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THE ART OF MELD: PITCH ORGANIZATION AND MOTIVIC  
TRANSFORMATIONS IN JOAN TOWER'S MUSIC FOR CLARINET

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THE ART OF MELD: PITCH ORGANIZATION AND MOTIVIC  
TRANSFORMATIONS IN JOAN TOWER'S MUSIC FOR CLARINET

A DOCUMENT APPROVED FOR THE  
SCHOOL OF MUSIC

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## Abstract

Joan Tower is an award-winning American composer, best known for her orchestral and chamber music. Her music is widely performed and is well liked by performers and audiences alike. Her three solo works for clarinet—*Wings* for solo clarinet (1981), *Fantasy...those harbor lights* for clarinet and piano (1983), and the Clarinet Concerto (1988)—have become standards in the clarinet repertoire. Tower herself is widely anthologized, and many scholars have researched the background of and influences on specific pieces. Other researchers have discussed the performative aspects of her pieces and examined her works by tracking the “Energy Line” of a piece, a technique devised by Tower herself. However, little scholarship explores the compositional techniques that are prevalent throughout her oeuvre, or the way that pitch is treated in her works. Further, there is only one published scholarly article by Judith Lochhead (1992) examining Tower’s works.

In an attempt to fill the gap in literature about Tower’s music—more specifically her three solo works for clarinet—this document explores the compositional processes used and similarities among the three works and examines how motivic development and pitch content structure Tower’s works. This document defines the formal construction of each work and discusses how that form is articulated by pitch emphasis, collections used, and the statement or development of thematic and motivic material. It examines the transitional moments between phrases and sections in terms of what I call “meld” in an attempt to more clearly define what other scholars and Tower herself has described as an “organic” compositional process.

## Chapter 1: Introduction

Joan Tower describes her music as energy-driven, intuitive, and “organic.” Of these descriptors, “organic” is the most interesting, as it speaks to a philosophical understanding of the compositional process not currently well documented. In fact, while describing her work as “organic,” Tower herself does not distinctly define what she means by organicism in music.

Ruth Solie has discussed musical organicism, arguing that the concept draws on the unity of organisms, in that all parts interact to form a whole, working life form.<sup>1</sup> A musical work achieves this unity through organic imagery. Because organicism is a philosophical underpinning of the compositional process, such processes that create “organic” features of Joan Tower’s works remain largely undefined. On the most basic level, her music has a consistent musical trajectory, with each idea transitioning naturally into the next.<sup>2</sup> The resulting musical work seems to constantly spin out a single idea, obscuring clear endings and beginnings to successive sections. In what follows, I argue one of the ways in which Tower creates organicism is by the blurring of boundaries between sections and by combining beginnings and ends of sections, a technique which I will call *meld*.

The term *meld* in vernacular English refers to blending otherwise separate entities. It is commonly used to describe fusing or bonding independent elements. I use *meld* to describe transitional moments in music in which multiple musical elements fuse together different musical ideas. *Meld* connects contrasting sections in such a way that

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<sup>1</sup> Ruth Solie, “The Living Work: Organicism in Musical Analysis,” *19th-Century Music*, 4, No. 2 (Autumn 1980), 147.

<sup>2</sup> Precisely what “organic” means or represents to Tower remains abstract. The most concise definition appears in Helen K. Grolman, *Joan Tower: The Comprehensive Bio-Bibliography*, (Lanham, MD: Scarecrow Press, 2007), 28.

the end of one idea and the beginning of the next idea are not just elided (such that there is a clear pivot point between ideas) but rather, the materials are fused in such a way that it is unclear where one idea ends and the other begins. Each idea in Tower's pieces grows from the previous idea, so there is an intentional blurring of structural sections.

Tower herself talks about the importance of this musical development:

A piece is a completely organic process, based on itself. In other words, the starting ideas provide the fuel for the form of the piece. The whole process is one of listening very patiently to what that piece is trying to do, rather than telling the piece what to do.<sup>3</sup>

Because Tower intentionally builds each idea from the previous one, examining musical meld, then, gives us a more powerful tool for understanding Tower's compositional practices than the otherwise vague concept of organicism.

Pitch is a driving element of meld in Tower's works. However, Tower practically discourages pitch analysis of her works because, as a composer and performer, she claims that any pitch patterns or relationships that appear in her music are an accidental result of other changes. She does not plot out or think about pitch relationships as she writes:

To me there's an arbitrariness to it that does not have any inherent musical meaning unless there's a whole lot of other things important [happening]... So what if there's half step relations inside the piece, or there's localized step relations. I'm not so sure that those relationships for me are the most important things that I can aim for, but I have not found a way frankly for doing that because I have gotten farther and farther away from say strictly pitch-oriented pieces... I work from note to note very carefully and I try to build an organic structure from note to note.<sup>4</sup>

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<sup>3</sup> Carol Neuls-Bates, *Women in Music: An Anthology of Source Readings from the Middle Ages to the Present*. (Boston: Northeastern University Press, 1996), 354.

<sup>4</sup> Nancy E. Leckie Bonds, "An Analysis of Joan Tower's *Wings* for Solo Clarinet," (DMA Document, Arizona State University, 1992), 215–216.

Scholars have taken Tower at her word, generally making only passing mention of pitch and motive and how these elements help drive Tower's works, creating a gap in the literature about her music.<sup>5</sup> Despite Tower's suggestion to the contrary, pitch is a driving element of her music, and pitch relationships clarify otherwise obscured formal divisions. This document looks at how pitch collections and transitions between collections create meld and clarify form in three of her works for clarinet: *Wings* (1981) for solo clarinet, *Fantasy...those harbor lights* (1983) for clarinet and piano, and the Concerto (1988) for clarinet and orchestra. It will illustrate the meld created by pitch content, modulatory procedures, and motivic manipulation and offer interpretive implications of these compositional techniques. It will help define Tower's "organic" compositional approach by examining how transitions between pitch collections and emphases create musical meld.

Because Joan Tower is a contemporary American composer, biographical material is readily available. As such, this document does not include a full biographical review of Joan Tower and her life. As discussed below, other scholars have examined the basic performative, technical difficulties of Tower's compositions for clarinet. This document will instead focus on analyzing the formal structure of select works for

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<sup>5</sup> Lori Elizabeth Baruth, "Joan Tower And The Clarinet: An Examination of Her Compositional Style and a Performer's Guide to *Rain Waves* (1997) and *A Gift* (2007)," (DMA document, University of Cincinnati, 2010); Heather A. Crawford, "Joan Tower's Violin Concerto: An Organic Approach to Composition," (DMA Document, University of Texas at Austin, 2002); Lesley Marie Hastings, "Organic Composition in Joan Tower's *Fantasy* for Clarinet and Piano," (DMA Document, University of Illinois at Urbana-Champaign, 2010); Elizabeth Christine Meyer, "An Analysis of Joan Tower's *Petroushskates*," (DMA Document, Northwestern University, 1999); Rochelle Lynn Oddo, "Joan Tower's Compositional Profile, Use of the Clarinet, and Collaboration in *Turning Points* for Clarinet and String Quartet," (DMA Document, Rice University, 2004); Laura Shouha, "The Musical Language Of Joan Tower: An Energy Line Analysis Of *Island Prelude* For Oboe And Wind Quartet," (DMA Document, University of North Texas, 2001).

clarinet and discussing how structure is created through meld, development of pitch content, and motivic transformation.

## Chapter 2: Review of Related Literature

### *Biographical Research*

Joan Tower is widely anthologized because of her status as an award-winning composer. The first published research on Tower's life and work appeared in Christine Ammer's 1980 collection *Unsung: A History of Women in American Music*.<sup>6</sup> That same year, Jane Weiner LePage included Tower in her anthology *Women Composers, Conductors, and Musicians of the Twentieth Century: Selected Biographies*.<sup>7</sup> Mary Lou Humphrey published a short biography and list of published compositions in 1991 for Associated Music Publishers, describing Tower's life and biographical influences in her works.<sup>8</sup> In her second edition of *Women in Music: An Anthology of Source Readings from the Middle Ages to the Present*, Carol Neuls-Bates included an interview with Tower on her early life, compositional philosophy, and the popularity of her orchestral works.<sup>9</sup>

Helen Grolman's book, *Joan Tower: The Comprehensive Bio-Bibliography*, is the most extensive biographical account of Joan Tower's life and music.<sup>10</sup> Published in 2007, it synthesizes and expands on the research of previous scholars and illuminates Tower's compositional career, outlining the timeline of her life, performance, teaching, and composition. Grolman summarizes Tower's compositional aesthetic, process, and philosophies. The book includes an annotated list of Tower's complete works with

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<sup>6</sup> Christine Ammer, *Unsung: A History of Women in American Music*, (Westport, CT: Greenwood Press, 1980).

<sup>7</sup> Jane Weiner LePage, *Women Composers, Conductors, and Musicians of the Twentieth Century: Selected Biographies*, (Metuchen, NJ: Scarecrow Press, 1980).

<sup>8</sup> Mary Lou Humphrey, *Joan Tower*, (New York, NY: G. Schirmer, 1991).

<sup>9</sup> Neuls-Bates.

<sup>10</sup> Grolman.

publisher, premiere, recording information, and published program notes. It concludes with peer reflections about Tower by performers, conductors, and fellow composers.

As Tower's orchestral music began to achieve popularity, interviews with the composer appeared in several notable compilations, such as Ann McCutchan's *The Muse That Sings: Composers Speak About the Creative Process* and an audiobook compilation by Jay Allison et al, *This I Believe II: More Personal Philosophies of Remarkable Men and Women*.<sup>11</sup> In 1996, the Verdehr Trio commissioned Joan Tower to write *Rain Waves* for violin, clarinet, and piano. They also interviewed Tower as part of their *Making of a Medium Video Series*. In the interview, Tower discusses her philosophical approach to composition and her general approach to writing for the clarinet.<sup>12</sup>

### ***Compositional Process and Performative Analysis***

Despite being widely anthologized, a structural and pitch analysis of Joan Tower's music appears in only one peer-reviewed scholarly article. Judith Lochhead's 1992 article, "Joan Tower's *Wings* and *Breakfast Rhythms I* and *II*: Some thoughts on form and repetition" compares recapitulations of rhythmic and motivic material to their introductory counterparts.<sup>13</sup> Lochhead discusses how both expansion and omission of previous material in the return creates form and a large-scale momentum toward an end

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<sup>11</sup> Ann McCutchan, *The Muse That Sings: Composers Speak About the Creative Process*, (New York: Oxford University Press, 1999); Joan Tower, "Music Makes me Come Alive," in Jay Allison, Dan Gediman, John Gregory, and Viki Merrick, *This I Believe II: More Personal Philosophies of Remarkable Men and Women*, (North Kingstown, RI: BBC Audiobooks America, 2008).

<sup>12</sup> Verdehr, Walter, Peter Schickele, Joan Tower, Elsa Ludewig-Verdehr. "Joan Tower: *Rain Waves*." *Making of a Medium Video Series, Part II*. (East Lansing, MI: Michigan State University Press, 2006, DVD).

<sup>13</sup> Judith Lochhead, "Joan Tower's *Wings* and *Breakfast Rhythms I* and *II*: Some thoughts on form and repetition," *Perspectives Of New Music* 30, no. 1 (January 1992): 132.

goal. She illuminates similar formal processes used in *Breakfast Rhythms*, but makes only passing mention of pitch relationships between formal sections in both analyses.

Nancy Bonds's 1992 DMA document "An Analysis of Joan Tower's *Wings* for Solo Clarinet" was the first document—and one of the few—to discuss compositional procedures in Tower's music. Bonds examines *Wings* from multiple theoretical perspectives showing the different facets of the piece.<sup>14</sup> Bonds explores the formal construction of *Wings* in terms of repeated motivic material. She uses Hindemith's ideas of harmonic and melodic intervals to illustrate repose and tension, texture, and harmonic versus melodic structure. Her linear analysis shows the melodic nature of the piece, and graphic analysis illustrates how Tower uses time-space.<sup>15</sup>

Bonds's interviews with Tower guided the focus of subsequent research. In an interview with Bonds, Tower recommends examining her music in terms of intensity, whether the music is becoming more intense, staying the same, or becoming less intense, and suggests a basic methodology for analyzing her music in terms of those shifts.

Energy line analysis. There are not tools for that, and as far as I know it hasn't been explored in theory books or anything. But that would be a way of getting to my music. If I were doing an analysis of my music, I would start with something like a physics point of view. What direction is it going? There are three directions: one is up, one is staying, and one is down. There are three energy lines: one is up, one is staying, one is down. In other words, music can get more intense, get less intense, or it can stay the same. Those are your choices. That's it. I would take that as the bottom line. Then I would go "okay, this is energy line one, increasing in intensity how? Well, it's getting louder, it's getting higher, the instruments are multiplying, the rhythm is getting slower." There's different ways of creating intensity. How is that intensity increasing? On what level? Then I would map out a whole thing about that.

Then I would do a space analysis on top of that because the space you're in for me is very important. Are you up here? Are you up here? Are you

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<sup>14</sup> Bonds.

<sup>15</sup> Ibid.

covering this grid? Are you down here? Where are you in the spatial grid? Because the energy line has a lot to do with that. How does it shift? Is it short periods, is it long periods? Then there would be a pacing line. How long does this intensity build up? And how long is this one in relationship to this one over here? What is the space here in relationship to space over here? I mean there are all kinds of maps that you could create that are not pitch maps.<sup>16</sup>

Consequently, most accounts to date have followed the advice of Tower herself in their inspections, by trying to construct an “Energy Line” of her works, graphing the changes in energy from measure to measure, and using that detailed chart to find large-scale fluctuations and high and low points.<sup>17</sup> Since no formal method of graphing energy lines in music exist, the combinations of factors contributing to the tension and release graphed in the “Energy Line” differ with each author. Often they consider rhythm, dynamic, orchestration, tempo, range, density, and articulation, but overall they disregard pitch and motivic usage.

Baruth describes the result of Tower’s compositional approach in her “Energy Line” graph, showing structural tension and resolution in *Rain Waves* and *A Gift* and discussing some performative difficulties of each work.<sup>18</sup> Hastings similarly discusses the Energy Line in her discussion of *Fantasy*.<sup>19</sup> Oddo delineates structure in *Turning Points* by using an “Energy Line” graph.<sup>20</sup> Crawford includes an “Energy Line” of the Violin Concerto and discusses three compositional techniques that Tower uses to unify her works.<sup>21</sup> Kristy Bryden posits that motion in many twentieth-century works is created through increased and decreased intensity in dynamic, articulation, register, and

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<sup>16</sup>Bonds, 211.

<sup>17</sup> Baruth, Crawford, Hastings, Meyer and Shouha’s analyses all hinge on Tower’s recommended “Energy Line” Analysis.

<sup>18</sup> Baruth.

<sup>19</sup> Hastings.

<sup>20</sup> Oddo.

<sup>21</sup> Crawford.

rhythm, since common-practice tonic-dominant functional relationships do not apply.<sup>22</sup> She demonstrates closural processes in Tower's *Petroushskates*, and graphs the changing intensity to show both the local and large-scale construction of the work.

Laura Shouha is the only analyst to include pitch as an element of her discussion of *Island Prelude*.<sup>23</sup> Shouha references Tower's combination of octatonic collections to transition between sections, and identifies it as an important element of Tower's organicism. The rest of her discussion is an examination of the tension and release, as charted with the Energy Line, created through orchestration, range, rhythmic energy, and dynamics.

Others discuss Tower's works without creating "Energy-Line" graphs, but still focus on non-pitch factors. Robert Janssen examines the performance issues of the *Fantasy*.<sup>24</sup> He discusses form and thematic material, phrasing, tempo, articulation, dynamics, and timbre changes throughout the piece and how they connect to create energy and organicism. Myrna Schloss uses performer-composer interaction to show the development of Tower's *Silver Ladders*, though she also makes passing mention of *Wings*.<sup>25</sup> She approaches her discussion from a feminist perspective—how a gendered perspective can inform Tower's choice of instrumentation and gesture, and how that narrative differs from that of previous generations of composers.

Tower's recommendation to focus on a single, untheorized element when examining her music has created a gap in knowledge and discussion of her music—

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<sup>22</sup> Kristy Ann Bryden, "Musical Conclusions: Exploring Closural Processes in Five Late Twentieth-Century Works," (PhD Diss., University of Wisconsin-Madison, 2001).

<sup>23</sup> Shouha.

<sup>24</sup> Robert Janssen, "Intuition and Analysis: A Performer's Perspective on Joan Tower's *Fantasy* for Clarinet and Piano," (PhD Dissertation, City University of New York, 2000).

<sup>25</sup> Myrna Frances Schloss, "Out of the Twentieth Century: Three Composers, Three Musics, One Femininity," (PhD Dissertation, Wesleyan University, 1993).

authors have consequently made only passing mention of pitch and motive and how these elements help drive Tower's works.<sup>26</sup> In Tower's words:

Pitch only becomes significant when it has all the other stuff going on with it. You're taking one parameter out of this very complex operation, and defining it because you can. You can talk about it in specific defining terms. But you can also talk about *other* things. It is in this register, and it is spread out in this way, and it's got this dynamic, and it's in this rhythm. The problem with music is that it is very hard to talk about because it has so many parameters to it. The theorists have discovered that pitch is at the center of the whole thing, which it *can* be—it doesn't *have* to be—and that's what they've isolated.<sup>27</sup>

Tower's insistence on examining elements other than pitch is misleading. Pitch relationships and the transformations between pitch collections do as much to drive Tower's music forward as the "Energy Line" created by dynamics, rhythmic variance, and articulation. When viewed in conjunction with the other factors, pitch relationships clarify otherwise obscured points of structural articulation.

Current scholarship ignores pitch analysis because of Tower's comment, avoiding a particular and very important aspect of any piece of music. Further, there is no historical precedent for doing so. We can gain important insights into Tower's music by examining pitch structure; even if she would like us to believe that pitch is not an important aspect of her compositions. Like many contemporary composers, Tower uses pitch to set up closure, arrival, tension, and ambiguity, but in a post-tonal language. By analyzing pitch collections and modulatory techniques, this paper will illustrate how pitch and motivic material are fundamental to creating Tower's approach to formal construction, by creating what I term *meld*.

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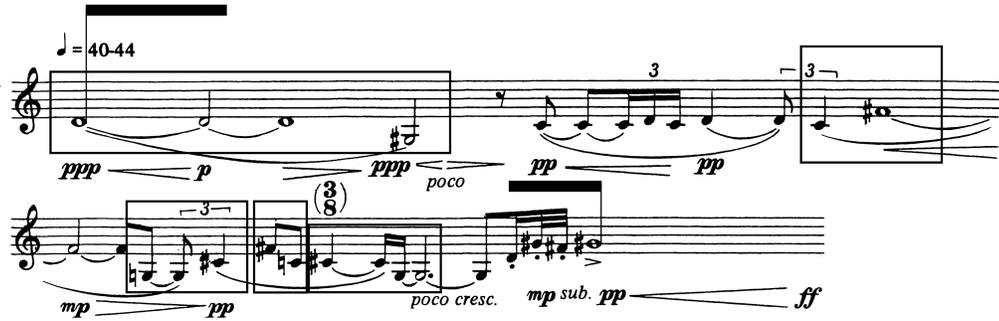
<sup>26</sup> Baruth; Crawford; Hastings; Meyer; Shouha.

<sup>27</sup> Randall Everett Allsup, "Sequoias, Mavericks, Open Doors...Composing Joan Tower," *Philosophy of Music Education Review*. 19, No. 1, (Spring 2011), 35.

### Chapter 3: Consistencies and General Compositional Tools

Tower's compositions feature waves of growth and returns to repose that vary in intensity to create an overall arch form. That large-scale arch features several consistent patterns and compositional tools which, when combined, create a meld. These include intervallic emphasis, utilization of the octatonic collection, and modulatory techniques. Each piece emphasizes a particular interval, which is used both motivically on a surface level and structurally on a formal level. The emphasized interval begins each piece and is outlined throughout the piece to delineate important structural sections. The emphasis on a particular interval works to clarify important structural, formal arrivals, based on the transposition of the interval used as well as the juxtaposition of the notes of that particular interval.

For example, Figure 1 shows the opening motivic treatment of the tritone in *Wings*. The tritone appears as the main intervallic emphasis in the first phrase and the return to the original tritone delineates structural closure. The D-G<sup>#</sup> tritone opens the piece and moves to other tritone pairs which attempt to form a rising gesture before falling back down. The return to the D-G<sup>#</sup> pair marks the end of the first phrase, realizing the prolonged D-G<sup>#</sup> tritone in the middle register and realizing the rising gesture begun by the other tritone pairs.



**Figure 1: *Wings*, Lines 1–2; tritone as surface (boxed) and structural (beamed) motive delineating a phrase**

Several scholars have noted the pitch centricity of Tower’s music; it is not tonally based, but it is not atonal either.<sup>28</sup> Instead, each section has a clear pitch center that is established through repetition. Tower is known for her use of the octatonic collection.<sup>29</sup> Though she does not use the octatonic collection throughout each entire piece, she does return to the octatonic collection at important structural moments.<sup>30</sup> In addition, Tower uses consistent methods to transform or “modulate” between structural sections, intervallic emphasis, and pitch collections. There are three main “modulatory” techniques that appear throughout her clarinet works: intervallic expansion or reduction, intervallic transposition, and common-tone or common-dyad modulation.

Like a pivot-chord modulation in tonal music, these pitch transformations usually occur just before a new structural section to set up a new musical gesture. The

<sup>28</sup> Baruth, 33.

<sup>29</sup> Crawford, 39; Baruth, ii–iii; Shouha, 23.

<sup>30</sup> There are different ways of labeling the octatonic scales, which consist of alternating half and whole steps. This paper uses the system that identifies three distinct scales, which are labeled according to the relation to the closest half step to C, represented in numeric form as 0. Therefore, OCT<sub>0,1</sub> is the collection C, C#/D<sup>b</sup>, D#/E<sup>b</sup>, E, etc.; OCT<sub>1,2</sub> is C#/D<sup>b</sup>, D, E, F, etc; and OCT<sub>2,3</sub> is D, D#/E<sup>b</sup>, F, F#/G<sup>b</sup>, etc. Similarly, the two whole-tone scales are identified as WT<sub>0</sub>: C, D, E, F# etc. and WT<sub>1</sub>: C#, D#, F, G etc. Because the octatonic and whole tone scales are symmetrical, centricity around notes other than those listed are still derivations of one of the forms of these scales.

transitional techniques create smooth movement between sections, blurring the boundaries between sections and melding them together.

For example, Figure 2 shows a transition into a new phrase in the *Fantasy*. This particular modulation uses both intervallic expansion and common-tone techniques to transition between forms. The new phrase begins at m. 140, where the shift to OCT<sub>2,3</sub> occurs. The main change between the two forms of the octatonic collection is the transposition of G to G<sup>#</sup> in mm. 139–140 in the piano, expanding a major third into an augmented third. This move to G<sup>#</sup> is foreshadowed by the E to E<sup>b</sup> alternation within OCT<sub>0,1</sub> in the piano left hand in mm. 137–138. Additionally, the modulation is prepared with a sustained E<sup>b</sup> in m. 139 in the clarinet and piano, which is a common-tone to both OCT<sub>0,1</sub> and OCT<sub>2,3</sub>. Further, the emphasis on E<sup>b</sup> and G in mm. 136–139 expands through embellishment into a paired statement of the minor third—E<sup>b</sup>-C and G<sup>#</sup>-B in m. 140, which is the structural interval of the *Fantasy*.

The image displays three segments of a musical score for 'Fantasy'. The first segment, labeled 'OCT 0,1', spans measures 136 to 145. It features a piano introduction with a treble clef and a 9/16 time signature, followed by a grand staff (treble and bass clefs) in 4/4 time. Dynamics include *ff* and *dim.*, and a *pp* marking appears in the piano part. The second segment, labeled 'OCT 2,3', spans measures 139 to 145. It begins with a treble clef in 2/4 time, marked 'poco rit.' and 'p', with a triplet of eighth notes. It then transitions to a grand staff in 2/4 time, marked 'a tempo' and 'pp', with a 'poco' marking. The third segment, also labeled 'OCT 2,3', spans measures 143 to 145. It features a grand staff in 2/4 time, marked 'mp'.

**Figure 2: *Fantasy*, mm. 136–145; change in octatonic collection at beginning of new section**

Tower regularly transposes, expands, or contracts intervals to move between sections, often via trills or similar rhythmic oscillation. For example, a major-second trill reduces to a minor-second trill to move between octatonic collections. Alternatively, an oscillating sixteenth-note pattern is transposed by half step to move to a new tonal center. Figure 3 shows the transposition of a minor-second oscillation in m. 51 to a minor-second trill in m. 52 to transition between sections and octatonic collections in Tower’s *Rain Waves* for clarinet, violin, and piano.

The image shows a musical score for three instruments: Clarinet in Bb, Violin, and Piano. The score is divided into two systems. The first system (mm. 50-53) features a trill in the Clarinet in Bb (labeled 'broaden'), a melodic line in the Violin (labeled 'mf' and 'broaden'), and a piano accompaniment (labeled 'mf' and 'dim.'). The second system (starting at mm. 104) shows a modulation to a new pitch collection, with the Clarinet in Bb playing a trill (labeled 'pp') and the Piano playing a trill (labeled 'pp').

**Figure 3: *Rain Waves*, mm. 50–53, trill to modulate to new pitch collection**

Tower also uses common tones, dyads, or chords to “modulate” between collections. Each octatonic collection shares tritones with each of the other two octatonic collections, and Tower uses those shared tritone dyads as pivot points between pitch collections and formal sections. This modulation occurs in some form in all three of her works for clarinet. The excerpt in Figure 4 shows a modulation between two forms of the octatonic collection using a fully-diminished seventh chord—the two tritones shared between OCT<sub>0,1</sub> and OCT<sub>2,3</sub>. The first scalar pattern in the clarinet in m. 59 outlines OCT<sub>0,1</sub>, which is interrupted by the diminished-seventh chord in the piano. The clarinet then states an expanded scalar gesture in m. 60, this time in OCT<sub>2,3</sub>.

The image shows a musical score for measures 57-60. The top staff is in treble clef, and the bottom staff is in bass clef. The time signature is 2/4. Measure 57 starts with a forte (f) dynamic and a triplet of eighth notes. Measure 58 continues with another triplet. Measure 59 shows a melodic line with a quintuplet (5) and a piano accompaniment with a quintuplet (5). Measure 60 shows a melodic line with a triplet (3) and a piano accompaniment with a triplet (3). A shared diminished seventh chord (°7) is indicated between measures 59 and 60.

**Figure 4: Concerto, mm. 57–60; modulation between collections via shared diminished seventh chord**

In unstable, transitional sections, Tower often mixes either two forms of octatonic collections or two transpositions of the emphasized interval to smoothly “modulate” between structural sections; much like passing chromaticism becoming functional chromaticism over the course of a transitional section in common-practice tonality. Figure 5 shows the end of a transitional phrase into a new section. Measure 73 transposes oscillating figures alternating between two forms of the octatonic collection expanding into repeated arpeggiated gestures emphasizing the minor third, the important structural interval in the *Fantasy*, in m. 74. In this example, the abrupt change to OCT<sub>0,1</sub> in m. 75 is marked by sudden rhythmic, dynamic, and textural shifts, which match the quick presentation of the OCT<sub>0,1</sub> collection in the preceding transitional material.

The image displays a musical score for measures 73-78. The top system (measures 73-75) features a piano accompaniment with octatonic collections labeled 'OCT 1,2' and 'OCT 2,3'. The bottom system (measures 76-78) shows a modulation to 'OCT 0,1' with dynamic markings like 'mp sub.' and 'cresc.'. The score includes various musical notations such as triplets, trills, and slurs.

**Figure 5: *Fantasy*, mm. 73–78, modulation via combined octatonic collections**

The above pitch transformations are also always associated with dynamic, rhythmic, and other musical changes in each piece: rhythmic acceleration or retardation through reducing/expanding rhythmic values and accompanying crescendi or decrescendi further affirm transitional material and structural arrivals. For example, Figure 2 (p. 14) shows a rhythmic deceleration in the clarinet and decrescendo in both clarinet and piano in mm. 137–139 to prepare the change to a new section, also articulated by the pitch modulation to OCT<sub>2,3</sub> in m. 140. Though dynamic and rhythm changes articulate the arrival of a new section, these changes do not on their own show m. 140 as an important structural arrival. The composite rhythm of the entire section is sixteenth notes, only changing to triplets and eighths in m. 139, returning to sixteenth notes in m. 140, making it seem like a relatively unimportant transition. Similarly, the diminuendo from fortissimo to pianissimo in mm. 136-139 mark m. 140 as a new section; but because of the immediate, though subtle, intensification after m. 140, it does not seem to be an important formal arrival. The accompanying pitch emphasis,

however, distinguishes this as a formal, structural point of articulation rather than a smaller, phrase-level shift, as might be inferred from the dynamic and rhythmic changes. There are only three pitches present in mm. 136-139 representing OCT<sub>0,1</sub>, leading into m. 140. The prolonged interplay of these three notes sets up the shift to OCT<sub>2,3</sub> with the common-tone and interval expansion techniques discussed above. The shift to OCT<sub>2,3</sub> and the expansion from three notes of OCT<sub>0,1</sub> in mm. 136–139 into four notes of OCT<sub>2,3</sub>, later expanding into the complete OCT<sub>2,3</sub> collection, clarifies m. 140 as an important formal arrival. In summary, pitch transformation and modulations then distinguishes formal arrivals from simple articulations of phrases. Sectional boundaries are marked by changes in all musical factors—dynamics, rhythm, tempo, articulation, and pitch—while phrase boundaries maintain pitch continuity in contrast to other changing factors.

## Chapter 4: *Wings*

### *Introduction*

Coherency in *Wings* is the result of multiple factors. *Wings* spins out in waves of tension and release, taking stable moments and transforming them into unstable ones, creating forward momentum and transforming a phrase from an arrival to the development of another idea through meld. Development—both thematic and motivic—and recapitulation also serve to drive the piece. Pitch serves an important role in formulating phrase and section boundaries. Each large section is articulated by a particular tritone emphasis and the overall trajectory of the piece focuses on the D<sup>#</sup>-A tritone pair. Additionally, phrases are melded together through the use of common tones and are often only articulated by intervallic contraction into and out of various tritone pairs.

### *Form*

*Wings* spins out in a three-part arch form. Each section features an intensification to a climactic point, followed by a sudden drop in intensity created through a sudden shift in tessitura, dynamic, articulation, and/or rhythmic activity, similar to the harmonic interruption in common-practice tonality of a half cadence followed immediately by a restart in tonic. Each sectional climax in *Wings* is stronger than the last, culminating with consecutive thematic and harmonic arrival on p. 7, line 4 of the work. *Wings* is written in free time with no barlines. To remain consistent with current scholarship, this document will refer to musical features based on the page and line numbers of the 1983 edition published by Associated Music Publishers. When a musical feature occurs in only part of a line, it will be designated with “a” and “b” for

the beginning and ends of lines respectively. Additionally, all discussion about pitch in *Wings* in this paper refers to the written, rather than sounding, pitch.

*Wings* is organized into three large sections, which divide into smaller phrase units.<sup>31</sup> The first and longest unit is the Statement section (pp. 1–2), which introduces thematic material and sets up the significant pitch relationships of the work. The second section, the Build section (pp. 3–6), gradually grows in intensity by accelerating, ascending in tessitura, and increasing dynamic. The Build is briefly interrupted by a slower ascending pattern, which Lochhead calls “X,” and when it restarts it picks up intensity and quickly pushes into the climax of the Recapitulation (pp. 6–7). Figure 6 shows the thematic relationships between sections and the overall form of *Wings*.



**Figure 6: Formal relationships in *Wings***

Each section divides into smaller phrase units. Table 1 shows the formal construction, pitch relationships, and function of each phrase within the three thematic sections. The Recapitulation phrases are labeled according to their thematic correspondence with the previous material. For example, the first thematic material of the Recapitulation section is labeled RS5, meaning that it resembles S5 of the Statement section. Specific tritone pairs outline each large section and each phrase, as illustrated in Table 1 below. The Statement section introduces and ultimately prolongs D<sup>#</sup>, implying

<sup>31</sup> Lochhead and Bonds both make similar formal observations; for sake of clarity with existing sources this paper will use Lochhead’s terms when they correspond to my own observations. My formal analysis aligns closely with Lochhead, and though Bonds also reaches similar formal conclusions, Bonds generally avoids defining the function of individual sections. For a discussion of terms see Lochhead 138.

the D<sup>#</sup>-A tritone. The Build section pushes through multiple tritone pairs, with emphasis on the C<sup>#</sup>-G tritone, before again pushing toward D<sup>#</sup> leading into Recapitulation material that ultimately realizes the D<sup>#</sup>-A tritone.

**Table 1: Formal construction, pitch relationships, and function in *Wings*<sup>32</sup>**

Statement				Build				Recapitulation			
Description	Tritone Emphasis	Page/Line	Function	Description	Tritone Emphasis	Page/Line	Function	Description	Tritone Emphasis	Page/Line	Function
S1	D-G#	1/1-2a	Expository	B1a	Mixed	3/1-4/4	Development	R.S5	E <sup>b</sup> (A)	6/6-7/1	Arrival
S2	Incomplete (G# prolonged)	1/2a-3a	Transition	BX	F#-C becoming C#-G	4/5-7	Arrival becoming development	R.S6	E <sup>b</sup> (A)	7/2-3a	Development
S3	F#-C and G#-D	1/3b-5	Expository becoming development	B1b	Mixed; mostly G-C#	5/1-10	Development	R.S8	(E <sup>b</sup> )-A	7/3b-4a	Arrival
S4	E <sup>b</sup> (A)	1/6-8a	Development	B2	Incomplete; C#	6/1-5	Arrival becoming development	R.S9	A-E <sup>b</sup>	7/4b-5a	Arrival
S5	E <sup>b</sup> (A)	1/8b-2/3a	Arrival					R.X	C-F#	7/5b-7	Arrival
S6	E <sup>b</sup> (A)	2/3a-4	Development								
S7	ambiguous	2/5-7a	Relaxing								
S8	E-A#	2/7b-10a	Arrival becoming development								
S9	A-D#	2/10b	Arrival becoming development								

Judith Lochhead discusses the formal construction of *Wings* via Tower's use of repetition.<sup>33</sup> She focuses her discussion on the return of material initially stated in pp. 1–2, which she calls the “Statement Passage.” She argues that the omission of sections of that Statement material in the final return allows the final, extended intensification of

<sup>32</sup> For formatting purposes, Table 1 utilizes some shorthand notation. When discussing page and line numbers, the first number refers to the page number, and the second refers to the line number: page/line. When only part of a line is part of the listed section, “a” and “b” designate the beginning and end of that line, respectively. For example, 1/1–2a refers to page 1, line 1 through the beginning of line 2. When tritone emphasis is incomplete or vague, notes are listed in parentheses. For example, E<sup>b</sup>-(A) means that the E<sup>b</sup>-A tritone is being emphasized, but the phrase does not clearly articulate or expand out to the A.

<sup>33</sup> Lochhead, 136–143.

pp. 5–6 to continue to the final climactic arpeggiating statements on p. 7. Lochhead reasons that the intensifying, sweeping trill section shown in Figure 7 creates a sense of expectation. In the recapitulatory return, the trill section leads directly to the final phrase of the Statement passage, eliminating the relaxing portion of the expositional Statement passage and instead pushing immediately into the climbing figures that create the final climactic arrival.<sup>34</sup> The push from RS6 to RS8 in the Recapitulation, in addition to keeping the forward momentum discussed by Lochhead, fulfills the large-scale pitch goal established by the return to and extended prolongation of D<sup>#</sup> in each structural section, continuing a step progression up to A on p. 7 lines 2–4, and realizing the D<sup>#</sup>-A tritone in the altissimo register.

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<sup>34</sup> Ibid., 139–141.

Poco meno mosso, bright and driving ♩ = 108 or more

play 4x  
ff  
6  
3x  
6  
2x  
6  
tr (e)

3x  
5  
6

tr (e)  
3x

2x  
6  
2x

Più mosso ♩ = 144  
tr (e)

**Figure 7: *Wings*, p. 6 line 6–p. 7 line 3; expansion of D<sup>#</sup>  
Tritone emphasis**

As noted, *Wings* emphasizes the tritone (interval class 6, IC 6).<sup>35</sup> The piece begins with the tritone stated in several transpositions, and the pitch material of each section moves toward a different tritone. The IC 6 emphasis works on both local and large-scale levels. Phrases frequently articulate the tritone, and larger sections prolong an individual tritone pair.

Though each of the three large sections discussed above emphasizes a particular tritone, the entire piece drives toward a realization of the D<sup>#</sup>-A tritone in the altissimo

<sup>35</sup> Throughout *Wings*, Tower uses both the augmented fourth and diminished fifth interchangeably, seemingly based on notational ease. Because they are used interchangeably and the specific notation does not seem to imply a specific resolution, the interval class and generic tritone terminology is used to designate both the augmented fourth and diminished fifth as equivalent.

register. The first Statement phrases, S1–S5 (p. 1 line 1–p. 2 line 2), step up to then prolong D<sup>#</sup>. Each subsequent rise (S6–S9) climbs up to, then past the D<sup>#</sup>, only to fall back down again. The Build section emphasizes several different IC 6 pairs, rising up to altissimo G in the BX phrase, but returns to altissimo D<sup>#</sup>. The Recapitulation begins by introducing D<sup>#</sup>, which is prolonged while the intervallic material expands chromatically (on p. 7 lines 2–4) to A, realizing the D<sup>#</sup>-A tritone in the altissimo register.

With each large-scale intensification comes an escalation of the upward trajectory of the entire piece. The upward trajectory is completed in the final ascending passages (p. 7 lines 3–4), when the D<sup>#</sup>-A tritone is finally realized in the altissimo register, marking the climax of the piece. The following phrase (RS9 on p. 7, line 4) serves as both a relaxation from the climactic material and a reflective return of the opening S1 motive—filling in the original D-A<sup>b</sup> tritone that was outlined in the beginning phrase. The final phrase of the piece takes the motivic material of BX and fills in the second IC 6 pair opened up in the beginning, simultaneously resolving the tension of the opening by filling in the tritone. Figure 8 shows the tritone of the beginning filled out with stepwise motion at the end of the piece.

The image shows two staves of musical notation. The top staff, labeled 'S1', has a tempo marking of ♩ = 40-44. It contains four notes: a half note G4, a half note A4, a half note B4, and a half note C5. Dynamics are marked as ppp under the first note, p under the second, ppp under the third, and poco under the fourth. The bottom staff, labeled 'RS9', has a tempo marking of ♩ = 54. It contains a sequence of notes: a half note G3, a half note F3, a half note E3, a half note D3, a half note C3, a half note B2, a half note A2, a half note G2, a half note F2, a half note E2, a half note D2, a half note C2, a half note B1, a half note A1, a half note G1, a half note F1, a half note E1, a half note D1, a half note C1, a half note B0, a half note A0. Dynamics are marked as ffp under the first note, ff under the second, p under the third, dim. under the fourth, ppp under the fifth, cresc. molto under the sixth, and fff under the seventh. A large bracket groups the final notes from G1 to A0. Arrows connect the ppp notes in both staves, and a large bracket groups the final notes of the bottom staff.

Figure 8: *Wings*, p.1 line 1 and p. 7 lines 4-5; A<sup>b</sup>-D tritone filled in by step

The final altissimo A is the highest note in the piece, and fulfills the large-scale push toward altissimo A created throughout the entire piece. The altissimo A fulfills the push upward from the altissimo D<sup>#</sup>, which has been expanded in each section. Figure 9 shows this final stepwise ascent that articulates the D<sup>#</sup>-A tritone. This intervallic expansion up to A is accompanied by a written-out ritardando that enlarges each gesture metrically. Each individual gesture also treats IC 6 with more significance. The first of the three gestures contains one tritone (IC 6) with the remainder of intervals as perfect fourths (IC 5), the second contains two IC 6 pairs, and the final contains three.

upward stems show simultaneous step progression in  
trilled notes to fill out the D<sup>#</sup>-A tritone

Più mosso ♩ = 144

Meno mosso ♩ = 108

Poco rit.

<molto>

*brighter still  
high intensity*

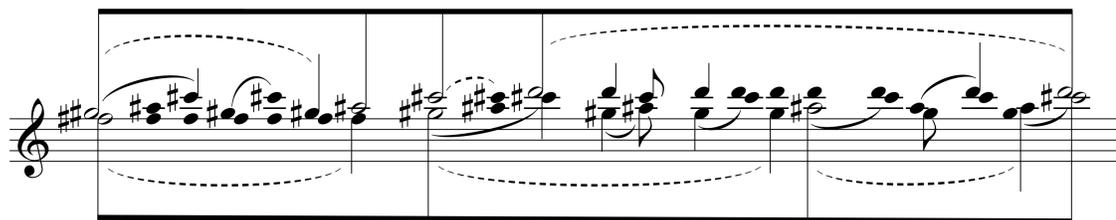
*ff p (energetic) ff marc.*

**Figure 9: *Wings*, p. 7 lines 2-4; beamed notes show step progression from D<sup>#</sup> up to A**

In addition to the expansion of the D<sup>#</sup>-A tritone discussed above, other sections and phrases are articulated by the arrival on a particular tritone. The Build section, though it is developmental in nature and does not as clearly or as systematically outline a single tritone as found in the Statement and Recapitulation sections, is still clarified by examining IC 6 emphases. In the Build section (pp. 3-6a), several phrases are implied by tempo changes and performance suggestions in the score, but are clarified by IC 6 emphasis. B1a begins by outlining the B<sup>b</sup>-E tritone (p. 2, line 1) before moving to other IC 6 pairs, including the D<sup>#</sup>-A and G<sup>b</sup>-C pairs, but returns to the B<sup>b</sup>-E tritone at the end of p. 1 line 6, just before a rest, breath mark implying time, and a tempo and dynamic change. Similarly, B1b cycles through multiple tritones, though it begins and ends by articulating the G-C<sup>#</sup> pair.

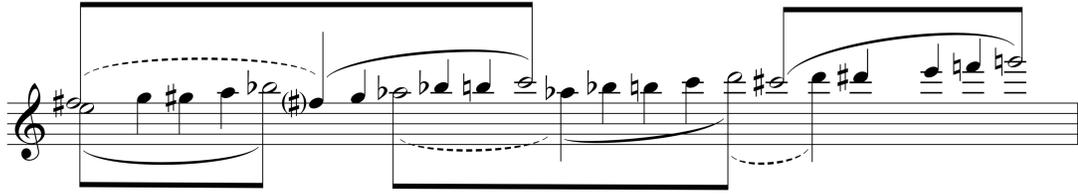
Throughout *Wings*, Tower frequently uses intervallic expansion and contraction, starting with one member of the tritone and expanding to the other member of the tritone through an embellished chromatic step progression, the realization of which marks an arrival. This technique is used to articulate both individual phrases and larger sections. Figure 10 shows the step progression that expands into the F<sup>#</sup>-C tritone using WT<sub>0</sub>. This particular phrase introduces the intervallic expansion and contraction that is used throughout *Wings* to articulate structural arrivals. This expansion is realized within a sentence structure: first locally with the stepwise grace notes of the first basic idea, which is then realized more fully in the second statement of the basic idea, finally reaching full fruition in the continuation through fragmentation. This excerpt also hints at another prolongation of G<sup>#</sup>-D in the grace notes. These simultaneous prolongations create a compound melody in which each melody begins at a unison, expands to the tritone, then returns to the unison on the second note of the IC 6 pairs. Figure 11 shows the step progressions expanding the F<sup>#</sup>-C and G<sup>#</sup>-D tritones.

Figure 10: *Wings*, p. 1 lines 3–5; expansion of F<sup>#</sup>-C tritone via step progressions



**Figure 11: *Wings*, S3 phrase reduction showing expansion of both the F<sup>#</sup>-C and G<sup>#</sup>-D tritone pairs**

Another arrival point marked by intervallic expansion and contraction occurs in the Build section on p. 4 lines 5–7. The rising gesture, BX, introduces simultaneous tritone prolongations: E-B<sup>b</sup> overlaid with F<sup>#</sup>-C and merging into C<sup>#</sup>-G. Figure 12 shows the overlay of the different voices. This phrase, BX, serves multiple functions. It acts as closure of the first half of the Build section by slowing down the rhythmic activity of B1a and climbing up to an altissimo G—another step toward realizing the D<sup>#</sup>-A tritone trajectory of the entire piece. Yet the BX phrase also pushes into the second part of the Build section, B1b, by introducing the C<sup>#</sup>-G tritone that bookends B1b. This prolongational ambiguity of multiple tritones (E-B<sup>b</sup> overlaid with F<sup>#</sup>-C and merging into C<sup>#</sup>-G) fits with the section’s simultaneously conclusive and transitional function—as a temporary resting point concluding the first half of the Build section and as developmental material leading into the expanded growth of the rest of the Build section.



**Figure 12: *Wings*, BX phrase reduction; interlocking tritone pairs expanded through interval expansion and contraction**

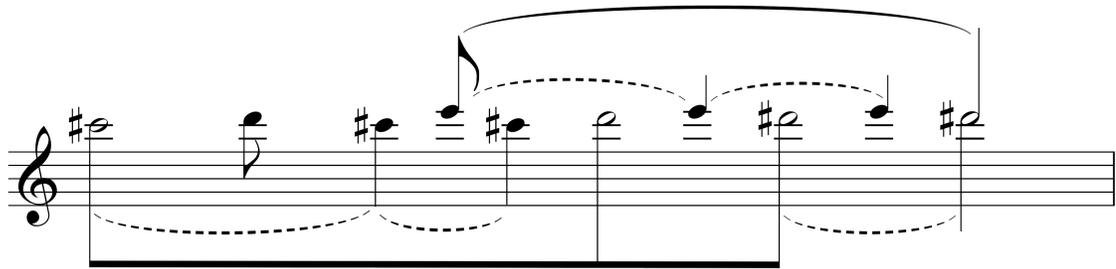
Most phrases start on one member of the tritone and expand out to the other member of the tritone, but some phrases start in the middle and expand out in both directions. The S4 phrase is an example of the latter. S4 starts on C and expands out to the A-E<sup>b</sup> tritone in both directions. Beginning on p. 1 line 6, the sustained quarter note line descends down from C to A while the first note of the sixteenth note groupings moves from C up chromatically to D<sup>#</sup>. Both arrive initially at the end of p. 1 line 6, then expand octaves out through the full clarinet range to a low A and altissimo Eb through p. 1 lines 7–8, where S5 begins.

Though intervallic expansion occurs in developmental phrases, the expansion often does not fully realize a complete tritone pair. The B2 section is one such example, shown in Figure 13. The Build (B1b) material on p. 5 leading into this sweeping section expands upon the previous Build material (B1a) on pp. 3–4, starting lower in the clarinet range and climbing higher up to the arrival on C<sup>#</sup> at the beginning of p. 6. Though it seems to be an arrival point, as the *fff* dynamic marking might suggest, this section is instead still intensifying, leading back into the recapitulatory sweeping sixteenth-note section prolonging D<sup>#</sup>. The transitional, unstable nature of B2 in the first

five lines of p. 6 is revealed by the changing arrival points on the held and trilled notes that surround and eventually arrive on D<sup>#</sup>—first C<sup>#</sup> and E as the outer notes of a small intervallic expansion, narrowing to D-E then finally to D<sup>#</sup>. Figure 14 shows the push toward D<sup>#</sup> through the B2 section in the original score and in reduction.

The image shows a musical score for five staves. The first staff is marked "Bright and wild" and "fff". It contains a trill on C# followed by a series of notes with slurs and trills, ending on D#. The second staff has a "p" dynamic marking and continues the melodic line with slurs and trills. The third staff continues the melodic line with slurs and trills. The fourth staff includes a "Poco rit." marking and continues the melodic line with slurs and trills. The fifth staff shows a trill on D#.

Figure 13: *Wings*, p. 6 lines 1–5; B2 phrase moving to D<sup>#</sup>



**Figure 14: *Wings*, reduction of B2; stepwise motion to D#**

Transitional, unstable sections are marked by multiple tritones appearing in succession. This mixing of tritones creates harmonic ambiguity and helps transition to the new melodic and harmonic emphasis of a new section. Prolonged juxtaposition of tritones within a longer passage creates additional harmonic tension driving the larger section forward to a true structural arrival. The Build section is an example of this harmonic ambiguity. As seen in Figure 15, B1 begins by outlining the B<sup>b</sup>-E tritone, then moves to D<sup>#</sup>-A, back to B<sup>b</sup>-E, then to G<sup>b</sup>-C within the first three lines. The rest of the Build section maintains harmonic ambiguity by switching between tritone emphases, slowly expanding and contracting interval content in an ascent toward the final climax. Figure 16 shows the ascending trajectory of the entire Build section, with an interruption at X, intensified re-start at B1b, and arrival at D<sup>#</sup> at the end of B2.

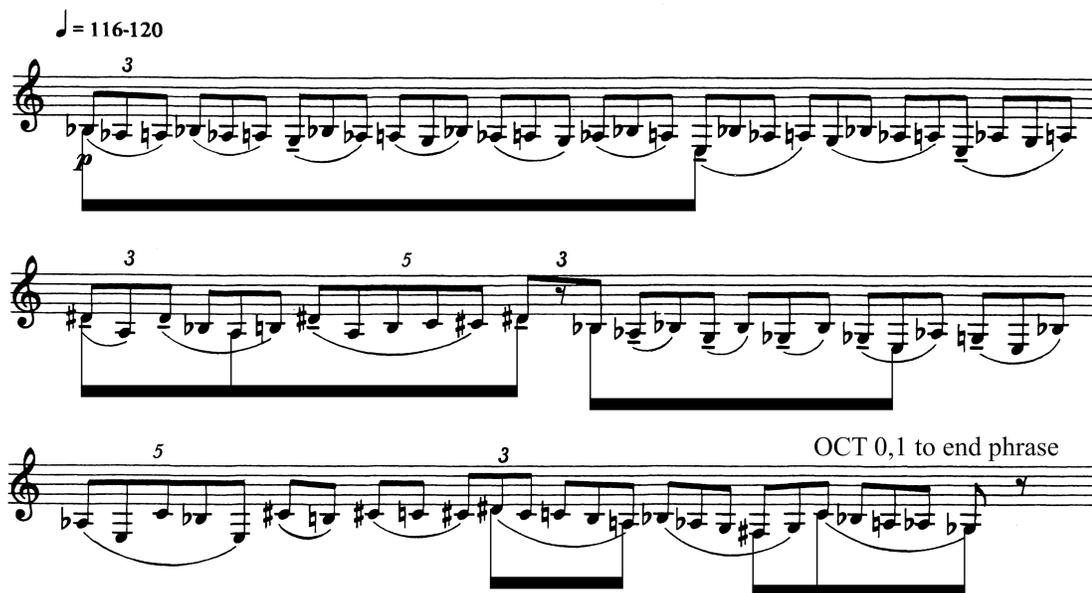


Figure 15: *Wings*, p. 3 lines 1–3; B1a showing the outline of various tritone pairs

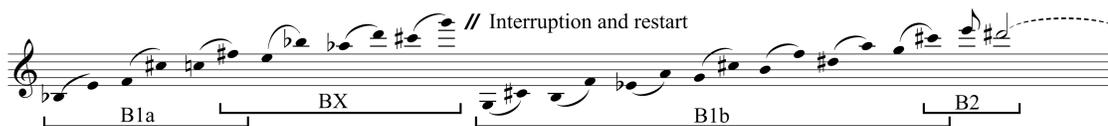


Figure 16: *Wings*, reduction of Build section (pp. 3–6); showing division of the section and overlapping tritone emphases

The opening rumination on various tritones on p. 1 lines 1–2 opens up the space for the intervallic expansion and contraction and IC 6 emphasis of the rest of the piece, and the upward stepwise closure of the tritone through the X section serves as the melodic inverse of the descending motive that begins the entire piece. Additionally, the emphasis on D<sup>#</sup> and the ultimate realization of the D<sup>#</sup>-A tritone in the climax of the Recapitulation drives the piece forward.

### *Meld*

Tritone emphasis is an important component to meld in *Wings*. The large-scale trajectory toward and the realization of the D<sup>#</sup>-A tritone in the altissimo register both resolves large-scale tension and provides a satisfactorily climactic arch form. The overlap of tritone emphases within the intervallic expansion sections creates harmonic tension and seamlessly pushes the piece forward. Yet tritone emphasis is not the only melding technique used in *Wings*. Transitions between phrases using a common tone melds phrases together and further blurs boundaries between both phrases and larger sections. The meld that transforms arrivals into developmental sections also creates cohesion by transforming moments of arrival or repose into moments of action and increased momentum. The intervallic expansion technique of a single note expanding via compound melody into larger intervals also melds phrases and sections together.

Because the tritone is emphasized throughout *Wings*, both melodically and through expansion, it is an important unifying aspect of meld. Further, the structural expansion of the D<sup>#</sup>-A tritone melds the Statement and Recapitulation sections together. Overlapping tritones in developmental sections tie one phrase to another and the overlapping ranges of emphasized tritones between phrases meld phrases together. For example, the B1a begins (p. 3 line 1) by expanding the B<sup>b</sup>-E tritone in descent, and finishes (p. 3 line 6) expanding the B<sup>b</sup>-E tritone up from B<sup>b</sup>, filling in the octave in the lower register. The next phrase of B1a (p. 3 line 7) begins emphasizing C<sup>#</sup> and D, in the middle of the range established by the first phrase of B1a, before climbing through interval expansion into a higher range than the first phrase.

Meld between sections becomes stronger as the piece progresses. The first section break, as shown in Figure 17, between the Statement and Build sections is marked by a subito dynamic, tempo, register and pitch collection change. To contrast, the transition shown in Figure 18 between BX and B1b changes register and returns to the rapid oscillations of the beginning of the Build section, but remains on a G at a soft dynamic. This pitch and dynamic connection melds BX and B1b together and reduces the importance of the sectional boundary. The final transition between the Build section and Recapitulation uses several melding techniques to maintain momentum into the final and most important climactic material. Rather than re-starting like the section break between the Statement and Build sections, the transition from the Build into the Recapitulation on p. 6 lines 5–6 keeps the momentum going through the altissimo D<sup>#</sup> into the climax of RS8. The transition between the Build and Recapitulation sections maintains the forte dynamic and D<sup>#</sup> prolongation in the altissimo register. However, because of the motivic nature of p. 6 line 6–p. 7 line 1, we are immediately reminded of the earlier S5 passage.

**Figure 17: *Wings*, p. 2 line 10b–p. 3 line 1a; transition without melding techniques**

Common tone and dynamic similarity between sections

**Figure 18:** *Wings*, p. 4 line 7b–p. 5 line 1a; meld between sections

Individual phrases are melded together in similar fashion, usually expanding from pitch material that ends the previous section. In the Statement section, the first six phrases are articulated by a repetition of the note that ended the previous phrase. S1 outlines the D-G# tritone, ending on G#, which is where S2 begins, with a sustained G#. S2 into S3 keeps an F# common-tone in the same register, and S3 ends on a C, which is the first note of S4. This common-tone usage melds together phrases in the Build and Recapitulation sections as well. In the Build section, B1a ends on an F# sustained via a fermata, and BX, which interrupts the motivic triplet oscillations of B1, begins on a sustained F# one octave higher.

In addition to linking phrases together, meld transforms the function of material within a single phrase. The first of these transformations is the S3 phrase, shown previously in Figure 10 on p. 27. The pedaled F# expanding in the grace note trills to C at the beginning of the phrase creates stability, but becomes developmental when the pedaled F# moves up to G# on line 4. The unstable, developmental quality continues as the overall ascent of the line loses focus, the dynamic increases, and the written-out rhythmic acceleration pushes the line forward. A similar transformation of arrival becoming developmental material happens in the S5 phrase. Initially the E<sup>b</sup> appears to

be an arrival, as it is sustained three times and serves as a pedal; but as the middle note of the tetra-chord moves down by half step, the predictable repetition of the E<sup>b</sup> breaks and the line pushes up through the registers to the altissimo D<sup>#</sup>. Figure 19 shows the motion of the different voices within the compound line.

Notice outer voices A<sup>b</sup> & E<sup>b</sup> sustained throughout

**Figure 19:** *Wings*, S5 phrase (p. 1 line 8b–p. 2 line 3); inner voice movement transforming gesture into developmental material

(015) (025) (025) (015)

**Figure 20:** *Wings*, S5 phrase reduction showing motion of middle voice and intervallic implications of that motion

Meld in *Wings* works on multiple levels—within a phrase, between phrases, between sections, and across the entire piece. Pitch is an important factor in meld—often other musical factors separate phrases, but pitch consistencies tie them together.

The uniformity of the intervallic emphasis on the tritone throughout the piece creates meld across sections, while range overlap in tritone emphasis between phrases and common tones between phrases tie both phrases and sections together.

### ***Conclusion***

Pitch is a driving factor in *Wings*. The emphasis on particular tritones delineates sections. Tritones are emphasized both melodically on a surface level and structurally, expanded via step progressions to delineate sections and used to articulate structural arrivals. Tritones that are expanded through step progressions often overlap in range between phrases to create a subtle, but steady, rising line throughout the piece. Therefore, step progressions and intervallic expansion techniques create cohesion within phrases and meld across phrase divisions. Further, phrases that begin as arrivals or moments of rest shift subtly in pitch content, rhythmic activity, articulation, or dynamic to become developmental and drive into the next phrase. Consequently, the constant shifting roles of phrases and motives push the piece forward and meld ideas together.

## Chapter 5: *Fantasy...those harbor lights*

### *Introduction*

Flow and uniformity in the *Fantasy* is created by multiple factors. Like *Wings*, the *Fantasy* spins out in waves of tension and release, taking stable moments and transforming them into unstable ones, creating a sense of forward momentum from arrival to development through meld. Thematic and motivic development and return also serve to drive the piece. Pitch serves an important role in formulating phrase and section boundaries. Overall, thematic repetition and variance ties the work together.<sup>36</sup>

### *Form*

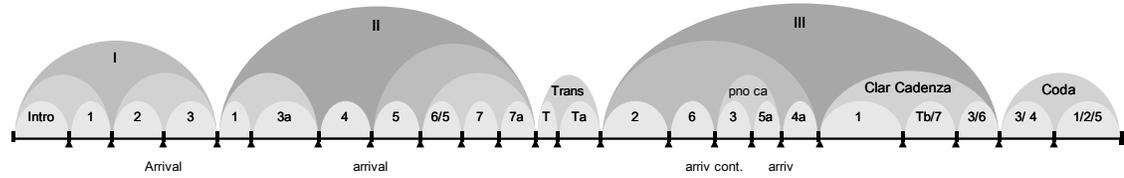
The *Fantasy* is in arch form, although it is less clearly divided than *Wings*. Varied repetition of material drives the *Fantasy* forward, with repeated material swelling to local climactic moments before falling back to repose. This intensification and relaxation created by thematic repetition and motivic development happens in three large sections, each more complicated than the prior statement, and with thematic ideas more intricately woven together in each subsequent section. The last statement swells into the largest climax in the third and final repetition of thematic material. This culminating iteration of thematic material pushes into a clarinet cadenza followed by a coda that reworks introductory material into closing material, transforming developmental material into static, reflective material by stabilizing pitch content. Each section becomes longer and thematic material is more intricately woven together contrapuntally, making the final climactic arch all the more dramatic.

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<sup>36</sup> The *Fantasy* is written for B<sup>b</sup> Clarinet; all examples have been transposed to concert pitch.

Section I (mm. 1–54) introduces thematic content and leads to a climactic phrase in mm. 34–44 before relaxing into the second section. Section II (mm. 55–217a) continues the gesture of Section I through thematic repetition and development, introducing the material that serves as climax of the third section. Section II features two swells, both of which are longer and more dramatic than the climax of Section I. Section II relaxes back into repose and moves into a brief transition of new thematic material (mm. 217b–246), which ends with a brief intensification. A return of thematic material marks the beginning of Section III (mm. 247–375). Section III, including the piano and clarinet cadenzas, features the longest continuous intensification and final, most climactic arrival. Section III recapitulates all of the thematic material of the previous sections, often in combination, and culminates in a clarinet cadenza that spins out pitch and motivic material. The cadenza moves into a brief coda (mm. 376–395), a tranquil reworking of all of the important motivic material of the *Fantasy*.

Figure 21 shows the arrangement of the three sections and thematic return between and within those sections. Throughout this chapter, themes are described by the section in which they occur, as well as their correspondence to earlier thematic ideas. For example, III.2 is the return of Theme 2 in section III. Where correspondences are less clear, a letter follows the Arabic numeral; Theme 5a in Section III (labeled as III.5a) then is derived from, but not immediately apparent as, a repetition of Theme 5 (introduced in Section II).



**Figure 21: Formal sections and thematic relationships in the *Fantasy***

**Table 2: Formal sections in the *Fantasy***

Section I		Section II		Transition		Section III		Coda	
Introduction	mm. 1–11	1	mm. 54–59	T	mm. 218–226	2	mm. 247–267	3/4	mm. 376–385
1	mm. 12–20	3a	mm. 60–74	Ta	mm. 227–246	6	mm. 268–300	1/2/5	mm. 386–395
2	mm. 21–33	4	mm. 75–100			3	mm. 301–318		
3	mm. 34–53	5	mm. 101–139			5a	mm. 319–328		
		6/5	mm. 140–172			4a	mm. 329–350		
		7	mm. 173–200			1	m. 351		
		7a	mm. 201–217			Tb/7	mm. 352–374		
						3/6	m. 375		

As shown above in Table 2, seven distinct thematic ideas develop throughout the *Fantasy*; only four are treated with extensive development and return and will be discussed here. Thematic idea I.1, shown in Figure 22, is introduced in mm. 12–20, characterized by a sustained line emphasizing IC 3 (the minor third) in the clarinet.<sup>37</sup> This IC 3 motive appears at important structural moments to articulate formal sections and moments of tranquility.

<sup>37</sup> Though the IC 3 interval is usually notated as a minor third or major sixth for ease of notation, it often also appears as an augmented second or diminished seventh. None of these notational differences affect the voice leading and expectations for resolution of dissonance that would traditionally be implied by a specific spelling. Therefore, this paper will treat all spellings equally by using interval class nomenclature.

**Figure 22: *Fantasy*, mm. 12–20; IC emphasis**

Rising octatonic gestures, first introduced in Theme I.3, undergo significant repetition and development in the *Fantasy* as well. These gestures appear as part of intervallic expansion and contraction in transitional sections, such as in mm. 301–306 from the piano cadenza shown in Figure 23. This phrase from III.3 utilizes intervallic contraction to step up through a major sixth, the expansion of IC 3. This moment, which begins the piano cadenza, is a temporary arrival in OCT<sub>2,3</sub>, the tonal goal for Section III. However, this temporary arrival to begin III.3 also serves a developmental function, as the BX section functioned in *Wings*.<sup>38</sup> As noted, mm. 301–306 is a brief arrival on OCT<sub>2,3</sub>, the harmonic goal of Section III. Yet because of the expansion and contraction of intervallic content and the overall ascent of the line, the music remains developmental as it gains momentum moving into the piano cadenza.

<sup>38</sup> The discussion of the function of BX in *Wings* appears on pp. 28–29.

Beams show different iterations of IC 3, as dim7, M6, and m3 ♩ = 72

301

304

*f*

*cresc.*

*ff*

**Figure 23: *Fantasy*, mm. 301–306; simultaneous IC 3 emphases**

Trills (Theme 4 and 4a) serve as climactic moments in all three sections. Section I introduces a trill motive as an arrival from the octatonic rising gestures of I.3. Theme 4 is realized more fully as a stepwise line in II.4 in mm. 75–86, shown in Figure 24 continuing to the structural climax of Section II in m. 100. Theme 4 returns in Section III (m. 329) after the piano cadenza with the clarinet entrance as the largest climax of the piece, and is again transformed in the coda in mm. 377–383 to transition out of the clarinet cadenza into the tranquil restatement of the other themes.

The image displays a musical score for measures 75 through 86 of a piece titled 'Fantasy'. The score is written for a single melodic line and piano accompaniment. The melodic line begins at measure 75 with a trill (tr) and a dynamic marking of *mp*. The piano accompaniment features a boogie bass line with syncopation and octave oscillation. The score includes various dynamic markings such as *mp*, *mf*, and *f*, and concludes with a *cresc.* (crescendo) marking. The time signature is 3/4, and the key signature is one flat (B-flat).

**Figure 24: *Fantasy*, mm. 75–86; Theme 4 in Section II, stepwise trill**

A pointillistic ostinato, the most developed of the thematic ideas, is prevalent throughout each large section of the concerto, and eventually develops into a fully-realized “boogie bass” in the piano cadenza. Theme I.3 has an introductory fragment of the boogie bass in the pointed interruptions of the piano line between the clarinet’s rising octatonic gestures in mm. 35, 37, and 46. These interruptive statements introduce two important characteristics of the boogie-bass theme: stacked IC 3 pairs and syncopation, both between hands and against the expected and prepared metric pulse. The next fragment, in mm. 75–79, introduces a third characteristic of the boogie-bass theme as octave oscillation, which is combined with an irregular alternation between IC 3 pairs E-G and E<sup>b</sup>-C. The full realization of this pointillistic ostinato is heard in mm. 319–327 in the piano cadenza, with the octave oscillation, syncopation between hands,

and an emphasis on IC 3. All forms of the boogie bass theme appear below in Figure 25.

36

IC 3

–IC 3 pairs  
–Syncopation

75  $\text{♩} = \text{ca. } 116$   
tr tr  $\flat$  tr tr  $\flat$  tr tr  $\flat$  tr  
mp sub. mp sub. –octave oscillation cresc.  
IC 3

79 tr tr mf tr mf mp

142 –irregular oscillation in sixteenth-notes  
pp staccato sempre p

319  $\text{♩} = \text{ca. } 120$  –all aspects combined in fully-developed "boogie bass" theme  
syncopation IC 3  
ff energetic (boogie bass)  
octave oscillation in sixteenth-notes irregular oscillation, outlining IC 3

322

Figure 25: *Fantasy*, mm. 35, 75–79, 142–147, 319–327; development of "boogie bass" theme

### *Octatonic collections*

The octatonic collection is used consistently throughout the *Fantasy*. Arrivals and moments of repose use a single octatonic collection, but transitional and intensifying sections mix forms of the octatonic collection, creating harmonic tension that corresponds to melodic, dynamic, and rhythmic tension throughout the piece. Additionally, each section moves toward a different octatonic collection as a tonal goal, and each section pushes more adamantly to a specific tonal goal within an individual octatonic collection. Each section becomes more complicated than the last, with greater harmonic tension between parts and ambiguity of emphasized octatonic collection. Thus the arrival on the final tonal goal in the third section articulates the structural climax.

#### *Octatonic Collection as Arrival*

As noted, each formal section intensifies to a climax and returns to repose. While the climactic sections are marked by dynamics, exact arrivals are clarified through shifts in pitch content. Section I has the most stable pitch content. Each phrase stays within a single octatonic collection, with pitch collection changes articulating each phrase. The arrival in Section I at I.3 in m. 34 is marked by a shift from OCT<sub>2,3</sub> to OCT<sub>1,2</sub> and remains in OCT<sub>1,2</sub> through the climactic section, changing to OCT<sub>0,1</sub> to return to repose and transition into Section II.

Section II grows to an arrival in OCT<sub>1,2</sub> in II.4. The developmental II.3a alternates quickly between octatonic collections, without landing on a given collection for more than a single measure. The beginning of II.4 at m. 75, however, is marked by a change to OCT<sub>0,1</sub>, which remains through a crescendo and written-out rhythmic

acceleration until m. 82, where it moves to and remains in OCT<sub>1,2</sub> through the rest of the climactic II.4 theme until m. 100.

The largest climax of the piece occurs in Section III at m. 346. Leading up to this climax, the clarinet and piano right and left hands are in disagreement between octatonic collections, as discussed below. The first moment of agreement between all three parts occurs on the downbeat of m. 346. Further, the longest point of tonal stability in all of Section III is on OCT<sub>2,3</sub> in mm. 346–351a, the unwinding of the beginning of the clarinet cadenza and a return of Theme 1.

#### *Mixed Octatonic Collections as Development*

Harmonic ambiguity occurs consistently throughout developmental sections of the *Fantasy*, often via mixing forms of the octatonic collection. Figure 26 shows the final growth into the main climax of the piece. In this section, all parts (piano right hand, left hand, and clarinet) are in disagreement between octatonic collections. The clarinet begins in OCT<sub>1,2</sub>, with the piano right hand on OCT<sub>2,3</sub> and left hand in OCT<sub>0,1</sub>. The parts shift between the three forms, and only come into agreement in m. 346, which is the arrival after the long intensification of Section III and the most significant climax of the piece.

Clarinet OCT 1,2

329  $\text{♩} = \text{ca. } 144$   
 $mf$   $cresc.$   $ff$

RH OCT 2,3  
 LH OCT 0,1  
 OCT 2,3

332 (OCT 1,2)  
 OCT 1,2  
 OCT 0,1  
 OCT 2,3

335 (OCT 1,2)  
 OCT 2,3  
 OCT 0,1  
 OCT 2,3

340 (OCT 2,3)  
 (OCT 0,1)

346 All on  
 OCT 2,3  
 $sfz$

**Figure 26: *Fantasy*, mm. 329–346; mixed octatonic collections leading up to largest climax in Section III**

The harmonic ambiguity leading toward the OCT<sub>2,3</sub> arrival of m. 346 begins long before the phrase discussed above; ambiguity of emphasized collections begins as far back as m. 268. In m. 268 the clarinet begins firmly in OCT<sub>2,3</sub>, but the piano

oscillation alternates between  $E^b$  (in  $OCT_{2,3}$ ) and  $E^{\natural}$  (not in  $OCT_{2,3}$ ). As this section into the piano cadenza progresses, the harmonic ambiguity increases. As noted, it begins with as little as a single note outside a primary octatonic collection in the piano. It then moves between the three forms of the octatonic collection in the piano (mm. 299–328), before having all parts in disagreement (mm. 329–345), with none of the parts firmly staying in one single collection. The arrival with all parts in  $OCT_{2,3}$  in m. 346 brings to an end the long-term harmonic ambiguity that began in m. 268. To confirm the arrival on  $OCT_{2,3}$ , the clarinet remains in  $OCT_{2,3}$  for first part of its cadenza.

#### *Modulation between Octatonic Collections*

Throughout the *Fantasy*, Tower moves between forms of the octatonic collection in several ways as discussed in Chapter 3, including pivot-tones, pivot-chords, interval expansion, and interval contraction. Octatonic collections share diminished-seventh chords, and Tower frequently uses these diminished sevenths (built of stacked minor thirds, the emphasized interval) to pivot between octatonic collections and pitch centers. In the clarinet cadenza, E is used as a common-tone to pivot between  $OCT_{0,1}$  and  $OCT_{1,2}$ , as shown in Figure 27. This modulation also features intervallic contraction, moving from IC 3 to IC 2 to shift between octatonic collections.

$\text{♩} = \text{ca. 48}$  Common-tone modulation between collections

**Figure 27:** *Fantasy*, clarinet cadenza (m. 351 middle); pivot between octatonic collections

An incomplete, fully-diminished seventh chord is used as a pivot between OCT<sub>2,3</sub> and OCT<sub>0,1</sub> in Figure 28. The rising octatonic arpeggios are part of a larger descending line, which pushes into the full boogie bass section of mm. 318ff. This modulatory moment in mm. 307–309 sets up the common-chord modulations that play out in the rest of this extended piano interlude leading up to the climax of Section III.

The image shows a musical score for three staves. The top staff is a vocal line with a treble clef and a 3/4 time signature. It contains rests for measures 307, 308, and 309. The middle staff is a piano part with a grand staff (treble and bass clefs) and a 3/4 time signature. It features a series of arpeggiated figures. The first two measures are labeled 'OCT 2,3' and the last two are labeled 'OCT 0,1'. A box highlights a chord at the transition between the two octatonic scales, labeled 'shared °7'. The bottom staff is a bass line with a bass clef and a 3/4 time signature, containing rests for all four measures.

**Figure 28: *Fantasy*, mm. 307–309; pivot between octatonic collections**

### *Interval Class 3 (minor third and major sixth)*

The *Fantasy* emphasizes IC 3, the minor third and its inversion, the major sixth. The minor third is an essential building block of the octatonic scale. One way of constructing the octatonic scale is by forming a series of alternating half and whole steps, which, when the two intervals are combined, form a minor third. Another way to think about the octatonic collection is to layer two different fully-diminished seventh chords (built of stacked minor thirds) on top of one another. Consequently, the IC 3 and octatonic emphasis in the *Fantasy* work well together. The minor third serves a similar role to the tritone in *Wings*, as it is emphasized at structural arrivals, used in step progressions to expand and contract intervallic content, and often functions as a harmonic center. Figure 22 on p. 41 shows the opening clarinet phrase, which is built on

IC 3 and serves as an important thematic/motivic foundation for the work. In this first statement of Theme 1 (the IC 3 motive) the clarinet alternates between the E-G and E<sup>b</sup>-G<sup>b</sup> pairs, moving to C to mark the end of the phrase. Also in the statement of I.1, the right hand of the piano forms a diminished triad, consisting of stacked minor thirds, which will also serve an important role in later development.

Intervallic motion between IC 3 pairs returns consistently throughout the *Fantasy* as a return to repose and articulates each large section. Figure 29 is the beginning of Section II and shows a return of the introductory IC 3 statement (first seen in mm. 12–19) in the clarinet in section II.1, this time supported by a rising octatonic gesture in the piano. This return of the IC 3 motive of Theme 1 marks m. 54 as the beginning of Section II.

## Section II.1

54  $\text{♩} = \text{ca. } 72$  IC 3 melody from Theme 1

Octatonic gestures from Theme 3

55

56 *cresc.* 9 *poco cresc.* 10 (*articulated*) *cresc. molto* 10 11

58 *dim.* 11 10 *ff* *dim.* 11 11

59 *poco rit.* 9 *dim.* 9 10 10 *poco* 11

Figure 29: *Fantasy*, mm. 54–59; beginning of Section II, Theme 1 and Theme 3 in counterpoint

Much like the tritone in *Wings*, the minor third is used in the *Fantasy* as a part of step progressions that utilize interval expansion and contraction. In the transition between the second and third formal sections, the IC 3 oscillation is used in step progressions employing interval expansion. Figure 30 shows the beginning of this transition with the IC 3 emphasis. The oscillation between IC 3 pairs, appearing now as a fast triplet motive expanded by stepwise motion, has been transformed dramatically from the original sustained, half-note statement of I.1. This transitional triplet form of the IC 3 motive is structurally important because it leads into a modified return of the I.2 phrase in m. 247, as the original IC 3 statement of Theme 1 did at the beginning. Further, the emphasis on IC 3 in this transition is the only link between this transition and previous material because the triplet figure, texture, and musical character in this section otherwise differentiate it from prior thematic material.

(The first appearance of each IC 3 pair is boxed)

**Figure 30: *Fantasy*, mm. 217–226; IC 3 emphasis in transition**

The motivic emphasis on IC 3 is fully realized in the clarinet cadenza, which presents all of the roles of the IC 3 motive together, as shown in Figure 31. The beginning of the clarinet cadenza states the E<sup>b</sup>-G<sup>b</sup> IC 3 pair as a climactic arrival, then moves into a return of the IC 3 triplet motive of the transition (mm. 218–246). The original statement of the triplet thematic material in the transition (mm. 217–246) shifts away from IC 3. In contrast, the clarinet cadenza emphasizes IC 3 with every articulated triplet, and when the triplet figures briefly expand away from IC 3, alternating expansion and contraction of intervallic content via step progressions return to the IC 3 emphasis. This continued emphasis on IC 3 through interval expansion and contraction

in the clarinet cadenza retains the harmonic stability the transition is lacking. The continued emphasis on IC 3, then, serves as a harmonic center, which is more fully realized in the coda.

Section III.1—consistent return to IC 3

351 IC 3 motive as structural arrival  $\text{♩}=\text{ca. } 54$

$\text{♩}=\text{ca. } 48$  IC 3 motive from opening

$\text{♩}=\text{ca. } 56$  *accel. e cresc. poco a poco*

IC 3 motive in oscillation *ppp* *mf* *dim.*

355  $(\text{♩}=\text{ca. } 88) *$  *(overall accel. poco a poco)*

359 IC 3 melodically and structurally in interval expansion (emphasized by articulation)

362 *meno mosso* *accel*

IC 3 as range boundary in phrase *(poco meno mosso ♩=ca. 108)* *(accel.)*

364 *mp*

366  $(\text{♩}=\text{ca. } 126)$

Continuation of IC 3 emphasis

Figure 31: *Fantasy*, mm. 351–362; IC 3 emphasis throughout interval expansion and contraction

The coda (mm. 376–395) further emphasizes IC 3, which now functions to create harmonic closure. As seen in Figure 32, there is a modified return of the alternating IC 3 pairs of Theme 1 (mm. 12–19) in the clarinet. IC 3 provides further closure with the return of Theme 2 motivic material emphasizing the B<sup>b</sup>-D<sup>b</sup> pair in m. 391. Theme 2, from I.2 and III.2 (mm. 20–27 and mm. 247–257 respectively), originally emphasized the tritone (IC 6), and the restatement of Theme 2 emphasizing IC 3 in m. 191 resolves the tension between motivic ideas and intervallic content created by Theme 2 earlier in the *Fantasy*. The return of the Theme 2 material in m. 391 then brings harmonic and thematic closure, much like the recapitulation of sonata form, with secondary material returning in the tonal language of the primary thematic material. The piece ends with the B<sup>b</sup>-D<sup>b</sup> pair in both clarinet and piano, resolving any conflict between parts created earlier in the work by different emphases.

382

*tr*  
*p*

*tr*  
*pp*

*tr*  
*ff*

*tr*  
*dim.*

*mp*

386 =ca. 50

*ppp dolce*

*tr*  
*pp*

*p*  
*dolce*

390

*tr*

*p*

*mp* (balance with clarinet)

393

*molto dim.*

*rit.*

*poco*

*tr*  
*mf*

*tr*  
*mp*

Figure 32: *Fantasy*, mm. 382–395; IC 3 emphasis in the coda

## *Meld*

Meld is created by a variety of means in the *Fantasy*. The combination of octatonic collections, pivot-tone and pivot-chord modulation between collections, and the corresponding rhythmic, dynamic, registral, and articulation changes, meld sections together. Additionally, motivic ideas develop through repetition across sections and expand, becoming more intricate and fully-formed in each subsequent return. Further, thematic material frequently shifts roles, from arrival or repose to developmental in function, and themes are combined in counterpoint to move the piece forward.

### *Pitch Development*

In the *Fantasy*, modulatory techniques are frequently combined to increase the complexity of meld. Intervalllic expansion and contraction, pivot modulation, and mixed octatonic collections frequently occur simultaneously to meld phrases together and create momentum.

For example, the transition between I.1 and I.2 uses both a common-tone modulation and interval expansion to meld the phrases together. In mm. 18–21, the clarinet's C serves as a common-tone between OCT<sub>0,1</sub> of I.1 and WT<sub>0</sub> of the beginning of I.2 (C is also a common-tone to OCT<sub>2,3</sub> which occurs later in the phrase). That same C is a new note to the I.1 phrase, and extends the descending G<sup>b</sup>-E<sup>b</sup> minor-third motion established in mm. 15–18. The combination of these two minor thirds (G<sup>b</sup>-E<sup>b</sup> and E<sup>b</sup>-C) creates a tritone, which is used extensively in I.2, and contrasts with the opening I.1 phrase emphasizing the minor third.

Meld created by combining pitch techniques helps to distinguish between structural sections and smaller phrase breaks. The transition between II.4 and II.5 (m.

100–101) seems at first glance to be an important structural change with abrupt tempo, dynamic, registral, and textural changes implying a sectional break. However, pitch emphasis remains in the OCT<sub>1,2</sub> collection; the alternating B<sup>b</sup>-C<sup>#</sup> trills of mm. 97–100 are repeated in the articulated sixteenth notes in the clarinet in mm. 101–104, and the half-step oscillation of the trill in mm. 97–100 ties in with the half-step oscillation in the eighth-note bass line in mm. 101–115. This meld created by pitch continuity reduces the importance of the break between II.4 and II.5 to a phrase boundary rather than a formal, sectional boundary.

Similarly, the transition between II.5 and II.6/5 in mm. 136–143 uses multiple pitch techniques to meld the two sections together. Figure 2 (previously discussed on p. 30) shows a transition into a new phrase in the *Fantasy*. This particular modulation uses both intervallic expansion and common-tone techniques to transition between octatonic collections. The new phrase begins at m. 140, where the shift to OCT<sub>2,3</sub> occurs. The main change between the two forms of the octatonic collection is the transposition of G to G<sup>#</sup> in mm. 139–140 in the piano, expanding a major third into an augmented third. This move to G<sup>#</sup> is foreshadowed by the E to E<sup>b</sup> alternation within OCT<sub>0,1</sub> in the piano left hand in mm. 137–138. Additionally, the modulation is prepared with a sustained E<sup>b</sup> in m. 139 in the clarinet and piano, which is a common-tone to both OCT<sub>0,1</sub> and OCT<sub>2,3</sub>. Further, the emphasis on E<sup>b</sup> and G in mm. 136–139 expands through embellishment into a paired statement of the minor third—E<sup>b</sup>-C and G<sup>#</sup>-B in m. 140, which is the structural interval of the *Fantasy*. This example, then, uses interval expansion,

common-tone modulation, and IC 3 emphasis to pivot between phrases and meld them together.

### *Thematic Development*

The return and development of thematic material also melds sections together. As discussed above (see Figure 25 on p. 44), an articulated, octave-leaping bass line develops throughout the *Fantasy*. It first appears in mm. 34–37, then again in 75–81; another variation appears in mm. 140–171, and is finally fully realized in the piano cadenza as a “boogie bass” in mm. 319–328. The final statement of the “boogie bass” combines all elements of the three previous fragments: the octave leaping oscillation, driving rhythmic syncopation, and a pointillistic oscillation pattern. This boogie-bass line always appears in developmental sections to drive the piece forward. Each return of this bass line is longer and more intense than the last, with the final statement in the piano cadenza pushing into the biggest climactic point of the piece in mm. 329–346. The development of this “boogie bass” theme then ties the sections together, melding otherwise separate ideas into a single coherent work.

The exact beginning and ending of phrases and thematic sections are obscured through meld. In the *Fantasy*, Tower frequently introduces fragments of new thematic material at the end of a section that are then fully realized in the next section. For example, rising octatonic gestures that drive I.3 begin as a sweeping scale introduced in I.2 in m. 26, again in m. 31, and as the repetitive ostinato of I.3 in m. 32 before I.3 begins outright in m. 34 with a shift to OCT<sub>1,2</sub>. Similarly, the staccato bass line variant of the boogie bass in II.4 is introduced with the left-hand chords of m. 71 in II.3a, with

an alternation between E and G bass notes, just as it appears beginning of II.4 in m. 75.

Figure 33 shows this origin of the E-G alternation of II.4 as introduced in II.3a.

The figure consists of two musical excerpts. The first excerpt, labeled '71', shows a piano part in 3/4 time. The right hand plays a melodic line with slurs and accidentals (flats). The left hand plays a triplet of eighth notes. A box labeled 'IC 3' highlights the first two notes of the triplet, which are E and G. The second excerpt, labeled '75', shows a piano part in 3/4 time. The right hand has a trill (tr) and a slur. The left hand has a triplet of eighth notes. A box labeled 'IC 3' highlights the first two notes of the triplet, which are E and G. The tempo is marked 'ca. 116' and the dynamics are 'mp sub.'.

**Figure 33: *Fantasy*, m. 71 and m. 75; E-G motivic correlation**

Another example of a meld of thematic material occurs at the end of II.7a into the transition between Sections II and III. The end of 7a introduces an oscillating triplet figure that is juxtaposed against the articulated sixteenth-note figure of I.7. The triplet oscillation figure forms the basis of the transition that pivots between Sections II and III, as well as a major part of the clarinet cadenza. The introduction of the motivic material of the transition before the beginning of the transition melds Section II with the transition, which as noted above, otherwise holds little in common with any previously stated thematic or motivic material. Further, the use of the triplet oscillations from the

transition (mm. 217–246) as the main motive of the clarinet cadenza ties the transition to Section III through melding motivic ideas.

As was demonstrated in *Wings*, Tower's works move forward because of subtle shifts in a line that turn moments of arrival or repose into moments of tension. In Figure 22, (previously discussed on p. 41), the clarinet states stable thematic material, but is driven by an unsettled accompaniment. The left hand of the piano creates turbulence by creating increasingly tighter tone clusters with each attack, urging the clarinet forward through an otherwise peaceful introductory statement. Additionally, the IC 3 motive in the clarinet juxtaposes two basic pairs: the E-G and E<sup>b</sup>-G<sup>b</sup> pairs. The move to C in m. 19 continues the IC 3 pattern from G<sup>b</sup>-E<sup>b</sup>, but because it is a new note and expands the intervallic content from outlining IC 3 to outlining IC 6 via IC 3, it pushes into the new thematic material of I.2.

The beginning of the piano cadenza, III.3, begins as an arrival, landing on and remaining in OCT<sub>2,3</sub> and establishing a stable ostinato of the rising octatonic gesture. Here, IC 3 is used in its expanded form as a diminished seventh. The octatonic gesture outlines IC 3, both in each individual gesture (D<sup>#</sup> up to C in m. 301 for example), and at the highest and lowest points of the phrase (D<sup>#</sup> in m. 301 and C in m. 306). Though III.3 begins as an arrival, it becomes developmental in m. 307. The change to developmental material is articulated by a change from an ostinato created by the rising octatonic gestures to an oscillating pattern that descends via step progressions. In m. 308, these oscillating patterns also begin modulating between octatonic collections via shared diminished triads. The shift between octatonic collections melds the section together; the shift creates harmonic instability that reinforces the unpredictability of the

oscillations and pushes into the next arrival on the boogie-bass section of III.5a (m.319ff).

Counterpoint between themes also melds phrases and sections together. Figure 29 on p. 51 shows the beginning of the second large formal section marked by a return of the opening IC 3 motive in the clarinet. This return, however, is dramatically different than the opening statement because of the accompanimental rising octatonic gestures in the piano. The two thematic ideas are presented in counterpoint; the rising octatonic gestures from I.3 accompany the IC 3 motive from I.1. This contrapuntal treatment melds the II.1 phrase to the previous transitional material, where the rising octatonic gestures originated, and thereby obscures the break between structural sections.

As the *Fantasy* progresses, meld created by the contrapuntal combination of multiple themes increases in intricacy and frequency. For example, in Section III, multiple thematic ideas appear simultaneously in counterpoint. Section III begins with a juxtaposition of the I.2 motive in the clarinet and the I.1 motive in the piano, which ends with a return of the rising octatonic gestures of I.3. This is followed immediately by a return of Theme 6 in the clarinet, which is supported by a rhythmic diminution of the same theme in the piano.

The contrapuntal treatment of themes culminates in the piano cadenza. The cadenza begins with Theme 3, the octatonic rising gestures, which moves into a return of Theme 5 over the bass line introduced in III.3. In m. 319, Theme 3 becomes a rising syncopated melodic line, over Theme 5 realized as a boogie bass. This moment, the

contrapuntal combination of two important thematic ideas, marks the simultaneous culmination of both themes, and the high point of the piano cadenza.

The clarinet cadenza also features a juxtaposition of thematic material. The clarinet cadenza spins out all of the energy built up in the piano cadenza and the trilling tutti of III.4a, and brings back thematic and motivic material in quick succession to unwind and transform thematic material into the repose of the coda. The cadenza begins with an oscillating figure emphasizing the IC 3 dyads B-D and C-E<sup>b</sup>, before relaxing into a reflective idea in m. 351 reminiscent of the opening IC 3 motive of I.1. This reflective idea moves into the triplet oscillations of the T theme in m. 352, once again emphasizing IC 3, before using interval expansion to transform the T thematic idea into the repetitive ostinato of Theme 7, again emphasizing IC 3 in m. 362. The T theme moves into a return of the rising octatonic gestures of Theme 3 in m. 375, alternating with a modified repeat of the pointillistic Theme 6 that leads into the climax of Section II.

The final contrapuntal combination of the piece creates complete harmonic and thematic closure through meld of thematic material and pitch emphasis. The coda, shown in Figure 34, combines the important thematic material from earlier in the piece into a single closing statement. Rising octatonic gestures lead out of the clarinet cadenza into a trill, reflecting back on the climactic trill material of previous sections. The trills in the clarinet and piano expand into the IC 3 motive, which is supported initially by block chords that also accompanied the final trill section of m. 329–ff. Even the boogie bass material of m. 319–ff. returns, but in the coda it appears as a gentle ostinato in the right hand of the piano, emphasizing IC 3.

Coda—Synthesis of motives

Theme 3 (Rising oct. gestures)      Introduce Theme 4 (trill)

375  $\text{♩} = \text{ca. } 54$

379

382

Theme 4 (stepwise trill motive)

Block chords from III.4a

386  $\text{♩} = \text{ca. } 50$

Accompaniment from I.1

390

Oscillating IC.3 pattern from "boogie bass" theme

393

Unified pitch content with Theme I material

Figure 34: *Fantasy*, mm. 376–395; coda showing compilation of thematic material

### ***Conclusion***

Thematic variation and emphasis on IC 3 drive the *Fantasy* and create continuity. Meld between sections and phrases is created by thematic continuity, but intervallic emphasis and octatonic usage clarify sections and articulate phrases. Each of the three large sections repeats material from the previous section with more intricate intertwining of thematic material and with stronger emphasis on IC 3. Each section also climbs to a climactic moment and returns to repose, with each growth and climactic arrival becoming more intense. The entire piece drives toward the final clarinet cadenza (beginning in m. 347), where pitch emphasis and thematic development culminate simultaneously for the first time.

## Chapter 6: Concerto

### *Introduction*

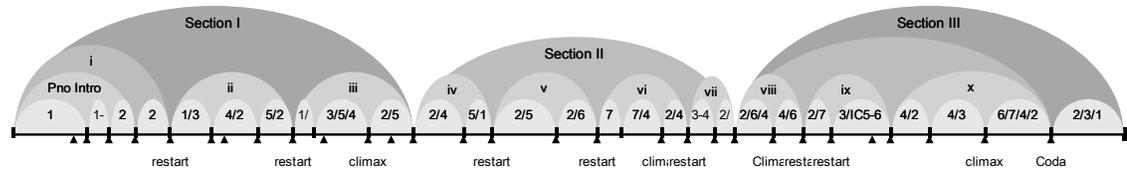
No current scholarship discusses Tower's Clarinet Concerto, therefore, this chapter discusses thematic material and formal divisions in more detail than the *Wings* or *Fantasy* chapters.<sup>39</sup> Similar to the *Fantasy*, the Concerto's uniformity is created by motivic repetition, development, and contrapuntal interaction between motives. Motivic unity and pitch modulation techniques meld sections together and connect otherwise quite different melodic and thematic ideas.

### *Form*

The Concerto is through-composed, though it divides into three sections that resemble the fast-slow-fast movement organization of a traditional concerto. The thematic continuity between sections, however, unifies the Concerto into a single arch-form piece similar to *Wings* and the *Fantasy*. Figure 35 shows the three movement-like sections and the divisions of each section. It also shows motivic ideas and the return and development of those motives throughout each section. In both the diagram and discussion throughout this chapter, sections are labeled with uppercase roman numerals, divisions of sections are labeled as lowercase roman numerals, and motives are labeled with Arabic numbers by the order in which they first appear. In order to avoid confusion with similarities in motivic material between sections, sub-sections are labeled chronologically rather than restarting numbering in each section.

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<sup>39</sup> The Concerto is written for A clarinet, with the option of performance on Bass Clarinet (with an extended range to written low C) notated as *ossia* passages in the clarinet part. All examples are transposed to and discussed in concert pitch. The analysis in this paper is based on the clarinet-piano reduction rather than the fully orchestrated concerto, thus I will refer to the piano part rather than the orchestral score in my discussion.



**Figure 35: Formal sections and motivic relationships in the Concerto**

Table 3 shows each section and the motivic statements within each section and sub-section. The Arabic numerals below each sub-section show the order in which motives are presented (highest on the chart is presented first in the concerto); when two numbers appear in the same box the motives they represent are being presented simultaneously in counterpoint.

**Table 3: Formal sections and motivic material in the Concerto**

Section I			Section II				Section III			
i (mm. 1–76)	ii (mm. 77–135)	iii (mm. 136–223)	iv (mm. 224–249)	v (mm. 250–274)	vi (275–298)	vii (mm. 299–321)	viii (mm. 322–378)	ix (379–419)	x mm. 420–489)	Coda (490–500)
1	1/3	1/4	2/4	2/5	7	3/4	2/6/4	2/7	4/2	2/3/1
1-2	4/2	3/5/4	5/1	2/6	7/4	2/6	4/6	3/7	4/3	
2	5/2	2/5			2/4				6/7/4/2	

*Structural Sections*

Section I divides further into three sub-sections, each marked by a return of the opening tremolo material of Motive 1 (discussed below), which is presented in the

piano introduction. Each sub-section rises to and subsequently falls from brief climactic moments. The beginning of each sub-section is also marked by a return of the opening ostinato pattern, a sustained melody, and an emphasis on IC 5, the perfect fourth and fifth.

Section II divides into four sub-sections (iv–vii), each articulated by a break created by a drop in rhythmic energy and dynamic level, and a change in thematic/motivic material. Section II introduces thematic material that is different from Section I, but also develops motivic material introduced in Section I. Intervallic expansion within individual themes is the primary technique used to grow into the short-term climactic moments of each sub-section. At the end of Section II, sub-section vii (mm. 299–321) re-introduces the oscillation motive from Section I that drives Section III, and therefore functions as both a gesture of closure for Section II and transition material into Section III.

Section III divides into three sub-sections and a coda, which mirror the large-scale fast-slow-fast arrangement of the Concerto itself. Sub-section viii (mm. 322–379) begins with the oscillation motive and ends in a climactic moment with rising octatonic gestures in the piano. Sub-section ix (mm. 379–419) relaxes from the excitement of the previous section, featuring tranquil presentations of the oscillation motive. Sub-section x (mm. 420–489) steadily builds into the largest and final climactic moment of the piece, which leads into the clarinet cadenza. A brief coda closes out section III. The sub-sections in Section III are more connected thematically than Sections I and II. Each sub-section moves into the next by layering motives and melding ideas together. These melded sub-sections push into the final and most intense climax of the piece. Like the

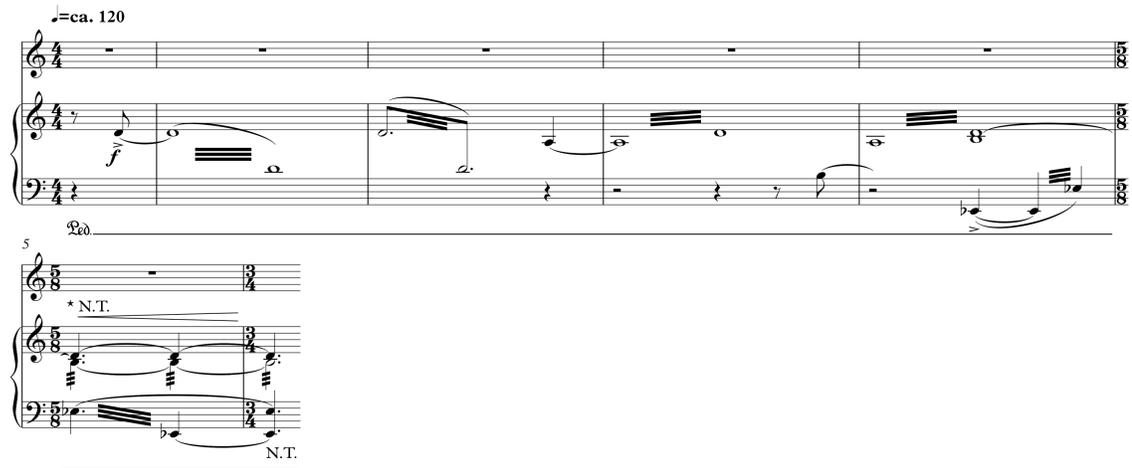
*Fantasy*, the final climax of the Concerto leads into a clarinet cadenza, which is followed by a coda that features a placid return of all of the thematic material.

### *Thematic and Motivic Correspondences*

The form of Tower's Concerto is driven by the repetition, development, and counterpoint between motivic ideas. What follows is a description of the most significant motives in the work and a discussion of how each works to help create the form of the Concerto.<sup>40</sup> The first of these motivic ideas is a tremolo figure, occurring primarily in the piano, returns consistently throughout the Concerto. Figure 36 shows this first tremolo motive, and because it is the first idea introduced, will be called Motive 1. These tremolo figures appear throughout the Concerto, usually as accompaniment supporting a sustained melodic idea. The return of Motive 1 always marks the beginning of a new structural section. In addition, the three parts of Section I are marked by a return of the opening motive: I.i opens with the extended statement of motive 1 in mm. 1–22, m. 77 is the beginning of I.ii and returns to the Motive 1 tremolo figure, and I.iii starts with a return of Motive 1 in m. 136.

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<sup>40</sup> Not all motivic material is discussed in this chapter. For example, Motive 3, a sustained melodic figure, does not receive extensive development or repetition in the Concerto. It is therefore omitted from this discussion.



**Figure 36: Concerto mm. 1–6; Motive 1, tremolo**

The second important motivic idea to be introduced is a meandering oscillation pattern in triplets and sixteenths, which usually appears as part of interval expansion and contraction. This oscillation motive, Motive 2, undergoes substantial modification and repetition throughout the Concerto, and serves both primary and secondary melodic roles, as the main melody and as accompaniment to another melodic idea. Motive 2 is first introduced in the piano introduction in m. 23, leading into the opening clarinet line. Figure 37 shows the first statement of this motive, as part of a rhythmic accelerando. Motive 2 returns throughout the concerto, and serves as the primary motivic device in the cadenza.



**Figure 37: Concerto, mm. 28–31; Motive 2, oscillation figure**

Similar to the *Fantasy*, the Concerto also features a rising scalar octatonic gesture. This motivic idea, Motive 4, first introduced in the clarinet in m. 45–65, appears throughout the Concerto as both a primary melody, as seen in m. 45, and as an accompanimental ostinato, as seen in the final build to the largest climax in mm. 451–484 of Section III. An expanded version of the scalar octatonic motive also appears in a sweeping rising and falling gesture in the clarinet throughout the Concerto, such as in mm. 85–95, and is the main motive that drives toward climactic moments. The high point of Section II, for example, occurs in m. 295, and the push up to that climactic moment is a series of ascending sweeping gestures, each of which expands by starting lower and continuing higher and crescendos to a louder point than the last. In Section III, rising octatonic gestures drive the piano interludes in mm. 357–378 and mm. 451–484, the latter of which grows into the final, most significant climactic moment of the work and pushes into the clarinet cadenza. Figure 38, from the final intensification to the climax in Section III, shows the rising octatonic gestures functioning as an ostinato accompaniment of a slower, sustained melody.

456

Motive 4 as accompaniment

Primary Melody

458

Detailed description: This figure shows two systems of musical notation. The first system, starting at measure 456, features a piano accompaniment in the left hand with a rhythmic pattern of eighth notes and a melodic line in the right hand consisting of stepwise trills. The second system, starting at measure 458, continues the piano accompaniment and the trilled melodic line. The key signature has one flat, and the time signature is 3/4.

**Figure 38: Concerto, mm. 456–459; Motive 4, scalar octatonic gesture**

A melodic line of stepwise trills, Motive 5, is used as part of the push toward climactic moments. It is often used in conjunction with other thematic ideas, including the climbing/sweeping octatonic passages of Motive 4 and the oscillation gestures of Motive 2. Figure 39 shows the introduction of the stepwise trilled Motive 5, which evolves into the sweeping gesture of Motive 4, all of which is accompanied by the oscillating Motive 2.

120

Motive 5

Motive 4

Motive 2

Detailed description: This figure shows three systems of musical notation. The first system, starting at measure 120, features Motive 5 in the right hand as a series of stepwise trills, with a 'cresc.' marking below. The second system shows Motive 4 in the right hand as a sweeping octatonic passage, with a 'ff' marking below. The third system shows Motive 2 in the left hand as a rhythmic pattern of eighth notes. The key signature has one flat, and the time signature is 3/4.

**Figure 39: Concerto, mm. 120–125; Motive 5, stepwise trills in counterpoint with other motives**

A pedal point, Motive 7, starts in m. 263 in Section II and returns in Section III. It begins as a steady quarter-note pulse and later is modified into an articulated sixteenth dotted-eighth rhythmic pattern that continues through the rest of Section II into Section III. Motive 7 reappears again in Section III in mm. 470 during the final surge into the climactic point of the piece, and is emphasized in mm. 485–489, the beginning of the clarinet cadenza. The original pedal point and its rhythmic variant appear in Figure 40.

263

*pp sub. dolce*

*ppp dolce*

Ped.

Bb and C as pedal point, Motive 7

278

*mp*

*mp*

Articulated variant of pedal point, Motive 7

**Figure 40: Concerto, mm. 263–265 and mm. 278–280; Motive 7, pedal point variants**

### *Octatonic Collection and Pitch Content*

The Concerto is less consistent in pitch emphasis than either the *Fantasy* or *Wings*. Rather than focusing on a single interval, the Concerto is based on quartal/quintal harmonic and melodic motion. The tritone (IC 6) is juxtaposed against

the perfect fourth and fifth (IC 5) throughout the piece, and a shifting emphasis between these two intervals creates tension and resolution. Octatonicism is still present, though not used as consistently or exclusively as in the *Fantasy*. However, as she did in the *Fantasy* and *Wings*, Tower uses the octatonic collection at important structural arrivals, and alternates between collections using the same motives in transitional sections.

### IC 5 and 6

Rather than the single emphasized interval of *Wings* and the *Fantasy*, as noted earlier the Concerto focuses on both IC 5 and IC 6.<sup>41</sup> Not surprisingly, the tritone is used to create tension and drive the work forward, while the perfect fourth and fifth appear at moments of rest and arrival. The opening piano introduction emphasizes this juxtaposition, as shown in Figure 41. IC 6 is emphasized in the tremolos of mm. 10–11, while IC 5 is prevalent in the sustained chords of the same measures. The juxtaposition of IC 5 and 6 continues throughout the piano introduction and sets up the juxtaposition of the rest of the Concerto. The juxtaposition of IC 5 and 6 moves to an emphasis on IC 6 as the introductory material develops into melodic motives and pushes into the clarinet entrance in m. 45.

The image shows a musical score for the piano introduction of a concerto, measures 10 through 17. The score is written for piano and includes various dynamics and articulations. At the top left, 'IC 6' is boxed and 'IC 5' is circled. The score begins with a forte (ff) dynamic and features tremolos in measures 10-11. A note 'etc.' is present in measure 11. In measure 12, there is a note 'Emphasis on IC 5 with diminuendo' with a circled interval. The score continues with a piano (ppp) dynamic and a tritone (tr) interval in measure 13, followed by a mezzo-forte (mf) dynamic and a note 'N.T.' in measure 14. The score ends with a crescendo (cresc.) marking in measure 17.

**Figure 41: Concerto, mm. 10–17; juxtaposition of IC 5 and 6**

<sup>41</sup> The perfect fourth and perfect fifth are used interchangeably, so in discussion will be considered as the same interval class, IC 5. Similarly, the tritone, IC 6, is notated as a diminished fifth and augmented fourth interchangeably for ease of notation, so will be considered the same interval.

The consonant intervals of the perfect fourth and fifth (IC 5) appear at moments of arrival and moments of rest to emphasize stability. For example, section III divides into three sub-sections, with the middle sub-section ix (mm. 379–419) serving as a slower, brief moment of tranquility before the final extended push into the largest climax of the piece. The end of sub-section ix, mm. 411–419, emphasizes IC 5. The tremolo figures in the piano create both perfect fourths and perfect fifths, and the clarinet part consists of three modified repetitions of a phrase, each a descending line outlining IC 5. The first two contain one tritone (B-F), which is eliminated in the final statement of the phrase. Figure 42 shows the IC 5 emphasis in this section.

The figure displays a musical score for measures 411 to 419. At the top left, two boxes are labeled 'IC 5' and 'IC 6'. The score is written for piano (ppp dolce) and clarinet (pp). The piano part features tremolo figures in the right hand and sustained chords in the left hand. The clarinet part consists of three modified repetitions of a phrase. Arrows and boxes highlight specific intervals: IC 5 (perfect fourth and fifth) and IC 6 (tritone). A note 'N.T.' (No Tritone) is present in the piano part. The final repetition of the phrase shows the elimination of the tritone, with the text 'IC 6 pairs become IC 5 pairs in final repetition of phrase' below it.

**Figure 42: Concerto, mm. 411–419; IC 5 emphasis and IC 6 becoming IC 5 for repose**

In contrast, the piano interlude after the climax of Section I (mm. 193–222) shows how the tritone is the emphasized interval during moments of tension and development. This section continues the high energy of the climax but also serves as a

transition into Section II, both developing previously stated material and introducing new material. IC 6 drives this developmental section. The left-hand piano oscillations throughout the entire section consist of alternating tritones, and the tritone is emphasized via step progressions, as shown in Figure 43. Here the tritone appears between hands on each sixteenth, and is filled in with a step progression from C to F# in both hands through the two measures.

m. 212 shows the harmonic IC 6s, m. 213 shows the melodic IC 6

The image shows a musical score for two measures, 212 and 213. Measure 212 features a piano accompaniment with a tritone oscillation in the left hand and a step progression in the right hand. Measure 213 features a melodic line in the right hand and a tritone oscillation in the left hand. The score is in 3/8 time and features a tritone (C-F#) between the hands on each sixteenth note.

**Figure 43: Concerto, mm. 212–214; IC 6 motive structurally, melodically, and harmonically**

### *Octatonic Collections*

In the Concerto a single octatonic collection is used at arrival moments and moments of rest and tranquility, while octatonic collections are mixed during transitions and developmental sections (exactly as octatonic collections were used in the *Fantasy*). Figure 44 shows the change between developmental material with mixed octatonic emphasis to a return to rest with a single octatonic emphasis. At the beginning of the example, the octatonic emphasis is unclear—the F# on beat one of m. 55 implies that the passage is using OCT<sub>0,1</sub>, while the E# on beat three puts the passage in OCT<sub>1,2</sub>. Measure

56 juxtaposes the two notes, further obscuring the emphasized collection. This juxtaposition of and alternation between octatonic collections continues until m. 75, although the alternation becomes less frequent as the music returns to repose and uses mostly OCT<sub>1,2</sub>.

The figure displays a musical score for Concerto, mm. 55-75, illustrating the juxtaposition of octatonic collections. The score is presented in a system of five systems, each with a treble and bass clef staff. The key signature is G major (one sharp). The time signature is 3/4.

- System 1 (mm. 55-60):** The melody features triplets and is labeled with "OCT 0,1" and "OCT 1,2". A "chromatic" passage is circled in the melody. The bass line includes a "cresc." marking and is labeled with "OCT 0,1" and "OCT 2,3". A note in the bass line is labeled "G, C#, E, Bb fit in both OCT 0,1 and OCT 1,2".
- System 2 (mm. 61-64):** The melody continues with triplets, labeled "OCT 0,1". The bass line is labeled "(OCT 2,3)" and "OCT 1,2".
- System 3 (mm. 65-68):** The melody is labeled "(OCT 1,2)". The bass line is labeled "OCT 2,3/OCT 1,2". Dynamics include "mf" and "mp".
- System 4 (mm. 69-72):** The melody is labeled "OCT 0,1". The bass line is labeled "OCT 0,1/OCT 2,3" and "OCT 2,3". Dynamics include "dim." and "shared °7".
- System 5 (mm. 73-75):** The melody is labeled "(OCT 2,3)". The bass line is labeled "pp OCT 1,2".

Annotations include "shared °7" pointing to specific notes in the bass line across multiple systems, and "chromatic" pointing to a circled passage in the melody of the first system.

Figure 44: Concerto, mm. 55–75; juxtaposition of octatonic collections

Another example of how Tower mixes octatonic collections to create harmonic tension and momentum is the transition into Section II (beginning in m. 224). The entire piano interlude of mm. 193–223 utilizes multiple pitch collections, primarily employing a fully chromatic collection emphasizing the tritone (particularly mm. 206–215). The material leading into m. 224 mixes octatonic collections, quickly rotating between collections with emphasis on the tritone. Figure 45 shows the alternation between collections in the transition.

**Figure 45: Concerto, mm. 216–224; alternation between pitch collections**

Moments of stability and arrival are marked by the use of a single octatonic collection. Continuing where the previous discussion left off, as the music slowly becomes more pitch centric to set up a stable Section II, beginning in m. 224, it moves from using all twelve chromatic pitches (mm. 217, 219), to five pitches within OCT<sub>0,1</sub> (m. 220), to trills that use common tones between octatonic collections as pivots. The final pivot motion occurs over four measures. In m. 220, a major second tremolo/trill

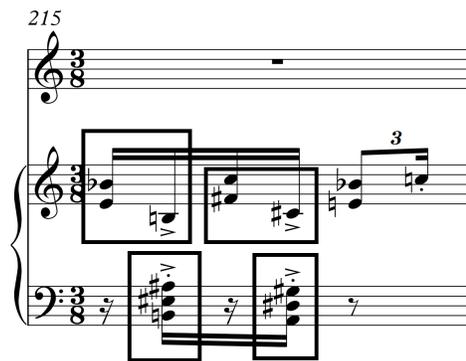
between C and B<sup>b</sup> of OCT<sub>0,1</sub> compresses into a minor second trill between B and C of OCT<sub>2,3</sub>, which transposes into a minor second trill between C and C<sup>#</sup> of OCT<sub>0,1</sub> at the clarinet entrance in m. 223. The C<sup>#</sup> then becomes the common tone into OCT<sub>1,2</sub>, which is the harmonic center of the beginning of Section II. OCT<sub>1,2</sub> is firmly established in m. 224 and marks it as a structural arrival, the beginning of Section II.

### *Meld*

Phrases and exact sectional boundaries are obscured in the *Fantasy* through meld. Thematic and motivic ideas that form the basis of one section are introduced in a previous section making it unclear where one section ends and the other begins. Return of motivic material also obscures clear sectional boundaries, and pitch modulation and juxtaposition between octatonic collections further meld phrases and sections together.

As a means of melding sections together motivically, Tower frequently develops motivic material at the end of one section before expanding it in the next section. For example, in the transition between Sections I and II (mm. 193–222), an expansion of the IC5 and IC 6 juxtaposition develops and becomes an important harmonic feature of the rest of the piece. The two interval classes are layered onto one another in a single chord, so that a tritone plus a perfect fourth is used to create a trichord of a tritone and major seventh above a bass note, as shown in Figure 46. This trichord creates meld on multiple levels—on a surface level within the transition, and structurally by fusing sections together. This trichord serves as the primary accompanimental harmony throughout Sections II and III, melding the two sections together motivically. This motive also creates meld within the transition section, because it originates in the oscillations emphasizing the tritone, which make up the majority of the transition. The

motive originates in a unison alternation between tritones in mm. 206–11. The IC 6 oscillation figure is embellished in m. 212 when the right and left hands split to create tritones against one another on each sixteenth note and the right hand adds IC 5 pairs on each second sixteenth. Meld, then, creates the IC5/6 trichord both horizontally/melodically and vertically/harmonically with the oscillations in the piano right hand and with the left and right hands together in m. 212. The motive appears in both its melodic and harmonic setting in Figure 46 below, with the melodic statement in the right hand and the harmonic in the left.



**Figure 46: Concerto, m. 215; IC 5/6 trichord**

Transitions utilize pivot tones between collections to meld otherwise distinct sections together. The transition into Section II discussed above in Figure 45 on p. 78 utilizes the pivot tone modulation technique. The textural, dynamic, timbral, and rhythmic differences between the transitional material of mm. 193–223 and the new material of Section II in m. 224ff distinctly divide the two. Yet, the pitch modulation using the C common tone in mm. 221–223 and C<sup>#</sup> in mm. 223–224 via trills and

oscillation, combined with a modified version of the IC5/6 trichord introduced in the transition and appearing throughout mm. 219–225 tie the two together.

Similar to the *Fantasy*, the Concerto uses motivic development and repetition to meld phrases and sections together. The motivic ideas of the tremolo, the oscillation, the stepwise trills, and the octatonic climbing and sweeping gestures discussed above are used to indicate structural divisions, but the repetition of those ideas also gives uniformity and coherency to the Concerto as a whole. As material is repeated throughout the Concerto, it is layered with the other motivic material in counterpoint, which then ties otherwise separate ideas together. The beginning of Section III in m. 322 is one such example. Shown in Figure 1, Section III begins with the oscillation pattern of Motive 2 in parallel thirds between the clarinet and piano, in the OCT<sub>2,3</sub> collection. A sweeping octatonic gesture in m. 325 from Motive 4 leads into more oscillations that this time use intervallic expansion to highlight both IC 5 and IC 6 in m. 327, before moving into a combination of the oscillation pattern in the clarinet and a pedal point from Motive 7 in the piano. The juxtaposition of motives continues throughout Section III, melding all of the sections together thematically.

Motive 4, octatonic sweep

Motive 2, oscillations (in parallel thirds)

Motive 2 oscillations

Motive 7 pedal (in both variations) against oscillations

**Figure 47: Concerto, mm. 322–329; counterpoint between motives**

Motivic repetition and development throughout the three sections of the Concerto create meld. Motivic development occurs throughout the work, and the introduction of a motive that is used substantially in one section is usually introduced at the end of the previous section, melding together and obscuring exact beginnings and ends of phrases. Though modulations between octatonic collections smooth out the transition between pitch centers, stable (i.e. lasting) arrivals on octatonic collections are the only musical element that clearly articulate structural endings and beginnings.

### *Conclusion*

As discussed above, the Concerto's uniformity is created by motivic repetition, development, and contrapuntal interaction between motives. The changing emphasis on IC 5 and IC 6 at moments of repose and development respectively structure the Concerto. Further, motivic unity and pitch modulation techniques meld sections together and connect otherwise quite different melodic and thematic ideas.

## Chapter 7: Conclusion/Performance Implications

In the previous chapters I have shown how Tower uses meld to help create structure in her works for solo clarinet. Additionally, I have discussed how motives and thematic material are related through pitch content, and how the repetition and development of those motives also articulates structure and in some cases simultaneously blurs boundaries between structural sections through meld. Tower uses several consistent compositional processes across the three works, and this paper has examined how Tower fashioned each piece such that it has a unique character while maintaining these compositional consistencies.

### *Consistencies in compositional processes*

On the most basic level, Tower's music has a consistent musical trajectory, with each idea transitioning naturally into the next. The resulting musical work seems to constantly spin out a single idea, obscuring clear endings and beginnings to successive sections. This blurring of boundaries between sections and the subsequent similarity of motivic/thematic material across sections is musical meld. Certain melding techniques are used consistently across the three works. Phrases and sections are connected through meld of pitch and other musical factors (rhythm, articulation, dynamic, etc.). Modulations between octatonic collections via alternating collections and common tones create seamless transitions between phrases and sections. Consistent intervallic emphasis throughout each work melds phrases and sections together. Return, development, and contrapuntal treatment of motives and themes across all sections of each piece also tie each work together.

Tower's use of intervallic emphasis is especially apparent throughout the three works, as each piece emphasizes a particular interval, which is used both motivically on a surface level and structurally on a formal level. Each piece emphasizes a particular interval, which is used both motivically on a surface level and structurally on a formal level. The emphasized interval begins each piece, is outlined melodically, and also appears to articulate important structural moments, including moments of climactic arrival, beginnings of new sections, or to delineate phrases. The interval is frequently embellished via intervallic expansion and contraction and expanded through step progressions. Further, the interval marks boundaries of phrases and sections, as the highest and lowest notes of a phrase outline the emphasized interval. The emphasis on a particular interval works to clarify important structural, formal arrivals, based on the transposition of the interval used, as well as the juxtaposition of the notes of that particular interval.

All three works are structured in an arch form of three sections, each of which grows to a climactic moment and return to repose, with the final intensification being the largest, and marking a structural arrival for the entire work. The climactic moment of each of the three works fulfills both pitch and motivic/thematic goals, and moves into some sort of unwinding, coda-like material that restates much of the important material from earlier in the piece.

Each work utilizes the octatonic collection in some way that delineates structure, though each piece uses the octatonic collection with differing degrees of consistency. Use of the octatonic collection in each work also creates meld in each piece. In all pieces, phrases or sections of stability are marked by consistency in the octatonic

collection used. In contrast, developmental and transitional passages are marked by shifting emphases on different octatonic collections, different octatonic collections presented simultaneously, or the absence of clear octatonicism.

Several motives are prevalent across the three clarinet works, all of which serve important structural roles. Each work features an oscillating triplet pattern that expands the emphasized interval through intervallic expansion and contraction.<sup>42</sup> Each also has a sustained melody in long durations that emphasizes the structural interval of the piece.<sup>43</sup> Finally, each has a modified version of a trilled motive that expands via step progressions with articulated lower register notes between the trilled stepwise progression.<sup>44</sup>

### *Unique compositional processes in each work*

Though all three pieces divide into three structural sections that create a larger arch form, those sections play out and are articulated in different ways. Tritone emphasis with the ultimate goal of the realization of the D<sup>#</sup>-A tritone drives *Wings*. Thematic development and the return of IC 3 articulate sections in the *Fantasy*. Motivic development and the layering of those motives unifies sections within the Concerto. *Wings* is built around a statement of various themes, followed by a long build into a climactic recapitulation. The *Fantasy* rises to climactic moments in each of the first two sections, then pushes into a final climactic arrival that spins out into a cadenza for the clarinet. The Concerto rises and falls in a similar fashion to the *Fantasy*, except that the

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<sup>42</sup> For examples of the oscillating motive see Figure 15 on p. 32 (*Wings*), Figure 31 on p. 54 (*Fantasy*), and Figure 47 on p. 82 (Concerto).

<sup>43</sup> For examples of the sustained melodic idea see Figure 1 on p. 12 (*Wings*), Figure 22 on p. 41 (*Fantasy*), and Figure 42 on p. 75 (Concerto).

<sup>44</sup> For examples of the trill figure see Figure 9 on p. 26 (*Wings*), Figure 24 on p. 43 (*Fantasy*), and mm. 189–191 (Concerto).

third section features a middle moment of repose before the final intensification into the climax, followed by a clarinet cadenza and reflective coda.

All three pieces feature repetition as a driving element of form, but each treats thematic and motivic material differently. *Wings* is built in phrases, and entire phrases from the first section return in the final recapitulatory section, realizing unfulfilled pitch goals established in the other two sections. The *Fantasy* uses varied thematic repetition to delineate structural sections. As the piece progresses, the intricacy of the variation and the counterpoint between thematic ideas increases, until the clarinet cadenza and coda where all thematic materials are presented, revised with the IC 3 intervallic emphasis. The Concerto is much more motivic than the other two, juxtaposing and combining motivic material. Instead of the clear melodic ideas (that perhaps begin as motives but eventually play out as full melodies) and phrases in both *Wings* and the *Fantasy*, the Concerto presents small motives that are repeated and expanded to form larger sections with the next always growing from the last.

#### *Intervallic Emphases*

All three pieces emphasize a particular interval, though each emphasizes a different interval, which in turn affects the character in each piece. *Wings* emphasizes a dissonant interval, the tritone, while the *Fantasy* emphasizes a consonant interval, the minor third. The Concerto moves between a consonant (perfect fourth and fifth) and dissonant (tritone) interval to reflect the stability or tension of a given phrase.

The effect of these intervallic differences plays out in the character of each piece. The tritone emphasis in *Wings* creates a sense of ambiguity and symmetry; since the tritone divides the octave evenly in half, it eliminates all concept of tonal hierarchy.

The continued emphasis on the tritone, without any attempt at resolution, makes the placid moments of *Wings* seem suspended rather than as moments of rest. In contrast, the *Fantasy* is built on a consonant interval, the minor third, which historically has been favored in tonal music as a sweet, full consonance, and creates a restful, peaceful character in the placid sections. To create tension within the consonant framework of IC 3, Tower layers IC 3 pairs to create denser, more dissonant harmonies (such as the tritone and diminished seventh chords). The juxtaposition of and alternation between emphasis on IC 5 and IC 6 in the Concerto creates dissonance—the half step difference between the two is used motivically throughout the Concerto. The Concerto has a conflict in character that the other two are missing because of the juxtaposition between emphasized intervals.

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October 5, 2015

Cassie Keogh  
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**CH. 3:**

S1—P. 1 lines 1-2 (to whole note G#, with cresc to ff)

**CH. 4:**

S3—P. 1 Lines 3b-5 (starting meno mosso)

S5—p. 1 last quarter-note Eb to p.2 line 3 downbeat

B1a—p. 3 lines 1-3 (all)

B2—p. 6 lines 1-5 (all)

RS5—pp. 6-7 lines 6-2 (D# trill downbeat only)

RS6—p. 7 lines 2-4 (except last low Ab on line 4)

Transitions:

p. 2-3 transition (p. 2 last line q=44 to p. 3 first four triplet figures)

pp. 4-5 transition (p. 4 after breath to p. 5 fourth triplet figure)

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**CH.3:**

mm. 136-145

mm. 73-78

**CH. 5:**

mm. 12-20

mm. 301-306

mm. 75-86

mm. 268-270

mm. 329-346

mm. 217-226

mm. 351-362

mm. 54-59

mm. 376-395

In one:  
Pickup to m. 37 piano lick  
m. 75-79  
mm. 142-c.150  
mm. 319-c.323

**CLARINET CONCERTO**

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**CH. 3**

mm. 57-60

**CH. 6**

mm. 1-6

mm. 228-31

mm. 456-459

mm. 120-125

mm. 263-265

mm. 278-280

mm. 10-17

mm. 411-419

mm. 212-214

mm. 55-75

mm. 216-224

m. 215

mm. 322-329