increasing to sixteenth notes. The rhythmic augmentation to sixteenth notes remains for the duration of the sixth theme.

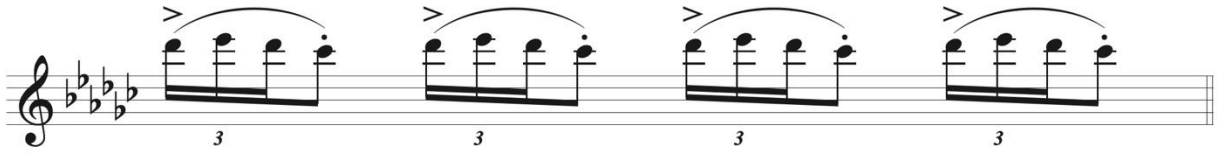
Beginning in measure 67, the sixth theme becomes fragmented as "mini solos" from measure 69 through 72 as a transition to lead back into the "sleighbell motive" in the clarinets, English horn, cellos, basses, and bassoons (Example 39).



Example 39: mm. 67-72, Theme 6, Fragmented Transitional "Mini-Solos"

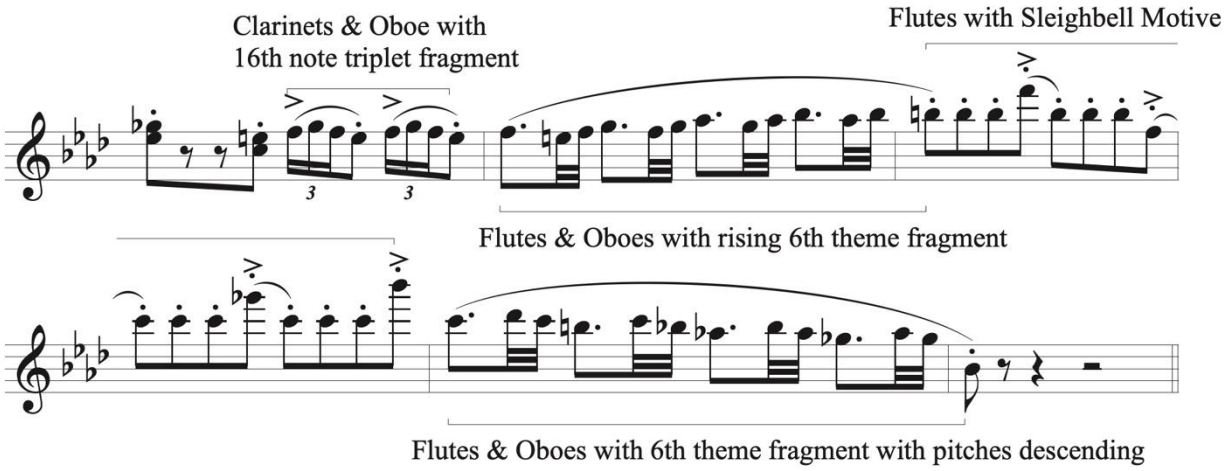
Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Established by the surrounding context, the fragment of the sixteenth note triplet to eighth note figure fluctuates as either the sixth or second theme as the second theme consequence and sixth theme contain similar rhythmic structures. Shifting from one musical idea to the next is possible through the similar rhythmic structures of both themes. The Eb clarinets in measure 159 show the sixteenth note triplet and singular eighth note fragmented (Example 40). The absence of the repeated eighth notes indicates the use of either the sixth or second theme. In measure 180, the sixteenth note triplet fragment brings in a statement of the sixth theme (Example 41).



Example 40: mm. 159, Theme 2 Consequence, Altered and Repeated

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)



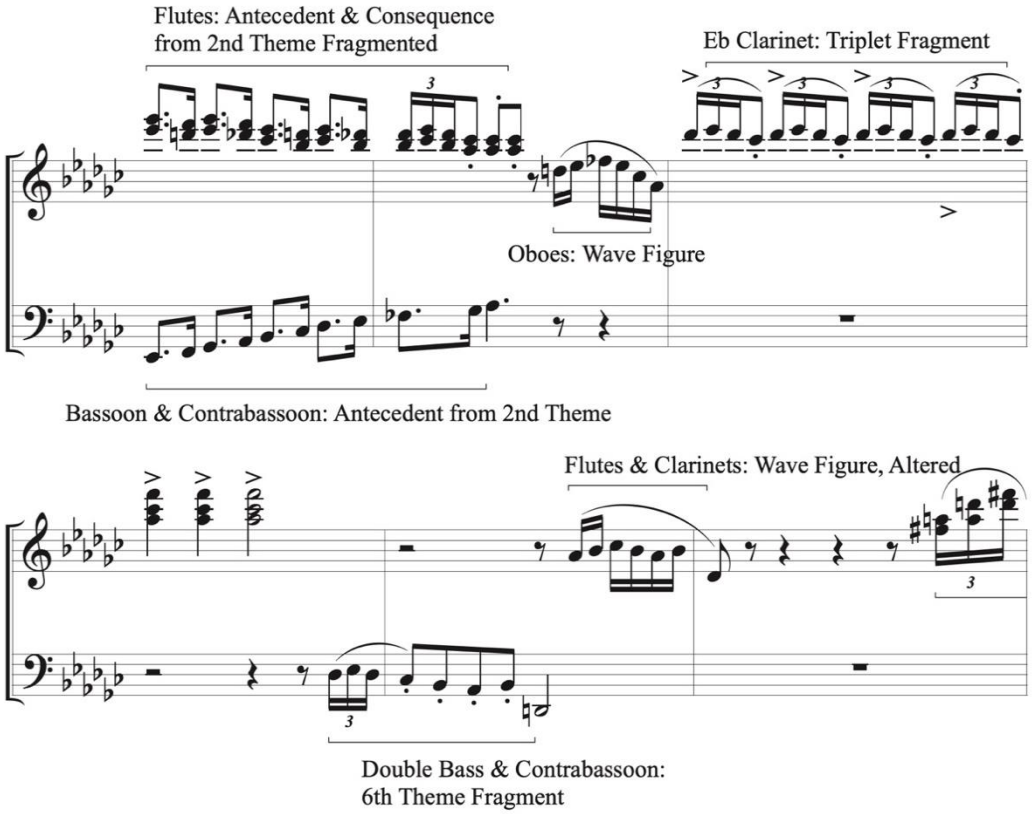
Example 41: mm. 180-187, Theme 6, Fragmented Transitions

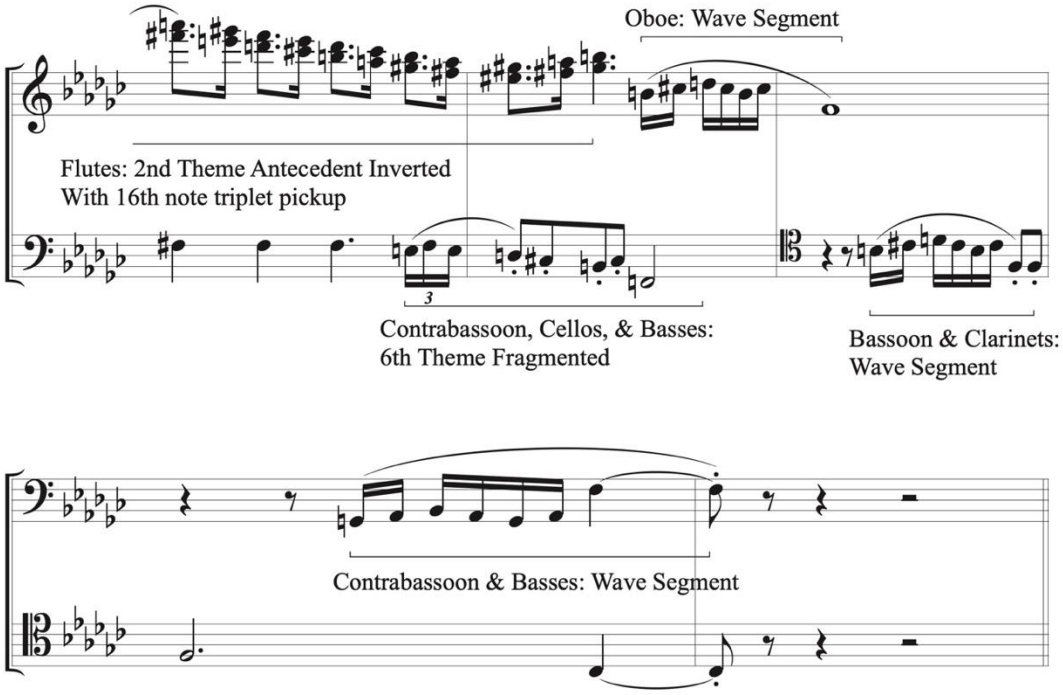
Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Similar to the previous example regarding the sixth theme, the sixth theme continues to function as a transitional entity from measures 180 to 187 through the use of fragmentation utilizing the triplet figure from the second variation of the sixth theme and the dotted eighth note to the thirty second note rhythmic figure (Example 41).

The sixth theme undergoes another alteration with the direction of the pitches in the dotted eighth note to thirty second note rhythmic figure. In measure 181, the pattern rises where in measure 184, the pattern is descending. While both forms occur, the pattern originally moves up – down – up – down, not a single line of rising and descending.

Throughout the development of the first movement, the “wave figure” from the second theme becomes detached from the rest of the second theme. Through the use of fragmentation, the “wave figure” becomes displaced while still separating the antecedent from the consequence. The “wave figure” also allows for the second theme to function as a transitional entity instead of as a thematic force during the transition from measures 159 to 167 (Example 42).


Flutes: Antecedent & Consequence
from 2nd Theme Fragmented
Eb Clarinet: Triplet Fragment
Oboes: Wave Figure
Bassoon & Contrabassoon: Antecedent from 2nd Theme
Flutes & Clarinets: Wave Figure, Altered
Double Bass & Contrabassoon:
6th Theme Fragment

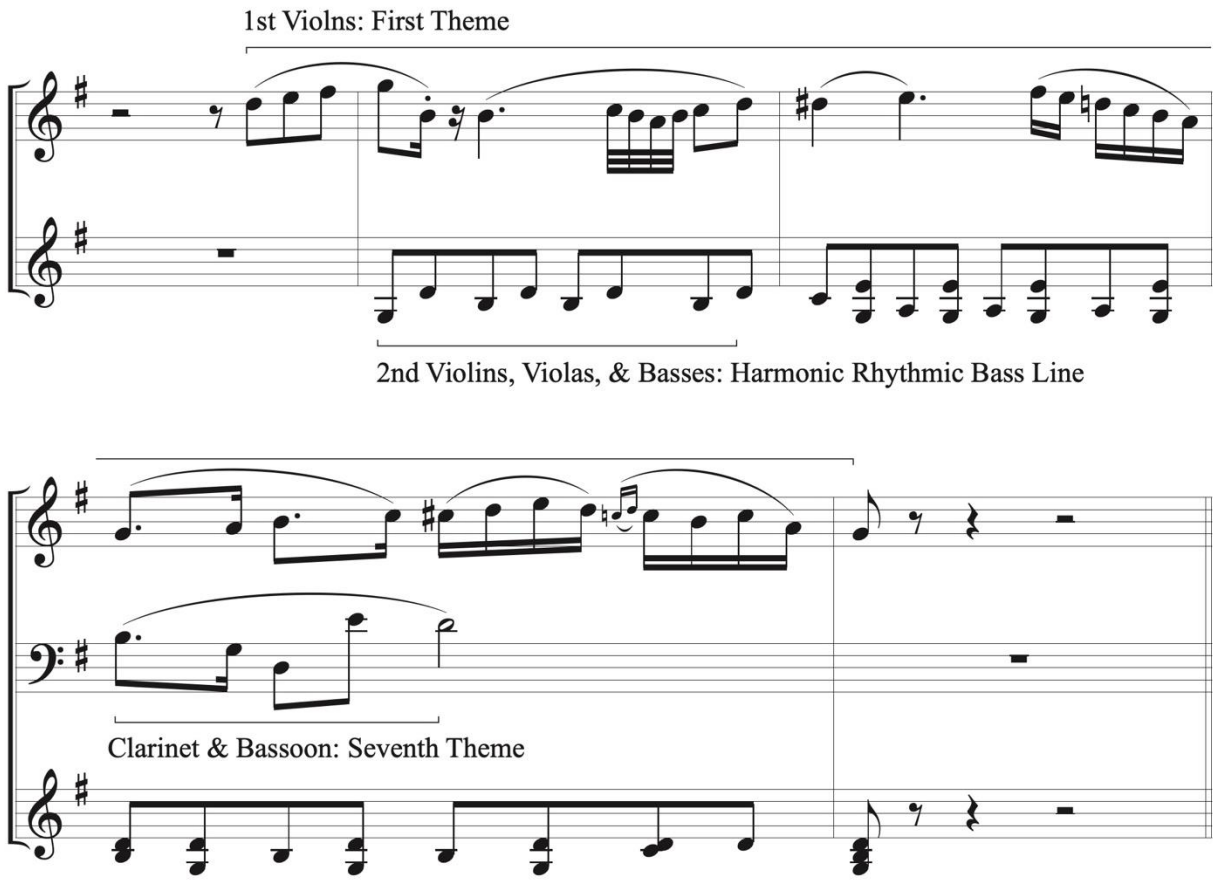


Example 42: mm. 157-167, Theme 2 & Theme 6, Transitional Fragmentation

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

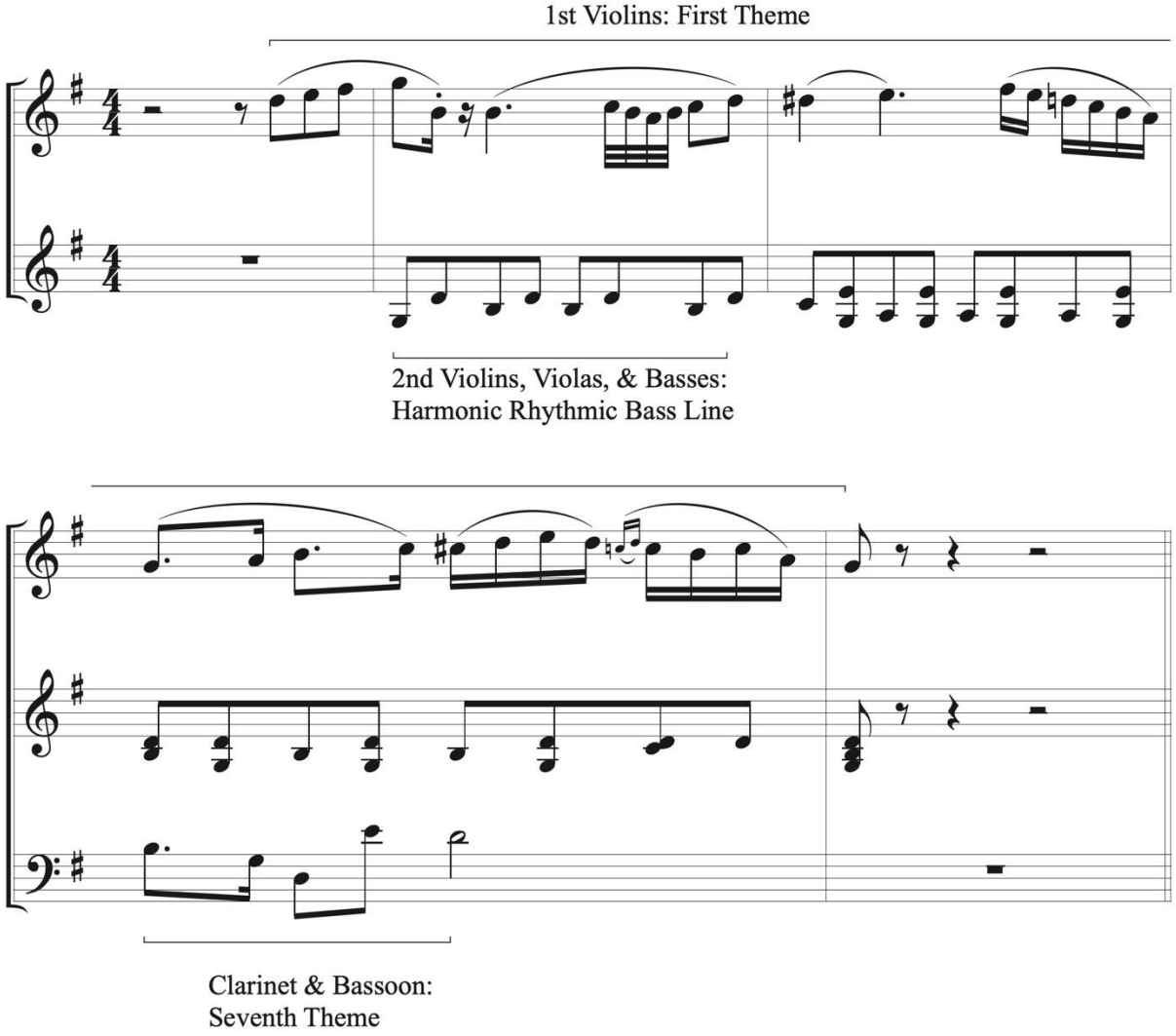
During the transition from measures 157 through 167, the "wave figure" scored in the oboe in measure 158 begins the transition to the repeated sixteenth note triplets derived from the consequence of the second theme in the Eb Clarinet, following the antecedent of the second theme (Example 42). A fragment from the first variation of the sixth theme opens in the bassoon and double basses in measure 160, leading into the wave segment in the flutes and clarinets. By measure 162, the antecedent of the second theme inverted and harmonized in the flutes moves into the wave segment descending from the oboes to the clarinets and low reeds. In measure 162, the second theme antecedent becomes inverted with a fragment of the sixth theme harmonizing underneath the inverted second theme antecedent.

In measure 20 and 79, in the clarinet and bassoon, the seventh theme is not only foreshadowed, but fragmented and acting has a harmonic force instead of thematic to accompany the first theme (Example 43, and Example 44). From a rhythmic perspective, there is rhythmic unison not only with the first theme in the first violins with the dotted eighth note to sixteenth note (repeated on beat two); the two eighth notes on the second beat are the same as the steady eighth note rhythmic harmonic bass line underneath the first theme. The use of the seventh theme as a harmonic force allows for counter-harmonic movement to enhance harmonic growth during the exposition.



Example 43: mm. 17-21, Theme 1, Theme 7 as Harmony Occurrence 1

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

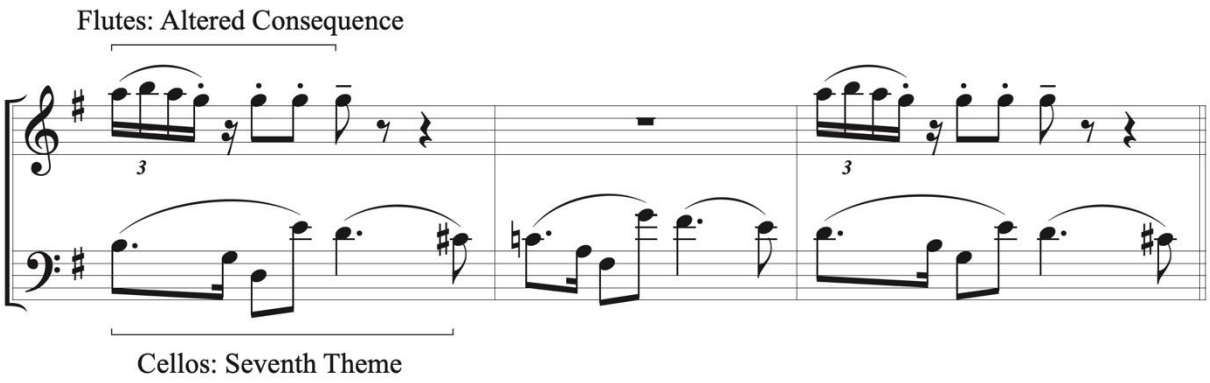


Example 44: mm. 76-80, Theme 1, Theme 7 as Harmony Occurrence 2

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

The second theme's consequence, scored in the flutes in measures 91 and 93, also functions as harmony instead of being thematic during the original statement of the seventh theme (Example 45). However, in both measures, second theme consequence undergoes rhythmic alterations on the upbeat of beat one changing to a sixteenth note and the rhythm

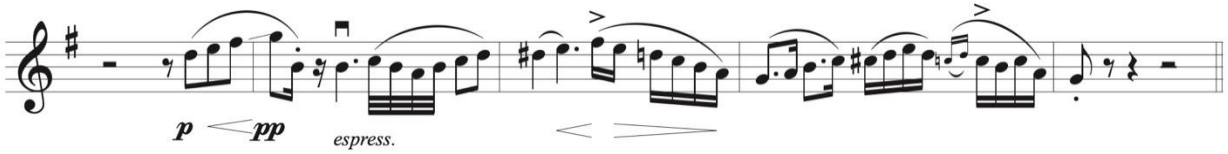
pattern changes on beat three with the addition of a fourth eighth note. Finally, repetition of the second theme consequence occurs twice in previous statements, except in measures 91 and 93, repetition is not present in the second theme consequence.



Example 45: mm. 91-93, Theme 7, Theme 2 Consequence as Harmony

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

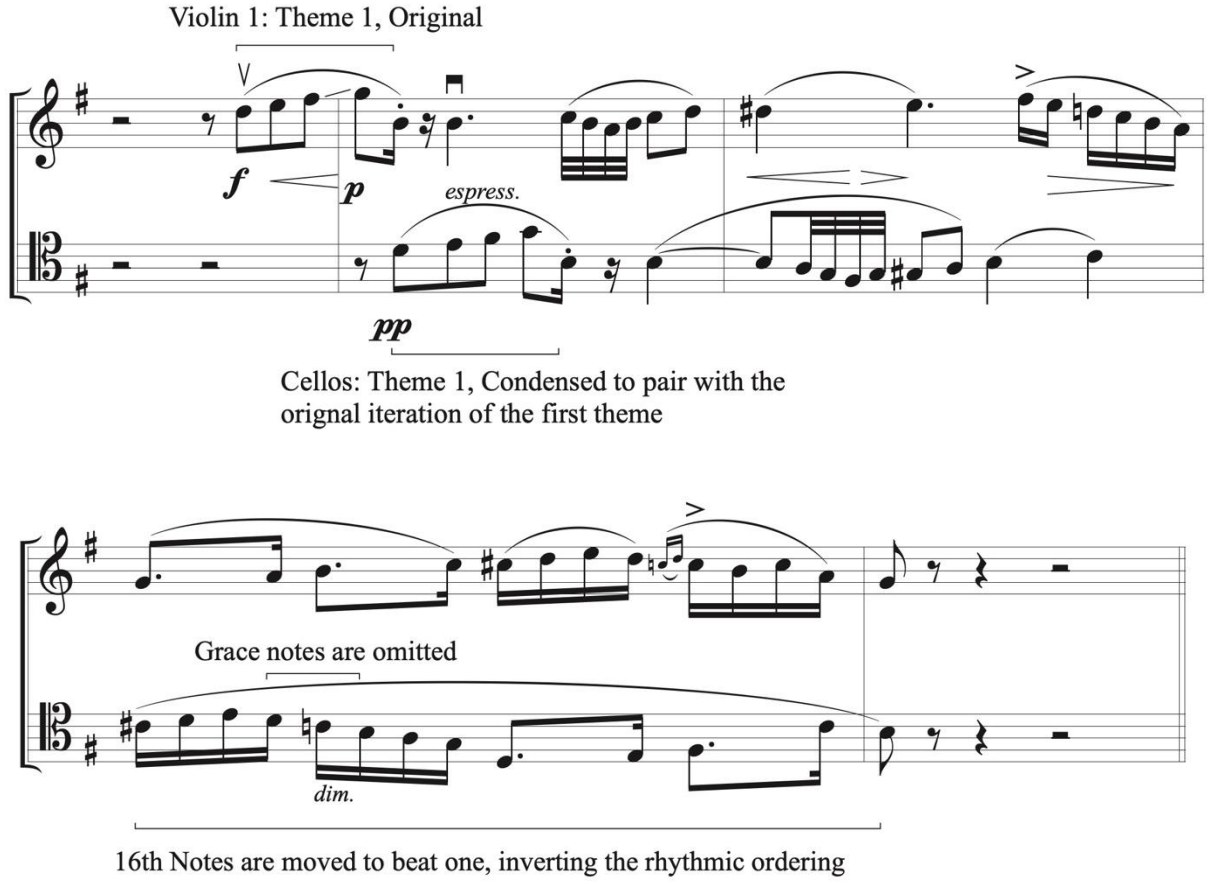
In measure three, the violins present the first theme (Example 46). The first theme original iteration occurs only in the first violins. Permutations of the first theme occur in other instruments. When the first theme is not scored in the first violins, the first theme is varied through fragmentation, expansion and contraction, or other alterations.



Example 46: mm. 3-7, Theme 1, Original Iteration

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

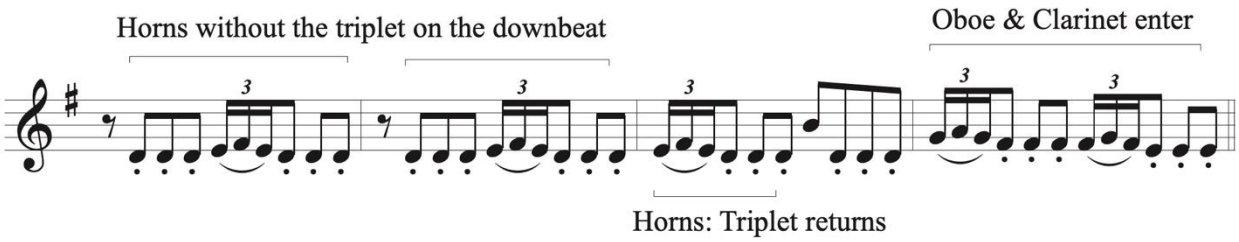
For instance, in measures 17 through 21, the first theme returns in the first violins. In Mahler's grand scheme of development, the cellos enter on the upbeat of measure 18 in a condensed variation of the first theme (Example 47). In measure 20, contraction occurs through the omission of the descending sixteenth notes, originally scored on the upbeat of beat three in the second full measure of the first theme. The order of the rhythm flips in measure 20 in the cellos with the eight sixteenth notes on beats one and two instead of beats three and four.



Example 47: mm. 17-21, Theme 1, Contraction

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

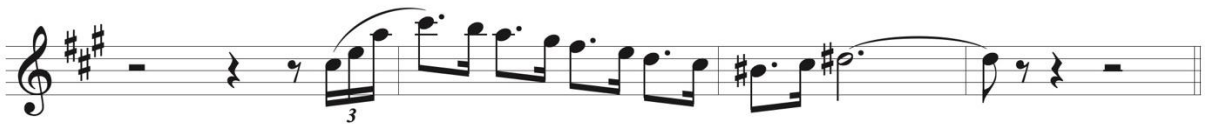
Rhythmic alterations occur throughout the first movement within the second theme. For instance, in measure 80, the horns return with the second theme consequence; however, a rhythmic alteration causes the omission of the triplet note figure on the down beat of measures 80 and 81. In measure 83, the oboe and clarinet tag in with the consequence with the sixteenth note triplet on the downbeat. The second theme consequence in the oboes and clarinets become sequenced, rising up by a third. The second theme consequence in the horn stays static on the E (Example 48).



Example 48: mm. 80-83, Theme 2 Consequence, Rhythm Variation

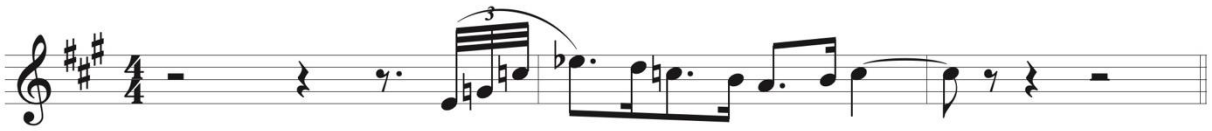
Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Rhythmic alterations continue to occur in the three-note anacrusis leading into the second theme antecedent in measure 147 in the flutes and oboes. In measure 147, the pickup note rhythm changes to a triplet sixteenth note figure (Example 49). In measure 151, the rhythm changes to thirty second note triplets allowing for the pacing to increase in intensity with each new statement (Example 50). In measure 189, the original eighth note rhythm returns as the anacrusis to the second theme antecedent (Example 51).



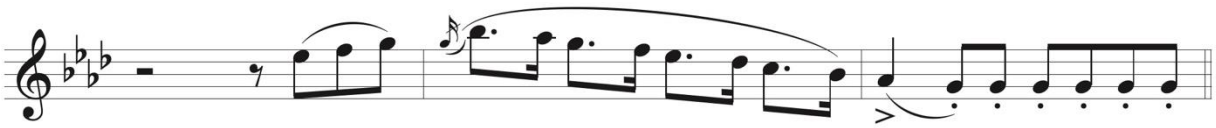
Example 49: mm. 147-150, Theme 2 Antecedent, Anacrusis Rhythm Variation

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)



Example 50: mm. 151-154, Theme 2 Antecedent, Anacrusis Rhythm Variation

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)



Example 51: mm. 189-191, Theme 2 Antecedent, Anacrusis Rhythm Returns to Original

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

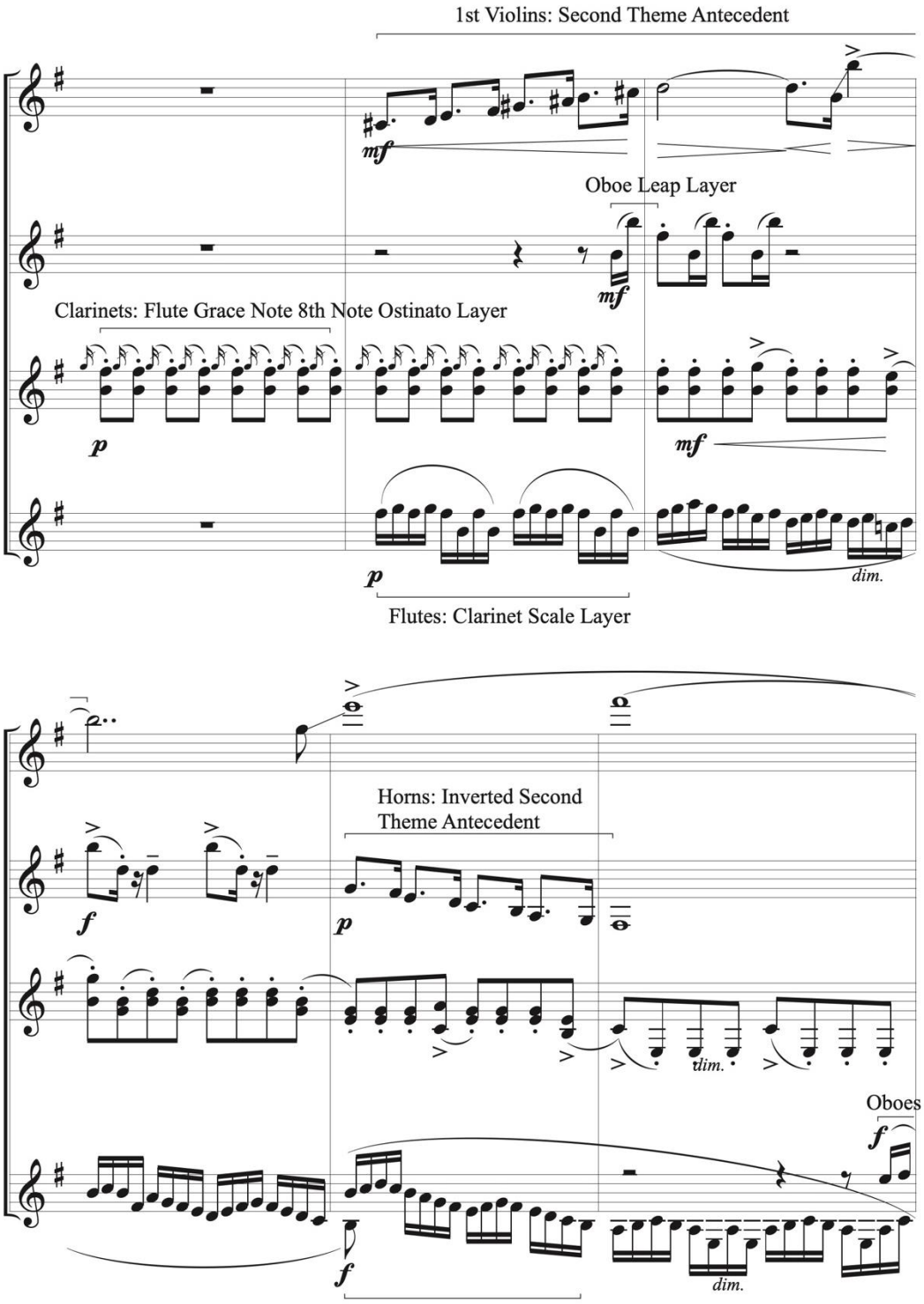
To contrast Mahler's use of rhythmic alterations of Symphony No. 4, first movement, Rimsky-Korsakov does not always alter short segments of a phrase. Instead, Rimsky-Korsakov typically augments and diminishes the rhythm of the entire phrase instead of singular beats, such

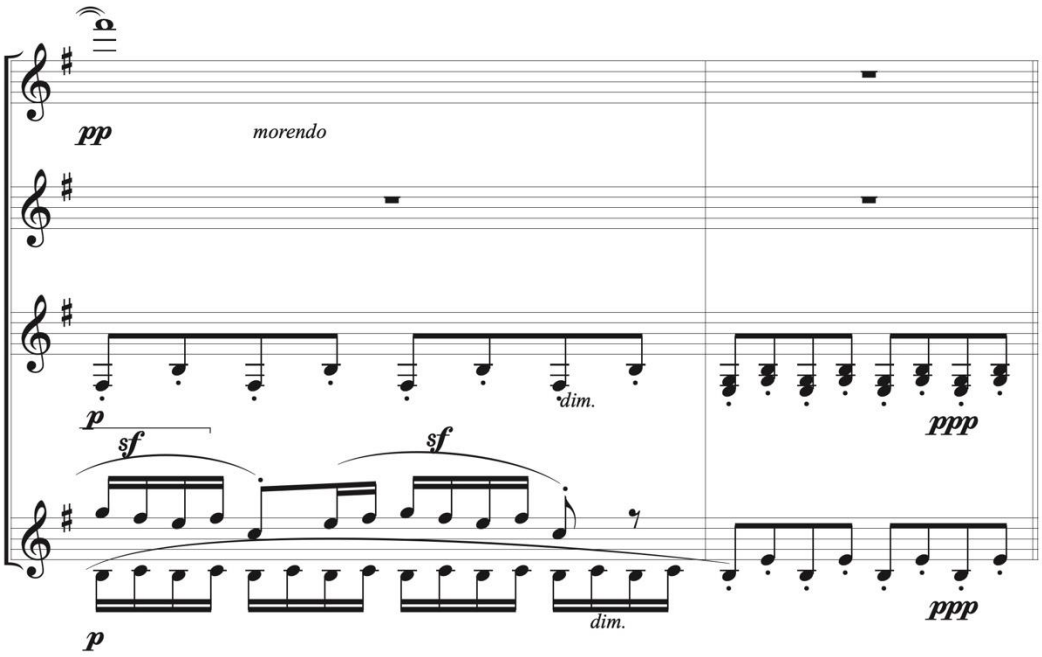
as seen in the first theme in measures 580 through 583 in the horn in Symphony No. 3, first movement (Example 9).

While the rhythmic activity of the anacrusis increases from measure 147 through measure 191 in the second theme antecedent, the pitches of the anacrusis undergo variation as well. Originally in measure seven, a second inversion triad, D – B – G, outlines the anacrusis (Example 31). In measure 151, a second inversion triad, E – G – C, is maintained in the oboe's anacrusis.

In measure 147, a first inversion triad, C – E – A, replaces the second inversion anacrusis (Example 49). In measure 151, the anacrusis in the oboes return to the second inversion triad (Example 50). In measure 189, stepwise motion of Eb – F – G replaces the triad (Example 51).

The second theme antecedent serves as harmony to the "sleighbell motive" in measures 102 through measure 109. In measure 103, the violins perform the second theme antecedent while the "sleighbell motive" occurs simultaneously. In measure 106, the horns receive the inverted antecedent under the "sleighbell motive." The consequence follows the inverted statement in measure 109, but not the original rising antecedent in measure 103. In the opening measures of the development section, Mahler omits the "wave figure" in both statements of the second theme (Example 52).


1st Violins: Second Theme Antecedent
mf
Oboe Leap Layer
mf
Clarinets: Flute Grace Note 8th Note Ostinato Layer
p
mf
p
dim.
Flutes: Clarinet Scale Layer
Horns: Inverted Second
Theme Antecedent
f
p
dim.
Oboes
f
f
dim.
Bass Clarinet: Joins with Clarinet Scale Layer

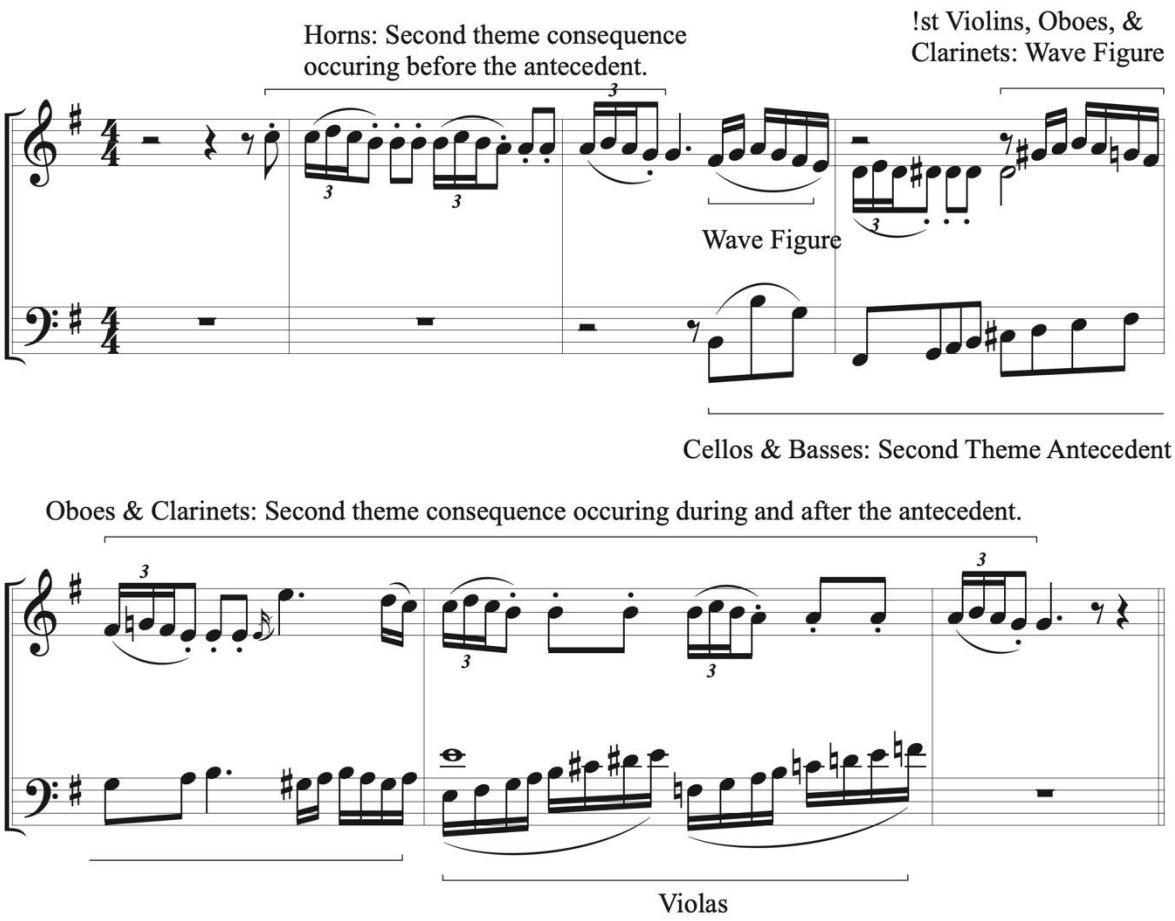


Example 52: mm. 102-109, “Sleighbell Motive,” Theme 2 Antecedent Accompaniment

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Following the second theme’s infusion with the “sleighbell motive,” sequencing takes precedence. In the anacrusis to measures 109 through 113, the consequence of the second theme sequences down from C – B – A – F# (the “wave figure”) and down to E before resetting to move from F# – E – B – A (Example 53).

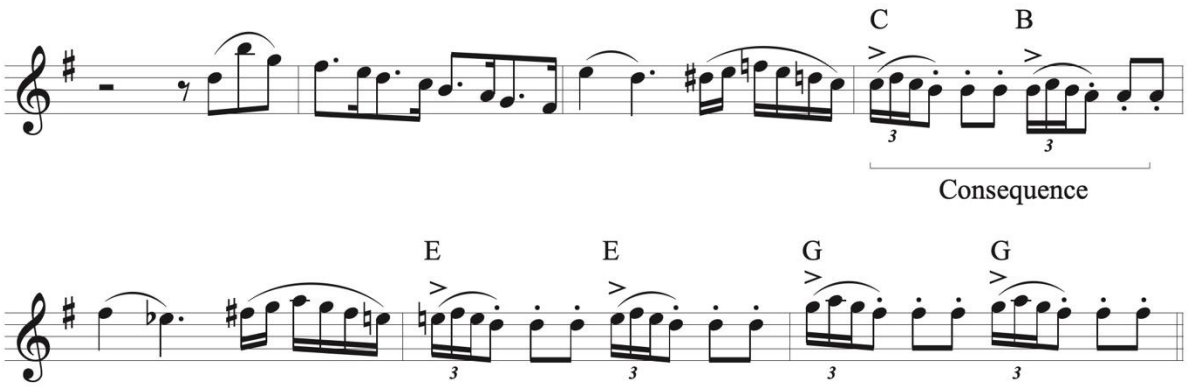
Also occurring in measure 109 is the reversal of the roles between the antecedent and the consequence, meaning the repeated note figure (the consequence) serves as the antecedent and the rising dotted eighth note to sixteenth note figure (the antecedent) functions as the consequence during the iteration of the second theme beginning in measure 109. The consequence then occurs in the oboes and clarinets during the statement of the antecedent in measure 113, finally acting as the consequence for measures 114 through 115 (Example 53).



Example 53: mm. 109-115, Theme 2, Reversed Roles

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

In contrast to the transition utilizing the "wave figure" and consequence in measure 29, leading up to the transition is a statement of the antecedent and the consequence. In measure 25, the first violins sequence the consequence by moving from C – B – E – E – G – G, excluding other rhythmic events (Example 54). The harmonic voice leading is down a step, then up a fourth, and up a third.

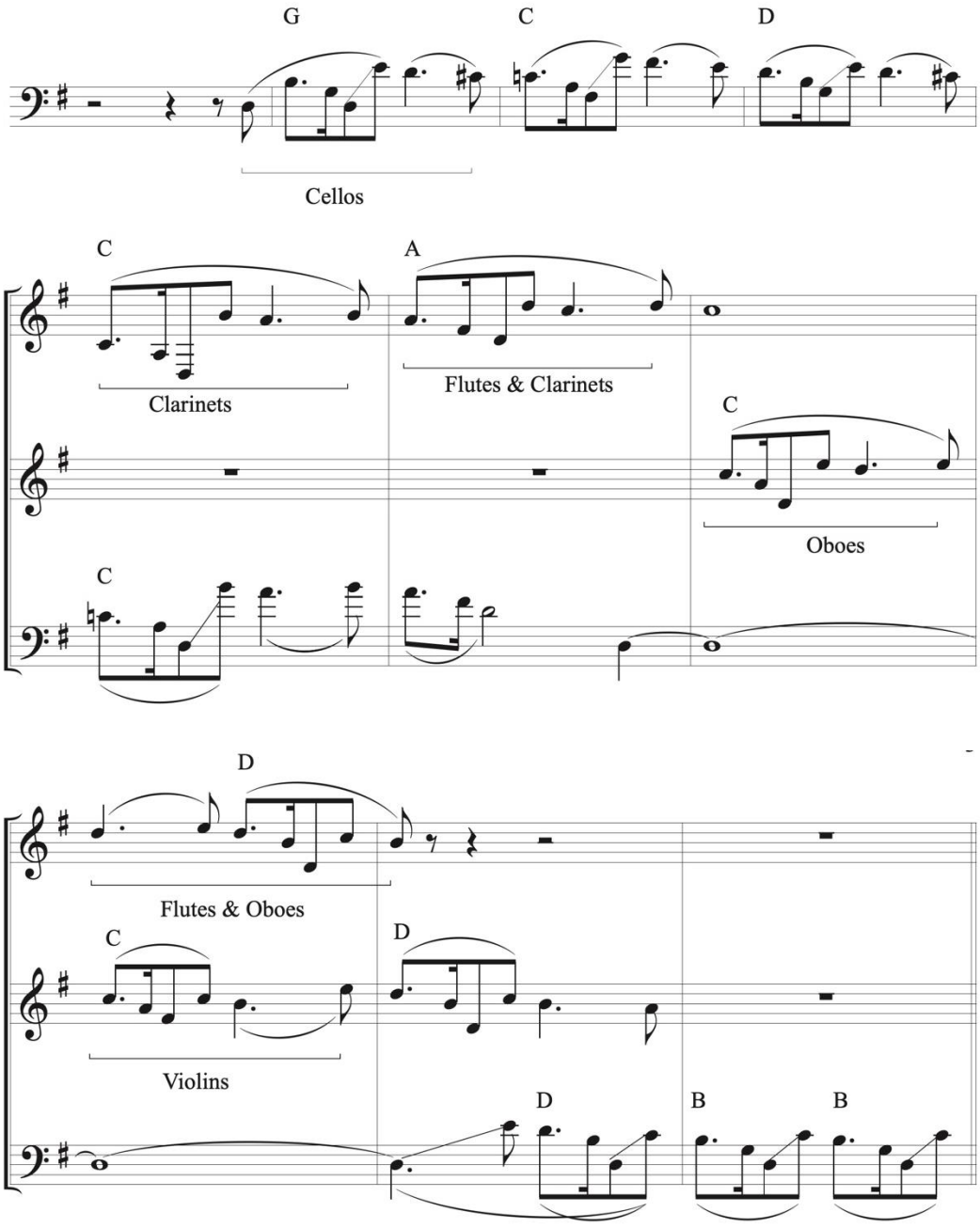


Example 54: mm. 25-31, Theme 2, Sequencing

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Sequencing

Sequencing takes place primarily with the seventh theme from the original statement of the seventh theme in measures 91 through measure 99. The seventh theme is only composed of a single measure utilizing a dotted eighth note, sixteenth note, two eighth notes, a dotted quarter note, and an eighth note rhythm. The figure starts in the cellos, rising up from B to D, down to C, with a leap of a sixth in the flute and clarinet entrance to the A, then a third up to the C in the oboe, up to the D in the flutes, and returning back to the C in the cellos, moving in a full circle to the B to end the phrase. In the recapitulation section, the seventh theme returns in the same configuration as the exposition. The instrumentation changes slightly during the final statement of the seventh theme (Example 55).

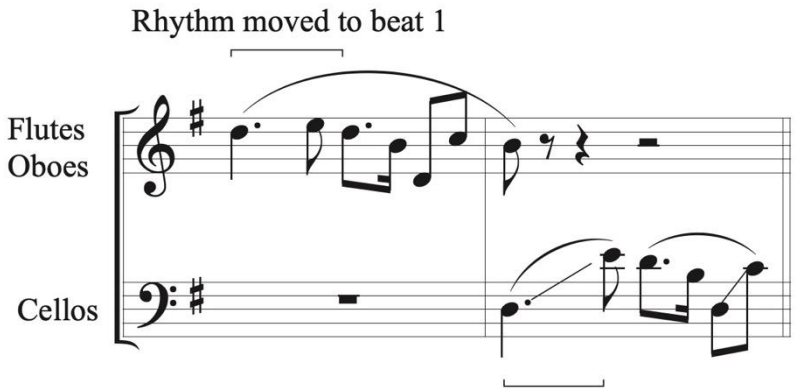


Example 55: mm. 90-99, Theme 7

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

The seventh theme becomes reversed rhythmically during the new iteration of the seventh theme in measure 97. The dotted quarter note to the eighth note from beat three moves to beat

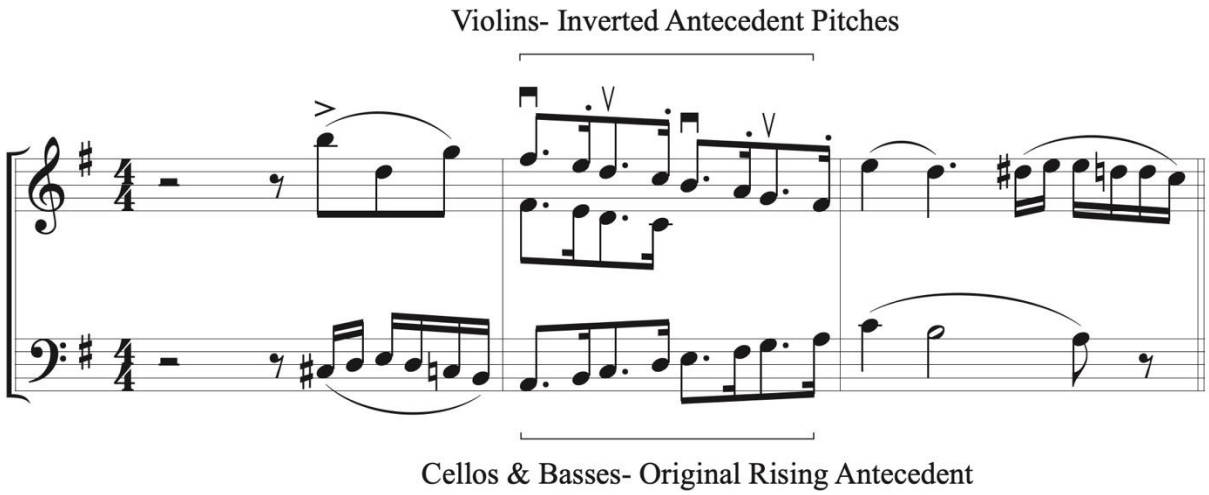
one and the dotted eighth note to sixteenth note to two eighth notes move to beat three in the flutes in measure 97. The same alteration occurs in the cellos in measure 98 as well (Example 56).



Example 56: mm. 97-98, Theme 7, Rhythm Inverted

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Inversion of pitches serves as the primary development for the antecedent of the second theme as shown in measures 11 to 13 (Example 57). Instead of being an ascending scale, the scale starts at the highest point and descends down to the lowest note.



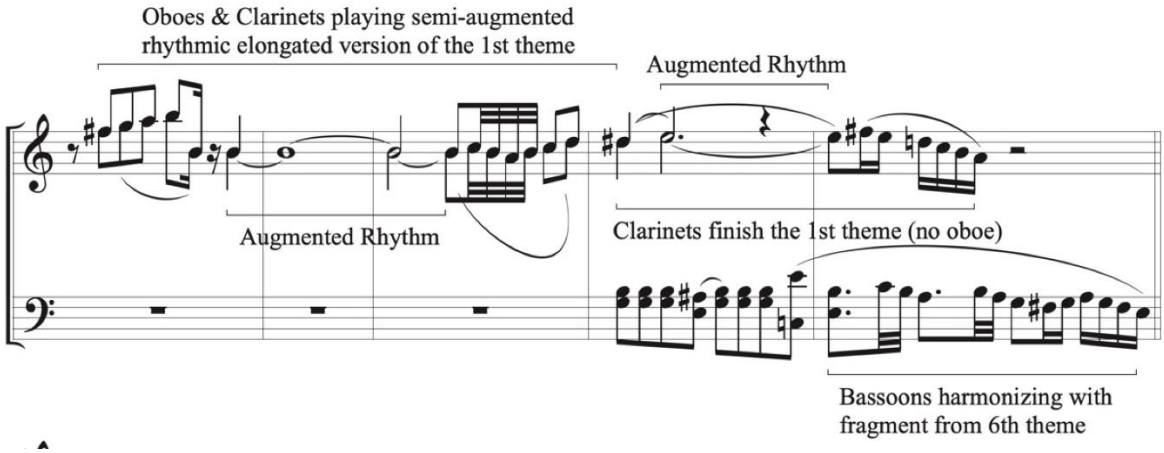
Example 57: mm. 11-13, Theme 2, Inversion & Original

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

With the pitches reversed in measures 11 through 13, the diatonic scale is descending instead of ascending as seen in the original showing the violins begin on F# descending an octave down to F# while the rhythmic figure stays intact. During the inverted variation, the cellos and basses maintain the ascending figure moving from A on the first space up to the A on the top line of the bass clef, allowing for both variations of the antecedent of the second theme to occur simultaneously.

In measure 234, the first theme becomes manipulated differently from other deviations of the first theme by morphing the theme across the clarinets and the oboes. The first theme becomes elongated and quasi-augmented in the variation in measure 234 (Example 58). While the opening rhythm stays the same, the quarter notes on beat four extended until beat three of measure 236 when the scale-like figure occurs. The clarinets resolve the first theme when the oboes drop out. Underneath the conclusion of the elongated first theme, the bassoon uses the sixth theme to in measure 228 as a soloistic transition. Elongation of the first theme shows

expansion of themes. The intermingling of the voices adds to the overall dramatization of the elongation, allowing for Mahler to showcase the timbre elements of the orchestra.



Example 58: mm. 234-238, Theme 1, New Deviation with 6th Theme

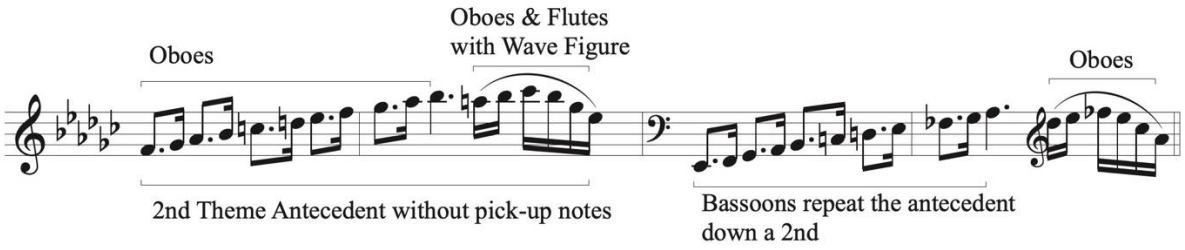
Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Rhythmic elongation of the first theme occurs in two places. In the original iteration of the first theme, on beat two of measure four, Mahler scores a dotted quarter note. However, in measure 234, the dotted quarter note extends across seven beats. In measure 237, a dotted half note replaces the original dotted quarter note from beat two (Example 46).

Repetition

Repetition occurs in measures 155 with the return of the "sleighbell motive." In measure 155, the antecedent takes flight in the oboe without the three-note anacrusis. The use of the inverted antecedent occurs immediately following the wave figure with the original antecedent scored underneath the variation, leading directly into the consequence of the second theme. The layering of the original with the altered antecedent allows for contrary motion of the harmonic

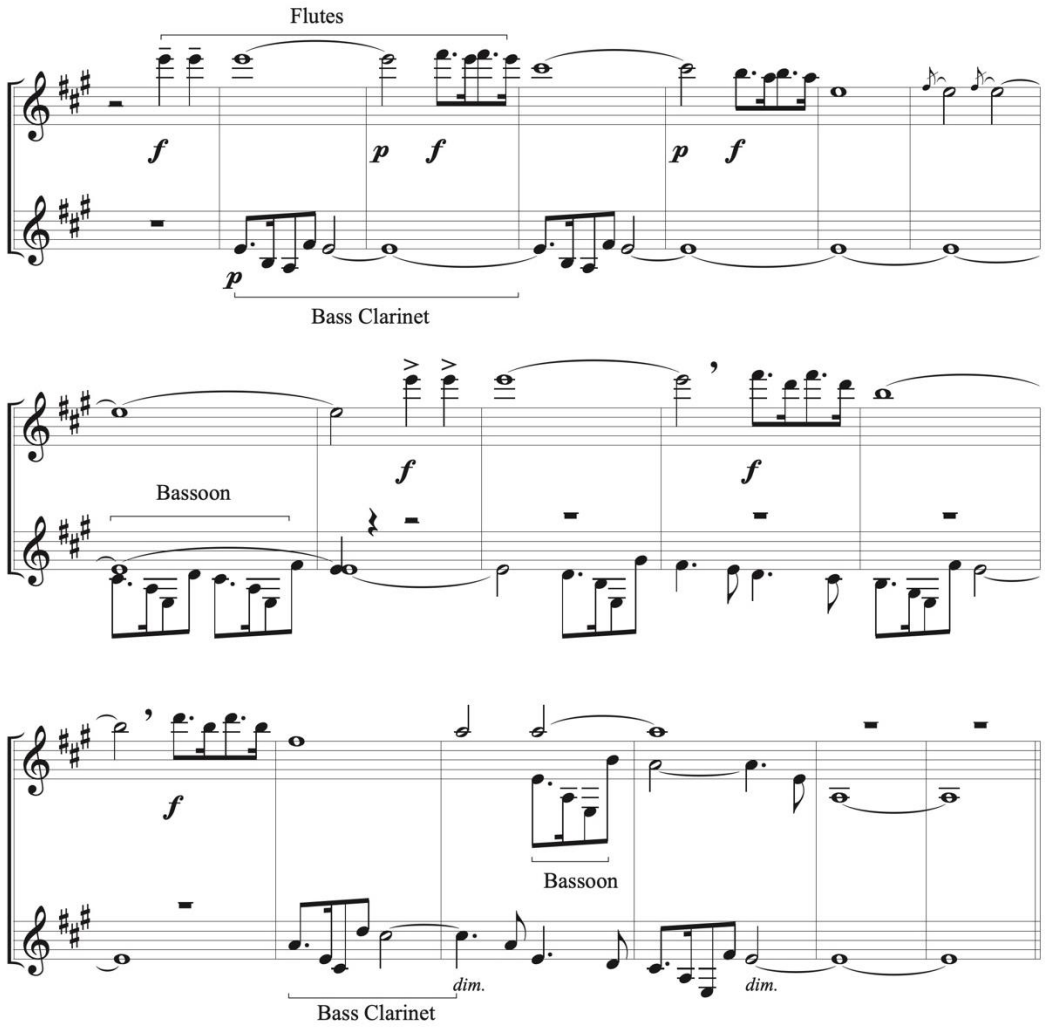
language. In measure 158 fragmentation occurs in the consequence through using a one-beat repetitive figure as a transitional figure out of the “sleighbell motive” (Example 63).



Example 59: mm. 155-158, Theme 2 Antecedent Harmony

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

During the development section, the seventh theme is heavily expanded. The dotted eighth note, sixteenth note, two eighth note, and half note rhythmic figure of the seventh theme, while maintained rhythmically, incorporates longer sustained notes to extend the phrase. The elongation of the phrases results in the grand expansion of the seventh theme. The long duration of sustained notes scored in bass clarinets and flutes beginning in measures 125 through 148 is a phenomenon more appropriate for strings than with woodwinds (Example 60).



Example 60: mm. 127-144, Theme 7, Development Section

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

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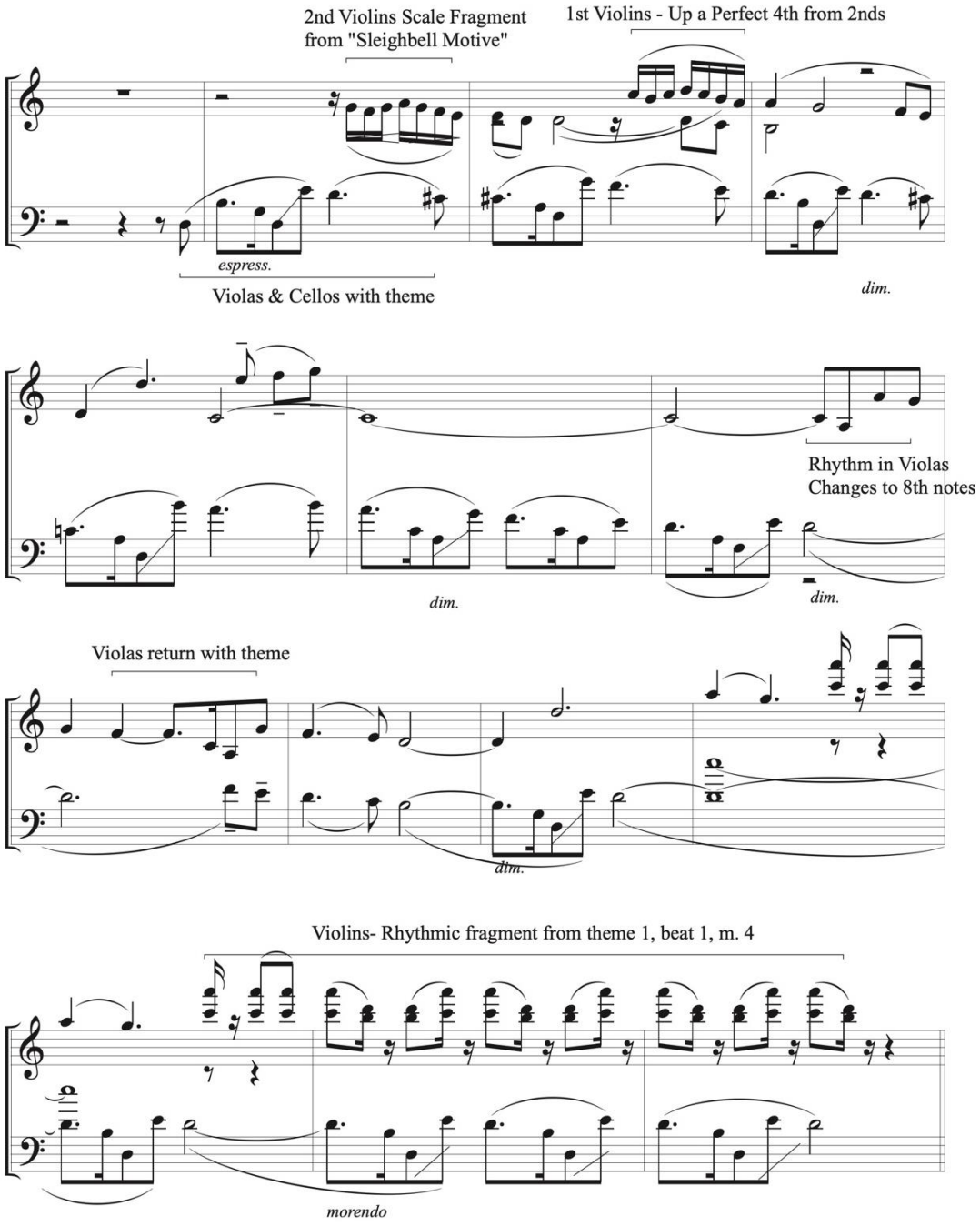
In measure 323, the seventh theme continues to develop in the recapitulation. The seventh theme is more closely related to the scoring of the exposition. The “clarinet scale layer” harmonizes the final statement of the seventh theme (Example 61).



Example 61: mm. 322-335, Theme 7, Recapitulation with Fragmentation

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Mahler does not return the first theme in the original form; a fragmentation of the first theme is scored in place of the original iteration of the first theme (Example 7). The first theme continues to undergo fragmentation in measures 343 and 344 utilizing the first beat of measure 341. The first theme fragment is repeated four times. The pitches undergo alterations in the intervals in measure 243. Instead of being a perfect fifth, the D down to F is a sixth, and the D to G is a perfect fifth. Additionally, the entire statement of the first theme from measures 340 to 342 is also fragmentary.

Overall, Mahler constantly repeats musical material throughout the entire opening movement of Symphony No. 4 without introducing new material between themes and motives. In being able to work with seven major themes, Mahler creates each theme as contrasting themes from one another to show technical, lyrical, and stylistic differences to capture an overall "fairytale" story concept through assist of a single motive.

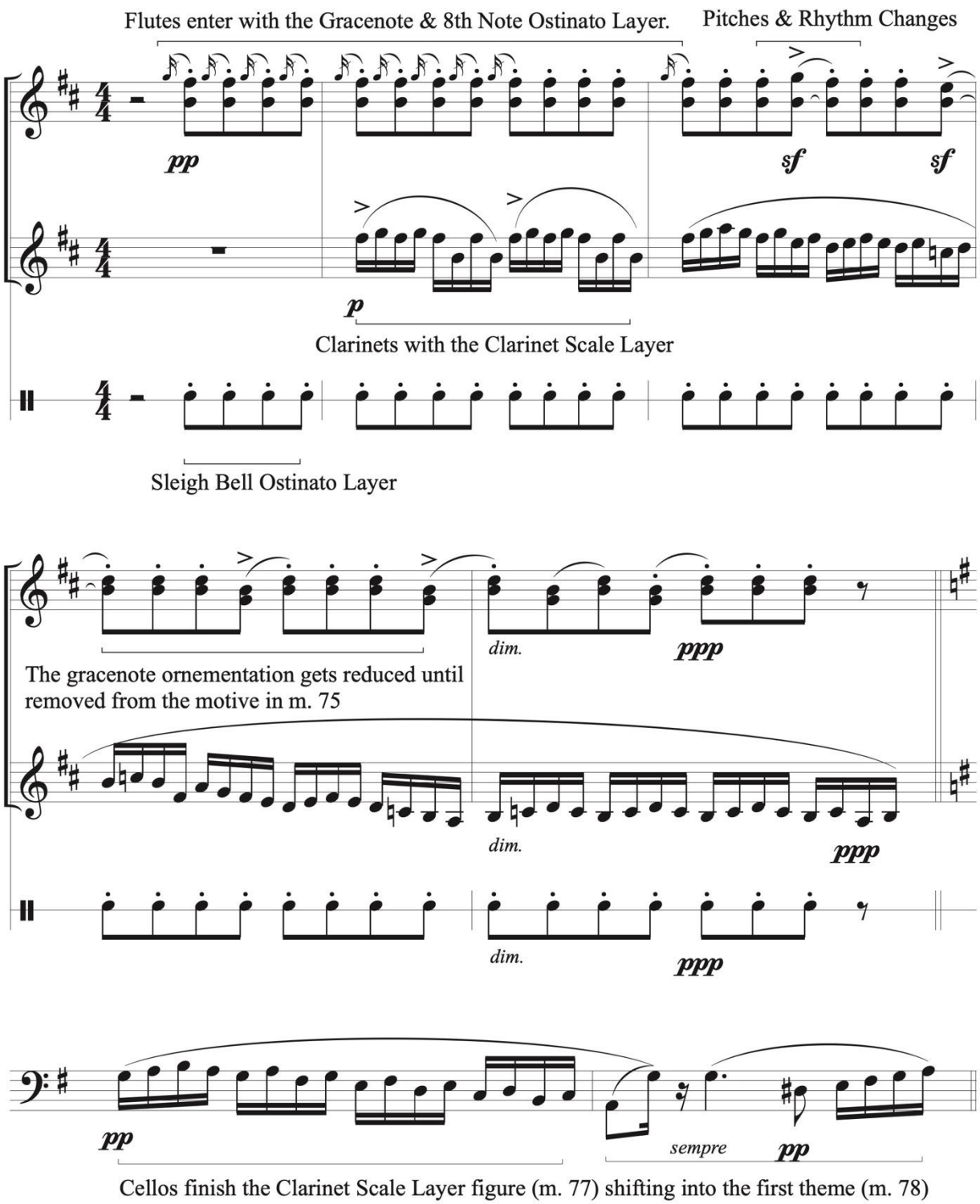
Motivic Development

Unlike Rimsky-Korsakov's Symphony No. 3, first movement, Mahler heavily develops motivic materials in the opening movement of Symphony No. 4. While Rimsky-Korsakov utilizes four motives, each motive is stable in terms of rhythmic variations, repetition, and purposes. Mahler only scores one motive, the "sleighbell motive," during the opening movement of Symphony No. 4. During the first movement, Mahler develops the "sleighbell motive" through repetition, fragmentation, and expansion and contraction.

The "sleighbell motive" has four rhythmic layers with the flutes having a "grace note" layer starting in measure one, the oboes with a "leap figure" beginning in measure two, the clarinets with a scale layer beginning on beat three of measure two, and the sleighbell's eighth note ostinato layer also beginning in measure one (Example 1).

The use of ostinato rhythms consisting of eighth notes in the sleighbells, the eighth notes with grace notes in the flutes, the running sixteenth notes in the clarinets, and the eighth note and two sixteenth note figure in the oboe are full of technical movement, giving a frantic and playful style and shape building up the “sleighbell motive.”

In measure 72, the “sleighbell motive” returns, elongated in duration from three measures to six measures and with ornamentations removed in the “flutes eighth note ostinato with grace note layer.” The “clarinet scale layer” extends to five measures in measure 73. During the new iteration of the “sleighbell motive,” Mahler omits the “oboe leap layer” (Example 62).



Example 62: mm. 72-77, “Sleighbell Motive,” Expanded & Reduced

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

The second statement of the "sleighbell motive," in measure 72, shows how Mahler continues to expand upon motivic phrases, differing from how Rimsky-Korsakov handles motivic development and expansion. The ascension motive in measures 101 through 147, Rimsky-Korsakov utilizes repetition to reinforce the diatonic and chromatic movement between each ascending figure. In Mahler's Symphony No. 4, first movement in the exposition section, the key changes to D major, however, Mahler returns to G Major in measure 72. Rimsky-Korsakov stays in E major after leaving the C major and minor tonal center for the remainder of the exposition.

The third full statement of the "sleighbell motive" occurs in measure 102, right at the start of the development section in G major. Immediately, Mahler manipulates the motive in a similar way in which Rimsky-Korsakov would manipulate motives in Symphony No. 3, first movement by altering the orchestration. The clarinets take the "grace note layer," the flutes acquire the "scale layer," the oboes maintain the "leap layer" with a fragmentation, and the sleighbells remain on the "eighth note ostinato layer" (Example 52).

The phrase of the third statement of the motive last for five measures, utilizing pitch changes in the grace note layer and shifts in orchestration throughout the short phrase. Additionally, Mahler scores the inverted antecedent of the second theme underneath the motive.

In the statement of the "sleighbell motive" in measure 102, Mahler utilizes the use of pitch alterations in the "flute grace note layer" in measure 104 to manipulate the motive harmonically (Example 52). In previous statements of the "sleighbell motive," the "flute grace note layer" stays static on three pitches, G, F#, and B. In measure 167, Mahler begins to layer in each of the four layers of the "sleighbell motive" across fourteen measures. From measure 167

through 180, Mahler uses groups of woodwinds (flutes, clarinets, oboes, and bassoons) and the horn paired with violins, before returning to the flutes, oboes, bassoons, and clarinet grouping. With the "sleighbell motive" scored as the introduction, the return of the motive in measure 72 comes to the listener as a surprise as repetition of the introduction does not typically occur after the original statement in sonatas composed during the romantic era. However, Mahler returns the introduction five complete times and scores the introduction motive as fragmentary and harmonic bits throughout the exposition and development sections of the first movement of Symphony No. 4.

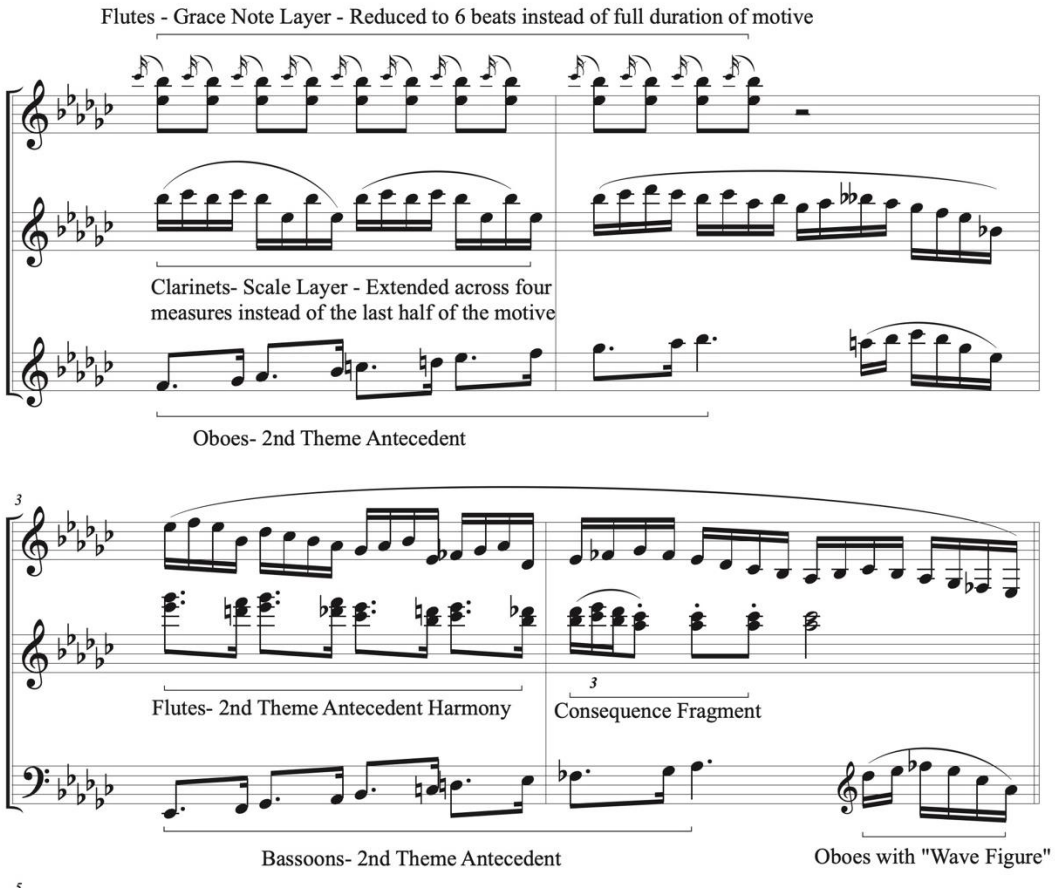
Fragmentation of the "sleighbell motive" occurs primarily as transitional material from one theme to the next or as harmony for themes occurring around the fragmentary bits from the "sleighbell motive." From measures 121 through 124, during the seventh theme, the "clarinet scale layer" in the violins becomes ornamented shifting from G major to A major.

From measures 133 through 154 by way of the "clarinet scale layer," starting in the violins, the cellos take a measure of the scale fragment in measure 139. From measures 140 to 141, omission of the "clarinet scale layer" occurs with the "clarinet scale layer" returning in the cellos in the violas in measure 141 on the "e" of beat three. The "clarinet scale layer" returns in the first violins in measure 142, with the second violins joining in measure 143.

By measure 155, a full statement of the "sleighbell motive" returns with the scale layer in the clarinets as scored back in measure two on beat three. The "sleighbell motive," originally three measures in duration increased to four measures through the utilization of fragmentary bits from two of the four layers. Mahler omits the "eight note sleighbell ostinatos" and "oboe leap layers," allowing for the second theme to be scored underneath the "sleighbell motive."

In measure 233, the “sleighbell motive” returns for the final time continuing to utilize the pitch alterations in the grace note layer while expanding across five measures. Omission of the “eight note sleighbell ostinato layer” occurs again during the “sleighbell motive” in measure 232. A variation of the first theme occurs simultaneously with the “sleighbell motive” as well. Through hyper-expansion, rhythmic alteration of the first theme occurs (Example 58). Rimsky-Korsakov also scores motives and themes simultaneously. For instance, Rimsky-Korsakov scores the first theme underneath the transitional motive in Symphony No. 3, first movement (Example 30).

In measure 155, the “grace note layer” in the flutes last for two and a half measures while the “clarinet scale layer” last for the full four measures of the fragmented yet expanded statement of the “sleighbell motive” (Example 63).



Example 63: mm. 155-158, "Sleighbell Motive," Fragmented

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Finally, Mahler does not return the "sleighbell motive" during the recapitulation section, which is a traditional expectation Mahler maintained with regarding introduction material. Similar to Mahler, Rimsky-Korsakov does not return any motives in the recapitulation section of Symphony No. 3, first movement. Thus, continuing to showcase how Mahler and Rimsky-Korsakov employ similar compositional writing styles in symphonic works, yet producing completely different results.

Rimsky-Korsakov presents Symphony No. 3, first movement with a more traditional approach in regard to orchestration doublings and groupings where Mahler focuses more on the overall timbre effects by utilizing and expanded full orchestra. The analysis of Rimsky-Korsakov's Symphony No. 3, first movement and Mahler's Symphony No. 4, first movement has shown how repetition, fragmentation, expansion and contraction, sequencing, rhythmic alterations, etc. are critical components towards the development of the themes and motives.

APPENDICES

APPENDIX A – CATALOGUE OF THEMATIC AND MOTIVIC ALTERATIONS OF MAHLER'S SYMPHONY NO. 4, FIRST MOVEMENT

Measure #	Theme	Description of Alterations
15-17	Theme 2	Antecedent and consequence occur simultaneously
29-31	Theme 2	Consequence and the wave figure simultaneously
17-21	Theme 7	Thematic segment as harmony
7-11	Theme 2	Original statement
29-31 88-90	Theme 2	Wave with consequence simultaneously
76-80	Theme 7	Thematic segment as harmony
91-93	Theme 2	Consequence rhythmically altered
3-7	Theme 1	Original Iteration
17-21	Theme 1	Off centered and condensed
80-83	Theme 2	Consequence with rhythmic alterations
147-153	Theme 2	Rhythm changes to 16^{th} note triplets & 32^{nd} triplets Harmony in 3rds Direction of pitches altered in final three notes of antecedent
189-191	Theme 2	Ornamentation and return to 8^{th} note rhythm
102-109	Theme 2	Antecedent as harmony
109-115	Theme 2	Antecedent and Consequence reverse order
11-13	Theme 2	Inverted pitches of the antecedent occur with the original antecedent statement Pickup note arpeggio descends
159	Theme 2	Consequence fragmented across one bar
340-344	Theme 1	Elongated rhythm in the anacrusis Fragment (beat 1) of measure 341 in 343-344
58-65	Theme 6	Original Iteration
63-65	Theme 6	The theme is ornamented and fused with the original and consequence of the second theme
60-61	Theme 6	The first beat is condensed to 16^{th} note triplets and the rhythm is augmented with the 64^{th} notes becoming 32^{nd} notes. The rhythm also shifts.
67-72	Theme 6	Transition as mini-fragmented solos
180-187	Theme 6	Transition and Fragmentation Pitches ascend and descend

APPENDIX B - CATALOGUE OF THEMES & MOTIVES ENTRANCES IN RIMSKY-KORSAKOV'S SYMPHONY NO. 3, FIRST MOVEMENT

Measure #	Theme/Motive	Notes
1 - 2	Theme 1	Original, Andante
580 - 583	Theme 1	Augmented
19 - 22	Theme 1	Inverted
148 - 156	Theme 2	Original & Repeated Statement
276 - 287	Theme 2	Expanded
356 - 363	Theme 2	Contracted
392 - 410	Theme 1	Cannon Entrances
426 - 427	Theme 1	Hyper Expanded in 3/2
427 - 410	Transitional Motive	Hyper Expanded in 3/2
364 - 377	Theme 2	Fragmentation
532 - 533	Theme 2	Fragmentation
519 - 527	Theme 2	Original in Ab Major
2 - 9	Transitional Motive	Original
166 - 169	Solo Motive	Original
101 - 147	Ascension Motive	Original
472 - 493	Ascension Motive	Sequential Chromaticism
99 - 100	First Horn-Call Motive	Original
228 - 231	Second Horn-Call Motive	Original
244 - 267	Second Horn-Call Motive	Triads, Transition, Harmony
248 - 267	Theme 1	Phrase Extensions, Harmony in 6ths & Octaves
528 - 540	Solo Motive	Fragmentation
531 - 546	Second Theme	Fragmentation & Augmentation
580 - 583	Transitional Motive	Condensed as harmony
50 - 60	Theme 1	Fused with Transitional Motive
470	First Horn-Call Motive	

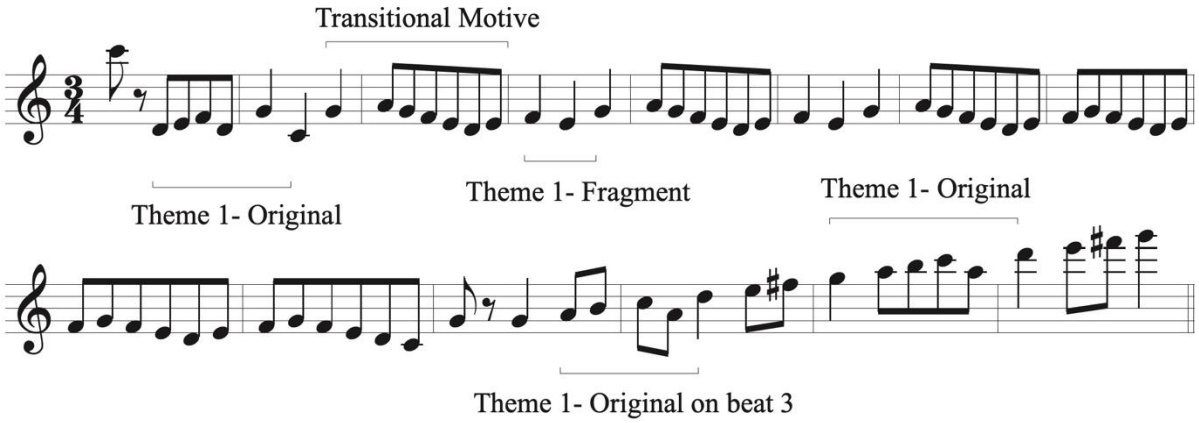
APPENDIX C – CATALOGUE OF THEMES & MOTIVES ENTRANCES IN MAHLER'S SYMPHONY NO. 4, FIRST MOVEMENT

Measure #	Theme/Motive	Notes
1 -- 4	Sleighbell Motive	Original Iteration
155-158	Sleighbell Motive	Fragmented
72-77	Sleighbell Motive	Expanded & reduced
102-109	Sleighbell Motive & Theme 2	Antecedent Accompaniment
3 -- 7	Theme 1	Original Iteration
340 - 344	Theme 1	Fragmentation
234-238	Theme 1 & Theme 6	New Deviation of 6th theme with rhythmic augmentation of theme 1
17-21	Theme 1 & Theme 7	Theme 7 as Harmony, Expansion & Contraction of Theme 1
76-80	Theme 1 & Theme 7	Theme 7 as Harmony
159	Theme 2	Consequence Altered & Repeated
109-115	Theme 2	Reversed Roles
11 -- 13	Theme 2	Original & Inverted Pitches
147-150	Theme 2	Anacrusis Rhythm Variation
147-153	Theme 2	Variation on Pitch Direction & Anacrusis
15-17	Theme 2	Antecedent & Consequence Occur Simultaneously
151-154	Theme 2	Anacrusis Rhythm Variation
155-158	Theme 2	Antecedent as Harmony
189-191	Theme 2	Anacrusis Rhythm Returns to Original
25-31	Theme 2	Sequencing
29-31	Theme 2	Wave Figure & Consequence Simultaneously
7 -- 11	Theme 2	Original Iteration
80-83	Theme 2	Consequence Rhythm Variations
88-91	Theme 2	Transitional Sequence
157-167	Theme 2 & Theme 6	Transitional Fragments
91-93	Theme 2 & Theme 7	Consequence as Harmony

180-187	Theme 6	Fragmented Transitions
58-59	Theme 6	Original Iteration
60-62	Theme 6	Variation I
63-65	Theme 6	Variation II
67-72	Theme 6	Fragmented Mini-Solos
127-144	Theme 7	Development, Expanded
322-335	Theme 7	Recapitulation Return with Fragmentation
322-335	Theme 7	Recapitulation with Fragmentation
90-99	Theme 7	Original Iteration
97-98	Theme 7	Rhythm Inverted
38 – 42	Theme 4	Original Iteration
47 – 52	Theme 5	Original Iteration

APPENDIX D - LISTING OF ALL MUSICAL EXAMPLES FROM RIMSKY-KORSAKOV'S SYMPHONY NO. 3, FIRST MOVEMENT

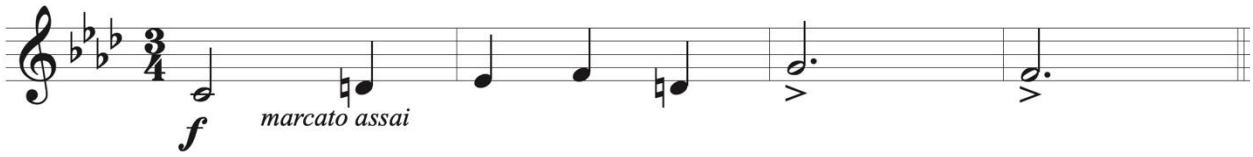
mm. 50-60, Theme 1



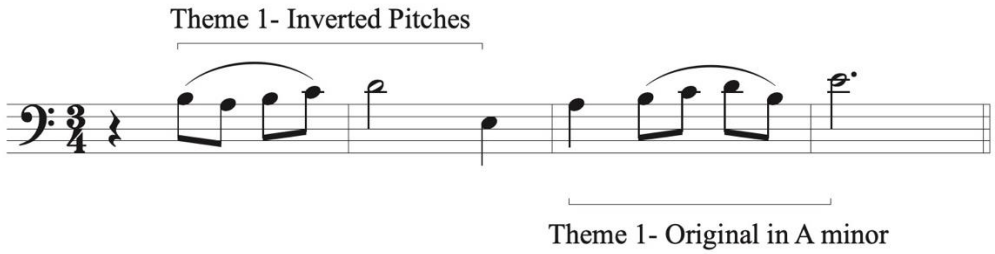
mm. 11-13, Theme 2

mm. 1-2, Theme 1

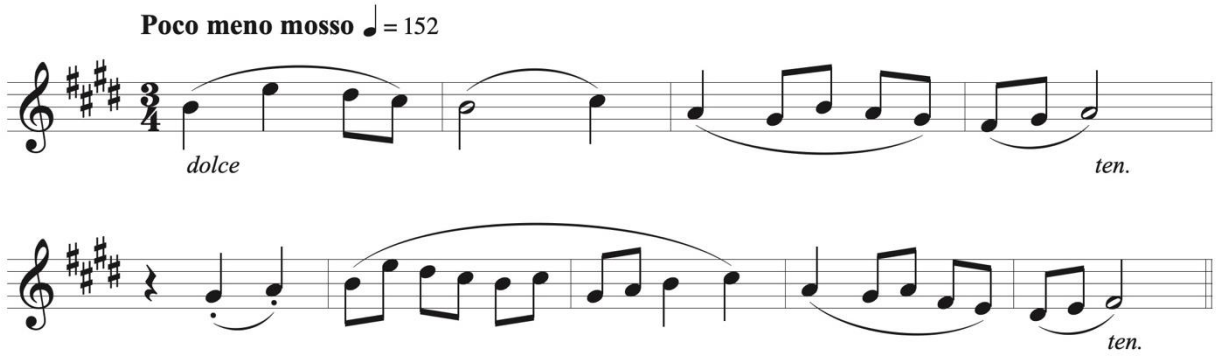
mm. 580-583, Theme 1



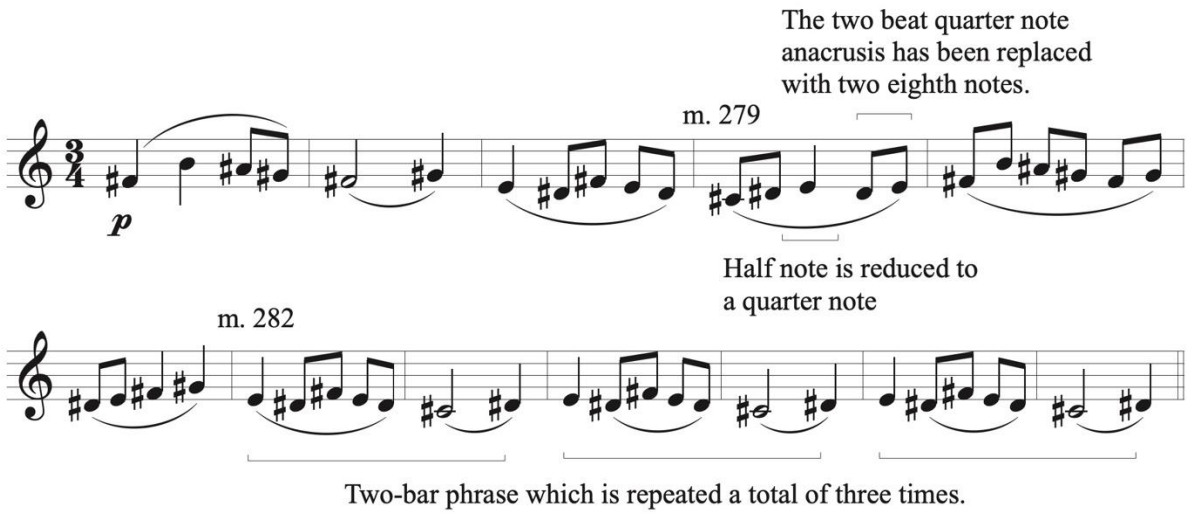
mm. 19-22, Theme 1



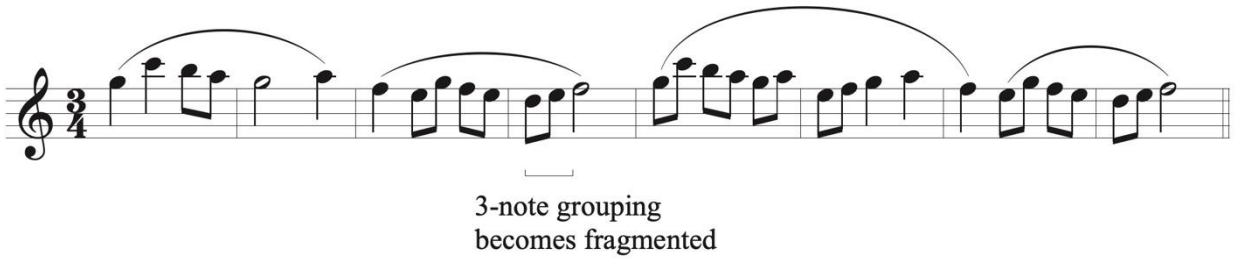
mm. 148-156, Theme 2



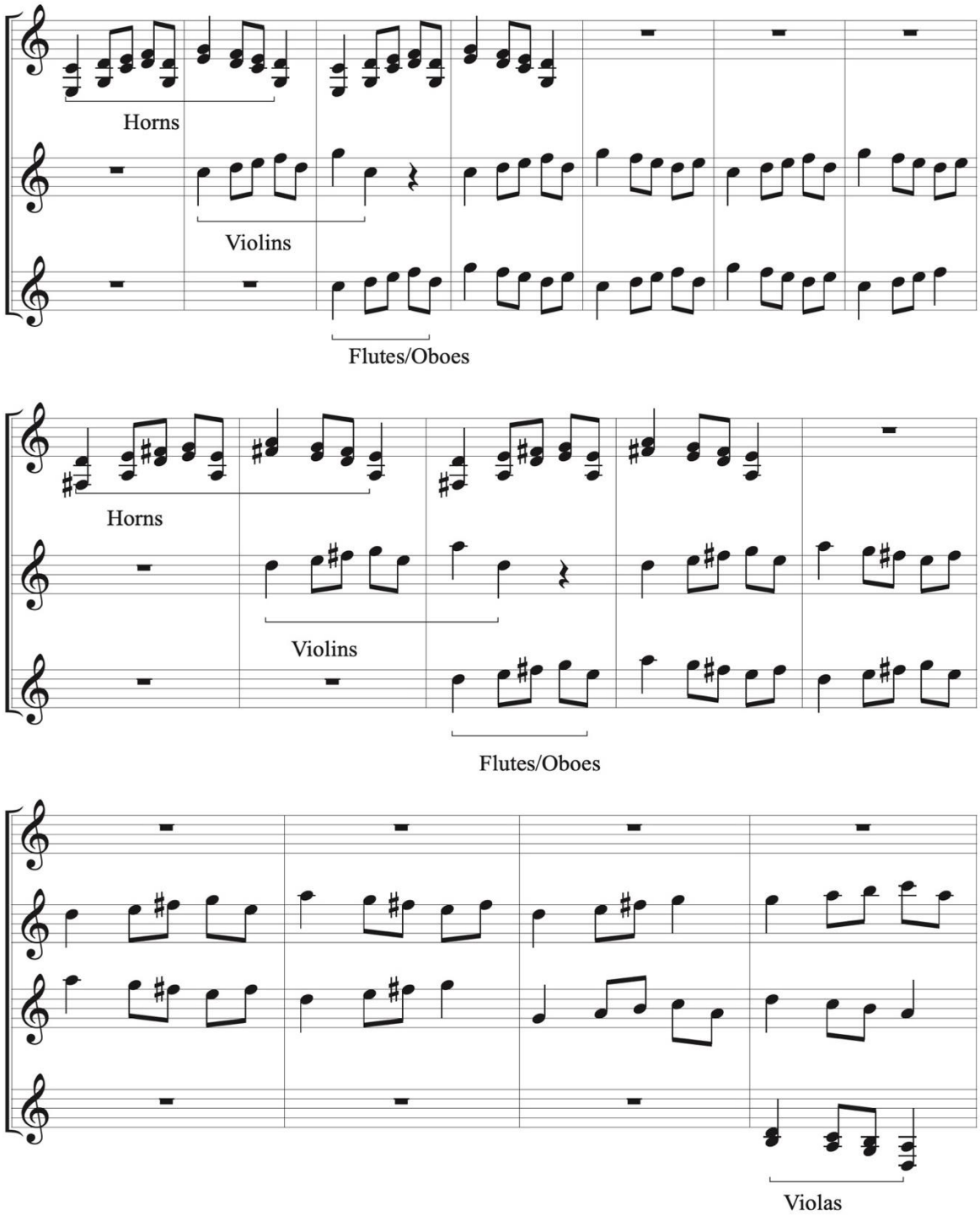
mm. 276-287, Theme 2

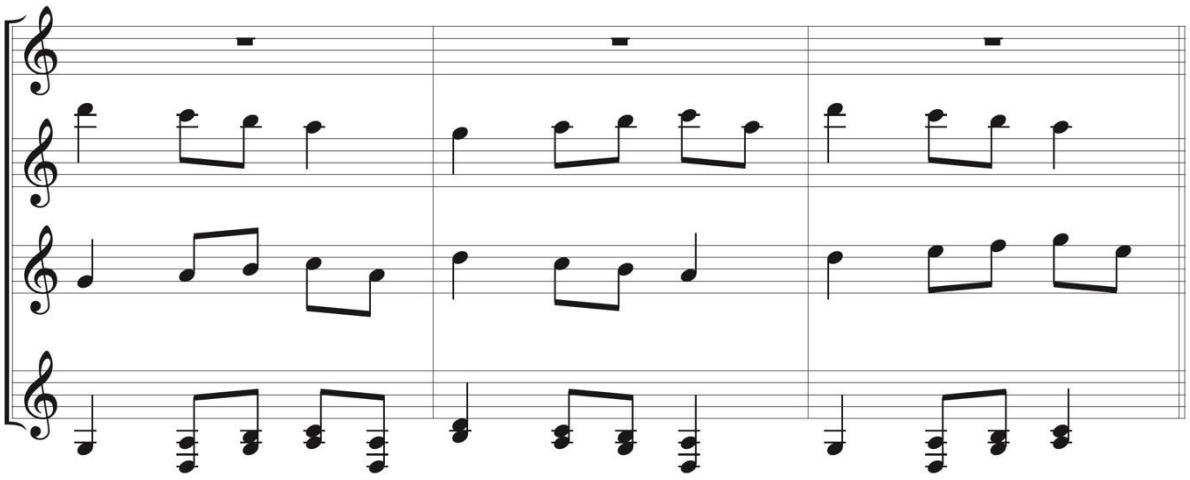


mm. 356-363, Theme 2

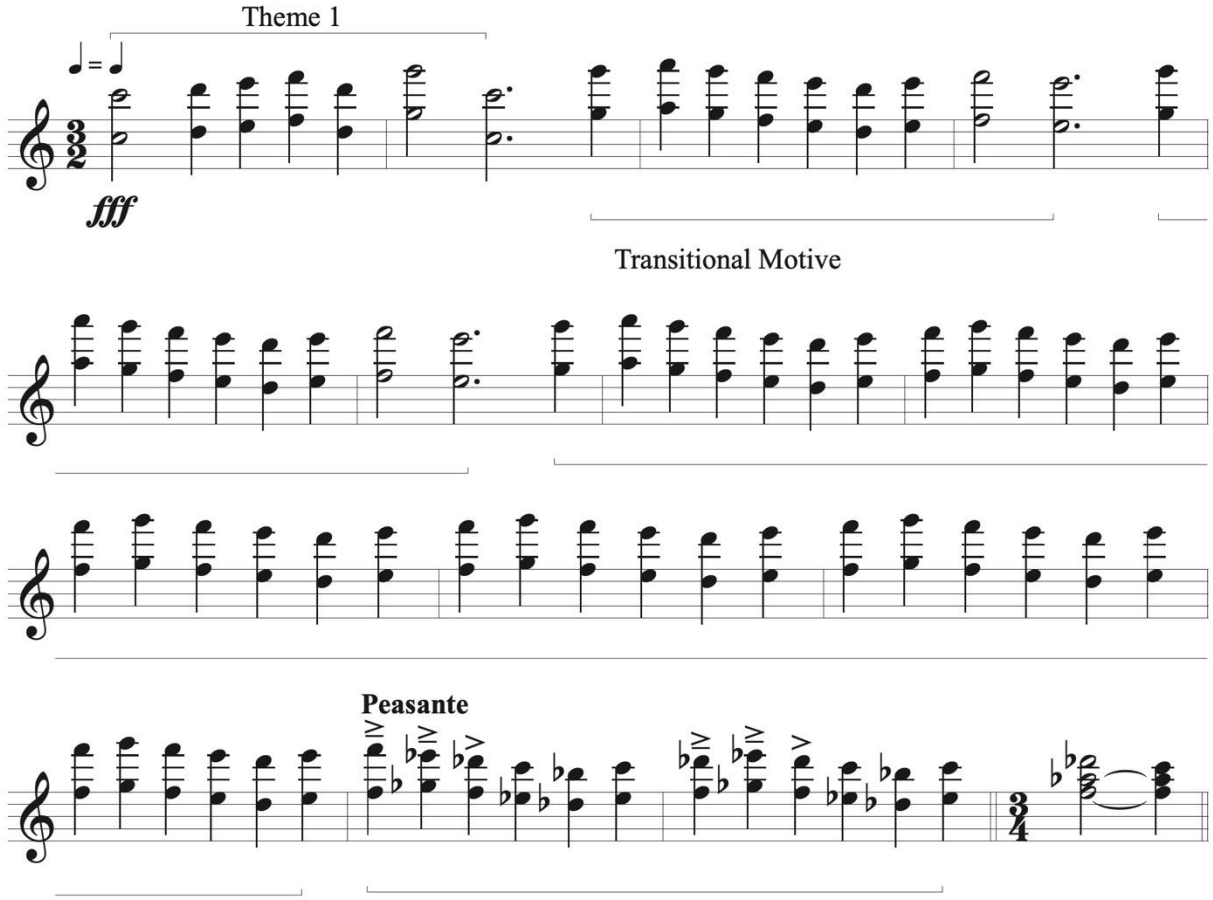


mm. 392-410, Theme 1





mm. 426-440, Theme 1 & Transitional Motive

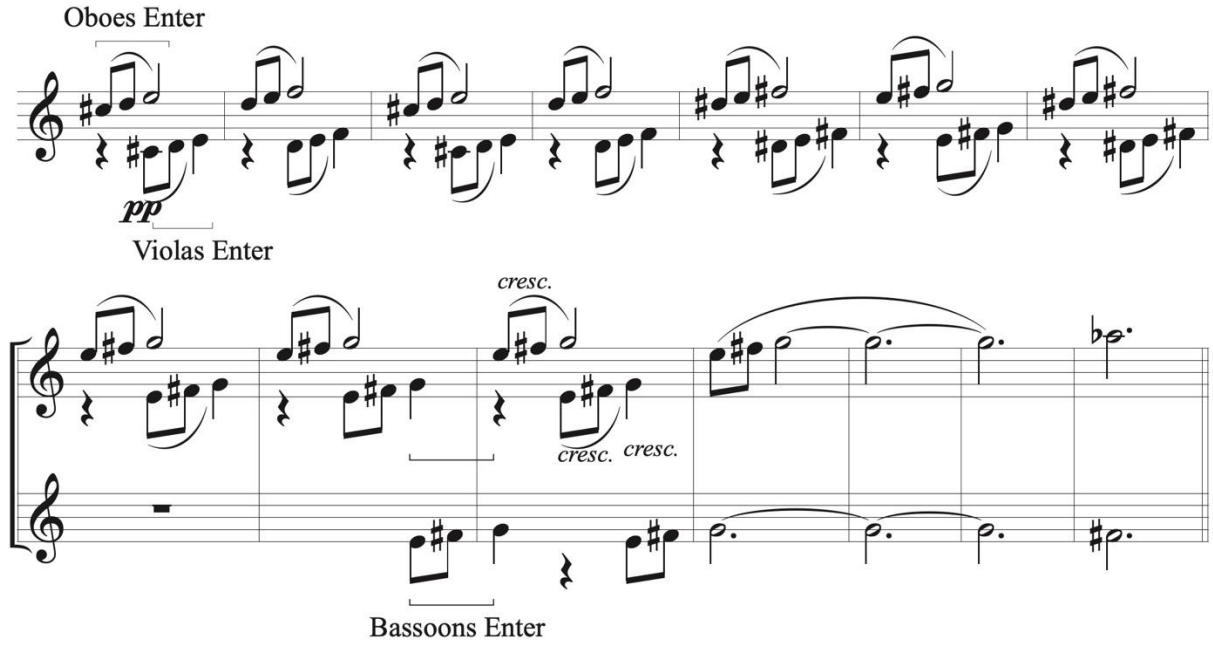


mm. 1-2, Theme 1 Rhythm

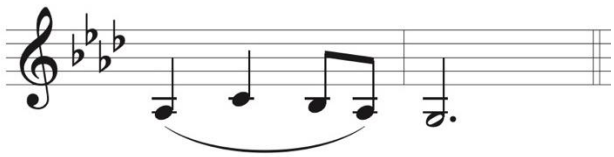
mm. 426-427, Theme 1 Rhythm Hyper Expanded

Rhythmic Example

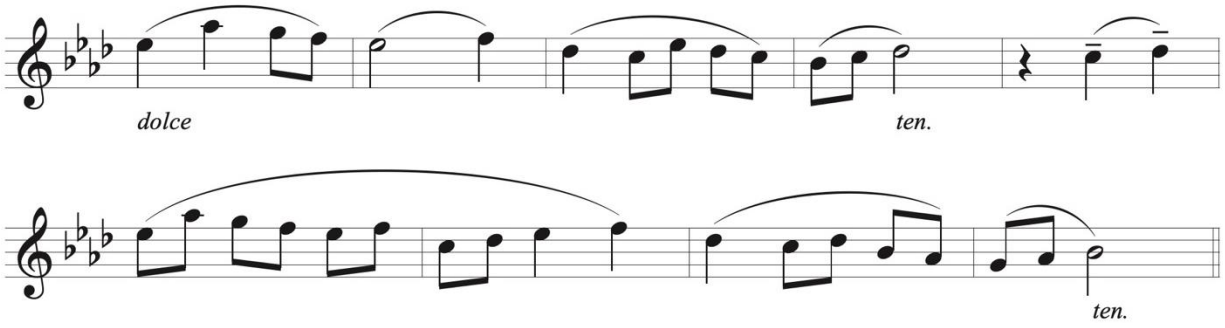
mm. 364-377, Theme 2



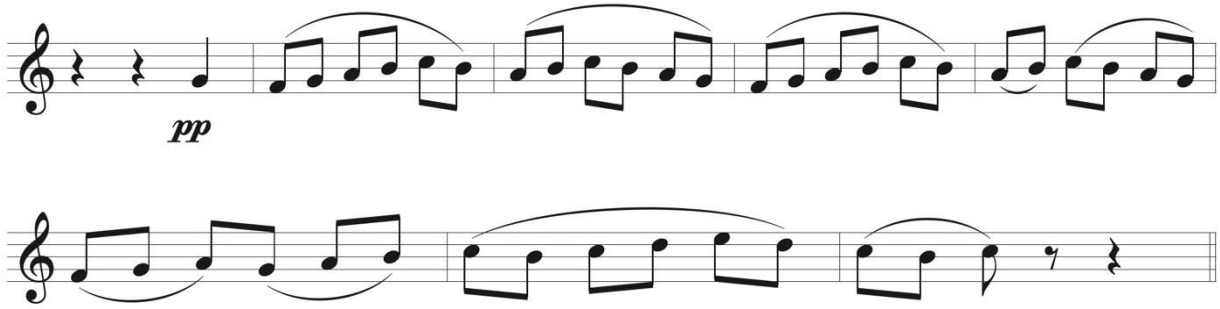
mm. 523-533, Theme 2



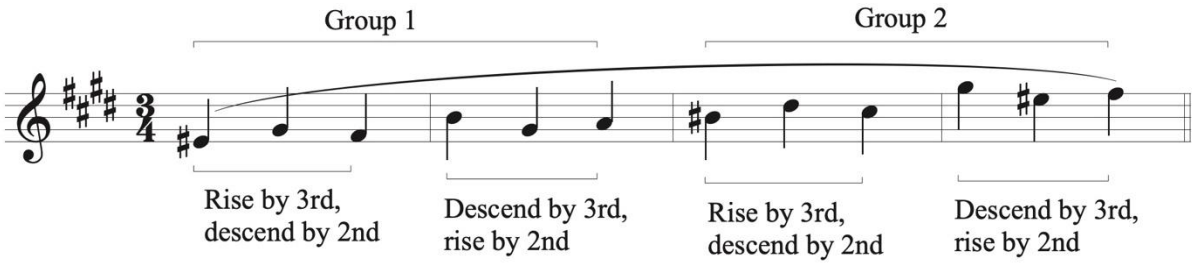
mm. 519-527, Theme 2



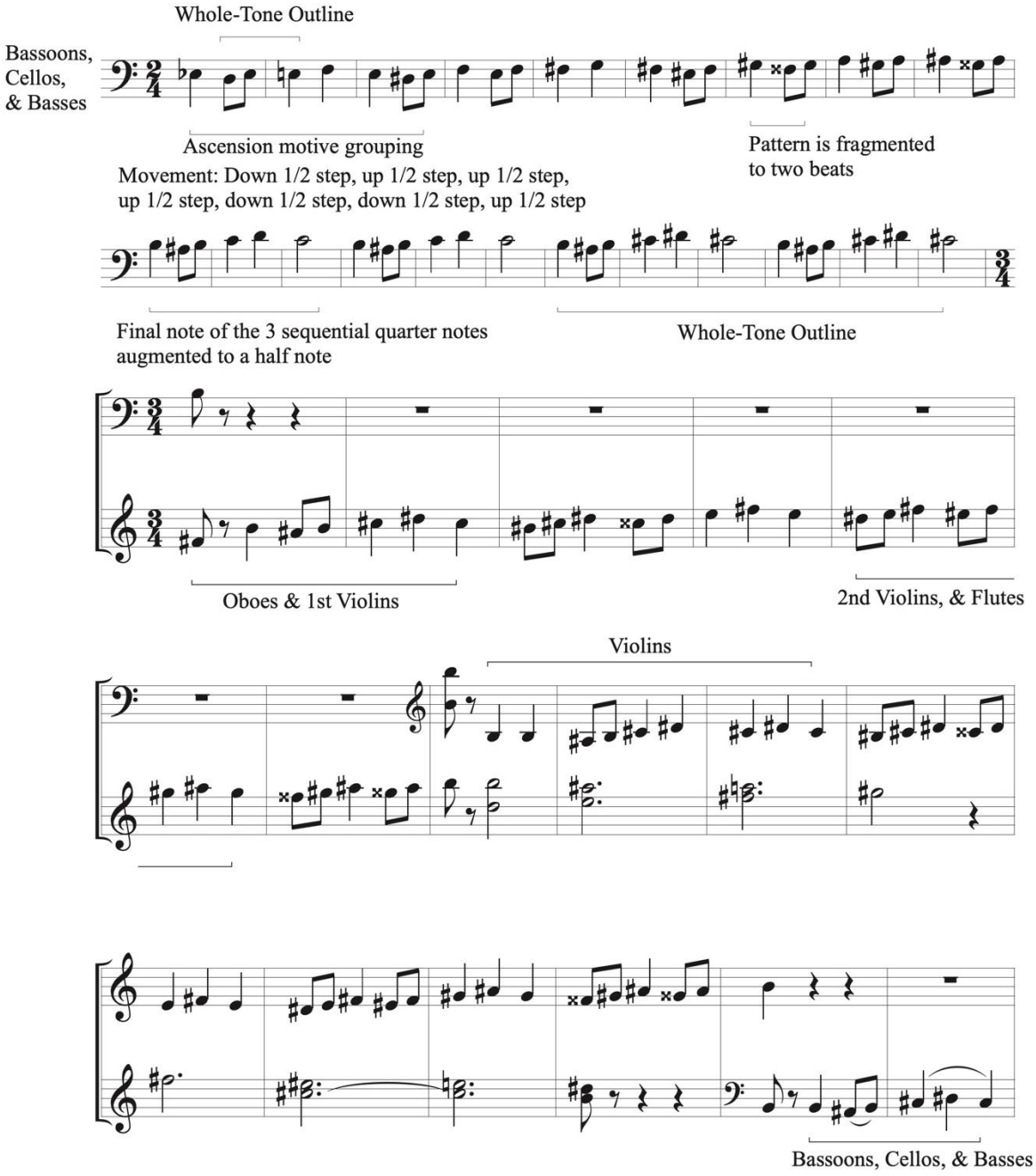
mm. 2-9, Transitional Motive

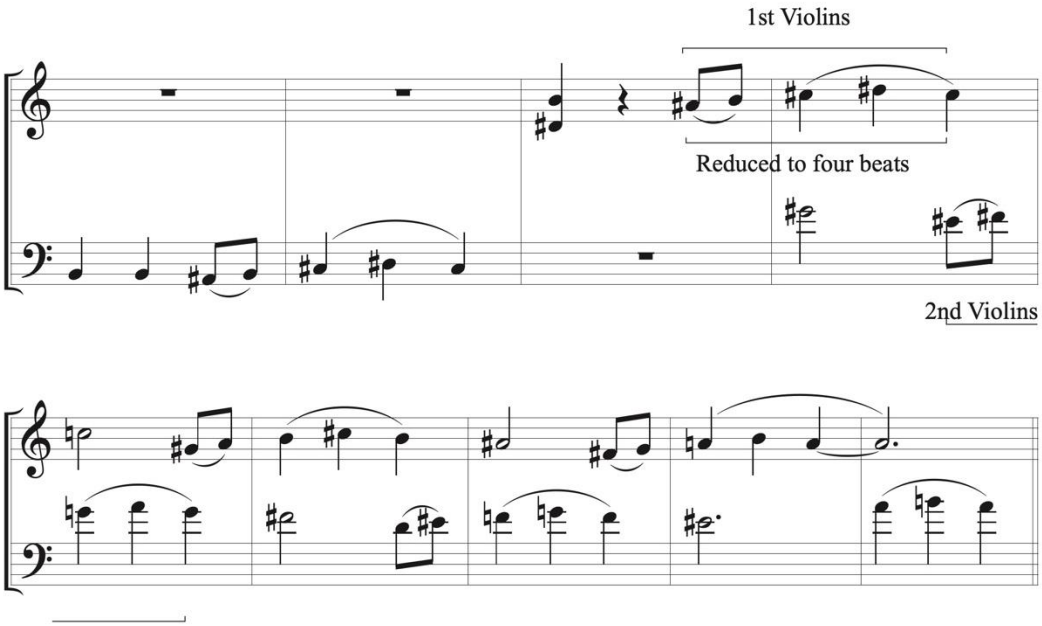


mm. 166-169, Solo Motive

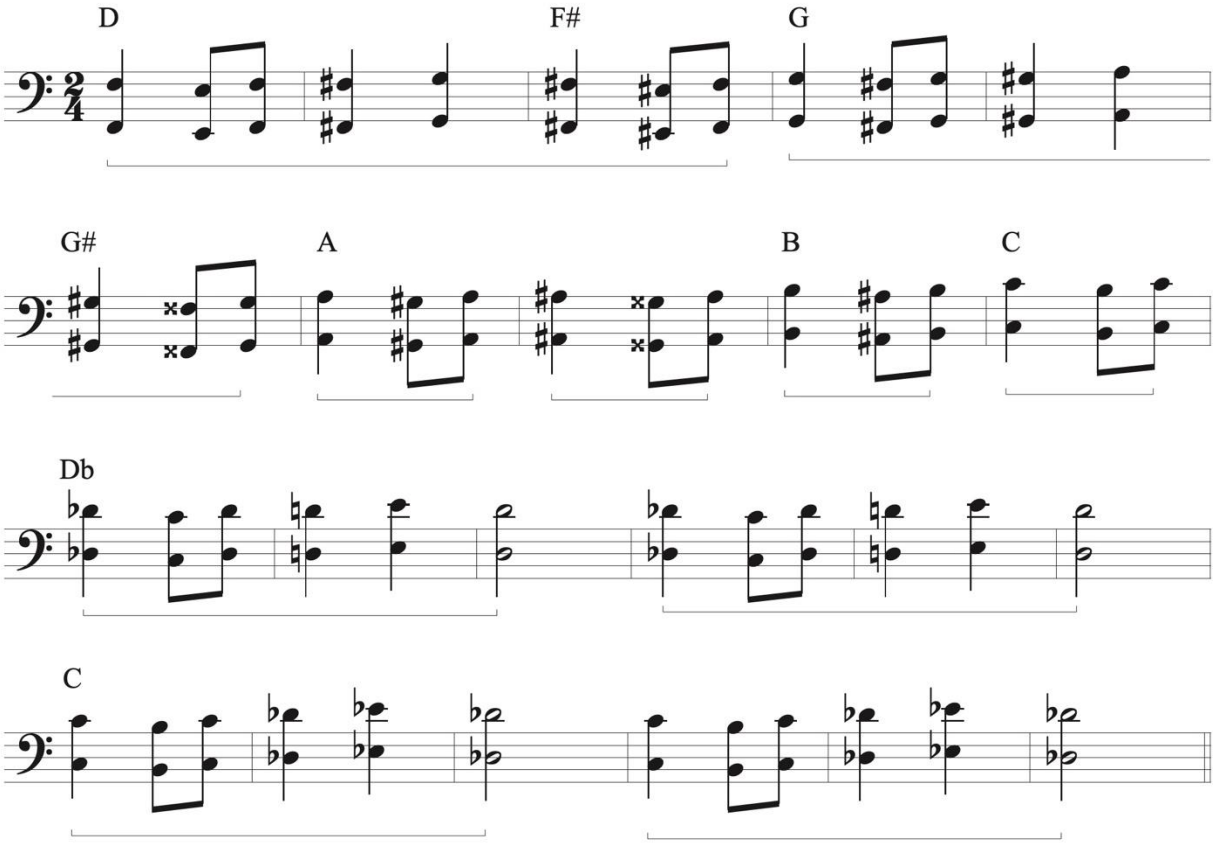


mm. 101-147, Ascension Motive

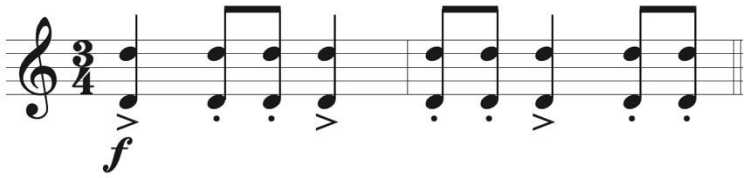



1st Violins
Reduced to four beats
2nd Violins

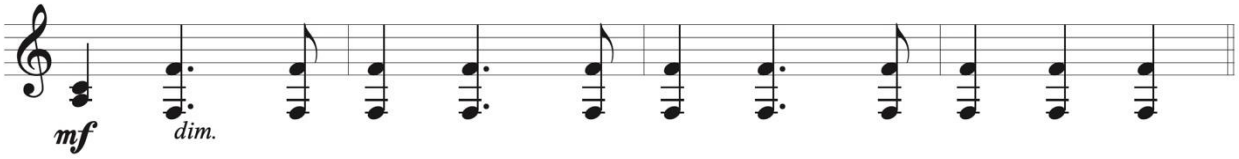
mm. 472-493, Ascension Motive



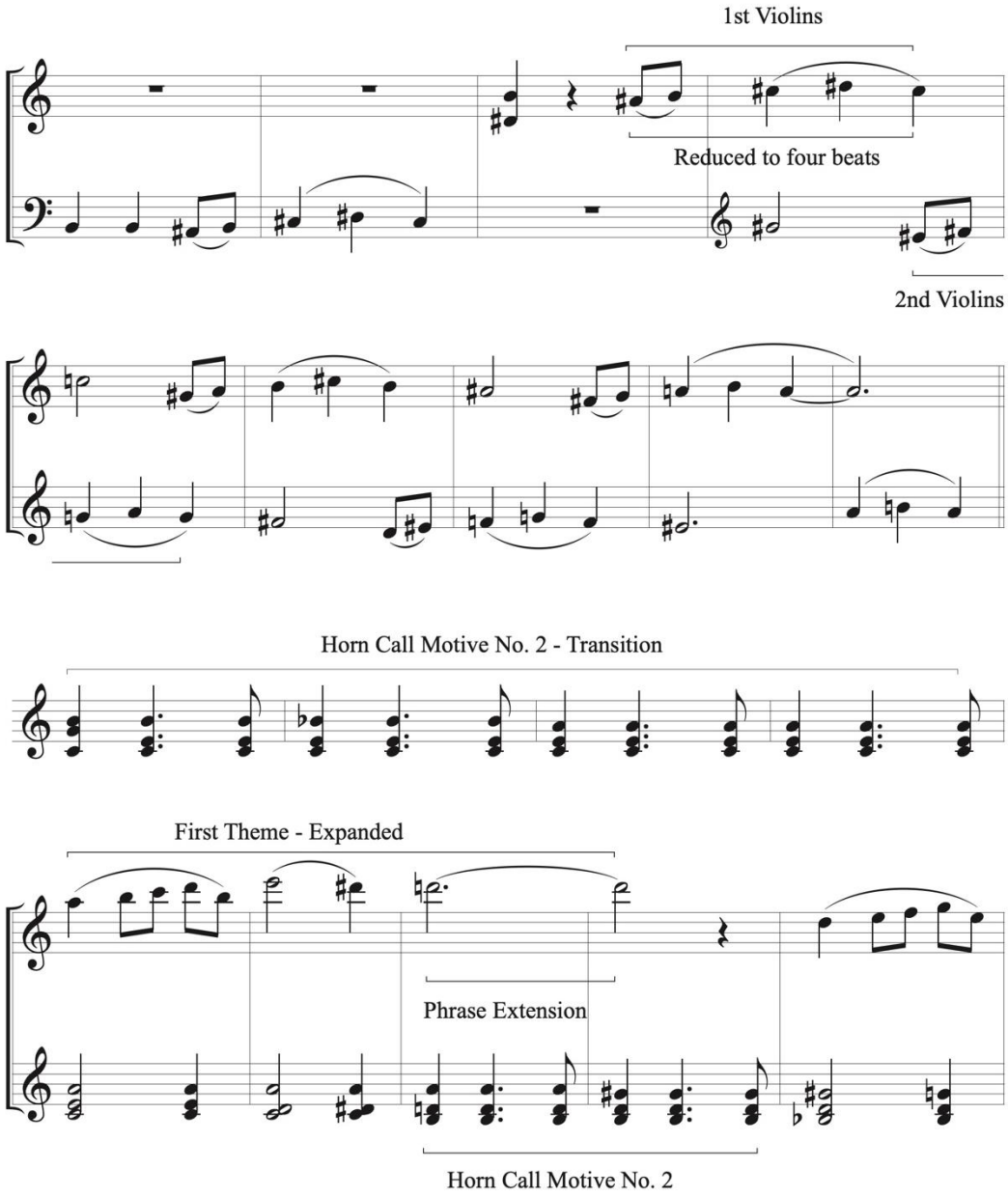
mm. 99-100, First Horn-Call Motive

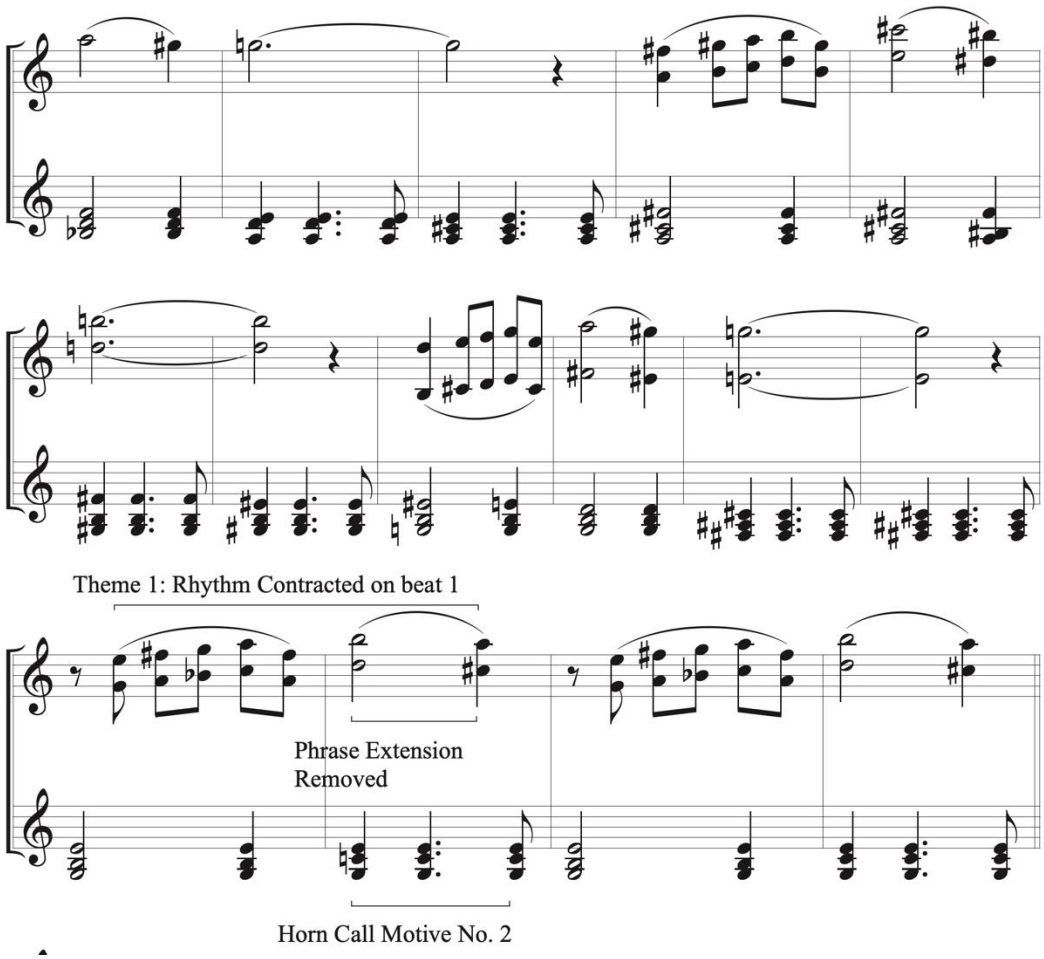


mm. 228-231, Second Horn-Call Motive

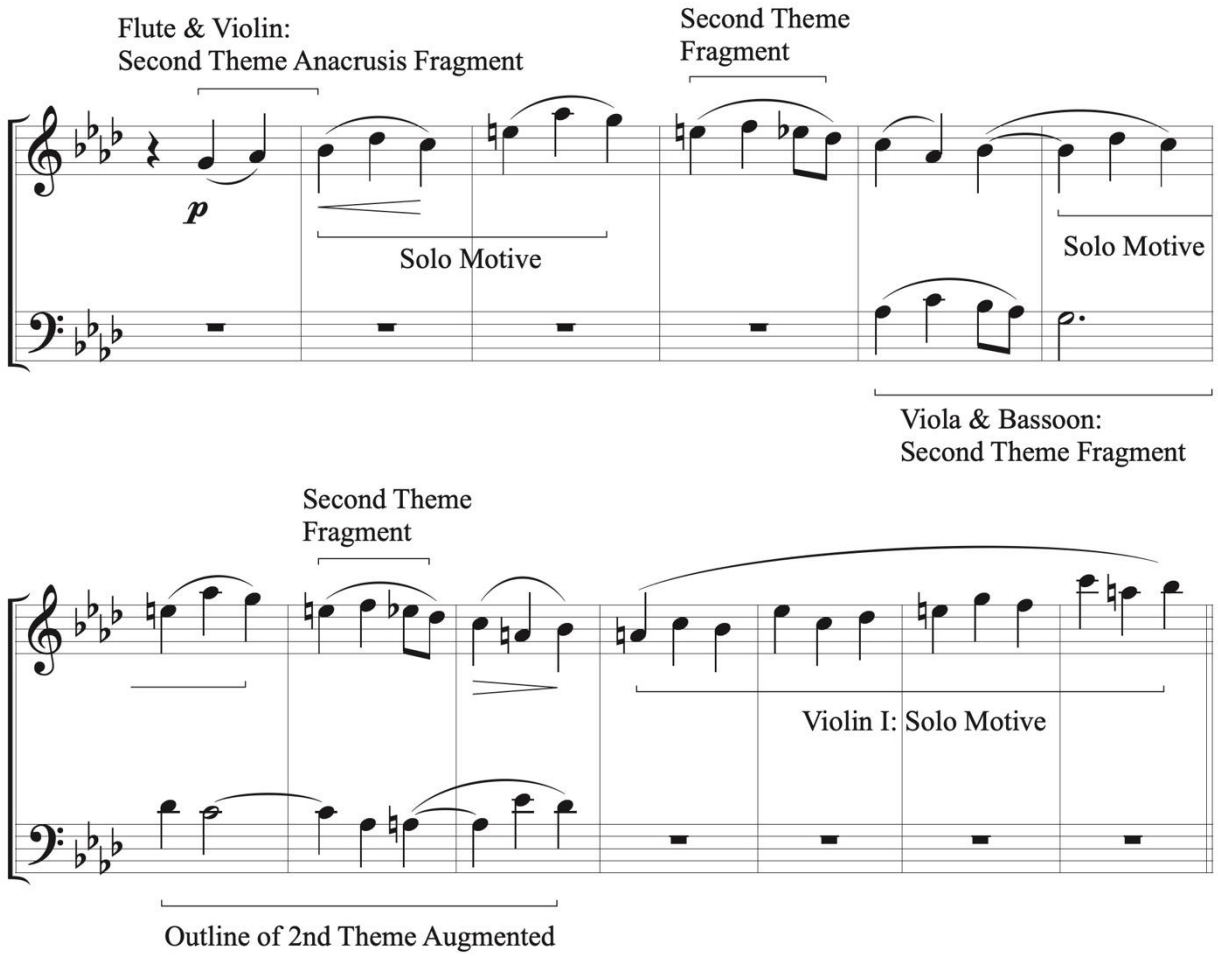


mm. 236-267, Second Horn-Call Motive & Theme 1

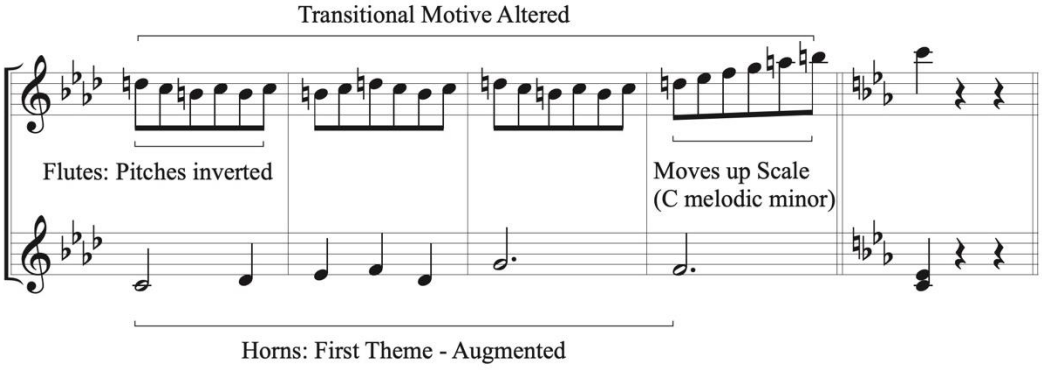



Theme 1: Rhythm Contracted on beat 1
Phrase Extension
Removed
Horn Call Motive No. 2

mm. 528-540, Theme 2 & Solo Motive

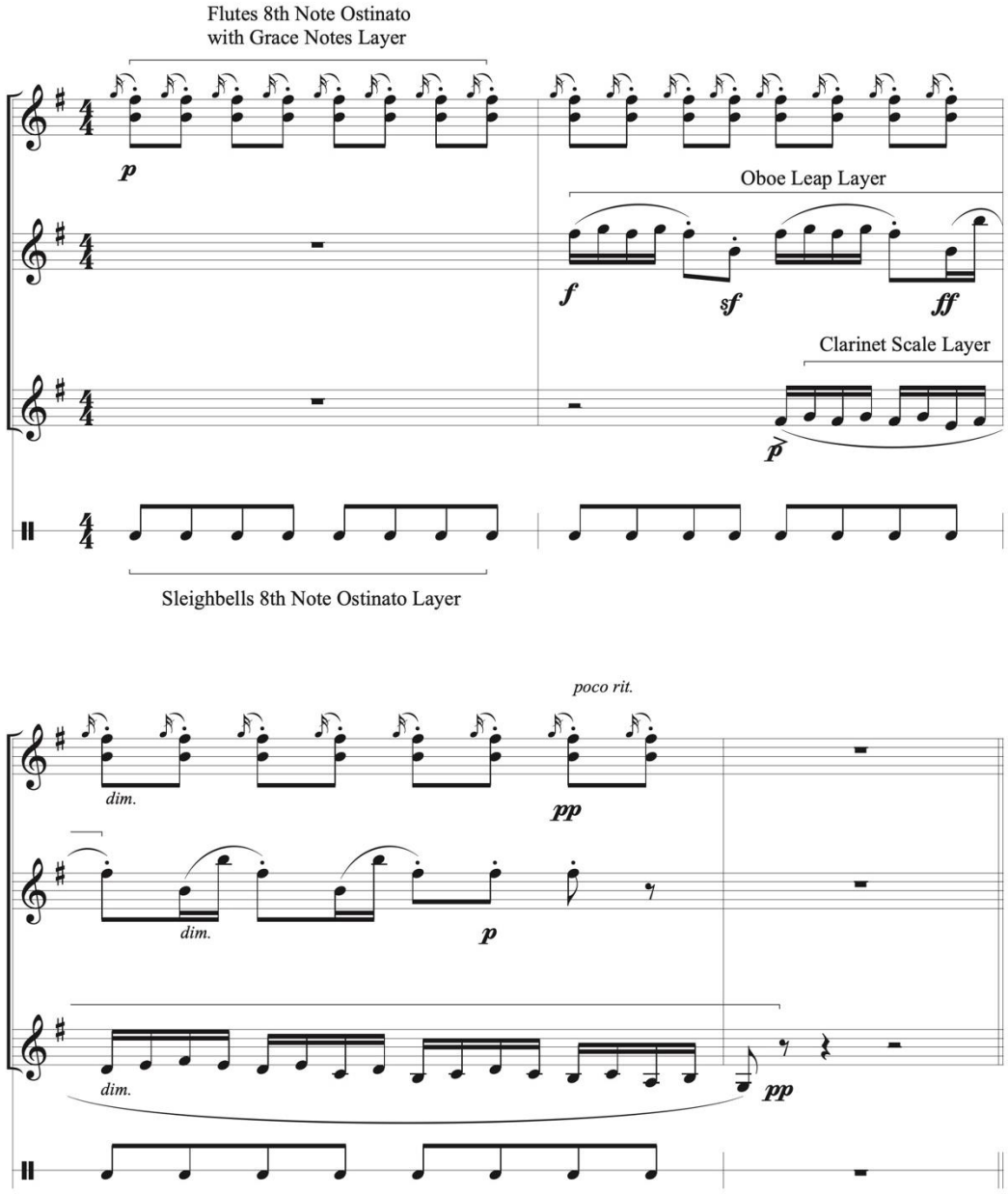


mm. 580-583, Theme 1 & Transitional Motive



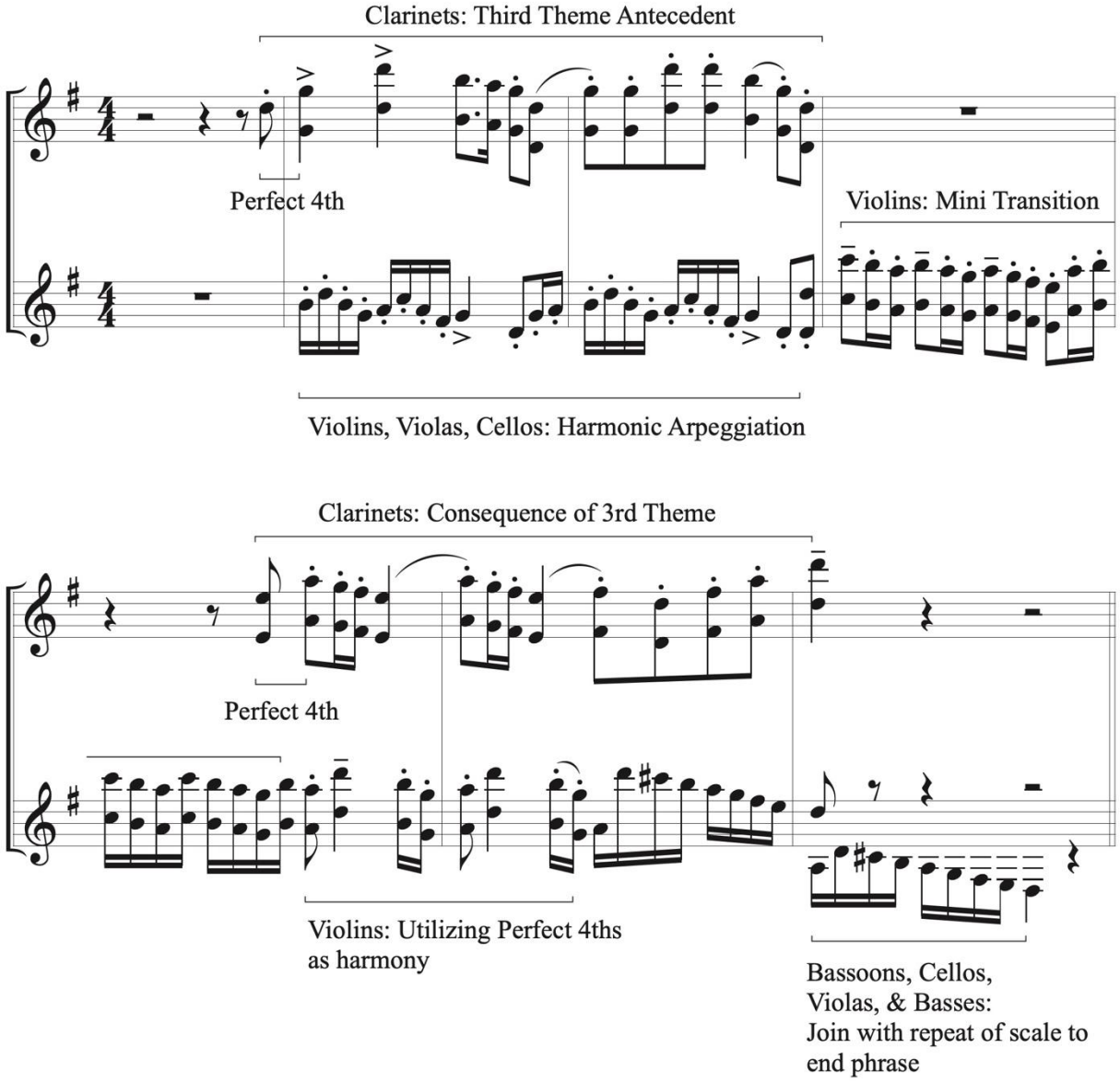
APPENDIX E – LISTING OF ALL MUSICAL EXAMPLES FROM MAHLER'S SYMPHONY NO. 4, FIRST MOVEMENT

mm. 1-4, Sleighbell Motive

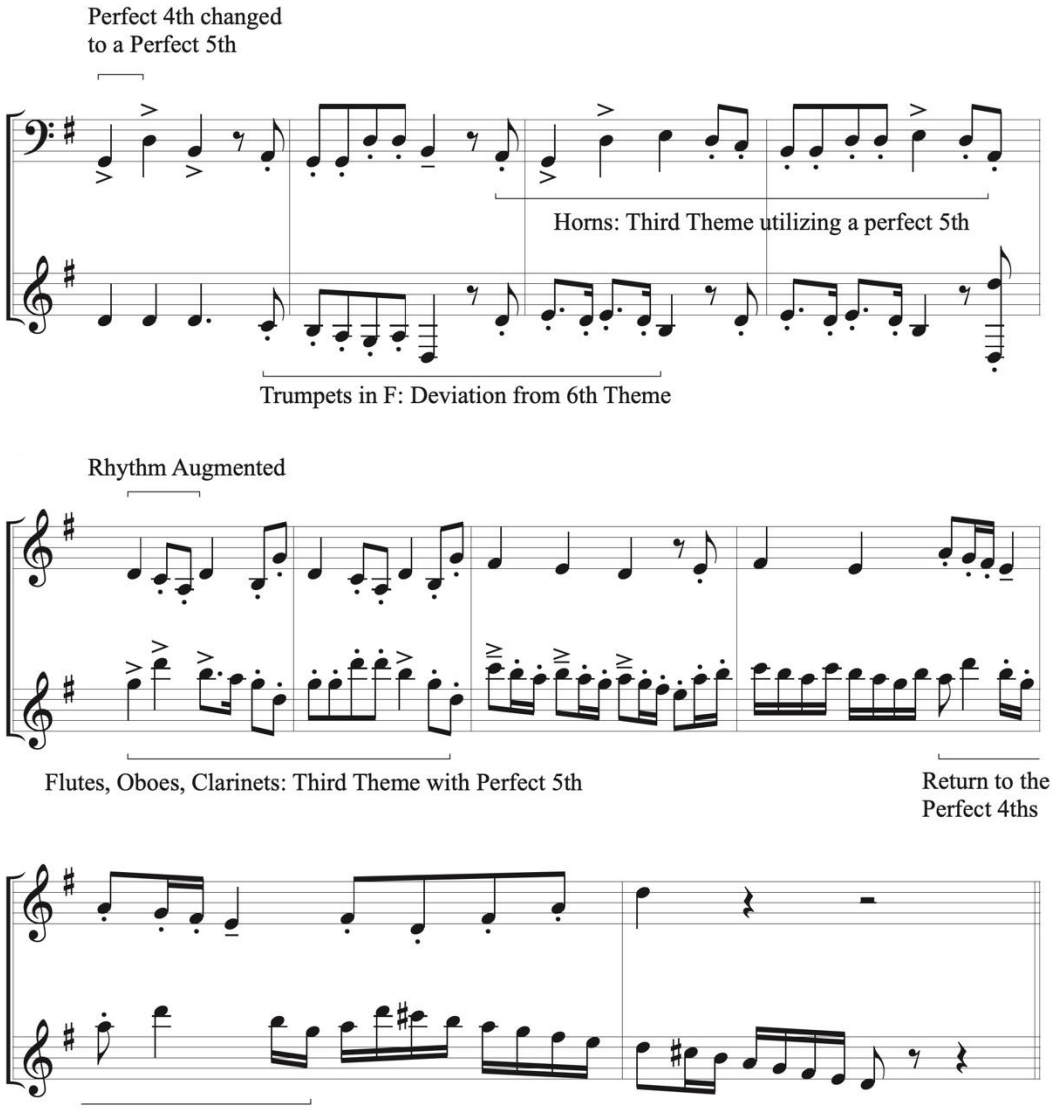


mm. 11-13, Theme 2

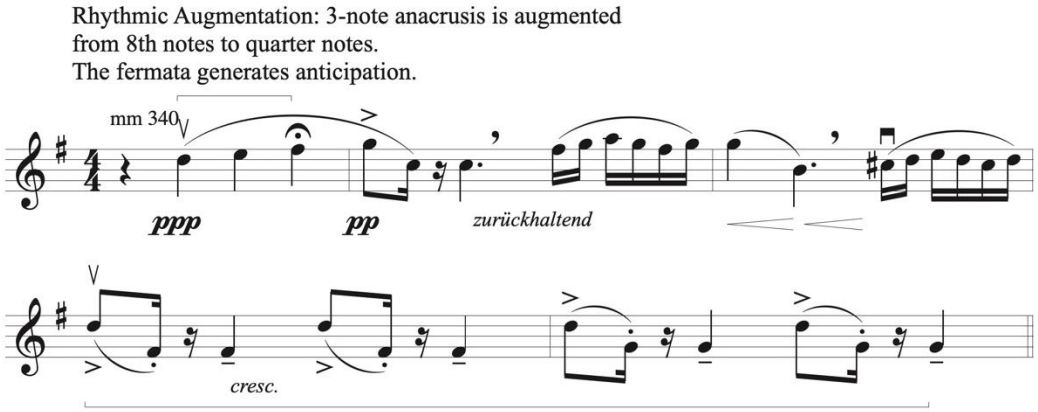
mm. 31-37, Theme 3



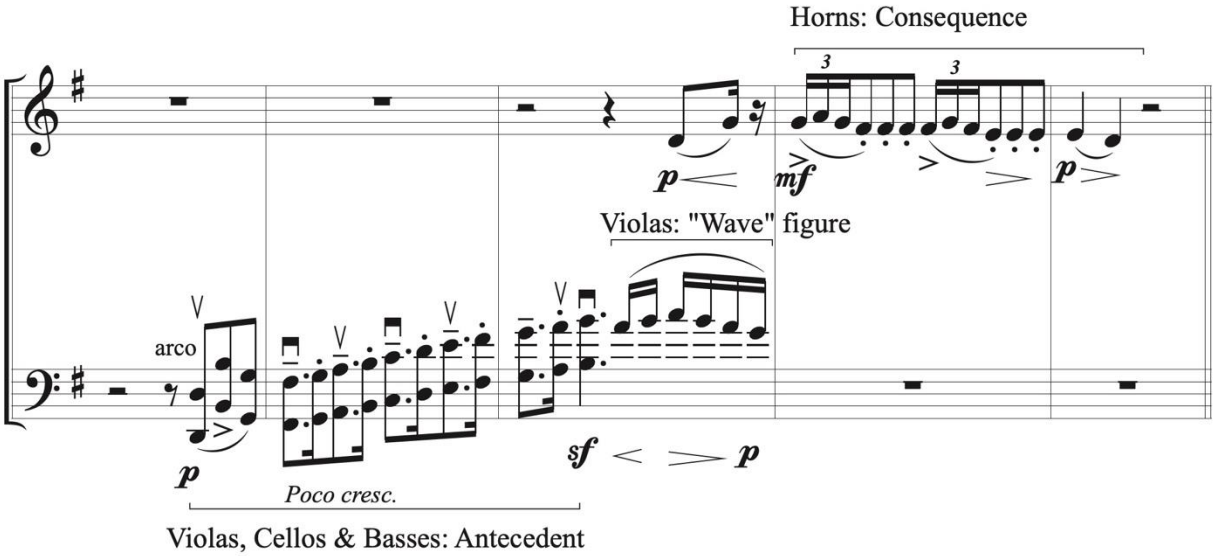
mm. 253-262, Theme 3, Variation I



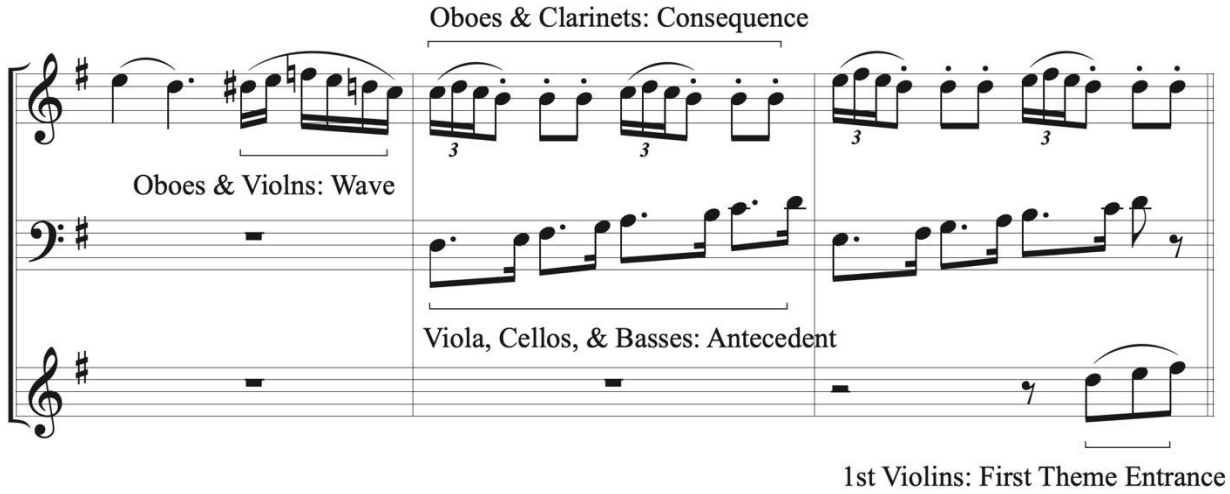
mm. 340-344, Theme 1



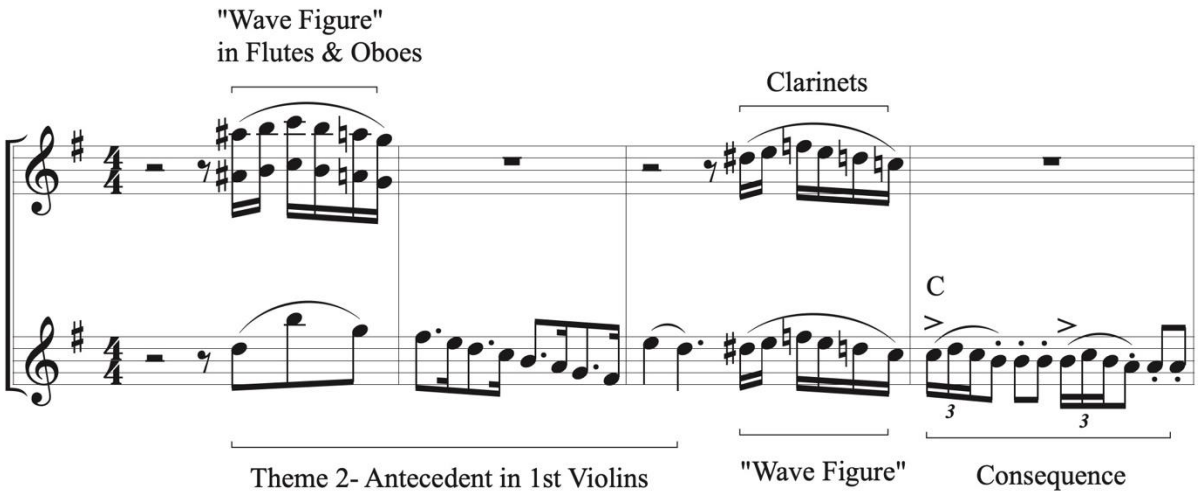
mm. 7-11, Theme 2

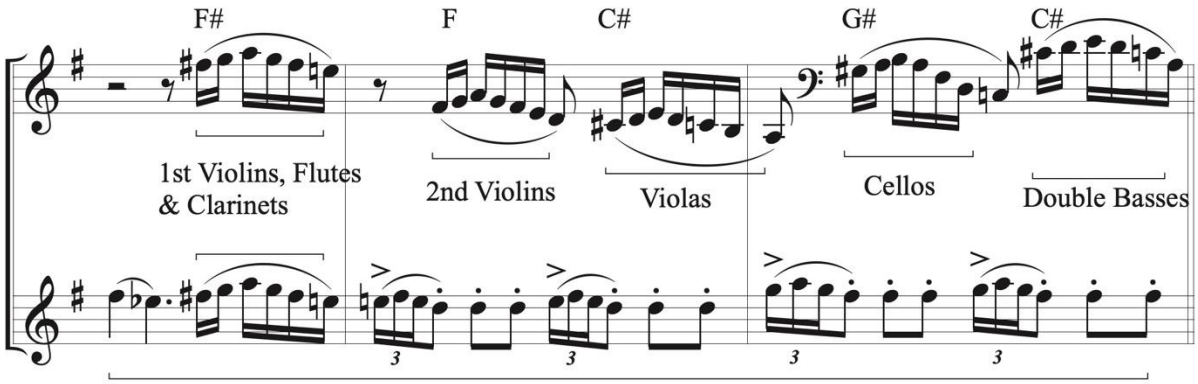


mm. 15-17, Theme 2



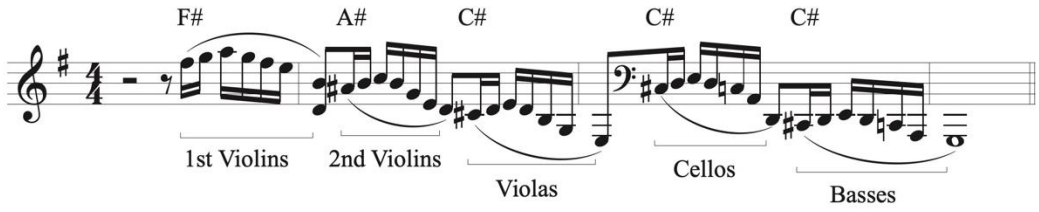
mm. 29-31, Theme 2



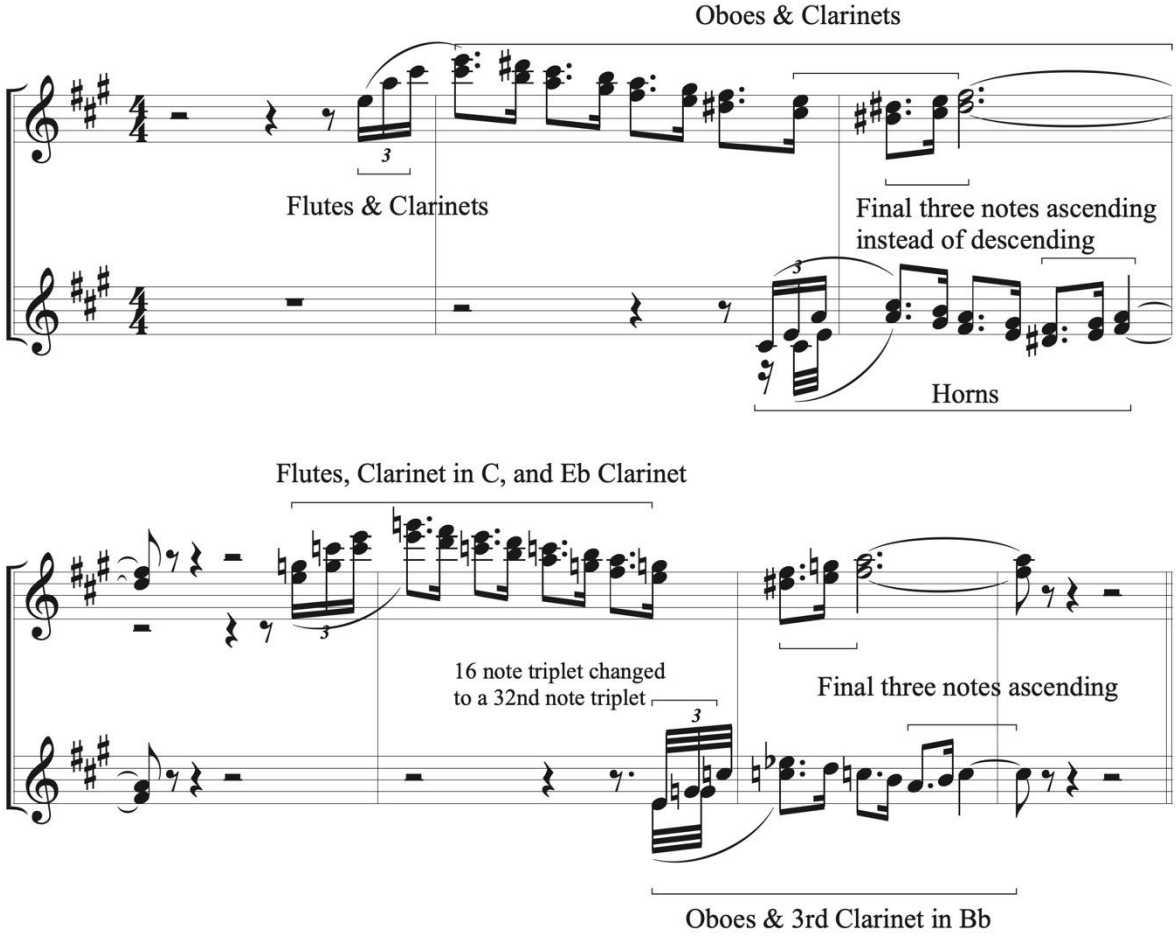


Theme 2-"Wave Figure" & Consequence Sequenced

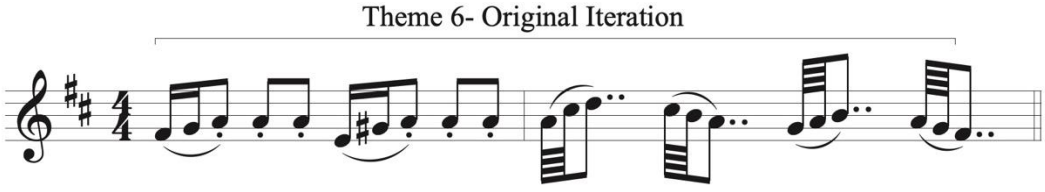
mm. 88-91, Theme 2



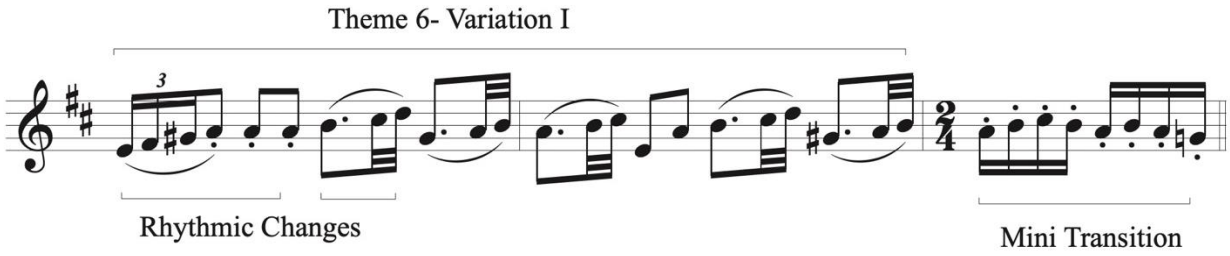
mm. 147-153, Theme 2



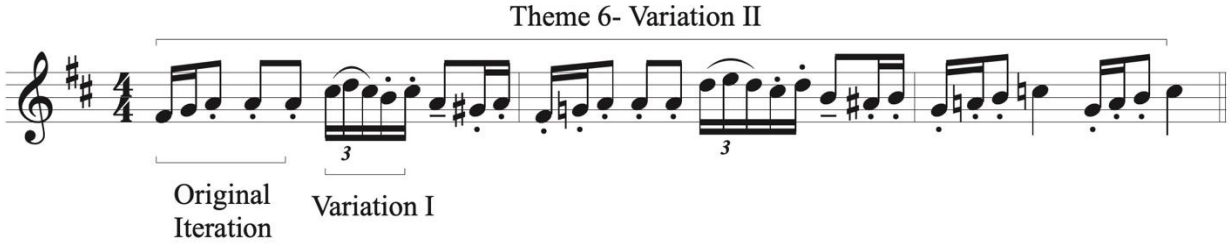
mm. 58-59, Theme 6



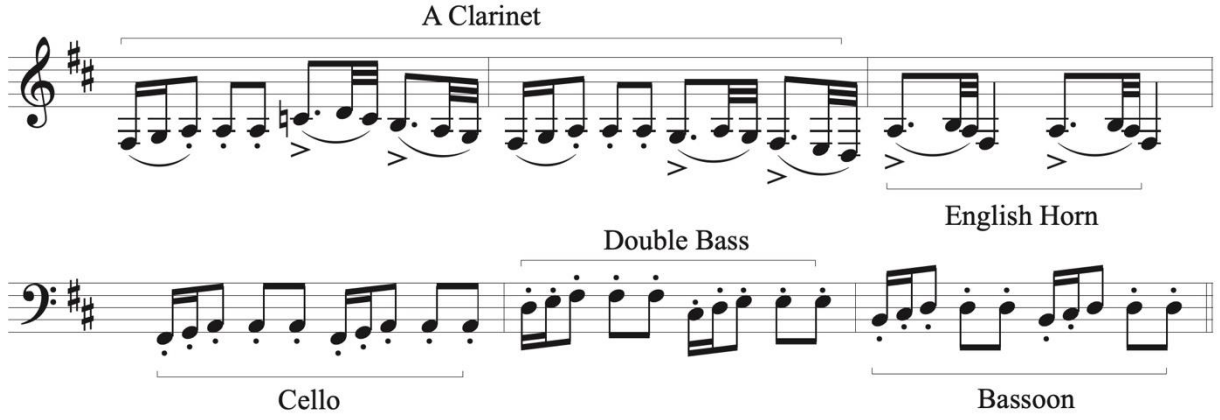
mm, 60-62, Theme 6



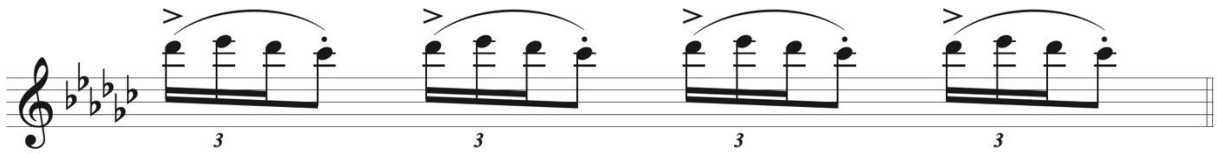
mm. 63-65, Theme 6



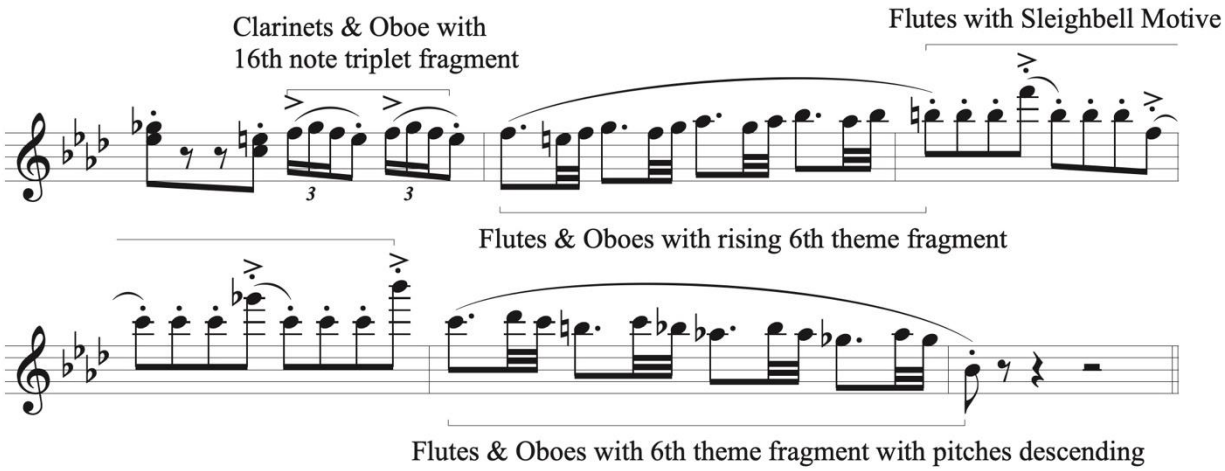
mm. 67-72, Theme 6



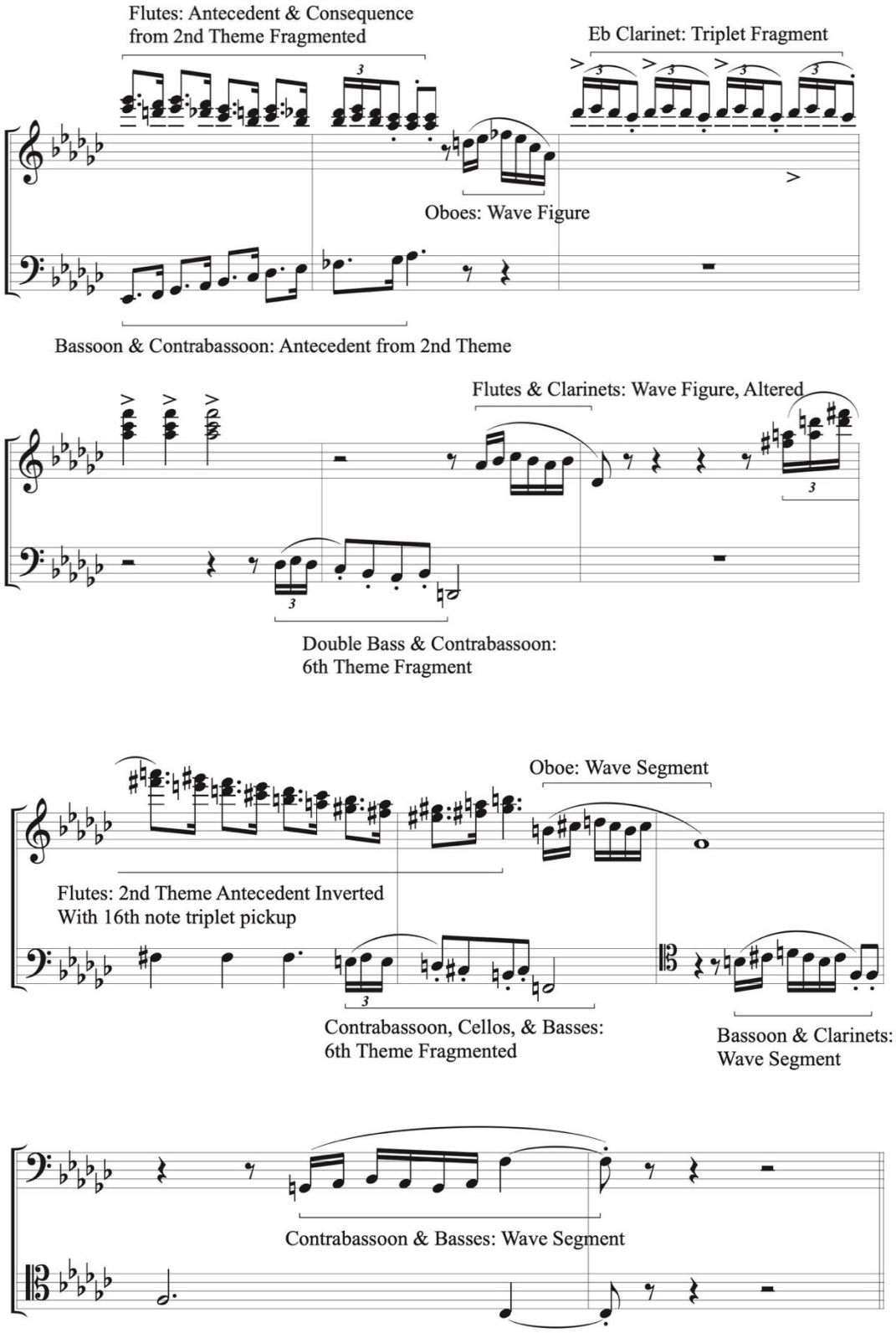
mm. 159, Theme 2



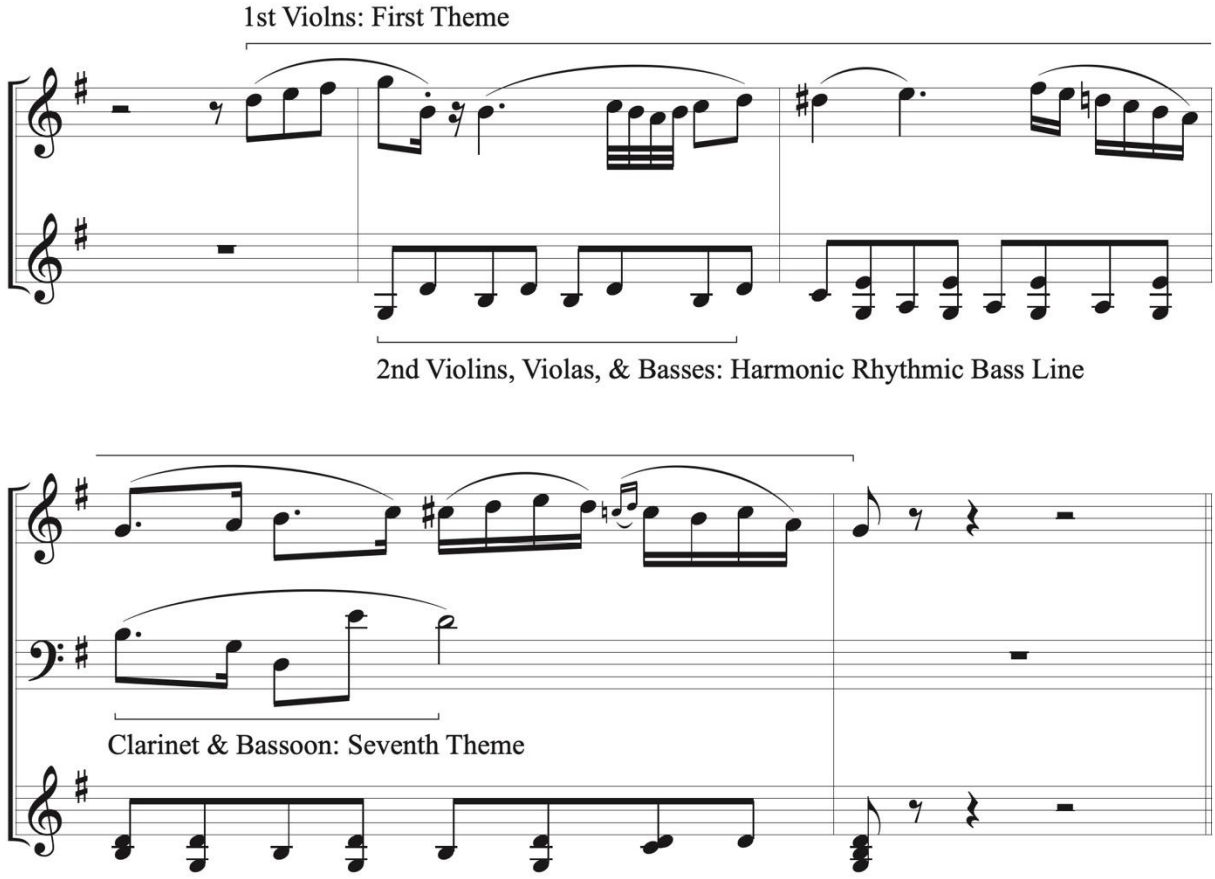
mm. 180-187, Theme 6



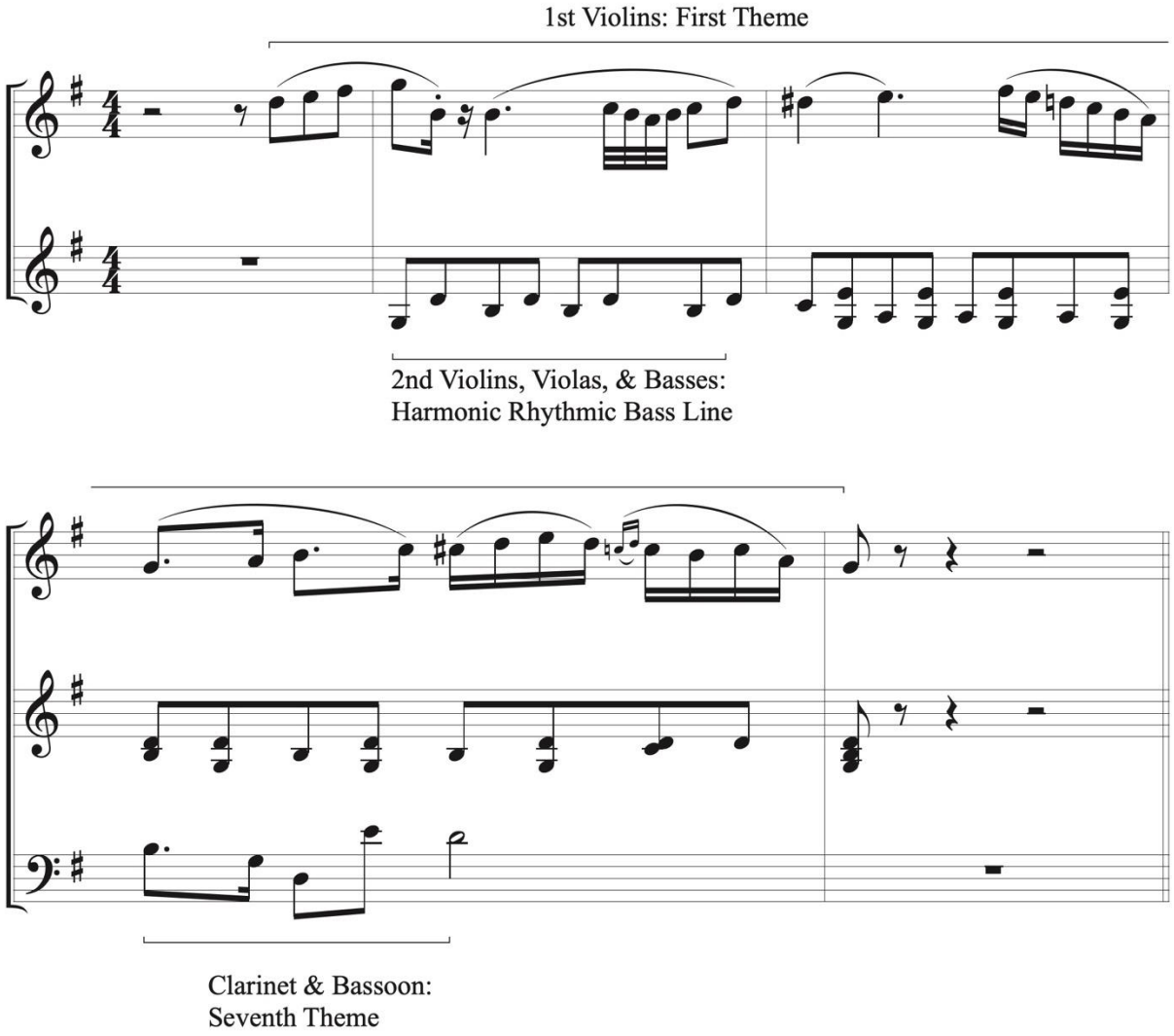
mm. 157-167, Theme 2 & Theme 6



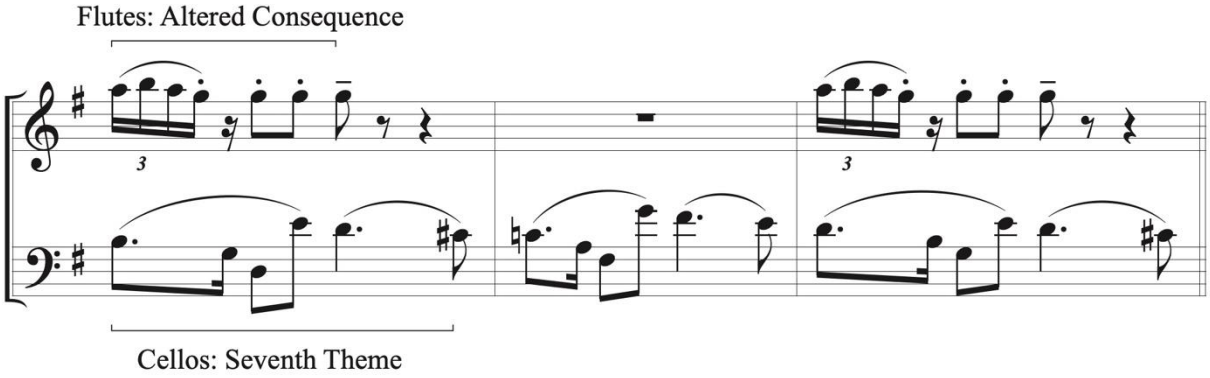
mm. 17-21, Theme 1 & Theme 7



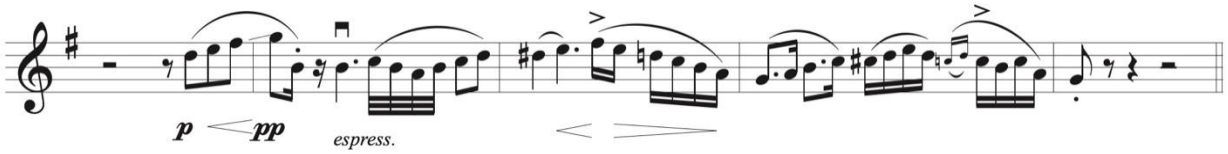
mm. 76-80, Theme 1 & Theme 7



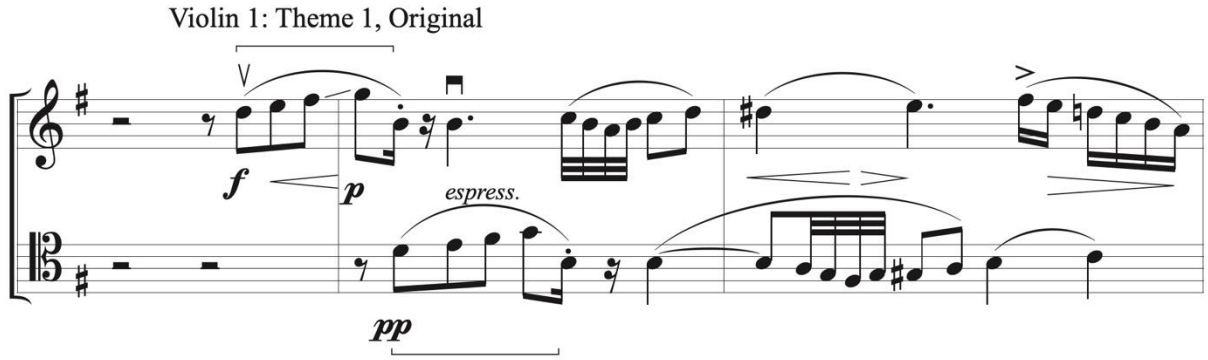
mm. 91-93, Theme 2 & Theme 7

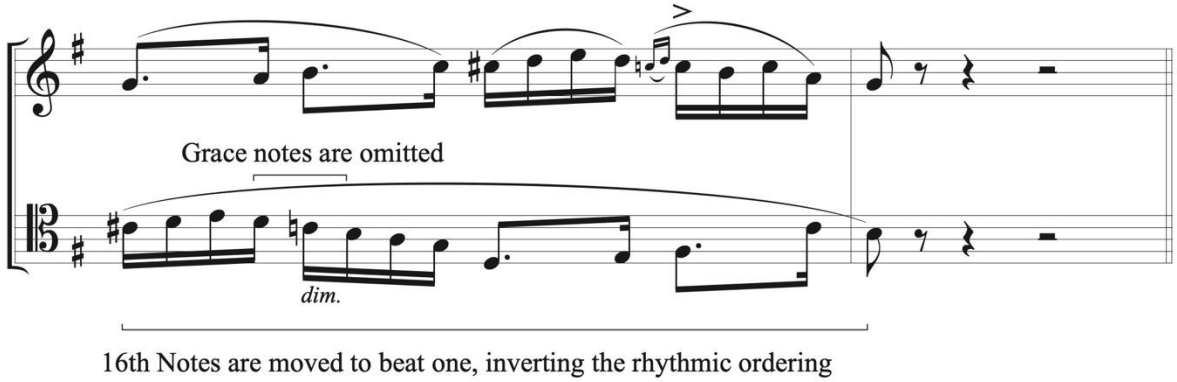


mm. 3-7, Theme 1

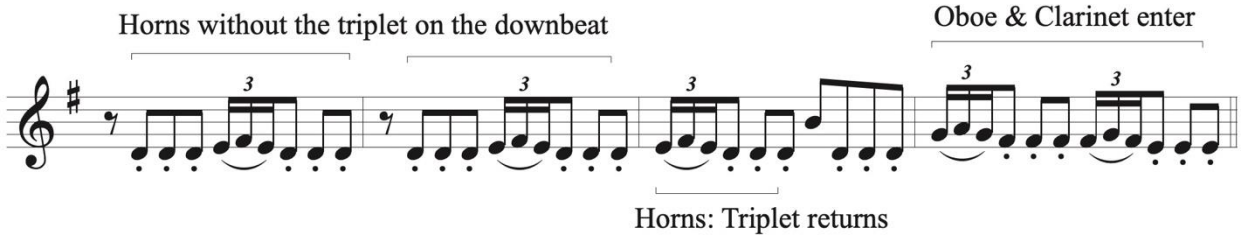


mm. 17-21, Theme 1



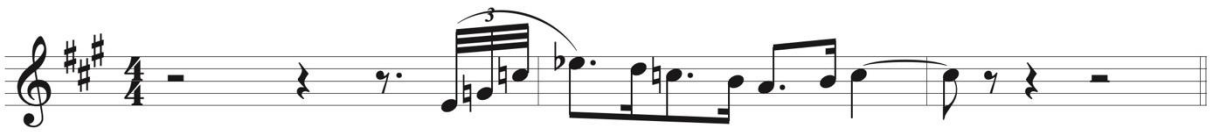


mm. 80-83, Theme 2

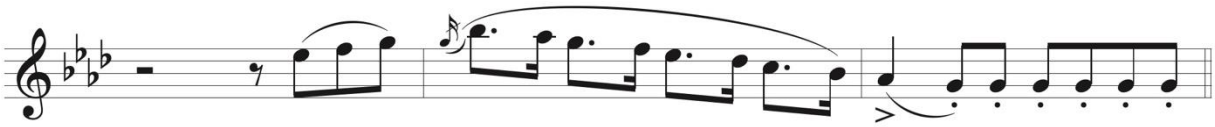


mm. 147-150, Theme 2

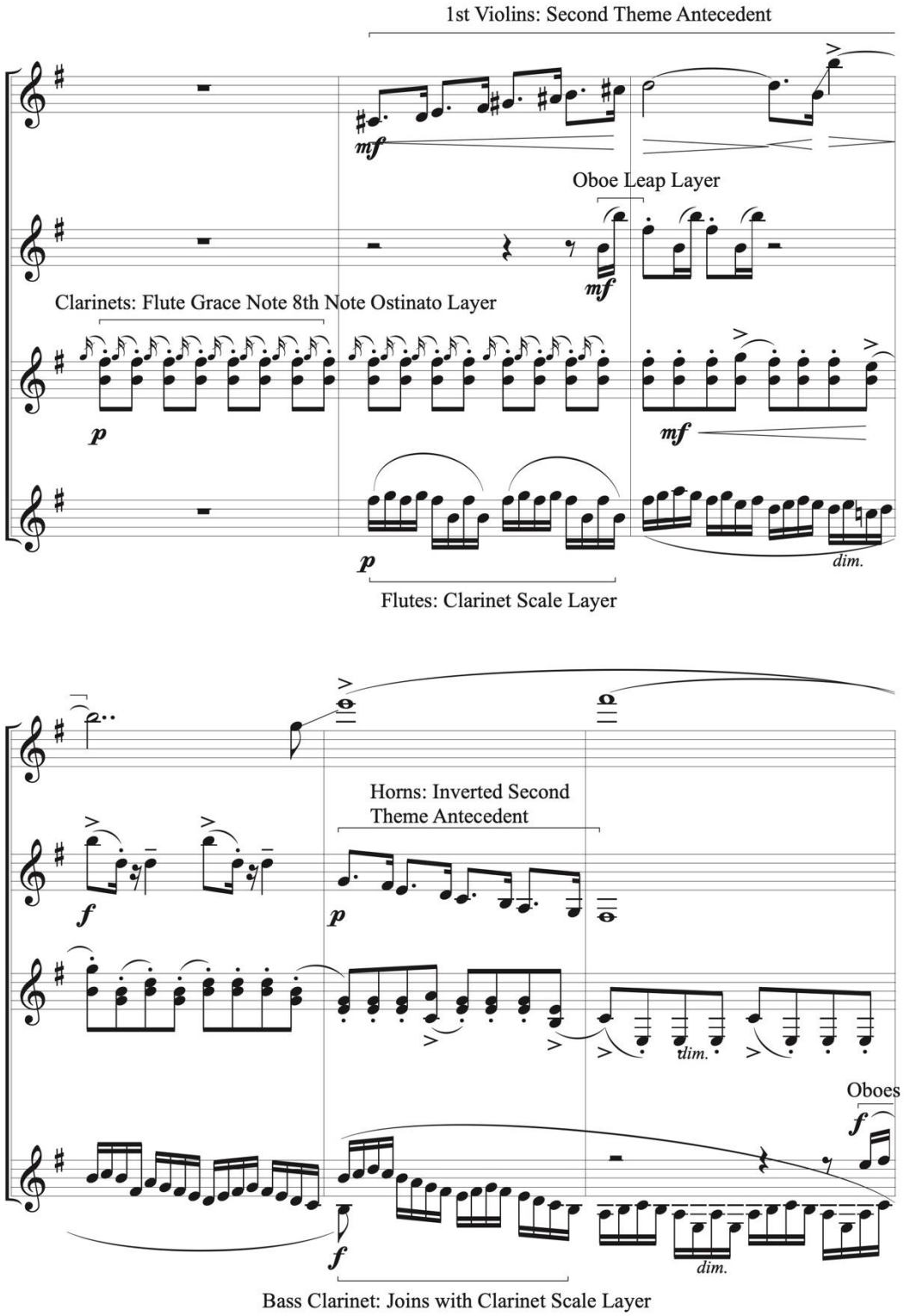
mm. 151-154, Theme 2

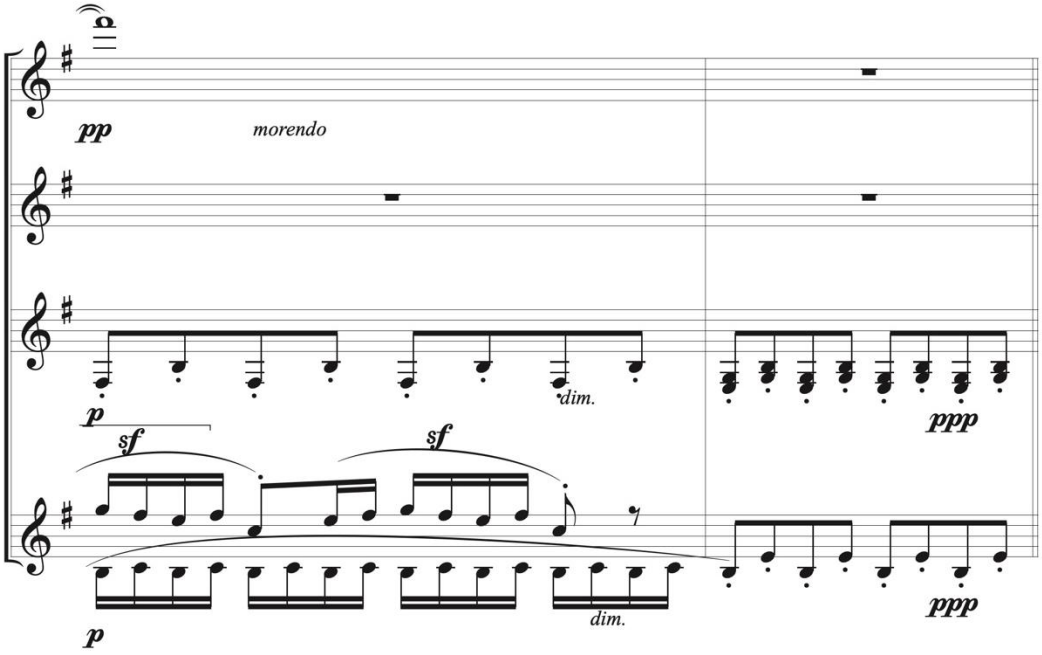


mm. 189-191, Theme 2

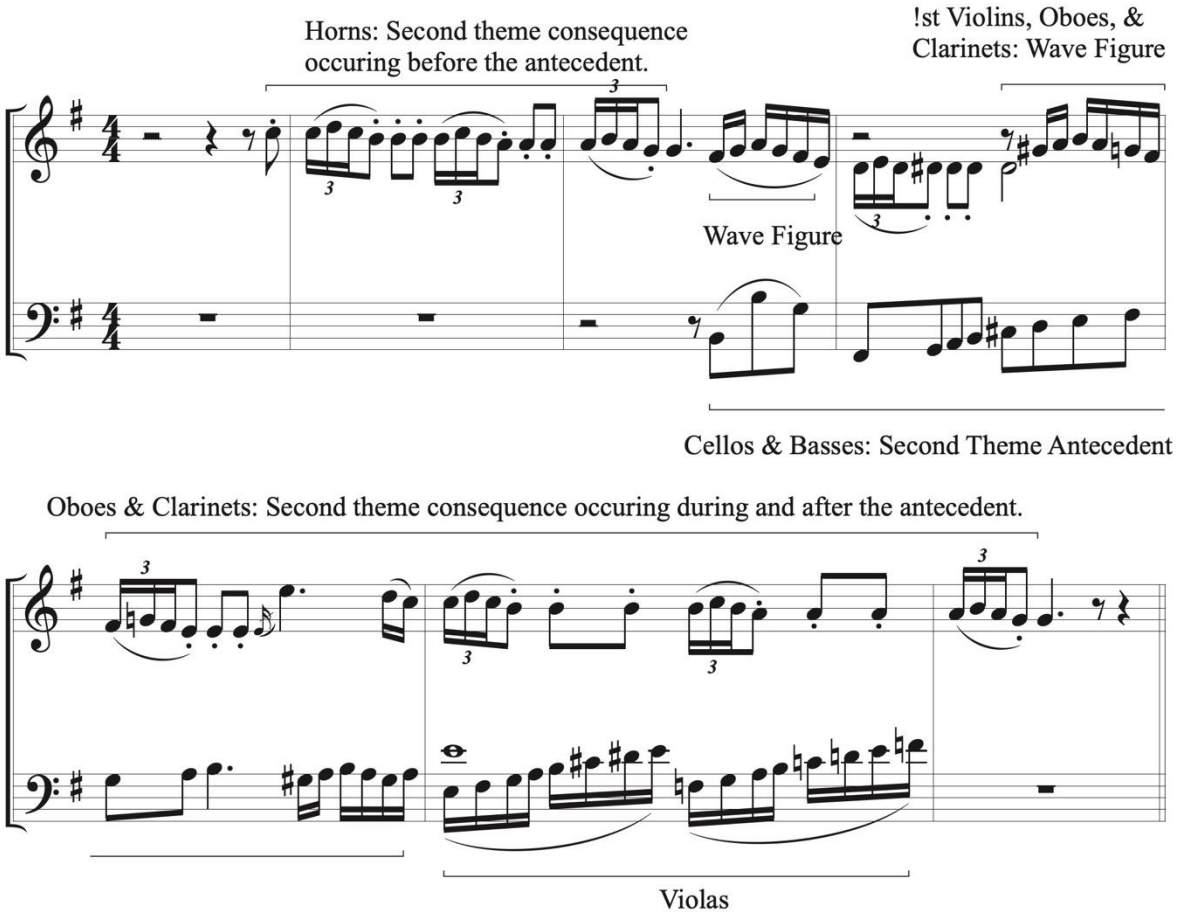


mm. 102-109, “Sleighbell Motive” & Theme 2

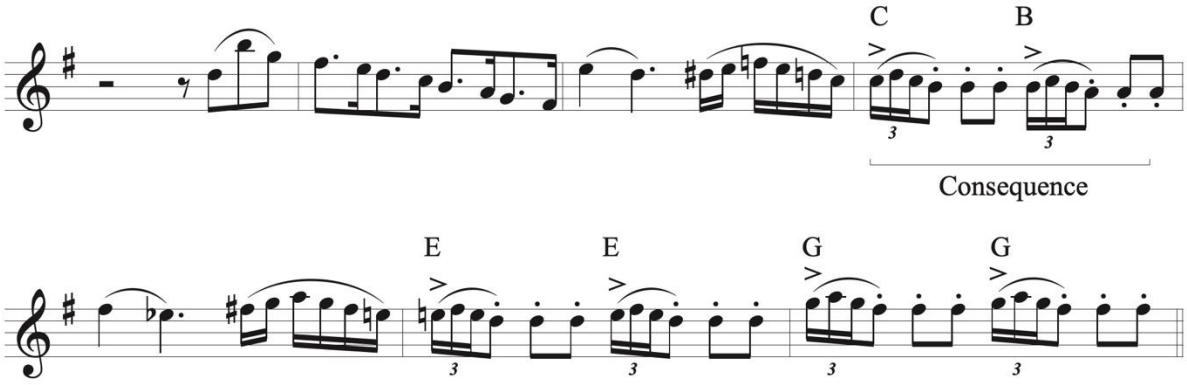



pp
morendo
p
dim.
ppp
sf
sf
p
dim.
ppp

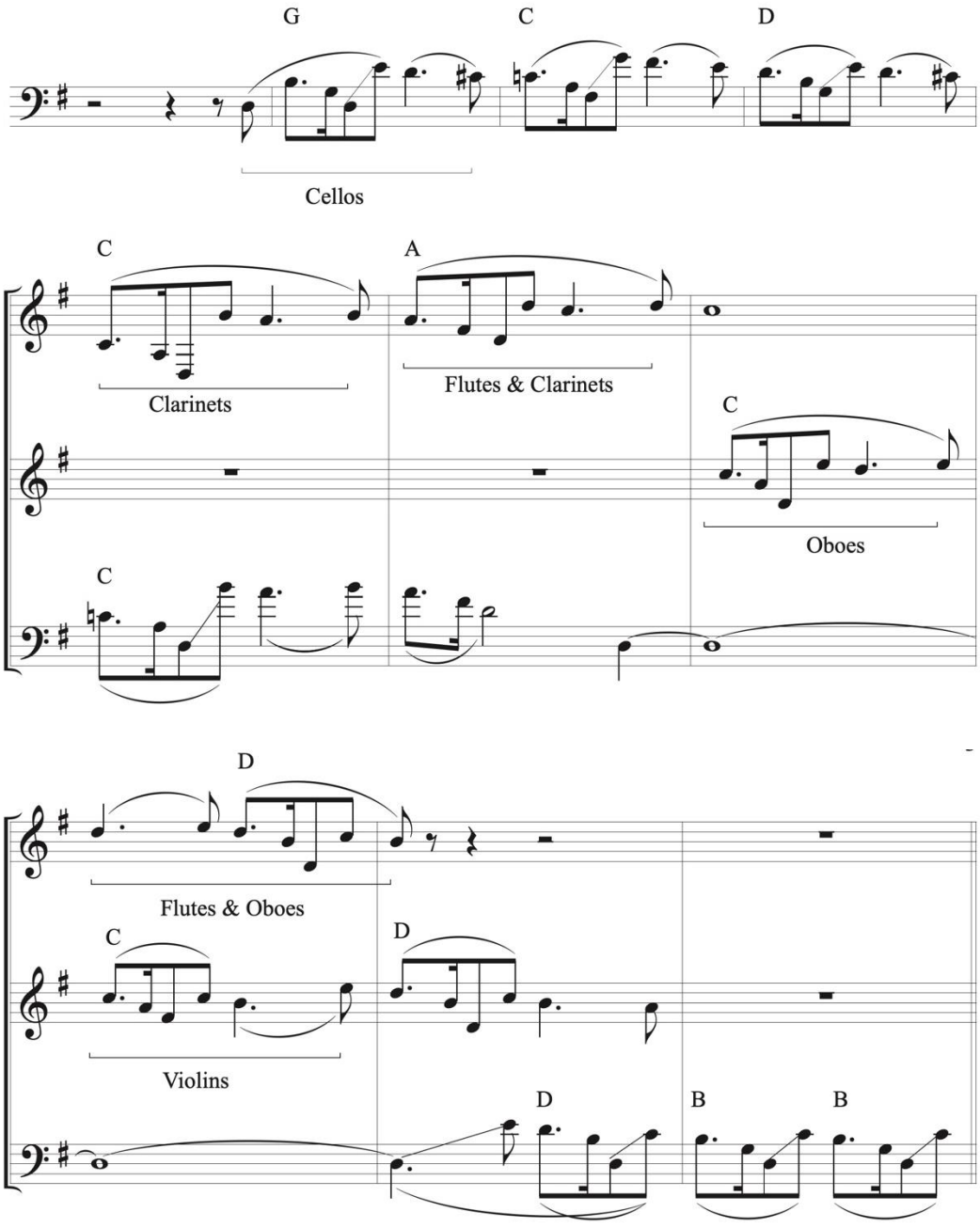
mm. 109-115, Theme 2



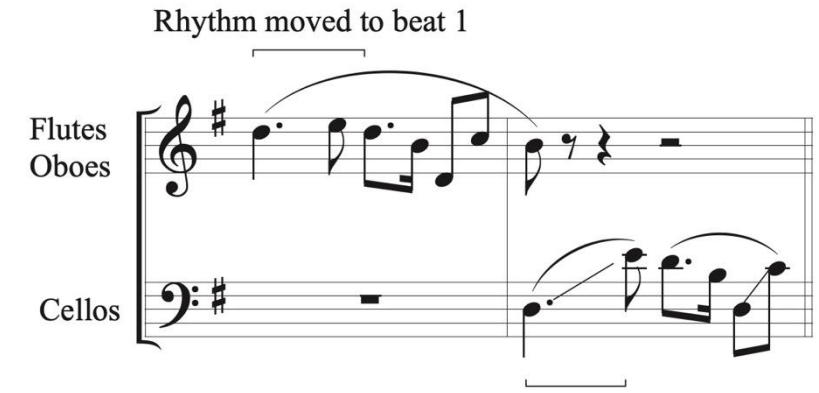
mm. 25-31, Theme 2



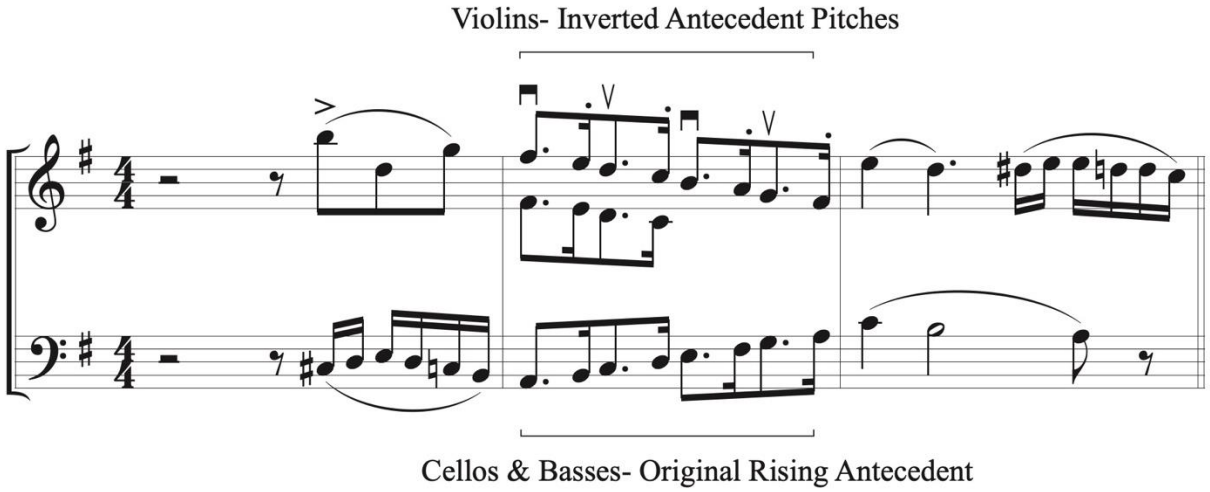
mm. 90-99, Theme 7



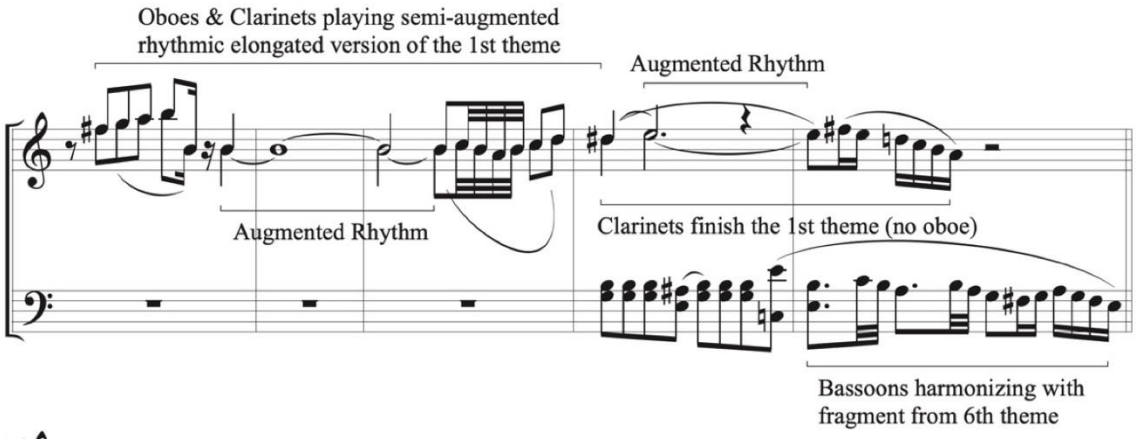
mm. 97-98, Theme 7



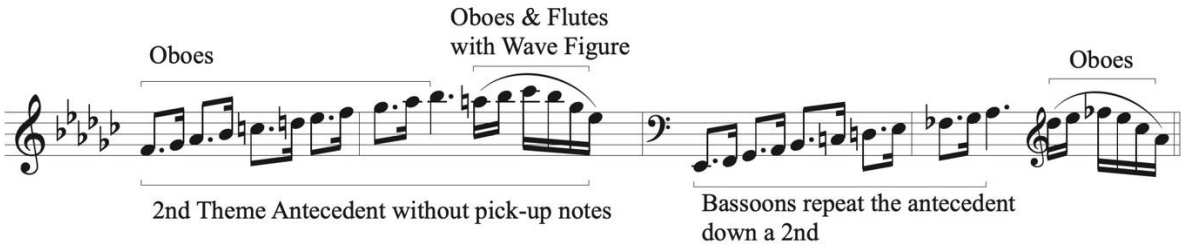
mm. 11-13, Theme 2



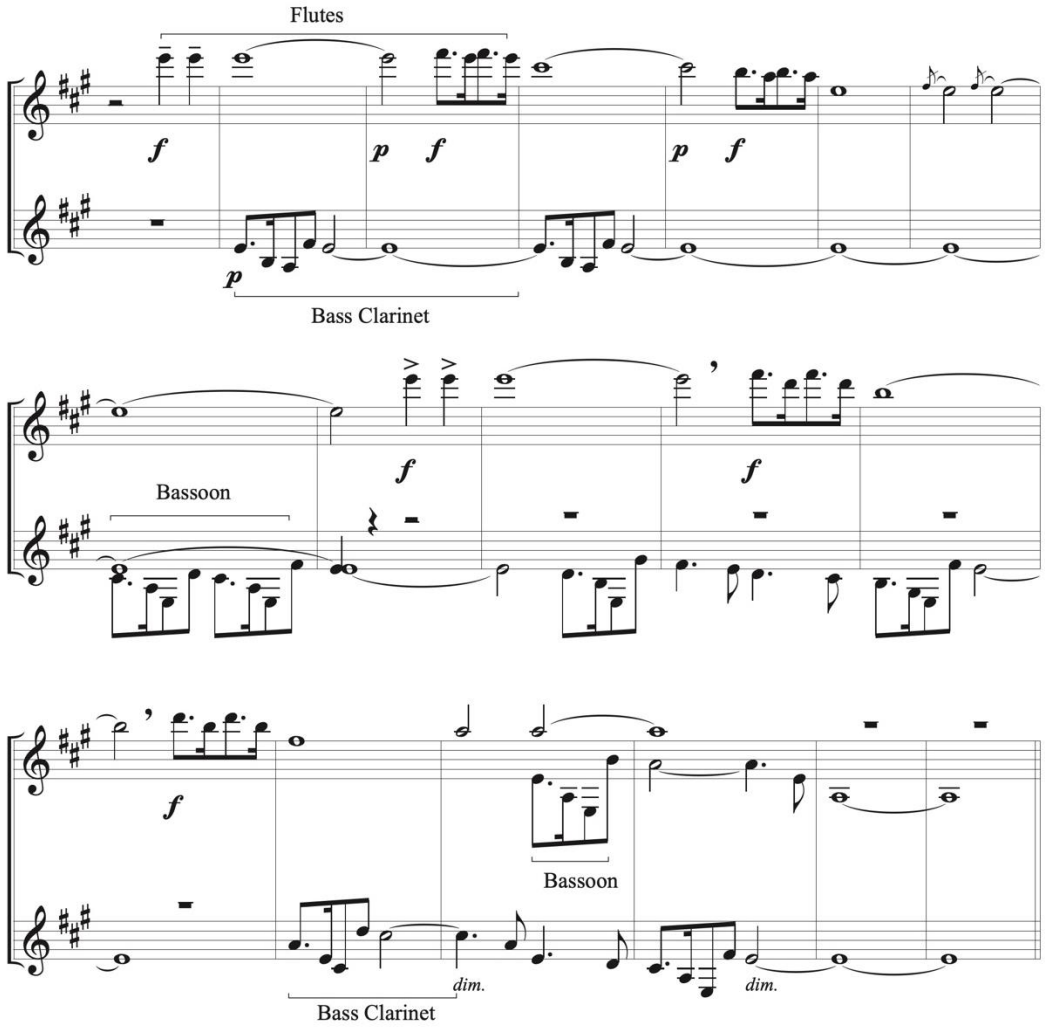
mm. 234-238, Theme 1 & Theme 6



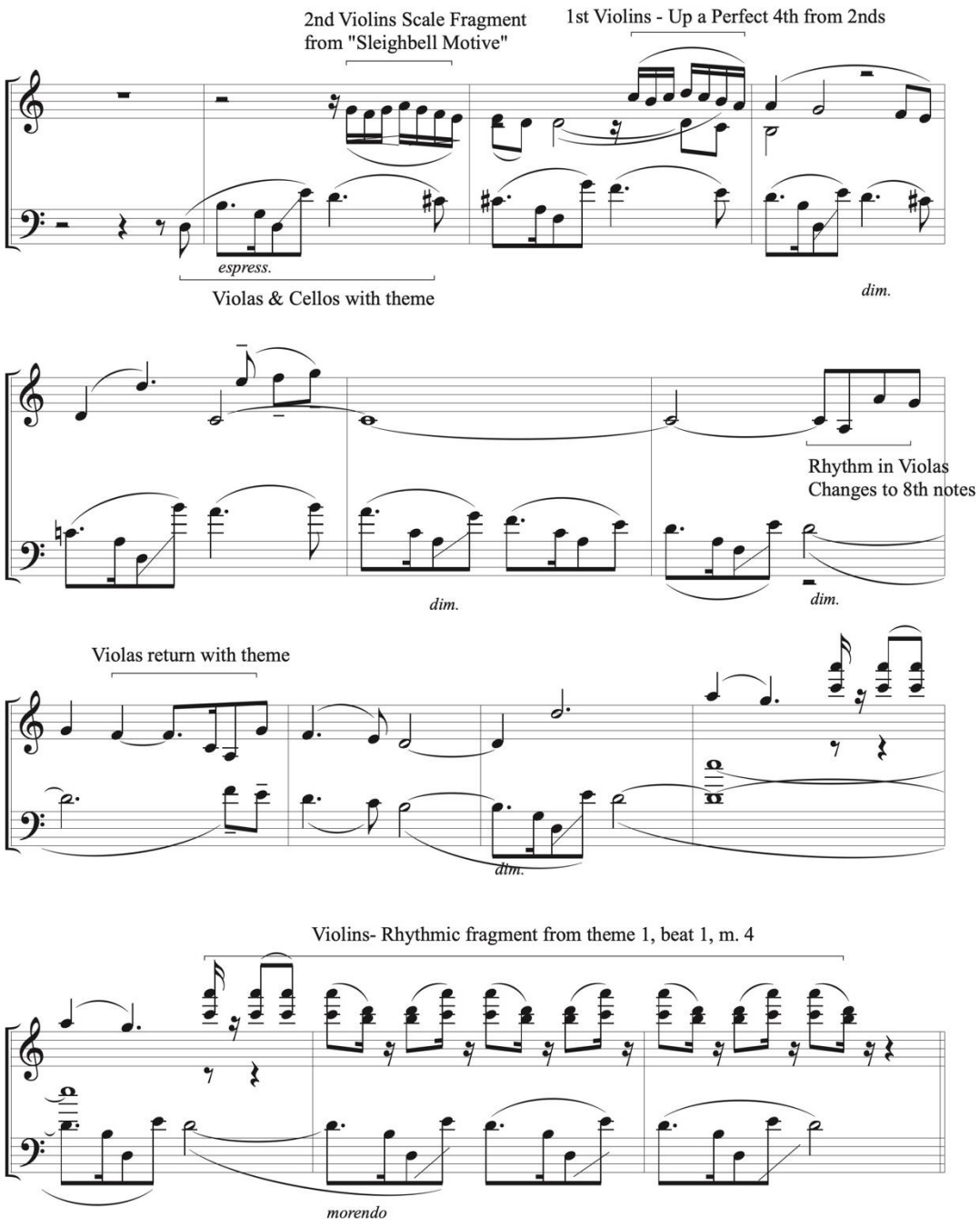
mm. 155-158, Theme 2



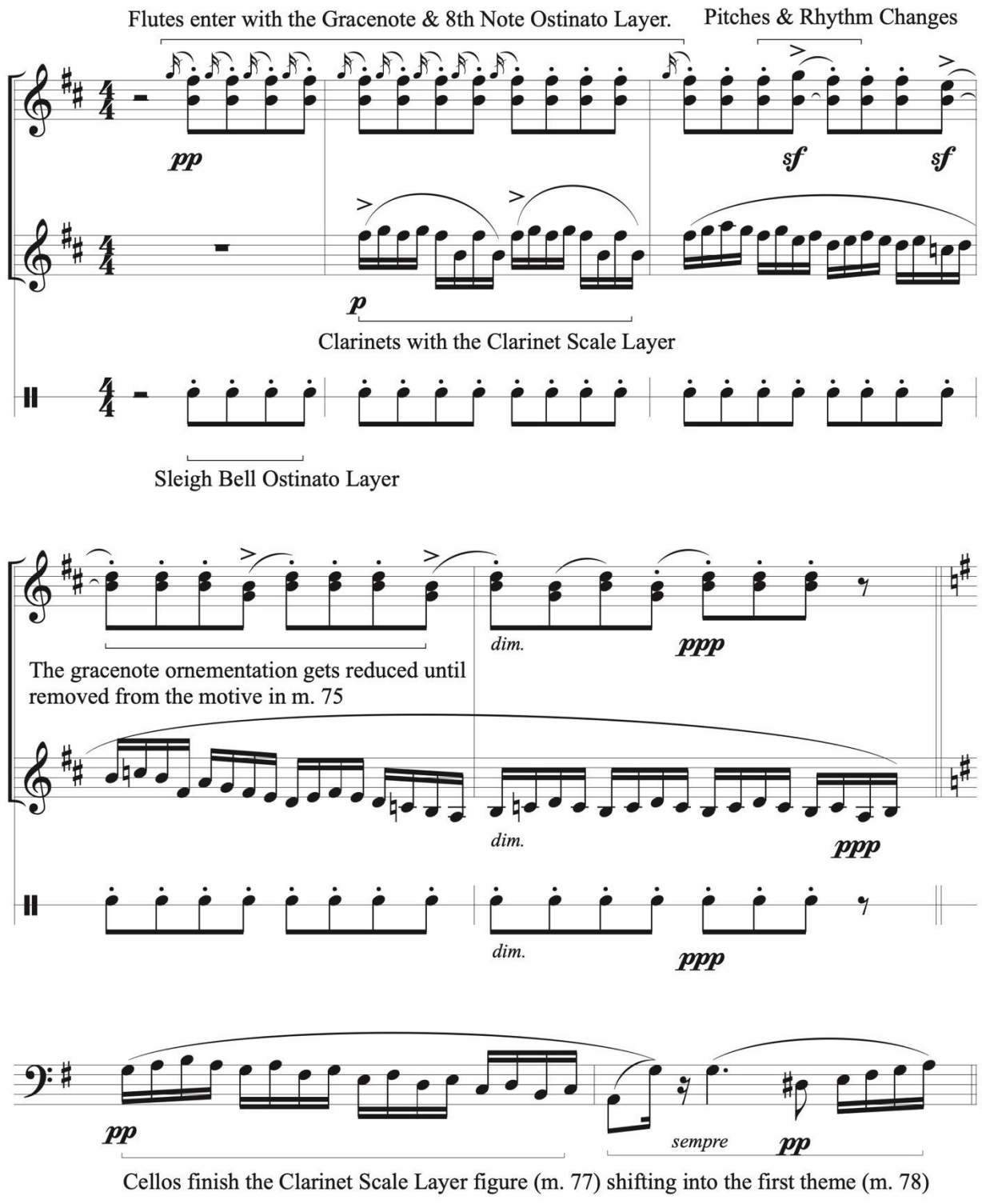
mm. 127-144, Theme 7



322-335, Theme 7

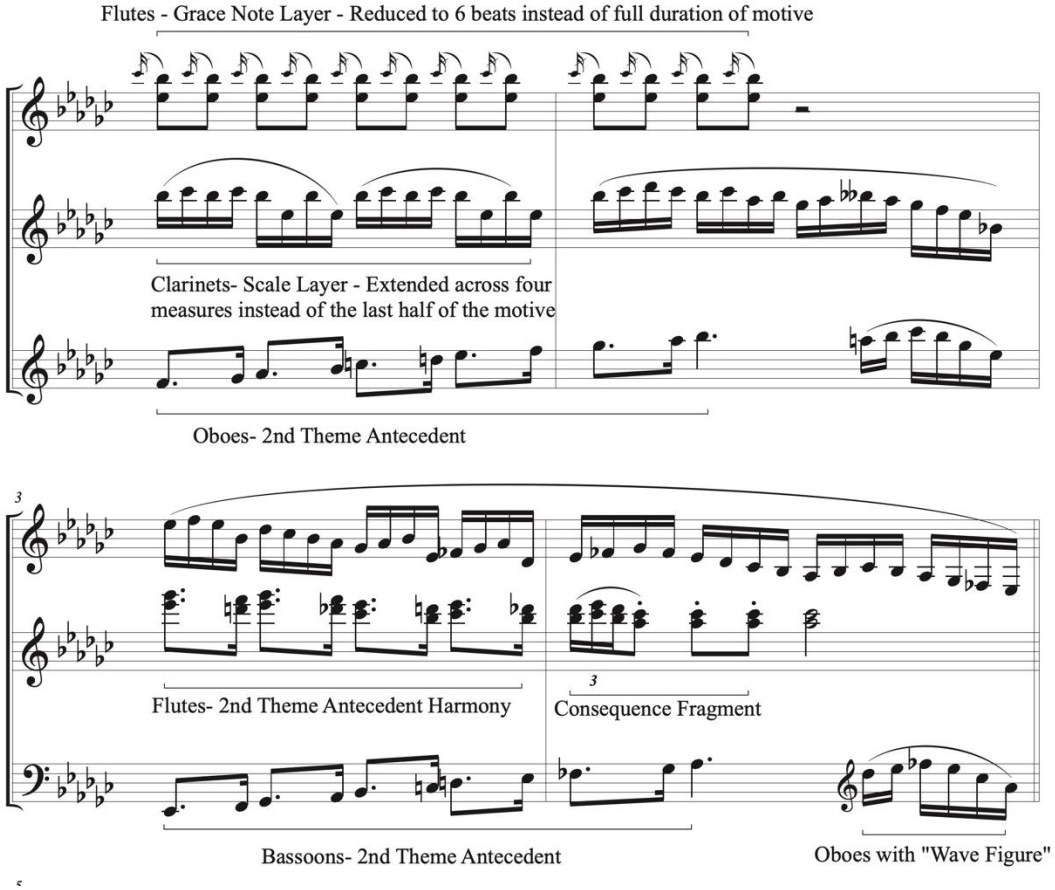


mm. 72-77, “Sleighbell Motive”



Cellos finish the Clarinet Scale Layer figure (m. 77) shifting into the first theme (m. 78)

mm. 155-158, “Sleighbell Motive”



Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

APPENDIX F – THEMATIC EXAMPLES NOT REFERENCES IN-TEXT

Example 64: mm. 38-42, Theme 4

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

Example 65: mm. 47-52, Theme 5

Source: Mahler, Gustav. Symphony No. 4, first movement. (1901)

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