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The Enchanted Garden by Richard Danielpour:
Issues of Analysis and Performance

by

Jen-Yi Wang

A dissertation submitted to the Graduate Faculty in Music
in partial fulfillment of the requirements for the degree of
Doctor of Musical Arts, The City University of New York

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THE CITY UNIVERSITY OF NEW YORK

Abstract

The Enchanted Garden by Richard Danielpour:
Issues of Analysis and Performance

by

Jen-Yi Wang

Advisor: Joseph N. Straus

Richard Danielpour has established himself as one of the most successful composers of his generation during the past decade. His music is highly accessible and full of romantic gestures. It combines the traditions of European classical music, the American vernacular of the early twentieth century, and elements from dance music, jazz, and pop. Danielpour's interests in New Age mysticism and Zen Buddhism are also reflected in his works. *The Enchanted Garden* (Preludes, Book I) for piano solo was written in 1992. It was commissioned by The Louisiana School for its annual piano festival in Natchitoches, Louisiana, and was premiered by Christopher O'Riley in 1992 at the Aspen Music Festival. There are five preludes in the set and each has a programmatic title: "Promenade," "Mardi Gras," "Childhood Memory," "From the Underground," and "Night." They illustrate many of Danielpour's musical characteristics, such as narrative connections, tonal references, romantic gestures, spiritual undertones, and lively musical imagination.

This study explores several issues of analysis and performance about the work; it aims to provide some insights to the preludes, in theory and in performance. The point of departure in the theoretical analysis is the use of the octatonic and the diatonic collections as pointed out by the composer in his notes. The discussion identifies the elements that represent or invoke the collections, and reveals the use of the major or minor triads and other tonal procedures that may contribute to the accessibility of his music. Chapter One is an introduction to the composer and the analytical aspects of the preludes in general. Chapters Two to Six contain analyses of each prelude, focusing on issues such as the form and materials, octatonic/diatonic interaction, trichords or tetrachords in relation to underlying octatonic/diatonic and in relation to generating intervals, large-scale tonal motion, and motivic/intervallic association. Chapter Seven discusses various performance aspects, incorporating the preceding theoretical observations. Chapter Eight offers some thoughts on three general interpretive strands in the preludes.

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CHAPTER 1 Introduction

Richard Danielpour was born in New York City in 1956 and grew up in Palm Beach, Florida.¹ He started his formal music training at the age of 15, studying piano and composition. He entered Oberlin as a piano major when he was 17, and later went to the New England Conservatory of Music. By his junior year at the conservatory, he decided that composition was to be his profession. He subsequently earned a master's degree and a doctorate in composition at the Juilliard School, where he studied with Vincent Persichetti and Peter Mennin. He also studied piano with Lorin Hollander, Theodore Lettvin, and Gabriel Chodos. Early in his career Danielpour was the soloist in his own piano works. In 1989, at the invitation of Leonard Bernstein, Danielpour served as a guest composer at the Festival of the Academy of Santa Cecilia in Rome and the Schleswig-Holstein Festival in Germany. Danielpour is currently a member of the composition faculty at the Manhattan School of Music.

Danielpour is best known for his orchestral works and has been commissioned by orchestras throughout the United States, including the New York Philharmonic, the San Francisco Symphony, the Pittsburgh Symphony, the Baltimore Symphony, the New York Chamber Symphony and the Chamber Music Society of Lincoln Center. A growing number of artists has shown interest in his music, including Yo-Yo Ma, Jessye Norman, Emanuel Ax, and the Emerson quartet. Yo-Yo Ma's recording of Danielpour's cello concerto won the "best classical album" and the "best instrumental performance with orchestra" in the 1998 Grammy Awards. Danielpour has been granted many awards, including a Guggenheim Fellowship, a Rockefeller Foundation Grant, the Charles Ives Fellowship, and the Lifetime Achievement Award from the American Academy of Arts and Letters. He is a regular visitor at Yaddo² and the MacDowell Colony³, and is now in a

¹ The following biographical information is extracted from the article by Barbara Jepson, "All-American New Music," *Wall Street Journal*, August 10 1992.

² An artists' colony near Saratoga Springs, N.Y.

³ An artists' colony in New Hampshire.

three-year composer residency with the Pacific Symphony starting in the 1998 - 99 season.

“Brilliantly orchestrated, rhythmically propulsive and mostly tonal,”⁴ “colorfully orchestrated, ... [of] Bernstein-style symphonic jazz,”⁵ “of large and romantic gestures,”⁶ and “exciting, impassioned, and accessible”⁷ are comments typical of recent reviews of Danielpour’s works. His imaginative ears give birth to such colorful orchestration as one witnesses in *Celestial Night*: “The first movement, filled with virile string writing and wind combinations showing off Danielpour’s ear for color, The second movement’s quietness, punctuated with dots of color, was [a] wash of strings and dissonant textures.”⁸ Most of the fast music in Danielpour’s output is enlivened by jazz-influenced rhythm, for example in *Elegies* and *The Enchanted Garden*. He notes that “jazz became a very important part of my way of hearing rhythm. There’s a wackiness about that, that I enjoy.”⁹ The ready appeal and the accessibility of his music partly result from tonal references, the rhythmic flair, and the romantic gestures at the musical surface. This is not to say that a “functional tonality” is employed in the music. The music is triadic, but the triads do not maintain their traditional tonal function or hierarchy. If the music is dominated by different triads from section to section, that has more to do with the concept of a “tonical basis,” using Reti’s terminology,¹⁰ than with traditional tonality. These topics will be discussed in detail in the main body of this thesis.

The accessibility of Danielpour’s music also results from a stylistic mixture, which involves several different musical trends. “I see myself as an assimilationist,” Danielpour

⁴ K. Robert Schwarz. “A Young Composer Leaps Ahead of a Promising Pack,” *The New York Times*, January 18 1998.

⁵ Allan Kozinn, “Composers Separated By Their Similarities,” *The New York Times*, February 21 1996.

⁶ “Richard Danielpour,” Associated Music Publishers Composers’ Biographies.

http://www.schirmer.com/composers/danielpour_bio.html, updated February 11 2000.

⁷ Royal S. Brown, “Reviews,” *Fanfare*, as cited at <http://www.schirmer.com/news/nov97/reviews.html>.

⁸ Paul Somers, “Reviews,” *Classical New Jersey*, as cited at http://www.schirmer.com/news/dec97_jan98/reviews.html.

⁹ Allan Kozinn, *op cit*.

¹⁰ Rudolph Reti, *Tonality, Atonality, Pantonality* (New York: The Macmillan Company, 1958), p.63.

said in an interview.¹¹ “As I got older, I was aware of a number of different strands coming together in my music, rather than seeing myself on a mission with one particular ax to grind.”¹² “My music combines the traditions of European classical music, the American vernacular of the early twentieth century, and elements from dance music, jazz, and pop.”¹³ The danger of writing music with such great resources lies in the lack of a personal voice and style. Or perhaps finding a personal voice is never his prime intention. “For me style is not the issue. It is how well a piece is written on a purely technical level. If other composers see themselves as superior just because their music may be more ‘original,’ that is OK. That is not what I am about.”¹⁴ Having made a statement with a somewhat defensive tone, Danielpour must have also understood exactly the musical values that stamp an individual mark on his music and attract the attention of the audience: “a sense of nature, a lively musical imagination, a talent for emotional communication,”¹⁵ “spiritual undertones... [that] reflect an interest in philosophy and spirituality.”¹⁶

Danielpour’s interests in spirituality, especially New Age mysticism and Zen Buddhism, are often manifested in his talk as well as in his music. In a conversation regarding the work *Celestial Night*, he said: “*Celestial Night* is a piece about duality, the yin and yang, heaven and earth. For me, writing it was the result of a growing acceptance of duality and impermanence as a basic fundamental of life. And yet this duality, if we are to understand it correctly, springs from the same source.”¹⁷ However, when asked to discuss more explicitly the spiritual essence in his music, the composer is often reluctant to do so. Only one statement is found so far to satisfy our curiosity: “In my music there is

¹¹ Anthony Tommasini, “Again, a Quest for the Great American Symphony.” *The New York Times*, August 10 1997.

¹² K. Robert Schwarz, *op cit*.

¹³ “Richard Danielpour in Conversation with Mary Lou Humphrey” from Koch International CD booklet.

¹⁴ K. Robert Schwarz, *op cit*.

¹⁵ Joseph McLellan, “Classical Recordings: In Celebration of Movements Where Less is More,” *The Washington Post*, February 21 1993.

¹⁶ Allan Kozinn, *op cit*.

¹⁷ Extracted from “October 1997 Schirmer News,” at <http://www.schirmer.com/news/oct97/danielpour.html>.

indeed a dark element, or ‘shadow’ energy—I need to be artistically honest about what is in me. For it is only in the acknowledgment of dark energy that ‘light’ energy, or spontaneity, can be comprehended. All of my compositions acknowledge opposites, dualities, and seeming contradictions in an attempt to reconcile them.”¹⁸

As an American composer of the twentieth and the twenty-first centuries, Danielpour hopes to change the way that contemporary music is perceived, especially American contemporary music: “We have developed a music that is idiosyncratically American—concert music as well as the works of composers such as Duke Ellington, Miles Davis and Bill Evans. I would hope there would be greater awareness that there is American music that does not depend upon another continent for its identity.”¹⁹

The Enchanted Garden was commissioned by The Louisiana School for its annual piano festival in Natchitoches, Louisiana, and was premiered by Christopher O’Riley on 4 July 1992 at the Aspen Music Festival in Aspen, Colorado. “This set of preludes for solo piano,” the composer writes in the program notes, “was inspired by my dream life—the juxtaposition of and contrast between my subconscious dreams and conscious reality. In a sense, this work is ‘a garden of the mind’.”²⁰ This “enchanted” garden of the mind consists of five scenes: “Promenade,” “Mardi Gras,” “Childhood Memory,” “From the Underground,” and “Night.” Each scene, as the composer notes, is inspired by a dream or a reality, or a juxtaposition of both. The five scenes work as a unity, with the first and the third, the second and the fourth corresponding to one another in terms of tempi and materials. The temporal design therefore alternates slow – fast – slow – fast, with the fifth prelude encompassing both tempi so as to conclude this set of preludes.

In the interview with Mary Lou Humphrey, Danielpour talks about the various facets of his music, especially the aspect of duality and his notion of unpredictability—

¹⁸ “Richard Danielpour in Conversation with Mary Lou Humphrey” from Koch International CD booklet.

¹⁹ Barbara Jepson, “All-American New Music,” *Wall Street Journal*, August 10 1992.

²⁰ Richard Danielpour, *The Enchanted Garden (Preludes, Book 1)*, Associated Music Publishers, Inc., AMP-8062, June 1993.

“anything can happen.”²¹ The musical presentation of duality in the preludes is deliberately planned. It is conceptualized by means of juxtaposing the diatonic (subconscious dreams) with the octatonic (conscious reality) element, as the composer mentioned.²² Unpredictability, according to the composer, is evoked by “dreams juxtaposing crazy things, some that mesh and others that don’t, both within and between the movements.”²³ The “crazy things” refer to the musical interruptions, in terms of dynamics, texture or materials, existing very often in the preludes. Some of the interruptions are irrelevant to the things happening immediately before and after; some later turn out to be significant. Examples will be explicated in the course of discussion.

A systematic employment of octatonic scales or elements appears as early as the music of Schubert and Liszt,²⁴ and the meaning of these materials is purely musical, without any indication of a programmatic nature. However, the idea to associate certain extra-musical meanings with the octatonic or diatonic collection has a long tradition in Russian music. For the Russian composers, the octatonic is “evocative of evil magic.”²⁵ Often in dramatic works (opera, ballet, etc.), the octatonic element represents an evil nature or a fantastic world as opposed to the human life represented by the folklore or the diatonic element, a tradition initiated by Glinka and followed by composers through Stravinsky.²⁶ The extra-musical representation of the collections in *The Enchanted Garden* by Danielpour is exactly the opposite of the idea common in Russian practice. As mentioned earlier, the octatonic element in the preludes represents reality, the human life,

²¹ “All of my compositions acknowledge opposites, dualities, and seeming contradictions in an attempt to reconcile them.... [The works] evidence a certain unpredictability or wackiness; the music seems inevitable, but at the same time very surprising.”

²² “The metaphorical representation of the diatonic and octatonic elements is especially vivid in the third prelude, where ‘at the sound of six chimes (depicting 6 am), the dream ends’ is done by the previous diatonic dominance giving way to the octatonic.”

²³ “Richard Danielpour in Conversation with Mary Lou Humphrey,” from Koch International CD booklet.

²⁴ See Richard Taruskin. “Chernomer to Kashchei: Harmonic Sorcery: or, Stravinsky’s ‘Angle’.” *JAMS*, vol.38, 1985, p.72ff.

²⁵ Richard Taruskin, *op cit*, p.93.

²⁶ *ibid.* p.103. “... differentiating the human and fantastic worlds by contrast between diatonic and chromatic harmony, the chromatic/fantastic being of the third-related kind (whole-tone or octatonic) to play off against the fifth relations of the human music.”

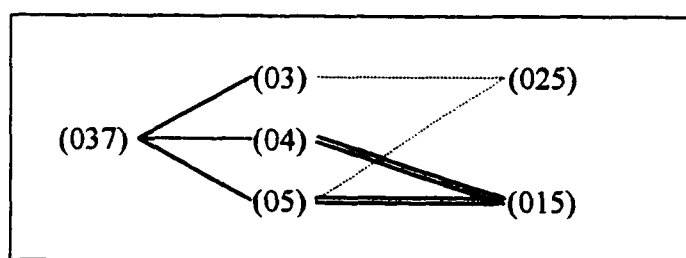
while the diatonic stands for the dream world, the fantasyland. Despite this contradiction, the purpose of programmatic association of this kind is not very dissimilar between Danielpour and the Russians. The listener is able to interpret the presence of the different worlds by their musical representation made up of elements embodied by the collections; in this way, the programmatic association works much as a “leitmotif” does.

My point of departure in the analyses that follow is the use of the octatonic and the diatonic collections as pointed out by the composer in the program notes. The analyses will concentrate on three aspects: octatonic/diatonic, triadic/tonal, and motivic/intervallic.

Octatonic/Diatonic Interaction

In order to determine the octatonic/diatonic interaction in each prelude, it is necessary to understand the structural features of the collections and to identify the elements smaller in scope that are embodied in each collection. The structural feature of an octatonic scale is a repeated alternation of half and whole steps. Such a scheme distinguishes the octatonic from the diatonic, whose intervallic succession is dominated by interval 2. The octatonic scale is self-symmetrical with the tritone being the bisecting point. That is, each member in the first half of the scale has a tritone partner in the second half; thus the collection contains four different tritones. This tritone presence becomes the foremost intervallic element differentiating the octatonic from the other collections. The diatonic collection is familiar to us for it has been employed since music came to exist. Certainly the use of the collection is different in the post-tonal period: the tonality traditionally suggested by the collection disappears and other smaller elements drawn from the collection, in addition to triads, are frequently used. Interval class 5, the most prominent interval in the diatonic collection (as opposed to the pervasive tritone in the octatonic), continues to come into play in the smaller elements created, a phenomenon also seen in the pc sets in the preludes. At times the pentatonic element appears (for example, in the middle section of the first prelude from bar 30 and the episode of the third from bar 8); the relationship among the pentatonic, the diatonic and the octatonic is based on a shared subset, (025) in the case of the preludes.

Very often notes of the whole octatonic collection can be found (in a non-scalar order) in the preludes. At other times an octatonic collection may be represented by its subsets. Both the octatonic and diatonic collections have subsets that are either distinctive to them or shared by both. There are many of them and I am going to concentrate on the ones that are involved in the preludes. The motif (0134) in the second, the fourth and the fifth preludes is distinctively octatonic, being the segmental tetrachordal subset of the collection. Set class (015) in the first, the third and the fifth preludes is distinctively diatonic. The elements shared by the two collections are (025), (037), (016) and (026). (016) and (026) are employed exclusively in the octatonic preludes; their mediating nature is subordinate to the typically octatonic tritone contained in the sets. (025) and (037) are inclined more to the diatonic; even though they may appear in an octatonic environment, the typically diatonic (05) interval embodied in the sets has more power in determining their character. Nevertheless, the mediating family should be acknowledged and it allows the music to change from one collection to another easily. The subsets related to the diatonic elements, either exclusively or commonly, are interrelated in a particular way that (015) and (025) share all the dyadic subsets of (037), i.e. (03), (04) and (05). By combining (04) and (05), (015) is attained; by combining (03) and (05), (025) is attained. Therefore, (015) and (025) have a close link to the triadic influence, in addition to their diatonic affiliation. The following chart illustrates the interrelationship of the diatonically inclined “mediating family” and the distinctively diatonic element.



To summarize, (0134) and the tritone in the preludes are associated exclusively with the octatonic collection, as (015) and interval class 5 are with the diatonic collection. In the mediating family, (016) and (026) are inclined more to the octatonic because of the

tritone whereas (025) and (037) are more to the diatonic because of interval class 5.

octatonic	mediating family	diatonic
(0134)	(016), (026)	(015)
tritone	(025), (037)	ic5

Interval class 5 and the tritone certainly can be mediating; however, in this particular context of the preludes, they do not function that way. In other words, although interval class 5 is of the dyadic subset of (025) and (037), and the tritone of (016) and (026), how the supersets function does not apply to the subsets.

Triadic/Tonal Reference

Tonal reference is a major characteristic in Danielpour's music. It is largely invoked by the use of triads (major or minor), pseudo-harmonic progression, and a constant underlying presence of the triadic subsets. In the first and the third preludes, there are three striking moments of plain major triads. Two of them are C major triads, in bar 26 of the first prelude and in bar 11 of the third prelude; the other is a D^b major triad in bar 65 of the first prelude. Apart from these big moments, triads of other kinds (minor, augmented, diminished, or two triads combined) are heard constantly in the preludes. Triads of all types are sometimes combined to create a kind of traditional harmonic progression or harmonic relation. In bars 63-64 of the first prelude, the lower part is made up of an A^b - C - E augmented triad, which can be interpreted as a pseudo-dominant of the following D^b major triad (Ex. 1-1). In bar 7 of the third prelude a plagal cadence is observed (Ex. 1-2).

Example 1-1 Pseudo V-I progression in D^b major

Poco più lento $\text{♩} = 72 - 76$

cresc.

r.h.

l.h.

Example 1-2 Plagal cadence in C major

con rubato

poco rall. a tempo

poco rall. a tempo

(as needed)

However, these harmonic progressions are rare in the music and do not suggest the widespread operation of traditional tonality. Tonal references of this kind do not suggest a sense of key as the basis of the composition. Reti's concept of "pantonality" is useful here: "The characteristic attribute of pantonality, ... is the phenomenon of 'movable tonics', that is, a structural state in which several tonics exert their gravitational pull simultaneously, counteractingly as it were, regardless of whether any of the various tonics ultimately becomes the concluding one."²⁷ If we apply this notion to our current concern, the triad is then a gravitational center that pulls and holds other triads towards it. Triads will stand out as salient events, and thus a quasi-tonal aura is "created by the ear singling out hidden relationships between various points of a melodic or contrapuntal web."²⁸ So, it is assumed that the function of triads in this particular set of preludes is to serve as a center and base of all the "crazy things" happening around it. In the octatonic

²⁷ Rudolph Reti, *op cit*, p.67.

²⁸ *ibid.*, p.65.

second prelude no pseudo-harmonic relationship is found. However, triads of all kinds appear frequently and are often coupled with dyads of the triadic subsets, interval class 3 and 4. The presence of the (03)/(04) dyadic idea continues in the fourth and the final preludes. In other words, the triadic moments are the aural pillars in the musical course and the (03)/(04) dyadic idea the base and support.

By following the crucial triadic moments in the music, we can construct a large-scale tonal motion can be constructed. The motion should reveal a series of tonal centers by which the musical direction is guided. The shifting from one tonal center to another does not imply modulation, for it does not function in the same way. This relationship basically governs the direction of the musical development and each center has an equal weight of importance. It may look similar to a structural motion in a Schenkerian sense, only without the hierarchical relations. Very often one center represents one section or passage; in this way, the tonal motion is integrated with the musical content.

Motivic/Intervallic Association

The motivic/intervallic association in the preludes involves essentially the following elements: the (03)/(04) dyads, set class (sc) (0134), the bell chant (a recurring texture, chordal or melodic, in the piano high register) and the framing interval 11. The (03)/(04) dyads influence eventually almost everything in the preludes—the melodic contour, the chordal spacing, the predominating sets, etc.

The exclusive association between (0134) and the octatonic collection was mentioned earlier. It is obvious that the motivic association of (0134) appears exclusively in the octatonic preludes, i.e. the second, the fourth and a portion of the fifth. Its appearances in these preludes are basically melodic, as an important melodic pattern (in the fourth and the fifth) or a short fragment attached to another melodic pattern (in the second).

The setting of the bell-chant texture can be chordal or melodic. Both settings are interrelated by some intervallic elements embodied in the “chant” that does not occur in

full until the final 12 measures of the fifth prelude. Consequently, the basis of this intervallic interplay is not revealed until late in the set. The chant is linear and extremely tonal. As opposed to (0134), its intervallic elements appear exclusively in the diatonic preludes, i.e. the first, the third and the diatonic part of the fifth. The interplay manifested in the chordal setting (in the first, the third and also the fifth preludes) corresponds to the first two members in the intervallic succession of the chant. In the final prelude where the chant is to emerge in the linear completion, the intervallic elements also influence the shapes of the melodic patterns, especially those with a diatonic undertone.

The intervallic interplay of the framing interval 11 solely involves the chordal patterns. It provides an aural association for the chords that are formed by different set classes. It takes effect mostly with chords set up by (014), (015) and (016), sets that have a (01) dyadic subset. In the fourth prelude, a similar interplay is noticed with the framing interval 10, which involves chords set up by (025), (026) and (027), sets that have a (02) dyadic subset.

In what follows, I will analyze each of the movements in turn. Each analysis will focus on six formal or structural issues:

1. The Form and Materials
2. Octatonic/Diatonic Interaction
3. Trichords and Tetrachords in Relation to Underlying Octatonic/Diatonic Collections
4. Trichords and Tetrachords in Relation to Generating Intervals
5. Issues of Centricity and Large-Scale Tonal Motion
6. Motivic/Intervallic Association

CHAPTER 2 Analysis of *Promenade*

The first movement, "Promenade," was inspired by my daily practice of walking through Central Park before or after working hours. The somewhat mesmeric ostinato in its middle section depicts 'daydreaming;' the movement's outer structures reflect various encounters experienced while walking through the park.¹

The Form and Materials

The first prelude has a vivid story-telling character. In his program notes quoted above, the composer clearly lays out the plan of the scenes and its relation to the formal structure. The middle section (from bar 28) stands out on its own under the "daydreaming" notion while the outer sections correspond to each other in terms of material, structure and musical depiction. The walking feeling is invoked in the outer two sections (from bar 1 and bar 50) by a parallel motion in intervals 8 and 9 and in quarter-note values, and by an ostinato in eighths in the middle section. In fact, the walking pace conveyed by these patterns does not change as the note values suggest. Based on the metronome markings of the composer, the tempo in the outer sections (bars 1 - 27 and bars 50 - 64) is of quarter notes equal to ca. 84 - 88; the middle section (bars 28 - 49) is of quarter notes equal to 42, half of the speed of the outer sections. This temporal relation enables the eighths to sound temporally equal to the quarters and thus maintains the feeling of a consistent walking pace. The notion of "various encounters experienced while walking through the park" is musically portrayed by sudden dynamic or textural changes interrupting the walking figures. Sometimes a short pause (e.g. in bar 14 and 15) is included too as one of the portraying devices.

¹ Richard Danielpour, *The Enchanted Garden (Preludes, Book I)*, Associated Music Publishers, Inc., AMP-8062, June 1993.

Section A (bars 1 - 27)

theme 1	bars 1 - 5
transition 1	5 - 14
theme 2	15 - 18
transition 2	19 - 27

Theme 1 has a carefree nature, setting up a musical picture of relaxing strolls in the park.

Example 2-1 Theme 1 (walking music)

Moderato, amabile ♩ = ca. 84 - 88 *con rubato*

(*pp* as needed)

hold back

The sudden musical changes depicting Danielpour's "various encounters" occur as early as in bar 8 of transition 1. After a short pause in bar 14, the music resumes its original peaceful pace. Theme 2 starts with a transposed version of theme 1: the top part in bar 15 is related to the opening fragment by T_5 (or T_7 in pitch-space operation), and the essence of the lower part in bars 15 - 18 corresponds to that of bars 1 - 5 also by T_5 (only the lowest notes in the left hand are taken into consideration) (Ex.2-2).

Example 2-2 Theme 2 (walking music transposed)

At bar 19, transition 2 starts with a T_7 (or T_5 in pitch-space operation) version of transition 1 (Ex.2-3), but its course is different from that of transition 1. The music moves towards a goal of C-major triad, a big moment in bar 26.

Example 2-3 Transition 2 (Transition 1 transposed)

Section B (bars 28 - 49)

The walking figure from bar 28 is not of a parallel movement, and is more in an ostinato nature with four eighths as one unit. Above the ostinato flows a melody (coupled with a trill in the high register) whose contour is similar to that of the opening of theme 1.

Example 2-4 A new walking figure with melodic similarity to Theme 1

Bar 38 starts yet another new walking figure. It is new in the sense that this figure is made up of the motion in both the upper and lower parts, and contrary motion is set up between the two parts instead of between each voice (Ex.2-5). Consequently, for the first

time, the walking figure becomes the main texture of the music.

Example 2-5 Another new walking figure with the upper and lower parts moving in contrary motion

Section C (bars 50 - 77)

reprise of theme 1	bars 50 - 56
reprise of transition 2	57 - 64
coda	65 - 77

One can see that there is some parallelism between section C and A; however, I am reluctant to assign it as A'. In fact, the reprise of theme 1 and transition 2 do not follow completely the path that their counterparts set up in section A. Nevertheless, the similarity should be acknowledged.

The reprise of theme 1 begins with a short prologue that is absent in the original statement.

Example 2-6 The prologue to the reprise of Theme 1

The reprise has the same length as theme 1 itself, but the content is vastly different. The melody of theme 1 does not recur in its entirety and the melodic patterns here in the

reprise are more of a developmental nature. Nevertheless, the walking figure in the left hand remains the same. The material from transition 2 is encapsulated into two measures in bars 57 - 58. From bar 59 to 64 the music moves away to prepare for the big moment of the D^b major triad which starts the coda. The blunt triad acts like a pedal point from bar 65 to 69 upon which two ideas occur. The first idea is a chordal setting consisting of three groups of chords. It seems to have nothing in common with the materials introduced so far in the first prelude. The meaning of this chordal setting will be discussed later in the chapter. The second idea is a pair of lines, which are always an interval 8 apart. To be precise, the material here is not new: it is derived from the opening of theme 1 with several rhythmic alterations.

Example 2-7 Derivation of the opening material upon a pedal point

The image displays a musical score for piano. The top system shows the beginning of a piece with a circled opening motif in the right hand and a walking bass line in the left hand. The bottom system shows a more complex passage with a circled motif in the right hand and a walking bass line in the left hand. The score includes dynamic markings like 'p' and 'f', and performance instructions like 'Sost.' and 'rit.'

At the surface, the reappearance of the opening fragment may not be as apparent aurally as suggested above. This reappearance in disguise compensates musically for the lack of a full reprise of theme 1 at the beginning of section C. The material from bar 70 till the end corresponds to that of bars 45 - 49 (Ex.2-8). The difference between the two is that the latter raises a musical question while the former finishes what is previously left open. Bars 70 - 73 is a near replica of bars 45 - 47; a further development starts from the latter part of bar 73.

Example 2-8 The parallel passages between the endings of section B and Coda

44

47 (don't drag)

51 rit. A tempo (♩ = 76) hold back a tempo

55 morendo poco a poco al fine

Despite having a different role in the story telling, the three sections are very much balanced in terms of structural proportion and length.

section A	section B	section C
14 mm. (theme 1+ transition 1)	octatonic vs	15 mm. (reprise of theme 1+ reprise of transition 2)
13 mm. (theme 2+ transition 2)	pentatonic/ triadic	13 mm. (coda)
27 mm.	22 mm.	28 mm.

Octatonic/Diatonic Interaction

In this movement, the octatonic and the diatonic are maintained in static equilibrium. The elements employed are often shared by the two collections, in addition to the ones that are distinctively octatonic or diatonic. Example 2-9 illustrates the elements dominating the first section: the melodic shape is governed by interval classes 3 and 4 and sc (025), and the “walking” is depicted by a parallel movement framed by interval classes 3 and 4, which are arranged in their complementary forms, 9 and 8. Clearly, theme 1 is essentially governed by elements from the “mediating family,” i.e. elements shared by both the octatonic and the diatonic collections.

Example 2-9 Network of (025) and interval classes 3 and 4 in the walking music

An extensive use of these elements foretells that section A is to have a maximum octatonic/diatonic interaction. The “mediating family” continues to influence transition 1. The initial material is built upon interval class 4, a dyadic subset of the “mediating family” (037). Example 2-10 illustrates the intervallic complement in bar 6 and 7 between interval 4 in the upper part and interval 8 in the lower part. This complementary scheme is apparently derived from the one used in theme 1, thus interrelating the two passages.

Example 2-10 The intervallic complement of Transition 1

5 *hold back* *a tempo* *accel.* *a tempo* *accel.* *a tempo*

pp *p* *mp*

int.4 *int.4*

int.8 *int.8*

The composer describes the mesmeric middle section as depicting “daydreaming”. Without reading too much into this statement, we can safely presume that it is a section where the materials representing dream and reality occur explicitly side by side. The octatonic influence is suggested by a new intervallic member, interval 6, in the ostinato-like walking figure. The figure consists of a unit of four eighths, and each unit expresses six notes of an octatonic scale starting on D^b (notes in parentheses are not in the figure).

Example 2-11 Octatonic scale in the ostinato walking figure

mf (echo) *p lunga* *pp molto legato*

gradually release pedal

The right-hand phrase starting from bar 30 to the first part of 31 is built upon a pentatonic scale starting on D^b , while that from the latter part of bar 31 is triadic (the G natural is another story) (Ex.2-12). The triadic phrase shares three pitches with the previous octatonic subset in the walking figure: the only difference is C^b and C; the G natural at the end of bar 31 is also shared. The interaction of the pentatonic, triadic and octatonic continues in bars 33 – 37, a phrase that is essentially an augmentation and variation of

bars 29 – 32.

Example 2-12 The pentatonic and the triadic in the melody of bars 30 – 31

The image shows a musical score for piano and voice. The piano part consists of a walking bass line with chords. The vocal melody is in Russian: "стена, рожь и риса". A circled section of the melody is shown below with labels "pentatonic" and "triadic".

Also to be observed is another new walking figure starting from bar 38. This figure gives up the interval class 6 involved previously and incorporates a new intervallic member, i.e. interval class 5 (Ex.2-13). The octatonic material and the ostinato setting are subsequently abandoned. Because of the dominance of interval class 5 in the figure, the passage from bar 38 to 49 is more diatonic and therefore less conflicting than the previous passage.

Example 2-13 The involvement of interval class 5 in the new walking figure from bar 38

The image shows a musical score for piano. The piano part consists of a walking bass line with chords. The tempo is marked "a tempo". A circled section of the melody is shown below with the label "ic 5".

To conclude, the octatonic/diatonic interplay in section A is manifested essentially with the elements employed from the “mediating family.” In section B, the equilibrium between the collections is established by the involvement of typically octatonic or diatonic interval classes.

Issues of Centricity and Large-Scale Tonal Motion

Each formal section of the movement is oriented towards a particular pitch center, and the movement as a whole can be understood as the succession of these centers.

Example 2-14 summarizes the pitch centers of the movement.

Example 2-14 Summary of the pitch centers



It is apparent that each section of the movement involves the same succession of pitch centers, $G^b - E^b - C$. The two exclamation marks in the example denote a surprising interruption of this progression.

The melody of theme 1 begins with a focus on G^b and then shifts strongly to E^b at its end. The interplay of interval classes 3, 4 and sc (025) in the melody has been revealed in example 2-9. What the example did not reveal was the establishment of the local pitch center. Turning back to the music, we can feel an emphasis upon G^b and then E^b in this 5-bar phrase. Because of this process of pitch-center establishment, the melody can be further divided into two segments. The first is moving towards G^b as a temporary goal, while the second finally establishes the local pitch center E^b ($D^{\#}$) (Ex.2-15). Notice how the (03) dyadic element comes into play again in the intervallic relationship between the two goal pitches.

Example 2-15 Structural line of the melody of Theme 1

Moderato, amabile ♩ = ca. 84 - 88 con rubato

(as needed)

5 *hold back*

From the example above, we can clearly see that the important pitches in the melody, G^b and E^b, are always approached from their upper neighboring notes A^b and D^b respectively, an interval 2 apart. Consequently, two (025)s can be attained by associating G^b and E^b with one of the neighboring notes, i.e. [D^b, E^b, G^b] and [E^b, G^b, A^b].

Example 2-16 (025) formed by the pitch centers and their neighboring notes



The range of the walking figure in theme 1 is comparatively narrow, spreading from A^b/F to D/B^b and centering at B^b/G with the upper line forming another (025). The intervallic relationship among these three points subsequently echoes the intervallic arrangement of the tonical centers and their neighboring notes in the melody.

Example 2-17 Intervallic arrangement between the important structural pitches and the walking figure

Moderato, amabile ♩ = ca. 84 - 88 con rubato

(2) is needed

5 hold back

2 3 2

2 3/(3+1)

Transition 1 that follows has then two purposes: one is to continue the octatonic/diatonic interplay; the other is to reinforce the tonical center E^b established by the end of theme 1. Towards the end of the transition, we have a re-confirmation on E^b after a long reaching-out both in the top and lower parts. Ex. 2-18a shows the line in the treble; 18b the line in the bass.

Example 2-18 Re-establishment of structural note E^b

5 *hold back* *a tempo* *accel.* *a tempo* *accel.* *a tempo*

8 *quasi tremolo* *rit.* *a tempo*

10 *Poco più mosso* ♩ = 88 *poco accel.* *A tempo primo* ♩ = ca. 84 - 88

13

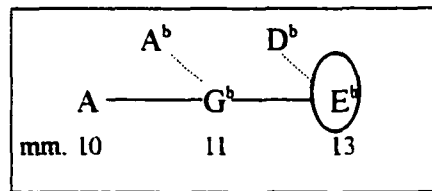
a. in the treble

b. in the bass

5 9 12

6 10 13

The following chart illustrates the tonical relationship derived so far from theme 1 and transition 1.



The T₇ (or T₇) operation in theme 2 consequently moves the temporary tonical goal from G^b to B in the right hand and, at the same time, retains the tonical center E^b in the left hand. Transition 2 initiates the process of moving towards a new tonical center.

Example 2-19 Pitch centers in Transition 2 (bars 21-25 are omitted)

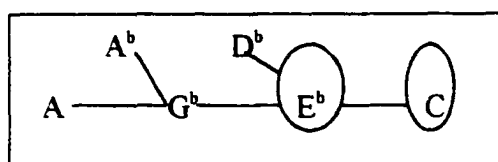
Musical score for Example 2-19, showing two systems of piano music. The first system includes measures 18-20 and 21-25. The second system includes measures 26-28. Dynamics include "a tempo", "poco accel.", "f (echo)", and "p lunga". A (3+2) time signature change is indicated.

The music begins with B^b in the lower part; G^b and E^b are emphasized occasionally in the top. Suddenly, a blunt major triad built on C takes over in bar 26, a tone which is first introduced in bar 19 (with a *temuto* marking) and 20 (with an accent). Section A subsequently ends on the tonical center of C. Example 2-20 demonstrates the bass line of section A in completion.

Example 2-20 The bass line motion of section A

Musical score for Example 2-20, showing the bass line motion of section A. The score is divided into measures 1-5, 6-18, 19-25, and 26.

The following chart shows the tonal relationship in section A.



The transpositional plan via intervals 5 and 7 has a point of significance. Let us consider the main bass line of section A again.

Example 2-21 Transpositional operations in the bass line

The T_5 operation maps the opening A^b/B^b of the lower part onto D^b/E^b in bar 6 where transition 1 starts. D^b/E^b continues in bar 15 where theme 2 begins, till in bar 19 where they are transposed by T_7 and therefore back to the pitch class in theme 1. Evidently, transposing any pitch by intervals 5 and 7 in either order returns that pitch to its original pitch class. In this way, the transpositions draw the listener back to the point where the musical material starts thus achieving equality and balance.

With the return of the diatonic element in the walking figure from bar 38, the emphasis on G^b and E^b also becomes apparent again. Example 2-22 shows how E^b together with its interval 7 partner serves as the basis of the walking figure in the right hand and how it is also prominent in the bass line.

Example 2-22 (05) dyad on E^b as the basis of the walking figure and E^b as the goal in the bass line

In bar 45 and 46, for the first time in the middle section, G^b and E^b express themselves explicitly in the bass line while the walking figure in the right hand shifts its basis from E^b/B^b to G^b/D^b .

Example 2-23 Appearances of G^b and E^b in the bass

In fact, the G^b/E^b influence is never absent from the music; even in the octatonic walking figure, the influence exists as well. Example 2-24 shows the octatonic walking unit in two separate voices.

Example 2-24 Influence of G^b and E^b in the octatonic walking figure

The image shows a musical score for piano. The top staff is in treble clef and the bottom staff is in bass clef. The top staff has a box around a section of notes labeled '1A'. The bottom staff has a box around a section of notes labeled '2A'. The score includes dynamic markings like 'ff', 'f (echo)', and 'p', and performance instructions like 'gradually release pedal'.

The top voice is centered around G^b and the lower voice around E^b . G^b and E^b subsequently occur simultaneously at the beginning of each unit. In other words, when the music enters section B, the G^b/E^b tonical relationship moves to the background suppressed by the octatonic vs pentatonic/triadic conflict at the surface. Once the conflict is removed, the dyadic relationship becomes more and more apparent till the place where G^b and E^b resume their status in the bass.

Section B ends on a strong D in the bass, which is rather surprising (Ex.2-25). Although the octatonic sound of section B distinguishes itself from the previous section, the many similarities of ideas and patterns relate it closely to section A. Therefore, the ear may expect pitch C to end the section, just as it ends section A; also the tonical relationship concluded so far might lead on to expect that C will follow G^b and E^b in bar 45 and 46. Nevertheless, the dynamic and expressive markings assigned to D indicate that such design of deviation is deliberate. It cannot be certain at the end of section B whether D is to replace C eventually in the tonical relationship, or is merely a passing tone between E^b and C. The functional role of pitch D is left in doubt.

Example 2-25 The surprise in the bass line of bars 45 - 49

The short “questioning” phrase at the beginning of reprise of theme 1 complements the appearance of D in the lower part at the end of section B as for a moment we do question where D is leading. The prologue re-establishes E^b in the bass and subsequently flows into the reprise of theme 1. But just when we thought to be free from the C/D dilemma, D occurs to replace E^b in the melody in bar 53. D lingers until bar 56, a passage that is expected to be centered on E^b. Without solving the mystery, the music proceeds into the reprise of transition 2. The entire transition 2 was summarized in bars 57 - 58 which displays the main bass line of A^b - B^b - C. From bar 59 we see the preparation for a quasi V - I motion, A^b - D^b, which occurs in bars 63 - 65 (Ex.2-26). So far, the first part of section C is full of surprise, question and uncertainty. At this stage, we still do not know the reason and purpose of the existence of D. At first, it seems to replace C, but later we have a conclusion of C in the bass line in bar 58. It also seems to replace E^b in the D^b/E^b relationship established in theme 1 (cf. the figures in bar 55 and 59); however, it does not have an association with G^b and C as E^b does (cf. Ex.2-1).

Example 2-26 The bass motion in bars 50 - 65

47 (don't drag) questioning

52 Tentative at first, then becoming sure. p

55 più espressivo 'pleadingly' *murmuring* *dim.*

60 poco più lento a tempo p dolce poco espr.

62 cresc. Poco più lento $\text{♩} = 72 - 76$

The coda is full of large gestures. It starts with a blunt D^b major triad, which echoes the big C major triad at the end of section A. The surprising D recurs in bar 73 after which an E^b/G dyad enters and another dyad, C/E, follows (Ex.2-27). By this design, it is clear that D simply serves as a slight detour from the tonical relationship already established. The detour may not be absolutely necessary, but it surely stirs up our

attention after a long mesmeric journey.

Example 2-27 Dyads following the surprising D in the Coda



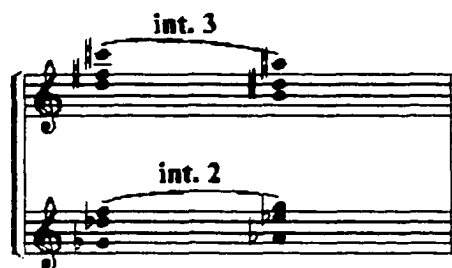
Motivic/Intervallic Association

The coda of the movement shows the first instance of the chordal bell-chant association in the preludes. The meaning of this setting has not yet been revealed and the patterns themselves seem not to come from the materials in the preceding sections. It occurs on the pedal point of D^b major triad and consists of three pairs of (015).

Example 2-28 The bell-chant chordal setting on three pairs of (015)

The first pair is related by T₄I, inverted around A^b6; the second pair is by T₆I, inverted around E^b6. The two inversional axes are very much audible and emphasized in the chordal setting as both are the common tones and are situated on the outer voice, the lowest or the highest. The third pair of (015)s is slightly different from the other two. It in fact consists of four (015)s and therefore the pairing becomes problematic. The only pairing that can result in a similar idea found in the other two pairs is the vertical pairing. The first pair is related by T₇I with G^b (F[#]) and D^b (C[#]) as common tones; the second pair is related by T₆I with E^b (D[#]) as common tone. However, the finding of common tones does not help to explain the horizontal motion. Let us concentrate on the intervallic relationship between the chords of each line (Ex.2-29).

Example 2-29 Intervallic relationship of each line of the third (015) pair



In the first line, the chords are related by interval class 3 (T_3); in the second line, the chords are related by interval class 2 (T_2).

These two interval classes are significant in relation to an important idea in the fifth prelude. In the program notes of the final prelude, the composer points out this important musical idea occurring in the final minutes of the prelude (cf. the program notes of the final prelude). The chant in “Night” first appears in bar 146. Despite the effect of a semitone clash, the chant is a simple diatonic tune descending from, e.g. in the lower part, A to D in a D major tonality. Example 2-30 illustrates the intervallic succession of the chant.

Example 2-30 Intervallic succession of the chant

The contour of the chant suggests strongly a D major triad, and the unfolding of A and F[#] is of particular interest as it relates to the chordal setting in the coda of the present prelude. As shown in the above example, the unfolding is accomplished by intervals 2 and 3, the intervals that are involved in the transpositional operations of the third (015)

pair. This association may seem coincidental for the present. However, during the course of the analysis, similar chordal settings will be identified in other preludes, and eventually the association will be explicated in the final prelude.

CHAPTER 3 Analysis of *Mardi Gras*

“Mardi Gras,” the second movement, resulted from a dream I had of the Berlin Philharmonic and its late music director dancing and marching, instruments in hand, down the streets of the French Quarter in New Orleans (or was it the West Village in New York?!).¹

The Form and Materials

The title “Mardi Gras” already alludes to the jazz character of the movement. Jazz elements in the movement include the accompaniment of alternating bass and chords in eighths reminiscent of the stride piano in ragtime music, syncopated melodies in essentially eighths and sixteenths which is also a feature of ragtime music, and written indications of specific jazz performance style (e.g. “scat-singing”). The “wackiness” of jazz that Danielpour likes can certainly be felt in this prelude. Nevertheless, it is not a jazz composition, despite the fact that the work has an extremely jazzy flair. The changes of texture and moods are extremely abrupt in the prelude, evoking vividly the swift change of scenes that one experiences while walking down the street in a parade. The music is essentially octatonic and involves three main ideas. The following chart summarizes the various sections of the prelude and the ideas involved.

section A (bars 1 - 35)	X - Y - Z
interlude (bars 36 - 39)	X
section B (bars 40 - 68)	X + new ideas & Z with new idea
section C (bars 69 - 113)	Y - X - Z
postlude (bars 114 - 119)	Y + X new idea

¹ Richard Danielpour. *The Enchanted Garden (Preludes, Book I)*, Associated Music Publishers, Inc., AMP-8062, June 1993.

Section A and Interlude

Section A is a section that introduces the piece's main materials. The characteristic of the passage involving idea X (starting in bar 1) is the design of an interval 6 followed by a semitonal descent in the right-hand part. Interval 6 is emphasized by numerous accentual markings and the off-beat placement. The left-hand part of X is formed essentially by intervals 8 and 9, and mainly provides regular beats underneath a highly cross-accented upper part.

Example 3-1 Passage involving idea X



The left-hand part of the passage involving idea Y (starting in bar 13) remains triadic. In addition, a line of four descending pitches is established; the descending line is used repeatedly in the passage from bar 13 to 27. The right hand starts a new line, which is transposed later on up an interval 7 in bar 21.

Example 3-2 Passage involving idea Y



The passage involving idea Z (starting in bar 28) has a totally different character from that of the other two materials. Its reflective character is evoked immediately by a pedal-point design of alternating intervals 11 and 7, upon which a new octatonic melody is built (Ex.3-3).

Example 3-3 Passage involving idea Z

28 *Lo stesso tempo, ma più tranquillo*

cantabile

(as needed)

Idea X in the interlude is a transposed version of that in section A, by T_5 (in pitch-space operation) in the upper part and by T_7 (in pitch-class space operation) in the lower part.

Example 3-4 The original and the transposed versions of X

7

10

34

37

cresc.

poco marc.

loco

T_0

T_5

Section B

The materials in this section have new ideas either underlying, preceding or interrupting them. The section starts with an ostinato bass upon which X and a new whole-tone melody are built. Occasionally the ostinato is interrupted by a chordal pattern of a hemiola-like rhythm.

Example 3-5 The ostinato, idea X, the new whole-tone melody and the chordal interruption

40 Ben misurato (lo stesso tempo) ♩ = 120 - 126

f marc. e secco [ostinato]

43 [X] *f pesante e molto espr.* [whole tone melody]

46

[chordal interruption]

49 *ff wild!* *f pesante ed espr.*

The new idea that sandwiches idea Z starts in bar 59. This new idea has a quasi contrapuntal nature. The G/F[#] dyad arranged as interval 11 is held invariant while the middle voice is moving against the descending line in the bass (Ex.3-6).

Example 3-6 The new idea preceding Z

59 *Con rubato, ma lo stesso tempo* *hold back* *a tempo*
p espr. (bring out the inner voice)
 (as needed)

Section C and Postlude

Idea Y starts section C with its original version in the treble and a new line, ascending, in the bass. This time when the upper part goes up to its T_7 version as it does in section A, the bass also moves up with it.

Example 3-7 T_7 version of Y

64 *ff sub.* *sf* *v*
 T_0
 T_7
 72 *f* *sf* *v*

Idea X returns in bar 92. The appearance of idea Z in bar 102 is a T_3 version, which is also prolonged and developed. The material for the postlude is mainly from the hemiola-like chordal interruption in section B.

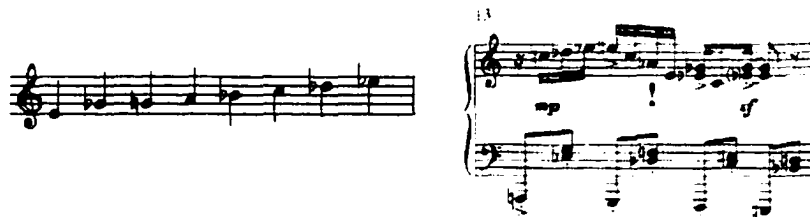
Trichords and Tetrachord in Relation to Underlying Octatonic

Idea X

Idea X is fundamentally octatonic with a particular orientation towards the tritone. The three (06) dyads that are the essence of idea X are namely $[E^b, A]$, $[D^b, G]$ and $[B^b,$

scale does not completely encompass the notes in the music this time; A^b in the music needs to be changed to A natural to fit into the scale (Ex.3-10). However, the notes in the second beat (containing the A^b), comprising sc (048), seem to balance aurally those in the third beat of sc (036) in a particular manner so that we do not feel A^b as a “wrong note.”

Example 3-10 The octatonic scale and its different appearance in bar 13



(048) and (036) do not have any direct relationship; (036) is a subset member of the octatonic and (048) is not. (037), which is a subset of both the octatonic and the diatonic, may be their next of kin in common—it takes only one step to transform them into (037), A^b to A on (048) and G^b to G on (036). This closeness to (037) allows a certain degree of aural association between them. This hypothetical transformation actually occurs later in bars 15 – 16.

Example 3-11 Fulfilment of the hypothetical relationship of (036), (037) and (048)

The initial fragment of idea Y presents an idea which later becomes an important motif (Ex.3-12). The fragment, (0134), and its intervallic succession 1 – 2 – 1 not only suggest the octatonic influence but also govern several melodic shapes later in the other preludes.

Example 3-12 The 'motif'



Therefore, idea Y is fundamentally octatonic, but with a flexibility that pushes it either in a diatonic or whole-tone direction.

Idea Z

The melody of idea Z is also fundamentally octatonic; it is based on a different scale from the one in X and Y.

Example 3-13 The octatonic scale in idea Z

28 *Lo stesso tempo, ma più tranquillo*

Musical notation for Example 3-13, showing a piano piece. The right hand has a melody marked *cantabile*. The left hand has a bass line. The tempo is marked *Lo stesso tempo, ma più tranquillo*. The dynamics are *p*. A note in the left hand is marked *(as needed)*.

A single line of musical notation showing the octatonic scale in idea Z.

The semitonal feature of B^b/B in the scale is emphasized very much in the melody. A possible presentation of the motif (0134) is implied by the melody centering on G and emphasizing the B^b/B.

Example 3-14 Embedded presence of the motif in idea Z

28 *Lo stesso tempo, ma più tranquillo*

Musical notation for Example 3-14, showing a piano piece. The right hand has a melody marked *cantabile*. The left hand has a bass line. The tempo is marked *Lo stesso tempo, ma più tranquillo*. The dynamics are *p*. A note in the left hand is marked *(as needed)*. A circled motif labeled (0134) is shown in the right hand.

It is mentioned at the beginning that the second prelude is essentially octatonic; nevertheless, the triadic/diatonic influence is still present. The left-hand part of idea X

and Y is made up largely of triads or triadic elements. As (037) is a member of the “mediating family,” the underlying collection for the left hand is ambiguous. The situation becomes clearer in section B. The ostinato in section B is essentially made up of two (015)s, [C, E, F] and [B^b, D, E^b], a set that exclusively belongs to the diatonic (Ex.3-15). Often [C, E, F] (015) has an extra member added to the set, i.e. B; it does not affect the essential set structure.

Example 3-15 (015) in the ostinato of section B

in Ben misurato (lo stesso tempo) $\text{♩} = 120 - 126$

Issues of Centricity and Large-Scale Tonal Motion

The tonical relationship in this movement is not constructed in the same way as in the first prelude with big triadic moments. Nevertheless, important pitch centers can still be traced, based on the frequent return to and the emphasis by pedal-point/ostinato on certain pitches. Example 3-16 summarizes the bass line motion of the movement.

Example 3-16 Summary of the bass line motion with its corresponding sections and ideas

It is clear that, before the last appearance of Z upon A^b, the pitches D and A dominate sections A and C with subordinate pitches E and F governing section B. The surprising ending on the pitch centers of A^b and C[#] counterbalances perfectly the similar partnership of A and D.

Section A starts with the bass centering on D, which begins and ends the idea X passage (Ex.3-17). When idea Y appears, the center moves to A, the starting of the

four-pitch descending line (Ex. 3-18). The passage later ends on E, the last pitch in the descending line.

Example 3-17 The bass line of X

Example 3-18 The descending line in the bass of Y

In the passage of idea Z, the pedal-point design is built upon F, with an E/E^b dyad in the middle voice whose T₃ version occurring in section C contains the important pitches G/F[#].

Example 3-19 Important dyads in Z and its T₃ version

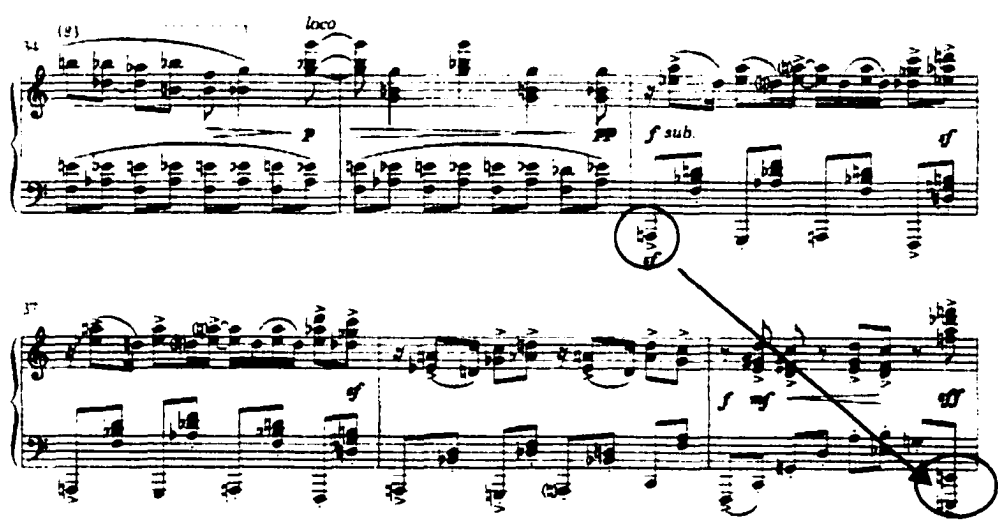
(continued)

Example 3-19 (continued)



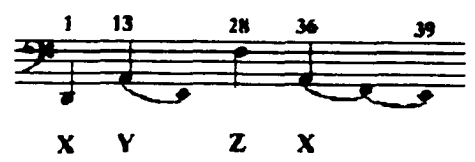
At the time when idea X recurs with its T₃ version in the interlude, the center accordingly moves to its interval class 5 partner, A. The bass line subsequently follows the direction set up in the idea Y passage towards E at the end of section A.

Example 3-20 The transposed idea X with the bass moving from A towards E



Consequently, the shift of tonical centers in section A corresponds to the change of materials.

Example 3-21 Tonical centers and the change of materials



As mentioned, idea X and Y are built upon the same octatonic scales even though their appearances on the surface are vastly different. Since the underlying octatonic element is the same, the move from D to A in the bass is therefore closely related, implying a I - V

relationship.

In section B, the ostinato underneath both idea X and the new ideas centers on F, which then gives way to E with idea Z/the new idea.

Example 3-22 The two pitch centers of section B

40 *Ben misurato (lo stesso tempo)* ♩ = 120 - 126

f marc. e secco *f*

Con rubato, ma lo stesso tempo *hold back* *a tempo*

p espr. (bring out the inner voices)

as needed

In section C, idea Y returns with a new bass line; this time it has four ascending pitches starting on A.

Example 3-23 The new ascending line in the bass of Y

69 *A tempo* ♩ = 126

f sub.

The dominance of A lasts till bar 91 before X recapitulates and the center moves back to D. The reappearance of idea Z in bar 102 brings out A^b in the bass and two important pitches in the middle voice (Ex.3-24).

Example 3-24 The reappearance of Z from bar 102

The F^\sharp in the high register from bar 102 has a counterpart in the previous section; it has already appeared in section B on the top voice of the interrupting chords. Its presence continues in the postlude, a passage subsequently destroys the seemingly logical relationship established so far. $[C^\sharp, F^\sharp, G]$ and $[C^\sharp, D, G]$ of (016) are emphasized in the last six measures, ending the prelude on a single C^\sharp in a most surprising manner.

Example 3-25 (016) in the postlude

To conclude the large-scale motion of the movement, the pitch center D provides the overall basis for the bass line till A^b appears. The A^b to C^\sharp motion in the postlude is certainly very surprising but not totally irrelevant. The operation of T_3 on Z has been

planned in order to bring out the G/F[#] dyad which is a part of [C[#], F[#], G] in the postlude. This (016) chord has saturated section B (in the interrupting chords and in the invariants held against the quasi counterpoint) and it is always arranged with interval 11 as the framing interval. The linear design of the dyad in the middle voice of Z in section C reinforces this pitch recollection. When the prelude ends on C[#] (the remaining member of [C[#], F[#], G]) and the bass moves from A^b to C[#] complementing the A - D motion established previously, the hidden identity of (016) in the prelude finally comes to light.

Motivic/Intervallic Association

As discussed, interval 6 and the semitonal shift of idea X create an important intervallic relationship. Let us turn to the opening music again.

Example 3-26 Interval 6 and the semitonal shift of idea X

The image shows a musical score for a piano prelude. The top staff is the treble clef, and the bottom staff is the bass clef. The music is in a key with one flat (B-flat major or D minor). The bass staff has a 'piano' marking. Below the main score are four boxes, each containing a short musical phrase illustrating intervallic relationships. The first box shows a sequence of notes: G4, A4, B4, C5. The second box shows: G4, A4, B4, C5, D5. The third box shows: G4, A4, B4, C5, D5, E5. The fourth box shows: G4, A4, B4, C5, D5, E5, F6.

It is apparent that each group formed by interval 6 and the following semitonal shift belongs to the (016) family. If we take the members of each (016) group and re-arrange them in the form of maximum framing interval, a chord of interval 6 plus interval 5 is obtained with interval 11 as the framing interval. Subsequently, (016) chords found in the prelude are always arranged with the framing interval 11; other chords (in this and other preludes) are often arranged with this framing interval, too. The most common arrangements in “Mardi Gras” are intervals 4+7/7+4, both of which represent (015), and intervals 5+6/6+5, both of which represent (016). This spacing organization produces a soft dissonant quality in the music since in each chord the dissonance of the framing interval is tamed by the other two intervals of consonance (though the quality of interval

6 is essentially ambiguous and pending). In addition, interval 11 already has a less clashing quality compared with interval 1—its complementary form. These contribute partly to the reason that the dissonance in this set of preludes is never too severe.

Also, the framing interval 11 contributes to the aural similarity of chords built on different set classes. As mentioned, chords of (015) and (016) can both be formed with the framing interval 11. Although the properties of these sets are not the same, by arranging the chords in this way, the aural relationship between them becomes closer as witnessed between the (015) ostinato and the (016) chordal interruption in section B. The (015) ostinato is interrupted occasionally by a pattern consisting of (016) in the upper part and (015) in the lower with a hemiola-like rhythm. Despite the rhythmic interruption, the (016) chords sound very close to the (015)

Example 3-27 (015)/(016) juxtaposition

This intervallic arrangement is also used in the chorale-like passage, as will be seen in the final prelude. With each chord having a similar spacing scheme, the music subsequently sounds integrated and unified.

Another motivic interplay is the motif (0134). As noted earlier, its intervallic succession provides a close association with the octatonic collection. Consequently, the motif is expected to be involved in the music of an octatonic undertone.

CHAPTER 4 Analysis of *Childhood Memory*

The cycle's third movement, "Childhood Memory," includes its most vivid musical description of waking from a dream. Here I recall a childhood dream in which I discovered nature as nurturer. At the sound of six chimes (depicting 6am), the dream ends; an evocation of birdsong serves as the coda to this song without words.¹

The Form and Materials

Among the five preludes in the set, the third prelude is the one with the most imaginative representation of the prefixed program. As the composer notes, one can literally experience in the music the six clock chimes, and the turn of the event when the dream ends and the birdsongs happen. Based on this story-telling design, the decision as to which musical material represents the dream or the reality becomes less problematic: the dream is dominated by the triadic/diatonic material while the reality is permeated with the octatonic element.

The following chart illustrates the various sections in the third prelude.

introduction	bars 1 - 4
theme	5 - 7
episode	8 - 13
reprise	14 - 26
coda	27 - 36

The Introduction

The introduction acts as a bridge linking the octatonic second prelude and the diatonic theme of the third prelude. It consists of three arpeggio patterns which illustrate a great interplay between the octatonic and the triadic/diatonic.

¹ Richard Danielpour, *The Enchanted Garden (Preludes, Book I)*, Associated Music Publishers, Inc., AMP-8062, June 1993.

Example 4-1 The introduction

The Theme

The melody in the theme section has by far the least angular shape of any melody in the set. It has a diatonic nature as a result of the characteristics embodied in the set classes that dominate the theme. The accompaniment is essentially syncopated and parallel motion of interval 7 occurs.

Example 4-2 The theme of bars 5 - 7

The Episode

From bar 8 on, the various materials introduced in the previous section are more and more integrated and interwoven until the arrival of the C major triad in bar 11. The complication of musical ideas that are present is suggested by the more detailed notation in three staves. The episode also offers an aural picture of white keys against black keys (Ex. 4-3) (the C[#] on the last eighth note in the middle staff of bar 8 is regarded as the starting point of the lower voice in the first staff of bar 9, for it forms (025) together with B^b and A^b on the first beat of bar 9. The (025) network in the episode will be discussed later).

Example 4-3 The episode

The Reprise

Compared with the theme, the reprise is slightly more developed in length (Ex.4-4). In addition, there are interruptions on two occasions, in bar 15 and 20 - 21. The interruption is made up of a chordal setting which relates to the chant in the final prelude and anticipates the clock chimes at the end of the reprise.

The Coda

After waking from the dream, the day comes. Accordingly, the octatonic element returns in the coda. As mentioned before, the introductory arpeggios serve as a bridge linking the octatonic and diatonic elements. The same concept applies to the similar arpeggio design in bar 27; bar 27 is literally a summary of the introduction section (without the final descending interval 3 towards D) (Ex.4-5). The arpeggio idea is repeated several times in the coda although its highest point is not identical each time.

Example 4-4 The reprise

14 *Tempo I*

Una corda *Una corda*

17 *cresc.* *f* *molto espr.*

21 *slower* *molto rit.*

p *dolce*

A tempo, $\text{♩} = 80$
(Clock chimes, 6 a m.)

24 *dim poco a poco*

Example 4-5 Summary of the introduction

27

Happening between each arpeggio idea are the birdsongs. There are three types of birdsong, which are presented next to each other in bar 34 (Ex.4-6). Consequently, the coda ends with another statement of the introduction section, coupled with one of the birdsongs.

Example 4-6 Three types of birdsong

When the opening arpeggio design recurs in bar 27—the beginning of the coda—the association of the introduction and the coda is instantly established. And it is clear that the introduction is the expanded version of the arpeggio design in bar 27. The reminiscence then proceeds to incorporate the birdsongs, the essence of the coda. When the opening arpeggio design is stated for the last time in bar 35, the final descending interval 3 towards D (which is missing in bar 27) is implied by the birdsong figure, [E, F#] and [B^b, C] in bar 36. Apparently these dyads are symmetrically inversional around D₆, the expected pitch to complete the opening arpeggio design. Therefore, the musical nature of the third prelude is highly self-contained, with the arpeggio design in bar 1 (the introduction), bar 27 (interacting with the clock chimes) and bars 35 - 36 (interacting with the birdsong) as three focal points. The musical duality is acknowledged by the dream section, isolated and surrounded by the nature of reality. The dream describes a spiritual world and is undoubtedly the most beautiful musical scenario in the preludes.

Trichords and Tetrachords in Relation to Underlying Octatonic/Diatonic

The trichords in question, (016) and (025), are both from the mediating family. Therefore, the passages involving these sets have a greater degree of octatonic/diatonic interplay. The first two upward quasi-arpeggios in the introduction are initiated by the same (016), [B^b, B, E] (Ex.4-7). As the previous prelude is fundamentally octatonic, (016) in the opening of this prelude acts as a bridge between the two, with the musical mood changing from wild and festive to mysterious and dreamy. By connecting the lower notes of the quasi-arpeggios, B and D, with A^b and F in the higher register, a diminished

seventh chord (0369), the complementary set of the octatonic collection, is formed—an indirect reference to the octatonic association.

Example 4-7 Network of (025), (016) and (0369) in the introduction

The third arpeggio contains overlapping (025)s, extending from D to A^b and followed by a falling interval 3. This is the point where (016) gives way to (025), one of the main musical resources in this prelude. (025) is embedded not only locally in the third arpeggio but also in the final notes of all arpeggios in the introduction—E^b, A^b, and F. (025) continues to be prominent in the episode. The top part contains overlapping (025)s and has a pentatonic undertone.

Example 4-8 The overlapping (025) in the episode

It is clear by now that (025) is an essential compositional component in the prelude. The reason lies in the relationship between (025) and the larger collections involved in the music. Looking at the interval vector of the diatonic collection [254361], it is evident that the interval class 5 is the most common interval—eight members of (025) can be

extracted from one diatonic collection.² The connection of (025) and the diatonic cannot be more explicit. A similar relationship between (025) and the octatonic can be attained as well. According to the interval vector of the octatonic collection [448444], there are four pairs of (05) dyads, from which also eight members of (025) can be formed.³ Subsequently, three of the total 16 members of (025) formed so far are shared between the two collections, i.e. (136), (T03), (T13). Besides serving as a mediating element between the two collections, it acts as a generator of the next compositional collection, the pentatonic collection. The pentatonic collection is of (02479), from which four members of (025) can be identified: the discrete trichordal subsets (247) and (902), and the segmental trichordal subsets (479) and (790). Similarly, the pentatonic and octatonic have common trichordal subsets, in this case, (479) and (790), the segmental subsets.

In the case of this prelude, sets bigger than trichords are associated mainly with the octatonic element. Consequently, they do not appear until the coda. The birdsongs in the coda are depicted by means of repetitions of two tetrachords (labelled respectively A and B) and one pentachord (labelled C) (Ex. 4-9).

A	[A, B, E ^b , F]
B	[A ^b , C, C#, D]
C	[B ^b , C, E ^b , E, F#]

The three types of birdsong always occur in the order of A - B - C, and the only time they appear right next to one another is in bar 34. The juxtaposition of the birdsong patterns and the linear designs in the rest of the coda bring out a dual nature in the music. Two of the three birdsong types are the octatonic set classes in question, tetrachord A and pentachord C. Tetrachord A, (0268), is a subset of the octatonic collection (0134679T), and so is pentachord C, (02368). Furthermore, tetrachord A itself is a subset of pentachord C. In other words, the following octatonic scale that is formed based on pentachord C eventually includes pentachord C, which then includes tetrachord A

² (035), (136), (358), (368), (58T), (8T1), (T03), (T13).

³ (136), (146), (469), (479), (790), (7T0), (T03), (T13).

(Ex. 4-10).

Example 4-9 Tetrachords A, B and pentachord C of the birdsong

Example 4-10 Superset/subset relationship among the octatonic scale, (02368) and (0268)

On the musical surface, the close relationship between tetrachord A and pentachord C is projected by the (02) dyad always associated with their appearances. This arrangement distinguishes them aurally from the remaining birdsong type, tetrachord B.

Trichords in Relation to Generating Intervals

As mentioned, the theme has a diatonic nature. The diatonic undertone of the theme is invoked by sets and intervallic elements that are exclusively diatonic or having a diatonic link. In chapter one, we explained the essential elements that are distinctively diatonic, octatonic or of the mediating family. According to that, (015) and interval class

5 are distinctively diatonic, whereas (025) and (037) are mediating with an inclination towards the diatonic. Here in the theme we find that all those four elements are present. Example 4-11 illustrates the interplay of (015), (025) in the melody and interval class 5 in the accompaniment.

Example 4-11 Interplay of (015), (025) in the melody and interval class 5 in the accompaniment

* G is conceived aurally as melody rather than E; this is justified later in the reprise

The triadic element, in this case the (03), (04) and (05) triadic subsets, is essentially present in the parts other than the melody. Almost all the accompaniment figures in the left hand part are written with interval class 5. In addition, the lower voice in the right hand is written by forming intervals 3, 4 and 5 with the top-line melody. The spacing is frequently in their complementary forms, intervals 9, 8 and 7.

Example 4-12 Dyadic elements and the spacing of voices in the theme

As example 4-11 shows, the interplay between (025) and (015) is minimal in the theme melody with (015) dominating bars 5 - 6 and (025) bar 7, as their shared element (05) is not emphasized. The pitch A in bars 5 - 6, which is not a member of (015) but of (025), is the only tone that provides some connection between the two sets. In the music, it occurs between the two appearances of (015) as a connecting tone in bar 5. At the end of bar 6, it occurs again not only as a connecting tone this time but also as the starting point of (025).

While being put side by side in the theme, (015) and (025) are more often vertically juxtaposed in the episode. This arrangement of vertical juxtaposition results in an

interesting sound that has not occurred before. In bar 8, the statements of (025) in the top line, $[D^b, E^b, G^b]$, and in the middle, $[D, E, G]$, are related by T_{11} and thus create a clashing sound of a semitone. In bar 9, the T_2 relation between $[G^b, A^b, B]$ and $[A^b, B^b, D^b]$ of (025) and the near T_2 relation between $[D^b, E^b, G^b]$ of (025) and $[E^b, F^b, A^b]$ of (015) (E^b and F^b are related by $T_{2,1}$) is even more striking aurally: the notes are always followed immediately by their transpositional partners, including the E^b occurring with F^b almost simultaneously—a semitone clash resulting from the $T_{2,1}$ relation.

Example 4-13 Transpositional correspondence in the episode

Issues of Centricity, Large-Scale Tonal Motion and Tonal Reference

The tonal aura in the movement is essentially created by several pseudo-harmonic progressions. The theme has the most striking example. By taking the last chordal clusters of each bar, a harmonic relationship of iii, vi, I in the key of C major is attained (Ex.4-14a) (the notes in parentheses are either of the decorative sixth or seventh degree as in iii and I, or of the non-chord neighbor notes as in vi). In addition, in the last two beats of bar 7, we have a plagal cadence (Ex.4-14b). This in fact has its counterpart in bar

13, where in the lower part an E-major triad goes to an A-major triad (Ex. 4-14c), implying a I - IV relationship.

Example 4-14 The theme

The musical score for 'The theme' consists of two staves. The upper staff is for the piano and the lower for the voice. Performance markings include 'con rubato' at the beginning, 'poco rall. a tempo' in the middle, and 'poco rall. a tempo' again towards the end. A 'p' dynamic marking is present in the piano part. A note in the piano part is marked 'as needed'.

a. Relationship of iii-vi-I in C major

This diagram shows three measures of music on a grand staff. The first measure is labeled 'iii' and contains a triad of E, G, and B. The second measure is labeled 'vi' and contains a triad of A, C, and E. The third measure is labeled 'I' and contains a triad of C, E, and G. Measure numbers 5, 6, and 7 are indicated above the staves.

b. Plagal cadence

This diagram shows a plagal cadence on a grand staff. The first measure is labeled 'IV' and contains a triad of F, A, and C. The second measure is labeled 'I' and contains a triad of C, E, and G. Measure number 7 is indicated above the staff.

c. The I-IV relationship corresponding to the plagal cadence

This musical score shows a specific context for the I-IV relationship. It features piano and vocal lines. Performance markings include 'più mosso' at the beginning, 'a tempo' in the middle, 'mf cant.' for the vocal line, and 'ppp ethereal' for the piano part. Measure numbers 12 and 13 are indicated. The piano part shows a transition from a triad labeled 'I' to one labeled 'IV'.

Consequently, the goals of these motions are also the local tonal centers.

At times triads are vertically juxtaposed with one another. For example in the last measure of the theme, a combination of C-major and E-minor triads is concluded on the

last beat.

Example 4-15 Vertical combination of C major and E minor in bar 7

Can this be seen as the predecessor of what is present in bar 24 (Ex. 4-16), the six soundings (depicting the clock chimes) of a C-major and an E-major triad vertically juxtaposed (the tied C and A from the previous measure are excluded for now from the picture)?

Example 4-16 The six clock chimes

To me, aurally and musically, the relationship is undeniable—a presumption based on their same pitch-class design (except a small variation on the G) and the musical situation where both close the theme section, and the C major/E major combination consequently ends the dream section.

It is clear by now that the C-major triad is the main gravitational center of this prelude. It is not only the goal of some traditional harmonic progressions, but also an element often associated with structural endings. Let us look at its significance again from another angle. Example 4-17 is a graph showing the bass-line motion from the theme to the end of the reprise.

Example 4-17 Bass line in the sections of the theme, the episode and the reprise



The strong tendency of returning to C is apparent. The three occasions of the plagal cadence subsequently fortify the dominance of C. In addition, a relationship among E, F and C is revealed. The link between F and C is established through the plagal cadence and in this way E may possibly be regarded as a neighbor tone to F. However, with a constant affiliation of D and its interval class 5 partner A, E thus establishes its individuality in the line with F and C.

Motivic/Intervallic Association

In the movement, the bell-chant texture appears again. As mentioned earlier, the course of the reprise is not smooth. On two occasions it is interrupted by a chordal setting (Ex.4-18a), which makes its first appearance in bar 13 at the end of the episode (where *ethereal* is marked). This setting of a bell-like sonority definitely foreshadows the forthcoming clock chimes. Also, it interacts with the similar patterns occurring in the coda of the first prelude. There we have discussed the intervallic relationship between the transpositional operations on the patterns and the intervallic succession of the chant in the final prelude. The same intervallic interest is employed here in bar 21. The chordal clusters in the upper part are related by interval class 2 and are contrapuntally opposed by interval class 3 in the lower part (Ex.4-18b).

Example 4-18a The chordal interruption in the reprise

14 *Tempo I*

Una corda *Una corda*

17 *cresc.* *f* *molto espr.*

21 *slower* *molto rit.*

p *dolce*

The score consists of three systems of piano music. The first system (measures 14-16) is marked 'Tempo I' and 'Una corda'. A box highlights a specific chordal structure in measure 15. The second system (measures 17-20) includes markings for 'cresc.', 'f', and 'molto espr.'. The third system (measures 21-24) is marked 'slower' and 'molto rit.', with dynamics 'p' and 'dolce'. A box highlights another chordal structure in measure 21.

Example 4-18b Chordal application of the chant's intervals

(-2, 2)

(-3, 3)

The notation shows two staves of music. The top staff has three chords, with the interval between the first and second chords labeled as (-2, 2). The bottom staff has three chords, with the interval between the first and second chords labeled as (-3, 3).

In the first prelude, the chords on the top line are related by interval class 3, and the chords on the lower line by interval class 2. The situation is reversed here but the effect and meaning are just the same.

CHAPTER 5 Analysis of *From the Underground*

"From the Underground," the fourth movement, recalls a nightmare from my childhood in which imaginary gremlin-like creatures skittered and slithered under the ground in New York.¹

The Form and Materials

This prelude has the characteristic of perpetual motion of a toccata. The continuous sixteenths flow through the entire piece, except in two sections where a broad melody is heard in the bass register. The materials employed are similar to the ones in the second prelude, i.e. the octatonic materials, sc (016) and the framing interval 11.

The following chart outlines the various textural events in the prelude.

section A	bar 1 - 15
A'	16 - 32
B	33 - 60
transition	61 - 70
A''	71 - 77
B'	78 - 90
transition	91 - 104
coda	105 - 119

Section A, A' and A''

The sections thus assigned have a similar musical setting: the left-hand part consists of stepwise dyads while the right hand contains (016)s arranged similarly to that of idea X in the second prelude (Ex. 5-1a). Most of the time no distinct melodies can be formed from the patterns. And no matter how different the journey of development sets out from

¹ Richard Danielpour, *The Enchanted Garden (Preludes, Book I)*, Associated Music Publishers, Inc., AMP-8062, June 1993.

the initial pattern, the sections always head towards a line derived from an octatonic scale, as in bars 13 - 15 (Ex.5-1b), 31 - 32 and 77.

Example 5-1a The beginning of section A

Lively ♩ = 144 - 152

Example 5-1b The ending of section A

Section A and A' are more balanced both in length and in terms of the course of development. In addition to starting at the same pitch class, both sections have a local goal towards a chordal gesture that involves pitch C, as in bar 8 and 27 respectively (Ex.5-2). Section A'' is very much truncated, although the features of the initial pattern and the ending octatonic line are still present (Ex.5-3).

Example 5-2 Chordal gestures involving C in bar 8 and 27

(continued)

Example 5-2 (continued)

Example 5-3 Truncated section A''

In section A, a quasi-canonic design emerges in bar 8 between the top and lowest tones (Ex.5-4). With a couple of exceptions, the dyads formed by G, D and their interval class 5 partners are flipped back and forth between the upper and lower parts. Subsequently the four-note figure at the inner voice is also being flipped around; to be precise, each figure is related by T_9I (Ex.5-5) (As this figure is inversional symmetrical, in this context, T_9I operation represents the registral transformation more strongly than T_7/T_3).

Example 5-4 Flipping of (05) dyads on G and D

The image shows a musical score for piano and treble clef. The piano part is on the left, and the treble clef part is on the right. The piano part has a 'cresc.' marking and a 'p' dynamic. The treble clef part has an 'espr.' marking and a 'f' dynamic. A dashed line indicates a phrase in the piano part. A box highlights a section of the piano part. Below the piano part, a smaller staff shows a detail of the treble clef part, with a 'p' dynamic and a '!' marking.

Example 5-5 Flipping of the figure by T₉

The image shows a musical score for piano and treble clef. The piano part is on the left, and the treble clef part is on the right. The piano part has a 'cresc.' marking and a 'p' dynamic. The treble clef part has an 'espr.' marking and a 'f' dynamic. A dashed line indicates a phrase in the piano part. Circles highlight specific notes in the piano part. Below the piano part, a smaller staff shows a detail of the treble clef part, with 'T91' markings and arrows indicating a transposition.

A sequential design starts in the middle of bar 9. Instead of tossing about a material, the sequence has two lines going down an interval 7 respectively (Ex.5-6). This design provides an intervallic interest to be shared between the upper and lower parts of the continuous sixteenths, and thus interrelates the parts which otherwise seem to go independently.

Example 5-6 Sequence of interval 7

Section B and B'

The texture of section B and B' is that of melody and accompaniment. In both sections, the accompaniment has the character of a pedal-point "below" which an octatonic melody is built; the melody is exclusively in the bass register (Ex. 5-7). Comparatively, section B is more dramatic in nature while section B' is more lyrical. The melodic materials used in B' are mainly the transposed versions of those in section B. The lines in bars 80 - 81 are the T_6 version of those in bar 46, and the lines in bars 85 - 86 are essentially little variations on those in bars 80 - 81 (Ex. 5-8a). Bars 82 - 83 are the ornamented version of bars 37 - 38 (Ex. 5-8b). The material of the pedal-point design in section B' is different from the one in section B. The pattern is no longer linear; instead, it is of two alternating dyads in intervals 11 and 4. Such arrangement also has a response in the melody in bars 82 - 83 (Ex. 5-8c).

Example 5-7 Melody and accompaniment of section B

31 **[section B]**

34

37

cresc. *f* *cresc.* *f*

sub. *sub. e marc.* *loco*

trh. overt *mf cantando* *cresc.*

Example 5-8a Materials that are derived and transposed from bar 46

46

50

mf cant.

(continued)

Example 5-8a (continued)

34

35

36

37

variation

T6

Example 5-8b Material that are derived from bars 37 - 38

37

(f. il. univ.)

cresc. andante

46

cresc.

espr.

32

37

Example 5-8c Intervallic design of the melody that is derived from the alternating dyads

The musical score for Example 5-8c shows a melody in the upper voice and a bass line in the lower voice. The upper voice is marked with a 'no' (noisy) dynamic and a '11 4 11 4' intervallic pattern. The lower voice is marked with a 'cant.' (cantabile) dynamic and a 'b2' (second below) interval. The bass line consists of four dyads, each circled, with intervals of 11 and 4 between the notes. Below the bass line, the intervals '11' and '4' are explicitly labeled for each dyad.

Transition and Coda

The texture of continuous sixteenth notes of the section A family returns in the transition and the quasi-canonic design found in section A also projects its influence. The top line in bars 61 - 62 is the basis of the musical direction in the transition; the remaining lines of similar contour are basically derived from it (Ex. 5-9). The lines are echoed canonically in the lower members of the dyads in the left hand, an arrangement which corresponds to the canonic design in section A (Ex. 5-10). The note-against-note correspondence is not always exact; nevertheless, the relationship is not totally unconvincing. Therefore, in essence, the transition is not very much different from section A.

Example 5-9 The top lines in the transition

61 *p* *cresc.* *p*

64 *p* *dim.* *p* *pp leggiero*

67 *p* *p* *p* *p* *p*

72 *p* *p* *p* *p* *p*

77 *p* *p* *p* *p* *p*

82 *p* *p* *p* *p* *p*

87 *p* *p* *p* *p* *p*

92 *p* *p* *p* *p* *p*

97 *p* *p* *p* *p* *p*

61 63 95 97

Example 5-10 Canon on the various lines in the transition



The materials of the coda are also derived from section A, especially from the material involving the sequential T_7 operation. Section B' also has a brief reappearance towards the end of coda.

It would not be inappropriate to imagine the two preludes—"Mardi Gras" and "From the Underground"—as two branches of the same tree. On the surface, the two preludes are differentiated by their own musical events; in essence, all the events are branched out from the same root, (016) and the framing interval 11. The position of these two preludes in the set also suggests their closeness to each other. By now, it is comprehensible that the first and the third preludes are more of a triadic/diatonic nature. The group of the second and the fourth preludes acts as the octatonic opponent of the other two, contrasting and balancing.

Trichords and Tetrachord in Relation to Underlying Octatonic

In the octatonic preludes of the set (the second and fourth), sc (016) plays an important role in the materials involved. The relationship between (016) and the octatonic collection is shown by their subset/superset relation: four members of sc (016)

can be attained from the octatonic collection. Having (016) as the dominating set, the music occasionally involves (026) as an alternative in the fourth prelude. (026) is also a member of the trichordal subsets of the octatonic collection. However, the only element (026) has in common with (016) is the dyadic subset (06). This tritone, pervasive in the octatonic intervallic properties, has been emphasized musically throughout the prelude. And because of this overemphasis, other dissimilarities between the two trichords seem not to register very significantly aurally.

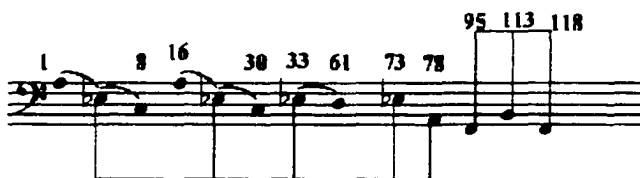
Example 5-11 Alternating (026) and (016)

The little melodic line, $B^b - G^b - G - A$, which seems causal in bar 7, presents the (0134) motif. The motif subsequently appears as the main melodic pattern in section B and B'. This motif has a close connection to the octatonic collection based on the intervallic relationship. The motif is a member of the tetrachordal subsets of the octatonic collection, and its intervallic succession, 1 - 2 - 1, implies an initiating figure to an octatonic scale. In section B and B', the appearances of the motif are based on one particular ordering—going down an interval 2, up a 3 and then down a 4, or $\langle -, +, - \rangle / \langle 2130 \rangle$. This ordering projects less on the surface the possible octatonic initiation than the other ordering does (for example, the little (0134) fragment of idea Y in the second prelude with the contour $\langle +, +, + \rangle / \langle 0123 \rangle$). Nevertheless, this particular ordering (and also $\langle 1230 \rangle$ to be seen in the fifth prelude) has just as strong a connection to the octatonic collection, and is more significant in presenting the motif in the preludes.

Issues of Centricity and Large-Scale Tonal Motion

Although the toccata-like texture of this prelude does not evoke much sense of bass-line centricity via triadic moments on the surface, a broad tonal emphasis still comes through in the flowing sixteenths by way of emphasizing on or returning to certain pitches in the sections. Example 5-12 summarizes the bass-line motion of the movement.

Example 5-12 Summary of the bass line motion



From the graph, it is clear that before the second transition the bass centers essentially on E^b and A, a tritone apart. This tritonal scheme is mirrored in the bass motion from the second transition till the end with F moving to B and returning to F.

In section A there is clearly a motion from A to E^b and then to C (Ex. 5-13a). This motion is repeated in section A'. The ostinato in section B is centered at E^b , which later moves to D in the transition (Ex. 5-13b). E^b returns as center in the very much truncated section A''; however, it soon gives way to A in section B' (Ex. 5-13c). The following transition centers at a new pitch, F, which eventually ends the prelude with a slight detour to B when the ostinato-like figure of section B' recurs briefly (Ex. 5-13d). In conclusion, the core of the bass motion is made up of two tritones, E^b/A and F/B.

Example 5-13a Bass motion in bars 1 - 15

Lively ♩ = 144 - 152

Example 5-13b Tonal center in section B and transition

31

[section B]

31

Example 5-13d Bass motion from transition to the end

94

112

115

vllm

Meno mosso, ♩ = 132

rit. ♩ = 120 rit. molto Subito tempo primo (♩ = 144 - 152)

ff martellato

vllm

(as needed)

Motivic/Intervallic Association

When the motif (0134) appears in the second prelude, it does not have much individuality: in the first appearance it is a short prefix to idea Y, and in the next it is merely implied in idea Z. In this current movement, its appearance is more explicit and significant, always as a melodic figure.

In chapter three, we discussed the relationship between (016), (015) and the framing interval 11. In the present prelude, this relationship carries on, for example, in the pedal point of section B. It consists of a four-note figure, $E^b - A^b - B^b - D$, which is formed by a combination of (015) and (016) and is arranged within the framing interval 11. Such arrangement is echoed every now and then by a chordal setting in the upper part (Ex. 5-14). (015) is subsequently in the melodies of the high register in bars 46 - 47 and

51 - 52 (Ex.5-15).

Example 5-14 Echoing of the pedal point in the upper part

The musical score for Example 5-14 consists of two systems. The first system, starting at measure 34, shows a piano piece. The right hand has a melodic line with a circled section containing notes labeled 'chord' and 'locus'. The left hand has a steady bass line with a circled section. Below the main score is a smaller diagram showing two chords: (016) in the upper voice and (015) in the lower voice.

Example 5-15 (015) embodied in the melodies of bars 46 - 47 and 51 - 52

The musical score for Example 5-15 consists of two systems. The first system, starting at measure 46, shows a piano piece. The right hand has a melodic line with a circled section containing notes labeled '(015)'. The left hand has a steady bass line. Below the main score is a smaller diagram showing a chord (015) in the right hand and a bass line in the left hand.

The relationship of (015), (016) and the framing interval 11 can also be explained by incorporating three dyads into the framing interval. If we incorporate (03), (04) and (05) into the framing interval, three kinds of spacing can be obtained: (03)+(08), (04)+(07) and (05)+(06). The sets thus formed are subsequently (014), (015) and (016). Based on this hypothesis, it is not difficult then to understand the frequent co-existence of (015) and (016) in one chord. A similar scheme applies to the framing interval 10, which is also cultivated in the fourth prelude. If we incorporate the dyads into the framing interval 10,

three kinds of spacing can be obtained too: (03)+(07), (04)+(06) and (05)+(05).

Subsequently, the sets are (025), (026) and (027); (025) and (027) are often co-existing in one chord.

Example 5-16 Chordal arrangement of the combination of sets with framing intervals 10 and 11

(025)	(025)	(015)	(025)	(015)	(015)	(015)
+(027)	+(027)	+(016)	+(027)	+(016)	+(016)	+(016)

The two groups of framing intervals 10 and 11 do not hold any implication for either the diatonic or the octatonic; both of them have elements in both collections.² The constant moving back and forth between the materials of the groups makes the music very exciting and unpredictable.

² Framing interval 10: (027) is diatonic; (026) is octatonic; (025) can be either.
Framing interval 11: (015) is diatonic; (014) is octatonic; (016) can be either.

CHAPTER 6 Analysis of *Night*

The fifth, and last, movement, "Night," pays homage to both the consoling and frightening aspects of things nocturnal. A chant of bells (transcribed from those which sound at sunrise and sunset each day in the northern Italian town of Bellagio) is heard in the piano's upper registers during the work's final minutes. Thus the beginning and the end of the day are perceived as one.¹

The Form and Materials

The programmatic notes—"... homage to both the consoling and frightening aspects of things nocturnal"—spell out the story of the final prelude. The sections depicting respectively the consoling and the frightening are vastly contrasting in terms of materials, moods and texture. Many materials employed previously return in the prelude and are further developed along with the new ideas introduced. In addition, some of the musical thoughts brought out partially in the preceding preludes appear in their entirety.

Besides the quintessential sets of (015), (025) and (037), this prelude introduces two more elements—the motif (0134) and the chant. They are not completely new to us as the intervallic structure of the chant has influenced certain chordal settings in the first and the third preludes, and the motif (0134) has occurred briefly in the second and the fourth. However, in the previous appearances, the ideas were isolated and kept from being integrated with other important materials. In the current prelude, their influences are not only felt but also thoroughly fused with all other musical happenings.

Sections depicting the frightening aspect

section B	bars 43 - 82
section C	bars 83 - 133

¹ Richard Danielpour, *The Enchanted Garden (Preludes, Book I)*. Associated Music Publishers, Inc., AMP-8062, June 1993.

By now, it is comprehensible that the octatonic element deals not only with “the reality” but also with the chaos, the darkness. Accordingly, the diatonic/triadic element represents “the dream,” the peace, the serenity. The sections depicting the frightening aspect of the night certainly are to be dominated by the octatonic. The music here is highly rhythmic and energetic. The atmosphere is almost threatening in nature.

Section B starts with a line joined by its T_{10} counterpart in a quasi-canonic design. Its counterpart is not as consistently designed (Ex.6-1); there are three tones in the left hand— D^b , E^b and D —that do not conform with the T_{10} relation. The lack of a true and exact canonic scheme is compensated later with the reappearance of the line in bar 65, where the counterpart enters at the T_9 level (Ex.6-2a). The T_9 counterpart in bar 66 in fact starts with the fourth group of (026) in the line. Thus, each group of the line is to be heard against the one preceding it. Consequently, the counterpart and the line are essentially the same (Ex.6-2b).

Example 6-1 Beginning of section B

Example 6-2a The T_9 canon in bar 65

Example 6-2b Relationship between the (026) line and its T9 canonic counterpart

The ideas being sandwiched by the canonic lines are (0134) and pairs of (04) dyads. The direction of the pairs is exclusively dominated by a contrasting contour between the two hands. An upward motion is always followed by a downward one. Playfulness and liveliness are thus created. The similar scheme of balancing motion is also seen between (0134) and the short phrases that follow. In bars 46 - 47, the short phrase consists of three (03) dyads all in an upward motion contrasting the downward interval 4 at the end of (0134). In bars 50 - 51, the phrase consists of a pair of (03)/(04) dyads whose motion, <-, +>, complements that of (0134), <+, -> (Ex.6-3). The same design occurs in bars 63 - 64. The up-and-down movement of this middle passage subsequently complements the general motion of an upward thrust in the canonic lines.

Section C is also influenced by the same octatonic material; the only difference between section B and C is the textural setting. A rhythmic ostinato appears in the bass, continuing the pick-up/downbeat rhythmic idea initiated in section B. Whereas section B emphasizes the downbeat (as seen with *tenuto* markings starting in bar 43), section C stresses the pick-up with accentual markings and by the bass notes thus placed (Ex.6-4a). As a result, section C has a more nervous and threatening character. Upon the ostinato flows three ideas, the motif (0134), a repeated figure appearing briefly in bar 8 and 31 - 34, and two cantilenas related by T₇. The complementary up/down motion is

also used here between the repeated figure and the two cantilenas: the former elevates through three octaves by repeating itself three times while the latter descends three octaves in a meandering fashion (Ex. 6-4b).

Example 6-3 Complementary motion of the dyadic pairs, (0134) and the subsequent phrases

The image displays a musical score for Example 6-3, illustrating complementary motion of dyadic pairs (0134) and subsequent phrases. The score is presented in four systems, each with a piano (piano) part and a violin (violin) part.

- System 1 (Measures 46-47):** The piano part features a circled dyadic pair (0134) in the bass clef. The violin part has a circled dyadic pair (0134) in the treble clef. A box highlights the complementary motion between the two parts.
- System 2 (Measures 48-49):** The piano part continues with a circled dyadic pair (0134) in the bass clef. The violin part features a circled dyadic pair (0134) in the treble clef. Dynamics markings include *mf cresc.* and *f*.
- System 3 (Measures 50-51):** The piano part features a circled dyadic pair (0134) in the bass clef. The violin part features a circled dyadic pair (0134) in the treble clef.
- System 4 (Measures 46-47):** This system shows the dyadic pairs (0134) in both parts with arrows indicating their complementary motion. The piano part is in the bass clef and the violin part is in the treble clef.

Example 6-4a Textural setting of section C

86

mf *dim.* *mf*

89

ben articolato, feroco
mf *cresc.*

Example 6-4b The cantilena in bar 100

98

cantilena *non legato*
molto distinto *f*

* half (as needed)

101

f *f* *f*

* (as needed)

Sections depicting the consoling aspect

The basic texture here is chorale-like. The chords are usually triads arranged in positions other than the root position (with framing intervals 8 or 9), or (027) arranged with a framing interval of 10. They move in either a parallel or contrary motion, and they always encompass a register of two octaves. With the music not having big contrasts in register, texture, sound and rhythm, the atmosphere is one of absolute peace and comfort. The small phrases in bars 1 and 2 stand out immediately in aural perception (Ex.6-5). They are made up of a pattern which concentrates on (015) and (037), and this pattern

becomes a “fixed idea.”

Example 6-5 The “fixed idea”

Later on, in the recapitulation of this opening passage, the phrases are summarized as in bar 140.

Example 6-6 Summary of the “fixed idea”

Bar 12 starts a new pattern, yet, with the same registral arrangement and in parallel motion. The top figure is quasi pentatonic and very similar to the top line in the episode of the third prelude (Ex. 6-7). A partial appearance of the chant is found in bars 14 - 15.

The recapitulation of the opening section is a place where ideas get summarized and elaborated at the same time. The summary of the “fixed idea” was mentioned. The elaboration applies to the full appearances of the chant and the two plagal cadences that are absent from the opening section.

Example 6-7 The new pattern in bar 12 and the melodic recollection

The image displays a musical score for piano and voice. The piano part is written on two staves (treble and bass clefs). The vocal part is written on a single staff (soprano clef). The score is divided into three sections:

- Section 1 (Measures 11-13):** The piano part begins with a *delicato* marking. The vocal part starts with a *cant.* marking. There are annotations for *as needed* and *espr.* (emphasis).
- Section 2 (Measures 14-16):** The piano part has a *(distant)* marking. The vocal part has a *loc.* marking. There are annotations for *espr.* and *as needed*. A *poco rit.* marking is present at the end of this section.
- Section 3 (Measures 17-18):** A single staff showing a melodic line. The first measure is labeled *Night* and the second measure is labeled *Childhood Memory*.

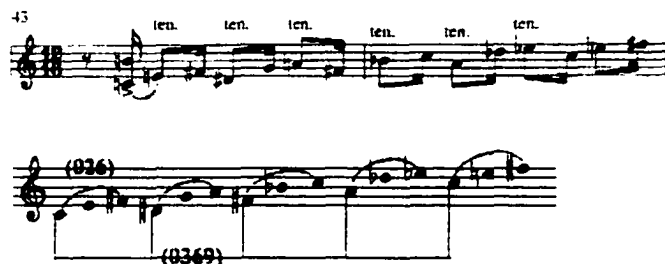
Additional annotations include *Lh.* (left hand) and *Sea* (sea) with an arrow pointing to a specific note in the vocal part.

Octatonic/Diatonic Interaction

Section B and C in the present prelude have the most intriguing octatonic/diatonic interplay of the preludes in the set, for in these sections the elements that are distinctively octatonic are closely interwoven with the ones from the “mediating family.” It is best illustrated in the following three events: the canonic line starting section B; the interplay of (0134) and pairs of (04) dyads; the cantilena in section C.

The line that starts section B is intervallically rich and meaningful. The reading based on the immediate aural perception reveals a string of (026), related to one another by T_3 and with the first notes of each group comprising sc (0369) (Ex.6-8). (026) and (0369) have a strong association with the octatonic collection, and consequently the line in example 6-8 is built upon the following octatonic scale (Ex.6-9a).

Example 6-8 Network of (026) and (0369) in the line starting section B



Example 6-9a Octatonic scale in the (026) line



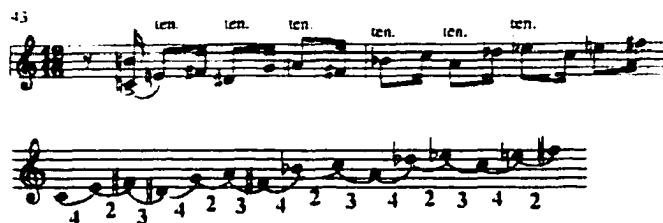
We mentioned that section C is influenced by the same octatonic material. This is illustrated by the observation that the octatonic scale derived from the (026) line in section B is embedded in (0134), the middle voice and the bass ostinato that initiate section C.

Example 6-9b Opening of section C

Such finding confirms our presumption of section B and C being saturated with the octatonic elements.

If we count the intervals between each note of the (026) line, three dyadic subsets are obtained (Ex.6-10).

Example 6-10 Intervallic succession of the (026) line



Intervals 2, 3 and 4 are not only involved but also presented in a certain order, 4 - 2 - 3, which repeats itself. A similar pattern will result if we group the notes in units of two in the manner of grace notes (the pick-up) and main notes (the downbeat).

Example 6-11 Intervallic succession of dyads in the (026) line



The same members are still involved but in a different order. These findings shed light again on the elements shared by the octatonic and the diatonic, for intervals 2, 3 and 4 are embedded in (037) and (025), members of the “mediating family.”

In section B, (0134) is surrounded by a texture of dyadic pairs in basically interval class 4. (04) as a subset of (037) can be regarded too as a member of the “mediating family” like its superset. However, in the present section, the (04) pairs often have an octatonic undertone. From the pairs, some octatonic scales can be formed (Ex.6-12). In addition, they can be arranged in a way that the bottom voice of one dyad is a semitone lower than the top voice of the other, a scheme that somehow recalls the ladder of thirds in Stravinsky’s *Firebird*.² Stravinsky uses major and minor thirds (intervals 4 and 3) in alternation; here only interval 4 is used.

² Richard Taruskin. *Stravinsky and The Russian Traditions: A Biography of the Works Through Mavra*. p.590.

Example 6-12 Dyadic pairs and the octatonic conclusion

The image shows a musical score for piano. The top system is a grand staff with a treble and bass clef, starting at measure 46. A box highlights a section of the score. Below the main score are two smaller musical diagrams. The first is labeled "octatonic implication" and shows two staves with notes and accidentals. The second is labeled "ladder of thirds" and shows a single staff with a sequence of notes connected by lines, representing a chromatic scale.

A closer look reveals that the cantilena in section C is derived from idea Y in the second prelude.

Example 6-13 The comparison between idea Y and the cantilena

The image shows a musical score for piano. The top system is a grand staff starting at measure 13, with a box highlighting a section. The middle system is a grand staff starting at measure 98, labeled "cantilena". It includes markings for "non legato" and "molto distinto". A box highlights a section of the cantilena. Below the main score are two smaller musical diagrams, each with a note: "* half ♯ (as needed)". The bottom system is a grand staff starting at measure 101, with a note: "* (♯ as needed)".

The cantilena can therefore be divided into three segments: the derivation of idea Y (of the octatonic), a succession of (03) (of the mediating family) and the return of the derivation (Ex. 6-14).

Example 6-14 Segmentation of the cantilena

The derivation is in fact an exact replica of idea Y; the idea of (03) succession is taken from the end of idea Y. The descent of the succession is nearly all chromatically stepwise until reaching the T_7 of the initial (0134), which subsequently starts the following cantilena (Ex.6-15a). Towards the end of the second cantilena, (0134) is transposed again, by T_5 , to return to the initial pitch class (Ex.6-15b).

Example 6-15a&b Transpositional operations embodied in the cantilena

a.

b.

This transformational operation of T_7 and then T_5 certainly reminds us of the similar operation used in section A of the first prelude between theme 1 and theme 2.

Trichords and Tetrachord in Relation to Underlying Octatonic/Diatonic

(037)

(037), including the major and minor triads, is present for most of the time in the consoling sections. Its diatonic significance creates a gravitational pull that attracts other sets in the same sections. For example, in bar 1, we have (015) converting into (037) in the upper part, and in bars 6 - 7 where (027) goes towards (037) also in the upper part.

Example 6-16 The tendency of sets moving towards (037)

The image shows a musical score for two staves. The upper staff has several chords circled in red. The first circled chord is labeled (015), and the second is labeled (037). The lower staff also has chords circled in red. The first circled chord is labeled (015), and the second is labeled (037). There are also labels (027) and (037) in the upper staff, with a line connecting them. The score includes various musical notations such as notes, rests, and dynamics like *mf* and *p*.

Although the presence of plain triads is almost unfelt in the octatonic frightening sections, its subsets, especially (03) and (04), continue to show.

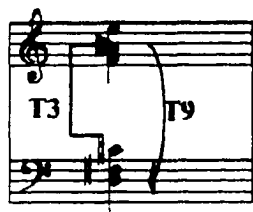
In the summary of the “fixed idea” in bar 140, the core can be further divided into two segments, the (015) and the (037).

Example 6-17 Summarization of the ‘fixed idea’

The image shows a musical score for two staves. The upper staff has two segments boxed in red. The first segment is labeled (015) and the second is labeled (037). The lower staff also has two segments boxed in red. There is a note marked with an asterisk (*) in the lower staff, with the text “*(as needed)” below it. The score includes various musical notations such as notes, rests, and dynamics like *mf* and *p*.

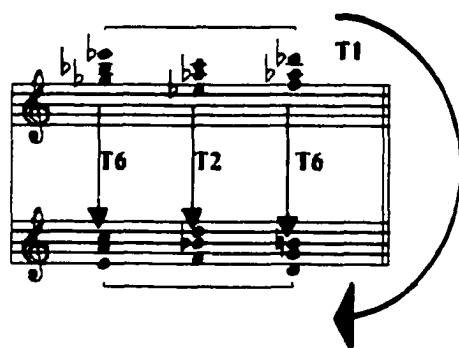
In the (015) segment, the sets are related by T_3 (or T_9) (Ex.6-18a). The E - D figure at the top converts the upper (015) into (037) on the second eighth.

Example 6-18a Transpositional relation of (015) segment



In the (037) segment, the sets are related by T_6 , T_2 and T_6 in succession. The only element that links the two segments is the E - D figure bracketed in the example (Ex.6-18b). The figure recurs in the bass line of the two outer sets of (037), and relates itself to the top line of the same (037)s by T_1 . Right from the outset, the T_1 operation associated with the chant is put to use implicitly in the passages of the chorale-like texture. The idea of clashing is strengthened by the T_6 and T_2 operations on the chords; in this way, maximum variants are guaranteed and no invariants are obtained to decrease the impact of T_1 . With the E - D relation in play, the middle set is therefore regarded as passing. And, reading from the top and the bass lines, an extreme balance is observed with the passing (037) (Ex.6-19).

Example 6-18b Transpositional relation of (037) segment

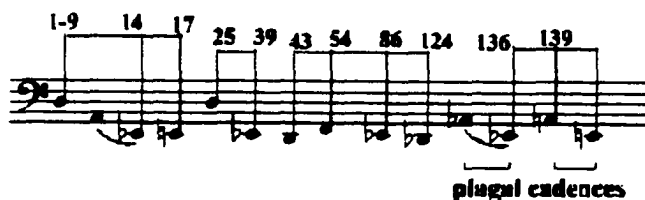


Example 6-20 (continued)

The essential properties of the chant's intervallic succession are intervals 2, 3, 4 and 5. The chant is extremely tonal; in example 6-20, the chant is clearly in the key of D major. Consequently, the chant is expected to be involved in the diatonic/triadic environment. However, its tonal aspect has less influence than the intervallic interests. In the previous preludes, the chant was merely implied by the chordal settings built on its intervallic interests, for example, in the coda of "Promenade" and the reprise of "Childhood Memory." A similar setting is also found in the present prelude, a design among other things providing an aural recollection and thus interrelating the preludes. The delay of the true appearance of the chant fortifies the importance of the prelude, and strengthens the extra musical meaning assigned to the chant—"thus the beginning and the end of the day are perceived as one."

Issues of Centricity and Large-Scale Tonal Motion

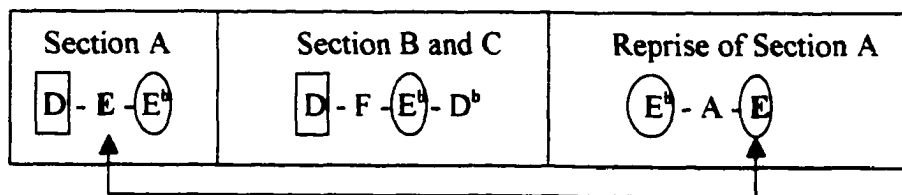
Example 6-21 shows the summary of the bass motion of the movement.

Example 6-21 Summary of the bass motion

As the graph reveals, section A centers on D and E^b, with E as an elaboration in the middle. The same emphasis on D and E^b continues in section B and C. The big D^b moment at the end of section C can be regarded either as an anticipation of something new, or a variation on D which in this way links section C and the reprise of A. After E^b

is established again in the reprise through the plagal cadence in bar 136, the center moves to A, which initiates the prolonged plagal cadence ending on E.

In the opening consoling section, several pitches in the bass are emphasized: D in bars 1 – 9, E^b in bar 14, E in bars 17 – 24. When the opening figure returns in bar 25, the center is back to D again; the section depicting the consoling finally ends on E^b (Ex.6-22a). Section B starts with centering on D and moves onto F in bar 54. The emphasis of the ostinato in section C is on E^b again. The section depicting the frightening finally ends on D^b (Ex.6-22b). The reprise of the opening section accordingly centers on E^b. With the preparation of the chant appearance, the bass travels first to A and ends on E (Ex.6-22c). In conclusion, section A introduces the motion that is to appear in the reprise, and anticipates the one in section B. The reprise of section A eventually establishes E as the center with the prolonged plagal cadence.



The prolonged plagal cadence stretches from bar 139 till the end of the prelude, upon which the summary of the “fixed idea” and the full appearances of the chant occur (Ex.6-23).

Example 6-22a The goals of the bass motion of the consoling section

4

14

20

21

38

espr

3/4z

(distant)

(as needed)

$\text{♩} = 84$

Example 6-22c The goals of the bass motion in the reprise

130 *accel.* *a tempo* (♩ = 80) *lunga (4)* *Slower* (♩ = 72-76)

ten. *untd!* *ff* *ff* *lunga (4)* *f cant.*

reprise

134 ♩ = 80

137 *ppoco espr.* *dim.*

140 **(as needed)*

153 *lunga* *lunga*

Example 6-23 The ideas involved in the prolonged plagal cadence

Motivic/Intervallic Association

The motivic/intervallic association in the movement involves basically the motif (0134) in the frightening sections and the chant in the consoling sections. (0134) has mainly two ways of ordering in the final prelude: one is going up in intervals 2 and 1, and then down 4 (Ex. 6-24a); the other is firstly going down interval 2, up 3 and then down 4 (Ex. 6-24b).

Example 6-24a&b Contours of (0134)

To be more specific, example 6-24a consists of a contour of <+, +, -> and 6-24b <-, +, ->. The similarity of these two contours lies in the downward motion at the end, both interval 4. By putting both contours into Cseg, <1230> and <2130>, the inwardness of the expressions becomes even clearer. It is thus balanced with other patterns of upward thrusts in the sections.

The partial intervallic succession of the chant, in this case 2 - 3, is used extensively in the final prelude. In addition to the opening figure, the figure in bar 12 is also 2 - 3, and so are many other short figures in the prelude.

Example 6-25 Figures with the 2 - 3 intervallic succession

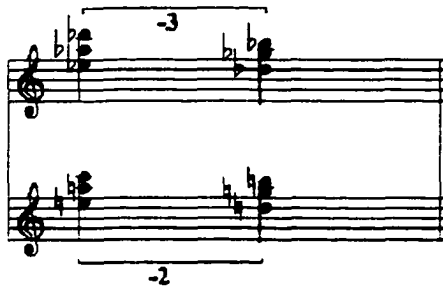
Example 6-25 consists of two musical staves. The left staff shows two boxed figures labeled 'int.2' and 'int.3'. The right staff shows a piano prelude starting at bar 11, marked 'delicato'. It features a melodic line with a '2-3-2' intervallic succession and a '1h' (half note) marking. The right hand is marked 'espr' (espressivo). A note in the right hand is marked with a '5' (finger number). A '(2) as needed' marking is present below the right hand in both staves.

This constant recollection of one property of the chant makes its appearance, partial or full, logical and inevitable. Whereas these measures concentrate on the intervallic application in a linear manner, the passage of bars 17 - 24 reminds us of that in the chordal setting. The similar settings have been seen in the coda of the first prelude and the reprise of the third. Here the core of the setting is displayed in bar 24, with bars 17 - 18 and 20 - 21 as elaborations.

Example 6-26 The chordal setting and its core in bar 24

Example 6-26 shows two systems of musical notation, numbered 20 and 21. Each system has a treble clef staff and a bass clef staff. In system 20, a box highlights a chordal setting in the treble staff. In system 21, a box highlights a similar chordal setting. A '(2) as needed' marking is located below the bass staff in system 21.

(continued)

Example 6-26 (continued)

As discussed, the chant is diatonic/triadic as opposed to (0134) being octatonic. In a way, this opposition can be extended to the opposition of the contrasting consoling and frightening sections in the movement, where the two motives saturate respectively. In other words, the final movement sums up everything that goes before: it is a grand finale to the story on how the diatonic fantasyland (the chant) and the octatonic reality world (sc (0134)) are maintained in perfect equilibrium.

CHAPTER 7 Performance Issues

In the preceding chapters, we explored the musical structure of the preludes. With that analytical information at hand, we now turn to their performing aspects. It is evident that the intense involvement of drama and fantasy in the music gives tremendous emotional satisfaction. Observations made from a musical intuition only, however, will not be sufficient to produce convincing performances. The following discussion aims to make use of theory and analysis to inform performance decisions. The performance aspects to be discussed are meter and tempo; pause/ritard vs tonical centers; dynamic execution; pedal; execution of narrative expressions; memorization and technical problems. Where appropriate, the discussion will incorporate my observations from the recorded performance by Christopher O'Riley.¹

Meter and Tempo

The metrical design of the preludes is surprisingly regular for a contemporary work. There are frequent metrical changes; however, the changes do not complicate or confuse very much the underlying pulsation of the music. They seem to be used to clarify ideas rather than to create variety. Often, they seem designed primarily to assist the performer.

For each prelude and section the composer gives very detailed and precise indications for the various tempi that he wants. Coupled with other temporal markings (*accel.*, *rit.*, etc.), we can see that the composer is trying very hard to control this aspect of performance. Nevertheless, the indications are not always practical as we shall see in the following discussion.

Theme 1 of the first prelude is a good example of metrical changes as an aid to performance (Ex. 7-1).

¹ Richard Danielpour, *The Enchanted Garden*, performed by Christopher O'Riley, Koch International, 1992, 3-7100-2H1.

Example 7-1 Theme 1 of the first prelude

Moderato, amabile $\text{♩} = \text{ca. } 84 - 88$ *con rubato*

(2) as needed)

At first glance, the metrical change seems redundant, for the music would work out well too if it had begun in 2/4 time. Not only is this assumption possible musically but it also conforms to the phrasings notated by the composer. So, why begin with 3/4 and change to 2/4 two measures later? In the theoretical analysis of the first prelude, two tonical goals, G^b and E^b , were pointed out in theme 1. The fact that these pitches never fall on a metrical downbeat makes it difficult at first to single them out aurally as goals. In order to eliminate the possibility of C being mistaken as an important pitch, the composer starts the passage in 3/4 time. Example 7-2 rewrites the passage in 2/4 time and shows how pitch C would fall on each metrical downbeat, which could result in a musical misunderstanding and dullness.

Example 7-2 Rewriting of theme 1 (the upper part only)

The composer cleverly modifies this situation by starting with 3/4 time. Thus, the question of whether to emphasize the beginning of each small phrase or the metrical downbeat is solved: the performers should try to balance the attacks between the

beginning and the ending of the phrases.

We have mentioned the temporal relationship between section A and B in relation to the unchanging pace of the walking figures. In theory, the relation between quarter notes equal to 84 and 42 respectively works out perfectly for the walking figures. However, in reality and in performance, the result may not be as perfect. In section A, O’Riley takes a tempo fairly close to what the composer marks; in section B, he definitely takes a faster tempo than the composer notes—the tempo he takes ranges from 46 to 48. The reason to point out this temporal deviation in O’Riley’s playing is to show that composers’ plans are not always realized well in performance. Theoretically, this deviation should destroy the relationship between the sections and the two walking figures. However, the “damage” does not sound as serious in the playing. Firstly, the aural relationship of the two walking figures is not easy to establish. They are far apart in time with various musical events happening in between, and in these events the quarter-note walking figure gradually disappears. In addition, the textures where the figures are involved respectively are so different that the “prefixed” temporal design does not seem significant enough a factor in establishing the relationship. Also, it is musically impossible to keep the tempo throughout section A, with more events happening (many *accel.* and *rit.* occur) and the textures becoming complicated during the course. The deviation in O’Riley’s playing consequently destroys nothing, for the temporal relationship designed by the composer is not very practical in performance. Nonetheless, this is not to say that O’Riley’s choice of tempo in section B is thus justified.

The second prelude also has a fairly regular metrical design, except in bars 40 – 58 of section B. However, again, the metrical change in this passage does not very much disturb the underlying pulsation in quarter notes. The temporal problem in this prelude has to do with consistency through each section and material. As seen in the score, every section is marked with a similar tempo ($\text{♩} = 120 - 126$). This tempo is absolutely practical for the sections involving ideas X and Y; however, for idea Z, because of its

reflective character, the performers may incline to a slightly slower tempo. O'Riley's performance also shows this inclination. His tempo in the idea Z passage is accordingly at $\text{♩} = 120 - 126$, but he takes a faster tempo (with his infallible technique) in the sections involving ideas X and Y at $\text{♩} = 126 - 132$.

Bars 8 - 10 of the episode in the third prelude provides a fine example of metrical changes contributing to clarification of ideas.

Example 7-3 Bars 8-10 of the third prelude

The three measures have three different meters: 3/4, 2/4 and 4/4, and it in fact would work out fine to write them all in 3/4 time (and would conform as well to the aural perception) without disturbing or changing any phrasings or tonical emphasis. Bearing no major aural difference, the two versions however differ from one another in one respect: if it is in 3/4 time throughout, the C-major triad would be displaced from the downbeat to a weak beat. Therefore, instead of adding an accent on the C triad starting bar 10, thereby perhaps creating an overemphasis, the composer places it at the beginning of a bar hoping to convey his idea more accurately.

Pause/Ritard vs Tonical Centers

Browsing through the score, one notices many markings of *ritard* or *hold back* in addition to various temporal and metrical changes. The *ritard* and *hold back* create numerous brief pauses as well as large structural sectionalization. Very often the moments of pauses and sectionalization coincide with establishments of the tonical goals concluded in our analysis. These goals not only explain the musical reasons for some of the pauses, but also construct a hierarchical relationship necessary in interpreting convincingly the pauses or ritards.

First prelude

An example of hierarchical relationship is seen in theme 1 and transition 1. A *hold back* is marked in bar 5 and a *rit.* in bar 8.

Example 7-4 Temporal markings in bar 5 and 8

The image displays a musical score for a piano prelude, focusing on two systems of music. The first system, starting at bar 5, features a 'hold back' marking in bar 5, followed by 'a tempo', 'accel.', 'a tempo', 'accel.', and 'a tempo' markings. The second system, starting at bar 8, features 'quasi tremolo' in bar 8, 'rit.' in bar 9, and 'a tempo' in bar 10. Dynamics include 'pp', 'f', 'mp esp.', and 'f'. The score is written in two staves, with various musical notations such as slurs, accents, and dynamic markings.

Since both *hold back* and *rit.* essentially mean a certain degree of slowing down, it is ambiguous whether to differentiate their degrees of slow-down. In fact, the occupation of different structural points (one at the end of theme 1; the other in the midst of transition 1) already suggests a differentiation of the degrees of slow-down. This decision corresponds to the tonical relationship present in the prelude. The *hold back* in bar 5 is marked over the establishment of E^b while the *rit.* in bar 8 is over a short phrase from A^b to G^b . From

the analysis on the tonical relationship of the prelude, we know that the temporary goal of G^b is often associated with its upper neighbor A^b , and is subordinate to the final goal of E^b . Therefore, in performance, the slow-down in bar 5 should be more conclusive (without interrupting the musical flow) than that in bar 8 (cf. O'Riley's performance).

The next example involves the differentiation between *hold back* in bar 5 and *espr.*, *molto espr.* from bar 11 to 13.

Example 7-5 Expression markings in bar 5 and 11 - 13

The image displays a musical score for piano. The first system shows bar 5 with a circled marking "hold back" above the staff. The second system shows bars 10 through 13. Above bar 10, the tempo is marked "Poco più mosso ♩ = 88 poco accel." and above bar 11, "A tempo primo ♩ = ca. 84 - 88". In bar 11, there is a circled marking "espr." below the staff. In bar 12, there is a circled marking "molto espr." below the staff. In bar 13, there is a circled marking "poco pesante" below the staff. The score includes treble and bass clefs, a key signature of one flat, and various musical notations such as slurs, accents, and dynamic markings.

Both places confirm the goal of E^b and both have significant structural meanings—the former is the end of theme 1 and the latter the end of transition 1. It seems both occasions ask for a similar amount of slow-down attention. However, we should project less the feeling of slow-down in bar 5 than in bars 11 - 14. The reason is that the re-confirmation of E^b in transition 1 is much more prolonged and elaborated, and consequently the moment of confirmation is more significant. Notice how much earlier before the arrival of E^b does *espr.* (*espressivo*) appear in music. *Espressivo* is not a temporal marking and

certainly does not have the same meaning as *rit.* or *hold back*. But, in performance, the performers would intuitively hold back the tempo with *espressivo* mark in sight. When one expresses, one emphasizes; when one emphasizes, one slows down naturally. In this way, the implicit *rit.* hidden in bars 11 – 14 is spelled out.

The surprising tonical interruption of D in bar 47 is marked with no *rit.* or other indications of the sort; instead, it is marked with *don't drag* in parenthesis.

Example 7-6 Don't drag in bar 47



The composer's intention of no slow-down here at the end of section B coincide with the conclusion that the pitch D is merely a detour in the established tonical motion. Temporal emphasis given to the tonical centers should not be employed in this place. The performers must fight hard here against the natural tendency to slow down towards the end of a section. O'Riley succeeds in keeping a strict tempo in bars 47 – 49; however, he takes an extra beat in bar 49, which is unusual and unconvincing.

Third prelude

It was concluded that the C-major triad exercises a general influence and a gravitational pull in the third prelude. The gravitational pull results in a couple of quasi-harmonic progressions in C major, and interestingly, most of the slow-downs in the prelude coincide with these quasi-harmonic progressions. The two examples are bars 5 – 7 (Ex. 7-7a) and 22 – 24 (Ex. 7-7b). *Poco rall.* is marked at the end of both bars 5 and 6, over the iii and vi of the quasi iii – vi – I progression. A similar idea is used in bars 22 and 23. For the preparation of a plagal cadence the music is marked with *slower* and then *molto rit.* when reaching the IV chord on the second beat of bar 23. Because the slow-down in these cases is placed before the advent of the tonical center, it should be executed still with a sense of direction—its effect is of anticipation, not resolution (cf. the

performance by O'Riley).

Example 7-7a Slow-down coinciding with harmonic progression in bars 5 - 7

Example 7-7b Slow-down coinciding with harmonic progression in bars 22 - 24

Fifth prelude

Surprisingly the interaction of slow-down and tonical centers in the consoling part of the prelude (diatonic/triadic) is not as extensive as expected: both examples occur in the process towards a less prominent goal—to E in bar 17 (Ex. 7-8a) and to A (a part of the prolonged plagal cadence) in bar 144 (Ex. 7-8b). The centers in the frightening (octatonic) section are approached in ways that incorporate both the slow-down idea and the continuous emphasis employed in the second and fourth preludes. As seen in the example, the goals of F in bar 54 and D^b in bar 124 are preceded by slow-down (Ex. 7-9a&b); the goal of E^b in bars 86 - 123 of section C is established by continuous emphasis in the ostinato (Ex. 7-9c). One thing to watch out for in performance: in the two

occasions of slow-down, the degree of slowing down should be carefully measured and executed. The natural flowing of the pick-up/downbeat rhythmic patterns is the priority concern in interpreting the frightening section.

Example 7-8a Slow-down towards bar 17

Example 7-8a shows a piano score from measure 14 to 17. The music features a gradual deceleration towards bar 17. Annotations include 'Sub...' above the staff, 'loca' above the right hand, 'poco rit.' above the right hand, and '(distant)' below the left hand. Dynamic markings include 'mp espr.'. A note at the bottom right indicates '* (as needed)'.

Example 7-8b shows a piano score from measure 17 to 144. The music features a gradual deceleration towards bar 144. Annotations include 'a tempo' above the staff and 'tonical goal' with an arrow pointing to a specific note in the left hand.

Example 7-8b Slow-down towards bar 144

Example 7-9a shows a piano score from measure 143 to 54. The music features a gradual deceleration towards bar 54. Annotations include 'molto rit.' above the staff, 'a tempo' above the staff, 'Avo...' above the staff, 'ethereal, distant' above the staff, 'p misterioso' below the staff, and 'tonical goal' with an arrow pointing to a specific note in the left hand.

Example 7-9a Slow-down towards bar 54

Example 7-9b shows a piano score from measure 53 to 110. The music features a gradual deceleration towards bar 110. Annotations include 'poco allarg. a tempo' above the staff and 'goal' with an arrow pointing to a specific note in the left hand.

Example 7-9b Slow-down towards bar 124

122

poco a poco rall.

cresc. *ff* *pesante*

$\text{♩} = 76 - 80$

124

ff con forza, agitato

goal *(vocal. sempre)*

Example 7-9c Ostinato on E^b

94

dim.

Dynamic Execution

The score is full of detailed dynamic instructions. This has both an advantage and a disadvantage: the advantage is that the performers are thus informed thoroughly of the composer's wishes for the performance; the disadvantage is that the extremely detailed instructions leave almost no room for personal imagination. Like the precise temporal markings, the dynamic instructions in the preludes show how controlling the composer is towards performances. For example, in bars 28 - 37 of section B of the first prelude (Ex. 7-10), a range of dynamics from *pp* to *f* is employed and distributed among the voices. The change from one area of dynamics to another is always swift though not terraced, but with as many as three voices to be considered, a faithful execution of the

with such markings is difficult to attain.

Example 7-13 The softness in bars 12 - 16 of the fifth prelude

Even if the desired effect is achieved, the music may sound blurred or lacking in character. In this case, the awkward situation is solved by the *cantabile* marking in bar 12. What one does is to bring out the melodies on the top voice and keep the remaining voices very soft. In other cases where the composer does not offer such a solution, performers should consider two things, dynamic relevance and balance. When it is difficult to achieve a soft effect that the composer asks for—either because of the intensity of musical movement or the registral placement impossible for achieving the quest, the performers are encouraged to exploit different balancing between voices in an attempt to produce a practical solution, instead of making each voice super soft lest the music sounds uncharacteristically blurred (of course there are times when this effect may be preferred).

Pedal

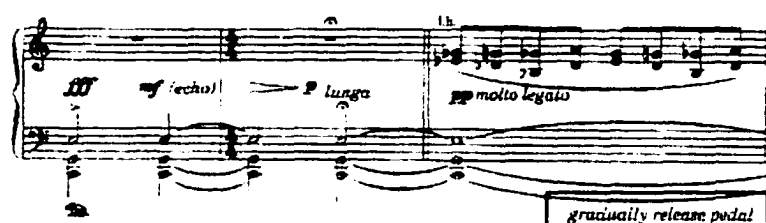
The use of pedal is extremely personal and subject to change in various performing venues. And a performer may not always pedal a section or a single piece the same way each time. Some performers seek to resolve the problem by intuition; others ask for

reasons. In addition to discussing the technical aspect of pedalling, I will show how pedalling can help in projecting some of the analytical conclusions reached in previous chapters.

First prelude

Example 7-14 shows the passage where the instruction *gradually release pedal* appears.

Example 7-14 The pedalling instruction at the beginning of section B of the first prelude



It requires the performers first to prolong the C triad that ends section A and then diminish its sound gradually underneath the section-B walking figure. The composer clearly marks the place (the second beat of bar 29) where he wants the C triad sound to cease completely; the performer has five beats to complete the releasing process. This is easier said than done, for how does one *gradually release pedal* and achieve a good effect? Obviously, the pedal should stay down for at least the first one and half beats of bar 28 lest the triad sound vanish too soon. Then the gradual release takes place. There are two ways to stop the sound: one is to release the pedal gradually till the sound disappears and then repress the pedal; the other is to change the pedal very slightly on each eighth note till the sound disappears and then engage the long pedal. The former method is somewhat more dangerous if one is not familiar with the mechanism of that particular piano; it may result in the sound vanishing too soon or too late. If the latter method is employed, the movement of changing should be well measured so that it does not disturb in the sound.

Once we solve the C-triad problem, the pedalling for the octatonic walking figure is less problematic. In bars 30 – 31 (Ex. 7-15), the composer indicates that the pedal is to stay down for at least 6 beats (if one changes the pedal as suggested in the parenthesis at

the beginning of bar 30).

Example 7-15 Pedal markings in bars 30 - 31

Often performers dislike very long pedals for fear of muddling or obscuring the sound. If the performer does hesitate to employ this long pedal (which can be a wonderful effect with an appropriate tonal balancing), one can change every two beats conforming to each unit of the walking figure. Moreover, this pedalling will encompass the notes that contribute to the concluded octatonic influence.

A brief explanation is needed on the use of the *sostenuto* pedal (the middle pedal) marked in bar 68. First of all, it shows that the composer wants different nuances and effects on a repeated pattern: the pattern (containing the theme 1 initial fragment) in bar 66 is marked *mf* with the sustaining pedal, whereas in bar 68 it is *mp* with the *sostenuto* pedal. It is reasonable to say that the sustaining pedal is totally unwanted for most of bar 68, for the composer did not use two layers of pedal markings to indicate a simultaneous use of two pedals (as in the fifth prelude). However, it is not clear as to when the *sostenuto* pedal is released.

Second prelude

The pedal is seldom used in this prelude and when it is used, it essentially helps to enhance the different textures in the music. As the composer indicates, ideas X and Y need scarcely any pedal while idea Z only employs it *as needed*. An extremely dry sound can be exciting and can provide contrast, but when present for a long period of time, a dry sound lacks resonance, especially in halls of larger size or poor acoustics. Therefore, in these circumstances, pedalling *as needed* should apply to the entire prelude.

Third prelude

The theme (Ex. 7-16a) presents a problem in pedalling: the instruction *Pedal as needed* is vague and it does not specify clearly what effect the composer has in mind. Hints may be taken from the reprise of the theme (Ex. 7-16b) although the passages are not identical. However, if the theme is to be pedalled on every eighth note as in the reprise, the effect is somehow too “clean.” One possibility of pedalling is given in example 7-17; performers are encouraged to explore other possibilities.

Example 7-16a Problem of pedalling in the theme of the third prelude

Example 7-16b Pedal markings in the reprise of the theme

Example 7-17 Possible pedalling for the theme

Fourth prelude

It is a prelude that can do with very little pedal, except in the ostinato B sections. That said, whenever a bass note occurs in the low register, a short pedal can be used to enhance the tone especially on those that are tonical centers. The idea of tonal enhancement can also be applied to the canonic lines in the transition passages.

Fifth prelude

The most interesting use of pedal is in bars 124 - 129.

Example 7-18 The passage involving the sostenuto pedal

The image shows a musical score for a piano piece, specifically Example 7-18. It consists of two systems of staves. The first system (bars 121-123) features a treble clef staff with a tempo marking of $\text{♩} = 76 - 80$ and a bass clef staff. The treble staff includes markings for *stacc.*, *loco*, and *ff* *cun forza, agitato*. The bass staff has a *sost.* marking and a diagram of the sostenuto pedal mechanism. The second system (bars 124-129) features a treble clef staff with markings for *ben misurato*, *Molto agitato accel.*, *a tempo*, and *poco*. The bass staff has markings for *f*, *cresc.*, *ff*, and *poco*. The sostenuto pedal diagram shows the pedal being held down during the first system and released during the second system.

The involvement of the *sostenuto* pedal becomes more and more popular in twentieth-century music. Its mechanism enables many exciting possibilities of sound effects and gives the piano sound a new dimension. The basic technique of its physical employment is simple: to prolong a tone, simply press it down after the tone is sounded and still being held by the hands. However, in performance, this simple procedure may cause confusion. Coupled with the use of the other two pedals, the entire pedalling scenario can be complicated and can require practice. The passage mentioned in the prelude is moderate in difficulty. As the pedal is completely off before the chords re-enter in bar 124, the performer will have time to prepare for the use of the *sostenuto* pedal. Due

to the different mechanism of each individual piano, some pianos require more pressure on the pedal lest other unwanted sounds creep in. The magic of the *sostenuto* pedal shows particularly in bars 128 – 129, where the sustaining pedal is completely off and an unusual color results from the bass notes prolonged by the *sostenuto* pedal contrasting with the dry sound of interval 3 above.

Execution of Narrative Expressions

We have mentioned the composer's attempt to convey his ideas through temporal and dynamic indications, and a similar situation applies to the expressive markings. Not only are the standard markings employed but also some rather novel and lively ones. As novel and lively as they are, sometimes the expression marks are not totally self-explanatory. The following list shows some of the novel expression marks found throughout the preludes and suggested meanings.

questioning (bar 50, first prelude): lack of forward movement; of suspension; *con irresolutezza*.

tentative at first, then becoming sure (bar 52, first prelude): gradually back to tempo; *poco a poco a tempo*.

pleadingly (bar 55, first prelude): expressive; emphasizing; *con desiderio*.

murmuring (bar 56, first prelude): blurring; unclear.

scat-singing (bar 80, second prelude): a jazz term referring to an interpolation of nonsense words, syllables or other vocal effects. During this vocal interpolation, the rhythm section of the band usually stops the regular rhythmic beating, a similar situation here when the left-hand accompaniment stops for about three beats. To be sure, the composer still intends this phrase to be played rather than sung by the pianist.

ghostly (bar 35, third prelude): very soft and slow; creepy.

inwardly (bar 89, fourth prelude): not of a bright tone; *con discrezione*.

Memorization and Technical Problems

Memorization

The process of memorization essentially involves four aspects: motor, aural, analytical and photographic. Motor and aural senses are formed and strengthened through daily practice. During a practice session, the muscles are encoded with movements related to certain musical works, and gradually the movements become a subconscious and automatic act. This is why performers find it time-consuming to fix technical problems (or simply to change fingerings) found at a later stage of the learning process. They need to make the muscles forget what has been encoded and start the new encoding procedure all over again. A similar encoding concept applies to the aural sense. Listening to their own practice everyday, soon performers will find that they are able to play the music in their heads without actually playing on the instruments. This “inner hearing” can also be attained by frequent listening to recordings, but the sensation and the ability to recall musical details built up in this way only are not as strong and complete. The analytical aspect requires analyses, general or detailed, of the music being learned. Analysis helps performers to understand music from a different angle, besides intuition or oral tradition. Photographic sensation refers to the ability to see the score in the mind, without having the actual score in sight. This sensation comes in handy at moments of possible memory lapse: being able to recall in mind where one is in the score may help the performer to get back on track in performance.

With regard to memorizing the preludes in question, the preceding analytical chapters offer an example of what performers can do in terms of analysis. The motor and aural sensations nonetheless need daily practice. Performers may find the photographic sensation not as useful in this particular set of preludes, as much of the printed music (especially the second and the fourth preludes) looks very much alike.

The second and the fourth preludes present a similar problem in memorizing: an excessive repetition of similar figures. The problem is similar to the nightmare of correctly memorizing the exposition and the recapitulation of a sonata, but here it is

greater. First of all, a performer must make clear the elements that differentiate the similar passages, whether it be a different register (e.g. bar 13 and 69 of the second prelude; bar 1 and 16 of the fourth prelude), a different harmonization (e.g. bar 13 and 69 of the second prelude), a transposition (e.g. bar 7 and 84 of the second prelude; bar 1 and 71 of the fourth prelude), a variation or derivation (e.g. bar 61 and 95 of the fourth prelude), or a combination of these things. Secondly, one must mark the differences into the score so that the photographic sensation can help in remembering these differences. Thirdly, it is helpful to memorize a small section first and then link it to another small section; one should not try to memorize the entire prelude at one go. In this way, a clearer picture of what comes before and after the similar passages can be established and clarified. Lastly, a performer should read the music away from the instrument, in order to free oneself from the preoccupation of playing and to concentrate on and absorb what is in the music.

Technical Problems

The following discussion presents two passages of greater difficulty in technique.

1. The left-hand part of ideas X and Y of the second prelude.

The part consists of wide jumps from one register to another, which in a fast tempo can cause problems. The most common problems are that errors occur when the tempo speeds up, that the performance cannot achieve the requested tempo, or that an unclear performance results when the playing is up to speed. As usual, slow practice is a good way to start. However, since the problems do not show until reaching a fast tempo, slow practice itself is not enough. First of all, avoid using the little finger on the up-beat chords to eliminate the feeling of excessive finger repetition. After a period of slow practice to familiarize oneself with the jumping movement and the geography of the keyboard, choose a moderately fast tempo and concentrate on the following.

- a. **Avoid too much extension/contraction of the hand caused by the musical figures. The avoidance of this motion reduces time spent on forming the shapes of each musical**

figure, and enables the performer to play in a faster tempo later on.

- b. Engage in a more lateral movement. The lateral movement also reduces time and space that the hand must travel between two points.
- c. Imagine the left-hand part in chords of quarter-note value—the less one feels of jumping around, the easier one jumps.

2. *The coda of the fourth prelude.*

The rhythmic design of this section is very subtle, and the many off-beat accents make it even more complicated. To practise slowly is still the way to start. In addition, exaggerate the accents and the slurs in practice. Speed up the tempo gradually and always make sure that the accents are faithfully executed. It is also helpful to practice one measure at a time so that one still feels the underlying metrical downbeat.

Finally, a few words on two editorial errors. 1. *Bar 39 of the second prelude.* In O'Riley's performance, the D in the upper part is played as D[#] (cf. Ex.3-4). I believe that his alteration of this pitch is justified, for he must have worked closely with the composer during the preparation for the premiere; the alteration may have come from the composer. In addition, this alteration changes the chord from (026) to (015), a set class which makes more sense both in the involvement of framing interval 11 and the co-existence with (016) in the prelude. 2. *Bar 143 of the fifth prelude* (cf. Ex.7-8b). The A^b and G^b in the upper part should be dotted quarter notes. The notes occur on the second eighth of the first beat, with A^b tied to the same pitch on the third beat. As no rest is present in the second beat, these two pitches should be dotted, as the dotted quarter notes of A and F in the lower part are.

CHAPTER 8 **Afterthoughts**

I have provided for this set of preludes interpretations that concentrate on both theoretical and performing aspects. In the analytical chapters, my point of departure was the use of the octatonic and the diatonic collections as pointed out by the composer in the program notes. Based on his revelation, the discussion proceeded to identify the elements that represent or invoke the collections in the music. Danielpour's use of the major or minor triad to mediate between the two collections may partly explain why his music is highly accessible, for the extensive use or implication of triads recalls subconsciously in the listeners the long-time involvement of triads in music, especially in relation to tonal music. Therefore, based on this reminiscence, the music is greeted with a high degree of understanding and acceptance by the listener. The narrative connection of the octatonic and diatonic collections is set up and well explored by the composer. In general, the diatonic represents dream while the octatonic represents reality. Later we see that these connections are applied in a broader sense musically—the diatonic with music of peace, tranquility and stasis, and the octatonic with music of horror, chaos and movement. The first prelude depicts the various encounters during the composer's daily walk in Central Park, a setting in which the two collections interact closely, vividly portraying the idea of day (octatonic)-dreaming (diatonic). The festive second prelude is inspired by the composer's dream of people dancing and marching down the streets in New Orleans. It has a jazzy flair, with the octatonic collection used as the basis of the musical ideas on the surface. The spiritual third prelude is a musical description of waking from a dream. It uses the two collections to depict two different worlds working in perfect equilibrium. The fourth prelude recalls one of the composer's childhood nightmares about some imaginary underground creatures in New York. The octatonic is employed here to represent the horror and musical description of the gremlin-like creatures slithering around. The final prelude also has a perfect balance between the two collections, paying homage respectively to the consoling and frightening aspects of the night. In short, the

first prelude is mediating between the octatonic and diatonic; the second and fourth preludes are octatonic; the third and fifth preludes hold the two collections in static equilibrium.

In the chapter on performance issues, I confronted the composer's strenuous effort to control tempi, dynamics and other marks of expression. At times the use of pedal is also specified. This suggests that the composer tries to leave no room for possible interpretive improvisation; he wants his music to be performed exactly the way he writes it. Nevertheless, we observed several deviations in the recording by O'Riley. And it can reasonably be assumed that these deviations have the composer's permission as O'Riley, who premiered the work, must have worked closely with the composer. What makes performing the preludes rewarding is the emotional satisfaction of the music, the challenge of finding a personal interpretation within the controlling of the composer and the highly idiomatic piano-writing.

In concluding this study, I would like to explore three interpretive strands that weave through both the analysis and performance of these preludes.

Duality

The simultaneous employment of two collections, the diatonic and the octatonic, already sheds light on the concept of duality in the preludes. The concept is exploited further when the composer often uses elements that are distinctive to the collections, invoking a sense of uncompromising, absolute opposition between the two collections. The musical concept of duality and opposition itself is not revolutionary. Many ideas and forms in the past involve such a concept: the counterbalance in binary, ternary forms and subsequently the sonata form; the contrast of the first theme and the second theme in a sonata; the opposition of expositions and episodes in a fugue, etc. In short, music has everything to do with dualities. So why is the concept especially characteristic of Danielpour's music? It is true that the structural forms just mentioned are different from the ones that we are dealing with. Musical exploitation may be different in other genres,

and often preludes in earlier eras (programmatic or non-programmatic) do not project the concept as prominently (there are, of course, exceptions). The idea of contrast applied in the past is built upon a highly hierarchical tonal/harmonic relationship. The musical contrast goes with the moving from one important key area to another, acknowledging the harmonic changes at the foreground and the background. In other words, the duality is subordinate to the predominance of tonal harmonies; it is more like a by-product, and sometimes its existence is not even necessary as witnessed in some sonatas with a monothematic feature of the early Classical period. With tonality being replaced by dodecaphony in the early twentieth century, contrasting duality seems to be less considered as well. Later, in the post-modern period, musical trends like minimalism throw away the concept entirely. With an environment of such musical concern, in this one respect, Danielpour's emphasis of duality in his music does seem unique.

When duality is employed in tonal works, the transition from one idea to another seldom causes interruptions as, for example in a sonata, a linking passage anticipates and interrelates the two key areas and materials. Thus, one section seems to grow logically from another. In the case of Danielpour's idea of duality, a complete cut-off between materials is expected now that the linking passage and the underlying harmonic hierarchy are abandoned. In addition, his use of elements distinctive to the collections keeps the music further from developing organically. Nevertheless, there is still communication between the two: the interaction of the collections mainly comes through with the elements from the "mediating family," whose function is not to decrease the individuality of the collections but to provide ways for music to move between them.

As the idea of duality requires two elements opposed to each other, the notion is better illustrated in the first, third and fifth preludes, which involve various degrees of octatonic/diatonic interaction (the second and fourth are both consistently octatonic in essence). We have discussed in the first prelude the juxtaposition of the octatonic and the pentatonic/triadic in section B. Another form of duality resides in the contrast between sections with various musical materials and of different moods. For instance, in the third

prelude, the juxtaposition of various materials is illustrated by the two contrasting sections (the dream and the day) set against each other. A similar contrast exists in the final prelude between the sections depicting the consoling and the frightening. Occasionally duality is expressed through the contrasts of movement and stasis, and ups and downs. For example, in the first prelude, the stasis of the walking figure in bars 38 – 40 and 42 is balanced by the movement in bar 41 and 43. The similar idea happens in the second prelude, where section B presents a slower “harmonic” rhythm against the rhythm in sections A and C. In section B of the fifth prelude, duality is projected by the upward thrust of the lines from bar 43 and bar 65 set against the up/down dyads sandwiched by those lines. Some of these observations may not be aurally significant for listeners, but are definitely valuable for performers as a way to light up their musical imagination.

Unpredictability

The frequent absence of linking passages between various sections is one of the sources of unpredictability in the preludes. Without interrelation and anticipation, what should follow in the music is hardly predictable, as seen, for example, in the second prelude. Another source of unpredictability is the musical interruption. A prime example is the pitch D in the first prelude interrupting the tonical relationship. The meaning of this surprise is fully explicated in the analysis; without the analytical explanation, the surprise still comes through on the surface with greater dynamics and accents. The other forms of surprises in the preludes include swift or sudden dynamic and textural changes. Examples can be found in almost every page. The more prominent moments are bars 21 – 27 of the first prelude; bars 21 – 39 of the second prelude; the coda of the third prelude; section B of the fourth prelude; bars 31 – 42 of the fifth prelude.

First prelude: bars 21 – 27

The music is in transition 2 and on its way to the big moment of C major triad. The material of the transition, soft and uncertain, is interrupted by two fierce statements,

marked *strepitoso* (*sub. con moto*) and *con forza*, in bars 22 – 23 and 25. The dynamic changes are extremely sudden; each dynamic level lasts less than one measure.

Second prelude: bars 21 – 39

This passage includes the latter part of idea Y, the entire idea Z in section A and the transposed idea X in the interlude. The unpredictability is invoked not only by the dynamic contrasts but also by the textures of each material. The music goes from rhythmically mobile to static and subsequently returns to mobility, all in these 19 bars.

Third prelude: the coda

The birdsongs are the musical surprises. Coupled with a detailed dynamic design and the opposing arpeggio figures, the coda is extremely lively and full of spirit.

Fourth prelude: section B

The atmosphere of this section is uncomfortably frightening; the melodic figure of (0134) in the bass register is almost grotesque. Despite the continuous sixteenth-note figure, the music is anything but consistent in terms of dynamics and registral placement. Pianists should experience such mobility physically for they need to move back and forth over the left hand in performance.

Fifth prelude: bars 31 – 42

This is the only passage in this set of preludes that has a linking character. The rhythmic figures of section B and C are anticipated briefly in an environment which is still under the influence of section A.

Some of the interruptions involve materials incoherent to the music immediately preceding and following the interruptions, but coherent and anticipating the music later to come. For instance, the chordal interruption in bar 51 of the second prelude is irrelevant in this section, but later in the last appearance of idea Z and in the postlude this chordal design becomes an important idea, sc (016), that dominates the second prelude.

Recollection

With so many surprises and interruptions in the music, reappearance or recollection of certain ideas is necessary in maintaining coherence. For instance, the use of triads and the big triadic moments as the aural pillars were mentioned in the first, second and the third preludes, and so were the “motif” (0134) in the second prelude and its reappearance in the fourth. In the final prelude, moments of recollection of the materials previously used have been revealed in the discussion. The notion of recollection is more significant here as the prelude is the final one in the set and its title suggests a finish, an end to a certain “journey of mind” (as the composer noted that this work is “a garden of the mind”). Recollecting what happened before conveys a feeling of wanting a completion. However, the materials recollected may not be as significant as the idea of recollection itself. Some of them are crucial in their own preludes; some are just passing. Nevertheless, recalling them in the final prelude enables us better to interrelate the five preludes and consequently to see them as one unity.

The chant has a couple of musical anticipations before its full existence in the final minutes of the last prelude. In fact, the anticipation in the first and the third preludes shows only part of the intervallic properties of the chant in a chordal setting; it is, to be sure, a very remote anticipation to its linear appearance. Nevertheless, by always arranging such chordal settings at a high register in the first, third and final preludes, the aural association is established regardless of the comprehensibility of what this association stands for at an early stage. When the chant finally appears, also at a high register, an inexplicable understanding results. The intervallic anticipation may seem logical merely in an analysis; however, the registral association is definitely practical in aural experience. The true identity of the chant at the end of the set provides musical and spiritual satisfaction.

The apparent opponent to the chant is the motif (0134), always associated with the octatonic chaos. Its appearance is implicit and passing in the second prelude, but total and significant in the fourth. In the final prelude, its statement becomes even stronger and

forceful in the frightening sections. It is also interesting that its appearances in these preludes often involve a bass ostinato.

It was observed that playfulness and liveliness in the frightening sections of the final prelude were created by the complement of up and down movements in the dyadic pairs. The movements can be seen to be derived from the patterns which give the fourth prelude a toccata-like texture. The units of two sixteenths are arranged in a scheme of continuous ups in the lower part and downs in the upper part. There is no playful feeling in the fourth prelude; the closeness of the up-down movement makes the music rather intimidating. Here is an example how tempo or spatial arrangement influences the character of music.

The recollection of idea Y of the second prelude is more with disguise; the pitch recollection is exact initially but the character is vastly different. In the second prelude, idea Y represents a linear line that is very rhythmic and jazzy. Whereas in the final prelude, the mood and character are full of uncertainty, evoked by the meander of the line's subsequent development.

In the last section of the final prelude, two distinct plagal cadences occur. This design not only echoes the similar scheme in the third prelude but also acknowledges once more the tonal implication in this set of preludes. An ending in a plagal cadence is preferred in many church chorales to that in a perfect cadence. Employing such a progression in the ending section of the work in question undoubtedly evokes the spiritual meaning already embodied in its tradition.

Appendix Works for/with Solo Piano by Richard Danielpour

1985	<i>Psalms</i>
1986/92	Piano Sonata
1988	Piano Quintet
1990	<i>Metamorphosis</i> (Piano Concerto No. 1)
1992	<i>The Enchanted Garden</i> (Preludes, Book I)
1993	Piano Concerto No. 2 <i>Songs of the Night</i> (for tenor, violin, cello, and piano)
1996	<i>I Am Not Prey</i> (for soprano and piano four hands)
1997	<i>Sweet Talk</i> . Four Songs on Texts by Toni Morrison (for soprano, cello, doublebass, and piano) <i>Fantasy Variations</i> (for cello and piano)
1998	<i>Spirits in the Well</i> (for soprano and piano)

Selected Recordings

<i>Psalms</i>	Koch International Classics CD 3-7100-2 H1 Christopher O'Riley, piano
Piano Sonata	New World 80426-2 Michael Boriskin, piano
Piano Quintet	Koch International Classics CD 3-7100-2 H1 Christopher O'Riley, piano Chamber Music Society of Lincoln Center
<i>Metamorphosis</i>	Harmonia Mundi France HMU 907124 Michael Boriskin, piano; Utah Symphony/Joseph Silverstein
<i>The Enchanted Garden</i>	Koch International Classics CD 3-7100-2 H1 Christopher O'Riley, piano

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