# TOWARD A UNIFIED WHOLE: ALLAN PETTERSSON'S SYMPHONY NO. 5

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The earlier symphonies of the 1950s embody a gradual realization of Pettersson's own unique symphonic style, containing large-scale development, repetition, and reiteration. *Symphony no. 5* takes these ideas to the extreme and represents the codification of techniques that are further developed in later symphonies. The present study examines the structure of the symphony from a voice-leading perspective. Included in this study is an analysis of the construction of the piece focusing on the development and expansion of motives that operate as structural determinants and the use of chromatic saturation to create intensity and direction. The use of linear analysis in a post-tonal context makes necessary a section devoted to explicating the graphic notation shown in the analysis and the analytical process of determining linear progressions.

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## **CHAPTER ONE**

#### INTRODUCTION

#### Allan Pettersson

Pour devenir compositeur, il faut consacrer de nombreuses et pénibles années à apprendre, depuis la mélodie éternellement identi-que du rosssignol jusq'à celle, éternellement changeante de Schoenberg, puis tout oublier et revenir à son point depart pour y chercher son état vierge, son innocence perdue par tous ces maîtres. 1

Allan Pettersson, Dissonance douleur (1952)

In order to become a composer, one must dedicate many laborious years to learning everything from the unchanging melody of the nightingale to the ever-changing melody of Schoenberg; then, forget everything and return to his point of departure, and there, seek out the youth and innocence lost through all this learning.

In the above quote, Allan Pettersson speaks of a composer who strives to truly absorb technical mastery to the point that one is not consciously aware of it at the moment of creation. Pettersson's own music is surely informed by earlier music, yet achieves a very distinct and personally expressive quality. Like many composers, Pettersson absorbed musical ideas from the more traditional music of the early twentieth-century and before and combined them with more modern musical ideas. His ability to return to his own starting point and forget all he has learned in order to create something genuinely personal has, perhaps, contributed to his place as one of the foremost Swedish composers of the twentieth century.

A prolific composer, Pettersson completed sixteen symphonies, six concertos, fourteen chamber music works, and some forty songs over the course of his life.

Increasingly his music is being recognized by the public and has appeared in music scholarship primarily in Scandinavia, Germany, and the United States. Born in Västra Ryd, Uppland, Sweden, Pettersson spent most of his formative years in southern

<sup>&</sup>lt;sup>1</sup> Allan Pettersson, "Disonnance douleur," *Allan-Pettersson-Jahrbuch III*, ed. Matthias Theodor Vogt (Wuppertal: Internationalen Allan Pettersson Gesellschaft, 1988), 9-10. Author's translation.

Stockholm, while his family struggled to survive under financial hardships.<sup>2</sup> His musical training as a child was minimal and self-taught; however, as a young boy intent on pursuing music, he applied to the Royal Conservatory of Music in Stockholm in 1926. Although his first attempt was unsuccessful, four years later he again auditioned and was accepted to begin study (viola and violin) in Fall 1930. He first began composing (mostly songs) around this time and, upon recognition of his musical talents, was awarded the prestigious Jenny Lind award in 1939 for study abroad in Paris. Following, he accepted a position as violist in the Stockholm Concert Society Orchestra (now the Stockholm Philharmonic) and remained there until 1950. During the 1950's, he continued to pursue composition, studying counterpoint with Otto Olson, composition with Karl-Birger Blomdahl, and orchestration with Tor Mann. Interested in devoting himself entirely to composition, he took a sabbatical from the Stockholm Orchestra in 1951 and moved to Paris where he began study in classes with Arthur Honegger and Darius Milhaud, and privately with René Leibowitz, who became his most influential teacher. His progress and talent as a composer eventually overshadowed his skill as a performer, and in 1952 he resigned his position as violist and began composing full time (surprisingly rather late in life). Over the course of the next 28 years until his death he continued to compose and perform his works throughout Europe, gaining notoriety primarily for his orchestral works.

Pettersson in the Context of Swedish Music History

In Sweden, prior to WWII, strong nationalistic tendencies were infused into the

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<sup>&</sup>lt;sup>2</sup> Biographical information was compiled from the following sources: Paul Rapoport, *Allan Pettersson* (Stockholm: Swedish Music Information Center, 1981), 3-22 and Paul Rapoport, 'Pettersson, Allan', *Grove Music Online* (Accessed 8 July 2004).

music of many late nineteenth- and early twentieth-century composers.<sup>3</sup> Furthermore. some music institutions had strong connections to late German Romanticism, particularly the music of Wagner and Strauss, which influenced many of the composers active during the first decades of the twentieth century. This is apparent in the music of Swedish composers Wilhelm Peterson-Berger (1867-1942), Hugo Alfvén (1872-1960), and Wilhelm Stenhammer (1871-1927), all of who were decided symphonists that merged their own nationalistic flare with late-Romanticism.<sup>5</sup> The following generation of Swedish composers, including Hilding Rosenberg (1892-1985), Gösta Nystroem (1890-1931), and Moses Pergament (1893-1977), are often referred to as the first Swedish modernists, characterized by a desire to explore new musical techniques associated with expressionism and impressionism adopted from the continent.<sup>6</sup> Rosenberg in particular was heavily influenced by Schoenberg's music while in Berlin. In many cases, these composers combined these new techniques with late-Romantic styles and approached music from a very humanistic point of view. Rosenberg and Pergament in particular reacted very strongly to WWII, composing works in protest of violence and genocide.8

Neo-classical music also became popular between the world wars.<sup>9</sup> Rosenberg, Nystroem, and Pergament, along with a slightly younger generation of composers

<sup>&</sup>lt;sup>3</sup> Claes M. Cnattingius, *Contemporary Swedish Music*, trans. Claude Stephenson (Stockholm: Swedish Institute, 1973), 23.

<sup>&</sup>lt;sup>4</sup> Ibid., 23.

<sup>&</sup>lt;sup>5</sup> Gösta Percy, "Leading Swedish Composers of the Twentieth Century," *Swedish Music Past and Present*, trans. Dick Litell (Stockholm: Musikrevy, 1967), 60.

<sup>&</sup>lt;sup>6</sup> Cnattingius, 24.

<sup>&</sup>lt;sup>7</sup> Percy, 77.

<sup>&</sup>lt;sup>8</sup> Of note are Rosenberg's *Johannes Uppenbarelse* (The Revalation of St John the Divine, 1940) composed at the start of the war and Pergament's *Den judiska sången* (The Jewish Song, ca. 1945) depicting the martyrdom of the Jewish people.

<sup>&</sup>lt;sup>9</sup> Eric Salzman, *Twentieth-Century Music: An Introduction*, Prentice Hall History of Music Series, ed. H. Wiley Hitchcock (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1967), 132.

emerging in the 1930's that included Dag Wirén (b.1905-1986), Lars-Erik Larsson (1908-86), Gunnar de Frumerie (b. 1908), Erland von Koch (b. 1910), and Hilding Hallnäs (1903-84), all composed music in this style. Following WWII, many of these composers would later incorporate more modern styles and techniques into their music, such as the twelve-tone method and electronic sounds. This shift, however, took place primarily within the post-WWII generation.

Following WWII, a well-known group of composers, some of whom studied with Rosenberg, met together on Mondays beginning in 1945. Many of this new generation of composers reacted strongly against the old national romanticism prevalent in Swedish music institutions for so long. This group, referred to as the *Måndagsgruppen* (the Monday Group), included Karl-Birger Blomdahl (1916-68), Sven-Erik Bäck, Ingvar Lidholm, Göte Carlid, Eric Ericson, Hans Leygraf, Ingmar Bengtsson, and Bo Wallner. The group had many purposes, one of which was the study of other composers such as Stravinsky, Bartók, Hindemith, Schoenberg, and Berg. It also functioned as a think tank on musical ideology and policy that later influenced Swedish musical life, since many of its members played prominent roles as teachers and conductors at major institutions. 11

In 1950, Pettersson began study with Karl-Birger Blomdahl, one of the leading figures of the Monday Group. Although Blomdahl was five years younger than Pettersson, he was active and arguably successful as a composer for over a decade prior to Pettersson formally beginning composition studies. Blomdahl was heavily influenced by Rosenberg but also by works that included neo-Baroque and neoclassical elements, serialism, eclecticism, and eventually electronic experimentation. He was also

<sup>11</sup> Ibid., 30.

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<sup>&</sup>lt;sup>10</sup> Gören Bergendal, "Post-war Art Music – Some Mainstreams and Profiles," *Musical Life in Sweden*, ed. Lena Roth (Stockholm: Norstedts Tryckeri AB, 1987), 22.

interested in creating a non-romantic, linear tonal language.<sup>12</sup> In this respect, he may have been a great influence on Pettersson's own music. Perhaps Blomdahl's most apparent compositional influence on Pettersson lies in Blomdahl's careful attention to motivic development in his earlier works, a characteristic that pervades Pettersson's own compositional practice.

While studying in France from 1951-53, Pettersson experimented with serial techniques under the tutelage of René Leibowitz. Leibowitz brought to France the twelve-tone techniques developed by the Schoenberg school. His pioneering books *Schoenberg et son école* (1947), *Introduction á la musique de douze sons* (1948), and *Schoenberg* (1969) established him as a significant scholar and pedagogue. His own compositions wed the French approach to instrumental color with the classical twelve-tone method and the expressive gestures characteristic of Schoenberg and his followers. Leibowitz gave many of his students their first encounter with the music of Schoenberg and Webern, since it was difficult to attain their scores immediately following the war, and indeed, this may have been the case with Pettersson. Hettersson thoroughly and progressively studied the twelve-tone method with Leibowitz, evidenced by a collection of notes and exercises in Pettersson's hand entitled *Studies with Leibowitz*.

As a musician and composition student, Pettersson was exposed to a great many developments both in Sweden and elsewhere in Europe. Although heavily

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<sup>&</sup>lt;sup>12</sup> Percy. 62.

<sup>&</sup>lt;sup>13</sup> René Leibowitz, *Schoenberg et son école* (Paris, 1947), English, *Schoenberg and His School*, trans. Dika Newlin (New York: Da Capo Press, 1970), *Introduction á la musique de douze sons* (Paris: L'Arche, 1949), and *Schoenberg* (Paris: Editions du Seuil, 1969).

<sup>&</sup>lt;sup>14</sup> Sabine Meine: 'Leibowitz, Rene', *Grove Music Online* (Accessed 14 Feb. 2007).

<sup>&</sup>lt;sup>15</sup> Allan Pettersson, *(Twelve-tone) Studies with René Leibowitz in Paris 1952*, CD-ROM, ed. Laila Barkefors (Göteborg: Beställes från Institutionen för musikvetenskap, 2002).

influenced by Leibowitz in serialism and compositional practice, Pettersson developed a unique style that is difficult to characterize as belonging exclusively to one musical language. He exploded onto the music scene in the 1950's with an evocative style, often characterized as harshly dissonant and very expressive. In his 1967 article "Leading Swedish Composers of the Twentieth Century," Gösta Percy describes him as "a decided singular personality in our musical art – like no one else and difficult to fit into prevailing formulas and isms. In its extreme subjectivity his music is in some respects "romantic". It is eruptive, involved and expressive to the point of impossibility; it is monumental in its dissonant harmonics and uniquely imaginative in its instrumentation."

Although some of Pettersson's musical passages and thematic treatment are often compared to late Mahler, it is difficult to place his works squarely within the context of central European developments. Comparisons to Mahler and other earlier composers are perhaps appropriate in some respects because Pettersson chose to continue his own musical development within the symphonic tradition, a genre that was avoided by many twentieth-century composers. Perhaps, like his teacher Blomdahl, Pettersson sought to create a new linear tonal style while reinvigorating the expansive symphonic thinking of earlier generations. Nonetheless, his music depends very little on earlier formal designs. Most proceed by introducing a group of motives and themes that are developed on a large-scale. Often the initial themes generate much of the later

<sup>&</sup>lt;sup>16</sup> Percy, 74-75.

<sup>&</sup>lt;sup>17</sup> Michael Kube states, "Zwar erinnern manche Passagen und Themenbildungen in ihrem Kuktus und ihrer offenen Gestalt an das Spätwerk Gustav Mahlers," in his article "Erst als mir diese Gesetze bekannt waren, konnte ich sie verwerfen': zu Allan Petterssons 2. Symphonie (1952/53)," *Musikgeschichte zwischen Ost- und Westeuropa: Symphonik—Musiksammlungen: Tagungsbericht Chemnitz 1995* (Sankt Augustin: Academia, 1997). Peter Revers also compares the two in his article, "Gustav Mahler und Allan Pettersson," *Das Gustav-Mahler-Fest Hamburg 1989* (Kassel, Germany: Bärenreiter, 1989), 363-373.

material through constant variation or transformation. Diatonic passages are frequently interrupted or overcome by highly chromatic passages. Nonetheless, the triad is often a representation of the purest harmonic sound, overcoming the infiltration of chromatic dissonance.<sup>18</sup>

Despite mixed reviews over the years, Pettersson's music has become well respected in Sweden and elsewhere both by critics and audiences. Today, Pettersson is highly regarded as a Swedish national composer.

Pettersson's Compositional Process and Aesthetic

Pettersson's ideals concerning composition are rooted in humanity and life experience. His own life struggle – a poor upbringing, rocky career, and eventually a terminal and slowly deteriorating disease that led to his death – is expressed in his compositional aesthetic. Dissonance plays an important expressive role for Pettersson.

Ich habe ein Violinkonzert geschrieben, dass in einer sehr symptomatischen Art und Weise bis zum Bersten mit Dissonanzen angefüllt ist. In dem Milieu, in dem ich aufgewachsen bin, habe ich den Schmerz der Menschen absorbiert. Es waren arme, kaputte, kranke und – was am schlimmsten ist – unterdrückte Menschen. Zunächst entstand in mir eine satte Empfindung davon, erst unbewuβt, dann bewuβt, und schlieβlich ein starker Druck, der nach und nach in ein intensives Ausdrucksbedürfnis überging.

Während meiner Arbeit konkretisierte sich der Schmerz ganz selbstverständlich in Dissonanz, als ob er in eine bereits fertige form gegossen würde. Fur mich war es nur eine Umwandlung, eine Transsubstantiation. Die Dissonanzen mittels Assoziation führten mich in die Tiefe (und es möglich ist, da $\beta$  ich auch viel Schlamm mit mir an die Oberfläche brachte). <sup>19</sup>

I wrote a Violin Concerto that bursts with dissonance in a very symptomatic way. In the period that I grew up, I absorbed humanity's pain. Namely, I was concerned with the poor, broken, sick, and - worst of all - oppressed people. A deep feeling took hold of me, first unconscious, then conscious, and finally a strong impression that developed into an ever more intense expression.

In the course of my work, pain materializes itself completely and understandably in dissonance, as if it were poured into an already finished form. For me it was only a transformation, a transubstantiation. The "Dissonance by means of Association" led me to the depths (and it is possible that I also brought much that was deep within me to the surface).

<sup>&</sup>lt;sup>18</sup> Rapoport, *Allan Pettersson*, 18-19.

<sup>&</sup>lt;sup>19</sup> Allan Pettersson, "Dissonanz-Schmerz," *Allan-Pettersson-Jahrbuch III*, ed. Matthias Theodor Vogt (Wuppertal: Internationalen Allan Pettersson Gesellschaft, 1988), 11-12. Author's translation.

Struggle and conflict are a significant aspect of Pettersson's music, often characterized by extreme dissonance that only very gradually resolves to consonance, rapidly changing textures, and complex chromatic lines. Struggle may also play a significant role in his compositional process. Although access to his manuscripts is limited, at least one, that of his second symphony, suggests a very intensive and detailed process of working out motives and themes and a great concern for timing (counting out measures and formulating the overall length).

Along with struggle, some of Pettersson's remarks suggest that a work must gradually mature over time. In the following passage, he relates this process to nature.

...wage ich zu denken, daß das Werk eine Einheit würde, wenn der Komponist es reifen ließe, daß das Werk es von der verwirrenden Logik der Natur geprägt ware, und das ist genau das Gegenteil von eine ein für allemal getroffenen Entscheidung, Musik "herzustellen."  $^{20}$ 

...I dare think, that a work will become a unity if the composer allows it to mature; the work will then be shaped by the tangled logic of nature, and that is the exact opposite of a decision taken once and for all, to "produce" music.

This passage suggests that the composer materializes his metaphysical experience in the score, allowing the work to mature as nature does. It is thus natural instinct that creates the work; despite being intensely divested in the details of the work, the composer must also struggle against any desire to contrive the music by formula. These principles are the foundation of Pettersson's compositional process and are realized in unique ways in his compositional practices. Motives and themes are constantly developing over long time spans giving the impression of a natural progression of materials. Furthermore, his music reflects an astute sense of timing and a careful attention to the architecture of intensity and repose.

<sup>&</sup>lt;sup>20</sup> Ibid., 12.

The Works: A Brief Summary

Pettersson's use of tonal structures and gestures and his reliance on consonance and dissonance to propel the music forward form a large part of his compositional language; therefore, much of his output may be considered extended tonality, although his later works rarely involve the conventional tonal hierarchy inherent in functional tonality. Representative of his early compositions are his *24 Barfotsänger* (*Barefoot Songs*, 1943-45), a collection of songs for piano and voice set to the composer's own poems. The poems contain themes of poverty, hardship, sorrow, and death set in a simplistic, ballad-like vocal style. Composed of primarily tertian sonorities, the songs often make use of the contrast between major and minor modes. Although mostly diatonic, some of the songs contain mild chromaticism<sup>21</sup> and extensive melodic and harmonic repetition, a characteristic that will later pervade his symphonic style. Representative of his chamber music are the *Seven Sonatas for Two Violins* (1951-62). His extensive use of color for expressive purposes and virtuosic effects in the sonatas are characteristics that will also later take shape in Pettersson's orchestral works.

Pettersson's orchestral works are an amalgamation of various compositional procedures and techniques. The *Concerto for String Orchestra No. 1* (1949) and his early symphonies: *Symphony No. 1* (1951, incomplete), *Symphony No. 2* (1952-53), *Symphony No. 3* (1954-55) and *Symphony No. 4* (1958-59) contain both diatonic and atonal aspects. In particular, the third and fourth symphonies begin to develop characteristics that are continued in later works, such as motivic repetition within

<sup>&</sup>lt;sup>21</sup> In Pettersson's earlier works, chromaticism is often of the kind encountered in the music of late-Romanticism.

melodic material (some melodies are almost ostinato-like), very dissonant<sup>22</sup> vertical sonorities resulting from a complex texture, long sustained pitches in the bass that create a slow moving atmosphere, and extensive use of coloristic effects. There is also a clear sense of linear motion in many of the voices, though it is often thwarted by repetition and by using rests to break up the line into short motives or motivic fragments. Themes or motives are developed over large spans and sections are often prompted by new thematic elements or a new thematic manipulation. The early orchestral pieces contain some neoclassical elements as well, but within them are the seeds of a chromatic intensity that will become more apparent in Pettersson's later style. In addition, it is clear from these early orchestral works that Pettersson is very concerned with the architecture of the whole, a factor that becomes even more evident as his style continues to develop.

More than a decade after writing his first orchestral work, Pettersson's symphonic style continued to evolve, becoming more unique in form, structure, and language. Characteristic of his later symphonies, *Symphony No. 5* (1962), *Symphony No. 6* (1966), *Symphony No. 7* (1967), and *Symphony No. 9* (1970) are expansive single movement works, composed of long, arch-shaped sections that continually develop a few basic motivic and thematic ideas (*Symphony No. 8* of 1969 is composed of two movements). Within them are rapid changes of texture from intense chromatic lines within complex atonal harmonies to simpler sparse textures with slower diatonic melodies. Thus blocks of music are juxtaposed, contrasting in character, tempo, dynamics, and rhythm. Despite seemingly disparate sections shaped by these elements

<sup>&</sup>lt;sup>22</sup> Here, I am referring to absolute dissonance or dissonances that are always considered dissonant, such as seconds, fourths, sevenths and all augmented or diminished intervals, versus contextual dissonances or dissonances that are, in tonal counterpoint, dissonant based on their context within a given chord.

of design, Pettersson continues in a European symphonic tradition in which composers show great concern for large-scale, teleological development. This is indicated by elements of structural coherence in which formal sections are related not simply through processes of thematic and motivic development but also by overarching structural connections that create a sense of propulsion and goal-oriented motion.

## Objective of Study

The earlier symphonies of the 1950s embody a gradual realization of Pettersson's unique symphonic style, containing both large-scale development and repetition, and reiteration. Symphony no. 5 takes these ideas to the extreme and represents the codification of techniques that are further developed in Symphonies 6 through 9. In this regard, it is often characterized as the beginning of his second phase of symphonic composition. It is a single-movement work, developing a few basic motives over the course of long, arch-shaped sections that build and recede in wave-like motion. The immediate repetition and reiteration of chromatic motives account for the intensity and length of the sections. Dissonance, particularly the minor second, plays an important role over the course of the work both harmonically and melodically within chromatically saturated motives and harmonies. All of these characteristics can be found in Symphonies 7-9 and contribute to a sense of style particular to this middle period by which large-scale teleological development is realized over the course of the symphony.

The purpose of this study is to relate how Pettersson continues the practice of

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<sup>&</sup>lt;sup>23</sup> In musical analysis it is often useful to clarify the distinction between repetition and reiteration. A repetition is something that reoccurs exactly whereas a reiteration is something that reoccurs in a subtly different form. While reiteration is quite common in music, the concept is quite apparent in Pettersson's music, especially in *Symphony no. 5*.

creating a unified whole through large-scale structural connections, a practice long associated with the symphonic genre of the late nineteenth and early twentieth centuries, while remaining innovative in aspects of form and modern musical language. To do so, I will examine both the interaction between the design of the symphony, that is, the sections as they are defined by changes in texture, dynamics, tempo, or the introduction of new motives and themes and the structure of the piece from a voiceleading perspective, involving the various basic motives and their role in the overall structure. The use of linear analysis in a post-tonal context makes necessary a section devoted to explicating the graphic notation shown in the analysis and the analytical process of determining linear progressions. In particular, the study will address the construction of the piece and how motives are developed and expanded, operating as structural determinants. In addition, the study will address the issue of chromatic saturation and how it is used melodically in voice leading and harmonically to create intensity and direction. These represent a few of the elements that will lead to an understanding of the structure of the symphony and that can be applied in further study, along with other orchestral works, toward an understanding of Pettersson's symphonic development and compositional practices.

## A Brief Survey of the Literature

The primary venues for publication on Pettersson's work include the series of *Allan Pettersson Jahrbuchs*<sup>24</sup> compiled and published from 1986 to 2001 and the various biographical books published by prominent Swedish, German, and American scholars over the last twenty years. Categories of investigation comprise musical criticism and analysis of individual compositions or genres, and the overall style periods

<sup>&</sup>lt;sup>24</sup> For a list of the *Allan Pettersson Jahrbuchs*, please refer to the classified bibliography.

of his oeuvre. In addition to these areas must be added Pettersson's own writings, most of which are limited to a general dialogue concerning his compositional process rather than specific commentary on individual works. Together, these avenues of investigation and personal commentary make up the primary literature concerning Pettersson and his work.

The *Allan Pettersson Jahrbuchs* are themselves divided into categories of investigation: biographical information about Pettersson, criticism or comparative literature concerning Pettersson's compositional practices and his place in Swedish and/or Western music history, specific analysis either of a genre of works or individual pieces, systematic and chronological catalogues of Pettersson's output, and publication of Pettersson's own writings concerning compositional process. To survey all of the articles published in each of these yearbooks would be peripheral to this study; however, a brief description of some of the more relevant articles from these journals that relate to the study at hand may be of use.

The majority of criticism concerning genres or specific compositions is directed toward a general understanding of the development and style of Pettersson's work.

Being mostly descriptive in nature, very few articles incorporate detailed structural analyses of individual works. Two representative analyses are Magdelena Manalova's article "Unendliche Melodie und Unbegrenzte Variantenbildung in Allan Petterssons

Symphonischem Denken<sup>25</sup> from the 1988 yearbook and Ivanka Stoianova's article "Die

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<sup>&</sup>lt;sup>25</sup> Magdelena Manalova, "Unendliche Melodie und Unbegrenzte Variantenbildung in Allan Petterssons Symphonischem Denken," *Allan Pettersson Jahrbuch III*, ed. Matthias Theodor Vogt (Wuppertal: Internationalen Allan Pettersson Gesellschaft, 1988), 15-31.

Raum-Symphonik von Allan Pettersson<sup>"26</sup> from the 1986 yearbook. In each article, the authors address general characteristics of Pettersson's compositional process and symphonic styles using specific aspects of various symphonies as examples. Manalova relates Pettersson's compositional process to formal syntax and to melodic aspects of Petterson's Eighth Symphony, also referring briefly to his Fifth Symphony. Her primary observation is the principle of a continuity of the semantic field in the effect of continuous, spiral-forming motion within Pettersson's symphonic form. Stoianova likewise addresses concepts of Pettersson's symphonic style in reference to "Bewegung im Raum" (motion in space) comparing it to Edgar Varèse's concept of "spatial music". By using examples from a multitude of symphonies and concertos, Stoianova describes various aspects of Pettersson's symphonic thinking including tonality, melody, texture, rhythm, form, and the creation of continuous space through long, continuously developing motives. These analyses conceptually illustrate aspects of Pettersson's formal design and particularly the means by which he achieves continuity and unity within the background of massive single-movement works. A structural voice-leading analysis will explicate these aspects and offer a more detailed account of his compositional procedures in achieving a continuous unified work. These procedures can also be related to Pettersson's own writings that describe philosophical or metaphorical concepts that guide his compositional process. In this manner, Pettersson's brief article entitled "Disonnance douleur," published in the 1988 yearbook and quoted in the introduction, is relevant to the present study. It outlines metaphorically Pettersson's own compositional process, one that can be applied to specific procedures

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<sup>&</sup>lt;sup>26</sup> Ivanka Stoianova, "Die Raum-Symphonik von Allan Pettersson, *Allan Pettersson Jahrbuch I*, ed. Matthias Theodor Vogt (Wuppertal: Internationalen Allan Pettersson Gesellschaft, 1986), 17-34.

used in the symphony.

Two important biographies should also be mentioned: Laila Barkefors' *Allan Pettersson: Det brinner en sol inom oss: en tonsättares liv och verk*<sup>27</sup> (Allan Pettersson: The Burning Sun Within Us: The Life and Works of a Composer) and Paul Rapoport's *Allan Pettersson*<sup>28</sup>. The former seeks to understand Pettersson's musical narrative technique, specifically how it "develops, is molded, sounds, and how we can understand it in relation to the spirit of the times, social reality and his personal background." Barkefors is one of the foremost Pettersson scholars in the world and her observations and criticism provide a useful foundation for placing Pettersson's Fifth Symphony in a socio-historical context. The latter is a straightforward chronological biography of Pettersson's activities accompanied by a bibliography, discography, and a brief commentary on his music. Its brevity makes it a quick reference guide to Pettersson's life and works.

Comparative criticism involving Pettersson and other composers also appears in the literature. Pettersson's musical style has often been compared to that of some of his European predecessors. Peter Revers discusses the issue of a comparison of the music of Gustav Mahler and Pettersson in his essay "Gustav Mahler und Allan Pettersson"<sup>29</sup> presented at *Das-Gustav-Mahler Fest* in Hamburg in 1989. Michel Mäckelmann gives an even more detailed comparison of the music of Pettersson and Jean Sibelius in his "Integration und offene Gestalt: zu Jean Sibelius und Allan

<sup>&</sup>lt;sup>27</sup> Laila Barkefors, *Allan Pettersson, det brinner en sol inom oss: En tonsättares liv och verk* [Allan Pettersson, the burning sun within us: A Composer's life and work] (Stockholm: Sveriges Radios Förlag, 1999).

<sup>&</sup>lt;sup>28</sup> Paul Rapoport, *Allan Pettersson* (Stockholm: Swedish Music Information Center, 1981).

<sup>&</sup>lt;sup>29</sup> Peter Revers, "Gustav Mahler und Allan Pettersson," *Das Gustav-Mahler-Fest Hamburg1989* (Kassel, Germany: Bärenreiter, 1989), 363-373.

Pettersson<sup>"30</sup> published in the 1987 yearbook. Included in this yearbook is an article that relates the similarities in the reception of the music of Danish composer Rued Langgaard (1893-1952) and the music of Pettersson. These articles provide insight into how Pettersson's own unique style builds on and differs from some of his European contemporaries and predecessors. The articles and commentary mentioned above are by no means the only articles that prove useful in the present study. They are, however, apart from being representative of the type and scope of criticism and analysis that has been undertaken with regard to Pettersson, some of the more applicable examples that assist in reinforcing peripheral issues and foundational principles that apply to a study of Pettersson's *Symphony no. 5*.

<sup>&</sup>lt;sup>30</sup> Michel Mäckelmann, "Integration und offene Gestalt: zu Jean Sibelius und Allan Pettersson," *Allan Pettersson Jahrbuch II*, ed. Matthias Theodor Vogt (Wuppertal: Internationalen Allan Pettersson Gesellschaft, 1987), 5-22.

## **CHAPTER TWO**

#### ANALYTICAL PRECEDENTS

## Linear Analysis and Schenkerian Analysis

It is clear that much twentieth century music contains remnants of tonal gesture and the tonal system of organization. In an effort to explicate post-tonal practices, new analytical approaches have been developed, while analytical approaches traditionally applied to tonal music have been altered to explicate expanded or modified tonal practices. Schenker's concept of the *Ursatz* and his analytical procedures have likewise been modified over time to assimilate more complex, extended, modified, or new musical practices. Concepts such as the *bi-tonal Ursatz*, the *meta-Ursatz*, various types of atypical *Ursätzen*, and numerous concepts associated with extensions of tonality have evolved from Schenker's original ideas but are incorporated to explicate more complex musical structures.<sup>31</sup> The concept of prolongation in post-tonal music has

<sup>&</sup>lt;sup>31</sup> The first two terms are used by Timothy L. Jackson in "The Tragic Reversed Recapitulation in the German Classical Tradition," Journal of Music Theory 40/1 (Spring, 1996): 38. The bi-tonal Ursatz contains multiple Ursätze operating simultaneously on the deep structural level of a piece. The meta-Ursatz is a structural phenomenon that occurs over the course of a multi-movement work such as a symphony in which the individual Ursätze from each movement form a part of an overarching meta-Ursatz that spans the entire work. Harald Krebs discusses this in his article "The Background Level in Some Tonally Deviating Works of Franz Schubert,' In Theory Only 8/8 (December 1985): 5-18 and in "Alternatives to Monotonality in Early Nineteenth-Century Music," Journal of Music Theory 25/1 (Spring 1981): 1-16. The two concepts may be useful when considering works of the later nineteenth and early twentieth centuries. Atypical Ursätze include those that do not encompass a tonic-dominant axis or a complete stepwise, descending line in the Urlinie to the tonic pitch. Some examples of these and other concepts of extended tonality are outlined in David Beach's article, "The Current State of Schenkerian Research," Acta Musicologica 57/2 (Jul., 1985): 275-307, including James M. Baker's, "Schenkerian Analysis and Post-Tonal Music," Aspects of Schenkerian Theory, ed. David W. Beach (New Haven, CT: Yale University Press, 1983): 153-186, "Voice-Leading in Post-Tonal Music: Suggestions for Extending Schenker's Theory," Music Analysis 9/2 (1990): 177-200, "Post-Tonal Voice-Leading," in Models of Musical Analysis: Early Twentieth-Century Music (Oxford: Blackwell, 1993): 20-41, Allen Forte's, Contemporary Tone-Structures (New York: Bureau of Publications, Columbia Univ. Teachers College, 1955), "New Approaches to the Linear Analysis of Music," JAMS 41/2 (1988): 315-48, Edward R. Pearsall's, "Harmonic Progressions and Prolongation in Post-Tonal Music," MA 10/3 (1991): 345-55, Joseph N. Straus's, "The Problem of Prolongation in Post-Tonal Music," JMT 31/1 (1987): 1-21, Roy Travis's, "Towards a New Concept of Tonality?," JMT 3/2 (1950): 257-84, Adele T. Katz's Challenges to Musical Tradition: A New Concept of Tonality (New York: Da Capo, 1972), Joel Lester's, "A Theory of

become a popular issue among theorists and has been applied to modified tonal procedures and even to some post-tonal music.<sup>32</sup> Likewise, hierarchical relationships among musical entities and the concepts of consonance and dissonance in post-tonal music are considered important issues among theorists. In this chapter, I will address each of these issues as they relate to post-tonal music and summarize some recent contributions to linear analysis of post-tonal music.

## Prolongation

The concept of prolongation is most closely associated with Schenker's theories and has been interpreted and described in various ways by later theorists. This is due in part because Schenker was not always specific in his use of the term and his use of terminology varied over the course of his writing.<sup>33</sup> In addition, changing or varied opinions about the concept of prolongation among later theorists results in varied

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Atonal Prolongations, as Used in an Analysis of the Serenade, Op. 24, by Arnold Schoenberg" (Ph.D. thesis, Princeton Univ. 1970), Robert P. Morgan's, "Dissonant Prolongations: Theoretical and Compositional Precedents." *JMT* 20 (1976): 49-91, Felix Salzer's *Structural Hearing: Tonal Coherence in Music*, 2 vols (New York: Dover, 1962), Edward M. Smaldone's *Linear Analysis of Selected Posttonal Works of Arnold Schoenberg Toward an Application of Schenkerian Concepts to Music of the Posttonal Era* (Ph.D. thesis, City Univ. of New York, 1986), Edward Laufer's, "An Approach to Linear Analysis of Some Early Twentieth-Century Compositions," in *A Composition as a Problem* 4/2, Fourth International Conference on Music Theory (Tallin, Apri. 3-5, 2003), and Olli Väisälä's, *Prolongation in Early Post-tonal Music: Analytical Examples and Theoretical Principles* (Helsinki: Sibelius Academy, 2004).

32 See Edward R. Pearsall's, "Harmonic Progressions and Prolongation in Post-Tonal Music," *MA* 10/3 (1991): 345-55), Joel Lester's, "A Theory of Atonal Prolongations, as Used in an Analysis of the Serenade, Op. 24, by Arnold Schoenberg" (Ph.D. thesis, Princeton Univ. 1970), Robert P. Morgan's,

Serenade, Op. 24, by Arnold Schoenberg" (Ph.D. thesis, Princeton Univ. 1970), Robert P. Morgan's, "Dissonant Prolongations: Theoretical and Compositional Precedents." *JMT* 20 (1976). 49-91, Roy Travis's, "Towards a New Concept of Tonality?," *JMT* 3/2 (1950): 257-84, and Joseph N. Straus's, "The Problem of Prolongation in Post-Tonal Music," *JMT* 31/1 (1987): 1-21.

<sup>&</sup>lt;sup>33</sup> In general, Schenker uses the terms *Prolongierung* and *Auskomponierung* interchangeably. In an interview, Carl Schachter defines prolongation as, "a way in which basic rules of counterpoint can become modified and transformed in actual compositions through addition of other elements, like motives or elaborate rhythms." He distinguishes it from 'composing out' which he describes as, "the expansion of an interval or chord at a later structural level." A possible later distinction is that *Auskomponierung* refers to intervals or sonorities rather than to single pitches, assuming that the chord or musical event is in condensed form and is realized over a span of time. Yet another interpretation assumes *Auskomponierung* refers only to the means of prolongation that occur horizontally, such as arppeggiation, linear progressions, register coupling, etc., as opposed to neighbor motion, pedal point, etc. Further discussion may be found in Josef Goldenberg's dissertation, "Prolongation of Seventh Chords in Tonal Music," Hebrew University, Jerusalem, September 2001, section 1.1.

definitions. I consider prolongation in a general sense as the continuation of a musical event, which is not present at every moment on the musical surface, by means of elaboration or retention.<sup>34</sup> The primary means of prolongation in tonal music is based on functional harmonic progression, in particular the descending perfect fifth root movement to tonic combined with half-step leading-tone motion. Traditionally, voice-leading techniques used to prolong either a harmony or a single pitch include linear progressions, coupling, reaching over, arpeggiation, motion from an inner voice, and unfolding.

In twentieth-century analysis, parameters recently considered secondary and reinforcing in tonal music, such as timbre, sound qualities, texture, rhythm, metric placement, register, and dynamics, are often as important as harmony, conventional voice leading, and tonal gesture in understanding the musical growth, form, and structure of a piece. These reinforcing procedures have likewise become more important in determining prolongational spans in post-tonal music. The equivalence of these parameters enables traditional techniques of prolongation to be supplemented or reinforced by procedures of prolongation such as octave displacement, repetition and reiteration, registral connection, pedal point, ostinato, accent, rhythmic or metric emphasis, and formal placement.

A distinction may be made between Schenkerian prolongation or composing-out and the extension or retention of a single pitch or sonority in post-tonal music.<sup>35</sup> Edward

<sup>&</sup>lt;sup>34</sup> This definition is based on Drabkin's encyclopedic definition on *Grove Music Online*, ed. L. Macy (Accessed [March 7, 2007]), <a href="http://www.grovemusic.com">http://www.grovemusic.com</a>, which is similar to Forte and Gilbert in *Introduction to Schenkerian Analysis* (New York: Norton, 1982), 142. What is different among these writers and later writers are the methods of prolongation and the subtle distinctions between them. Salzer defines it more broadly as the "shaping and individual treatment through elaboration, expansion and detour of the music's basic direction."

<sup>&</sup>lt;sup>35</sup> Joseph Straus contends in his article, "The Problem of Prolongation in Post-Tonal Music," that

Laufer implies a distinction when he states: "The prime sonority will be extended by what I have called *composing between the notes of the prime sonority* – a procedure analogous to Schenkerian prolongation of an interval or *composing-out* of a chord." This statement suggests a terminological distinction but does not explicitly note differences between "prolongation and *composing out the notes of the prime sonority*." While a distinction can be made between prolongation in a strict sense and an analogous process in the context of post-tonal music, I will use the term prolongation in a broader context, based on the significance of the above-mentioned parameters in defining prolongational spans in some post-tonal pieces.

All of the above-mentioned techniques of prolongation are intertwined with voice-leading and harmonic conventions and often, with the presence of consonance and dissonance. In tonal music, harmonic progression or succession is the primary means by which harmonies are prolonged. The hierarchical structure of chords within a given tonal spectrum provides a basis for how chords are prolonged on the surface and background level. Voice leading plays a role in determining means of prolongation that may include voice exchanges and neighbor motion. Some of the same techniques can be applied to extended tonality, bearing in mind that traditional notions of hierarchical structure are often still apparent in the musical structure.

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associational devices, such as the ones listed here, do not in and of themselves constitute prolongations but rather pitches become structural in a given context due to their inherent relationships. Straus summarizes four conditions for prolongation: consonance-dissonance, scale-degree, embellishment, and harmony/voice-leading. While I agree with his four conditions, I would contend that pitches or sonorities may be retained through associational devices when the traditional forms of the above-mentioned conditions are not clearly established. The question is whether this constitutes prolongation. Associational devices may not constitute prolongation in a Schenkerian sense, that is, in the way that Schenker originally intended. However, pitches and sonorities may be retained through elaboration without these conditions creating hierarchy among certain pitches. Therefore, pitches can become structural in the context of a piece or portion of a piece, not only due to their inherent relationships but also to associational and contextual factors.

#### Consonance and Dissonance

The *terms consonance* and *dissonance* are most closely associated with music; however, they are also aesthetic and cognitive terms. In music, they are often applied to specific intervals and, in the case of *dissonance*, to pitches that are not in agreement within a certain harmony. The concepts of consonance and dissonance based on strict counterpoint include the regulation and treatment of dissonances created between two pitches resulting in consonant resolution. Seconds, sevenths, and diminished and augmented intervals are considered absolute dissonances.<sup>36</sup> All other intervals are considered consonant. By contrast, the tonal concept of dissonance considers harmonic context. A single pitch is considered consonant or dissonant based on its function within the sonority, often called an essential or chordal dissonance. Therefore, absolute dissonances can be considered consonant within the context of a harmony.

The concepts of consonance and dissonance are closely associated with the development of modal and tonal music. They are somewhat problematic due to their shifting meanings over the course of music history, not to mention they are essentially "fluctual terms". That is, they describe the combination of pitches as a graded scale.

Over the course of music history that graded scale has changed. Traditionally, dissonance in tonal music is considered a means of expression, gravitating toward consonant resolution. By the time of the twentieth century, some composers viewed dissonances on an equal level with consonances. For example, Schoenberg upheld that

<sup>&</sup>lt;sup>36</sup> The distinction between absolute dissonances and contextual dissonances gradually accompanied developments in compositional practice from the seventeenth century onward. While probably not the first, Kirnberger distinguishes the two in his, "Die Kunst des reinen Satzes in der Musik, aus sicheren Grundsätzen hergeleitet und mit deutlichen Beyspielen erlaütert, i (1771/R; with new title-page, Berlin and Königsberg, 1774); ii (Berlin and Königsberg, 1776–9/R); both vols. (2/1793; Eng. trans., 1982, as *The Art of Strict Musical Composition*). A modern interpretation is given by Ernst Kurth in E. Kurth: *Die Voraussetzungen der theoretischen Harmonik und der tonalen Darstellungssysteme* (Berne, 1913/R). A more thorough discussion is given in the above-cited Goldenberg dissertation, section 1.3.

resolution of dissonance was not necessary and that there are no preexisting tendencies with relation to dissonance within a given sonority.<sup>37</sup> Often, traditional concepts of consonance and dissonance associated with tonality were a compositional preference rather than a tenet and might be integrated only in segments of a post-tonal piece.

Due to the evolving use of consonance and dissonance in late nineteenth- and early twentieth-century music, recent analyses have focused on the possibility of prolonging dissonant sonorities or contrapuntal chords.<sup>38</sup> While much post-tonal music may completely abandon traditional concepts of consonance and dissonance, many composers still rely on the expressive role of dissonance in relation to consonance, just as in tonal music. In extended tonality, dissonance may still take on this role while not conforming to traditional resolution. In linear analysis, context (both local and the piece as a whole) plays a role in determining the possibility of dissonant prolongation or the use of dissonance and consonance in a more traditional manner. As the harmonic vocabulary expands in post-tonal music, sonorities that are traditionally considered dissonant may be structurally significant within a certain context. While a distinction is not always clear, Pettersson's Symphony no. 5 contains both absolute and contextual dissonances. While absolute dissonances dominate, some passages still play on the use of contextual dissonances by eluding to common tonal progressions. In Chapter Three, I will address a particular passage that uses dissonance in a more traditional manner.

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<sup>&</sup>lt;sup>37</sup> Arnold Schoenberg, *Style and Idea*, ed. D. Newlin (New York, 1950) [15 essays].

<sup>&</sup>lt;sup>38</sup> See Robert Morgan, "Dissonant Prolongation: Theoretical and Compositional Precedents."

## Hierarchical Relationships in Post-tonal Music

In tonal music, prolongation of a tonal center is established through linear or harmonic progression. On the most basic level, this occurs by root movement of a fifth supporting a descending linear progression in the upper voice. As a result, a hierarchy of pitches and sonorities is established primarily through tonal relationships.

Hierarchical structure and the building of a whole from individual parts that bear meaning as a result of their relations have not disappeared in post-tonal music. Primary sonorities can assume higher structural significance within the context of a specific piece based on nontraditional relationships and by means of extended techniques of prolongation.<sup>39</sup>

## Examples of Linear Analysis

Compositional techniques and concepts common to tonal music such as prolongation, consonance and dissonance, and hierarchical structure are often applicable and useful when applied to modified or extended tonal procedures and to newly defined relationships between pitches and sonorities in post-tonal music. In many cases, the concepts have not entirely changed, only the musical context in which they appear and the means by which they are achieved. It is perhaps on this basis that many analysts have adapted new analytical approaches to post-tonal music using Schenker only as a model and in some cases only as a distant inspiration. As stated by Edward Smaldone about his teacher Henry Weinberg, a composer and analyst who like many others developed his own approach to post-tonal analysis based on Schenker:

<sup>&</sup>lt;sup>39</sup> Alban Berg also talks about subordination of individual voices in some atonal music as well, stating: "The essence of polyphony of course consists in the interordination and subordination of voices, voices, that is, which have a life of their own. Her again we are dealing with the harmonic aspect; I mean, the individual lives of all the voices give rise to a second, a new life, that of the collective sound…" in "What is Atonality" in *Composers of Modern Musical Culture: The Origins of Modernism, 1900-1930*," 67.

Weinberg has adapted Schenker's approach to tonal music as a conceptual model. As such, post-tonal musical texture is interpreted through an approach to analysis that appreciates the multi-leveled dimension in music as well as aspects of voice leading, prolongation, the post-tonal equivalent of harmonic and nonharmonic tones, and the intuitively perceived process of beginning, middle, and end without reference to which musical art would sever its ties to time as a meaningful factor. 40

Though not always explicitly, many analysts such as Smaldone and Weinberg make a distinction between Schenkerian analysis and linear analysis. While the former incorporates the principles of strict counterpoint that underlie all foreground events in tonal music, the latter is expanded to contrapuntal motion between functional or nonfunctional sonorities that does not necessarily follow traditional contrapuntal procedures. This second designation or extension is useful as an approach to analysis of some post-tonal music. Indeed, the distinction between Schenkerian analysis and linear analysis is not always made clear because the latter may be viewed as an extension of Schenkerian concepts. Edward Laufer offers this perspective in a footnote to "An Approach to Linear Analysis of Some Early Twentieth-Century Compositions,"

Having studied Schenker's approach for decades, and indeed as a 'purist,' I nonetheless found myself – subconsciously, without specific intent – considering early twentieth-century music in much the same way as the music of the classical masters. Without setting out to extend Schenkerian techniques, I came upon a natural, inevitable continuation of his approach which acknowledges that music is a continuum wherein one does perceive great twentieth-century works essentially like earlier masterpieces. One cannot therefore speak of a 'falsifying' or 'improvement' of Schenker's approach; but indeed rather of a testimonial to the revealing, broadly encompassing nature of his viewpoints.<sup>41</sup>

Linear analysis may thus be defined in general terms as the analysis of linear progressions and voice-leading procedures. It adopts concepts from Schenkerian analysis such as hierarchical levels, prolongation or retention of a pitch or sonority, and structurally significant pitches or sonorities along with graphic illustrations. These

<sup>41</sup> Edward Laufer, "An Approach to Linear Analysis of Some Early Twentieth-Century Compositions," *Fourth International Conference on Music Theory*, Estonian Academy of Music, 3-5 April, 2003.

<sup>&</sup>lt;sup>40</sup> Edward M. Smaldone, "Linear Analysis of Selected Posttonal Works of Arnold Schoenberg: Toward an Application of Schenkerian Concepts to Music of the Posttonal Era" (Ph.D. diss., City University of New York, 1986).

concepts are considered in the context of modified or extended tonal procedures or even nontraditional procedures.<sup>42</sup> Analytical decisions are based on individual features within the music itself. These procedures occur in contrapuntal, harmonic, melodic, rhythmic, metric, and formal parameters and may be unique to the composer or to the specific piece. Although the compositional forms and harmonic language of much posttonal music may not conform to conventional tonal models, this linear approach offers an effective way of interpreting the structure of a piece and may be useful for revealing a multitude of important features including the relationship between parameters, the structural significance of various sonorities, prolongation of sonorities through various voice-leading procedures, and even concepts more closely associated with strictly tonal music such as *motivic parallelism*, *progressive motivic enlargement*, or *hidden repetition*.<sup>43</sup> Furthermore, this approach can also shed light on the interaction between structure and design in a work and the relation of modified tonal procedures to conventional tonal practice.

Examples of a linear approach to post-tonal music have been presented in essays by some of the more prominent theorists in the field. In his essay "Towards A New Concept of Tonality," Roy Travis investigates the question: "To what extent can the techniques of tonal coherence, as developed in the rich and diverse language of

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<sup>&</sup>lt;sup>42</sup> The concept of hierarchical levels did not originate with Schenker but was one of the foundations of his theory.

<sup>&</sup>lt;sup>43</sup> The term *motivic parallelism* is one of Schenker's notions expounded upon by Charles Burkhart in his article, "Schenker's Motivic Parallelisms," *JMT* 22, (1978): 145-175. The term *progressive motivic enlargement* is described by Roger Kamien in his article, "Aspects of Motivic Elaboration in the Opening Movement of Haydn's Piano Sonata in C-Sharp Minor," *Aspects of Schenkerian Theory*, ed. David Beach (New Haven: Yale Univ. Press, 1983), 77-93. The term *hidden repetition* is likewise discussed in John Rothgeb's article, "Thematic Content: A Schenkerian View," of the same publication. Although there may be subtle differences between these three concepts, they originate from Schenker's idea of motives that are composed out over larger spans of music. This is particularly significant for the study at hand, as I will propose a process analogous to motivic enlargement in Pettersson's Fifth Symphony.

Western music, be applied to certain sonorities and melodic procedures characteristic of the newest music?"<sup>44</sup> He offers a broad definition of tonal as "a musical motion which unfolds through time a particular tone, interval, or chord…by means of its structure and prolongations." For Travis, chords other than the tonic triad can serve as "primordial tonic sonorities." Based on this definition, he investigates three works by Stravinsky and Bartók, ultimately demonstrating how voice-leading analysis can be effective in examining non-traditional harmonic prolongations.

"referential sonorities". Laufer's linear analyses of early twentieth-century music include works by Schoenberg, Webern, Debussy, Bartók, Dallapiccola, Sessions, and Tubin. 45 In a presentation entitled "A Linear Approach to Some Twentieth Century Compositions," given at the *McGill Theory Symposium* in 1986, Laufer demonstrates the existence of structural levels and linear voice leading defined by contextual factors in works by Schoenberg and Webern. 46 These contextual factors may include register, phrasing, rhythm, dynamics, texture, and motive. (I shall return to one of Laufer's analyses in detail.) Indeed, Timothy L. Jackson, in his article "Schoenberg's Op. 14 Songs: Textual Sources and Analytical Perception," notes how these contextual factors can assume greater significance in defining structure in post-tonal music than in tonal music. 47 His article uses linear analysis based on contextual factors to demonstrate how

<sup>&</sup>lt;sup>44</sup> Roy Travis, "Towards A New Concept of Tonality?" *Journal of Music Theory*, 3 (1959): 257.

<sup>&</sup>lt;sup>45</sup> Laufer's analyses include, "An Approach to Linear Analysis of Some Early 20<sup>th</sup>-Century Compositions," *Fourth International Conference on Music Theory*, Estonian Academy of Music, 3-5 April, 2003 and "A Linear Approach to Some Twentieth Century Compositions," *McGill Theory Symposium*, 14 March, 1986. In addition there are some unpublished graphic analyses of Schoenberg's Op. 11/1 and others.

<sup>46</sup> Laufer, "A Linear Approach to Some Twentieth Century Music."

<sup>&</sup>lt;sup>47</sup> Timothy L. Jackson, "Schoenberg's Op. 14 Songs: Textual Sources and Analytical Perception," *Theory and Practice XIV* (1989/90): 38.

Schoenberg achieves correlation between poetic ideas and voice leading in his Op. 14 songs.48

Felix Salzer also defines tonality in a broader sense in his book Structural Hearing as "prolonged motion within the framework of a single-key determining progression."49 For Salzer, the tonic-dominant axis is not the only background in which prolongation can occur; contrapuntal prolongations can also assume structural significance (p. 204).

Robert P. Morgan, in his article "Dissonant Prolongation: Theoretical and Compositional Precedents," sets up possible types of dissonant prolongation established by composers in the nineteenth century.<sup>50</sup> His analyses cover works by Beethoven, Schubert, Listz, and Wagner. Within his analyses is the paramount concept that a contrapuntal chord or a dissonant chord may serve as structurally significant in a contextual structure-defining progression as opposed to tonal functionality.

In his article entitled "Post-Tonal Voice Leading," James Baker uses a linear approach to relate unconventional or modified tonal procedures to conventional tonal procedures in works by Wolf, Ives, Debussy and Bartók.<sup>51</sup> He uses the term post tonal to refer to music "in which structure is based on extensions or modifications of conventional tonal procedures." The first of his analyses, Hugo Wolf's Das verlassene *Mägdlein*, illustrates the use of traditional graphing techniques applied to a post-tonal piece. He makes a case for prolongation of an A-minor tonic sonority with an

<sup>&</sup>lt;sup>48</sup> Ibid., 38.

<sup>&</sup>lt;sup>49</sup> Felix Salzer, Structural Hearing: Tonal Coherence in Music, 2 Vols. (New York: Dover Publications,

<sup>&</sup>lt;sup>50</sup> Robert P. Morgan, "Dissonant Prolongation: Theoretical and Compositional Precedents, *Journal of* Music Theory, 20 (1976): 49-91.

<sup>&</sup>lt;sup>51</sup> James M. Baker, "Post-Tonal Voice-Leading," *Early Twentieth-Century Music*, ed. Jonathan Dunsby Oxford: Blackwell, 1993), 20-41.

unconventional bass progression supporting a descending *Urlinie* from  $\hat{5}$ . Included in his analysis are contrapuntal and analytical concepts familiar to Schenkerian analysis such as implied tones, pitches with auxiliary functions, voice exchanges, unfolding, and octave displacement. Important to note is the absence of an *Ursatz*, a concept that Baker has apparently reserved as a more traditional Schenkerian concept. Characteristics common to much post-tonal music, such as obtaining tonality by implication as opposed to direct statement and the use of chromatic saturation, are considered in the course of this particular analysis. This approach to analysis can offer a unique insight into the particular methods of voice leading associated with post-tonal pieces by adapting and expanding the traditional concepts and terminology associated with Schenkerian analysis.

Baker also directly addresses this issue in his article "Schenkerian Analysis and Post-Tonal Music" by surveying some of the more prominent attempts to apply Schenker's theories of prolongation and tonal hierarchy to post-tonal music. His assessment reveals two primary positions on the use of Schenkerian analysis with post-tonal music: those "strict constructionists who consider as tonal only those works that conform exactly to Schenker's formulations" and "a larger group of theorists who have adopted a much more liberal approach, finding prolongations and stratified structure even in the absence of a tonic-dominant tonal axis…some seeking to establish the existence of prolongations of triads and even of tonal functional progressions in nontriadic music" (p. 167).

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<sup>&</sup>lt;sup>52</sup> James M. Baker, "Schenkerian Analysis and Post-Tonal Music," *Aspects of Schenkerian Theory*, ed. David Beach (New Haven: Yale University Press, 1983), 153-188.

Linear Analysis Applied to Schoenberg's Op. 11/1

In an effort to explicate some of the above-mentioned concepts, I will now look more closely at a specific linear analysis. Edward Laufer's unpublished analysis of Schoenberg's Op. 11/1 demonstrates the use of linear analysis to reveal a primordial pitch collection that plays an important role in the synthesis of the piece. As was mentioned above, one of Laufer's analytical concepts is the "referential sonority." This sonority serves as the primary structural entity from which a piece is generated and is often composed out over sections or an entire piece. In his graphic analysis of Op. 11/1, Laufer draws attention to the initial three notes, B-G‡-G¹, with a beam and designates them as the primary referential sonority along with an E that is later confirmed in the final section (see Ex. 2.1).<sup>53</sup> Over the course of the first eleven measures, this referential sonority occurs both melodically, composed out over the entire eleven measures, and harmonically, in b. 3 m.4, b.1 m. 5, b. 2-3 m. 11, ect. He also refers to a voice exchange that occurs between the G#/G in the outer voices of b.3 m. 4 and the G#/G in the outer voices of b. 2 m. 10 and b. 3-4 m. 11 spanning the antecedent/consequent phrase. The decision about what constitutes the referential sonority seems to be based on many factors. One contextual factor is the sonority's placement within the design of the first two phrases and subsequently its formal placement within the piece as a whole. The direction of the first antecedent phrase is towards the sustained G#-B-G harmony in m. 4 and its subsequent reiteration over the remainder of the antecedent phrase in mm. 6-8. This is followed by its placement at the end of the consequent phrase in m. 11 confirming it as the ultimate goal. According to

<sup>&</sup>lt;sup>53</sup> I believe this analysis was delivered at a conference at Columbia University in 1991.

this reading, other pitches are interpreted in the middleground as passing tones, neighbor tones or extensions of the primary pitches. Laufer differentiates vocal strands in the right hand of the piano part. The upper-most strand consists of a descending third from the initial B in m. 1 through the A in m. 2 to the G in m. 4. The A is treated as a passing note within the referential sonority. A second strand consists of the referential sonority in melodic form from the initial B to G in the second measure. Motion to an inner voice continues from the G through F and finally to E in m. 3. The B sounding in m. 2 adds yet another layer that is consistent throughout the antecedent phrase in m. 1-8. C and B<sub>b</sub> surround the B, acting as upper and lower neighbors in mm. 4-5 and 6-7. Often, decisions about what constitutes less essential tones are based on the relationship among the pitches on the surface level to the pitches of the referential sonority. Gesture and direction also play a role in defining those relationships.

An important feature of Laufer's graphic analysis is the representation of the melodic expansion of the referential sonority over the course of the antecedent/consequent phrase. The initial three pitches of the piece are thus structurally important in that they guide the harmonic design of the first two phrases. Indeed, what Laufer has termed the referential sonority plays a role in the deep structural level of the entire piece. Its formal placement delineates its role as a primary sonority. Particularly, its appearance in m. 53 marks the return of the opening phrases, now with the Eb present both in the bass and in the top voice in m. 55. Laufer also reads the primary sonority composed out from the middle of the retransition in m. 50 to the end of the returning antecedent phrase through stepwise descending linear motion.

The design and structure are for the most part in congruence in Laufer's reading. The piece as a whole consists of three sections: main in mm. 1-33, middle in mm.34-48, retransition in mm. 49-52, and final in mm. 53-64. This formal design reflects the structural motion from the referential sonority, which governs the main section, to a secondary referential sonority, F-Al-Al, which dominates the middle section. The referential sonority returns in the final section.

The analyses described above are only a handful of analyses that demonstrate the possibility of applying Schenker's theories of prolongational procedures to music outside of the realm of Schenker's own investigations. These procedures, among others first pointed out by Schenker, can be considered among the most adaptable to the broader context of some post-tonal music. Other more contemporary analytical techniques are in many cases necessary for a full understanding of some pieces; however, it is advantageous to consider how the analyst can utilize concepts from traditional analytical techniques in the context of new musical practices.

Linear Analysis Applied to Pettersson's Fifth Symphony

While its use of dissonant harmonies and formal and structural procedures inconsistent with strict conventional tonal models would seem to complicate any use of this type of analysis, Pettersson's *Symphony no. 5* can be considered extended tonality, establishing a variation of a conventional harmonic background through prolongation of dissonant and nontriadic harmonies. Linear analysis, in the sense of showing contrapuntal motion between triadic and non-triadic sonorities that are not necessarily functional by means of contextual factors, can provide a clear understanding of how contrapuntal chords and basic fundamental motives are structurally significant and how

they interact with the design of the piece. More importantly, linear analysis can provide insight into the overall structural unity of a design that is made up of a continuous multitude of successive, arch-shaped sections, often with seemingly little overall coherence. Motives that are revealed in deeper structural levels can play an important role in establishing unity between design sections by appearing in multiple sections either in original form or in variation. Moreover, linear analysis enables the analyst to establish contrapuntal lines out of chromatic, multidirectional motives that often saturate the voices.

## **Texture and Linear Analysis**

Voice-leading textures dominate in *Symphony no. 5*. Linear motion, motion by half- or whole-step, may occur as local events or may span significant portions of the piece. Prolongation of pitch classes or harmonic constructions, linear progressions, and hierarchical relationships occur in the symphony and function in ways similar to their counterparts in more traditional tonal music. Pitch classes or harmonic constructions may be prolonged throughout a section, therefore functioning as important structural elements. Linear analysis provides a representation of linear progressions that are aurally perceived at the beginning and end as ascending or descending motions, often within the context of harmonic constructions. Orchestration, register, rhythm, metric placement, accents, gesture, dynamics, and other parameters delineate linear progressions in much the same way that they do in a strictly tonal context. These parameters assist, along with harmonic constructions, in designating a certain parsing of a linear motion and in determining which pitch classes are structurally important on all levels. Harmonic constructions in which certain voice-leading procedures occur are not

always triadic; therefore, it is all the more necessary to rely on other parameters for clarification. Consonance and dissonance, as stated in Chapter One, play an important expressive role in Pettersson's music; therefore, the harmonic interaction between individual voices in accordance with consonance and dissonance is considered in choosing structurally important pitch classes within linear progressions.

# **Graphic Symbols**

My analysis of this piece includes many graphs. In these graphs, notational conventions are used to provide clarification. The basic meanings associated with the graphic notation are adopted from those widely used in Schenkerian analysis of tonal music. In this study, dotted slurs indicate prolongation of a single pitch class, solid slurs indicate either adjacent motion or enclose linear motions, both as local and large-scale events. Greater note values and longer stem lengths indicate hierarchical relationships. Broken beams indicate the prolongation of noncontiguous pitches of the same pitch class while solid beams indicate linear progressions of pitches on the same hierarchical level. Solid beams do not always indicate the presence of an *Ursatz* in the sense of Schenkerian analysis. Lines drawn between staves indicate voice-exchange or the continuation of a single pitch-class into another voice. Arrows drawn between staves from one pitch-class to an adjacent pitch-class indicate linear motion between voices represented on two different staves.

#### CHAPTER THREE

### LINEAR PROGRESSIONS

In previous chapters, I discussed topics concerning a general history of Pettersson, the current state of Pettersson research, and some examples of linear analysis applied to post-tonal music. This chapter addresses different types of linear progressions from *Symphony no. 5* intended to demonstrate, on a small scale, a linear approach to analysis that will be applied on a large scale to the entire symphony.

Various types of linear motion may result in *linear progressions*. In New Grove's Encyclopedia, William Drabkin defines a *linear progression* or *Zug* as, "in Schenkerian analysis, a conjunct diatonic succession of notes, encompassing a certain interval, by which movement from one pitch, register or part to another is established; hence one of the chief methods of prolongation of a basic musical structure."54 As is stated here, this definition is specific to Schenkerian analysis and usually involves the prolongation or composing out of a particular chord or chords within a given diatonic progression. In his dissertation, "New Approaches to the Analysis of Webern," Edward Murray defines voice-leading textures as comprising two or more coexistent linear progressions, each of which occupies a different register. 55 This textural description is useful when applied to Pettersson's Symphony no. 5, which primarily consists of simultaneous linear progressions that do not necessarily take part in a harmonic progression but are rather independently coexisting. Voice-leading conventions that were followed by most composers from around 1600 to 1900 are not common but are occasionally incorporated. In this manner, patterns that resemble conventional voice-leading models

<sup>54</sup> William Drabkin: 'Zug,' *Grove Music Online* ed. L. Macy (Accessed 24 June 2006), http://www.grovemusic.com.

<sup>&</sup>lt;sup>55</sup> Edward Murray, "New Approaches to the Analysis of Webern" (Yale University, Ph.D. Diss, 1979), 24.

are often employed, but within a new harmonic context. Therefore, for the purposes of this study, a broader use of the term *linear progression* seems necessary, which takes into account diatonic or chromatic successions of notes that may or may not constitute prolongation of a particular harmonic entity and may not conform to the more common types of linear progressions encountered in Schenker's analyses of tonal music, in which the notes within a linear progression are scale degrees or steps within a given key. Linear progressions may be established with a clear beginning and end based on a multitude of contextual factors, such as notions of consonance and dissonance, harmony, rhythm, meter, register, formal placement and design, and reinforced by musical features such as repetition, sequence, pedal point, ostinato, and accents.

Some examples of linear progressions encountered throughout the symphony will now be described in an effort to clarify analytical procedure. The following examples will focus on shorter passages and on the surface or foreground of the music. A discussion of analytical interpretations made on a minute or foreground level may seem tedious in the context of the entire symphony; however, it is helpful to provide a model for how those interpretations are arrived at, a process that is often more effectively illustrated on the minute level. The following examples and are approached according to the context or parameter that affects a particular analysis of these linear progressions. They include (1) consonance, dissonance, and goal-directed motion as determinants of liner progressions, (2) motivic cells as building blocks of linear progressions, and (3) register as a determinant of linear progressions. Naturally, much of the analysis is based on multiple parameters acting simultaneously. Thus the reader can assess the

analysis of certain segments along with the analytical interpretations that shaped the analysis.

Consonance, Dissonance, and Goal-Directed Motion as Determinants of Linear Progression

Während meiner Arbeit konkretisierte sich der Schmerz ganz selbstverständlich in Dissonanz, als ob er in eine bereits fertige Form gegossen würde. Für mich war es nur eine Umwandlung, eine Transsubstantiation. Die "Dissonanzen mittels Assoziation" führten mich in die Tiefe (und es ist möglich, daß ichauch viel Schlamm mit mir an die Oberfläche brachte). Wenn ich mich \ einem Dreiklang näherte - übrigens immer einem Molldreiklang – ahnte ich einen Frieden jenseits aller Vernunft und strebte ihn an. Aber wenni ch ihn erreicht hatte, schien er mir formlos zu sein, und ich konnte ihn nicht lebendig machen. Trotz seiner Konsonanz war er nicht in der Lage, Konsonanz zu bilden oder Ruhe zu vermitteln. Der Schmerz fand keine Ruhe, man konnte ihn nur zum Schweigen bringen - er war wie die unterdrückten Menschen, die ich früher gekannt hatte. <sup>56</sup>

- Allan Pettersson

In the course of my work pain materializes itself completely and obviously in dissonance, as if it were poured into an already finished form. For me it was only a transformation, a transubstantiation. The "Dissonances by means of Association" led me to the deep (and it is possible that I also brought with me a lot of muck that was buried beneath up to the surface). When I approached a triad – incidently, always a minor triad – I sensed a freedom beyond all reason and strived for it. However when I had attained it, it appeared to be formless to me and I could not bring it to life. Despite the consonance of the triad, it was not in the position to create a sense of consonance or of peace. Pain has no peace; one could only bring it to silence. The triad was like suppressed humanity that I had known earlier.

Pettersson is not specific about his concepts of consonance and dissonance with regard to intervals or chords. However, it is clear from the above statement that he considers consonance and dissonance and tertian harmonies to be a significant part of his musical language and that dissonance plays a principal expressive role in his music. The following excerpt, mm. 1-35, illustrates how more traditional concepts of consonance and dissonance and goal-directed motion help to establish a top-voice linear progression, E-D#-C#-C, which is based on the initial motive, D-E-D#-C#-C, hereafter referred to as motive A. This particular linear progression is composed out

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<sup>&</sup>lt;sup>56</sup> Allan Pettersson, "Dissonanz als Schmerz," *Allan Pettersson Jahrbuch,* Internationalen-Allan-Pettersson-Gesellschaft von Michael Kube (IAPG) (Säarbrucken: Pfau-Verlag, 1988),11.

over the course of the introduction and Parts 1 and 2 of the symphony, providing the main structural top voice descent, much like the Schenkerian top-voice descent from 3 to 1. A common tonal harmonic succession underlies the opening section of the introduction and provides a basis for this top-voice descent.

The opening motive A is stated in mm. 1-22 in instrumental couplets occurring in stretto. Its initial statement in mm. 1-5 occurs in the cornet I and viola III parts (see C score in Example 3.1). The pitch classes are registrally displaced, but form a stepwise linear motion ascending from D to E and then descending to C\(\frac{1}{2}\). This is perhaps the most common type of linear motion, in which adjacent pitch classes are separated in the musical foreground. In this case, register plays little role in defining the linear motion but rather establishes a melodic shape of intervallic importance. That is, the original form of motive A in which the pitch classes are registrally displaced often signals a return or the beginning of a new section, therefore playing an important role in the design later in the symphony. The stepwise linear motion of the motive is confirmed by the entrance of the trombone I and viola I in mm. 5-8, where all pitch classes occur in the same register.

Further analysis of motive A based on its relationship with the supporting bass motion takes into account points of consonance and dissonance that help to establish structurally significant pitch classes defining the beginning and end of a top-voice linear progression from E to C. The stretto entrance of the motive creates a constant sounding dissonant minor second interval between two or more voices at particular points. For instance, the third note of the motive, D‡, sounds against the first note of the motive, D‡, as a result of the second instrumental couplet entering in m. 3. This same minor second occurs again in m. 5 with the entrance of the third instrumental couplet. Likewise, the

fourth note of the motive, C<sup>‡</sup>, and the first note of the motive, D<sup>‡</sup>, sound together in m. 7 as a result of the entrance of the fourth instrumental couplet. The sustained bass pitch B entering in m. 3, also sounds against the last note of the motive, C<sup>‡</sup>, beginning in m. 5. Consonance is reached in m. 12 when the bass voice moves to C and is aligned with E in the upper voice, only to be quickly overcome by the continuation of the motive in stretto up to m. 22. As consonance is achieved, C and E become structurally important pitch classes, the C also serving as the ultimate goal of the motive.

These observations alone do not establish C and E as structurally significant pitch classes within the first section or in the piece as a whole. One could also suggest that the ultimate goal of the motive is to reach C in a descent from E. When consonance is achieved in m. 12, the remaining repetitions of the motive in each voice of the stretto withhold the arrival on the structural C\(^1\) until m. 24, overlapping it with the following material. The withholding of the final pitch of the motive aurally suggests a goal-directed motion towards that pitch, reinforcing the descending linear progression from E to C and the structural importance of C as a point of destination (refer again to score in Example 3.1). Finally, repetitions of motive A pause and sustain the E in the trombone I and viola I parts in m. 19 and the cornet III and viola IV parts in m. 21, further reinforcing the structural importance of the E.

In mm. 24-33, a series of successive tertian chords resembles the common tonal procedure of a dissonant six-four suspension above the bass pitch B resolving to a consonant five-three position (see reduction in Example 3.2). Indeed, the aural effect suggests movement from and E minor chord with an added C sustained above the bass note B moving to a B major chord in mm. 31-33. The C and E of the initial chord in m.

24 are retained from the above-mentioned structural third (C-E), which arrives in m. 12. This is graphically illustrated in Example 3.3, which shows the retention of E and C in the top voice and middle voice in mm. 12-24 and the motion from C to B in the bottom voice in m. 20. Therefore, the C<sup>1</sup> in the middle voice is sustained through the "B sixfour" harmony, maintaining the dissonant minor second clash with the bass.

The arppeggiation of E-G-B in the violin I above the lowest sounding voice B in the bassoon reinforces the harmonic context of an E minor chord with an added C. While the E and G above the bass note B descend to D# and F#, the descent in the clarinet and viola parts from C to F# acts as an inner voice. The A in mm. 27-28 is a passing tone between the B and G that are chord tones within the harmonic context of E minor. While the A could be interpreted as an added dissonant tone, there is no indication of this in preceding or proceeding harmonies. Whereas the C, which operates as an added dissonant tone, can be interpreted as being held over from the previous harmonic context. As is often the case on the musical surface, pitches within a harmony do not always occur simultaneously but can be composed out horizontally in musical time. This is the case here, where the F# in m. 29, a chord tone in the B major harmony, not completely achieved until m. 31, arrives early against the sustained fourth between B and E in the lower voices. One may then question the appearance of the E-G arppeggiation in the flutes in m. 30. Does this force a reinterpretation of the early appearance of the F# in m. 29 as a lower neighbor to the G that occurs in m. 30 in the flute part, subsequently replicating the contrapuntal motion from G to F#? A rest follows

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 $<sup>^{57}</sup>$  This label does not imply  $V_4^6$ , which is anachronistic to functional harmony, but only the intervals above the bass pitch B.

the F# in the clarinet, ceasing the motion of those voices; however, the F# in the cello voice continues to sustain, distinguishing it as a separate voice from the texture change in m. 30. The appearance of the flute in arppeggiation at the texture change would seem to be a continuation of the violin I part in the preceding measures. The two voices are thus separate and on the surface level do not require interpretation as a single voice entity.

The structural E of the top voice descends over the course of the above-mentioned tonal succession to D#. The remaining notes of the top voice linear progression, C# and C\(\bar{\pi}\), are not supported by this tonal succession but appear in mm. 34-35 registrally displaced, just as they were in the opening measures. Thus the top voice in mm. 24-35 completes the descent to the structural C. This descent is overlapped with the restatement of motive A in the viola in mm. 33-35 and the appearance of the dissonant major seventh, E-D# in the violin II.

While mm. 1-35 of the introduction do not consist of a functional tonal progression, a multitude of other factors such as consonance and dissonance, harmonic context, orchestration, and figuration help to establish structural pitches as well as a clear upper-voice linear progression. In particular, the constant repetition of motive A and the withholding of arrival on its final pitch C provides a sense of goal directed motion. Furthermore, harmonization of some of the pitches of the motive within a succession of harmonies that resemble a common tonal progression also provides a sense of goal-directed motion by establishing a dissonant suspension resolving to consonance.

# Motivic Cells as Building Blocks of Linear Progression

A second type of linear progression is based on the use of motivic cells as building blocks of linear motion. Pettersson often uses chains of different motives to generate linear progressions throughout the voices. Parsing of these linear progressions is based on a multitude of contextual factors that establish a clear beginning and end and emphasize certain pitches rather than a harmonic context, in which intervals or notes of a chord belonging to a particular harmony are composed out linearly. Before providing a few examples, I will first discuss the significance that motive plays in Symphony no. 5 in order to provide a context for the use of motive as the main source of linear progression.

Over the course of the symphony, Pettersson develops a few motives to create a large amount of musical material. This technique involves repetition of a small group of motives in various contexts. Motive A, provides a basis for many of the motives present in the first two parts of the symphony. The notes of the opening motive, D-E-D#-C#-C#, can be represented in set theory as pitch-class set [0,1,2,3,4] belonging to set class (01234). This is a chromatically saturated group of pitches that can be represented intervallically as +2-1-2-1, where each interval is represented by the number of semitones between pitches and a plus or minus sign is added before the number to indicate ascending (+) or descending (-) motion. The set class (0123), as subset of the initial motive, reappears in different intervallic combinations over the course of Parts 1 and 2. Pettersson's use of this particular set class to create a large amount of motivic material is illustrated in Example 3.4. Given here are the first appearances of multiple pitch-class sets belonging to set class (0123) along with the various intervals that are

used to construct motives based on set class (0123) and the measures in which those same contours appear in different pitch-class sets. The first three intervals of motive A, +2-1-2, is just one of the possible intervallic combinations of subset (0123), recurring in a number of places, including mm. 513, 519, 526, and 534-558 (shown in m. 12 in Example 3.4).

As can be seen in Example 3.4, almost every possible intervallic realization of set class (0123) is utilized to generate motives. In this way, Pettersson has taken a small set class of chromatically adjacent pitches and worked out different possible intervallic arrangements within the motives to generate material. This gives the aural impression of constant development. Moreover, the set class itself is generated from the primary motive, which guides the structure of the opening section and ultimately that of the entire symphony.

Of course, other motives are used in conjunction with these motives, mostly in the latter part of the symphony, that do not belong to this set class. The motive, B♭-F-F♯ or B♭-F-G♭, hereafter referred to as motive C, appears quite often throughout the symphony. Unlike set class (0123) illustrated above, this motive is for the most part pitch class specific. Indeed, it is the underlying bass motive associated with the prolongation of B♭ over the second part of the symphony. The motive is, however, transposed in the latter part of the symphony to different pitch classes, all of which serve an important structural function (as will be discussed in the final chapter).

The following excerpts demonstrate the building of linear progressions based on one particular motive and its transposition or modification. In m. 181, a new motive, B-C-A-G#, hereafter referred to as motive B, establishes a new section and is developed

and modified over the course of the symphony, playing a role in building linear progressions (Example 3.5). It is transposed at different pitch levels at the beginning of this section, first to Eb-Gb-D-C‡ in m. 186 and then to G‡-A-G‡-F‡ in m. 189. In Example 3.6, a voice-leading graph illlustrates how multiple stepwise lines are implied if the second and shorter eighth note of each four-note grouping is considered an escape tone. The rhythm helps to establish this interpretation as well as the overall aural effect of descending motion in mm. 181-191 from B♭ to F‡. In the lower voice, E♭ descends to B in m. 191.

Measures 256-260 are one example of how modification of this four-note motive is used to create a stepwise linear progression in the bass from F to C (Example 3.7). Although the rhythmic resemblance is clear, the last note of the motive has been dropped and only the intervallic contour of the first three notes of the original motive are maintained, +1-2. (see the lower voice in Example 3.8) An elision of each three note segment then binds the linear progression together, the last note of each segment functioning as the first note of the next segment. The stepwise linear progression contains the dotted half notes at the downbeat of each measure, the eighth notes again functioning as escape tones.

A similar example of the use of this motive as a building block of linear motion occurs immediately following in mm. 261-264. The clarinet I sounds the pitch classes E-F-E-D-E-D-C (Example 3.9). The linear motion outlines a descent from E to C and can be segmented into two elided four-note motives: E-F-E-D, D-E-D-C, with the D overlapping (Figure 3.5). This segmentation into two four-note motives is established as a result of the initial occurrence of the motive in mm. 181-182 beginning on B-. The

durational values of the notes create the aural effect of a stepwise chromatic line. The half notes E, E, and D in the first motive establish the primary descending chromatic line between E and D with F functioning as an escape tone. This establishes the next chromatic motion from D to C via D, where the E, now functions as an escape tone. The reduced linear motion is a chromatic descending line from E to C.

The above examples of linear progressions are representative of much of the linear progressions that occur over the course of the symphony. By using a small group of closely related motives, slightly modified and in different context, Pettersson provides a sense of constant development over the course of the symphony.

## Register As A Determinant of Linear Progression

As is often the case in tonal music, register may form a basis for establishing long-range connections or linear motion between non-adjacent pitch classes. The same can be said of linear motion in the context of some post-tonal voice-leading textures in *Symphony no. 5*. In mm. 308-332, a texture change initiates five layers separated by instrumentation and register (mm. 312-330 are reduced from the score in Example 3.10). Each layer establishes its own linear motion, with the exception of the repeated Dß eighth notes in the violin II (not shown in reduction), distinguished from the each other by register, instrumentation, and durational value or metric placement. The highest layers occur in the violin I, projected as a series of eighth-note gestures of an ascending minor ninth in mm. 312, 316, 320, 324, 328, and 332 (the rhythmic durations are altered in m. 332). Register allows the aural perception of two separate descending chromatic lines despite the three-measure separation between segments. The same is true of the cornet parts beginning in m. 312 on G and ascending by step to C in m. 324.

Register and duration between pitches is maintained between segments. The cello and bass parts proceed in chromatic motion in octaves from mm. 314-330, also in short eighth note gestures separated by three measures of rest. Figure 3.11 provides graphic illustration of the different linear progressions. In a larger context, this section provides a transition between Parts 1 and 2 of the Symphony. The texture change and linear progressions become significant in defining the transitional character of the passage.

## Concluding Remarks

The above characteristics illustrate some of the compositional techniques used throughout the symphony, including concepts of consonance and dissonance and the manner in which motives and motivic cells are used to generate material. They are characteristic of Pettersson's style and in particular of *Symphony no. 5*. The chromatic density that occurs in many of the motives is a primary means of creating dissonance throughout the symphony, particularly in the use of the minor second, which becomes a significant interval in the symphony as a whole.

The various linear progressions illustrated above not only help to identify some of the more common practices throughout the symphony, but also help to explicate how analytical observations are made on a minute level. Although narrow in scope, they reflect many of the linear progressions that occur on a larger scale. In the following chapter, the structure and design of the whole will be examined using graphic illustration of the middleground and background of the symphony. The methods applied above are carried out through the entire symphony.

### **CHAPTER FOUR**

### SYMPHONY NO. 5

In Chapter Three, I examined short passages from Pettersson's Symphony no. 5 in order to demonstrate the analytical approach that I have applied to the symphony as a whole. In this chapter, I will begin with an overview of the symphony as a whole and then address certain features in each part that convey important aspects of Pettersson's symphonic style. Although there are many fascinating processes that occur on the surface in each of these parts, this chapter focuses primarily on the interaction of elements of both structure and design that help to give the symphony a sense of large-scale development while highlighting some of its more salient features.

# Graphic Representation

The graphs throughout this chapter should be viewed as interpretive sketches that tease out of the complex texture of the symphony a structure primarily consisting of tertian harmonies related by stepwise motion. The contrapuntal processes that occur on the surface are not always illustrated in the graphs, which are a result of a detailed examination of each of the specific surface level events and the relationships between them. Differing interpretations can be made regarding some of the delineations of linear progressions, since they are often melodic strands broken in time and consisting of many multi-directional (both ascending and descending motion), mostly chromatic, motives. The purpose of the graphs is to show how tertian harmonies guide and direct linear progressions on each structural level from middleground to background. This analytical approach is useful for explicating the synthesis of the parts within the

symphony as a whole as well as the basic compositional processes that underlie its construction.

#### Musical Form

Much of musical analysis involves exploring the relationship of the parts of a musical piece to the whole and the relationships between parts. Thus it is constructive to have a codified system of hierarchy when referring to formal entities. As is common in discourse about musical form, I refer to the work at hand as consisting of individual parts that can then be divided into sections and subsections. These are descriptive terms; however, they do say something about how the parts relate hierarchically in the design of a piece. Indeed, further analysis reveals that these descriptions often lead to a deeper conception of structural organization.

# The Symphony as a Whole: An Overview

In the following paragraphs, I will address a few points concerning the structure of the work as a whole. Pettersson has an impressive sense of musical form that enables large-scale development of motives or themes and emphasizes goal-oriented motion. The most apparent background feature of the symphony is the lack of multiple movements and the absence of any formal breaks by means of double barlines, or definitive points of closure; however, structural elements establish five main parts of the symphony including an introduction, and four parts (as will be later explained). The final section, or Part IV, is similar to a recapitulation in sonata form. The graph shown in Example 4.1a/b offers an overview of the entire symphony. The parts are separated in the graph by full barlines and labeled above the measure numbers. Each of these parts may be further divided into sections based primarily on elements of design that are

frequently reinforced by structural factors. These sections are separated by half barlines and labeled with Roman numerals between the staves.

A dual mode of C major/minor serves as the primary harmonic background of the symphony as a whole. The C major or minor harmony may be considered a quasi-tonic. This harmony is often also accompanied throughout the symphony by a quasi-dominant sonority, G-B-D-F‡. As discussed in Chapter Three, a C-major tonality is established in the introduction by the arrival of the consonant third C-E in m. 12 and confirmed by the emphasis on repeated C's in m. 115 at the close of the introduction (refer to Example 3.2). C major/minor is also the final harmonic goal of the symphony, conveying a sense of resolution once the final C's are reached in the outer voices in mm. 1130 and 1150 (Ex. 4.1b).

From a Schenkerian perspective, the overall C-major/minor tonality supports the large-scale descending *Urlinie* E-E-D-C or 3+3-2-1 (E in mm. 12/129/188/991; E- in m. 1038/1078/1130; D in m. 1137; and C in m. 1150). This large-scale linear descent is projected over the whole, coming to a close in Part IV. It conveys the duality between C major and C minor since both E and E- appear at points of formal significance (E in mm. 12 and 129 or the beginning of the Introduction and Part I and E- in m. 344 at the beginning of Part II). Additionally, this harmonic complex supports the descending segment of motive A (E in m. 12-E- in m. 344-D- in mm. 350/987-C in m. 1150), a subsidiary descending line composed out over the course the symphony. The descending pitches of motive A can be described as an atypical *Urlinie* (3+3/42+2/41-1), where E- and D- may be enharmonically spelled as D# and C#. As is shown in the graph, the third between E and C is filled in with chromatic motion (E in m. 12; E- in m. 344;

Di/C#/D in mm. 350/522/950/987; and Ch in m.1150). Small-scale descents of motive A occur in different forms in all of the formal parts (marked in Ex. 4.1a/b). Indeed, the process of filling in the descending third E-C guides the direction of the upper voice in each of the formal sections and is projected over the whole as the large-scale form materializes. Thus the upper voices of the graph present a series of nested descents, reflecting a hierarchical network of descending linear motion within a C major/minor harmonic background.

## Simultaneous Linear Progressions

One aspect of the upper voice, represented at the background level, is the appearance of simultaneous linear progressions of the descending part of motive A. In other words, multiple descents of motive A appear on different structural levels and progress at different rates within each of the voices. One example occurs in Part I, mm. 129-310. As is shown in Example 4.1a, two linear progressions of the descending part of motive A are marked in the graph. Beginning in Section III of Part I, a shift to Db in the descending motive A is supported in the middle voice by a shift to Bb minor. The Db is sustained through Section IV and resolves to C in m. 310. This descent is juxtaposed against a return to E in m. 260 (Ex. 4.2) that continues a second descent of the primary motive A that also resolves to C in m. 310. The juxtaposition of the sustained Db and the return to C-E in m. 260 allow for the dissonant tension of the minor second between C and Db, a characteristic interval that occurs both harmonically and melodically in the symphony, to be projected through most of Part I.

Simultaneous linear progressions also span all four parts on a larger scale.

Beginning in m. 260, the descending upper-voice E progresses to E (m. 344), D (m.

350), D♭ (picked up in m. 987), and finally C (m. 1150) at the close of the structure. Meanwhile a deeper-level descent is also initiated in Part II at m. 260 on E, which is picked up in m. 991 of Part IV and progresses to E♭ (m. 1038), D (m. 1137), and C (m. 1150). Again, the simultaneous descending lines create dissonant tension between C and D♭ at the opening of Part IV (m.987) that is resolved only at the close of the structure (m. 1150).

### Simultaneous Structural Pitch Classes

A second unique aspect of the upper voice descent is the interpretation of two structural pitches occurring simultaneously. As mentioned above, the minor second is structurally and motivically significant throughout the symphony, especially in Part III, where pitch classes C#/D in m. 522 and C/C# in m. 950 are prolonged at the background level. Though not occurring as a linear progression in time, a large-scale chromatic linear motion can be conceived as occurring in conjunction with overlap or elision of the primary pitch classes. This particular aspect will be discussed in detail later in the chapter.

### The Supporting Bass Voice

The upper voice descent, composed out on multiple structural levels, occurs primarily within the context of neighboring bass motion C-B-C and C-B-C in the lower voice (see overall bass motion in Ex. 4.1a/b). The structurally significant pitch classes in the bass voice support tertian harmonies constructed on each of the chromatic pitch classes in the upper voices from E to C. For example, motion to B in the bass voice in m. 57 supports motion in the upper voice from E to D# in mm. 57-84, creating the six-four to five-three motion discussed in previous chapters. Likewise, motion from E- to D-

in mm. 198-242 in the top voice is supported by motion from C to B<sub>r</sub> in the lower voice, forming a stepwise progression from C minor to B<sub>r</sub> minor. Indeed, examples of neighboring motion from C-B-C and C-B<sub>r</sub>-C supporting the descent from E to C in the upper voice can be found throughout each of the Parts and at the deepest background level of the whole. Thus, the neighboring motion that first occurs in the introduction foreshadows not only the process of composing out the pitch classes of motive A, D-E-E<sub>r</sub>-D<sub>r</sub>-C but also of supporting each of those pitch classes with neighboring harmonies on a large scale.

### Structural Connections Between Parts

There are several structural connections between parts of the symphony that help to establish form and provide a sense of unity over the course of the symphony. As mentioned above, the overall harmonic background of the Introduction and Part I serve to prolong bass C and treble E. A shift in the upper voice from E to E<sub>b</sub> appears at the opening of Part II in m. 344 and begins a subsidiary linear descent (D<sub>b</sub> [m. 350] – C‡ [m. 522] = D<sub>b</sub> [m. 987] – C [m. 1150]) over the course of Parts II, III, and IV (Ex. 4.1a/b). It is in Part II that a significant harmonic shift occurs to B<sub>b</sub> minor (mm. 349-350). The B<sub>b</sub>-minor triad is composed out over mm. 350-451 primarily by means of a tonic-dominant axis that supports a large-scale subsidiary descent from D<sub>b</sub> (m. 350) to B<sub>b</sub> (m. 452) in the upper voice (the dominant F major/minor appears in mm. 358, 449, and 452). The progression from a C-minor to B<sub>b</sub>-minor sonority at the opening of Part II is similar to the progression from C-major to a B-major sonority that materializes over the course of the introduction in mm. 12-84. In the introduction, the upper-voice descent from E to D‡ is

supported by a B in the bass. In Part II the progression is extended one semitone to B<sub>b</sub> in the bass to accommodate an E<sub>b</sub> to D<sub>b</sub> descent in the upper voice (Ex. 4.1a). As mentioned above, the structure of the introduction is expanded on a larger scale in Part I. Within these two Parts, there are subsidiary descents of motive A that consequently help to establish each of the parts. The arrival of E<sub>b</sub> in Part II marks the beginning of a new descent from E<sub>b</sub> to B<sub>b</sub> that will incorporate the larger-scale harmonic shift from C major/minor to B<sub>b</sub> minor in m. 349 mentioned above. These structural connections not only help to establish the parts but also develop large-scale unification by harmonically supporting the gradual descent of motive A.

Further structural connections can be made between the Introduction and Part II and between Parts I and II that help to establish the large-scale harmonic shift from C major/minor to B<sub>P</sub> minor. The move to C in the upper voice in m. 358 of Part II mirrors the resolution to C in m. 115 of the introduction; however, the C in m. 358 is now supported by F in the bass, the dominant of B<sub>P</sub>, and becomes a passing tone between the D<sub>P</sub> in m. 350 and the B<sub>P</sub> in m. 363. While the C in m. 115 is well established as a point of resolution, the process of passing the C as a point of resolution in the upper voice and continuing on to B first occurs at the opening of Part I in mm. 129-134, where motive A continues through C to B, the upper third of a dominant G sonority (Ex. 4.3, C in clarinets and violin I). Furthermore, the larger-scale linear progression in the upper voice from E to B<sub>P</sub> in mm. 129-178 foreshadows the motion from E<sub>P</sub> to B<sub>P</sub> in the upper voice in Part II (see Ex. 4.1a). Likewise, the move from C minor to B<sub>P</sub> minor in mm. 198-242 in Sections II and III of Part I that provides harmonic support of the top voice

descent from E<sub>b</sub> to D<sub>b</sub> is replicated on a larger scale in mm. 344-350 of Part II. The prolonged B<sub>b</sub> minor in Section III of Part I, mm. 242-252, foreshadows the major structural shift to B<sub>b</sub> minor in Part II.

Part III: Development

Part III asserts two background harmonies that emphasize the juxtaposition of minor seconds. Here begins the long process of returning to C by chromatically filling in the space between E♭ and C in the top voice and B♭ and C in the bass. It might be viewed as a quasi-development in which the characteristic pairs of minor seconds are emphasized. Pairs of chromatic dyads in the outer voices, Bi/B and C#/D, are prolonged over the course of Part III (Ex. 4.1a/b). The F/F# dyad is also prolonged in the inner voice, representing the upper fifths of the lower voice dyad BJ/B. The resultant sonorities can also be explained as two triads occurring simultaneously with pairs of minor thirds, BI/C# and B/D, in the outer voices. In the lower voice, the dyad BI/B is ultimately progressing chromatically back to C while the upper voice dyad C#/D is descending to C. While these dyads occur both harmonically and melodically, in graphic notation they are compressed to illustrate their structural significance as simultaneities. Often the figuration of quick alternation (i.e. mm. 489-536, 565-586, 619-639 strings) between the two pitches creates the impression of verticalization (a few examples of this are shown in Ex. 4.4 although it is quite common throughout Part III). A sense of progression is nonetheless felt in each of the voices, namely that of gravitation toward a resolution to C in both voices.

Part IV: The Close of the Structure

In Part IV, the G dominant of the tonal center C, plays an important structural role for the first time in the symphony, shifting the emphasis to a tonic-dominant axis as a means of composing out the primary motive – as opposed to the C-B-C and C-B-C neighboring motion used earlier. In other words, while the dominant sonority has occurred in other parts of the symphony, it does not become structurally significant on a larger scale until the final part, where it is sustained as a pedal over several measures and supports a descent in the upper voice from E- to D. As explicated by the background graph, the G is the goal of an ascending inner voice third-progression that begins on E- (m. 344) and progresses though the F/F# that act as the upper fifths in Part III (m. 522) to G (m. 1038) (see inner voice in Ex. 4.1a/b).

As mentioned above, I interpret an over-arching  $3-\sqrt{3}-2-1$  (E in mm. 12/129/188/991; E<sub>\(\bar{\psi}\)</sub> in m. 1038/1078/1130; D in m. 1137; and C in m. 1150) over the course of the symphony. Perhaps less apparent is the presence of the D<sub>\(\bar{\psi}\)</sub> (m. 987) against this upper voice descent in Part IV. I interpret this juxtaposition of the D<sub>\(\bar{\psi}\)</sub> as a second linear strand of the descent towards C, i.e., a continuation of the unresolved C\(\frac{\psi}{\psi}\)D<sub>\(\bar{\psi}\)</sub> (m. 950) from Part III that again creates dissonant tension against the structural C in the lower voice. The linear motion from D<sub>\(\bar{\psi}\)</sub> (m. 987) to C (m. 1150) is a part of a second descent in mm. 260-1150 ( $\hat{3}$  [m. 260] –  $\hat{3}$  [m. 344] –  $\hat{3}$  [m. 350] –  $\hat{3}$  [m. 350] –  $\hat{3}$  [m. 350] –  $\hat{3}$  [m. 987] -  $\hat{1}$  [m. 1150]). The constant presence of the D<sub>\(\bar{\psi}\)</sub> through the whole of Part IV is indicated in the graph in Ex. 4.1b by a beam beneath the uppermost

descent. Thus in Part IV, both the over-arching  $\hat{3}$ - $\hat{3}$ - $\hat{2}$ - $\hat{1}$  descent and the subsidiary  $\hat{3}$ - $\hat{3}$ - $\hat{2}$ - $\hat{2}$ / $\hat{2}$ - $\hat{2}$ / $\hat{4}$ 1- $\hat{2}$ - $\hat{1}$  descent resolve to C in m. 1150.

# The Introductory Subsections (Ex. 4.5)

As was briefly illustrated in Chapter Three, the primary motive A, D-E-D#-C#-C, occurs in both the foreground of the introduction as the main source of musical material, but also guides the structure of the whole on the background level. As proposed by the graph in Ex. 4.5, the vertical barlines between staves separate three sections within the introduction, each determined by elements of design.<sup>58</sup> The primary motive is composed out over the course of Sections I and II (see motive A in Ex. 4.5). Section III consists of a series of stepwise lines in all voices that lead back to the goal of the primary motive, namely C. While Section III contains smaller repetitions of the primary motive (identified in the example), the third section is also subsumed within the larger progression of the motive beginning in m. 36 and continuing over the course of Section II (D# [m. 85/97], C# [m. 112], C<sup>1</sup> [m. 115]). Motive A is supported by a succession of harmonies that result from stepwise voice leading and materialize over large temporal spans. C major is the primary background element, prolonged by the neighboring harmony B-D#-F#. As mentioned above, a voice-leading pattern introduced in mm. 12-33 and expanded in mm. 36-97 consists of the harmonic succession of a dissonant six-four suspension above a neighboring B resolving to a consonant five-three (see the figured bass in Ex.

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<sup>&</sup>lt;sup>58</sup> While I do not describe each element of design on the musical surface that contributes to a sense of delineation, specific elements are mentioned throughout the following chapter in reference to a specific section. Some are obvious, while others may be interpreted in multiple ways. Furthermore, as is often the case with design, especially in more complex musical surfaces, a case can be made for some temporal overlap between delineations.

4.5). Through varied repetition, the motive can achieve structural significance and convey a sense of resolution within a harmonic framework.

A closer look at motive A in each section reveals how it propels the structure and how a sense of final resolution is delayed throughout the introduction. Structural points of arrival (i.e. m. 12, 31, 36, 84-85, 112, etc.) outline the primary motive A at a deeper structural level (Ex. 4.5). At the opening, motive A is repeated using instrumental couplets in stretto beginning at four different points (mm. 1, 3, 5, and 7) (Ex. 4.6). A sustained B in the Trombone I and Contrabass supports the stretto voices (mm. 3-12). Both the chromatic density of the motive itself (represented melodically as five chromatic pitch-classes, E-D‡-D-C‡-C) and the resultant dyads that occur harmonically as a result of the stretto, mostly seconds, create dissonant tension. In m. 12, a point of arrival is achieved as C in the lower voice and E in the upper voice form a consonant third. Thus, musical tension and resolution resulting from traditional contrapuntal and harmonic dissonances resolving to a consonance reinforce points of structural significance, in this case the C and E that arrive in m. 12.

The repeated primary motive A is nested within its larger composing out over the course of mm. 1-35 (Ex. 4.5). In mm. 33-35, we reach a point of formal division created by the resolution of the B six-four harmony, and the entrance of the repeated E/D# in Violin II (Ex. 4.6). This formal articulation is reinforced structurally by the close of the primary motive on C in m. 35. The C in m. 35 occurs in the highest range yet achieved, establishing the basis for the ensuing motive in the Flute (Ex. 4.7, m. 36). However, the absence of an arrival on C in the lower voices and the persistence of B against C do not create a fully satisfying sense of closure or resolution of the motive (Ex. 4.6, m. 35,

Cello). This effect of delaying resolution propels the listener into the second section of the introduction.

The second section, beginning in m. 36, restates the primary motive A (mm. 38-42, Flute); however, a sustained E (mm. 36-38) prefaces the beginning of the motive (Ex. 4.7). The placement of the E reinforces the interpretation of the second note of the motive, E, as the main structural third above the structural bass note C, established in the opening measures by the arrival on C-E in m. 12. As mentioned above, Section II replicates and expands in mm. 36-84/85 the initial harmonic succession in mm. 22-33, arriving on B-D#-F# in mm. 84-85. The linear motion from E to D# that acts as the upper voice in the harmonic succession, is also harmonically present throughout the Introduction. The presence of the dissonant minor second, E-D#, is particularly poignant beginning in m. 59 (Ex. 4.8), expressed by its inversion as a major seventh. This interval first appears in mm. 33-35 at the close of the first section as a foreshadowing effect (Ex. 4.6). In one sense, the second two pitches of motive A, E and D♯, may be said to occur both on the musical surface and in the middleground. This dyad can be understood as an elision or overlap of the melodic realization of two successive pitch-classes. This idea emphasizes the minor second or its inversion as a major seventh as a significant characteristic of the symphony.

The third section, beginning around m. 98, is prompted by the Trombone II entering on F and rising to C in m. 113 (Ex. 4.9). Again, elements of design such as textural shift and the introduction of new motivic segments contribute to the effect of a new section. Texturally, the previous voices drop out and the listener perceives four layers consisting of the primary motive sounded repeatedly in the Flutes and Cornet III

and shifting to the Bassoons in m. 104, the lower voice shift to C in the Cello in m. 98 which progresses into the Tuba and Contrabassoon in m. 104, the rising Trombone II, and the rising motives in the Violins. The impression of a new section is supported structurally by the resolution of the six-four harmony, ultimately in m. 96, and the beginning of a series of linear formations that lead to an arrival on C at the close of the introduction (Ex. 4.5). The B five-three arrival in m. 97 is considered structural, thereby delaying the completion of motive A and the arrival on C in the lowest register until the end of the introduction (Ex. 4.9, mm. 112-113). The resolution and the close of the Introduction are reinforced by the convergence on C, thus foreshadowing the role of this note as the potential structural bass note of the piece, a quasi-tonic.

The C-DI-C motive in the Flutes at the close of the Introduction is a gesture foreshadowing the textural layer of repeated eighths initiating the first section and later repeated with different pitch-class pairs (Ex. 4.9, mm. 117/119). The repeated alternation between different sets of minor seconds is a constant thread throughout the symphony functioning in several ways: at a local level, as one of the determinants of the main harmonic tension generated in a given section; and as a means of unifying the individual harmonic areas of the whole. Indeed, as was mentioned above, the notes E and EI/DI also arise in the Introduction, first appearing in mm. 33 in the Violin II and later in mm. 59-71. The two minor seconds — C-DI and E-EI/DI — form the basis for the primary motive. Their occurrence as harmonic intervals throughout the Introduction is the main source of dissonant tension, a tension to be played out over the course of the symphony.

Part I, mm. 129-310, is divided into four sections defined by design changes, points of structural significance, and the appearance of motives B and C: mm. 129-180, mm. 181-242 (motive B), mm. 242-260 (motive C), and mm. 260-310 (motive B) (Ex. 4.10a). Pettersson generates large-scale connections between the sections based on their role in the background structure. Similar to the introduction, motive A guides the upper-voice progression at the background level in Part I and is also present at the surface level, namely mm. 132-33, 140-141, 143-146, 149-50, etc. The harmonic succession of tertian harmonies that supports the upper-voice descent (C-E-(G) [m. 129], C-E-(G) [m. 198], B-D-F [m. 242], resolution on C [mm. 260 and 310]) is not based on a tonic-dominant tonal axis, but rather on neighboring linear motion to and from B-minor (mm. 242-259).

By delaying a conclusive resolution on the final C of motive A throughout Part I, Pettersson generates a sense of direction that is emulated in the deep background level over the course of the entire symphony. At the surface level (Ex. 4.10b), the opening statement of motive A in m. 132 continues past C in m. 133 (Clarinet), eventually coming to a point of stasis on D<sub>i</sub> in mm. 143-147. Over the course of mm. 132-175, the neighboring motion in the bass, C (m. 132)-D<sub>i</sub>/C‡ (m. 142)-C (m. 175), supports the descent of motive A. Neighbor motion is further reflected in the perpetual C-D<sub>i</sub>-C ostinato pattern in the Violin II beginning in m. 129 (Ex. 4.11). A quasi-dominant sonority (in the implied key of C major/minor), G-B-D-F‡, appears in mm. 134, emphasized by the transposition of the opening motive A to G in m. 140 (Ex. 4.11). The bass voice G supports this quasi-dominant sonority and subsequently descends in mm. 141-142 to

D<sub>b</sub>, spanning a tritone (return to Ex. 4.10b).<sup>59</sup> Consequently the quasi-dominant sonority is subsumed within the neighboring bass motion from C to D<sub>b</sub> over mm. 132-142. Following a series of repetitions of motive A that terminate on D<sub>b</sub> in the upper voice in mm. 143 and 147, a varied restatement of the opening phrase begins in m. 149, spinning out motive A to m. 157 and again coming to a stasis on D<sub>b</sub>. Measures 132-142 are essentially repeated with variation in mm. 149-157 and are therefore not shown in the graph. The arrival on D<sub>b</sub> in mm. 142 and 157 in the bass and the stasis on D<sub>b</sub> in the upper voice in mm. 143-147 generate suspense by withholding a resolution to C at the end of each phrase.<sup>60</sup>

A consequent section (see Ex. 4.10a), beginning in m. 159, builds to a climax in m. 175, structurally emphasizing C in the outer voices. Although the C is reached in ascending motion, it closes the local span of motive A; however, the subsequent uppervoice descent to B<sub>b</sub> in m. 180 overshoots the C, as it had in the opening of the section (mm. 132-33). In mm. 175-178, the C-E-(G) harmony, prolonged thus far, proceeds in contrary stepwise motion between outer voices to an E<sub>b</sub>-G<sub>b</sub>-B<sub>b</sub> harmony, which materializes in mm. 178-181 and serves as a mediant related harmony. Overshooting the final note of motive A and progressing to the mediant sonority is an effective means of delaying a sense of definitive arrival on the fundamental goal of the descent from E to C.

<sup>&</sup>lt;sup>59</sup> The transposed Motive A in m. 134, if it bears the implications of the original statement of the motive, outlines a motion to F-A-C achieved in mm. 140-142 in the upper voices.

<sup>&</sup>lt;sup>60</sup> The perception of a phrase is marked by the rests in m. 142 and the echoes of Motive A that follow. The presence of the phrase is one factor that reinforces the reading of the dominant sonority as subsumed within neighboring motion from C to D<sub>j</sub>.

Motives B and C as Structural Determinants

Motive plays an important role in this symphony for many reasons. As was shown in the Introduction and Part I on a large scale, motive A indicates points of structural significance and guides the background structure of the parts. Introduction of new motives are also significant as they often prompt new formal sections and offer new forms of linear motion that prolong a particular sonority. For example, the second section of Part I is indicated by a design change and the introduction of motive B, B\-B-A-G\#, in mm. 181-182. In mm. 181-197, the descending linear motion from B\-\text{to E}\-\text{in the inner voice is supported by a descent from E\-\text{to C in the lower voice, or motive B,} beginning on E\-\text{.}

Motive B, B⊢C⊢A-G♯, is a particular ordering of four chromatically adjacent descending pitches. Multiple orderings of four chromatically adjacent pitches comprise many of the motives throughout the symphony. As illustrated in Chapter Three (pgs. 48-53), chains of different orderings, present either adjacently or separated in time, often create linear progressions at the surface level. The configuration of motive B is also marked by the rhythm dotted-quarter, eighth, plus two quarters, which reappears frequently over the course of the symphony. Pettersson exhausts the possible orderings in generating motivic material throughout the work (see Chapter Three, pg. 34. Ex. 3.4). The upper-voice linear descent of motive B is a continuation of the primary motive and facilitates the composing-out of the stepwise motion from E at m. 129 to E♭ at m. 198. The appearance of motive B along with other design factors prompts the beginning of a new section.

Likewise, the introduction of motive C in m. 242 becomes structurally significant because it outlines the B<sub>b</sub> harmony prolonged in mm. 242-259. The prolonged B<sub>b</sub> sonority serves as the main point of departure in Part I. The upper notes of motive C, F and F‡, are also significant as they represent the upper fifths of both B<sub>b</sub> and B. Both are minor-second dyads that will become significant in later parts. Motive C will also become the primary motive of Part II when a major structural shift to B<sub>b</sub> occurs in m. 349.

# Linear Progressions in Part I

The multiple strands of linear motion woven throughout the texture in Part I, and elsewhere across the symphony, are especially characteristic of Pettersson's stylistic tendencies at the surface level. Linear progressions may continue between different instrumental voices, often utilizing multiple octave ranges. In doing so, Pettersson creates a force of harmonic sound in which sonorities resembling triads are composed out over large spans. These triads are realized as particular voices are sustained, while other voices continue with linear motion. By expanding linear progressions to multiple ranges, a sense of overarching propulsion is present in each layer of the texture. The span of each linear progression at each level helps to create a sense of division between the sections but also enables long-range connections between structurally significant notes that function within a deeper harmonic succession. Points of structural significance are sometimes emphasized by certain surface-level features (i.e., the climax in m. 175 or the appearance of motive C combined with the design change at m. 242) so that there is a correspondence between structure and design; however, points of structural significance may also be subsumed within a particular section (i.e., the

return to C at m. 197, which does not correspond with the design change and introduction of motive B that initiate the beginning of the Section II).

## Part II (Ex. 4.12 a/b)

As with previous parts, I will not give a detailed account of the voice leading of Part II presented in the middleground graph, but rather provide an overview followed by brief discussion of a few significant aspects. As illustrated by Examples 4.12a/b, mm. 344-452 constitute Part II of the symphony, in which previous motives are developed along with new material. Like Part I, it is subdivided into three sections demarcated by elements of structure and design: mm. 344-362, mm. 363-411, and mm. 412-452. Each restatement of motive C, BI-F-FI/GI, often initiates a new section. Structural features, such as the return to BI at the beginning of Sections II and III, coupled with other design elements, such as the tension-release pattern over the course of each section, and the changes in texture (i.e. m. 364, Ex. 4.13), delineate the formal boundaries of these sections.

Although motives B and C play a prominent role in developing material in Part II, motive A is again the foundation of the upper voice. It takes on new meaning, however, in the context of the B<sub>b</sub> background harmony. As discussed above (pg. 67), the harmonic shift to B<sub>b</sub> minor was foreshadowed on a smaller scale in Sections II and III of Part I, facilitating the descent to \$\frac{1}{2}\$ in the upper voice. In Part II, the B<sub>b</sub>-minor sonority is prolonged by means of a tonic-dominant axis, whereby the resolution to C of motive A is now reinterpreted as the upper fifth of the dominant F sonority (see Ex. 4.12a, mm. 358/442). The three primary sonorities presented at the middleground level in Part II - B<sub>b</sub> minor (m. 350/363/412, F major/minor (m. 358/449, and D<sub>b</sub> major (m. 358) - serve to

prolong B<sub>b</sub> minor. The relationship between these harmonies reflects the relationship between C major/minor, E<sub>b</sub> major/minor, and G minor in Part I, all of which served to prolong C major/minor. The primary means of prolongation over the course of the Section II of Part II is the large-scale voice exchange at mm. 397/400 and 401/410. The climax in m. 397/400 reinforces the structural significance of F and B<sub>b</sub>. Likewise, the ascent in m. 410 from D<sub>b</sub> to F in Violin I, supported by B<sub>b</sub> now in the middle register, closes the second voice exchange. Section III initiates an upper-voice descent from D<sub>b</sub> to C (m. 442, Ex. 4.12b) to B<sub>b</sub> (m. 464). The dominant F in m. 449 supports the descending C passing tone. This upper-voice descent coupled with motion to the dominant also serves to prolong B<sub>b</sub>.

## Determination of a New Part

When approaching a continuous form, it is useful to explicate factors that lead to the determination of a new part. To explicate some factors, I will consider the division between Parts I and II (refer to Ex. 4.1a for overview). Elements of both structure and design support the identification of the beginning of a new formal section at m. 344. A transitional space between Parts I and II occurs in mm. 308-343 (queued by the repeated D\(\text{i's}\)) (Ex. 4.14). Although C is reached in m. 310, the repeated D\(\text{i's}\) convey a sense of delayed resolution and provide motion through a transitional space consisting of separated motivic segments. Structurally, the transitional space facilitates an ascent from C (m. 310) through D (m. 343) to E\(\text{i'}\) (m. 344) through a series of linear motions displaced by register (Ex. 4.12a). This particular passage is discussed in Chapter Three (Ex. 3.13) as an example of linear motion determined by register. Motive D (E-D-E\(\text{-D}\)

and G-F-G-E), a particular ordering of four chromatically adjacent pitch classes, appears in the bass in mm. 334 and 339 in descending form. At m. 341 a different ordering of the pitches in motive D appears, namely in ascending form (E-F-E-F‡). These particular orderings of motive D emerge as a significant component of linear progressions in the second part. In the context of the transition, the final sustained notes of each statement of motive D in the bass form an ascent from the initial C in m. 310 to G in m. 343, which acts as the dominant supporting D in the upper voice. The return to E→ in the upper voice (m. 344) supported by the regained C in the bass (m. 346) marks, from a structural perspective, the beginning of Part II. Again, with respect to structure, the transitional space emphasizes the return to E→ as →3 supported by C as quasi-tonic. In addition, a design change occurs in m. 344 with a motive derived from motive B, Eb-Fb-D-Db, which is stated beginning on E→ in m. 349, facilitating a small-scale descent from E→ to D♭. This small-scale descent is the primary structural feature of the upper voice at the opening of Part II.

**Emphasis on Minor Second Dyads** 

Two additional aspects of Part II become apparent in Section II in mm. 363-410 and are further developed in Section III. The use of minor second dyads is expanded from C/D

and E/E

to B

B

B and F/F

(or G

). Cues to this expansion are apparent in motive C (B

F-F

), which is present throughout Part II and contains the F/F

dyad. There are also strong shifts to G

such as in mm. 359-360 with the alternation of B

and G

(Ex. 4.15) in the low strings and timpani. The alternating spelling between F

and G

over the course of Part II makes reference to the F

from the introduction (Ex. 4.1a), which

occurs as a fifth in the context of the neighboring B-major sonority. The dyad F/F#, particularly in m. 363, becomes an inner voice continuation of the F# in the introduction and lead to the F/F# dyad that will again emerge in Part III.

Other factors contribute to the expansion of minor-second dyads. The bass motion from C to B to B<sub>b</sub> in m. 344-349 that initiates a structural shift to B<sub>b</sub> minor is mirrored on a smaller scale in mm. 412-446. A feeling of propulsion to return to a resolute C through B<sub>b</sub> is present throughout the part and is reflected in the dyad B<sub>b</sub>/B<sub>b</sub>. Furthermore, particular sonorities in Part II are composed of seconds. At m. 397, the resultant harmony of the climactic moment of Section II contains B<sub>b</sub>-B<sub>b</sub> in the outer voices, C-D‡-D-C‡-E, and G, reflecting the pairs of minor seconds that create dissonant tension throughout Section II between B<sub>b</sub>/B<sub>b</sub>, C/C‡, and D‡/E, excluding the F/F‡ dyad. Harmony as A Result of Linear Motion

The type of harmony described above, which is primarily the result of contrapuntal motion, appears again in mm. 420-424. These harmonies are not so much calculated harmonic entities than a result of independent linear progressions. Indeed, many of the resultant harmonies throughout Part II, and for that matter the entire symphony, are a result of the complex linear processes occurring over large spans of time. Often the underlying tertian harmonies are superimposed or elided as they are composed-out simultaneously. The aural perception of the underlying tertian constructions is still made apparent in elements of design as well as the beginning and ending of certain linear formations. For example, as illustrated in the graph (Ex. 4.12a) in m. 349-358, independent lines are woven throughout the texture often changing octaves. In the process, B<sub>F</sub> minor and F minor are composed out simultaneously in mm.

350-358. The slurs indicate linear progressions that occur on the surface of the music even though stepwise notes are often left out for purposes of reduction. In the middleground, a basic voice-leading design can be teased out of the multiple strands of linear motion. The Eb moves ultimately to Db over the course of mm. 344-350. The Gb of m. 349 functions as the upper third above Eb and moves to F in m. 350. The interior voice alternates between Bb and Ab and the prolonged Db in mm. 350-355 moves to C in m. 358. Thus over the course of m. 350-358 a gradual shift from Bb minor to F minor occurs. As a result of the different strands of contrapuntal motion, the harmonies often occur simultaneously. Such is also the case in mm. 358-363 previously described.

## Part III (Ex. 4.16 a-f)

Part III is divided into three sections primarily determined by the addition of new motives and by breaks in musical motion: mm. 484-638, mm. 639-865, and mm. 866-950 (see Ex. 4.16 a-f). These are considerably larger sections than in previous parts but are clearly marked by elements of design and structure. In terms of the whole, Part III can be understood as a developmental space in which previous ideas and motives are expanded and manipulated. I will address only a few aspects concerning superimposed sonorities and elided pitch-classes presented in linear motion.

### Superimposed Sonorities

The main background harmony of Part III consists of a complex of two harmonies, B-D-/C#-F and B-D-F#/G-, that share an equal status. Together, these harmonies support the simultaneous upper voice notes of  $\hat{2}$ ,  $\hat{2}$ /# $\hat{1}$ , and  $\hat{1}$ . These scale degrees can also be understood as pairs of minor seconds. Oscillation often occurs between D and C# and C# and C. Though not always occurring in descending order,

these two pitch classes represent the upper thirds of a harmonic complex that is composed out over Part III, in which motion from B<sub>b</sub> minor through B minor will return to C in the final part. Likewise, the upper fifth, F, of the B<sub>b</sub> sonority that is present throughout Part III will return to G through F‡ in Part IV. While the B minor sonority may be viewed as a passing chord, its constant appearance in different forms and its structural significance seem to suggest the two chords are equal in status. Indeed, the introduction uses the B major sonority as a neighboring harmony, harmonizing D‡ instead of D, the natural 2. The presence of D in Part III as a structural upper-voice 2, is in many ways a fulfillment of the initial D of motive A which occurs as an initial neighbor to the E at the opening of the symphony and is subsequently avoided in the descent from E to C of motive A. As a result of all of these factors I have represented the pairs of upper voice scale degrees as simultaneously occurring in the background.

### Elided Pitch Classes

Most apparent in Part III is the further emphasis on the minor-second dyads. As mentioned above in reference to Part II, the minor seconds between structural pitches that outline the descent in the upper voice, E/E and C#/C are further expanded in both directions to B B and F/F II. In Part III, the expansion of dyads is continued to G/A and A/B This is accomplished in part through the structural significance of motive C, the various forms of motive B, and the figuration of alternating eighths mentioned above. Example 4.17 illustrates this expansion and each of the various motives as they occur over the course of the symphony. Motive B, of course, appears as early as m. 181, beginning the process of expanding downward to B and B and upward to A and G II.

Various forms of motive B in mm. 511-12, 514-15, and m. 638, continue the chromatic linear expansion from F# to B.

The graph illustrated in Ex. 4.16a/b presents a complex notation that is related to the idea of simultaneous or elided minor-second dyads presented in linear motion. While the notation is unorthodox, it establishes the notion of two chromatic pitches or shades that occur both melodically and harmonically, participating in building linear progressions over a large span. Beginning in m. 492, multiple variations of four adjacent pitch classes form complimentary motives (Ex. 4.18 and 4.16a/b). The motive, first heard with counterpoint in mm. 492-93 in the trombone and violin, is echoed in inversion in m. 495 by the cello and bass. This alternating pattern is continued over the course of mm. 492-535 building to a climax in m. 537. In m. 519 and on, the motives are expanded in the bass voice, thus emphasizing the reassertion of BI/B as the primary background pitches distributed over the course of Part III. Although the patterns consist of multi-directional motives separated in time, the aural effect is of stepwise linear motion. As is illustrated in the graph, pairs of minor seconds are emphasized, C#/C, Bb/B, Ab/A, and F#/G in mm. 492-517 forming stepwise motion from C#/C to G/F# (Ex. 4.16a/b). In a deeper sense, the F/F# of motive C are shifted up to F#/G. This shift is reiterated in m. 521 when motive B is expanded to arrive on a sustained G and constitutes a change in the design and the beginning of a new series of motives that stress the arrival points on sustained harmonies in mm. 521, 528, and 535 (See Ex. 4.16a/b and music in 4.18). Each of these harmonies can be viewed as triads with split thirds and fifths, again emphasizing the complex of minor second intervals. The overall linear motion, woven throughout the multiple voices, is an ascending line in the upper

voice from C/C# (m. 492) to the climactic F# (m. 537) in parallel motion to an ascending bass from F/F# (m. 484) to B (m. 535). Immediately following is as descending gesture that outlines B<sub>p</sub> major in mm. 538-41, accompanied by motive C. The process is repeated with slight variation in mm. 542-561.

Consequently, the large-scale bass motion in mm. 484-535, F/F‡-G-A-B, roughly resembles the melodic motion of the second part of the ostinato figure, F-G-A♭-B♭ in m. 457 of the transition (Ex. 4.19). Both rising lines are a return from the upper fifth dyad F/F‡ to B♭/B. This connection reinforces the interpretation of large-scale linear motion as well as the structural importance of B♭/B and their upper fifths F/F‡. (Again it should be noted that both F and F‡ share an equal structural status and are prolonged over the course of the first section.) Likewise, an ascent from B♭/B in m. 477 to C/C‡ in m. 492/499 and finally to C‡/D in m. 522 reasserts the main upper thirds that are also prolonged over the course of Part III above B♭/B (Ex. 4.16a). The C‡/Din m. 522 can be understood in the deep structural background as emanating from D♭ in m. 350 (see background graph Ex. 4.1a).

Part IV: Arrival of Tonic-Dominant Axis (Ex. 4.20 a/b)

The final part serves to recapitulate the opening harmony and the primary motive A. A sense of recapitulation is prompted in m. 987 by the return of the opening C/D ostinato pattern; however, the D is sustained in the upper voice against C and delays any sense of definitive arrival on C (Ex. 4.20a/b). Indeed over the course of Part IV, definitive arrival on C is thwarted in the upper voice by juxtaposition of these two pitches and the continual assertion of a dominant pedal on G. motive A is restated in m. 991

and reasserts the E as the structural upper voice. As it had at the opening of Part I, the primary motive overshoots the C, arriving on B in m. 993. G is reasserted in the bass in m. 993 supporting an ascending line, generated from D<sub>P</sub> up to G<sub>P</sub> in m. 1011. In Part I, the cognate dominant harmony of m. 134 was subsumed within the larger neighboring motion between B and C in the lower voice (see Ex. 4.10a). It now takes on a new role, as the arrival of a dominant-tonic axis. A few factors lead to the perception of a dominant-tonic axis, rather than the neighboring motion so prominently composed out over the main parts of the symphony. The G completes, in a deep structural sense, the rising line from E<sub>P</sub> to G in the inner voice beginning at m. 344 of Part II (see background graph, Ex. 4.1a/b). The structural arrival in m. 1038 on E<sub>P</sub> is also supported by a G in the lower voice, rather than by the neighboring B-major harmony. Furthermore, a dominant pedal is clearly asserted in mm. 1078-1129. All of these factors establish a tonic-dominant axis as the structural context for the descending upper voice.

The Assertion of D as the Upper Fifth of G

The return to C as the primary harmony is reinforced in m. 1018-1022 with restatements of motive C, the defining motive of the B<sub>b</sub> sections, transposed to begin on C and G. The resulting minor seconds G<sub>b</sub> to G in the motive stated on C reasserts the final inner voice linear motion from F‡/G<sub>b</sub>, the upper fifths of the neighboring B- and B<sub>b</sub>-minor harmonies, to G as the dominant of the primary sonority C. Likewise, the minor second motion D<sub>b</sub> to D in the motive stated on G (m. 1021), asserts the note D not only as the upper fifth of G, but also as a primary pitch in the linear descent from E to D. This is articulated at the very close of the symphony by a more conventional descent in m.

the course of the symphony and supported by neighboring harmonies. In a sense, the opening D of motive A, interpreted as a neighbor tone, reasserts itself at the close of the symphony as the fundamental fifth above the dominant G, though it is not supported in its final descent by a strong dominant.

The D<sub>P</sub> pitch class that is avoided in the final descent; however, it is still present in the continual ostinato pattern between C and D<sub>P</sub> and the continual restatements of motive A that pause on C# in the final part. Though it does not take part in the final descent, it lingers throughout the part, begging final resolution to C. For this reason, I interpret the D<sub>P</sub> to be present throughout Part IV, resolving to C only at the conclusion in m. 1150.

## Achieving Closure

The above-mentioned observations all contribute to achieving a sense of closure in the final part. The strong emphasis on the quasi-dominant in the final part sets up a new context for the descent of motive A in the upper voice and often functions as a dominant pedal, further strengthen a gravitation toward a resolute C. Transposing motive C to begin on the quasi-tonic C and the quasi-dominant G in the bass further emphasizes the tonic- dominant axis that will support the final descent in the upper voice and introduces D as an important structural pitch in the final descent. The completion of an inner-voice linear motion over the course of Parts II-IV also helps to establish G as a quasi-dominant. These structurally significant pitch classes, G and D, were foreshadowed in motive A and in the appearance of a quasi-tonic throughout the symphony. In one sense, their significance is only revealed in the final part. Part IV is, therefore, not a simple return of the opening material but rather a return of previous

materials in new contexts that place emphasis on different pitch classes. Thus through mechanisms of motivic association and reinterpretation within various harmonic contexts (i.e. motive C) and the completion of linear progressions (i.e. inner voice progression to G), both of which help to establish the arrival of structurally significant pitch classes, Pettersson achieves a sense of teleological completion in Part IV.

#### CHAPTER FIVE

#### CONCLUSION

In this thesis, I intended to offer not only an analysis of one of Pettersson's most significant works but also to provide one model or perspective from which to gain access to and understanding of Pettersson's music in general. Each of the chapters was designed with this goal in mind. Chapter One offered an overview of Pettersson's background as well as a brief survey of some of the literature about Pettersson, and established the basic objective of this study. Chapter One was not intended as a comprehensive account of Pettersson's life and all of the literature about his music but rather as an entry point for the general reader to the biographical and musicological resources pertaining to Pettersson. While interest for Pettersson has grown and has provided many worthwhile books and articles, particularly in Sweden, Germany, and United States, the current state of Pettersson research still contains critical lacunae. With regard to musicology, and in particular analysis, much more is yet to be discovered that would help reify some of the ideas already posited about Pettersson's musical development. In addition, much is yet to be discovered about Pettersson's compositional process, in particular, manuscript study that could offer valuable insight into his music and its development. Furthermore, it is clear that Pettersson composed a large oeuvre of works worthy of in-depth analytical study that can be related to his own compositional development and the sociological and historical world in which he composed.

Chapter Two provided some analytical precedents that form a basis for my own analytical approach to Pettersson's Symphony no. 5. It is important to keep in mind that

the analysts mentioned in Chapter Two are quite varied in the music that they are studying. Their own analytical approaches sometimes differ from each other, offering an array of models. Most of the composers or pieces that they have studied are part of the standard repertory of the twentieth century and their analyses offer a new perspective or way of further understanding the music along with other forms of analysis. Furthermore, the examples of linear analysis presented in Chapter Two are not necessarily directly related to Pettersson's music. Pettersson's music has not yet been rigorously investigated in this respect. In general, there are not yet many in-depth analyses of his works.

Linear analysis applied to post-tonal music is in itself a topic that has garnered interest and lively debate among theorists and would constitute a separate study in order to attempt a comprehensive account of its many angles. Chapter Two offered a brief account of some of the more significant analyses that provide a bridge to the formation of my own approach. Analytical approaches applied to any given piece, especially post-tonal pieces, are naturally geared toward the particular aspects that the analysts would like to emphasize. In this way, I offer only one approach among many possibilities, with the specific intention of illustrating particular characteristics of Pettersson's *Symphony no. 5*.

Chapter Three provided examples of linear analysis applied directly to excerpts from the symphony. This is helpful in establishing an analytical approach because it explicates some of the decisions that are made on a larger scale in Chapter Four. Furthermore, I organized the presentation of examples in Chapter Three to reflect some of the different types of linear progression in the symphony. This organization

establishes categories, by no means exhaustive, that are not related in this chapter to previous types of linear progression described in analyses by other theorists in Chapter Two. In this way, one might perceive a gap between the analyses presented in Chapter Two and the categories of linear motion given in Chapter Three. This is because approaches to linear analysis of one piece may not necessarily be applied to post-tonal music at large. The types of linear motion presented in Chapter Three likely have precedents in other post-tonal music, and have been described by other theorists, but are especially characteristic of Pettersson's style and may be applied to some of Pettersson's other works. However, any unorthodox or unprecedented notation or analytical assertions that I applied to this symphony (i.e. elided pitch classes that reflect emphasis on the minor second) stem from a desire to explicate specific characteristics of this work only and may or may not be applied to other works.

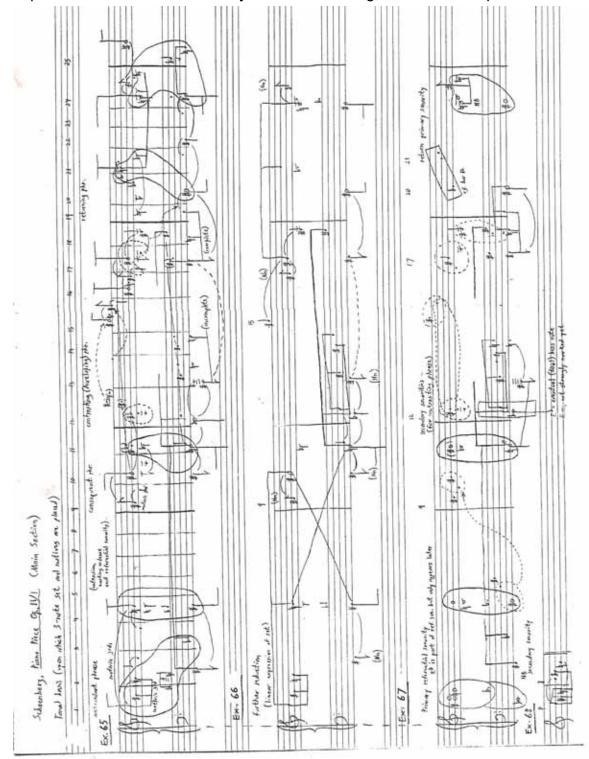
Chapter Four provided a large-scale linear analysis of the entire symphony. It was not intended as an analytical summary but rather touches on formal aspects and some main characteristics of the symphony revealed through analysis. Presented in the analysis are four main parts that constitute a through-composed symphony. As was illustrated, each part consists of sections defined by a variety of different design elements. One purpose of the analysis was to reveal a structure that binds these different sections and parts into a unified whole, explicating the harmonic successions that are often blurred by complex linear motions on the surface of the music. It provided a sketch of how a single compositional idea, the primary motive A, is expanded and used as a structural determinant, guiding the harmonic background and providing unification of the whole. Though each graph was not discussed in detail, nor were all

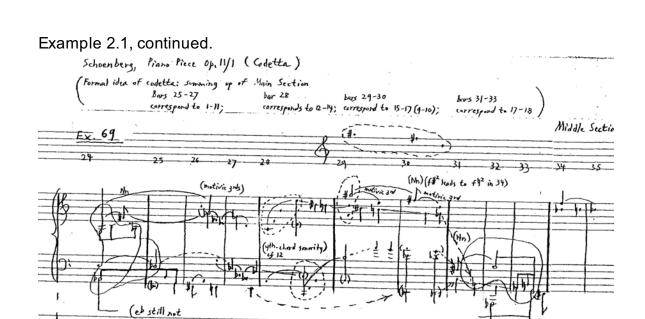
topics related to the analysis fully explored, the above-mentioned aspects will, I hope, serve to shed light on some of the musical processes that pervade Pettersson's symphonic works; particularly, his use of a structure marked by significant motives that unfold within a continuous design, his use of motivic associations and reinterpretation to play out a musical drama, and his emphasis on dissonance as a means of expression. While Pettersson's compositional techniques – particularly his use of complex textures involving the combination of small motivic ideas into linear progressions that compose out contrapuntal harmonies over large musical spaces are unique in comparison with more traditional symphonic composers of the nineteenth and early twentieth century – his symphonic thinking concerning large-scale synthesis reflects just such a tradition. As mentioned above, many symphonic works representative of the German symphonic tradition of the late nineteenth and early twentieth centuries – such as those of Bruckner, Mahler, and Strauss as well as those of other European composers such as Sibelius and Elgar - reflect a symphonic process in which single movement or multimovement orchestral works are unified through a single background structure. In this way, Pettersson continues in a long line of symphonic tradition while offering a wholly unique style both in form and in language. As a result, his music represents a new moment in the development of the symphony, the study of which has declined in the complex musical atmosphere of the twentieth century. Although the symphony in the twentieth century is no longer the primary means of musical development as it was for many earlier composers, it is a vital part of that development, and merits further study of composers such as Pettersson who have used the symphony as an important means of musical expression and development.

**APPENDIX** 

MUSICAL EXAMPLES

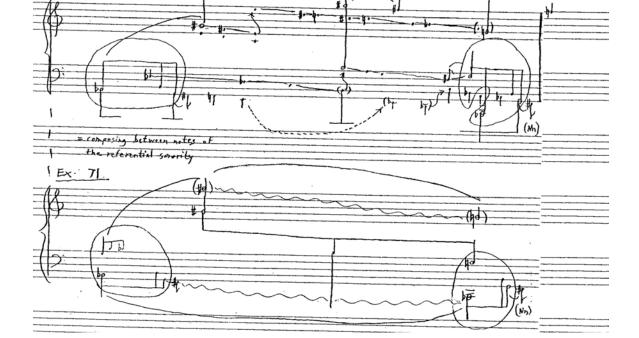
Example 2.1. Edward Laufer's Analysis of Schoenberg, Piano Piece Op. 11/1.





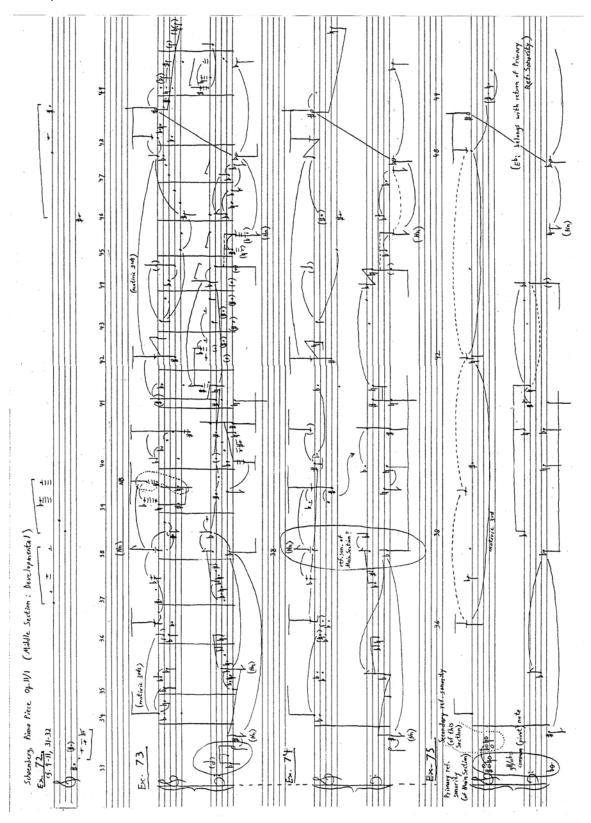
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1 Ex . 70



(Nh)

Example 2.1, continued.

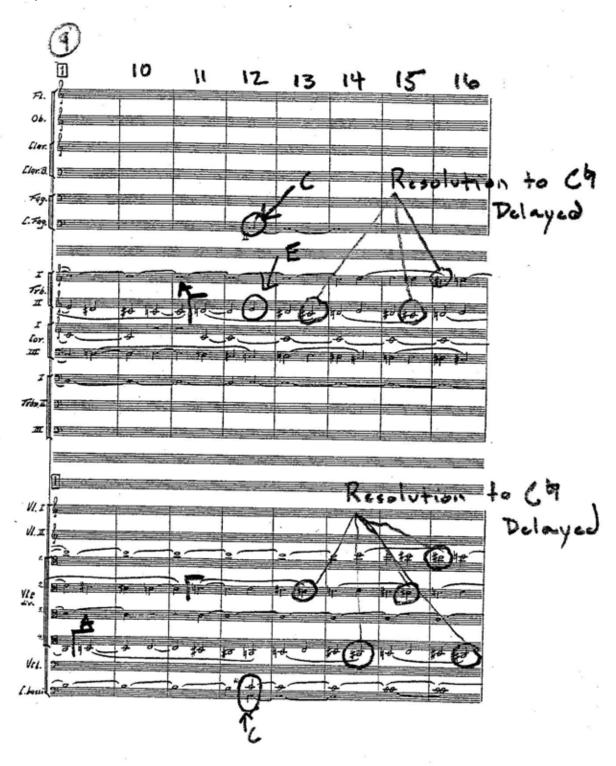


Example 2.1, continued. secondary sonority of 12 added -63 ------- descending lines, filling in between notes of ref. son. (cf. codetta, 25-33, to which this Section corresponds as well) (conseq. phr.) 56 -57 - 58 - 59 66 . 55 Reform (antec. phr.) - harmanie return precedes formal return, thus joining sections - retison, becomes clearer; emphasized repeatedly -Eb of ref. son, only emphasized in Final Section Schoenberg, Pinno Piece Of-11/1 (Final Section) 3 2 Retransition starts 44 43

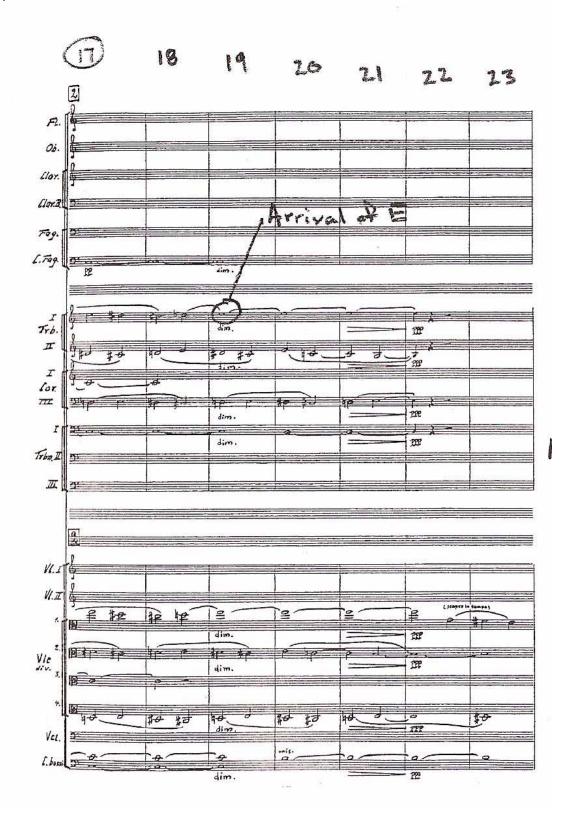




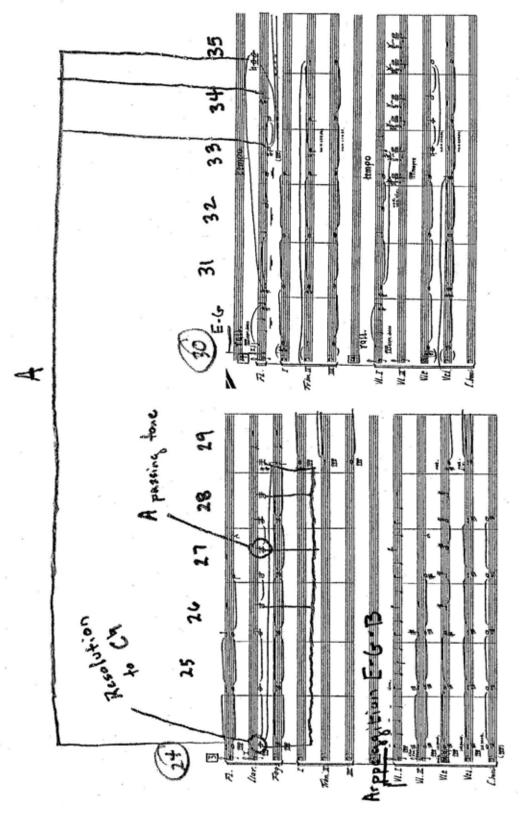
Example 3.1, continued.

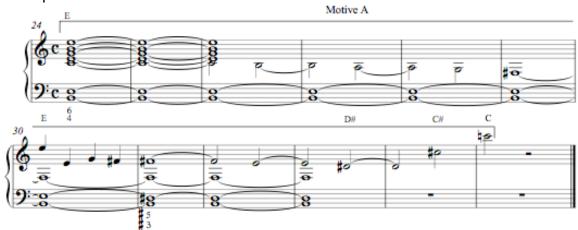


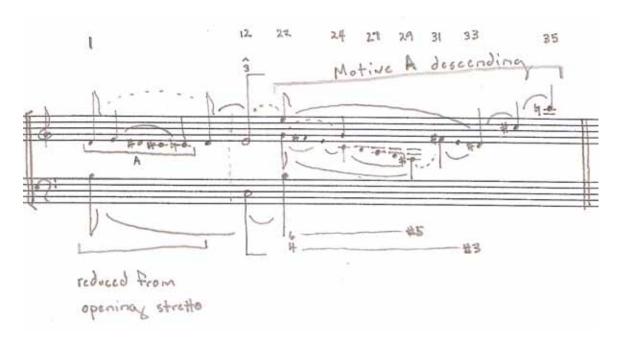
Example 3.1, continued.



Example 3.1, continued.







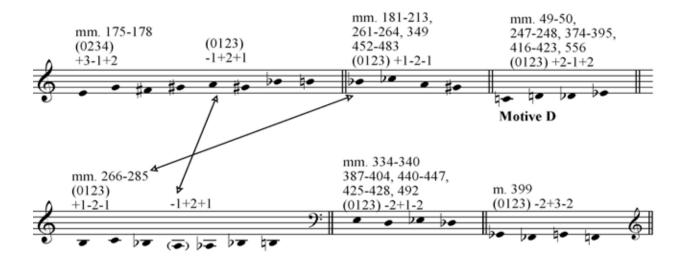




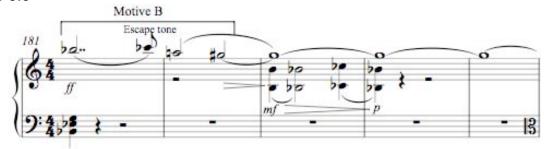


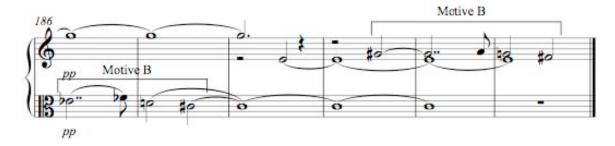








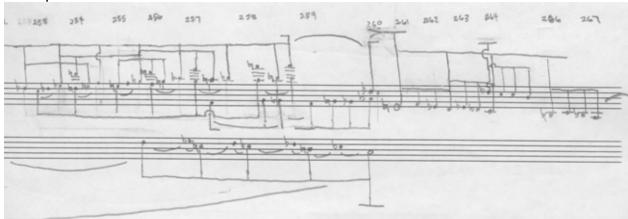


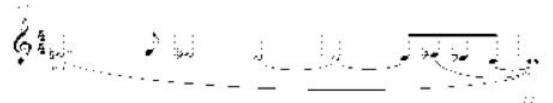


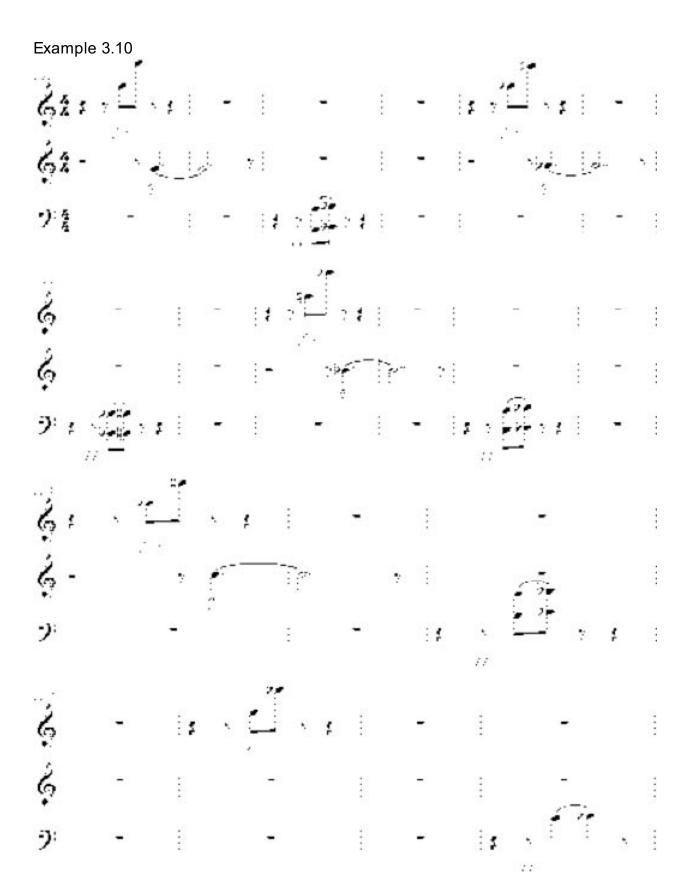


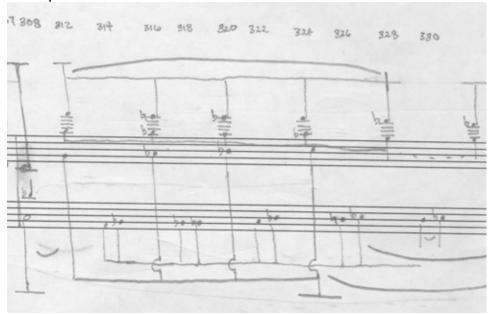
Example 3.7



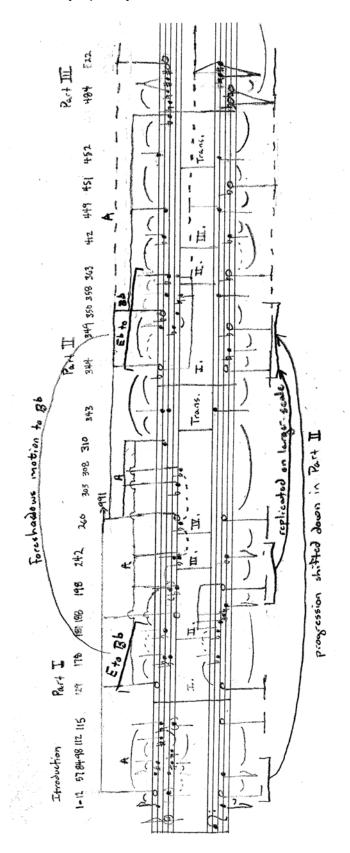




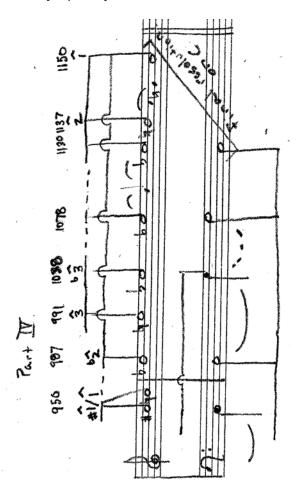




Example 4.1a. Pettersson, Symphony no. 5, Overview.



Example 4.1b. Pettersson, Symphony no. 5. Overview.



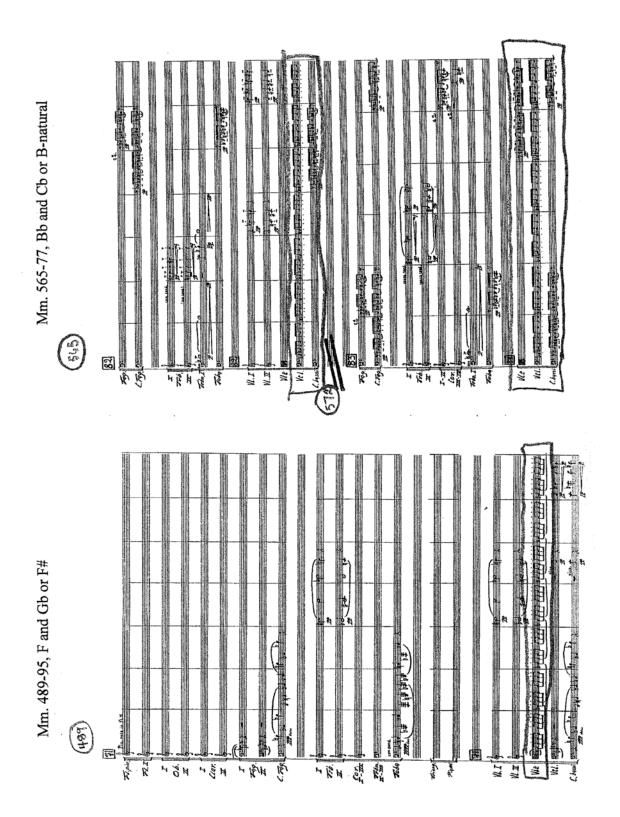
Example 4.2 Pettersson, Symphony no. 5, mm. 256-263



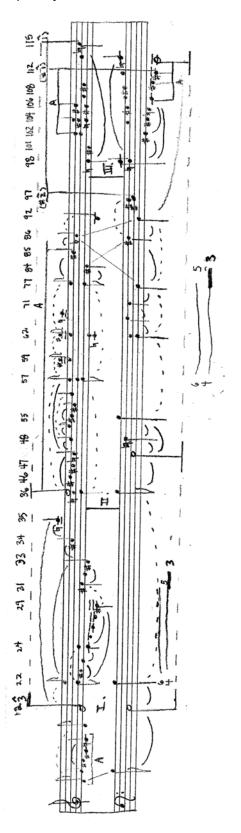
Example 4.3. Pettersson, Symphony no. 5, mm. 129-135. Motive A surpasses C



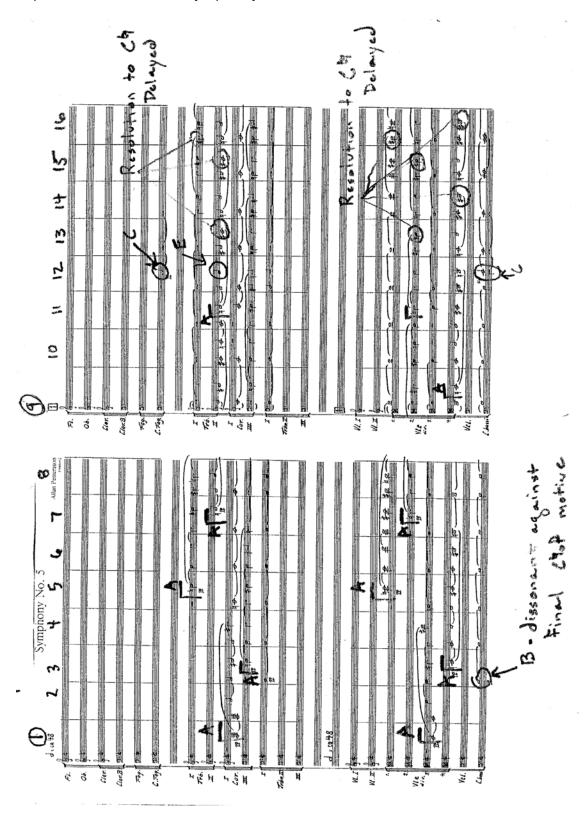
Example 4.4. Alternating figuration as representation of dyads.



Example 4.5. Pettersson, Symphony no. 5, Introduction.



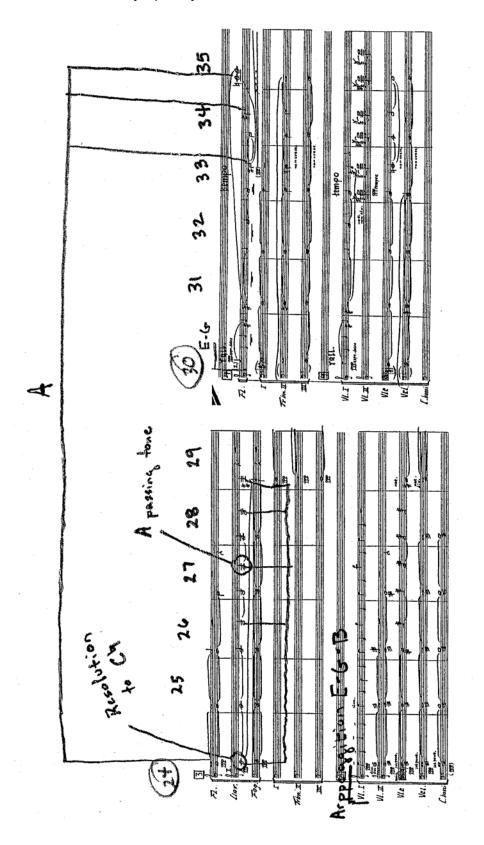
Example 4.6a. Pettersson, Symphony no. 5, mm. 1-16.



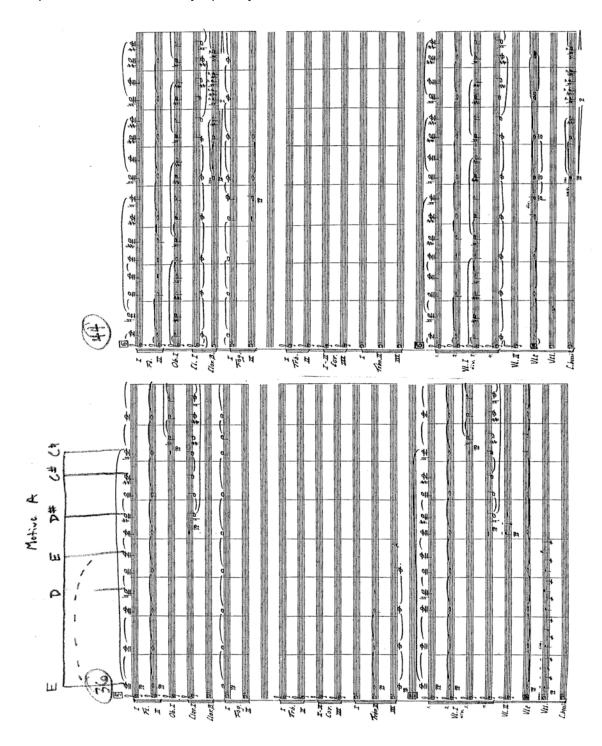
Example 4.6b. Pettersson, Symphony no. 5, mm. 17-23.



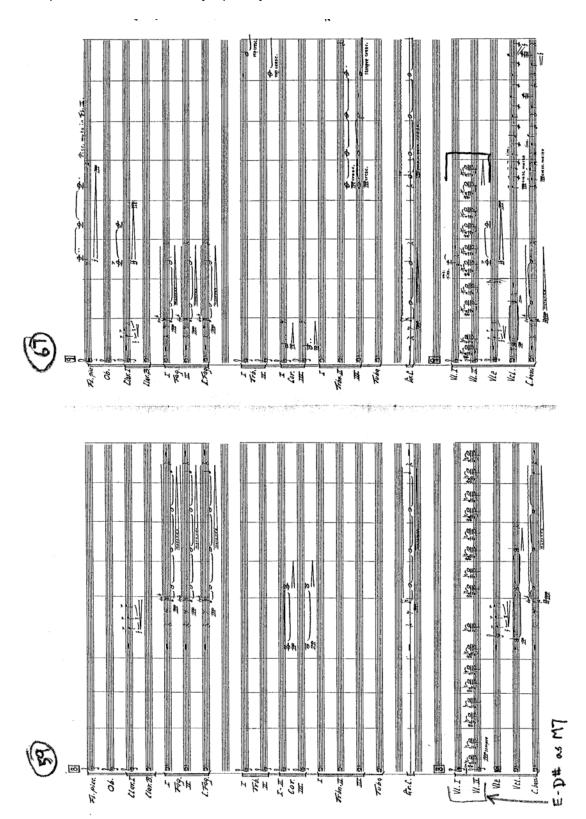
Example 4.6c. Pettersson, Symphony no. 5, mm. 24-35



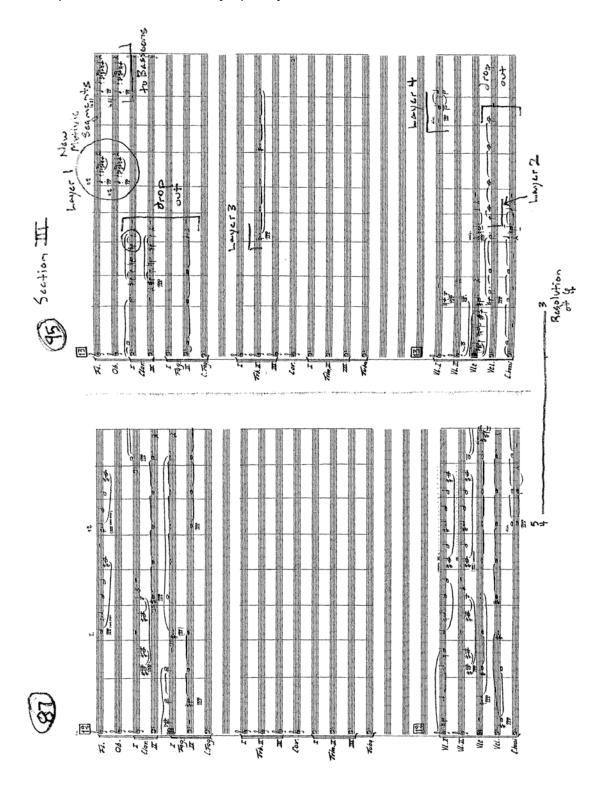
Example 4.7. Pettersson, Symphony no. 5, mm. 36-51.



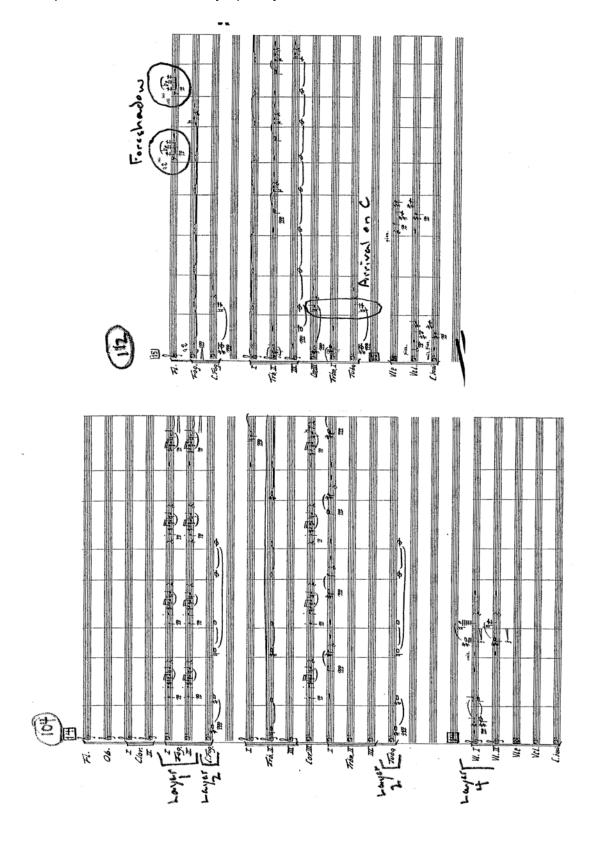
Example 4.8. Pettersson, Symphony no. 5, mm. 59-76.



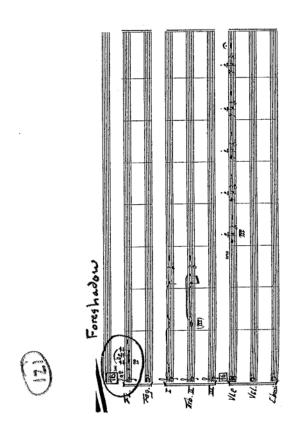
Example 4.9a. Pettersson, Symphony no. 5, mm. 87-103.



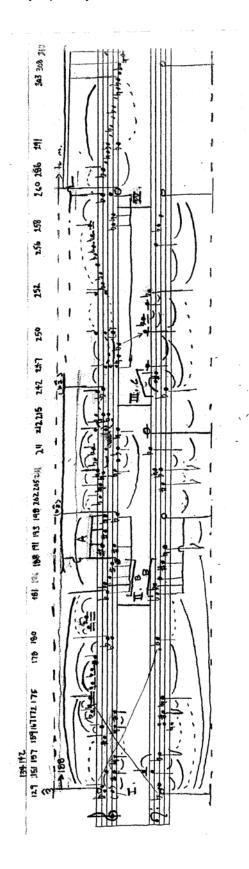
Example 4.9b. Pettersson, Symphony no. 5, mm. 104-120. Section III of Introduction



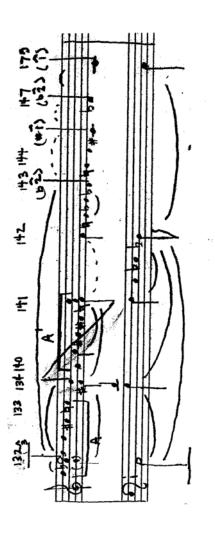
Example 4.9c. Pettersson, Symphony no. 5, mm. 121-128.



Example 4.10a. Pettersson, Symphony no. 5, Part I.



Example 4.10b. Pettersson, Symphony no. 5, Part I.

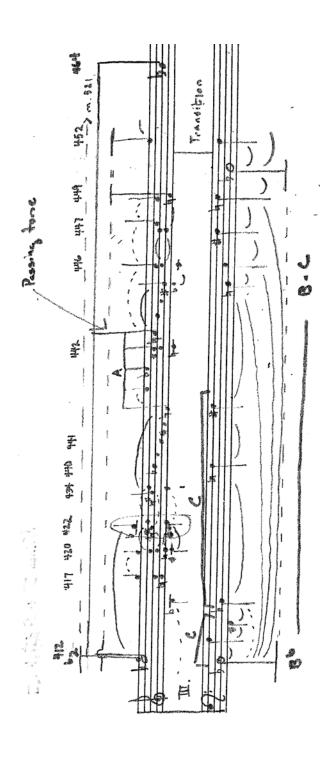


Example 4.11. Pettersson, Symphony no. 5, mm. 129-135.

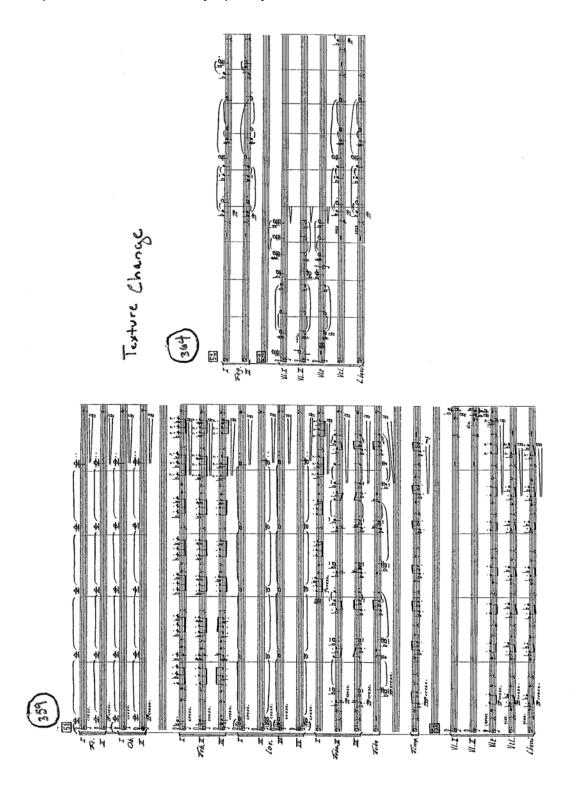


Example 4.12a. Pettersson, Symphony no. 5, Part II. 37 363 359 350 39 369 アナロ 34-3 337 Transition 210 312 328 336 333 The famous second of the Ta

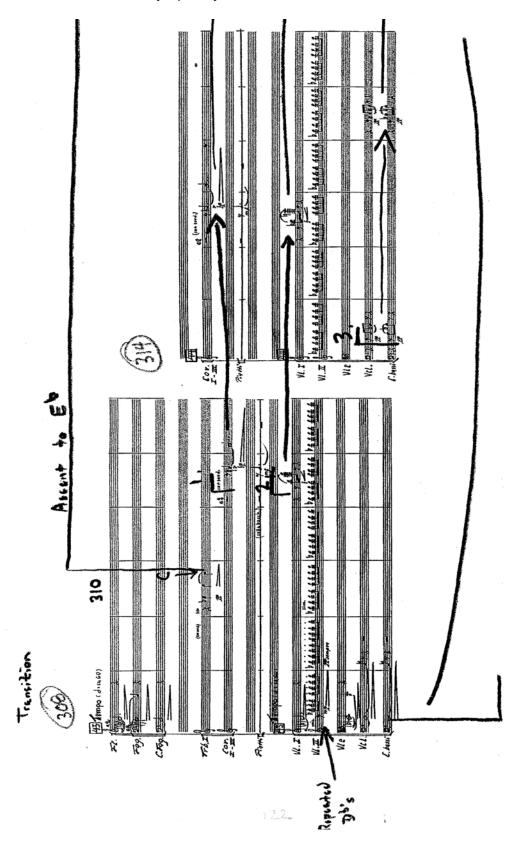
Example 4.12b. Pettersson, Symphony no. 5, Part II.



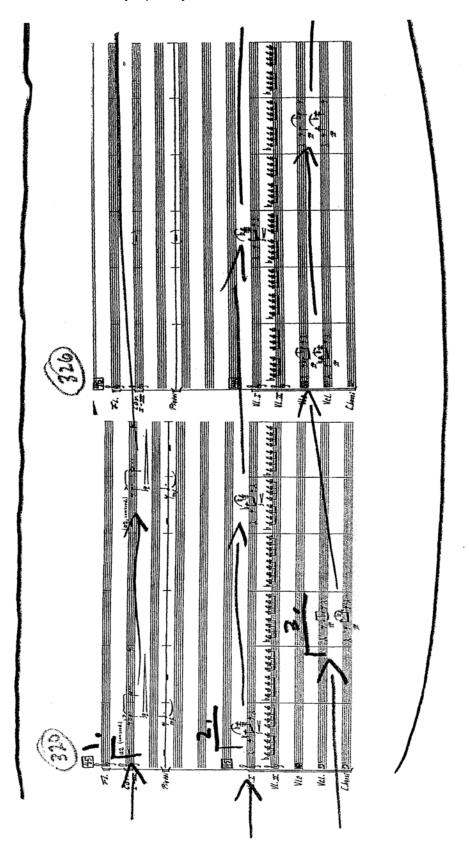
Example 4.13. Pettersson, Symphony no. 5, mm. 359-373.



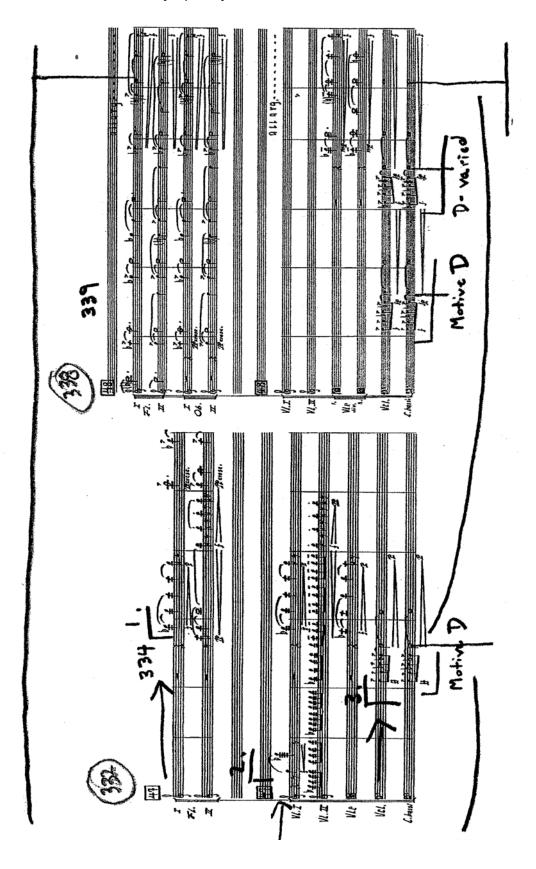
Example 4.14a. Pettersson, Symphony no. 5, mm. 308-319.



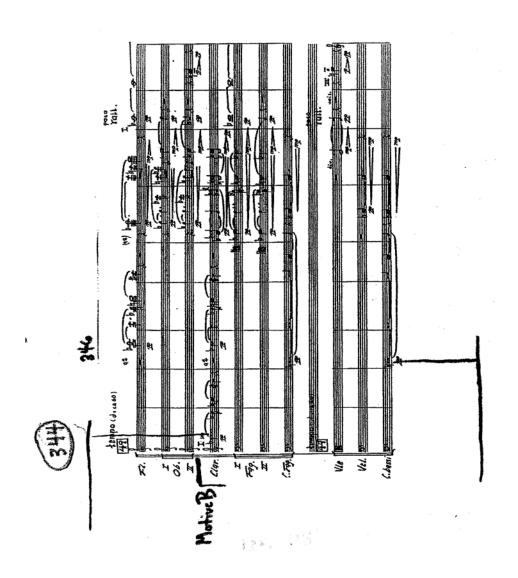
Example 4.14b. Pettersson, Symphony no. 5, mm. 320-331.



Example 4.14c. Pettersson, *Symphony no. 5*, mm. 332-343.



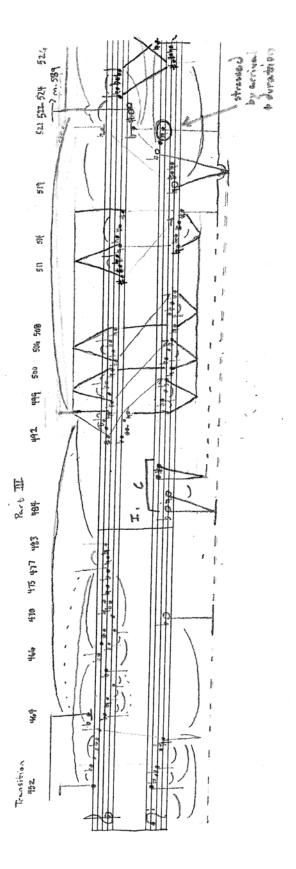
Example 4.14d. Pettersson, Symphony no. 5, mm. 344-353.

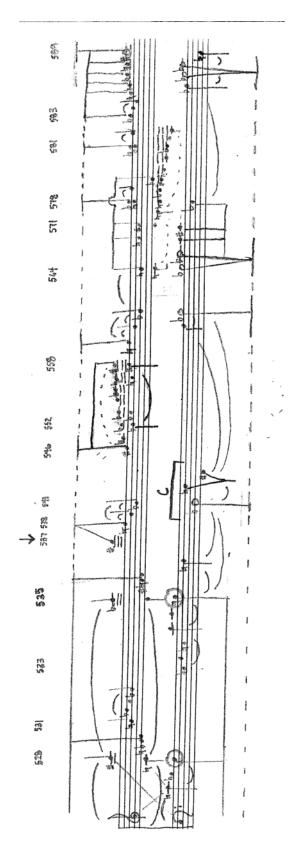


Example 4.15. Pettersson, Symphony no. 5, mm. 359-63. Emphasis on G flat.

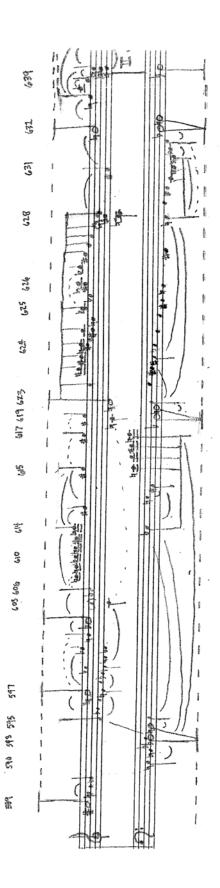


Example 4.16a. Part III.

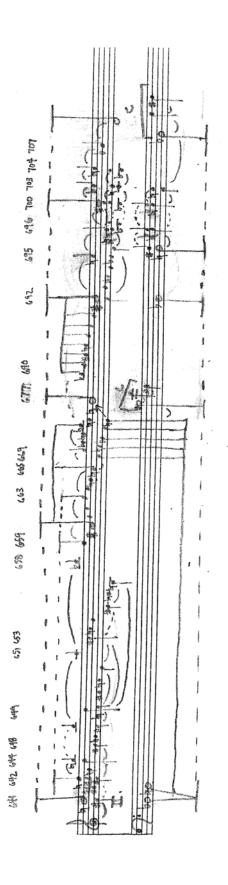


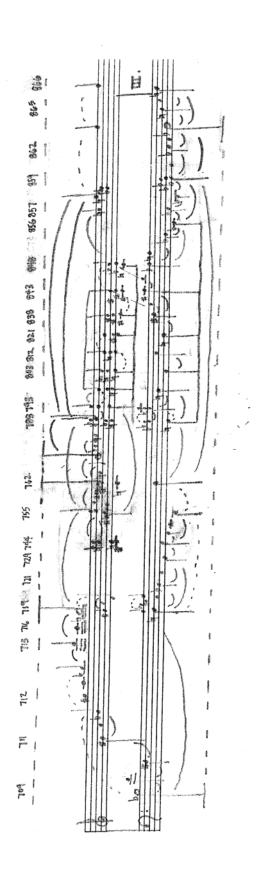


Example 4.16c. Part III.

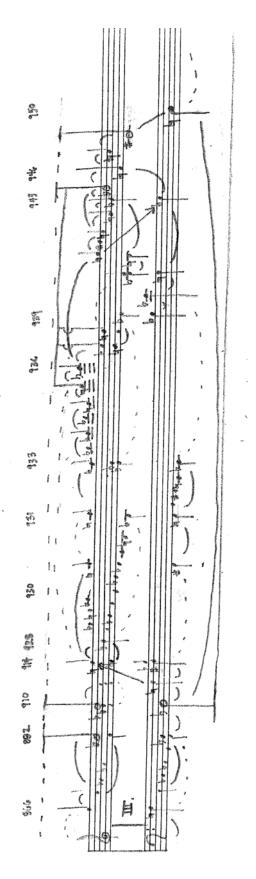


Example 4.16d. Part III.

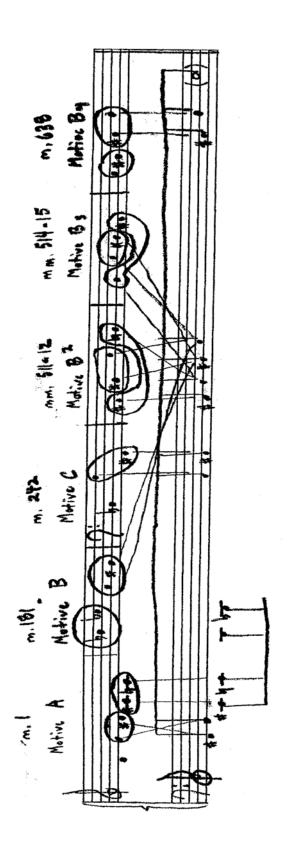




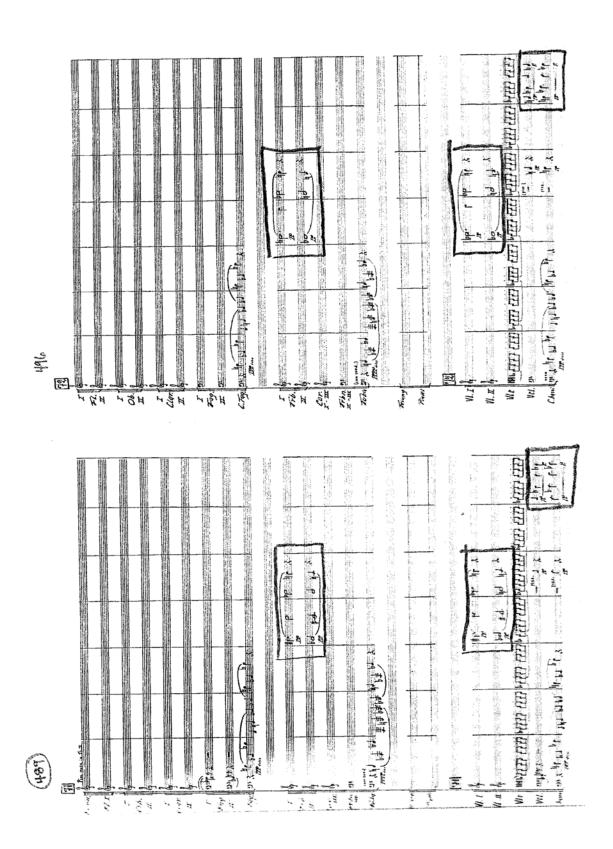
Example 4.16f. Part III.



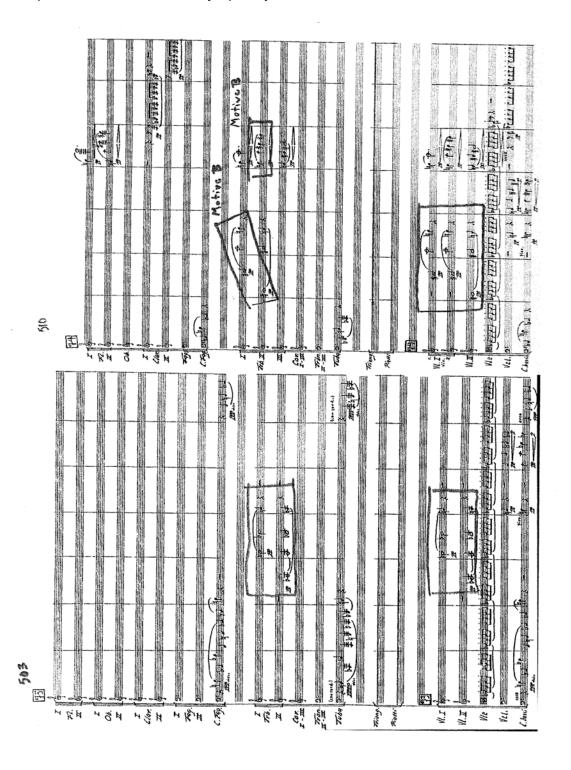
Example 4.17, Pettersson, Symphony no. 5. Expansion of Minor-second Dyads.



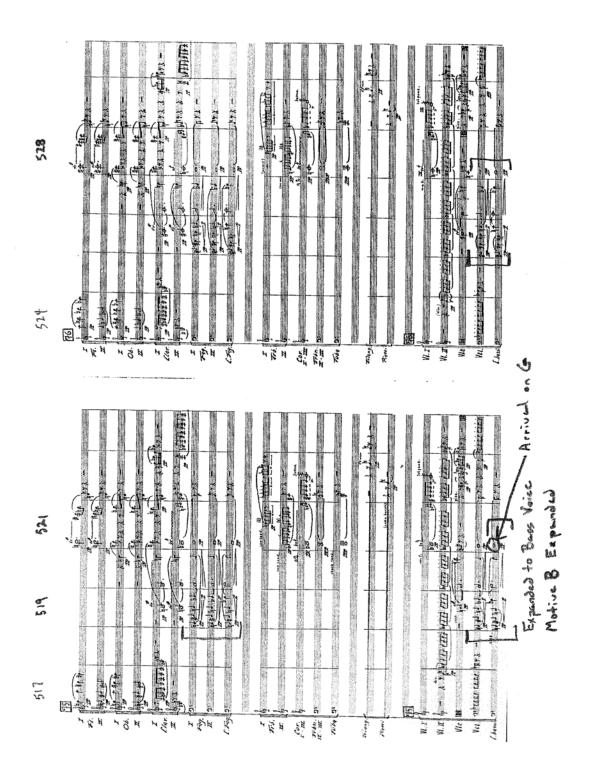
Example 4.18. Pettersson, Symphony no. 5, mm. 489-102.



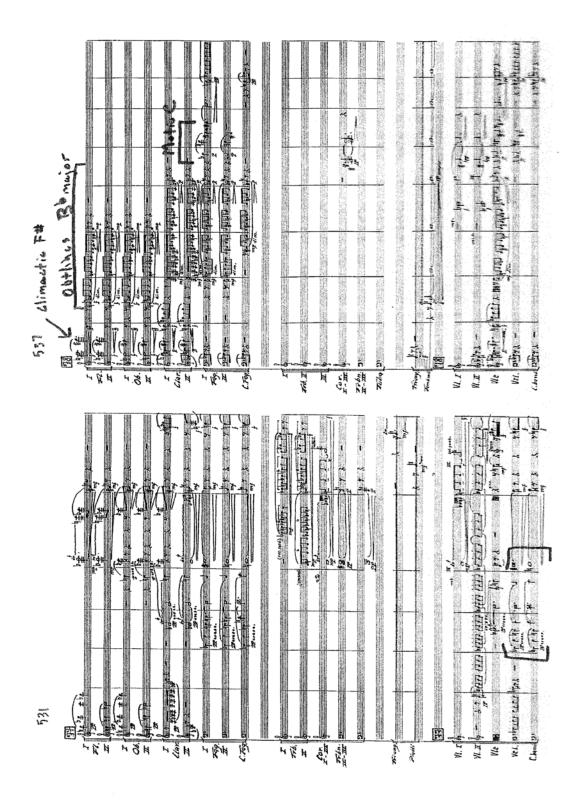
Example 4.18b. Pettersson, Symphony no. 5, mm. 503-516.



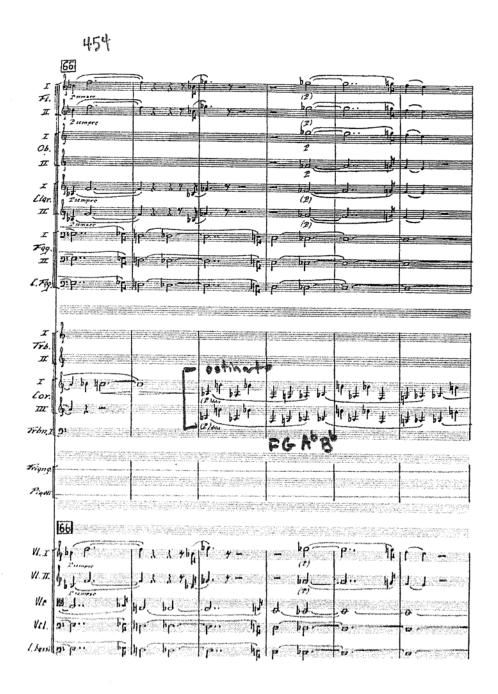
Example 4.18c. Pettersson, Symphony no. 5, mm. 517-530.

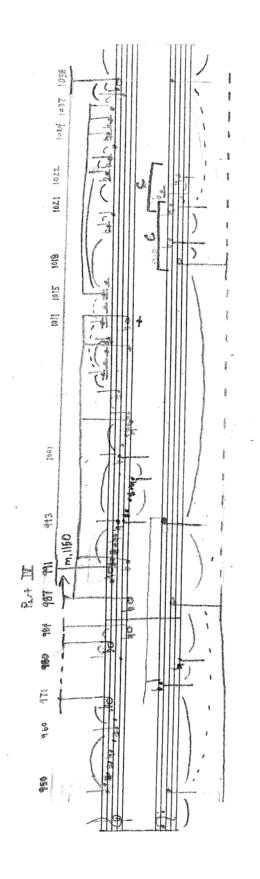


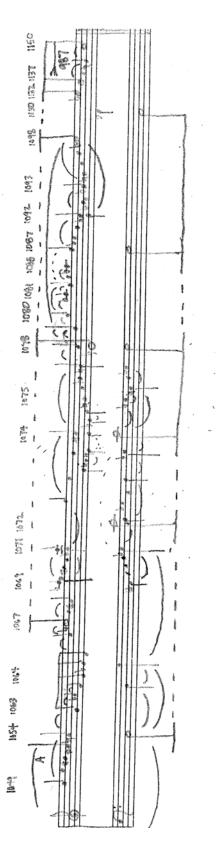
Example 4.18d. Pettersson, Symphony no. 5, mm. 531-544.



Example 4.19. Pettersson, Symphony no. 5, mm. 454-459. Ostinato Figure.







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