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**FIVE PRELUDES OPUS 74 BY ALEXANDER SCRIBIN:  
THE MYSTIC CHORD AS BASIS FOR NEW MEANS OF  
HARMONIC PROGRESSION**

**Committee:**

---

Elliott Antokoletz, Co-Supervisor

---

Lita Guerra, Co-Supervisor

---

Gregory Allen

---

A. David Renner

---

Rebecca A. Baltzer

---

Reshma Babra Naidoo

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HARMONIC PROGRESSION**

**by**

**Chia-Lun Chang, B.A., M.M.**

**Treatise**

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## **Dedication**

To Mom and Dad

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Chia-Lun Chang, D.M.A.

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Supervisors: Elliott Antokoletz, Lita Guerra

The music of Alexander Scriabin evolved from nineteenth century Romanticism to a groundbreaking harmonic system that foreshadowed the atonality of the twentieth century. His musical vocabulary in the later opuses reveals a tendency toward coalescence of the harmonic materials. The “Mystic Chord” grew out of this tendency, the harmonic concept of which is based on a new scalar source known as the “acoustic scale.” This became the basis for Scriabin’s later harmonic organization.

Five Preludes, Op. 74, composed in 1914, is Scriabin’s last composition before his death in 1915. In these Preludes, Scriabin displays maturity and mastery in his harmonic executions. Traditional compositional techniques are incorporated into the new harmonic system which impels a reinterpretation of harmonic progression and tonalities. By using the Mystic Chord as the harmonic basis, this treatise analyzes and identifies the harmonic tendencies in the Five Preludes Op. 74 to help define the musical directions and expressions.

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## INTRODUCTION

The music of Alexander Scriabin (1872-1915) evolved from nineteenth-century Romanticism to a groundbreaking harmonic system that foreshadowed the atonality of the twentieth century. Whereas music of the traditional tonal system of the eighteenth and nineteenth century is founded primarily on the major-minor scale system, Scriabin as well as Debussy, Bartók, Stravinsky, and others were moving into a kind of twelve-tone language. Chromatic music of the Romantic era is still based on hierarchical pitch relations within the total chromatic continuum. In Scriabin, the twelve tones are equalized and thus attain structural rather than the embellishing (consonant-dissonant) functions of pitches in the music prior to the twentieth-century.

The fundamental premise in this evolution toward a kind of twelve tone language is the notion of the pitch/interval set. In contrast with Schoenberg's set which functions as theme or motive (that is, a serial or ordered entity), Scriabin's set functions as a scale (that is, a non-serialized entity). While there are fundamental connections with the unordered, non-serial sets of Debussy, Bartók, Stravinsky and others, Scriabin's set emerged in his later works as a highly specific construction, which came to be known as the Mystic Chord. The implication of Scriabin's development is significant in that it reflects a larger tendency in the early twentieth-century toward the singular construct as a factor in generating the entire chromatic continuum.

Scriabin was trained conventionally in the European tradition at the Moscow Conservatory where he was a classmate of Sergei Rachmaninoff.<sup>1</sup> His teachers in the

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<sup>1</sup> The biographical information of Scriabin is mainly drawn from Faubion Bowers, *Scriabin: A Biography*, rev. 2d ed., (New York: Dover Publications, Inc., 1996). Other resources include Bowers, *The New Scriabin: Enigma and Answers* (New York: St. Martin's Press, 1973); Alfred J. Swan, *Scriabin* (London: John Lane The Bodley Head Ltd., 1923); A. Eaglefield Hull, *A Great Russian Tone-Poet: Scriabin*

Conservatory included Vassily Safonoff, Sergei Taneief, and Anton Arensky. After graduating from the Conservatory in 1892, he began his career as a concert pianist. Scriabin concertized in Russia as well as internationally in which he performed only his own compositions. Many of the early works are small character pieces for solo piano. In addition to numerous etudes, impromptus, mazurkas, waltzes, nocturnes and preludes, the first two symphonies and Piano Sonata No.1 to 3 were composed during the early period. Chopin's influences predominated in these early works in terms of the melodic lyricism, forms, textures, harmonies, figuration, pianistic approaches, and even genre. Twenty-Four Preludes, Op. 11 (1888-1896), for instance, are arranged in accordance with Chopin's Twenty-Four Preludes Op.28. However, signs of tonal dissolution as well as the weakening of consonant-dissonant functions are already apparent in Op. 11 through vague progressions of tonic, dominant and sub-dominant.

From 1898 to 1903, Scriabin held a professorship at the Moscow Conservatory. During the last years of teaching at the Conservatory, Scriabin began to immerse himself in philosophical readings. While his philosophical insight started to take shape, Scriabin continued to expand the possibilities in harmonies and tonalities. Between 1903 and 1907, Scriabin composed two sonatas (No.4 and 5), the Third Symphony "Divine Poem", and small piano pieces such as preludes and poems. His compositions during this period reveal a more personal musical idiom that departs from Chopin's influences. Extended dominant harmonies were used extensively in the works of his middle years. The super-tertian construction results in a coalescence of harmonic materials which reveals the tendency toward harmonic singularity and unity.

In 1905, Scriabin was introduced to Helena Petrovna Blavatsky's *The Key to Theosophy*. Scriabin became interested in theosophy and mysticism which inspired in

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(London: Kegan Paul Trench, Trubner & Co., Ltd., 1916), and Boris de Schloezer, *Scriabin: Artist and Mystic*, trans. Nicolas Slonimsky (Berkeley and Los Angeles: University of California Press, 1987).

him the idea of creating a grandiose play “*Mysterium*”. The *Mysterium* was intended to embrace music with philosophy and religion while synthesizing all forms of arts and senses such as dances, color, lights and scents. Scriabin took years contemplating a seven-day performance called “Prefatory Action” to precede the *Mysterium*. In between the course of writing texts, and sketching for this project, he composed his Fourth Symphony “*Poem of Ecstasy*”, Fifth Symphony “*Prometheus*”, five piano Sonatas (Nos. 6-10), and some short piano pieces including five preludes, Op. 74. Under the influence of theosophy, Scriabin was driven to create a new kind of sound in music that is suitable for the expression of mystical elements or experiences. His musical evolution showed a parallel progression with his philosophical development.

A novel sonority which emerged in the *Prometheus* opened a new phase of musical expression. The six-tone harmony, C-F<sup>#</sup>-B<sup>b</sup>-E-A-D, which pervades this symphony reveals Scriabin’s new harmonic materials. The chord of *Prometheus* was later expanded into a seven-tone harmony (C-F<sup>#</sup>-B<sup>b</sup>-E-A-D-G) which became known as the “Mystic Chord.” The harmonic concept of the Mystic Chord is based on a new scalar source known as the “acoustic scale,” which was expected to be exploited in *Mysterium*.<sup>2</sup> This singularized harmony of the Mystic Chord becomes the basis for Scriabin’s later harmonic organization.

Due to his premature death caused by blood poisoning in 1915, *Prefatory Action* and *Mysterium* remained fragments of sketches. Five Preludes, Op. 74, composed in 1914, is Scriabin’s last composition. In these Preludes, Scriabin displays maturity and mastery in his harmonic executions. Traditional compositional techniques are incorporated into the new harmonic system which impels a reinterpretation of harmonic

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<sup>2</sup> Bowers wrote “In Scriabin’s sketches for the ‘Prefatory Action,’ there is one chord written out experimentally under the caption ‘Investigation: Melody, Harmony, Rhythm’: C, F<sup>#</sup>, B<sup>b</sup>, E, A, D, G, and over it is written the overtone numbers, eight through fourteen (the twelfth, G, included).” Bowers, *The New Scriabin: Enigma and Answers*, p. 135.

progression and tonalities. By using the Mystic Chord as the harmonic basis, this treatise analyzes and identifies the harmonic tendencies in the Five Preludes Op. 74 to help define their musical directions and expressions.

## Chapter 1: Theoretical Background

In the traditional tonal system, harmonic functions play an important role in articulating and expressing musical structure. Theoretical analysis assists a performer in identifying the phrase structure, musical direction, formal structure, and expected as well as unexpected events. Eventually, analysis can help understand the musical expression and emotional content of the work.

The harmonies of Scriabin's late compositions reveal an increased complexity over the early works and a move beyond tonal functionality. Instead of relying on the diatonic system, he creates an original musical vocabulary to express his personal philosophy and inspiration. Music theorists and musicologists who analyze Scriabin's music often resort to pitch-class set analytical techniques, or treat the Mystic Chord as an altered extended dominant.<sup>3</sup> However, Scriabin's later compositions do not submit to a diatonic functional analysis, and set theory only helps to identify the essential sonorities, which has limited benefit for musical interpretation.

George Perle states that Scriabin's evolution "leads him not into 'atonality,' but rather into a new kind of 'tonality' in which symmetrical partitionings of the semitonal scale by means of interval cycles generate new, totally consistent, referential harmonic structures."<sup>4</sup> This "new tonality" unfolds its own means of functionality and progression. Grasping the musical and emotional intensity of Scriabin's later works requires defining his compositional principles and techniques as well as comprehending

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<sup>3</sup> See Allen Forte, *Structure of Atonal Music*. (New Haven: Yale University Press, 1973). The present study is not based on Forte's methodological approach to pitch-class sets. For an evaluation of his approach, see George Perle "Pitch-Class Set Analysis: An Evaluation," *The Journal of Musicology* Vol. 8, No. 2. (Spring, 1990): 151-172.

<sup>4</sup> George Perle, "Scriabin's Self-Analyses," *Music Analysis* 3:2. (July 1984): 116. The Five Preludes, Op. 74, are discussed in this article, where Perle analyzes Scriabin's Preludes according to the octatonic system. For the complete article, see *Music Analysis* 3:2, 101-122.



the meaning of his musical idioms. Theoretical studies must take into account Scriabin's personal compositional vocabulary in order to identify areas of tension and resolution, and to observe moments of musical motion versus stasis.

### **Scriabin's Musical Vocabulary**

Although Scriabin often stated that he composed "according to definite principle," he did not explain the terms of his harmonic language nor clarify the compositional systems utilized in his later works.<sup>5</sup> Boris de Schloezer, an eminent philosopher, music critic, and Scriabin's brother-in-law, describes Scriabin's compositional process in his biography of the composer. The close relationship between Schloezer and Scriabin enabled Schloezer to provide a genuine critique of Scriabin's creative process and personality. In a series of recollections of their conversations and discussions about music and philosophy, Schloezer reveals the principles of Scriabin's composition:

The initial chord in *Prométhée* can be reduced to a scale or mode of six notes – C, D, E, F-sharp, A and B-flat – which, in various transpositions, constitutes the foundation of the entire melodic and harmonic structure of the score. This musical system, as pointed out with complete justification by Ivan Vishnegradsky, is based on a hexatonic irregular scale differing fundamentally from the classical diatonic scale both structurally and in the manner of employment. None of its six component tones assumes the function of the tonic; there is no hierarchy or attractive force among them. This peculiarity is closely related to the manner in which Scriabin treats this scale; he uses all its components simultaneously, often in superposed fourths. Thus the concept of the scale is fused with that of the chord, and this chord, embracing the entire scale, appears perfectly stable, reposing upon itself without requiring resolution. It synthesizes and summarizes the scale. From this standpoint any transposition of the chord is equivalent to a freely effected modulation. The music moves as a concatenation of chords, disregarding any preconceived rules (within the limits of the mode) and ignoring what is described as tonal logic.<sup>6</sup>

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<sup>5</sup> Faubion Bowers, *The New Scriabin: Enigma and Answer* (New York: St. Martin's Press, 1973), p. 129.

<sup>6</sup> Boris de Schloezer, "Appendix 2: The Destiny of Scriabin's Music," *Scriabin: Artist and Mystic*, trans. Nicolas Slonimsky (Berkeley and Los Angeles: University of California Press, 1987), p. 321-322.

To elaborate, the initial chord of Scriabin's *Prometheus* (1910), which is known as the Mystic Chord, C-F#-Bb-E-A-D, can be outlined as a scale or mode, C-D-E-F#-[]-A-Bb. According to Schloezer, the fifth degree of the scale is excluded to avoid tonal suggestions. However, soon after the Sixth Sonata, Scriabin added the seventh tone, G, and expands the chord to C-F#-Bb-E-A-D-G. This completes the mode, C-D-E-F#-G-A-Bb, which was to become the foundation of Scriabin's later harmonic constructions.<sup>7</sup>

### **Terminology**

Theoretically, this scale is known as the "overtone" or "acoustic" scale since its pitches are the seventh through thirteenth partials of the overtone series (Fig. 1).<sup>8</sup> Similar to the diatonic scalar system, the acoustic scale can be transposed to twelve different transpositions. Since the mode contains an irregular sequence of whole steps and half steps in contrast to the diatonic modes, traditional key signatures are no longer relevant. This results in Scriabin's abandonment of key signatures altogether in his late compositions. For analytical convenience, the pitch-class integers are applied to identify the transpositions of the scale. Accordingly, the transposition that starts on C is named Transposition 0, or abbreviated T- 0. T-1 indicates that which starts on the C#, T-2 on D, T-3 on Eb, and so forth. The diagram in Table 1 demonstrates all twelve transpositions of the acoustic scale.

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<sup>7</sup> Elliott Antokoletz, "Musical Reactions to the Ultra-Chromaticism of the Wagner-Strauss Period: Rise of National Style," in *Twentieth-Century Music*, (Englewood Cliffs, NJ: Prentice Hall Inc., 1992), p. 100-104.  
8

Figure 1: Overtone Series

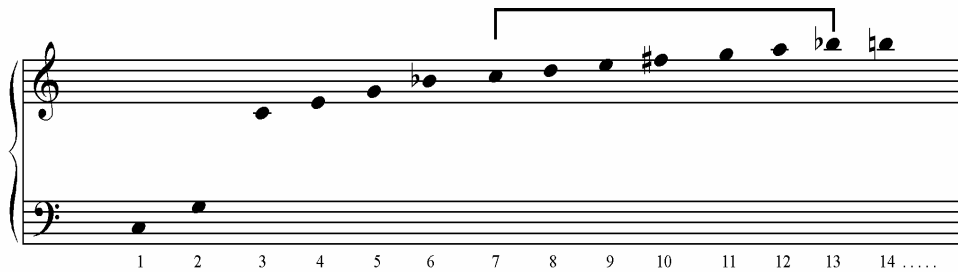


Table 1: Acoustic Scale and Transpositions

<b>T-0</b>	C	D	E	F <sup>#</sup>	G	A	B <sup>b</sup>	C
<b>T-1</b>	C <sup>#</sup>	D <sup>#</sup>	E <sup>#</sup>	F <sup>x</sup>	G <sup>#</sup>	A <sup>#</sup>	B	C <sup>#</sup>
<b>T-2</b>	D	E	F <sup>#</sup>	G <sup>#</sup>	A	B	C	D
<b>T-3</b>	D <sup>#</sup>	E <sup>#</sup>	F <sup>x</sup>	G <sup>x</sup>	A <sup>#</sup>	B <sup>#</sup>	C <sup>#</sup>	D <sup>#</sup>
<b>T-4</b>	E	F <sup>#</sup>	G <sup>#</sup>	A <sup>#</sup>	B	C <sup>#</sup>	D	E
<b>T-5</b>	F	G	A	B	C	D	E <sup>b</sup>	F
<b>T-6</b>	F <sup>#</sup>	G <sup>#</sup>	A <sup>#</sup>	B <sup>#</sup>	C <sup>#</sup>	D <sup>#</sup>	E	F <sup>#</sup>
<b>T-7</b>	G	A	B	C <sup>#</sup>	D	E	F	G
<b>T-8</b>	G <sup>#</sup>	A <sup>#</sup>	B <sup>#</sup>	C <sup>x</sup>	D <sup>#</sup>	E <sup>#</sup>	F <sup>#</sup>	G <sup>#</sup>
<b>T-9</b>	A	B	C <sup>#</sup>	D <sup>#</sup>	E	F <sup>#</sup>	G	A
<b>T-10</b>	A <sup>#</sup>	B <sup>#</sup>	C <sup>x</sup>	D <sup>x</sup>	E <sup>#</sup>	F <sup>x</sup>	G <sup>#</sup>	A <sup>#</sup>
<b>T-11</b>	B	C <sup>#</sup>	D <sup>#</sup>	E <sup>#</sup>	F <sup>#</sup>	G <sup>#</sup>	A	B

Scriabin often avoided the possibility of harmonic function by arranging harmonies in stacks of fourths instead of thirds.<sup>9</sup> This arrangement produces the Mystic Chord in its most characteristic form with two tritones underlying the lower partial of the

<sup>9</sup> Scriabin answered to a question regarding the arrangements of the so called “Prometheus Chord” by saying “I wanted to rid myself of the usual disposition in thirds of the dominant thirteenth chord.” (Bower, Fabion. *The New Scriabin: Enigma and Answers*, (New York: St. Martin’s Press. 1973). This incident is quoted by Bower in order to prove that Scriabin’s late harmonic system still suggests functionality because “Scriabin was thinking in terms of traditional harmonic analysis.” However, Scriabin’s remark cannot support Bower’s statement, but only suggests that Scriabin was obviously trying to avoid the tonal gravity.

chord (Fig. 2). When Scriabin arranged the chords in thirds, as seen in the set of the Seventh Sonata, the second degree of the scale is lowered. This thirds ordering creates the coexistence of major and minor triads in the upper tetrachord (Fig. 3).

Figure 2: Acoustic Scale and Mystic Chord

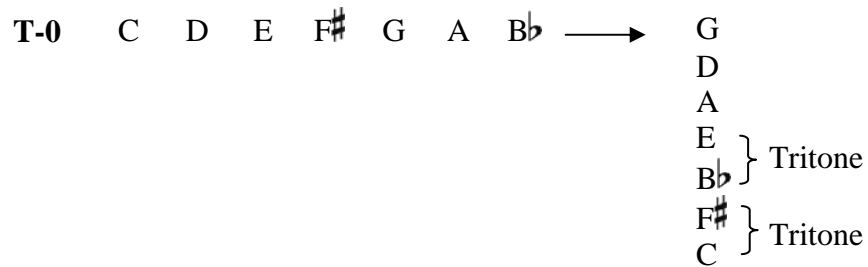
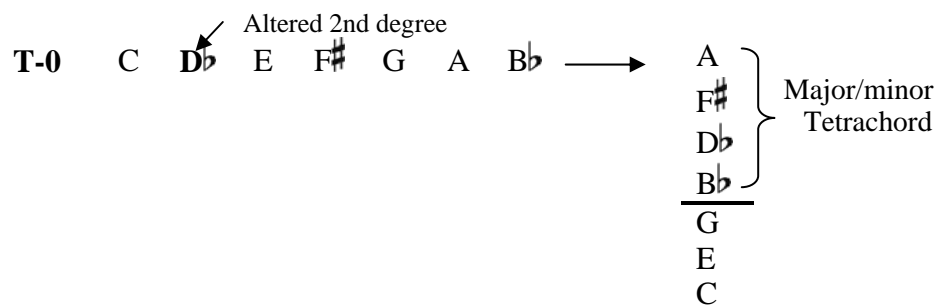


Figure 3: Basic Mode in Sonata No. 7 (Altered Acoustic Scale).



### Transformations of the Acoustic Scale

Scriabin often modifies the acoustic scale slightly, transforming the scale or fusing two scalar systems to allow changes in harmonic color, as the example of the Seventh Sonata presented above demonstrates. There are various possibilities enclosed in the acoustic scale. The acoustic scale has some diatonic elements. It contains

segments of the C-Lydian mode (C-D-E-F<sup>♯</sup>-G-A) and G-Dorian mode (G-A-B<sup>♭</sup>-C-D-E). A rotation of the acoustic scale to its seventh degree, B<sup>♭</sup>, yields a five-note whole-tone segment, B<sup>♭</sup>-C-D-E-F<sup>♯</sup>. From the third degree (E), the acoustic scale alternates whole-steps and half-steps (E-F<sup>♯</sup>-G-A-B<sup>♭</sup>-C), which together form six notes of the octatonic scale. Splitting the second degree (D) of the acoustic scale into neighboring half-steps produces a complete octatonic scale (Fig. 4). The acoustic scale inherits the modal quality of the Lydian and Dorian elements and at the same time enfolds both whole-tone and octatonic segments. Elliott Antokoletz illustrates the relations between the acoustic scale and other non-diatonic modes in a diagram shown in Figure 5.<sup>10</sup>

Figure 4: Transformation from Acoustic Scale to Octatonic Scale.

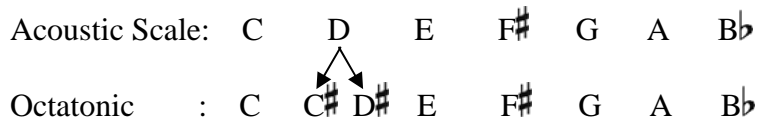
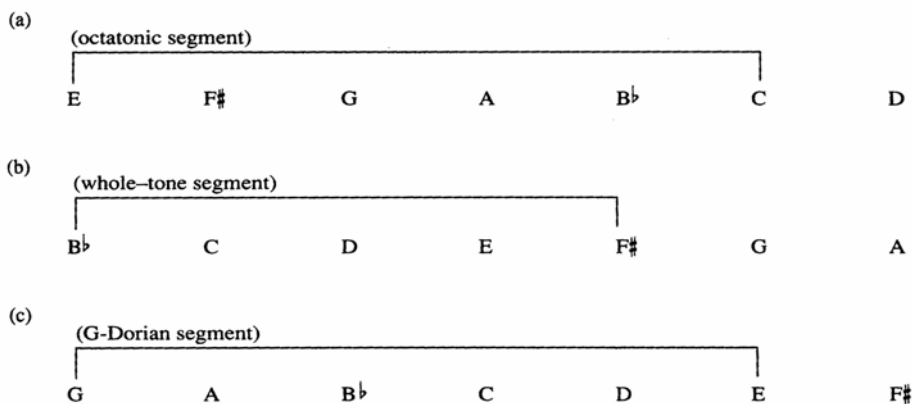


Figure 5: Three permutations of Acoustic Scale in Relation to Other Non-Diatonic Modes. (Example 4-10 from Antokoletz's *Twentieth-Century Music*.)



<sup>10</sup> Antokoletz, *Twentieth-Century Music*, p. 103.

The acoustic and octatonic scales are closely related as seen in Figure 4, and this relationship is extensively exploited by Scriabin. The octatonic extensions, together with the second degree of the acoustic scale, form a three-note chromatic segment, D<sup>#</sup>-D-C<sup>#</sup> (see Fig. 4). These three-note chromatic cells in their successive minor-third transpositions are essential for the thematic elements in many of Scriabin's late works. It is especially evident in Prelude Op. 74, No. 3, which is studied in Chapter 2. Scriabin's compositions often reveal the octatonic entity with a variety of chromatic passing tones. The unifying octatonic structures and the seemingly chaotic chromaticism are not random occurrences, but a result of a scrupulous execution of Scriabin's new harmonic system. This will lead to a discussion of the cyclic transpositions.

### **Interval Cycles and Cyclic Transpositions**

In the diatonic scale system, the circle of fifths is essential to harmonic progression. The diatonic scale can be reordered as a seven-note segment of the cycle of fifths or fourths, e.g., the cyclical collection of the interval-7 (perfect-5th), F-C-G-D-A-E-B can be reordered as the diatonic scale, C-D-E-F-G-A-B.<sup>11</sup> Two keys in a perfect fifth relation are most closely related because of the maximum amount of common pitches between the two keys (six out of seven).

Different interval cycles generate different scalar systems. For example, interval-2 cycle would result in the whole-tone scale, C-D-E-F<sup>#</sup>-G<sup>#</sup>-A<sup>#</sup>, and an octatonic

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<sup>11</sup> In the system of the interval cycles, there is one minor-second (interval-1) cycle, two major-second (interval-2) cycle, three minor-third (interval-3) cycles, four major-third (interval-4) cycles, only one perfect-fourth/ perfect-fifth (interval-5/7) cycles and six tritone (interval-6) cycles. All intervals are indicated by numbers of half-tone between two notes. An interval-3 would be a minor-third in a traditional diatonic terminology. Elliott Antokoletz, *The Music of Béla Bartók*. (Berkeley and Los Angeles: University of California Press. 1984), p.68.

collection is a combination of two interval-3 cycles. The acoustic scale is largely built on the interval-3 cycle. Two incomplete cycles, F<sup>#</sup>-A-C, and E-G-B<sup>b</sup> are contained in the acoustic scale. The interval-3 cycle is important in determining the transpositions and progressions of Scriabin's music. The minor-third interval plays the same role in the acoustic scale as the perfect fifth plays in traditional tonal music.

When the acoustic scale is transposed by a minor third, the concept of the common-tone relation is similar to the fifth transpositions of the diatonic scale. Referring back to Table 1 (p. 8), four pitches from one scale would remain in common with four pitches from its T-3 transpositions. For instance, G, A, B<sup>b</sup>, and C (the second tetrachord) from T-0 are in common with the pitches from the third to sixth degrees of T-3. However, Scriabin's application of the cyclic transpositions does not provide for modulation or modal contrast as in a traditional tonal system. Instead, interval-3 cycles are often applied in chord progressions such as in the Sonata No. 7. In the Seventh Sonata, the tetrachords in the treble part clearly indicate four transpositions of the seven-note octatonic set (T-0, T-3, T-6, and T-9) which are related by interval-3 cycles (Ex. 1).<sup>12</sup> Although the tetrachords move by interval-3 progressions, the common tones among four transpositions allow these four upper tetrachords to be reduced to two transpositions. As mentioned previously, the lowered second degree transforms the acoustic scale into a seven-note segment of the octatonic scale. This altered acoustic scale as shown in Figure 3 is the primary set for the Seventh Sonata. Each interval-3 transposition of this set brings in a new note to complete the octatonic collection. For instance, T-0, C-D<sup>b</sup>-E-F<sup>#</sup>-G-A-B<sup>b</sup> contains seven notes from the octatonic collection. T-6, F<sup>#</sup>-G-A<sup>#</sup>-B<sup>#</sup>-C<sup>#</sup>-D<sup>#</sup>-E has six notes in common with T-0 except for D<sup>#</sup>, which complements T-0 and completes the octatonic collection (C-D<sup>b</sup>-D<sup>#</sup>-E-F<sup>#</sup>-G-A-B<sup>b</sup>). The

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<sup>12</sup> Elliott Antokoletz, "Hybrid Modes and Interval Sets as Formal Determinants in Piano Sonatas of Albrecht, Scriabin, and Prokofiev," *International Journal of Musicology*, 3 (1994): 323-326.

interval-3 transpositional progression of the set produces an octatonic composite that contributes to the structural unification for the piece.

Example 1: Excerpt from the Seventh Sonata. (Example 7 from Antokoletz's *Hybrid Modes and Interval Sets as Formal Determinants in Piano Sonatas of Albrecht, Scriabin, and Prokofiev*).

A different harmonic color is created when progressions move from the interval-3 to the interval-2 cyclic transpositions (T-0/2/4/6/8/10 or T-1/3/5/7/9/11). While the interval-3 transpositions are essential to the octatonic relationship, the interval-2 cycles create whole-tone implications. A progression from T-0 to T-8, for instance, reveals the most observable transition from the acoustic to a whole-tone collection (Fig. 5). When T-8 follows T-0, it supplies G<sup>#</sup> to the T-0 set which completes the whole-tone scale.

Figure 6: Acoustic Scale T-0 to T-8

T-0	(B <sup>b</sup> )	→	C	→	D	→	E	→	F <sup>#</sup>	G	A	B <sup>b</sup>	C					
							↓											
T-8								F <sup>#</sup>	→	G <sup>#</sup>	→	A <sup>#</sup>	→	B <sup>#</sup>	C <sup>#</sup>	D <sup>#</sup>	E	F <sup>#</sup>
								Complete Whole Tone Scale										



### **Interval-3 Transpositions of the Octatonic Scale and Acoustic Scale**

The interval-3 cycle is significant on several different levels. First, it is a symmetrical subdivision of an octave. There are only three interval-3 cycles available: C-D $\sharp$ -F $\sharp$ -A, C $\sharp$ -E-G-B $\flat$ , and D-F-A $\flat$ -B. Each interval-3 cycle contains two tritones. In traditional diatonic harmonies, these interval-3 pitch collections are interpreted as the fully-diminished seventh chord in relation to their designated tonalities. The tritones are dissonant intervals that need to be resolved to consonant intervals, most often, thirds. Conversely, when tritones are subsets of a system that originated from symmetrical partitionings of an octave, tonal resolution of the tritones becomes inapplicable.

The properties of the interval-3 cycle noted above can also be observed in the octatonic scale. The octatonic scale, C-C $\sharp$ -D $\sharp$ -E-F $\sharp$ -G-A-B $\flat$ , is a combination of two interval-3 cycles, C-D $\sharp$ -F $\sharp$ -A and C $\sharp$ -E-G-B $\flat$ . The alternating whole-step and half-step proportion the octave symmetrically. As a result, none of the pitches assumes hierarchy or tonal gravity. Furthermore, the pitch-class content of the octatonic collection remains invariant in its successive interval-3 transpositions. Consequently, only three octatonic collections are available; they are Octatonic-0 (C-D-E $\flat$ -F-F $\sharp$ -G $\sharp$ -A-B), Octatonic-1 (C $\sharp$ -D $\sharp$ -E-F $\sharp$ -G-A-B $\flat$ -C) and Octatonic-2 (D-E-F-G-G $\sharp$ -A $\sharp$ -B-C $\sharp$ ).<sup>13</sup> The invariability of the octatonic content under transpositions at T-0, T-3, T-6 and T-9, is an important factor for structural unification in Scriabin's music.

The heptatonic acoustic scale (C-D-E-F $\sharp$ -G-A-B $\flat$ ), on the other hand, contains six notes (C, E, F $\sharp$ , G, A, and B $\flat$ ) of the octatonic collection, plus one "odd" note: the second

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<sup>13</sup> Antokoletz, *The Music of Béla Bartók*, (Berkeley, Los Angeles, London: University of California Press, 1984), p. 76. "There are three possibilities for pairing the three interval-3 tetrachords, giving us the three octatonic scales –C-D-E $\flat$ -F-F $\sharp$ -G $\sharp$ -A-B, C $\sharp$ -D $\sharp$ -E-F $\sharp$ -G-A-B $\flat$ -C, and D-E-F-G-G $\sharp$ -A $\sharp$ -B-C $\sharp$ . . . . We shall arbitrarily assume a referential position for each of the three octatonic scales, beginning with the whole tone. Any permutation of that scale that can begin with pitch-class C will be referred to as octatonic-0, that with pitch-class C $\sharp$  as octatonic-1, and that with pitch-class D as octatonic-2."

degree (D). This non-octatonic note disrupts the symmetry of the octatonic scale and thus affects the total invariability of the minor-third transpositions of the acoustic scale. Each minor-third transposition of the acoustic scale brings new pitches, leaving four pitches in common between minor-third related transpositions. However, any combination of two minor-third related transpositions of the acoustic scale produces a complete octatonic collection. As shown earlier in Figure 4, by splitting the second degree of the acoustic scale into its neighboring half steps, a two-note octatonic extension forms. The two-note octatonic extension encircling the second degree of the acoustic scale can also be seen when two minor-third related transpositions of the acoustic scale are combined. For instance, when T-0 (C-D-E-F<sup>#</sup>-G-A-B<sup>b</sup>) of the acoustic scale is combined with T-3 (E<sup>b</sup>-F-G-A-B<sup>b</sup>-C-D<sup>b</sup>), T-0 provides the two-note octatonic extension E-F<sup>#</sup> encircling the second degree (F) of T-3, and T-3 provides D<sup>b</sup>-E<sup>b</sup> encircling the second degree (D) of T-0. Thus, the synthesis generates a complete octatonic scale with two notes that do not belong to the octatonic collection. These two non-octatonic notes are the second degrees of each respective interval-3 transposition of the acoustic scale, which forms the chromatic cells within an octatonic entity. The relationships between the acoustic scale and the octatonic collection are illustrated in Figure 7. While Fig. 7a shows the synthesis of T-0 and T-3 in scalar disposition, Figure 7b shows the T-0 and T-6 combined in the more common Mystic Chord dispositions. As shown in Figure 7a, the chromatic line extends from C to G when the T-0 and T-3 of the acoustic scale are combined. However, it is the three-note chromatic cells surrounding both of the second degrees that are most essential in the thematic design of Scriabin's music.

Figure 7a: Synthesis of T-0 and T-3 Transpositions of the Acoustic Scale.

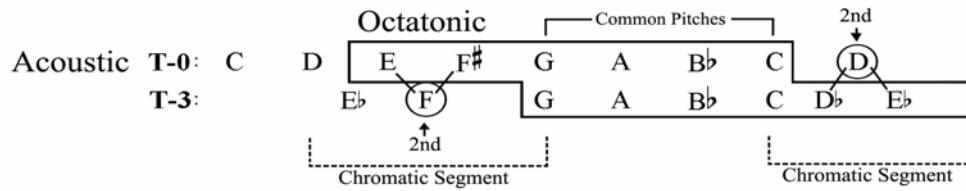
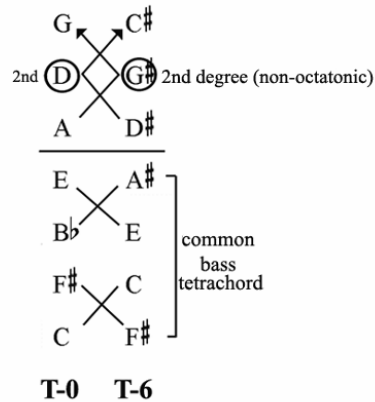


Figure 7b: Synthesis of Tritone Transpositions in Mystic Chord Dispositions.



Combinations of tritone related transpositions are often utilized by Scriabin. The vertical presentation of the scale (Mystic Chord) as demonstrated in Figure 7b, clearly displays the relationship between T-0 and T-6 of the set. While the tritone content of the lower tetrachords of T-0 and T-6 remain the same, the upper notes produce two chromatic cells ( $D^\sharp-D-C^\sharp$  and  $A-G^\sharp-G$ ). Scriabin exploits this relationship in Prelude Op. 74, No.1. In the opening chord for instance, the chromatic cell  $A-G^\sharp-G$  unfolds in the alto voice while the bass suggests the lower tetrachord (Ex. 2). The chromatic complexity of Prelude Op. 74, No. 1 is discussed in Chapter 3.

Example 2: Opening Measure of Prelude, Op. 74 No.1.

chromatic cell

G C#  
D G#  
A D#

E A#  
Bb E  
F# C  
C F#

common tetrachordal content

T-0 T-6

Within the twelve transpositions of the acoustic scale, there are three groups of interval-3 companions, T-0/3/6/9, T-1/4/7/10 and T-2/5/8/11. While Octatonic-1 could be a by-product of any combination of two transpositions from the T-0/3/6/9 family, Octatonic-2 could be a combination of T-1/4/7/10 and Octatonic-0 T-2/5/8/11. In addition, since a combination of two interval-3 related transpositions of the acoustic scale results in two pitches outside of the octatonic collection, a progression of all four interval-3 related forms produces all twelve tones of the chromatic continuum.

### Compositional Techniques and Applications

Scriabin often stated that “melody is harmony unfurled; harmony is furled melody.”<sup>14</sup> Faubion Bowers, one of Scriabin’s biographers explains that, “in this way, he leveled the vertical and horizontal differences between harmony and melody to a

<sup>14</sup> Faubion Bowers, *Scriabin: A Biography of the Russian Composer* (Tokyo and Palo Alto: Kodansha International Ltd, 1969), p.204.

single unit of compression.”<sup>15</sup> Schloezer continues his analysis of the Mystic Chord in *Scriabin: Artist and Mystic*:

It is clear that melodic and harmonic structures also are fused, so that the melody simply unfolds in a certain order and rhythm the sounds contained in the synthetic chord. But although in theory this chord can be explained in terms of the mode, in fact the mode is dictated by the chord; the point of departure was a sonorous block that Scriabin heard and conceived as both a chord and a timbre.<sup>16</sup>

On these accounts, harmony for Scriabin is not confined to functionality. Instead harmony is a representation of color. The Mystic Chord which becomes the core of his later compositions in particular is subject to a colorific significance for Scriabin. Melodies unfold from it and conjoin at designated points. In the absence of the tonal definition, the harmonic orientation is pointed toward the convergence of the linear unfolding of the Mystic Chord or other harmonic materials. To find musical direction is to find the points of departure and conjunction of the harmony. Accordingly, harmonic movement is perceived through the changes in harmonic color from the acoustic, octatonic, whole-tone collections, or sometimes modal inclination.

While the employment of this scalar system generates a complete new harmonic idiom, many of Scriabin’s basic compositional techniques adhere to tradition. His Seventh Sonata encloses interval-3 related chord progressions linked by common tones. The common-tone technique is also used to bridge the transitions or transformations among the acoustic, octatonic and whole-tone sets.

Scriabin’s formal schemes are rather simple. Many of his short pieces are arranged in binary or ternary forms. In a diatonic system, tonal or modal contrasts play an important role in defining phrasal and formal structures. The establishment of the home key, the tonal departure and the return of the original key are the basis for the

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<sup>15</sup> Ibid.

<sup>16</sup> Boris de Schloezer, *Scriabin: Artist and Mystic*, p.322.

divisions of the form, which is usually supported by textural, dynamic and other musical changes. Scriabin's employment of the acoustic scale as a set (Mystic Chord) leaves no tonal gravity or force in the traditional sense. A new kind of functionality is adopted for his harmonic system. The tritone is not only essential to Scriabin's harmonic construction, it is also important for formal definition. An entire section of music often returns at the tritone transposition. If the octatonic is the fundamental structure, the invariance of their tritone transpositions leaves the two sections confined within the same octatonic property. It results in a static harmonic quality that has no trace of tonal gravity, thus requiring no need for resolution. The source of contrast has to be provided by variant transformations of the acoustic scale or by the transition to different intervallic transpositions. Nevertheless, Scriabin often assigns a pitch-center to his pieces. The first note of the acoustic scale (or the bass note of the Mystic Chord) still assumes an important role in defining the "tonal" orientation. The definition of the "home key" is reinterpreted and replaced by the "primary transposition" of the Mystic Chord. Frequently, the "tonal" orientation is obscured by the intervention of other elements. Yet the "home transposition" is often implied by the opening chord with the ending that confirms the "tonality" of the opening implication. While the octatonic scale serves as a medium for structural unification, the Mystic Chord or the acoustic scale determines the "function" of the harmonies.

## Chapter 2: Prelude Op. 74 No. 3

In his last years, Scriabin became increasingly economical with the length and thematic materials of his compositions. Many of his late pieces are condensed into a few pages of music that often last only a minute or two in actual performance. In order to leave an emphatic impression in such a short period of time, repetitions of the same or similar motivic ideas and thematic materials become necessary. All five preludes of Op. 74 attest to this trait: all five pieces are short with a high density of musical tension and expressiveness. Among the five preludes, No.3 presents a fundamental concept through a simple and structured application of the new harmonic source, the acoustic scale. It provides the basic sources of principles for examining the other preludes.

Prelude Op. 74 No.3 reveals a straightforward – perhaps mechanical and symmetrical – formal structure (Table 2). The thematic material is divided into a binary form with a two-measure codetta at the end. The thematic relations and the octatonic framework are discussed in *Twentieth-Century Music* by Elliott Antokoletz.<sup>17</sup> In summary, two diminished-seventh chords underline the linear construction of tenor and bass voices in section A from mm. 1 to 8 (Ex. 3). The two diminished-seventh chords extracted from tenor and bass lines respectively are G-A<sup>#</sup>-C<sup>#</sup>-E and B<sup>#</sup>-D<sup>#</sup>-F<sup>#</sup>-A. The combination of the two diminished-seventh chords results in a complete octatonic scale, A<sup>#</sup>-B<sup>#</sup>-C<sup>#</sup>-D<sup>#</sup>-E-F<sup>#</sup>-G-A (Octatonic-1). This octatonic scale is the melodic and harmonic backbone of the prelude, indeed the entire pitch content, except for one chromatic passing tone in each thematic statement. Occasionally, when a familiar major

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<sup>17</sup> Elliott Antokoletz. "Musical Reactions to the Ultra-Chromaticism of the Wagner-Strauss Period: Rise of National Styles," in *Twentieth-Century Music*, (Englewood Cliffs, NJ: Prentice Hall Inc., 1992), p. 101-103.

or minor chord occurs, it has no traditional harmonic function, but merely resembles the traditional harmonic construction as it is. Furthermore, Scriabin is a harmonic composer – conceiving chord as color – in which he linearizes the harmonic octatonic entity. Thus, the piece can be seen as a linear manifestation of the octatonic harmony. The actual chords at certain points are segments of the larger octatonic harmony, contextually representing intersections of the linear unfolding. In this case, it is the interval cycles, namely minor thirds and tritone cycles that linearly define the threads of the octatonic collection. The result is that the chords at various points are like knots in time where these cyclic-interval substructures converge. A dominant-seventh chord, A-C<sup>#</sup>-E-G as at m. 2, is therefore an octatonic dominant-seventh, rather than a functional diatonic one.

Table 2: Op. 74/3. Form

A	mm. 1 – 8: T10 - T4 - T10 - T7 + T4
B	mm. 9 – 12
A'	mm.13 – 20: T4 - T10 - T4 - T2 + T10. (Tritone transposition of (A))
B'	mm. 21 – 24: (Tritone transposition of (B))
Codetta	mm. 25-26

Example 3: Op. 74/3 (mm. 1-8). Tenor and Bass Voices (Bass Staff).



The octatonic scale permits four tritone partitions, A $\sharp$ -E, B $\sharp$ -F $\sharp$ , C $\sharp$ -G, and D $\sharp$ -A. The tritone property is most prominently displayed in the ostinato bass, at other times in the thematic transposition. For instance, the second thematic statement (mm. 3-4) is the tritone transposition of the first (mm. 1-2), and the return of the A and B sections is the tritone transposition of the original A and B sections. Some hidden tritone relations gives clues to the harmonic progression. The D $\sharp$ -seventh chord, D $\sharp$ -F $\times$ (G)-A $\sharp$ -C $\sharp$  (m. 4) becomes distinct, although the F $\times$  is spelled enharmonically as G to be consistent with the basic octatonic set. Without the need of harmonic resolution, the A-seventh chord (m. 2) and the D $\sharp$  seventh chord (m. 4) reveal a sequential tritone relation that prepares for the D $\sharp$ -A tritone bass (m. 6). While the tritone partitions of B $\sharp$ -F $\sharp$  and D $\sharp$ -A are exhibited most prominently in the harmony, the A $\sharp$ -E and C $\sharp$ -G partitions are displayed in the melody (Ex. 4)

Example 4: Op. 74/3 (mm. 1-4). Tritone Relation.

The entire A section is repeated at the tritone transposition in the A' section (mm. 13-20). In the traditional tonal sense, the A' section seems to be stated in another tonal area, and would indeed produce instability and the need for resolution to the tonic. In

this instance, modulation back to the tonic establishes tonal identity. However, in the case of this prelude, its harmonic constructions rely on the octatonic scale, A<sup>#</sup>-B<sup>#</sup>-C<sup>#</sup>-D<sup>#</sup>-E-F<sup>#</sup>-G-A, a symmetrical scalar system that eliminates tonal hierarchy and harmonic gravitation. As a result, the harmonic movements become static due to the symmetrical design of the scale. Since the pitch content of the octatonic scale remains invariant at interval-3 transpositions (Table 3), harmonies would be drawn from the same pitch materials even at the tritone transposition. Hence, tonal orientation relies on the aural sense of pitch differences rather than harmonic function. Scriabin realized the advantage of this scale, and utilized it to create harmonies of the same color without exceeding the content of the basic octatonic scale.

Table 3: Interval-3 Transpositions of the Octatonic Scale.

Basic set:	A <sup>#</sup>	B <sup>#</sup>	C <sup>#</sup>	D <sup>#</sup>	E	F <sup>#</sup>	G	A
T-3 transposition	C <sup>#</sup>	D <sup>#</sup>	E	F <sup>#</sup>	G	A	A <sup>#</sup>	B <sup>#</sup>
T-6 (tritone)	E	F <sup>#</sup>	G	A	A <sup>#</sup>	B <sup>#</sup>	C <sup>#</sup>	D <sup>#</sup>
T-9	G	A	A <sup>#</sup>	B <sup>#</sup>	C <sup>#</sup>	D <sup>#</sup>	E	F <sup>#</sup>

The harmonic movement occurs when a different non-diatonic mode is fused with the octatonic collection. Antokoletz discovered that Scriabin's Mystic Chord construction accounts for the non-chord tone in each thematic statement. The Mystic Chord (C-F<sup>#</sup>-B<sup>b</sup>-E-A-D-G) is the harmonic disposition of the acoustic scale, C-D-E-F<sup>#</sup>-G-A-B<sup>b</sup>. This non-diatonic mode is the principal source of the pitch and harmonic materials. Because the scale contains the partial octatonic segment (E-F<sup>#</sup>-G-A-B<sup>b</sup>-C), when it is transposed by the tritone (F<sup>#</sup>-G<sup>#</sup>-A<sup>#</sup>-B<sup>#</sup>-C<sup>#</sup>-D<sup>#</sup>-E), it has six pitches in common with the basic octatonic scale of this piece except for the second degree, G<sup>#</sup>. In other words, the octatonic set is derived from the F<sup>#</sup> (T-6) acoustic scale by splitting the

second degree, G<sup>#</sup>, into its neighboring half steps (G-A). The result is F<sup>#</sup>-G-A-A<sup>#</sup>-B<sup>#</sup>-C<sup>#</sup>-D<sup>#</sup>-E. The non-octatonic note, G<sup>#</sup>, which is the second degree of the F<sup>#</sup> acoustic scale, provides an extra element for departure from the octatonic scale. The octatonic extension, G and A with the acoustic second degree, G<sup>#</sup> form a chromatic cell, A-G<sup>#</sup>-G. On the surface, G<sup>#</sup> seems to serve as a passing tone (see Ex. 4 in p. 22). In fact, it is a deviation from the octatonic to the acoustic collection. The second degree G<sup>#</sup> provides an extra pitch material for a harmonic departure from the octatonic sphere. Similar to traditional tonal technique, the common tones or chords provide a pivot for tonal deviation. The G<sup>#</sup> serves to identify the F<sup>#</sup> acoustic scale and at the same time, itself as a chromatic passing tone in the context of the octatonic property. While the harmonic color of the octatonic set remains unchanged, the fusion of the acoustic scale allows a change of color, and thus creates progression.

The A section unfolds five thematic statements based on the octatonic collection and its interval-3 transpositions (Ex. 5). Each thematic statement thus contains one note that refers to the acoustic scale. The first A section contains two statements on A<sup>#</sup> (T-10), two on E (T-4), and a statement on G (T-7).<sup>18</sup> When the whole A section returns at tritone transposition, T-10 and T-4 switch places, and T-7 is replaced by T-2 (on C<sup>#</sup>). The pairing of the octatonic scale and acoustic scale for each statement is demonstrated in Table 4, in which notes indicated in italic are the second degrees of the acoustic-scale transpositions which are non-common pitches of their coupled octatonic sets. They are presented as the chromatic passing tones in each statement. Note that the pitch content

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<sup>18</sup> The terminology of the set is explained in Antokoletz, "Hybrid Modes and Interval Sets as Formal Determinants in Piano Sonatas of Albrecht, Scriabin, and Prokofiev," *International Journal of Musicology*, 3 (1994): 323. The name of the set is assigned according to its transposition number. The 12 pitch classes are indicated by numbers from 0 to 11; C as 0, C<sup>#</sup>/D<sup>b</sup> as 1, D as 2, D<sup>#</sup> as 3, and so on. The first statement of this prelude starts with A<sup>#</sup>, pitch class 10; hence it is labeled as T-10.

of the octatonic scale remains invariant at the interval-3 and tritone transpositions, and each transposition of the acoustic scale is rotated to align with the octatonic set.

Example 5: Op. 74/3 (mm. 1-8).

The musical score shows five thematic statements in piano accompaniment. Statement 1 (T-10) is on A# and includes a T-6 Acoustic scale with a crescendo. Statement 2 (T-4) is on E and includes a T-0 Acoustic scale with a forte dynamic and the instruction 'f comme un cri'. Statement 3 (T-10) is on A# and includes a T-6 Acoustic scale with a piano subito dynamic. Statement 4 (T-7) is on G and includes a T-3 Acoustic scale with a crescendo. Statement 5 (T-4) is on E and includes a T-0 Acoustic scale.

Table 4: Octatonic /Acoustic Scale Pairing in Each Thematic Statement.

Thematic Statement 1 and 3 (T-10)

Octatonic set	A#	B#	C#	D#	E	F#	G	A
Acoustic scale T-6	A#	B#	C#	D#	E	F#	G#	A

Thematic Statement 2 and 5 (T-4)

Octatonic set	E	F#	G	A	A#	B#	C#	D#
Acoustic scale T-0	E	F#	G	A	Bb	C	D	D#

Thematic Statement 4 (T-7)

Octatonic set	G	A	A <sup>#</sup>	B <sup>#</sup>	C <sup>#</sup>	D <sup>#</sup>	E	F <sup>#</sup>
Acoustic scale T-3	F <sup>x</sup>	G <sup>x</sup>	A <sup>#</sup>	B <sup>#</sup>	C <sup>#</sup>	D <sup>#</sup>	E <sup>#</sup>	

A' section: Thematic Statement (T-2)

Octatonic set	C <sup>#</sup>	D <sup>#</sup>	E	F <sup>#</sup>	G	A	A <sup>#</sup>	B <sup>#</sup>
Acoustic scale T-9	C <sup>#</sup>	D <sup>#</sup>	E	F <sup>#</sup>	G	A	B	

The tritone bass creates a stagnant harmony that underlies the movements in the upper voices. While the eight-measure A section is subdivided by different transpositions of one thematic idea, it easily becomes repetitious and monotonous. Scriabin, therefore, makes use of the rhythmic possibilities to create motion. Measure 1 to 2 unfolds the primary thematic statement. It opens with a broken major-seventh on A<sup>#</sup> on the down beat (see Ex. 5), which is labeled T-10. This statement is transposed by the tritone at m. 3, but this time it is delayed by an eighth-rest. At the next two measures, the opening broken major-seventh is transformed into an unbroken vertical interval, and comes back off beat at m. 7 (T-7). This T-7 statement is incomplete and interrupted by another entry of the statement (T-4) on the downbeat, in its original broken-seventh form.<sup>19</sup>

Without the pulling force in the harmonic progression, the rhythm becomes self-sufficient in dividing the musical phrasing and creating musical direction. In 9/8 meter, the rhythmic division is obscured by the bass stressing on the off beats to make the melodic lines sound as if in common time. The metrical rhythm is more established in measure 2. The subtly arranged duple-and-triple subdivision creates conflict, which evokes an unsettled feeling as the tension increases through the A section. Moreover,

<sup>19</sup> Antokoletz, *Twentieth-Century Music*, p. 101-102.

while the thematic statements seem to be arranged in a balanced two-plus-two phrase, the eighth-rests at mm. 3 and 7 throw off the two-measure rhythmic pulse. Rhythmic displacement of the theme undeniably creates motion and tension. When the T-10 statement is disguised by a harmonic seventh on the downbeat at m. 5, it seems to be a continuation of the previous phrase. It is recognized as a variant of the initial statement. Finally, when one expects a reinforcement of the unbroken 7th of the thematic statement, it is intercepted by the return of the statement in its original form. As far as rhythm is concerned, the return of the opening statement functions as a closure to the A section (A-B-A in its thematic disposition), but the interruption adds intensity to the already unsettled mood of the music.

Example 6: Op. 74/3 (mm. 5 and 9). Convergence of Linear Structure.

m.5

*p subito*

m.9

(B#)C-F# boundary

*f*

Treble

Octatonic: A#-B#-C#-D#-E-F#-G-A

Bass

Every musical aspect works together to reach the climax (m. 9), where the B section begins. First of all, the convergence of the linear structure reaches the peak where the octatonic scale makes its complete appearance for the first time. The chord in the bass staff is the convergence of the D $\sharp$ -A tritone in the bass and E-C $\sharp$  from the interval-3 cycle of the tenor line, while the treble reveals a spread of notes confined to the

C-F $\sharp$  boundary (Ex. 6 above). Each thematic statement from the A section works toward closeness to reach the peak. All other elements succeed correspondingly toward completion of the octatonic collection. The rhythmic conflict and instability in the A section pushes toward a direction that demands stability. This is achieved through a clearly established 9/8 metrical rhythm emphasized by *forte*. A sense of resolution is thus attained by harmonic completion, the release of rhythmic tension, as well as dynamic emphasis.

A complete octatonic scale is presented in the melodic line at m. 12. This clearly confirms the application of the octatonic scale in both harmony and melody. This particular scalar system not only allows symmetrical partition, it also contains minor-thirds and minor-sixths. It is understandable that Scriabin might use fourths to produce the harmonies while presenting the melodic lines with other possibilities from the scale. Since this particular scale permits various possibilities, it is irrelevant to argue whether Scriabin's compositional principle is based on quartal or tertian constructions.<sup>20</sup>

The acoustic scale plays an essential role not only in providing pitch divergence, but also in establishing pitch centricity. Referring back to Table 4 (p. 25-26), the opening statement is infused with the T-6 acoustic scale, F $\sharp$ -G $\sharp$ -A $\sharp$ -B $\sharp$ -C $\sharp$ -D $\sharp$ -E. The ostinato bass B $\sharp$ -F $\sharp$  implies the tritone roots of the Mystic Chord either on T-6 (F $\sharp$ -B $\sharp$ -E-A $\sharp$ -D $\sharp$ -G $\sharp$ -C $\sharp$ ) or T-0 (C-F $\sharp$ -B $\flat$ -E-A-D-G). The F $\sharp$  tonic is more stressed because the acoustic scale at T-6 is presented in the theme, which is identified by the chromatic passing tone, G $\sharp$ . Because the tritone B $\sharp$ -F $\sharp$  is the common bass of the T-0 and T-6 of the acoustic scales (pitch invariant at tritone transposition), they are retained at m. 3

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<sup>20</sup> "The most common interval melodically, . . . is the third, major and minor, and its inversion the sixth, usually minor. This use of thirds reinforces the idea that Scriabin's concept of harmony was still basically tertian, not quartal." Faubion Bowers, *The New Scriabin: Enigma and Answers* (New York: St. Martin's Press, 1973), p. 136-138, quoting Ellon DeGrief Carpenter, "Thematic Development and Continuity in the Ten Piano Sonatas of Alexander Scriabin" (Master's Thesis, Kent State University, 1972).

where the thematic statement is infused with the acoustic scale at T-0. At m. 7, the tritone bass changes because F $\sharp$  does not belong to the T-3 acoustic scale. A stronger tonal center is implied (m. 8) where F $\sharp$  becomes the first note of the tritone bass under the fifth statement (at T-4) that contains T-0 acoustic set instead of T-6.

In order to confirm the pitch center on F $\sharp$ , the entire A and B sections have to be repeated at the tritone. By doing so, the B $\sharp$ -F $\sharp$  tritone bass reverses, and F $\sharp$  becomes the first note in the tritone bass. In addition to the tritone reversal, the bass chord (F $\sharp$ -B $\sharp$ -E-A $\sharp$ ) at m. 23 established the tonic on T-6 (F $\sharp$ ). This chord is significant because it is the F $\sharp$  acoustic scale arranged in fourths vertically, i.e., the structure of the Mystic Chord (Ex. 14). A completed Mystic Chord built from the F $\sharp$  acoustic scale is spelled F $\sharp$ -B $\sharp$ -E-A $\sharp$ -D $\sharp$ -G $\sharp$ -C $\sharp$ . The most characteristic lower tetrachord of two tritones is applied at m. 23 to secure the tonal reference on F $\sharp$ .

Example 7: Op. 74/3 (mm. 21-24). Mystic Chord at T-6: F $\sharp$ -B $\sharp$ -E-A $\sharp$ .

Furthermore, the interval-3 related transpositions of the acoustic scale (T-0, T-3, T-6, and T-9 from thematic statements T-4, T-7, T-10, and T-2 respectively) provide four notes in addition to the eight-note octatonic collection. This means all twelve pitches are obtained in this piece. In section A, three interval-3 transpositions of the acoustic scale (T-6, T-0, and T-3) deliver three pitches, G $\sharp$ , D, and E $\sharp$  in addition to the octatonic



collection. Transposition of the A section by the tritone permits an exchange of one transposition (T-6) for the other (T-0), while T-9 replaces T-3. As a result, the B from the chromatic cell, B $\sharp$ -B-A $\sharp$  in the thematic statement (m. 10) is the second degree of the acoustic scale at T-9. This thematic transposition supplies the last pitch, B, to attain the completion of all twelve tones. The arrival of the last pitch of the twelve tones brings another highlight to the music.

The intended tonal center on F $\sharp$  that was established earlier (m. 8) is weakened when the thematic statement is transposed to tritone (B $\sharp$  becomes the first pitch of the tritone bass) (m. 20). Immediately, the tritone-tetrachord of the Mystic Chord at T-6 (F $\sharp$ -B $\sharp$ -E-A $\sharp$ ) in the bass restores the tonal center on F $\sharp$  (m. 23). The attached two-measure codetta summarizes the octatonic scale and confirms the tonal primacy of T-6 by placing F $\sharp$  in the bass. The piece concludes with the broken-seventh motive (E-D $\sharp$ ) of the T-4 statement on an F $\sharp$  bass, which serves to reinstate T-4 as the principal thematic statement and reinforce the F $\sharp$  pitch center.

The structure of this prelude is so meticulously planned, it does not seem to allow for any alterations. Although the harmonic language does not belong to the functional sphere, many compositional techniques can still be explained in the traditional sense. The harmonic movement becomes static by using a symmetrical scalar system to generate the harmonies. The sense of progression can only be created by infusion of other modes, in this case, the acoustic scale. Similar to the application of tonal harmony, the two scalar systems are related through common pitches. Instead of using functional major and minor modes, Scriabin employs the Mystic Chord to provide tonal references in the context of the octatonic scale system where the tonal function is absent. The F $\sharp$  pitch center is hidden in the structure of the work, which becomes more prominent toward the end. This technique is familiar in the musical creations of the late nineteenth

century. The result is that uncertainty increases the need to settle or reach some sort of resolution. Completion of the octatonic collection and the twelve tones contributes to the musical direction of the piece. The arrival points of the completion thus create a sense of resolution. Together with other aspects, such as phrasing, rhythmic design, and dynamics, the music moves within one static harmonic color. Its obsession with that one single color intensifies the music toward climax. The effect is so compelling that it seems to possess one's aural sense even after the music ends.

### Chapter 3: Prelude Op. 74 No. 1

Prelude Op. 74, No. 1, a simple A B A form, is extremely complex in texture and harmony (see the formal outline in Table 5). Within only 16 measures, the musical materials and emotional content are greatly concentrated. The A section contains only one musical phrase which is formed by a single motive, marked X (Ex. 8). Except for the pick-up to m. 2, this motivic idea moves by ascending half-step. The four-note descent, marked Y, is an extension and inversion of the X motive. In other words, the Y motive is derived from X and mostly concealed in the inner voices. Section B starts at the pick-up of m. 4, where the ascending chromatic motion in the soprano line was interrupted. When the soprano voice strives upward in the second phrase (m. 6), the ascending chromatic line (B-C-D~~b~~-D<sup>b</sup>) continues without the rhythmic identity of the X motive (Ex. 9). The rhythm and the melodic contour in section B contrast with section A, but the texture remains complex and contrapuntal. While the soprano line moves away from motives X and Y, these motives interweave between the inner voices. The A section returns at the tritone transposition and resumes the chromatic ascent in the soprano. It is concluded by a codetta where the last X motive, D-D<sup>#</sup>-E, was repeated and again stated in a register an octave lower (Ex. 10).

Table 5: Op.74/1. Form

<b>A</b>	mm. 1-4	
<b>B</b>	mm. 4-8	
<b>A'</b>	mm. 8-12	Tritone transposition of A
<b>Codetta</b>	mm. 12-16	

Example 8: Op. 74/1(mm. 1-3). Motives X and Y in Section A.

Musical score for Example 8, Op. 74/1 (mm. 1-3). The score is in 3/4 time and D major. It shows the first three measures of Section A. Motive X is a three-note ascending chromatic line (D4-E4-F#4) in the right hand. Motive Y is a three-note descending chromatic line (F#4-E4-D4) in the middle voices. The score includes dynamics like *p* and *mf*, and markings for "motive X", "motive Y", and "Y inverted".

Example 9: Op. 74/1(mm. 4-8). B section.

Musical score for Example 9, Op. 74/1 (mm. 4-8). The score is in 3/4 time and D major. It shows measures 4 through 8 of the B section. The key signature changes to D minor (Bb, C, D, Eb, D, A'). The score includes dynamics like *p* and markings for sections B, C, Db, D, and A'.

Example 10: Op. 74/1(mm. 12-16). Codetta.

Musical score for Example 10, Op. 74/1 (mm. 12-16). The score is in 3/4 time and D major. It shows measures 12 through 16 of the Codetta. The score includes dynamics like *p* and markings for "Codetta" and asterisks.

On the surface, Prelude Op. 74 No. 1 appears to be quite chromatic in its construction. The contrapuntal texture comprises several chromatic lines moving parallel to or in the opposite direction against each other. The melodic line moves upward chromatically via the X motive, while the Y motives in the middle voices move

in the opposite direction against the melodic line. The continuous downward motion is reinforced by the wide leaps in the bass. As a result, the inversional tension among the voices as well as the general chromatic unfoldings seems to reflect Scriabin's marking "*Douloureux, déchirant*" (distressing, heartbreaking).

The chromatically ascending line in the soprano eventually completes all twelve tones from E<sup>#</sup> to E, though the completion does not happen easily. When the soprano strives upward, the downward figurations of other voices counter the attempt in the soprano. In section A, the melody starts at E<sup>#</sup> and moves up to G. It was pulled down chromatically to E and then up a whole step to F<sup>#</sup>.<sup>21</sup> In the context of the chromatic line, this whole-step draws attention to the increasing effort to reach upward. When it reaches B<sup>b</sup> chromatically (at m. 3), the contrasting B section (m. 4) interrupts the ascending movement. At the beginning of the B section, when the soprano seems to be defeated, the second soprano takes over the upward movement by a reversed and rhythmically modified Y motive, D-E<sup>b</sup>-E<sup>b</sup>-F (mm. 4-5), and F<sup>#</sup>-G-G<sup>#</sup>-A, (mm. 6-7). At the same time, the tenor in the bass clef initiates the descending Y motive against the ascending one of the second soprano. Finally, the ascent is succeeded by the first soprano which brings the pitch to D (m. 8; see Ex. 9). The A-section materials return at the tritone transposition to continue the struggle between voices. By transposing the A section by the tritone, the chromatic ascent in the preceding section is able to continue and complete all twelve tones. Thus, the symmetrical design exists in both the formal construction and the pitch organization. The chromatic ascent in the A section consists of half the twelve tones, from E<sup>#</sup> to B<sup>b</sup>. The ascent continues from B to E in the A'

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<sup>21</sup> The question arises as to whether this maybe a misprint, and that the E actually should be an E<sup>#</sup>. The reason for the E<sup>#</sup> interpretation is based on the exact repetition of the segment except for the one note, also the doubling of E<sup>#</sup> in the bass clef. However, there are logical analytical explanations for both cases. I have chosen the E<sup>b</sup> for reasons discussed in the following.

section without repeating any pitch from the previous section (Table 6). That is, the tritone transposition of a symmetrical divided twelve-tone permit the completion of the continuum. However, the whole-tone leap in section A (m. 1) now becomes a half-step in the A' section (m. 9). The obstacle is therefore minimized once the interval is reduced. At m. 11, the ascending figuration finally reaches E, where the completion of the twelve tone continuum is attained. A sense of arrival is therefore achieved by the completion, thus providing an effective climax for the piece. Nevertheless, finality is yet to be accomplished by rounding out the piece at its starting pitch, E<sup>#</sup>. The codetta confirms the completion by restating the ascending X motive (D-D<sup>#</sup>-E), but it was unable to bring the pitch up to E<sup>#</sup>. Finally, the ending is compromised by E an octave below. The one octave drop of the same figure seems to be a perfect portrait of the exhaustion from struggle and frustration due to the unfinished ascent (see Ex. 10: Codetta).

Table 6: Symmetrical Division of the Twelve Tones.

A section (mm. 1-4)						A' section (mm. 8-11)					
E <sup>#</sup>	F <sup>#</sup>	G	A <sup>b</sup>	A	B <sup>b</sup>	B	C	D <sup>b</sup>	D	D <sup>#</sup>	E
1	2	3	4	5	6	7	8	9	10	11	12

In this prelude, the harmonic resources are obscured by the chromaticism in its contrapuntal texture. In contrast to the chromaticism of nineteenth-century music, Scriabin combines different transpositions of the acoustic scale to increase the possibility for a chromatic design. In the interval-3 transpositions of the acoustic scale, any two transpositions have four pitches in common while the other pitch contents conjunctively produce chromatic relations. For example, the T-0 (C-D-E-F<sup>#</sup>-G-A-B<sup>b</sup>-C) and T-3 (E<sup>b</sup>-F-G-A-B<sup>b</sup>-C-D<sup>b</sup>-E<sup>b</sup>) of the acoustic scale share four common pitches G, A, B<sup>b</sup> and C.

The non-common pitches D, E, and F $\sharp$  from T-0 and the D $\flat$ , E $\flat$ , F from T-3 together form a chromatic line, D $\flat$ -D-E-F $\sharp$ . In the tritone transpositions, T-0 and T-6 for instance, two chromatic segments would be formed. In addition, any combination of two transpositions would fulfill an octatonic scale with two pitches outside of the octatonic collection. In other words, the two pitches outside of the octatonic collection provide the chromatic possibilities that are supported by the octatonic unity. Table 7 illustrates the pairings of tritone and interval-3 transpositions of the acoustic scale.

Table 7: Pairings of the Interval-3 Related Transpositions of the Acoustic Scale.

Tritone-Related Transpositional Pairs:

<b>T-0:</b>	C	D	E	F $\sharp$	G	A	B $\flat$	C	D	E
<b>T-6:</b>	F $\sharp$	G $\sharp$	B $\flat$	C	C $\sharp$	D $\sharp$	E	F $\sharp$		

<b>T-3:</b>	E $\flat$	F	G	A	B $\flat$	C	D $\flat$	E $\flat$	F	G
<b>T-9:</b>	A	B	C $\sharp$	D $\sharp$	E	F $\sharp$	G	A		

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 Extended chromatic segment

Interval-3-Related Transpositional Pairs:

<b>T-0:</b>	C	D	E	F $\sharp$	G	A	B $\flat$	C	D	E $\flat$
<b>T-3:</b>	E $\flat$	F	G	A	B $\flat$	C	D $\flat$	E $\flat$	F $\sharp$	G $\sharp$

<b>T-3:</b>	E $\flat$	F	G	A	B $\flat$	C	D $\flat$	E $\flat$	F	G
<b>T-6:</b>	F $\sharp$	G $\sharp$	B $\flat$	C	C $\sharp$	D $\sharp$	E	F $\sharp$	G $\sharp$	A

<b>T-6:</b>	F $\sharp$	G $\sharp$	B $\flat$	C	C $\sharp$	D $\sharp$	E	F $\sharp$	G $\sharp$	A
<b>T-9:</b>	A	B	C $\sharp$	D $\sharp$	E	F $\sharp$	G	A	B	C

<b>T-9:</b>	A	B	C $\sharp$	D $\sharp$	E	F $\sharp$	G	A	B	C
<b>T-0:</b>	C	D	E	F $\sharp$	G	A	B $\flat$	C		

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 Extended Chromatic Segment

Every motivic transformation and transposition in this prelude is derived from the pick-up to m. 1 (m. 0)<sup>22</sup>, which contains a chromatic triplet, A-G<sup>#</sup>-G<sup>b</sup>. This chromatic cell is the nucleus of the entire piece which is transformed by various rhythmic dispositions and displayed in different voices. Whenever it occurs, at least two sets of acoustic form would be involved in order to make ways for the chromatic possibilities. Measure 0 is based on acoustic scale at T-0 since the bass B<sup>#</sup>-F<sup>#</sup>-E strongly suggests the lower partials of a Mystic Chord at T-0 (C-F<sup>#</sup>-B<sup>b</sup>-E-A-D-G). However, the C<sup>#</sup> and the chromatic passing tone G<sup>#</sup> in the treble make reference to the T-6 of the acoustic scale (tritone transposition). The E<sup>#</sup> in the soprano does not belong to either the T-0 or the T-6 forms, but it implies the T-3 of the acoustic scale. Therefore, m. 0 contains three transpositions of the acoustic scale, T-0, T-6 and T-3. Similar to m. 0, the bass in m. 1 implies the Mystic Chord at T-9, but the chromatic lines reveal the complexity of both T-3 and T-6 forms. Measures 1.5 to 2 is basically a repetition of measures 0 to 1, except that the E<sup>#</sup> in the soprano is replaced by E<sup>b</sup> and the G<sup>#</sup> in alto is eliminated. Thus, without the E<sup>#</sup>, measure 1.5 suggests a combination of T-0 and T-6 of the acoustic scale, and without the G<sup>#</sup>, measure 2 is a combination of T-9 and T-6. The ambiguity continues through out the whole piece. Measure 2.5 reveals a paradox between T-6 and T-9, and measure 3 between T-0 and T-6. Table 8 shows the systematic relationships of the transpositions in each measure, which are presented in both “Mystic Chord” form (vertical) and their scalar permutations. The brackets indicate the missing notes from the sets and the arrows show the chromatic cells that appear in the thematic statement and the texture.

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<sup>22</sup> The measure number is named to fit the structure of the phrase. In order to make an easy reference, the pick-up to m. 1 is numbered 0, and pick-up to m. 2 is referred to as m. 1.5, the next one as m. 2.5 and so on.



Table 8: Syntheses of the Interval-3 Transpositions of the Acoustic Scale.

**A SECTION**

**m. 0 (pick-up to m. 1)**

G	C#	A#	
[d]	G#	E#	
A	[d#]	B#	<b>T-3:</b> [d#] E# F <sup>x</sup> G <sup>x</sup> A# B# C# [d#]
E	A#	F <sup>x</sup>	<b>T-0:</b> C [d] E F# → G A B <sup>b</sup> C [d] E
B <sup>b</sup>	E	C#	<b>T-6:</b> F# G# A# B# C# [d#] E F#
F#	B#	G <sup>x</sup>	
C	F#	[d#]	Bass B#-F#-E = T-0 or T-6 Mystic Chord roots
<b>T-0</b>	<b>T-6</b>	<b>T-3</b>	

**m. 1**

[e]	B <sup>b</sup>	C#	
[b]	F	G#	
F#	[c]	D#	<b>T-6:</b> F# G# A# [c] C# D# E
C#	G	A#	<b>T-9:</b> A [b] C# D# E F# → G A [b] C# D# E
G	D <sup>b</sup>	[e]	<b>T-3:</b> E <sup>b</sup> F G A B <sup>b</sup> [c] D <sup>b</sup> E <sup>b</sup>
D#	A	[c]	
A	E <sup>b</sup>	F#	Bass: A-D#-C# = T-9 (or T-3) Mystic Chord roots.
<b>T-9</b>	<b>T3</b>	<b>T6</b>	

**m. 1.5 (without E#)**

G	C#	
[d]	G#	
A	[d#]	
E	A#	<b>T-0:</b> C [d] E F# G A B <sup>b</sup> C [d] E
B <sup>b</sup>	E	<b>T-6:</b> F# G# A# B# C# [d#] E
F#	C	
C	F#	
<b>T-0</b>	<b>T-6</b>	

**m. 2 (without G#)**

[e]	B $\flat$	
[b]	F	
F $\sharp$	[c]	
C $\sharp$	G	<b>T-9</b> A [b] C $\sharp$ D $\sharp$ E F $\sharp$ G A [b] C $\sharp$ D $\sharp$ E
G	C $\sharp$	<b>T-3</b> E $\flat$ F G A B $\flat$ [c] D $\flat$ E $\flat$
D $\sharp$	A	
A	E $\flat$	
<b>T-9</b>	<b>T-3</b>	

**m. 2.5**

D $\flat$	E	
A $\flat$	B	
[e $\flat$ ]	F $\sharp$	
B $\flat$	C $\sharp$	<b>T-6</b> G $\flat$ A $\flat$ B $\flat$ C D $\flat$ [e $\flat$ ] F $\flat$ G $\flat$
F $\flat$	G	<b>T-9</b> A B C $\sharp$ [d $\sharp$ ] E F $\sharp$ G A
C	[d $\sharp$ ]	
G $\flat$	A	
<b>T-6</b>	<b>T-9</b>	

**m. 3**

[g]	D $\flat$	
[d]	[g $\sharp$ ]	
A	[d $\sharp$ ]	<b>T-0</b> C [d] E F $\sharp$ [g] A B $\flat$ C [d] E
E	A $\sharp$	<b>T-6</b> G $\flat$ [a $\flat$ ] B $\flat$ C D $\flat$ [e $\flat$ ] F $\flat$ G $\flat$
B $\flat$	E	
F $\sharp$	C	
C	F $\sharp$	Chord: C-F $\sharp$ -B $\flat$ -E-A = segment of Mystic Chord in T-0
<b>T-0</b>	<b>T-6</b>	

The derivation of the chromatic cells in each measure is illustrated in the chart above. For instance, the incorporation of the T-0 and T-6 of the acoustic scale permits

the chromatic cell, A-G<sup>#</sup>-G in m. 0. The T-6 also provides the C<sup>#</sup> in the second soprano which results in a harmony that suggests close to an octatonic collection (C-C<sup>#</sup>-[]-E-F<sup>#</sup>-G-A-A<sup>#</sup>). In the content of the octatonic collection, the E<sup>#</sup> in the first soprano that looks like an appoggiatura is actually an acquisition from the acoustic scale at T-9. Accordingly, the chromaticism serves double meanings – as a result of two or more acoustic forms combined and as chromatic passing tones in the context of the octatonic harmonies.

The A section is dominated by the acoustic scale, T-0, and its interval-3 transpositions (T-3, T-6, T-9). All four of these transpositions maintain the invariance of a single octatonic collection. Nevertheless, it appears that neither the acoustic form nor the octatonic collection is presented in its completed form at any point. Despite the fact that one of the acoustic forms is more apparent in the bass, each of the acoustic forms is equally involved with one or two pitches missing from the system. An increasing anxiety is created by the consistency of the incompleteness, which finally grows into frustration. This corresponds to the effects of the inadequate ending on E instead of E<sup>#</sup> in the soprano. However, section A' complements the A section in tritone transposition, which means that the missing notes from the acoustic scalar system are provided in the tritone transposition in both directions. Consequently, the repetition of the A section in tritone transposition is necessary not only to complete all twelve tones, but also to fulfill the harmonic content by means of complementation.

As mentioned before, the coda fails to bring the soprano voice to its beginning pitch, E<sup>#</sup>. Nevertheless, the harmonic importance of the T-6 set is confirmed at this point. While the last phrase lands on the T-6 set (F<sup>#</sup> in the bass), the repetition of the fragments of the chromatic ascents assures the pitch center on F<sup>#</sup> (see Ex. 10 in p. 33). Evidently, the acoustic collection is treated as a scalar and harmonic system similar to the

diatonic one. In the traditional diatonic system, the first note of the scale defines the key. In the acoustic scalar system, the pitch hierarchy is possible to be eliminated by the almost symmetrical structure of the acoustic scale. While this system is no longer functional, the first pitch of the scale and its transpositions still assume superiority in establishing pitch-center. Here, Scriabin reveals a compositional technique that is akin to the traditional principles – the confirmation of the pitch center at the end of a piece.

Although the role of the T-6 seems to become more prominent when the section A' returns in the tritone transposition at m. 8, its importance is already suggested from the beginning of the piece. As mentioned before, the pick-up measure employs equally three different interval-3 related transpositions of the acoustic form, T-0, T-6, and T-3. T-0 obtains the primacy because of the indication of lower partials of the C Mystic Chord in the basses (C-F#-[]-E). However, the spellings of the sets reveal an implication of T-6 as an essential set. For example, the T-0 of the acoustic scale is spelled C-D-E-F#-G-A-Bb-C. Instead of C, the lowest bass is spelled B#, which accords with the spellings of the T-6 set, F#-G#-A#-B#-C#-D#-E-F#. Scriabin spells the chord enharmonically to suggest the significance of the T-6 set, hence F# should be the focal point of the piece. Despite the fact that the enharmonic spelling is not discernible without the score, performers should bear in mind that the musical direction is to bring emphasis on F#.

As a final point, it is worth mentioning that the last phrase (mm. 14-end) delivers an effective conclusion by completing the missing notes from the opening set. In fact, the harmonies of mm. 14.5 and 0 compliment each other and fulfill the absent notes of each other's sets. (At m. 0, D and D# are missing from T-0 and T-6 respectively; at m. 14.5, A and C# are missing from T-0 and T-3.) More strikingly is the half-tone descent from D# to D in the inner voice at the final chord (Ex. 10). These two pitches (D# and

D) were the missing pitches from the opening measure, and are realized at the end.  
Thus, this realization establishes a sense of finality through resolution.

## Chapter 4: Prelude Op. 74 No. 2

Prelude No. 2 opens with a four-measure statement which comprises two parts of thematic materials (Ex. 11). For analytical purposes, the opening two measures of the theme form the “head,” marked “A,” and the following two measures form the “tail,” marked “B.”<sup>23</sup> The initiating two-measure thematic idea contains a motive based on the augmented second, A-B $\sharp$ , followed by a descending chromatic segment, G-F $\sharp$ -F $\flat$ -E. The two-measure “tail” contains sequences of three chromatically descending notes accompanied by an ostinato tritone bass. These chromatic descents in the “tail” are the motives derived from the “head” statement. The second statement (mm. 5-8) is a reiteration of statement 1, except that the “head” phrase is juxtaposed with the motives of the “tail” and the ostinato bass. With a chromatic pick-up, the head of the thematic statement returns (m. 9), but it is transposed a minor third higher (on B $\sharp$ ) as the ostinato continues in the bass. This theme on B $\sharp$  (mm. 9-10) is an interval-3 (minor-third) transposition of the opening statement. While this T-3 transposition of the theme is more prominent, the initial statement joins in a minor third below as it proceeds (Ex. 12). As a result, the texture is thickened and the harmonic application is more complex due to increasing layers of chromatic lines.

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<sup>23</sup> The terminology “head” and “tail” indicates initial structural ordering of the two integral parts within a thematic entity. It does not necessarily suggest the aural effect in phrase structure. The reason for this clarification is to distinguish the two-part phrase structure from the classical terminology of “antecedent” and “consequence” phrases. The latter has strong implications of functionality regarding the opening and closing of a thematic statement. In the case of this prelude, the “head” and “tail” alternate throughout the piece. And because of the retrogressive disposition of the form, the functions of the two phrases are rather interchangeable. The “head” of the statement continues to the “tail,” and at the same time, the “tail” leads to the next “head.”

Example 11: Op. 74/2 (mm. 1-4). Opening Thematic Statement.

Thematic Statement 1

Head (A)

chromatic segment

Tail (B)

chromatic sequences 1 2 3

*pp*

Example 12: Op. 74/2 (mm. 8-10). Statement 3 - Thematic Doubling

Head theme on B $\sharp$

Theme on A (m3 below)

While the “tail” part of the theme is expected to follow after statement 3, another “head” statement ensues instead. However, it proceeds in a variational manner. For a moment, it seems to repeat statement 3 (on B $\sharp$ ). It moves down a minor third which appears closer to the “head” of the opening statement. Instead of a chromatic descent, the minor third is followed by an ascending chromatic line to B $\sharp$ , and closed by a leap back to A. The sequential “tail” phrase is delivered by a retrogression of the chromatic

series (Ex. 13). Finally, the “head” idea returns in its initial form which concludes the piece.

Example 13: Op. 74/2 (mm. 11-17). Thematic Statement 5 and 6.

The musical score for Example 13, Op. 74/2 (mm. 11-17), is presented in two systems. The first system (mm. 11-13) is labeled "Head (A''') Variation" and "Tail (B)". The second system (mm. 14-17) is labeled "sequential retrogression" and "Head (A)". The score includes dynamic markings such as *pp*, *dim.*, and *smorz.* The piece concludes with a final cadence.

Structurally, Prelude No. 2 reveals a palindrome in its formal construction. The formal outline is demonstrated in Table 9. It opens with a simple thematic idea, [A] (head), followed by a passage [B] (tail), which contiguously leads right back to the [A] theme. While this [B] passage is the continuation of the preceding [A] idea, it also serves as a transition back to [A]. The entire piece develops through the alternations and juxtapositions of these two ideas until it reaches the peak of its textual complexity in thematic statement 3 (mm. 9-10). The succeeding thematic variation not only provides diversity, but also functions to gradually diminish the tension and dilute the texture in order to prepare for the quasi-palindrome return to the initial theme. The retrogression



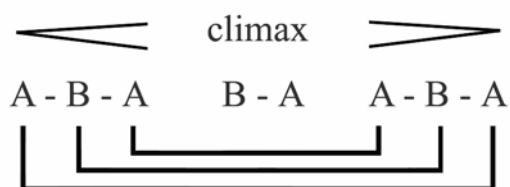
of the chromatic sequences results in a series of descending chromatic figurations. While the ascending chromatic sequences in the original [B] phrase leads to a more complicated [A] each time, the retrogression prepares and anticipates the return of the primitive form of the A theme. Since the successions of the [A] and [B] phrases are interchangeable, the form can be viewed as centering around the B-A theme (Fig. 8).

Table 9: Op. 74/2. Formal Scheme.

Measure	1	2	3	4	5	6	7	8
Form	Statement 1				Statement 2			
Sub-div	Head (A)		Tail (B)		Head/Tail (A')		Tail (B)	
Remark	(Theme on A)				(Theme on A)			

Measure	9	10	11	12	13	14	15	16+17
Form	Statement 3		Statement 4				Statement 5	
Sub-div	Head/Tail (A'')		Head/Tail (A''')		Tail (B')		Head (A)	
Remark	(Theme on B#) (doubled with theme on A)		Theme on A (variation)		Retrograde		Theme on A	

Figure 8: Formal Palindrome

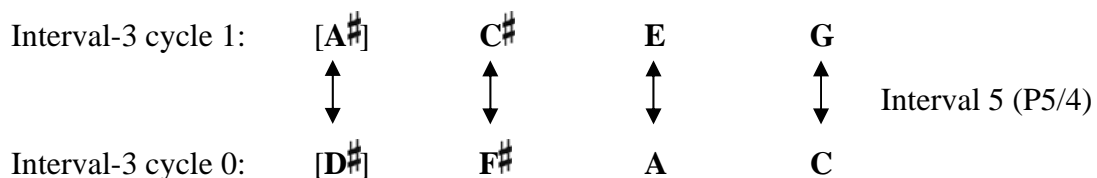


This prelude reflects No. 3 in terms of the harmonic designs. Similar to No. 3 Prelude, No. 2 is built on the set-derivative octatonic union while incorporating interval-3

transpositions of the acoustic scale to allow the chromatic passing tones. With slightly different operations of this unique system, this Prelude reveals an entirely different timbre that has its own distinctive character.

Referring back to Example 11, the “head” phrase reveals the Octatonic-1 collection, C#-[ ]-E-F#-G-A-[ ]-B#, except D# and A#. Instead of confining the harmonies and melodic boundaries to the interval-3 cycles (as seen in Prelude No. 3), Prelude No. 2 unfolds within the interval-5 (perfect fifth and its inversive equivalent, perfect fourth) periphery. As mentioned in Chapter 1, an octatonic scale contains two collections of the interval-3 cycles (diminished-seventh chords in functional terms). If starting the two cycles from the missing two notes D# and A#, for instance, D#-F#-A-C and A#-C#-E-G, the interval-5 relation between the two sets becomes apparent (Fig. 9).

Figure 9: Interval-5 Relation of the Two Interval-3 Cycles (Octatonic-1).



This interval-5 relation is important for defining both harmonic and melodic boundaries in this Prelude. The opening thematic statement in Example 11 demonstrates these configurations. The F#-C# is found in the bass harmonies; A-E confines the start and end of the [A] phrase, while the C-G boundary is utilized in both melody and harmony (Ex. 14). A tritone movement is created by adjoining the two interval-5 harmonies F#-C# and C-G. The tritones that underlie the bass movement suggests the participation of the Mystic Chord. Scriabin, however, withholds the F# for

the bass pedal point, and has the tenor move by tritones and semitones. While the tritones create the static harmonic movement, the semitones correspond to the chromatic movements in the melodies.

Example 14: Op. 74/2 (mm. 1- 4).

Thematic Statement I

Similar to Prelude No. 3, the thematic statements in Prelude No. 2 also contains chromatic fragments. In the thematic segment [A],  $E^\sharp$  does not belong to the octatonic collection. The  $E^\sharp$  appears twice in the [B] phrase along with a non-octatonic note, B, in the first sequence, and a D in the bass (see Ex. 14). All of these non-octatonic notes appear as chromatic passing tones within the octatonic context. However, in accordance with the principles revealed in the Third Prelude, the chromatic passing tones belong to the acoustic scale and its interval-3 transpositions respectively. As mentioned in Chapter 1, the acoustic scale is transformed into an octatonic scale by splitting its second degree into the neighboring half steps. This second degree of the acoustic with the octatonic extension forms a three-note chromatic cell. The chromatic segments in the statement of Prelude No. 2 indeed are realizations of this incorporation. The  $F^\sharp-E^\sharp-E^\natural$

chromatic segment in the [A] phrase is formed by fusing the acoustic scale of T-3 (D<sup>#</sup>-E<sup>#</sup>-F<sup>×</sup>-G<sup>×</sup>-A<sup>#</sup>-B<sup>#</sup>-C<sup>#</sup>) with the octatonic scale (E<sup>#</sup> is the second degree of T-3, F<sup>#</sup> and E are the encircling octatonic extensions). Continuing on to the [B] phrase, the acoustic scale in T-9 (A-B-C<sup>#</sup>-D<sup>#</sup>-E-F<sup>#</sup>-G) is perceived through the B<sup>#</sup>-B<sup>b</sup>-B<sup>b</sup> chromatic cell (B<sup>#</sup> and B<sup>b</sup> are the octatonic extensions). Since combination of any two interval-3 transpositions of the acoustic scale produces a complete octatonic collection, the entire thematic statement in other words, is built upon the combination of acoustic scale at T-3 and T-9. The formation of this combination is demonstrated in Fig. 10a. The box frame encloses the octatonic collection and the arrows indicate the chromatic segments that appear in the thematic statement.

Figure 10a: Op. 74/2. Synthesis of T-3 and T-9 Acoustic Scale (Statement 1).

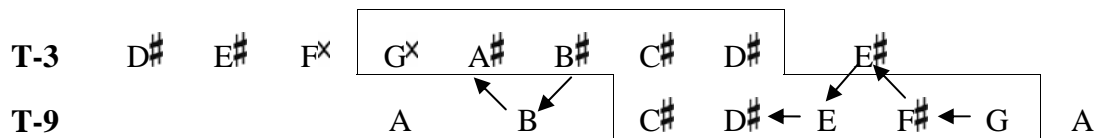


Figure 10b: Acoustic Scale at T-0 and the Octatonic Extensions.



The tritone bass pattern changes at m. 4. Corresponding to the T-3 acoustic scale in the melody (realized by the chromatic passing tone E<sup>#</sup> which is the second degree of T-3), the tritone pattern in the tenor linearizes the lower partials of the Mystic

Chord in T-3 (D $\sharp$ -A, C $\sharp$ -G). At the same time, a chromatic segment emerges in the second tenor. This chromatic movement D $\sharp$ -D-C $\sharp$ -(C) is a glimpse of the acoustic scale T-0 (C-D-E-F $\sharp$ -G-A-B $\flat$ ) that is infused into the octatonic collection (Fig. 10b). Three out of the four minor-third transpositional companions of the acoustic scale, T-3, T-9 and T-0 make their appearances, i.e., except for T-6. In accordance with the acoustic T-3 and T-9 implications in the melody, placing either A or D $\sharp$  in the bass would be more appropriate for establishing the “tonal center.” Instead, the F $\sharp$  is strongly imbedded in the bass. Although T-6 of the acoustic scale is missing, the F $\sharp$  pedal and the F $\sharp$ -C tritone in the bass suggest the Mystic Chord at T-6 (F $\sharp$ -B $\sharp$ -E-A $\sharp$ -D $\sharp$ -G $\sharp$ -C $\sharp$ ), which is the harmonic disposition of the acoustic scale (T-6: F $\sharp$ -G $\sharp$ -A $\sharp$ -B $\sharp$ -C $\sharp$ -D $\sharp$ -E). Without the last piece of the T-6 fabric, the function of the F $\sharp$  bass still awaits clarification. Apparently, Scriabin’s intension is to stage a mystery by arranging his musical elements in an ambiguous disposition.

The following statement (Ex. 15) is merely a repetition of the first statement. Nevertheless, the texture becomes thickened by the superposition of the chromatic elements and the tritone bass ostinato of the [B] in the [A] theme. The last missing pitch (A $\sharp$ ) from the octatonic collection finally appears as the repetitive pedal in the second alto voice. The interval-5 boundary of the A $\sharp$  and D $\sharp$  is found between the alto pedal and the chromatic sequences. This A $\sharp$ -D $\sharp$  boundary first appears at the outermost points. The D $\sharp$  gradually works its way closer and eventually joins the A $\sharp$  to become part of the harmony. This movement in the inner voice creates a more flowing musical direction for the theme, while the bass continues on the static tritone harmonies.

Example15: Op.74/2 (mm. 5-8). Thematic Statement 2.

**Thematic Statement 2**

Because of the merging of the [A] and [B] ideas together with the emergence of the missing interval-5 pair, A $\sharp$ -D $\sharp$ , the head part alone in the statement 2 contains all four interval-5 boundaries. This means that the octatonic collection has reached its completion. While the missing pieces start to emerge one by one, the last piece of the puzzle comes in to view in thematic statement 3. The latter is transposed a minor third up and juxtaposed with the initial theme. The three-note chromatic cell in the theme becomes A-G $\sharp$ -G $\flat$  as a result of acoustic scale at T-6. The passing tone, G $\sharp$ , the second degree of the acoustic scale at T-6 (F $\sharp$ -G $\sharp$ -A $\sharp$ -B $\sharp$ -C $\sharp$ -D $\sharp$ -E-F $\sharp$ ), is chromatically encircled by A and G $\flat$ , which are the octatonic extensions (see Ex. 12 in page 44). When T-6 of the acoustic scale finally makes its appearance, not only does it add the last note to the twelve-tone context (eight notes from octatonic, and four extra notes that are respective second degrees of the acoustic scale, T-0, T-3, T-9, and T-6), it also provides an answer for the tritone movement of F $\sharp$ -C. The bass pedal, F $\sharp$  at last harmonizes with the melody as the bass of T-6. A sense of resolution is therefore achieved.

Though the texture of the next statement becomes slightly thinner, the continuous development of the [A] without an interruption of the [B] seems to continue the excitement from the previous phrase. The rapid alternation of the tritone bass patterns contributes to the final emphasis on the chromatic cell, D $\sharp$ -D $\flat$ -C $\sharp$ -C $\flat$  generated from T-0

in the tenor. The extended chromatic cells in the alto voice proceed without pauses. This also helps to keep the music active. A sense of tension arises when the chromatic cell of the [A] phrase is inverted in the opposite direction against the chromatic descent of the alto and tenor voices. All these motions are caused by the interweaving chromatic cells. All four interval-3 transpositional companions (T-0, T-3, T-6, and T-9) of the acoustic scale come together at the point (m. 12) where all twelve tones arrive by means of the chromatic cells (Ex. 16). The turmoil gradually subsides when the chromatic sequences retrogress in the [B] phrase. As all conflicts and questions resolve, the piece concludes with a return of the initial [A] phrase. This ending is reflective musically as well as emotionally. A sense of reminiscence is perceived in the course of this thematic reinstatement.

Example 16: Op.74/2 (mm. 11-12). Attainment of All Twelve Tones.

12 tone Continuum

S: A - A<sup>#</sup> - B - C

A: E<sup>b</sup> - E - F - F<sup>#</sup> - G - G<sup>#</sup>

T: C - C<sup>#</sup> - D - D<sup>#</sup>

Ambiguity of tonal definition is one of many characteristics of late nineteenth-century music. Often the chromatic harmonic progressions do not resolve until the end. Scriabin conducts his music around the same concept with his new system. The source of ambiguity in the Prelude is not the chromatic harmonies, but omission of certain

harmonic materials. Contrary to chromatic harmony of nineteenth-century music, chromaticism formed by synthesis of minor-third transpositions of the acoustic scale is the clue for identifying harmonic progression. The octatonic entity is the by-product of such a procedure, which is the basis for structural unification. The acoustic scale gradually emerges through a series of chromatic passing tones in the octatonic texture. Music progresses by the emergence of the true “tonal” identity that defines musical functions.

The formal design of the Second Prelude is determined by the resolution of the harmonic ambiguity, the structural focal point occurring in the middle section. The music opens with a statement uncertain of the “tonal” function. Structural clarification is achieved by the emergences of Mystic Chord materials such as the tritone bass and the chromatic counterpoints, which lead a direction toward the ultimate resolution. After the harmonic resolution, the music returns to the initial stage. The closing theme, identical to the opening, is more definite and conclusive in its musical expression due to the preceding tonal resolution. The progression and the reversion of the musical materials are an ideal portrayal of a state of mind through a journey of a contemplation and meditation.



## Chapter 5: Prelude Op. 74 No. 4

The formal structure of Prelude Op. 74 No.4 unfolds a simple A-A-B-A framework (Table 10).<sup>24</sup> The first A section consists of a four-measure statement that is repeated almost entirely in the following A' section. Within the thematic statement, there are two major motivic ideas (Ex. 17). Motive "X" (D<sup>#</sup>-C-A) is a cyclic interval-3 segment comprised of three descending notes. Motive "Y" is a variant of the "X" motive. In place of the cadential minor third descent of X, Y ends with an ascending major third. Another Y motive succeeds the first Y at the perfect fourth transposition (G<sup>#</sup>-F-A), linked by an intervening minor third, E-G. The later Y motive marks the peak of the phrase. At the restatement of A (pick-up to m. 5), the original entrance of C is delayed by a G<sup>#</sup>. This restatement is modified by replacing the second Y motive with its transposition a half-step lower, G-F<sup>b</sup>-A<sup>b</sup> (m. 7). This lower transposition prolongs the rise to a higher peak. A phrase extension is required to produce a continual rise by motive Y to a higher point. The second section A cadence (mm. 8-9) reaches the highest point of the piece on Y motive, C-A-D<sup>b</sup> (Ex. 18). Concurrently, the B section overlaps this section A' extension and proceeds to develop the Y motive in various transpositions. The overlapping of sections A and B creates a phrasal elision. Although the elision briefly interrupts the balanced four-plus-four phrase structure, it promotes continuity.

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<sup>24</sup> Note that all phrases start with a pick-up. The divisional measure number is placed after the pick-up. When a phrase is indicated by the measure number, for instance, mm. 5-8, it actually means the phrase starts from the pick-up at m. 4 to the second beat of m. 8.

Table 10: Op. 74/4. Formal Outline.

Sections	A	A'	B		A''
Measure	1 – 4	5 – 8	9 – 12	13-17	18 – 24
Remark	Motivic ideas X + Y + Y	♦ 2nd Y half-step lower. ♦ Phrase overlap to B: elision	♦ Development of the Y. ♦ Climax	Descending Y motive in T-4 relations.	♦ Rhythmic augmentation ♦ Omit the Y ♦ Unfolds interval-3 cycle.

Example 17: Op.74/4 (mm. 1-4). A Section. Thematic Statement 1.

Example 18: Op. 74/4 (mm. 7-10). Elision of A' section and B section.

The move from section A to section B is based on a complex network of overlapping contrapuntal linear strand. The final rise of the A section to the peak at m. 9 is reiterated for several measures (to m. 13). This extension is part of a larger sequential process of the form. The first A section cadenced at mm. 3-4 with the Y motive by rising to A. At this point, three lines of counterpoint descend chromatically in chordal style, which is overlapped by the theme leading into section A'. As mentioned, A' rises higher to cadence on D $\flat$ , a major third higher than the previous Y cadence. Here, m. 9 would have exact duplication of the chromatically descending line in chordal style. Thus, all being a major third higher than the first A cadence just as this cadence intensifies the first cadence in terms of the higher register. The structure is also extended by constant reiteration of all these cadential materials, though varied each time. The reason for this extension of the A' section is that emotional peak at m. 9 needs to wind down. This process simultaneously maintains and yet decreases the tension. While the soprano line maintains the high pitch level, it begins to contract in time through an abridgement. The result is that the highest Y motive (C-A-D $\flat$ ) reiterates consecutively three times without the interruption of the lower Y motive, G-F $\flat$ -A. This contraction increases the intensity of the climax and is maintained by the altered shapes of the lower counterpoints. At m. 9, the lower lines descend chromatically succeeded by a lower sequence of Y motive in the soprano. Whereas in mm. 11 and 12, the chromatic sequences in the bass staff attempt to ascend. Finally the ultimate extension starts to descend by interval-4 transpositions at m. 13. B section thus can be seen as an extension of the A' statement where its musical elements succeed to the rise from section A', sustains the climax and finally falls back to the initial point. Nevertheless, its self-contained developmental character produces a sense of tonal departure which induces the

sense of recapitulation when A returns at m. 17. For this reason, mm. 9 to 17 earns its individual division as a musical section.

B section which is developmental in its extension character is subdivided into two four-bar phrases. It begins with a struggle between the two Y motives, which are an extension of the preceding A section. In the second part of the B section, this Y figuration starts to descend in a T-4 (major third) relationship which finally returns to the initial pitch C. The recapitulation of the opening material starts at the pick-up in m. 17. The thematic materials are intercepted by the rhythmic augmentation which distorts the identities of the initial theme. To resume the A section completely, regardless of the rhythmic augmentation, a Y motive is expected at m. 22. Instead, X motive enters a half-step higher and the Y motivic ideas are omitted all together. The omission of the Y motive leads to an exclusive exploitation of the interval-3 cycles which eases the conflicts between the major and minor thirds in the melodies (Ex. 19).

Example 19: Op. 74/4 (mm. 18 – 24). A" section.

The musical score for Example 19, Op. 74/4 (mm. 18–24), A'' section, is presented in two systems. The first system covers measures 18, 19, and 20. Measure 18 begins with a piano (*p*) dynamic. Annotations include 'm3' (major third) intervals, 'rhythmic augmentation', and 'X' (X motive). The second system covers measures 21, 22, 23, and 24. Measure 21 starts with a 'p' dynamic. Annotations include 'm3' intervals, 'X' (X motive), and 'interval-3 cycle' (highlighted in a box). The score concludes with a double bar line in measure 24.

The melody of the closing phrase unmistakably unfolds an interval-3 cycle, G-B $\flat$ -C $\sharp$ -E, which indicates an affinity to the octatonic structure. The inner voices of the last three chords reveal another interval-3 cycle, C-E $\flat$ -F $\sharp$ -A. Combine the two cycles and Octatonic-1 results, C $\sharp$ -D $\sharp$ -E-F $\sharp$ -G-A-B $\flat$ -C. In fact, the last three chords are constructed within a complete octatonic context, and their harmonic dispositions reveal the sources of the octatonic entity. The sonority of the simultaneous major and minor triads of the final chord in this Prelude recalls the major/minor tetrachord in interval-3 progressions in Scriabin's Seventh Sonata. The formation of the major/minor tetrachords in the Seventh Sonata is ascribed to the tertian harmonic arrangements of the altered Acoustic scale. As discussed earlier in Chapter 1, the transformation is made by lowering the second degree of the acoustic scale. The result of this procedure is the seven-note octatonic mode, C-D $\flat$ -E-F $\sharp$ -G-A-B $\flat$ , which becomes C-E-G-B $\flat$ -D $\flat$ -F $\sharp$ -A when arranged in thirds harmonically. The upper tetrachord (B $\flat$ -D $\flat$ -F $\sharp$ -A) of the set contains simultaneously a major triad, F $\sharp$ -A $\sharp$ -C $\sharp$ , and a minor triad, F $\sharp$ -A-C $\sharp$  (enharmonic spelling), while the lower partial is a C major triad. (Note that the partitions of the lower triad and the upper tetrachord are related by a tritone, CM-F $\sharp$ M/m). Six out of seven pitch-classes remain invariant in the interval-3 transpositions. The non-common pitches from each of the interval-3 transpositions complement each other and fulfill a complete octatonic collection. Thus the interval-3 transpositional progressions of the seven-note set produce a complete octatonic collection that is the structural unity for the piece.<sup>25</sup>

The opening and closing major/minor tetrachords of Prelude No. 4 are indications of a procedure similar to the Seventh Sonata. The Prelude also employs the seven-note

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<sup>25</sup> Elliott Antokoletz, "Hybrid Modes and Interval Sets as Formal Determinants in Piano Sonatas of Albrecht, Scriabin, and Prokofiev," *International Journal of Musicology*, 3 (1994): 323-326.

octatonic mode for its harmonic constructions. In the Seventh Sonata, the upper major/minor tetrachord and the lower major triad are displayed distinctly in the treble and bass staves respectively (see Ex. 1 in Ch.1). In Prelude No. 4, on the other hand, the major/minor tetrachords are isolated from the underlying major triad and treated as individual harmonies, as seen in the opening and ending chords. However, when two seven-note octatonic sets are related by tritone, their individual tetrachords contain the lower triads of the respective set transpositions. For example, the harmonic disposition of the seven-note mode in T-3 produces the upper tetrachord, C<sup>#</sup>-E-G<sup>x</sup>-B<sup>#</sup> superimposed upon a D<sup>#</sup> (or E<sup>b</sup> enharmonically) major triad while T-9 discloses a D<sup>#</sup> major/minor tetrachord with an A major triad in the bass (Fig. 11).<sup>26</sup> The D<sup>#</sup> major from the T-9 tetrachord (G-B<sup>b</sup>-D<sup>#</sup>-F<sup>#</sup>) matches the bass triad of the T-3 set. Correspondingly, the upper tetrachord of T-3 contains an A major triad that matches the bass triad of the T-9 set. When combining only the two tetrachords, each individual set is fulfilled by its respective counterparts with the two non-common tones that complete an octatonic collection.

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<sup>26</sup> Since the tertian harmonic construction of the seven-note set is based on the altered acoustic scale, the seven-note octatonic mode, the set is spelled according to the mode. However, Scriabin does not always spell the tetrachord in accordance with the scalar spelling due to the close relationship between two tritone-related seven-note octatonic sets. For instance, the tetrachord of the set at T-3 should be spelled as D<sup>b</sup>-F<sup>b</sup>-A-C or C<sup>#</sup>-E-G<sup>x</sup>-B in accordance with the scale of T-3, D<sup>#</sup>-E-F<sup>x</sup>-G<sup>x</sup>-A<sup>#</sup>-B<sup>#</sup>-C<sup>#</sup>, or E<sup>b</sup>-F<sup>b</sup>-G-A-B<sup>b</sup>-C-D<sup>b</sup>. This tetrachord of T-3 is mostly spelled as C<sup>#</sup>-E-A-C because of the infusion of seven-note set of T-9. T-9 and T-3 are related by a tritone. The lower triad (A-C<sup>#</sup>-E) of the T-9 set (A-C<sup>#</sup>-E-G-B<sup>b</sup>-D<sup>#</sup>-F<sup>#</sup>) is part of the upper major/minor tetrachord of T-3. When the texture reveals a combination of the two tritone-related sets, the spelling of the tetrachord is usually changed to indicate the primacy of the set. In the present study, the spelling of the tetrachord is in coherence with the spelling of the scale as a whole. However, when referring to the harmonic content of the tetrachord, traditional major/minor terminology is used. For instance, the upper tetrachord of the seven-note set in T-3, D<sup>b</sup>-F<sup>b</sup>-A-C is referred to as the A major/minor chord. In addition, when the tetrachord is spelled contextually in the music, an enharmonic spelling is provided occasionally in the parentheses to help identifying the content of the tetrachords.

Figure 11: The Harmonic Relationship of T-3 and T-9 Seven-Note Octatonic Sets.

The seven-note octatonic scale

**T-3:** E $\flat$  F $\flat$  G A B $\flat$  C D $\flat$   
**T-9:** A B $\flat$  C $\sharp$  D $\sharp$  E F $\sharp$  G

**T-3 + T-9 =**  
**Octatonic:** C-C $\sharp$ -D $\sharp$ -E-F $\sharp$ -G-A-B $\flat$

Harmonic Dispositions in Thirds

**T-3**      **T-9**

Example 20: Op.74/4 (mm. 22-24). T-3/9 pair.

**T-9** D $\sharp$ M/m      **T-3** A M/m

**Octatonic:** C-C $\sharp$ -D $\sharp$ -E-F $\sharp$ -G-A-B $\flat$

This particular relationship is most evident in the last three chords of the piece. The closing A major/minor tetrachord is from the T-3 set, while the pitches of the T-9 tetrachord, G-B $\flat$ -D $\sharp$ -F $\sharp$  are disposed clockwise in the outer voices (bass and soprano) of the previous two chords (Ex. 20 above). As mentioned earlier, the inner voices reveal an interval-3 cycle, C-E $\flat$ -F $\sharp$ -A. Of the four pitches, the E $\flat$  and A represent the bass

notes of the T-3 and T-9 respectively while the C and F<sup>#</sup> are the non-common pitches between the two sets.

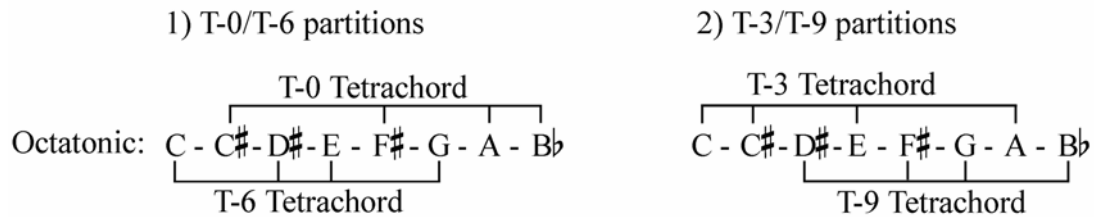
This progression determines Scriabin's harmonic operations for the piece. Scriabin attached equal importance to the two transpositions. Although the final chord seems to set the "tonality" on T-3 transposition, the spelling and the aural effect of the chord make a strong tonal impression centering on A. Suppose that T-3 determines the function of the A major/minor tetrachord, the chord should be spelled as A-F<sup>b</sup>-C-A-D<sup>b</sup> from the bass (or G<sup>x</sup>-E-B<sup>#</sup>-G<sup>x</sup>-C<sup>#</sup> enharmonically) in accordance with the scalar disposition of the T-3 set (E<sup>b</sup>-F<sup>b</sup>-G-A-B<sup>b</sup>-C-D<sup>b</sup> or D<sup>#</sup>-E-F<sup>x</sup>-G<sup>x</sup>-A<sup>#</sup>-B<sup>#</sup>-C<sup>#</sup>). Instead, the spellings of the A major triad in the tetrachord reflect the bass triad of the T-9 set, A-C<sup>#</sup>-E. The crucial component of the T-3 major/minor tetrachord, C<sup>#</sup>, is de-emphasized by the placement in the inner voice. Furthermore, by placing the A in the root and doubling it in the major/minor chord, T-9 set whose root is also A seems to be more stressed acoustically.

On the surface, T-9 which couples with T-3 defines the tonality for the prelude. On a deeper level, the combination of T-9 and T-3 major/minor tetrachords produces the octatonic union, the pitch content of which is also equivalent to the combination of their interval-3 companions, T-0 and T-6. This means that the octatonic collection allows four partitions of the major/minor tetrachord in the interval-3 relationship (Fig. 12). In the three-chord cadence as shown in Example 20, the tetrachords of T-0 and T-6 are hidden in the texture as well as the more apparent T-3/T-9 pair. Example 21 cites the same except in which marks the T-0 and T-6 tetrachords. In other words, the octatonic collection is the union of all four transpositions of the interval-3 cycle 0-3-6-9. The pair of tritone transpositions allows the upper tetrachords to be independent from the lower triadic basses without losing the octatonic unity. Despite the fact that all four



transpositions coexist in the octatonic cadence, the tritone pair of T-3 and T-9 are more prominent owing to the precise vertical alignment of the A major/minor chord at the end.

Figure 12: Coexistence of T-0/6, T-3/9 Major/Minor Tetrachords in the Octatonic Scale.



Example 21: Op.74/4 (mm. 22-24). T-0/T-6 pair.

D#	A
B#	F#
G	Db
E	Bb
C#	G
A#	E
F#	C
T-6	T-0

Octatonic: C-C#-D#-E-F#-G-A-Bb

The preparation of the opening A major/minor tetrachord in contrast to its occurrence at the ending, delivers a different but related acoustic quality and tonal definition. The conflict between the major and minor sonority is accentuated by placing the semitone C-C# in the outer voices. The tonal definition is vague without a harmonic progression to T-9 and the emphasis on A. The harmonic ambiguity is increased when other harmonic materials intertwine into the octatonic fabric of T-0/3/6/9

family. After the opening T-3 tetrachord, the melody and the harmonies reveal another area of the cyclic-interval-3 tetrachords. For example, the soprano melody in the first measure unfolds the T-2 tetrachord, C-E $\flat$ -G $\sharp$ -B (C-D $\sharp$ -G $\sharp$ -B enharmonic spelling), which is supported by the T-11 tetrachord, A-C-E $\sharp$ -G $\sharp$  (A-C-F-G $\sharp$ ) on the downbeat in the harmony.

This thematic statement is predominated by the interval-3 cycle of 2, 5, 8, and 11 as shown in Example 22a. While Octatonic-1 (C $\sharp$ -D $\sharp$ -E-F $\sharp$ -G-A-B $\flat$ -C) is the union of interval-3 cycle 0-3-6-9 tetrachords, the combination of the tetrachords of T-2, T-5, T-8, and T-11 produces another octatonic collection, C-D-E $\flat$ -F-F $\sharp$ -G $\sharp$ -A-B (Oct-0). As a result, the theme is stated within the Octatonic-0 by adjoining the major/minor tetrachords from the interval-3 transpositions, T-2, T-5, T-8, and T-11.

Example 22a: Op. 74/4 (mm. 1-4). T-2/5/8/11.

Example 22b: Op. 74/4 (mm. 1-4). T-0/3/6/9.

The “tonal” conflict is intensified when T-3 tetrachord stubbornly makes its appearance every two beats to interrupt the octatonic-0 domain in the theme (Ex. 22b). The A major/ minor tetrachord of T-3 first appears as a perfect verticality at the opening chord, but slides off the counterpoint each time it returns. The intercepting T-3 tetrachord finally finds its complementary T-9 tetrachord at the downbeat of measure 3. Simultaneously, T-6 tetrachord in the melody joins with its tritone counterpart, T-0 in the bass. The coalescence of all four transpositions (T-0/3/6/9) in the middle of T-2/5/8/11 family reinforces the attempt to establish the harmonic unity on the area of octatonic-1 instead of Octatonic-0. The recurring T-3 tetrachord anchors the tonal foundation on the A major/minor chord though it regains the vertical position (i.e. simultaneity) only at the very end.

A modulation from Octatonic-1 to Octatonic-2 occurs when T-1/4/7/10 emerges at the end of the section A' (m. 7). The half-step lowered Y motive ( $G-F\flat-A\flat$ ) not only causes the phrase extension, but also initiates the “tonal” deviation. In the opening A section at m. 3, T-1 tetrachord appears in between the intertwining tetrachords from the two interval-3 groups, 0/3/6/9 and 2/5/8/11 (see Ex. 22b). Its tritone complement, T-7 ( $F-A\flat-C\sharp-E$ ), is concealed in the mixed texture of T-11 and T-3. The second Y motive ( $G\sharp-F-A$ ) from section A is the segment of the T-11 tetrachord ( $A-C-E\sharp-G\sharp$ ), which leads the “tonality” back to area of T-2/5/8/11 (Oct-0) as opening passage returns. When this Y motive is lowered by a half-step in the A' section, it becomes the segment of T-10 tetrachord ( $G\sharp-B-D\flat-F\flat = A\flat-C\flat-F\flat-G$ ). Its counterpoint is altered to be identical with the first Y passage. The second Y passage in section A' is in fact a major-third transposition of the first Y motive. As a result, the combination of T-1, T-4, T-7, and T-10 tetrachords determines the harmonic construction of this Y passage (Ex. 23). The combination of the interval-3 family, T-1/4/7/10, results in the third octatonic collection,

D-E-F-G-G<sup>#</sup>-A<sup>#</sup>-B-C<sup>#</sup> (Oct-2). The preceding T-1 anticipates the arrival of this octatonic collection, and at the same time functions as a transition to the tonal area of T-1/4/7/10.

The peak Y motive (C-A-D<sup>b</sup>) at the extension of the A' section is the T-3 tetrachord (D<sup>b</sup>-F<sup>b</sup>-A-C) in disguise (with the F<sup>b</sup> in the harmony). Again, the constant recurrence of T-3 attempts to ground the tonality on the A major/minor tetrachord. It briefly brings the tonality back to T-3, but is intercepted by the restatement of the G-F<sup>b</sup>-A passage. Regardless of the blending of other tetrachordal conglomerates, T-3 reclaims the peak and provides a harmonic resolution for the previous tonal departure brought by T-1/4/7/10. The melodic register and the harmonic resolution both account for the sustained climax.

Example 23: Op.74/4 (mm. 6-8)

0/3/6/9 = Oct. 1
1/4/7/10 = Oct.2

C-C<sup>#</sup>-D<sup>#</sup>-E-F<sup>#</sup>-G-A-B<sup>b</sup>
D-E-F-G-A<sup>b</sup>-B<sup>b</sup>-B-C<sup>#</sup>

When the Y motive descends by interval-4 transpositions (m. 13), the supporting harmonies reveal the adjacencies of three major/minor tetrachords at the major-third relationship (Ex. 24). Tetrachords, T-3 (D<sup>b</sup>-F<sup>b</sup>-A-C), T-7 (F-A<sup>b</sup>-C<sup>#</sup>-E), and T-11 (A-C-

E<sup>#</sup>-G<sup>#</sup>) coexist in the chromatic harmony, supporting the T-3 segment (Y motive, C-A-D<sup>b</sup>) in the soprano. The T-11 segment (A<sup>b</sup>-F-A<sup>b</sup>) in the melody is harmonized by T-1 (B<sup>b</sup>-D<sup>b</sup>-F<sup>#</sup>-A), T-5 (E<sup>b</sup>-G<sup>b</sup>-B-D) and T-9 (G-B<sup>b</sup>-D<sup>#</sup>-F<sup>#</sup>). While the transpositional level of the tetrachords in the harmonies is determined by interval-4, the progression reveals an interval-2 relation. The interval-2 progression of the major/minor tetrachord permits the chromatic cell of one tetrachord to continue to the chromatic cell of the consecutive tetrachord, which forms an extended chromatic line. From T-3 (D<sup>b</sup>-F<sup>b</sup>-A-C) to T-1 (B<sup>b</sup>-D<sup>b</sup>-F<sup>#</sup>-A) for example, the half-step, D<sup>b</sup>-C, of the T-3 tetrachord is continued by the B<sup>b</sup>-A of T-1 (D<sup>b</sup>-C-B<sup>b</sup>-A is displayed in the alto voice). This passage (mm. 13-17) moves away from the octatonic sphere generated by interval-3 cycles into the chromatic fabrication created by interval-2 transpositions.

Example 24: Op.74/4 (mm. 13-17).

The musical score for Example 24, Op.74/4 (mm. 13-17), is presented in a grand staff. The right hand (treble clef) features a descending Y motive, which is a chromatic line of eighth notes. This motive is marked with a box and the text 'Descending Y motive'. A 'rit' (ritardando) marking is placed above the staff in the fifth measure. The left hand (bass clef) provides a harmonic accompaniment with chords and single notes. The piece concludes with an 'A''' Recap.' section, marked with a piano 'p' dynamic.

From another angle, the interval-2 cycle 1-3-5-7-9-11 contains the odd number tritone pairs (1,7/ 3,9/ 5,11) of the tetrachords from the three interval-3 cycles, 3, 9 from 0-3-6-9; 1, 7 from 1-4-7-10; and 5, 11 from 2-5-8-11. Since the octatonic collections are combinations of the tritone pairs of tetrachords, the coexistence of all three octatonic collections produce a chromatic composite that consists of all twelve pitches. The

joining of all three interval-3 cycles creates a complete twelve-tone language that is distinct from the chromaticism of nineteenth-century music and the twelve-tone serialism of the Schoenberg circle.

The whole piece is based on the intersection of the major/ minor tetrachords of the seven-note octatonic set. While the transpositional level of the tetrachord is determined by interval-3, the three interval-3 cycles (0-3-6-9, 1-4-7-10 and 2-5-8-11) define the tonal areas. Each complete interval-3 cycle of the set's tetrachords represents an octatonic collection –Octatonic-1 encompasses T-0/3/6/9, Octatonic-0 T-2/5/8/11, and Octatonic-2 T-1/4/7/10. Harmonic progression occurs when harmonic properties move from one octatonic collection to another.

Section A displays a conflict between the T-0/3/6/9 and T-2/5/8/11 cyclic transpositions, which means that the “tonality” is swaying between Octatonic-0 and Octatonic-1. The A major/minor tetrachord of T-3 establishes the tonal center (A) at the opening chord, and recurs constantly to try to overturn the permeating T-2/5/8/11. The tonal area modulates from Octatonic-0 to Octatonic-1 in the first part of the B section. All three octatonic collections join in the second part of section B which generates the chromatic texture in the harmonies. A reprise of the opening theme summarizes tonal conflict of the T-0/3/6/9 and T-2/5/8/11 and finally resolves to a cadence comprises tetrachords of T-0, T-3, T-6, and T-9, with the A major/minor tetrachord in a perfect verticality concluding the piece.

The “tonal” definition is obscured by the intersecting tetrachords from three different interval-3 cycles. The A major/minor tetrachord (C<sup>#</sup>-E-A-C) of T-3 is the focal point that assumes the role of establishing tonality. However, the T-3 tetrachord contains the A major triads that is also the bass of T-9 set (A-C<sup>#</sup>-E-G-B<sup>b</sup>-D<sup>#</sup>-F<sup>#</sup>). Both

T-3 and T-9 represent the primary tonal references. The qualities of vacillation and indecisiveness are voiced through harmonic ambiguity and conflicts.

## Chapter 6: Prelude Op. 74 No. 5

In contrast to the preceding Preludes, No. 5 turns away from the harmonic and textural complexities of the preceding Preludes, and moves to a simpler, minimal application of the harmonic materials. The semitone figure appears occasionally, but the extensively interweaving chromatic texture can no longer be found in this prelude. Conversely, the textural density is greatly attenuated and the harmonic progressions of the Mystic Chord are relatively transparent and straightforward.

The thematic materials are organized in a balanced four-plus-four phrase structure. Similar to the formal structure of Prelude No. 3, the binary thematic materials in this Prelude unfold in a straightforward A-B-A-B form. Both A and A' sections (mm. 1-4 and mm. 9-11) are subdivided into a pair of two-bar parallel phrases: (a + a') and (a + a''). The second pair of two-bar phrases, marked [a'] and [a''], are a transpositional restatement of the first [a] phrase. These two sub-phrases of the A and A' sections are related by tritone. As expected, the two contrasting B sections are in the tritone relationship as well. The formal construction is outlined in Table 11.

Table 11: Op. 74/5. Formal Outline.

<b>A</b>	[a + a']	mm. 1-4	[a'] = T-4 (major-3 transposition) of [a]
<b>B</b>		mm. 5-8	
<b>A'</b>	[a + a'']	mm. 9-11	[a''] = T-2 (major-2 transposition) of [a], Tritone to [a']
<b>B'</b>		mm. 13-17	T-6 (tritone transposition) of B



Prelude No. 5 attests to Scriabin's notion that "melody is harmonies unfurled."<sup>27</sup> The thematic materials in Prelude No. 5 resort to explicit linearization of the pitch contents from the Mystic Chord, which is incorporated intermittently with other scalar transformations such as the seven-note octatonic mode. The first measure contains three ascending melodic figurations supported by two-note bass descents. Each of the figurations is a linear manifestation of the Mystic Chord. For instance, the thematic materials at the first two beats unfurl the Mystic Chord in T-3,  $E\flat-A-D\flat-G-C-F-B\flat$ , while the third figuration progresses to T-5,  $F-B-E\flat-A-D-G-[C]$  (Ex. 25a).<sup>28</sup> The part writing of this T-3 to T-5 harmonic progression adheres to traditional voice-leading techniques. These two transpositions share common tones,  $E\flat$ , A, G, C, and F. While the common tones are retained, the  $B\flat$  and  $D\flat$  from T-3 advance to B and D respectively. This procedure creates smooth continuous voice leading.

The Mystic Chord at T-1,  $D\flat-G-C\flat-F-B\flat-E\flat-[A\flat]$  is the harmonic basis in the second measure (Ex. 25b). The non-chord tone  $E\flat\flat$  in the tenor voice is derived from the seven-note octatonic scalar transformation of the acoustic scale. When the acoustic scale is merged with the seven-note octatonic mode, the notes from the second degree of the scales form the semitone  $E\flat-E\flat\flat$ . This  $E\flat\flat$  is significantly emphasized by the rhythmic placement of the semitone figure and the arpeggiated leaps in the bass staff. Through this emphasis, the transformation from the acoustic to the seven-note octatonic mode becomes perceptible. While the acoustic scale is largely diatonic, the transformation brings it one step closer to the octatonic sonority, which anticipates the arrival of a complete octatonic structure in the B section.

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<sup>27</sup> Faubion Bowers, *Scriabin: A Biography of the Russian Composer* (Tokyo and Palo Alto: Kodansha International Ltd, 1969), p.204.

<sup>28</sup> The bracket indicates the note that is absent from the set.

Example 25a: Op. 74/5. m. 1.

The score for Example 25a consists of two systems. The top system shows a piano part with a treble clef and a bass clef. The treble clef part features sixteenth-note runs with a '6' above them, and a piano dynamic marking 'p'. The bass clef part features triplet eighth notes. The bottom system shows a voice part with a treble clef and a bass clef. It contains two chords labeled 'T-3 Mystic' and 'T-5 Mystic'. Arrows labeled 'voice leading' indicate the relationship between these chords. The key signature has three flats, and the time signature is 3/2.

Example 25b: Op. 74/4. m. 2.

The score for Example 25b consists of two systems. The top system shows a piano part with a treble clef and a bass clef. It includes triplet eighth notes, a piano dynamic marking 'p', and a double flat '(bb)' marking. The bottom system shows a voice part with a treble clef and a bass clef. It contains two chords labeled 'T-1 Mystic' and '7-note Octatonic T-1'. An arrow labeled '7 Oct' points from the first chord to the second. A downward arrow labeled 'transformation' points from the second chord to a lower register. The key signature has three flats, and the time signature is 3/2.

Subsection [a'] (mm. 2-4) is a literal restatement of the first two measures at T-4 (major-third transposition). Thus, the harmonic collection of the thematic materials reveals the Mystic Chord progressions from T-11 and T-1 to T-9. Again (at m. 4), in the content of the Mystic Chord at T-9 (A-D $\sharp$ -G-C $\sharp$ -F $\sharp$ -B-E), the non-chord tone, B $\flat$ , reveals the compound texture of the acoustic scale and seven-note octatonic mode (Ex. 26).

Example 26: Op. 74/5 (mm. 3-4). Subsection [a'].

In addition to the acoustic scale and seven-note octatonic mode, the Mystic Chord progressions and the surface materials disclose a presence of the whole-tone fabric. Firstly, the transpositional progressions of the Mystic Chord are restricted within the interval-2 cycle (T-1, T-3, T-5, T-7, T-9, and T-11). The significance of the interval-2

cycle is that the whole-tone scale is formed through a complete cycle. Section A contains T-1, T-3, T-5, T-9 and T-11. Except for T-7, the cycle is almost completed. The result is that the bass notes of the Mystic Chord progressions in section A form a five-note whole-tone segment, A-B-D $\flat$ -E $\flat$ -F (E $\flat$ -F-D $\flat$  from the [a] section, and B-C $\sharp$ -A from the [a'] section). The underlying whole-tone relationship is reflected in the organization of the thematic materials. As mentioned, the acoustic scale contains both whole-tone and octatonic segments. Although the octatonic references are made by the inclusion of octatonic notes from the seven-note octatonic mode in mm. 2 and 4, the whole-tone possibility is more articulated in the thematic dispositions. For example, the scalar form of the Mystic Chord at T-3 unfolds E $\flat$ -F-G-A-B $\flat$ -C-D $\flat$  which encloses the whole-tone segment D $\flat$ -E $\flat$ -F-G-A, with the B $\flat$  and C belonging to another whole-tone collection.<sup>29</sup> The pitch content of the first thematic contour (first beat of m.1) unfolds, successively, the B $\flat$ -F-E $\flat$ -D $\flat$ -A-G-C. The whole-tone elements of the T-3 are confined in the center while, B $\flat$  and C are placed at the edges of the contour (see Ex. 25a). When this figuration is repeated at the second beat, C is replaced by F, which belongs to the Whole Tone-1 collection. The elimination of the C opens the passage for an uninterrupted completion of Whole Tone-1 when it is succeeded by pitch B in the bass. Even when the octatonic is implied (m. 2), the whole-tone presence is retained in the chord of the second crotchet, which contains pitches C $\flat$ , D $\flat$ , E $\flat$ , and F from Whole Tone-1. These dispositions of the pitch materials emphasize the whole-tone sonority rather than the diatonic or octatonic tendencies of the acoustic scale.

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<sup>29</sup> Antokoletz, *The Music of Béla Bartók*, (Berkeley, Los Angeles, London: University of California Press, 1984), p. 76. According to the referential numbering system of the three octatonic collections, the whole-tone scale, C-D-E-F $\sharp$ -G $\sharp$ -A $\sharp$ , is referred to as Whole Tone-0, and D $\flat$ -E $\flat$ -F-G-A-B as Whole Tone-1, regardless of ordering or enharmonic spelling.

In the B section (mm. 5-8), the transpositional progressions diverge from the interval-2 cycle to the interval-3 cycle. While the presence of the interval-2 cycles is implied by the whole tones, the interval-3 cycle is the primary component of the octatonic scale. Since T-9 is part of the interval-2 transpositional cycle (T-1/3/5/7/9/11) and the interval-3 transpositions (T-0/3/6/9), it becomes the pivotal transposition of the transition (Ex. 26). It functions not only as “pivotal transposition” for the interval-2 and 3 cycles, but also as a pivot chord for the transition from the Mystic Chord to the seven-note octatonic set. The merging of the seven-note octatonic second degree, B $\flat$  in the Mystic Chord at T-9 produces a smooth transition from section A to B, where the seven-note octatonic set takes the primary role over the Mystic Chord. Section B continues with T-9, but the Mystic Chord harmonies are toned down by the removal of the second degree, B, of the acoustic scale. Subsequently, the harmony of the Mystic Chord based on fourths is transformed into tertian harmonic construction, which is the basic construction of the seven-note octatonic mode as shown in the Seventh Sonata and Prelude No. 4 of Op. 74. The modification of the harmonic construction is in accordance with the scalar transformation.

Harmonic transformation and progression in the B section are demonstrated in Example 27. In m. 5, B $\flat$  is emphasized in the tenor voice to indicate the transformations of the scalar and harmonic content from the acoustic scale to the seven-note octatonic mode. While the tritone bass, D $\sharp$ -A, still implies the presence of the Mystic Chord, the melody unfolds the upper major/minor tetrachord (G-B $\flat$ -D $\sharp$ -F $\sharp$ ) of the seven-note octatonic set in T-9 (A-C $\sharp$ -E- G-B $\flat$ -D $\sharp$ -F $\sharp$ ). The E that is missing from the Mystic Chord at T-9 (m. 4) remains absent when the harmony is transformed to T-9 of the seven-note set (m. 5). T-9 is not completed until m. 6, where E is stressed in both treble and bass staves. Tertian harmonic construction becomes more apparent at m. 6.

Despite some displacement of the pitch materials, the harmonic quality of the major/minor tetrachord built over a major triad in the bass is quite perceptible. The passage at m. 6 is transposed to T-0 (C-E-G-B $\flat$ -D $\flat$ -F $\sharp$ -A) (m. 7). Complementary to T-9, the harmonic progression to T-0 brings in the new note, D $\sharp$ , which fulfills the pitch content of Octatonic-1 (C $\sharp$ -D $\sharp$ -E-F $\sharp$ -G-A-B $\flat$ -C). The completion of the octatonic collection is reinforced (m. 8) when the octatonic scale is presented in the descending figuration, except for G and F $\flat$ . This figuration is supported by the harmony of the T-3 seven-note octatonic set. Notes, G and F $\flat$ , which are excluded in the octatonic melodic cascade, are concealed in the harmony. Although the harmonic construction is transformed from the fourths of the Mystic Chord to the thirds of the seven-note octatonic set, the tritone descents in the bass are the tritone roots of the Mystic Chord in various transpositions. The Mystic Chord is not only the basis of the harmonic construction, but also the root of the harmonic progression.

Example 27: Op. 74/5 (mm. 5-8). Section B.

The musical score for Example 27, Op. 74/5 (mm. 5-8). Section B, is presented in piano. It consists of two systems of music. The first system covers measures 5 and 6. Measure 5 is labeled "T-9 w/o E" and measure 6 is labeled "T-9 w/ E". The second system covers measures 7 and 8. Measure 7 is labeled "T-0" and measure 8 is labeled "T-3 + extension Eb-F $\flat$ -G-A-B $\flat$ -C-D $\flat$  = Oct. 1". The score includes a treble clef with a melodic line and a bass clef with a harmonic line. Chords are indicated by letters and accidentals above the notes. A "cresc." marking is present in measure 6. The bottom of the score shows chord diagrams for T-9, T-0, and T-3.

The harmonic content of each transposition in the B section reveals a progression toward completion of the octatonic entity. The harmonic construction shifts from the Mystic Chord to the seven-note set when section B starts (m. 5). The first measure of section B inherits the pitch content of the preceding measure (m. 4), excluding the non-octatonic second degree, B, of the acoustic scale. As the music progresses, T-9 is completed (m. 6) and followed by a complete form of T-0 (m. 7). T-0 contributes to the attainment of the Octatonic-1 by complementing T-9 with D<sup>#</sup>. A presentation of Octatonic-1 in a scalar figuration in the last measure of section B (m. 8) confirms and finalizes the completion. This process creates a musical direction by means of a move toward harmonic completion. When the completion is achieved, a sense of harmonic resolution is obtained.

The opening thematic statement returns (m. 9) after the brief excitement at the end of the B section. While subsection [a] remains the same, [a''] is transposed up by interval-2 instead of down by interval-4 as in the first A section. By such transpositions, subsection [a''] reveals the Mystic Chord progressions from T-5 and T-7 to T-3 (Ex. 28). This transpositional repetition permits the incomplete whole-tone cycle of the Mystic Chord progressions in the opening A section to be completed in the A' section. The missing T-7 in section A surfaces through the interval-2 transpositions of the [a] subsection in section A'. The complete interval-2 cycle of the Mystic Chord transpositional progressions is attained by supplementing T-7 to the T-1, T-3, T-5, T-9 and T-11 in the previous A section.

Example 28: Op. 74/5 (mm. 11-12). Subsection [a''].

The same pivotal procedure bridges the A' and B' sections. Section B' is the tritone transposition of section B. The B section unfolds the seven-note octatonic set in T-9, T-0, and T-3 (with octatonic extension), and their tritone transpositions, T-3, T-6 and T-9 respectively are stated in section B'. Correspondingly, the tritone transposition of the B section allows the completion of the interval-3 cycle, 0-3-6-9, by means of the interval-3 transpositional progressions of the seven-note octatonic set. On the one hand, the tritone transposition contributes to the completion of interval-3 cyclic progression, and on the other, it changes the cadence in section B' to T-9 instead of T-3 (as in the B section). Regardless of the harmonic transposition, section B' is also confined to Octatonic-1 collection due to the total invariability of the octatonic content in interval-3 or tritone transpositions. In accordance with the B section, the descending figure in section B' unfolds the same pitch content of the Octatonic-1 (C<sup>#</sup>-D<sup>#</sup>-E<sup>#</sup>-G-A-B<sup>b</sup>-C). However, the underlying Mystic Chord basses and the spelling of the pitch materials reveal a shift from T-9 to T-3 of the Mystic Chord. While the pitch content of the



octatonic collection remains invariant at the tritone transposition, it is the Mystic Chord that determines the “tonal” center of the final cadence.

As shown in Example 29, the harmonic construction of this passage adheres to the seven-note octatonic set in T-9, while the descending melodic figuration contains the octatonic extension, C. The A-D $\sharp$  tritone in the bass nevertheless implies the tritone bass of the Mystic Chord at T-9 (A-D $\sharp$ -G-C $\sharp$ -F $\sharp$ -B-E). On the third beat, the chord, A-E $\flat$ -D $\flat$ -G (spelled from the bass) is a harmonic inversion of the lower tetrachord (A-D $\sharp$ -G-C $\sharp$ ) of the Mystic Chord at T-9 in enharmonic spelling. In fact, the spelling of the chord indicates that it is the lower tetrachord of the Mystic Chord at T-3 instead of T-9. T-3 (E $\flat$ -A-D $\flat$ -G-C-F-B $\flat$ ) is tritone transposition of T-9 (A-D $\sharp$ -G-C $\sharp$ -F $\sharp$ -B-E). The bass tetrachords of T-9 and T-3 are identical in terms of pitch content. Therefore, the chord on the third beat (A-E $\flat$ -D $\flat$ -G) is indeed a harmonic inversion of the Mystic Chord at T-3, E $\flat$ -A-D $\flat$ -G. Concurrently, the spelling of the octatonic melody adapts to T-3 to be consistent with the function of the Mystic chord. The final chord establishes the tonality on T-3 by bringing the tetrachord to its root position.

Example 29: Op. 74/5 (mm. 16-17).

Oct. T-9 A-B $\flat$  C $\sharp$ -D $\sharp$ -E-F $\sharp$ -G

T-3 E $\flat$ -F $\flat$  G $\flat$  G-A-B $\flat$ -C-Db-E $\flat$

F $\sharp$   
D $\sharp$   
B $\flat$   
G  
E  
C $\sharp$   
A  
T-9  
7-Oct.

A-D $\sharp$  T-9 Mystic Chord Tritone bass

T-3 Mystic Chord Bass

The harmonic designs of Prelude No. 5 point toward octatonic completion. Although the Mystic Chord seems to be the primary source of harmonic and thematic organizations, the complete form never appears. In the openings of section A, for instance, the pitch materials suggest the Mystic Chord at T-3, but the perfect-fourth replacement in the bass removes the characteristic tritone bass of the Mystic Chord. When the music progresses to T-5 with its tritone root, one note is excluded from the set. The succeeding T-1 is tempered by the intervention of the seven-note octatonic set. This intervention forecasts the arrival of the octatonic entity. In the B sections, on the other hand, the interval-3 cycle and the harmonic transformation of the seven-note octatonic set allow for the completion of Octatonic-1. While the tertian harmonic construction of the seven-note set imperiously assumes the primacy, the Mystic Chord is reduced to merely a tritone descent in the B section. The Mystic Chord serves to connect the two sections by means of the tritone descents.

In the closing B section, the lower partial of the Mystic Chord at T-3 is applied to establish the “tonic.” Use of only the lower tetrachord of the Mystic Chord avoids the second degree of the acoustic scale, which is the non-octatonic note. This way, the completion of the octatonic structure is not distorted by the Mystic Chord, and the obscured T-3 tonality at the opening of the piece is confirmed and established through the Mystic Chord tritone basses.

Contrast is provided by the transpositional level and the transformation of the harmonic content and construction. Section A reveals a harmonic color closer to whole tone by adjoining the whole-tone elements of the acoustic scale in the thematic statements, and also by the whole-tone (interval-2) transpositions of such thematic statements. The harmonic content is transformed from the Mystic Chord to the seven-note octatonic set in section B. The interval-3 transpositions of the seven-note set yields

the complete octatonic sonority in contrast with the whole-tone sonority of the A section. The simple and transparent harmonic application enhances the distinct harmonic contrast. As a result, the music carries a more positive and definite tone of expression that corresponds to the musical marking, “*Fier, belliqueux.*”

## Chapter 7: Conclusion

The acoustic scale is not only the harmonic source of the Mystic Chord, but it also contains various possibilities for scalar transformation. The interval-3 cyclic transpositions of the acoustic scale enable the formation of the octatonic entity with additional chromatic variety. While tonal gravity is eliminated in the symmetrically proportioned octatonic scale system, the Mystic Chord serves as the harmonic foundation in which tonal references are conveyed. Within the structural unity of the octatonic scale, each individual prelude of Opus 74 acquires its distinct character and tonality via different applications of the Mystic Chord.

Prelude No. 1 portrays distress and heartbreak through chromatic counterpoint. The composite of the interval-3 transpositions of the Mystic Chord contributes to chromaticism, while incompleteness in the harmony enhances the agony of discontent. Although the complete form of the Mystic Chord is always distorted by infusion of its interval-3 transpositions, the root of the tritone tetrachord preserves the identity of the Mystic Chord. In this way, the Mystic Chord supports the compound chromatic texture. By means of the chromatic ascent, the soprano line triumphs over the inversional force of the other voices to complete the twelve tones from E to E<sup>#</sup>, where it reaches the highest pitch and achieves the climax. The climax arrives on the F<sup>#</sup> Mystic Chord bass (F<sup>#</sup>-B<sup>#</sup>-E-A<sup>#</sup>), which assumes the function of tonal definition.

No. 2, with its profound and contemplative character, is an abstract musical expression of a spiritual journey. The music starts placidly with an enigmatic thematic statement in an uncertain tonality. By combinations of the interval-3 transpositions (T-0, T-3 and T-9) of the acoustic scale, the octatonic entity unfolds within the chromatic

counterpoint. The texture thickens gradually while layers of musical ideas converge. Tonal resolution is conveyed by the corresponding thematic statement in T-6 (F<sup>#</sup>-G<sup>#</sup>-A<sup>#</sup>-B<sup>#</sup>-C<sup>#</sup>-D<sup>#</sup>-E) with its Mystic Chord tritone bass F<sup>#</sup>-C (F-B<sup>#</sup>, enharmonically). After this accomplishment, the music returns to its original state by retrogression of the musical ideas and by diminishing textures. The retrospective ending reflects the opening tranquility, but with a more lucid and conclusive temperament after the preceding tonal enlightenment.

As Perle describes, Prelude No. 3 “in its simple and straightforward surface unfolding of the invariant relations inherited in the basic octatonic scale, has the character of an axis of symmetry in the context of the work as a whole.”<sup>30</sup> The invariance of the octatonic scale in the interval-3 transpositions results in the entire piece being confined to one single octatonic color. Given the stasis of the octatonic harmony, rhythm plays an autonomic role in creating a sense of motion. At the same time, the infusion of the acoustic scale brings chromatic variety in addition to octatonic unity, by which all twelve tones are attained through a complete cycle of interval-3 transpositions of the acoustic scale. Ultimately, the persistent harmonic color of the octatonic scale supported by the Mystic Chord tritone basses prevails in the piece.

Prelude No. 4 is characterized by the combined sonority of the major and minor triad deployed as adjacent pitches or as simultaneous chords. This simultaneous major/minor harmony is derived from the upper tetrachord of the seven-note set, based on the seven-note octatonic mode of Scriabin’s Seventh Sonata. This mode is a transformation of the acoustic scale in which the second degree is lowered a half-step to form the seven-note octatonic mode. A complete interval-3 cycle of the tetrachord, T-0/3/6/9 for example, produces a complete octatonic collection. Three cyclic-interval-3

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<sup>30</sup> George Perle, “Scriabin’s Self-Analyses,” *Music Analysis* 3:2 (July 1984): 116.

families of the tetrachord, 0-3-6-9, 1-4-7-10, and 2-5-8-11 yield three areas of octatonic “tonality,” i.e., Octatonic-1, (C<sup>#</sup>-D<sup>#</sup>-E-F<sup>#</sup>-G-A-B<sup>b</sup>-C), Octatonic-2 (D-E-F-G-G<sup>#</sup>-A<sup>#</sup>-B-C<sup>#</sup>), and Octatonic-0 (C-D-E<sup>b</sup>-F-F<sup>#</sup>-G<sup>#</sup>-A-B) respectively. The music in Prelude No. 4 reveals intersections of these three octatonic areas. Although “tonal” reference is established by the A major/minor tetrachord at the beginning and the ending chords, the intersection of the tetrachordal harmonies from other areas of interval-3 transpositions obscures the tonal primacy. As a result, the tonal conflict and uncertainty express the character of obscurity and indecisiveness.

Both the acoustic scale and the seven-note octatonic mode are utilized in Prelude No. 5. The acoustic scale is the primary source for thematic and harmonic construction in the A section, where the whole-tone relation is exploited in the thematic dispositions and in the transpositional level of the Mystic Chord progression. While the B section is moving toward the completion of the octatonic collection by means of interval-3 cyclic transpositions, the harmonic construction shifts from fourths of the Mystic Chord to the tertian harmony of the seven-note octatonic set. Thus, the whole-tone and the octatonic possibilities contained in the acoustic scale contribute to the harmonic contrast between the two musical sections, A and B. Since the thematic materials linearize the Mystic Chord in section A, the harmonic progression is determined by each transposition of the Mystic Chord in the thematic dispositions. Without the infusion of other interval-3 transpositions, the chromaticism is minimized. The ascending wide leaps create a decisive and majestic musical character that contrasts with the mysterious and distressing chromatic harmony of the preceding preludes.

The Mystic Chord provides infinite variety for the musical creations. The ultimate result is a twelve-tone language that is attained by the systematic transpositions of the Mystic Chord. Using the Mystic Chord as the basic set, Scriabin’s twelve-tone

language is distinguished from the twelve-tone serialism of Schoenberg's circle, and the chromaticism that is produced by such a procedure assumes a textural significance as opposed to the embellishing chromaticism in the functional music.

## Appendix A

Appendix A lists the twelve transpositions of the acoustic scale, and its Mystic Chord form.

### Acoustic Scale and Transpositions

<b>T-0</b>	C	D	E	F <sup>#</sup>	G	A	B <sup>b</sup>	C
<b>T-1</b>	C <sup>#</sup> (D <sup>b</sup> )	D <sup>#</sup> (E <sup>b</sup> )	E <sup>#</sup> (F)	F <sup>x</sup> (G)	G <sup>#</sup> (A <sup>b</sup> )	A <sup>#</sup> (B <sup>b</sup> )	B (C <sup>b</sup> )	C <sup>#</sup> (D <sup>b</sup> )
<b>T-2</b>	D	E	F <sup>#</sup>	G <sup>#</sup>	A	B	C	D
<b>T-3</b>	D <sup>#</sup> (E <sup>b</sup> )	E <sup>#</sup> (F)	F <sup>x</sup> (G)	G <sup>x</sup> (A)	A <sup>#</sup> (B <sup>b</sup> )	B <sup>#</sup> (C)	C <sup>#</sup> (D <sup>b</sup> )	D <sup>#</sup> (E <sup>b</sup> )
<b>T-4</b>	E	F <sup>#</sup>	G <sup>#</sup>	A <sup>#</sup>	B	C <sup>#</sup>	D	E
<b>T-5</b>	F	G	A	B	C	D	E <sup>b</sup>	F
<b>T-6</b>	F <sup>#</sup> (G <sup>b</sup> )	G <sup>#</sup> (A <sup>b</sup> )	A <sup>#</sup> (B <sup>b</sup> )	B <sup>#</sup> (C)	C <sup>#</sup> (D <sup>b</sup> )	D <sup>#</sup> (E <sup>b</sup> )	E (F <sup>b</sup> )	F <sup>#</sup> (G <sup>b</sup> )
<b>T-7</b>	G	A	B	C <sup>#</sup>	D	E	F	G
<b>T-8</b>	G <sup>#</sup> (A <sup>b</sup> )	A <sup>#</sup> (B <sup>b</sup> )	B <sup>#</sup> (C)	C <sup>x</sup> (D)	D <sup>#</sup> (E <sup>b</sup> )	E <sup>#</sup> (F)	F <sup>#</sup> (G <sup>b</sup> )	G <sup>#</sup> (A <sup>b</sup> )
<b>T-9</b>	A	B	C <sup>#</sup>	D <sup>#</sup>	E	F <sup>#</sup>	G	A
<b>T-10</b>	A <sup>#</sup> (B <sup>b</sup> )	B <sup>#</sup> (C)	C <sup>x</sup> (D)	D <sup>x</sup> (E)	E <sup>#</sup> (F)	F <sup>x</sup> (G)	G <sup>#</sup> (A <sup>b</sup> )	A <sup>#</sup> (B <sup>b</sup> )
<b>T-11</b>	B	C <sup>#</sup>	D <sup>#</sup>	E <sup>#</sup>	F <sup>#</sup>	G <sup>#</sup>	A	B

### Mystic Chord and Transpositions

G	G <sup>#</sup>	A	B <sup>b</sup>	B	C	C <sup>#</sup>	D	D <sup>#</sup>	E	F	F <sup>#</sup>
D	D <sup>#</sup>	E	F	F <sup>#</sup>	G	G <sup>#</sup>	A	A <sup>#</sup>	B	C	C <sup>#</sup>
A	A <sup>#</sup>	B	C	C <sup>#</sup>	D	D <sup>#</sup>	E	E <sup>#</sup>	F <sup>#</sup>	G	G <sup>#</sup>
E	E <sup>#</sup>	F <sup>#</sup>	G	G <sup>#</sup>	A	A <sup>#</sup>	B	C	C <sup>#</sup>	D	D <sup>#</sup>
B <sup>b</sup>	B	C	D <sup>b</sup>	D	E <sup>b</sup>	E	F	F <sup>#</sup>	G	G <sup>#</sup>	A
F <sup>#</sup>	F <sup>x</sup>	G <sup>#</sup>	A	A <sup>#</sup>	B	C	C <sup>#</sup>	D	D <sup>#</sup>	E	F
C	C <sup>#</sup>	D	E <sup>b</sup>	E	F	F <sup>#</sup>	G	G <sup>#</sup>	A	A <sup>#</sup>	B
<b>T-0</b>	<b>T-1</b>	<b>T-2</b>	<b>T-3</b>	<b>T-4</b>	<b>T-5</b>	<b>T-6</b>	<b>T-7</b>	<b>T-8</b>	<b>T-9</b>	<b>T-10</b>	<b>T-11</b>



## Appendix B

Appendix B lists the twelve transpositions of the altered acoustic scale, the “seven-note octatonic mode,” and the tertian harmonic disposition based on the mode.

### Seven-Note Octatonic Mode and Transpositions

<b>T-0</b>	C	D $\flat$	E	F $\sharp$	G	A	B $\flat$	C
<b>T-1</b>	C $\sharp$ (D $\flat$ )	D (E $\flat\flat$ )	E $\sharp$ (F)	F $\times$ (G)	G $\sharp$ (A $\flat$ )	A $\sharp$ (B $\flat$ )	B (C $\flat$ )	C $\sharp$ (D $\flat$ )
<b>T-2</b>	D	E $\flat$	F $\sharp$	G $\sharp$	A	B	C	D
<b>T-3</b>	D $\sharp$ (E $\flat$ )	E (F $\flat$ )	F $\times$ (G)	G $\times$ (A)	A $\sharp$ (B $\flat$ )	B $\sharp$ (C)	C $\sharp$ (D $\flat$ )	D $\sharp$ (E $\flat$ )
<b>T-4</b>	E	F	G $\sharp$	A $\sharp$	B	C $\sharp$	D	E
<b>T-5</b>	F	G $\flat$	A	B	C	D	E $\flat$	F
<b>T-6</b>	F $\sharp$ (G $\flat$ )	G (A $\flat\flat$ )	A $\sharp$ (B $\flat$ )	B $\sharp$ (C)	C $\sharp$ (D $\flat$ )	D $\sharp$ (E $\flat$ )	E (F $\flat$ )	F $\sharp$ (G $\flat$ )
<b>T-7</b>	G	A $\flat$	B	C $\sharp$	D	E	F	G
<b>T-8</b>	G $\sharp$ (A $\flat$ )	A (B $\flat\flat$ )	B $\sharp$ (C)	C $\times$ (D)	D $\sharp$ (E $\flat$ )	E $\sharp$ (F)	F $\sharp$ (G $\flat$ )	G $\sharp$ (A $\flat$ )
<b>T-9</b>	A	B $\flat$	C $\sharp$	D $\sharp$	E	F $\sharp$	G	A
<b>T-10</b>	A $\sharp$ (B $\flat$ )	B (C $\flat$ )	C $\times$ (D)	D $\times$ (E)	E $\sharp$ (F)	F $\times$ (G)	G $\sharp$ (A $\flat$ )	A $\sharp$ (B $\flat$ )
<b>T-11</b>	B	C	D $\sharp$	E $\sharp$	F $\sharp$	G $\sharp$	A	B

### Seven-Note Set and Transpositions

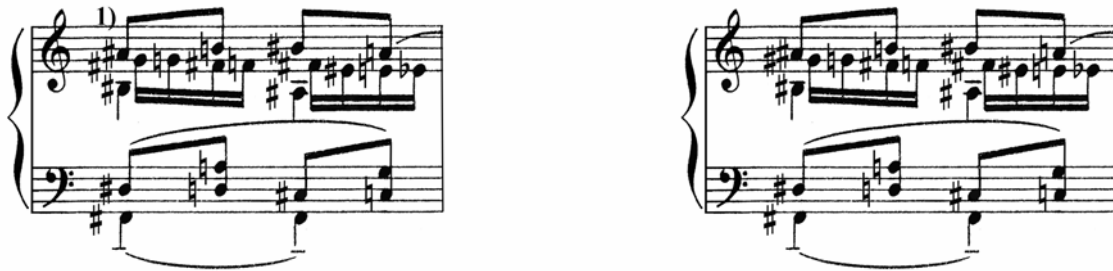
M/m	F $\sharp$	G	G $\sharp$	A	A $\sharp$	B	C	C $\sharp$	D	D $\sharp$	E	E $\sharp$
6	A	A $\sharp$	B	B $\sharp$	C $\sharp$	D	D $\sharp$	E	E $\sharp$	F $\sharp$	F $\times$	G $\sharp$
4	F $\sharp$	F $\times$	G $\sharp$	G $\times$	A $\sharp$	B	B $\sharp$	C $\sharp$	C $\times$	D $\sharp$	D $\times$	E $\sharp$
2	D $\flat$	D	E $\flat$	E	F	G $\flat$	G	A $\flat$	A	B $\flat$	B	C
7	B $\flat$	B	C	C $\sharp$	D	E $\flat$	E	F	F $\sharp$	G	G $\sharp$	A
5	G	G $\sharp$	A	A $\sharp$	B	C	C $\sharp$	D	D $\sharp$	E	E $\sharp$	F $\sharp$
3	E	E $\sharp$	F $\sharp$	F $\times$	G $\sharp$	A	A $\sharp$	B	B $\sharp$	C $\sharp$	C $\times$	D $\sharp$
1	C	C $\sharp$	D	D $\sharp$	E	F	F $\sharp$	G	G $\sharp$	A	A $\sharp$	B
Scale degree	<b>T-0</b>	<b>T-1</b>	<b>T-2</b>	<b>T-3</b>	<b>T-4</b>	<b>T-5</b>	<b>T-6</b>	<b>T-7</b>	<b>T-8</b>	<b>T-9</b>	<b>T10</b>	<b>T11</b>

## Appendix C

Appendix C contains the comments on the edition of the musical score.

During the process of analyzing Five Preludes, Op. 74, some misprints or contextual mistakes were found in the original score. Corrections were made in the musical examples cited in this treatise. Below are lists of original score in comparison to the edited version that is used in this treatise.

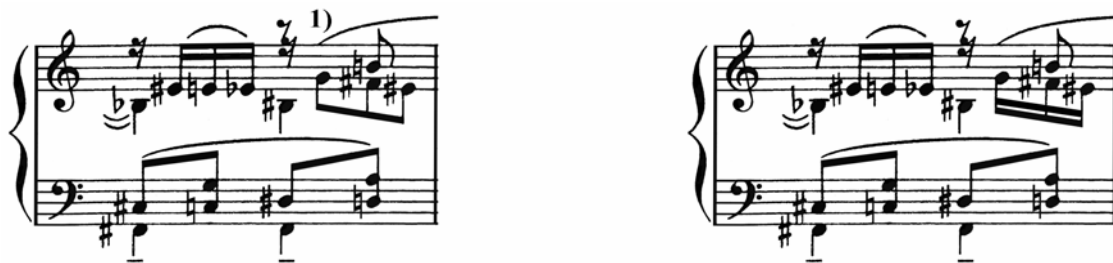
### Prelude No. 2 (m. 12)



The image shows two side-by-side musical staves for measure 12 of Prelude No. 2. Each staff consists of a treble clef and a bass clef. The treble clef part features a complex rhythmic pattern with many accidentals. The bass clef part has a simpler, more regular pattern. A bracket is placed under the bass clef part of both staves. The left version has a sharp sign on the G line of the treble clef, and the right version has a sharp sign on the F line.

1) The sharp sign should be placed on G line.

### Prelude No. 2 (m. 8)



The image shows two side-by-side musical staves for measure 8 of Prelude No. 2. Each staff consists of a treble clef and a bass clef. The treble clef part features a complex rhythmic pattern with many accidentals. The bass clef part has a simpler, more regular pattern. A bracket is placed under the bass clef part of both staves. The left version has a sharp sign on the G line of the treble clef, and the right version has a sharp sign on the F line.

1) Misprint: the chromatic line G-F#-E# in the treble clef should be sixteenth notes.

**Prelude No. 3 (m. 21)**



- 1) The entire A' and B' section (mm. 13-24) are tritone transpositions of the initial A and B (mm. 1-12), except for this chord in the bass staff. The D and G# in the original score do not belong to the pitch content of Octatonic-1. According to the systematic transpositions of the thematic statements, this chord should be spelled A-D#-G-A# in stead of A-D-G#-A#.

**Prelude No. 4 (mm. 9-10)**



- 1) The passage in measure 9 contains same figurations as in measure 4. The second G in the bass should be a G $\flat$  in coherent with the chromatic texture revealed in other voices.
- 2) A is replaced by A $\flat$  since the Y motive comprises a minor-third descent followed by a major-third ascent.

**Prelude No. 5 (m. 11)**

1) Misprint, it should be a G in octave.

## Cited Works

### BOOKS

Antokoletz, Elliott. *Twentieth-Century Music*. Englewood Cliffs, NJ: Prentice Hall Inc., 1992.

\_\_\_\_\_. *The Music of Béla Bartók*. Berkeley and Los Angeles: University of California Press, 1984.

Bowers, Faubion. *Scriabin: A Biography*. 2d ed. New York: Dover Publications, Inc., 1996.

\_\_\_\_\_. *The New Scriabin: Enigma and Answers*. New York: St. Martin's Press, 1973.

\_\_\_\_\_. *Scriabin: A Biography of the Russian Composer*. Tokyo and Palo Alto: Kodansha International Ltd, 1969.

Carpenter, Ellon DeGrief. "Thematic development and Continuity in the Ten Piano Sonatas of Alexander Scriabin." Master's Thesis, Kent State University, 1972.

Forte, Allen. *Structure of Atonal Music*. New Haven: Yale University Press, 1973.

Hull, A. Eaglefield. *A Great Russian Tone-Poet: Scriabin*. London: Kegan Paul Trench, Trubner & Co., Ltd., 1916.

J. Swan, Alfred. *Scriabin*. London: John Lane, The Bodley Head Ltd., 1923.

Schloezer, Boris de. *Scriabin: Artist and Mystic*. Trans. Nicolas Slonimsky. Berkeley and Los Angeles: University of California Press, 1987.

## ARTICLES

Antokoletz, Elliott. "Hybrid Modes and Interval Sets as Formal Determinants in Piano Sonatas of Albrecht, Scriabin, and Prokofiev." *International Journal of Musicology*, 3. (1994): 309-338

Perle, George. "Pitch-Class Set Analysis: An Evaluation." *The Journal of Musicology* Vol. 8, No. 2. (Spring, 1990): 151-172.

\_\_\_\_\_. "Scriabin's Self-Analyses." *Music Analysis* 3:2. (July 1984): 101-122.

## **Vita**

Chia-Lun Chang was born in Taipei, Taiwan in 1976, the daughter of Pin-Fang Chang and Deng Chiang. After receiving a Performance Certificate in Traditional Chinese Music from the National Academy of Arts in Pan-Chiao, Taiwan in 1996, she entered the State University of New York at Stony Brook where she received the Bachelor of Fine Arts degree in 1999. That same year, she was awarded the Verna M. Harder Endowed Presidential Scholarship to pursue the Master's degree in Piano Performance at the University of Texas at Austin. She obtained the Master of Music degree there in 2001 and continues study towards the Doctoral of Musical Arts in Piano Performance at the same school.

Permanent address: No. 15, LN 77, Te-Kuang Rd. Chung-Ho City, Taipei County 235, Taiwan, R.O.C.

This dissertation was typed by the author.