AN ANALYTICAL STUDY OF ELLIOTT CARTER'S PIANO SONATA.

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Abstract

This analytical study of Elliott Carter's Piano Sonata focuses on middleground structural aspects found in the work such as phrases, phrase groupings, cadences and note collections. These are examined under four main headings:

The Articulation of Phrases looks at the division of large passages into phrases, showing the various ways in which new phrases are marked. These include sudden changes in texture and register, restatements of thematic material, and recurring characteristics that appear at important cadential points.

The Unification of Extended Passages by Middleground Stepwise Motion focuses on the rising linear motion that connects the individual phrases of many of these larger passages. Correlations between thematic material and phrase contours are also explored.

The Relationship of Vertical Intervals and Note Collections to the Character and Phrase Rhythm of Particular Passages further examines phrase articulation by means of changes in note collections, with distinctions among phrases arising from the correlation of consonant vertical intervals with passages of linear motion and dissonant vertical intervals with passages that are more static.

Anticipation and Overlapping of Materials describes an important aspect of the Sonata's overall structure in which themes and motives, as well as characteristic intervals of these materials are used to link the two movements of the work by a network of anticipations and flashbacks.

An examination of the final climactic Maestoso section of the first movement (mm. 252–264) provides a summary of the various compositional aspects described in this study.
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Chapter 1

Introduction

The music of Elliott Carter is well known for its complexities of both rhythm and harmony, yet it also projects a strong sense of continuation in tradition. This dichotomy is particularly evident in his Piano Sonata, a work which has been recognized as the first piece in the composer's mature style (Glock 1955, 47; Goldman 1957, 156; Brandt 1974, 27). Many of Carter's stylistic traits stem from the influence of various composers whose work made a deep impression on him in his early development.

Carter's real involvement in music did not begin until his high school days. He had the advantage of living in New York during the 1920's, a particularly active period for new music. There he came into contact with a number of influential people, perhaps the most important being Charles Ives, whose encouragement and stimulation led Carter into the field of composition. He completed a Masters Degree at Harvard where he studied with Walter Piston and Gustav Holst and then, like many American composers of the time, went on to study with Nadia Boulanger in Paris. Coming from a wealthy family, Carter did not feel the economic pressure of pursuing an education for the sake of earning a living, and he was able to indulge in a wide range of interests such as English Literature (Goldman 1957, 152). Along with the study of nineteenth century literature, Carter also explored both modern writing and the classics, looking at Greek meter and prosody. This interest shows itself in the choice of subject matter for some of his earliest works, such as the incidental music based on Sophocles' Philoctetes (1931), and Mostellaria by Plautus (1936), which includes fragments of Greek melody and meter (Goldman 1957,
153). In many of his other early works, such as the ballet *Pocahontas* (1936) and his first Symphony (1942), he relies heavily on the neo-classical models of the time and is especially indebted to the influence of Copland and, like many other composers of this period, to Stravinsky. Soon, however, Carter's reputed "intellectual complexities" began to manifest themselves in his use of cross-accented counterpoint (Goldman 1951, 83). He felt that rhythmic complexity was the foundation of American music. In his article "The Rhythmic Basis of American Music", he quotes Roy Harris as follows:

"our rhythmic sense is less symmetrical than the European rhythmic sense. European musicians are trained to think of rhythm in its largest common denominator, while we are born with a feeling for its smallest units." (Carter 1955, 28)

The basis of this way of thinking stems from jazz, in which an irregularly grouped melody proceeds against a steady, unchanging dance rhythm. Harris himself often goes a step further by combining several lines of irregular grouping and omitting the rhythmic reference point of the unchanging beat. Such cross-accented counterpoint may be heard in the final movement of his first Piano Sonata (1929) (Figure 1.1).

Two other composers who are known for their use of rhythmic complexities and contrapuntal textures influenced Carter: Charles Ives, who has already been noted, and Roger Sessions, whose first Piano Sonata carried the rhythmic techniques of Harris to greater extremes. Carter remarked that Session's Sonata "exercised a considerable influence on composers of the 1930's." (Carter 1955, 29)

In such choral works as *Harmony of Morning* (1944) and *Musicians Wrestle Everywhere* (1945) Carter uses irregular, shifting accents and different combinations of rhythmic displacements to produce, on a small scale, a type of cross-accented counterpoint that becomes an integral part of the Piano Sonata.
Figure 1.1: Roy Harris: Sonata for Piano, Third movement, mm. 1-15 ©1931 Associated Music Publishers, Inc. New York.
There is no denying that the Sonata marks an important turning point in Carter's compositional development. Carter himself stated:

"I ... have been interested in pursuing the possibilities of dramatic contrast and interplay offered by the individual character of instruments and have attempted in all my works, at least since the Piano Sonata, to exploit these possibilities in the most vivid ways I can imagine." (Edwards 1971, 68)

The uniqueness of the composition was described by Virgil Thomson after a 1948 performance of the work:

"This is a sustained piece full of power and brilliance. Its relatively quiet moments, though a shade reminiscent of both Copland and Stravinsky, are not entirely, in feeling, derivative; and as figuration they are quite personal. The brilliant toccata-like passages, of which there are many, are to my ear completely original. I have never heard the sound of them or felt the feeling of them before." (Thomson 1967, 245)

In spite of the obvious importance of the Sonata, there are few detailed discussions of the work in the music literature. Many of the articles that refer to the Sonata comment on its more superficial characteristics, such as the pervasive use of contrasting material and the consistent pulse rate which links the Maestoso and the Scorrevole sections of the first movement (Goldman, 1951; Glock, 1955; Henderson, 1966; Schiff, 1983). This latter characteristic is often seen as a foreshadowing of one of Carter's later rhythmic techniques, that of metric modulation. Other more detailed studies of the Sonata look at the work on a macroscopic, or background level, describing the overall structure in terms of traditional sonata-allegro form and ternary form (Below, 1973; Whilite, 1977; Haberkorn, 1979; Schiff, 1983). The divisions of the forms given by many of these authors are as follows:
First Movement:

Introduction: Maestoso mm. 1–14
              Scorrevole mm. 15–23
              Maestoso mm. 24–32
Exposition:  First theme area mm. 33–82
              Second theme area mm. 83–112
              Closing section mm. 113–122
Development: mm. 123–223
Recapitulation: First theme mm. 224–251
               Introduction material mm. 252–264
               Second theme mm. 265–270
Coda:        mm. 271–302

Second Movement:

A Section:   Section I mm. 1–24
             Section II mm. 25–51
             Section I mm. 52–75
B Section:   Fugal introduction mm. 76–103
             Fugue mm. 104–329
A Section:   Section I mm. 330–340
             Section II mm. 341–361
             Section I mm. 362–392
Epilogue:    mm. 393–414

Other authors focus on a microscopic, or foreground level of analysis, explaining the structure in terms of small motivic units which appear throughout the Sonata. One such
discussion, by Robert Below, is the most extensive article about the Piano Sonata. He demonstrates that four main motives, found in the Introduction of the first movement (Figure 1.2), act as unifying structures throughout the work (Below 1973).

The first motive, which Below names X is the semitone bass progression from B to A\(\sharp\) and back to B. This semitone motion underlies the overall harmonic progression of the Sonata and is the main harmonic motion of the first movement in particular. It may also be seen as a substitute for the traditional tonic-dominant relationship (Below 1973, 284). The motive appears in many places, such as in Figure 1.3, in which a transposition of motive X is heard in the bass immediately preceding the second theme.

The second motive, labelled Y in Figure 1.2, is the descending whole tone that first appears in m. 10 and reappears at many prominent places throughout the two movements, often set to the same short-long rhythm that is found in the Introduction. At other times the motive occurs with slight rhythmic alterations, as seen in the initial Scorrevole section (Figure 1.4), where the altered motive appears along with its inversion.

The melodic movement in the upper voice of mm. 2–4 makes up the third motive, A. This motive often has slight variations in its intervallic content but the overall contour remains the same. In mm. 5–7, for instance, the final leap of the motive is changed from a fifth to a sixth, and in mm. 9–10 the first minor second is omitted (see Figure 1.2). The most striking appearance of the motive is at the outset of the development section where, by the use of harmonics, Carter presents both motive Y and motive A simultaneously (Figure 1.5).

Motive B, the final motivic cell discussed by Below, is the arpeggiated flourish found in m. 3 and m. 11. Its characteristic intervals of the fourth and fifth permeate much of the toccata-like writing of the first movement.

Although all of these motives are important aspects of the Introduction, there are
Figure 1.2: Elliott Carter: Piano Sonata, first movement, mm. 1-12. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
Figure 1.3: First movement, mm. 77–85. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
Figure 1.4: First movement, mm. 13–18. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.

Figure 1.5: First movement, mm. 120–129. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
other repeated pitch-classes and intervals that will be shown below to be equally impor-
tant to the structural unity of the work. These include the dyads found in m. 2, the D♭
major and C♯ major triads found in m. 7 and m. 10, and the interruptive accented octave
leaps found in m. 4, m. 7, and m. 9 (see Figure 1.2).

The obvious importance of both these very large and very small scale elements in the
overall understanding of the work cannot be overlooked. However, these elements are not
what immediately concern the listener or performer. There is much that can be learned
about Carter's compositional techniques and about this particular work from an analysis
of middleground aspects of the structure, such as phrases and phrase groupings, cadences
and rhythmic patterns. These will be examined under the following four headings:

1. The Articulation of Phrases.

2. The Unification of Extended Passages by Middleground Stepwise Motion.

3. The Relationship of Vertical Intervals and Note Collections to the Character and
   Phrases Rhythm of Particular Passages.

Chapter 2

The Articulation of Phrases

Many of the larger passages of the Piano Sonata, especially those containing the Scorrevole material, possess a free, improvisatory quality, attributable to the persistent, contrapuntal sixteenth note motion, the constantly shifting, irregular groupings, and the ever changing materials evolving out of the initial statement. For instance, the opening of the exposition proper shown in Figure 2.6 presents a rapid indistinct flurry of fourths and fifths (m. 33). In m. 36, these intervals coalesce into the five-note motive labelled by Below as the principal theme, and later evolve into a full, expansive thematic statement. Although on first hearing these passages may appear to be seamless, a closer examination reveals definite phrase divisions. These divisions are variously marked by sudden changes in texture and register, restatements of thematic material, transfers of dominant role between the hands, and striking rhetorical cadences.

The passage of the exposition between m. 51 and m. 63 (Figure 2.7a) illustrates many of these methods of articulation. It is divided into three main phrases beginning respectively at m. 51, m. 56, and m. 58. The first phrase, dominated by the right hand, establishes the repetitive, shifting groups of quintuple and septuple sixteenth notes that remain within a narrow linear range. The second phrase is marked by a brief return to the principal theme, in which both hands participate equally. This thematic statement is brought further into focus by an increase in dynamic level from piano to mezzo forte. The third phrase contains the same kind of rhythmic groups as the first phrase but without the same limited linear range. Rather, attention is focused on the left hand through
Figure 2.6: First movement, mm. 32–50. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.

a drop in register, a subito piano, and the initiating attack of an isolated chord. The third phrase is also articulated rhythmically, in that it is the only place where there is no attack on the immediately preceding sixteenth note. The dominating role of the left hand continues through a rising octave motion, related to the theme, which ultimately leads to the climax of the section. The sense of arrival is also established rhythmically by means of the decreasing groupings of sixteenth notes, producing a cumulative effect of motion to the cadence. This same technique is used in mm. 77–79 (Figure 2.7b) where the cadence on C is strongly reestablished.

Another passage that shows the same treatment of phrase articulation occurs at the beginning of the recapitulation, as illustrated in Figure 2.8. It is divided into four phrases, beginning at m. 224, m. 229, m. 236, and m. 239. The first phrase reestablishes the harmonic area of the original Scorrereole, as is expected in a traditional recapitulation.
section. The remaining three phrases all begin with restatements of the principal theme material, and each is marked by a sudden drop in register and dynamic level.

Although there is certainly a strong sense of return at the outset of the recapitulation, the remainder of the passage develops the material differently from the way in which it is presented in the exposition, as can be seen by comparing Figures 2.6 and 2.8. This continual change in material within the outlines of a traditional structure is a common characteristic of Carter's works after 1944. He stated:

"... it struck me that, despite the newness and variety of the post-tonal musical vocabulary, most modern pieces generally 'went along' in an all-too-uniform way on their architectonic levels."

Bothered by this fact, Carter began to rethink the idea of large structure in a new way.
"This aim led me to question all the familiar methods of musical presentation and continuation— the whole so-called musical logic based on the statements of themes and their development. In considering constant change-process-evolution as music's prime factor, I found myself in direct opposition to the static repetitiveness of much early 20th century music, the squared-off articulation of the neo-classics, and indeed much of what is written today in which 'first you do this for a while and then you do that'.” (Edwards 1971, 90-91)

The differences, on the smaller phrase level, between the exposition and the recapitulation of the Piano Sonata illustrate “constant evolution”, but this factor also appears on a larger scale with the reappearance of Introduction material between the first and second themes of the recapitulation. The significance of this specific passage will be discussed later in greater detail.
Other phrase-articulation techniques of Carter that display both traditional and non-traditional elements are found at many of the main cadences. Accented notes, left-hand octaves, contrary motion between the hands, and large leaps separating the final two notes are common characteristics that together, produce a marcato-style cadence that is used to emphasize the termination of many important passages. The origin of this type of cadence can be found in the accented left-hand octave leaps that mark the phrase divisions in the Introduction (Figure 2.9a). Another source is the interruptive figure of mm. 20–23 (Figure 2.9b); the isolated accented chord, the rising marcato left-hand octaves, and the final upward leaps found here are important characteristics of many subsequent cadences.

The first statement of this marcato-style cadence appears in the section of the exposition discussed above in Figure 2.7, specifically at mm. 61–63. Octaves in the left hand move in an arch shape through a four-octave span. The right hand, contrary to the left, moves to an accented high point at the dramatic arrival on the C cadence. Another example of this type of cadence also appears at m. 138 (Figure 2.10) of the development section, where again, left-hand octaves describe an arch shape that ends in an accented upward leap in contrary motion to the right hand. However, the contrary motion is the reverse of that found in m. 61, with the left hand leaping upward and the right hand describing a downward motion. Returning to the first phrase of the recapitulation (see Figure 2.8), one again finds many of these cadential characteristics appearing in m. 228. The two hands move in contrary motion. The right hand moves to an accented local high point while the left hand marks out a descent in octaves with a final leap of a fifth to an accented C#. Here, as in the exposition, the final bass motion, with its leap from G# to C#, outlines a traditional dominant-to-tonic cadential relationship, but the accompanying harmonies in the right hand are non-traditional. The same dominant-to-tonic relationship also appears in augmented form in mm. 101–102 (Figure 2.11), where the arrival
Figure 2.9: a) First movement, mm. 1–8. b) First movement, mm. 19–23. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
point of the bass leap from G to C is dramatically anticipated by the octave flourish to a C7 in the previous bar. ¹

The technique of employing a rising motion to a local high point, as observed at this smaller phrase level, also applies to longer paragraphs. The next chapter will show how Carter uses linear motion to carry large and sometimes complex passages to important climaxes.

¹The official system of the American Acoustical Society will be used when referring to specific registral positions.
Figure 2.11: First movement, mm. 100–104. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
Chapter 3

The Unification of Extended Passages by Middleground Stepwise Motion

Another important element found in many of the extended passages of the Sonata is a rising linear motion that connects the individual phrases, creating a continual drive to a local climax. An example of this type of unifying technique can be found between mm. 51-63 (Figure 3.12) of the exposition. Through all three phrases of this passage, a stepwise progression can be traced from the initial D5 of m. 51 to the E7 of m. 63, which is the melodic high point of this section, as was noted earlier. The importance of each member of this progression is indicated notationally by double stems, and by tenutos or dynamically accented articulations. The A♯5, for instance, is first heard in m. 54 but does not become an emphasized tone until m. 56 when it is notated with a double stem.

The recapitulation passage described in Chapter 2 shows another example of this type of linear motion. Figure 3.13 traces the ascending line, starting at the high point of the first phrase, the B6 in m. 224. The second phrase moves to B♯6 in m. 232 and, by the use of a repetitive rhythmic figure, continues to climb, first to C♯7 then to D♯7. The end of the third phrase is marked by the appearance of E♯7 which finally leads to F♯7 in mm. 243-245. Not only does this pitch mark the climax of this Scorraveole section, but it also represents the largest vertical span (6 octaves) found in the movement thus far.

This same technique is displayed more clearly in the passage comprising mm. 25-52 of the second movement, illustrated in Figure 3.14. This passage forms the middle section of a larger A B A structure that precedes the fugue. It features not the rising right-hand motion of the previously cited examples, but a descending bass line. The line begins
Figure 3.12: First movement, mm. 51–64. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
on the Eb2 of m. 27, which acts as a pedal point until the haunting melody appears in the inner voice of m. 35. Subsequently the bass begins a descent, following the line Eb2, Eb2, Db2, Cb2, Bb1, (A1), G1, F♯1, F1, E2, Eb2, and finally cadencing on D1 at the return of the A section. In the first movement examples, the constant flurry of the toccata figurations sometimes disguises the notes of the unifying line, demanding special attention on the part of the performer to ensure that these notes are heard. In contrast to this, the sparse texture of this second movement passage allows the overall descending line to be more readily apparent.

Unlike the upward direction of the Scorrevole passages, the shape of the second theme describes an arch. This change in contour from linear to arch shape accompanies the change from brilliant toccata writing to a more lyrical, expressive style. A rising motion is built into the first phrase of the melody as seen in Figure 3.15, where the line ascends
from Ab⁵ in m. 83 to Ab⁶ in m. 88. The phrase that follows contains a seven bar descent over an Ab pedal point. The return of the second theme in the left hand at m. 95 (Figure 3.16) overlaps this descent, and with it, the arching shape begins anew. The final arrival of the C cadence in m. 102 is the ultimate goal of the exposition. The material that follows hovers between C and F, a fifth below (Figure 3.17), and employs canonic imitation in the upper two voices of the right hand along with its inversion in the left hand. Thus, the ascending and descending phrase directions of the previous second theme material are now combined into a single event.

The characteristic shape of the individual phrases in the Scorrevole sections of the first movement mimics the overall rising linear motion. The contour of the majority of these phrases is that of an upward surge, rarely arching or dropping off. Rather, each
new phrase generally begins with a sudden drop in register from the previous phrase and then proceeds upward to an even higher tone. The rising tendency actually exists on three different architectural levels: not only in the upward surges of the individual phrases, and in the rising linear motion across the various phrases of the larger passage, as have been mentioned, but also throughout the entire exposition and development.

The large-scale linear ascent engages the highest notes in each of the sections. It begins with the C♯7 of m. 35 which is re-emphasized in m. 48. It then moves to D♯7 in m. 49 which is heard again in m. 59 and arrives on E7 in m. 63, the highest point of the exposition. The highest notes of the development demonstrate a retake in register with the reappearance of C♯7 in m. 151 and D♯7 in m. 153. E7 returns again at the syncopated section of the development found at m. 166 (Figure 3.18). This passage also features the first appearance of G7 and G♯7, enhanced by accents and octave leaps and terminating
Figure 3.16: First movement, mm. 94–101. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
with a final drop from G♯7 to G♯3 in mm. 170-171. This drop marks the beginning of the final ascent, culminating in the arrival of the ultimate high point of the movement, the B7 in m. 198 as shown in Figure 3.19.
Figure 3.18: First movement, mm. 164–172. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.

Figure 3.19: First movement, mm. 197–198. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
Chapter 4

The Relationship of Vertical Intervals and Note Collections to the Character and Phrase Rhythm of Particular Passages

The above study has shown how linear motion and cadential gestures clearly articulate extended passages into distinct phrases. A further analysis of these same passages reveals that phrase divisions are also articulated by changes in note collections. Distinctions among phrases also arise from the correlation of consonant vertical intervals with passages of obvious linear motion, and dissonant vertical intervals with passages which are more static.

Let us consider the passage mm. 33–50 in which the first theme evolves in a succession of short phrases, as was described above. The vertical intervals in this passage are generally consonant. However, the note collections are carefully coordinated with the phrase rhythms, in that a change in collection signals a change of phrase.

The first phrase, mm. 33–35, is based on the notes of a C♯ major scale. The change to a G♯ major scale with the appearance of the F× in m. 37 (Figure 4.20) distinguishes the second phrase from the first. This latter extended phrase is interrupted by two statements of the odd marching-octave motive, first heard in mm. 20–23 (see Figure 2.9b). At these interruptions, the collection of notes changes for an instant and features the minor 2nd as the transpositional interval between the two statements of the motive.

The motion from B♭ in m. 40 to B in m. 41 to the B♯ in m. 42 touches on all three of

1A given collection of notes will be identified as being in a certain scale. This does not mean that the passage is in that key but it is a convenient way of describing a group of notes and demonstrating some of the more subtle ways that the collection changes.
Figure 4.20: First movement, mm. 35-44. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
the important tonal areas of the movement. The isolated goal, B\(\sharp\), also anticipates the significant cadence to C in m. 63. The B\(\sharp\) is also important in that it reintroduces the G\(\sharp\) major collection to round off the large phrase. The B\(\flat\) and F\(\flat\) in m. 43 signal a change to the third phrase, now featuring an F\(\flat\) major note collection. The E natural of m. 48 functions in a similar way, marking the start of a new phrase by shifting the note collection to B major (Figure 4.21). The momentary harmonic stability attained at

![Figure 4.21: First movement, mm. 48-50. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.](image)

this point is sustained for nearly three measures before it is interrupted by the striking G natural in m. 50, with a clashing F\(\flat\) above it. The change of collection that this note causes and the reappearance of dissonant vertical intervals usher in the next, more dissonant passage of the exposition.

The following section, mm. 51-63, was described earlier as one in which the driving force is attained through a rising linear motion to the cadence on C, the focal collection of the second theme. As in the preceding music, distinction among phrases arises from the changes in the note collections and from the contrast between linear, consonant material and static, dissonant material. The first phrase, mm. 51-55, whose repetitive rhythmic grouping and narrow linear range have already been noted, features the minor 2nd interval, as is seen in the use of the conflicting semitones, D–D\(\sharp\), E\(\flat\)–F\(\flat\), F\(\flat\)–G, and
G-G♯ between the upper and lower voices (Figure 4.22). The phrase is thus characterized

Figure 4.22: First movement, mm. 51–56. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.

by the limited linear motion and dissonant vertical intervals. The brief return of the first theme in m. 56 is articulated by a return to consonant verticalities, accompanied by a quickly ascending motion in both hands. The same interruptive G natural chord that marked the end of the first section (m. 50) reappears in m. 58 to signal a change in note collection as well as the beginning of a new phrase. The third phrase beginning at m. 58 (Figure 4.23) is rhythmically similar to the first phrase but it has more directed linear motion. Its note collection changes gradually, and as it does so, the vertical combination of notes becomes increasingly dissonant, with the E♯, B♯, and F× tones gradually disrupting the generally consonant flow of the phrase until m. 61, where the enharmonic equivalents of these notes (C,F,G) appear against the major 2nd above it. Incidentally, the E♯, B♯, and F× are the same tones which are found to disrupt the diatonic collection of the Introduction as found in m. 2, m. 5, and m. 7.

A similar coordination of rhythmic and harmonic changes occurs in the passage of
Figure 4.23: First movement, mm. 57–62. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.

the second movement mentioned above (see Figure 3.14), where a change in note values from eighth notes to triplets to sixteenth notes signals a change in the note collections, moving from a stable Gb major collection in m. 41 to an increasingly dissonant collection made up of a number of conflicting semitones in mm. 49–51. This instability is resolved at the return of the A section in m. 52.

The section of the exposition beginning at m. 65 (Figure 4.24) possesses the same rhythmic and linearly static quality of some of the earlier phrases. The rhythm of this passage which is grouped into two units of 5+5+4 sixteenth notes has the effect, like much of the Scorrevole material, of disregarding the notated barline. The vertical intervals are predominantly dissonant, featuring an interplay between collections of semitones, D–D♯, B♯–C♯, and A♯–B. Carter resolves this dissonance by extracting certain tones from the collection (D♯, B♯, and A♯ renamed Eb, C, and Bb) which, combined with F and G, establishes a harmonic stability around a Bb major collection which often appears in the Sonata. The resolution of the dissonant collection also acts as a means of articulating
The technique of resolving dissonance to consonance through the extraction of specific tones makes up a large portion of the development section. For example, mm. 167-177 (Figure 4.25) resemble mm. 66-68 in their use of rhythmic repetition along with semitone clashes arising from the juxtaposition and alternation of C major/minor and C:\ major/minor triads. At m. 178 there is a distinct rhythmic and harmonic change. The rhythm shifts from groups of quintuple to septuple sixteenth notes, thereby lengthening the pulse unit and emphasizing the change in texture, register, and dynamic level. The C\ and E are extracted from the previous collection and the conflicting B\ and D\ are left behind, resulting in a greater harmonic stability. The use of motivic fragments as the basic material, the progressive domination of quintuplets over septuplets as the rhythmic drive, and the gradual change from a C\ collection to a C collection as the harmonic focal point, allows this passage to move with increasing drama to the climax of the development at m. 198 (see Figure 3.19). In retrospect, the passage at m. 65 is seen to contain, on a
Figure 4.25: First movement, mm. 167-181. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company,
smaller scale, all the techniques that make up a large part of the development.

The resolution of conflicting semitones into a consonant sonority is a particular feature in the measures prior to the second theme. The return of Tempo I at m. 77, seen in Figure 4.26a, presents a highly unstable note collection dominated by major and minor seconds. This harmonic instability throws the upcoming C cadence at m. 79 into relief in two ways: the dissonant intervals dissemble into a strongly dominant-sounding sonority (bracketed in the lower staff at mm. 78–79), and the ensuing octave C’s not only resolve this dominant but provide a tremendous consonant contrast to the preceding dissonant conflict. Likewise, the dominant triad that appears in m. 82 before the second theme emerges from a flourish completely constructed from conflicting semitones. The same method applies, but in more dramatic fashion, to the climactic cadence found at mm. 101–102 (Figure 4.26b).

The articulation of phrases by interval content in the Piano Sonata finds parallels in distinctions among the themes of this work, and in Carter’s later music as well. In the first movement of the Piano Sonata, the interval of a third is found to dominate the Maestoso and second theme areas, whereas the fourth and fifth are the basic intervals of the Scorrevole sections. In many of his works, Carter also uses the unique acoustic qualities and expressive characteristics of various intervals of the chromatic scale to create passages of contrasting character (Schiff 1983, 61). This identification of specific intervals with corresponding thematic material is a useful tool when explaining the significance of some of the more ambiguous passages of the work, as will be shown in the following chapter.
Figure 4.26: a) First movement, mm. 77–82. b) First movement, mm. 100–102. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
Chapter 5

Anticipation and Overlapping of Materials

David Schiff has observed that the two movements of the Piano Sonata are linked by a network of anticipations and flashbacks (Schiff 1983, 125). Such overlapping involves not only themes and motives but the characteristic intervals of this material as well. It is an important formal device within the first movement itself, as can be seen by the frequent interruptions of Maestoso material that refer back to the Introduction. More locally, overlapping is a fundamental characteristic of the initial presentation of the first theme material (see Figure 2.6). The five-note thematic motive (m. 36) acts as a miniature introduction or anticipation of the first theme, fully stated in m. 44. The theme itself has been shown to evolve out of the Scorrevole material of mm. 33–36, which in turn was anticipated in the Scorrevole section beginning at m. 15. A similar technique is used in the opening section of the development where the appearance of the first theme motive in m. 139 anticipates the full statement at m. 143. All these passages unfold through a continual overlapping and transformation of ideas.

Within the divisions of traditional sonata-allegro form in this work are some passages that cannot be explained in such general terms. For example, the passage beginning at m. 65, situated between the exposition of the first theme and the second theme, does not seem to relate to the preceding music (compare Figures 4.23 and 4.24). Moreover, since the tonality (C) of the upcoming second theme was already established prior to this passage (m. 63), it seems to have no harmonic function. The transitional function of this passage, however, is not inherent in its tonality but in its intervallic content.
In contrast to the preceding C major material, which features fourths and fifths, this passage introduces the minor third, an interval associated with the upcoming second theme. Thus, this section takes on an anticipatory role, signalling the approach of the more lyrical second-theme material. Likewise, the use of the third is another element that links this section with the corresponding passage in the development (mm. 167–177) that also follows from material dominated by fourths and fifths.

The second half of the transition from the first to the second theme beginning at m. 71 (Figure 5.27a), differs from the first half and therefore it would seem to demonstrate the same sort of discontinuity. However, like the previous bars, it appears to foreshadow the second theme by means of the change in tempo and use of vertical thirds. Its upper voice also outlines the linear interval of a third (Ab to C) which is heard as pedal tones in the bass line of the second theme (Figure 5.27b). This same melodic motion also appears as the initial ascending line of the second theme. Thus, the second half of the transitional passage fixes the new interval of the first half into the specific note pair found in the second theme.

The use of the third as the fundamental interval in an anticipatory section also occurs in the second movement. When the A section returns prior to the fugue (Figure 5.28a), the minor third becomes more prominent than the whole tone which was the basic melodic interval of the opening A section. The intervallic modification of the A material prepares for the following Misterioso section which is based entirely on the interval of a third (Figure 5.28b).

Reference has already been made to the frequent appearances of Introduction material that function as a link between several sections of the Sonata. However, there are some very specific sonorities first heard in the Introduction which reappear throughout the two movements, demonstrating this same network of anticipations and flashbacks. The members of the dyads C♯–E♯ and D♯–F♯, for instance, first heard in m. 2, reappear in
Figure 5.27: a) First movement, mm. 71–73. b) First movement, mm. 83–89. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
Figure 5.28: a) Second movement, mm. 52–62. b) Second movement, mm. 76–77. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
the middle B section of the second movement (mm. 27-35), distinguished by tenutos from their surrounding figuration (Figure 5.29a). The D♯, enharmonically renamed Eb, is of particular importance as it serves as the pedal point before the long linear descent described in Figure 3.14. It appears again as the transposed tonal area at the return of the A section at m. 330 (Figure 5.29b).

Such unifying sonorities are particularly predominant in the closing pages of the Sonata, where the minor third and especially the D♯-F♯ dyad figure prominently. As the final pages unfold, more and more connections are made between the two movements. Many of the motives from the Introduction return again. A varied form of motive A appears in m. 375 and motive Y is heard in m. 373, m. 380, m. 396, and m. 398. Its appearance in m. 380 is of particular importance in that it emphasizes the dyad Eb-Gb (D♯-F♯) which permeates the remainder of the movement, and functions as the goal (m. 409) of this rather elusive material (Figure 5.30a). The octave B and dyad D♯-F♯ that appeared in the opening measures of the first movement return again at the close of the work. The dyads that make up the final chord of the piece have already been anticipated at the outset of the Misterioso section (Figure 5.30b), as well as in the opening measures of the Sonata.
Figure 5.29: a) Second movement, mm. 24-36. b) Second movement, mm. 330-334. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
Figure 5.30: a) Second movement, mm. 404–414. b) Second movement, mm. 76–77. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
Chapter 6

Summary

The various ways in which Carter provides structure and unity in the Piano Sonata have been treated in the preceding discussion, through an analysis of middleground aspects of the work, pointing out the essential materials that characterize its phrases and phrase articulations, and revealing the significance of passages that do not fit into the generalized divisions of sonata-allegro form. No other passage better illustrates a consolidation of Carter's many techniques than the final Maestoso of the first movement.

The method of phrase articulation demonstrated in earlier passages of the Sonata also holds true in the Maestoso passage between mm. 252–264 as shown in Figure 6.31. It is divided into four phrases, beginning respectively at m. 252, m. 256, m. 257, and m. 259. The division between the first and second phrases (m. 256) is marked by the interruptive octaves that were described earlier as characteristic of the common marcato-style cadence. Each of the phrase divisions is marked by a retake in register, a growth in dynamic level, and an increase in texture as found in the three initiating flourishes.

Unifying linear motion also plays an important role in this passage. The lowest voice in the opening five measures contains a line, E, Eb, D, B to A♭ (see Figure 6.31) that, although it appears in different registers, gives an overall descent to the bass. The Eb in m. 254 is particularly significant and its importance will be noted in later measures. In the uppermost voice, an overall rising motion by thirds exists from m. 252 to m. 262, providing contrary motion to the bass line. It begins with the B♭5 and C♭5 in m. 252, moving to D6 and F♯6 in m. 255 and climaxing on B♭7 in m. 263. Beneath this line is a
Figure 6.31: First movement, mm. 252–264. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
parallel ascent beginning with the B₄ in m. 256, moving to D♯₅ and F♯₅ in m. 258 and finally reaching the A♯₅ in m. 260, thereby anticipating the climactic Bb7 of m. 262.

The return of the Introduction material at m. 252 provides another example of the network of flashbacks that has been shown to be such an integral part of the work's structure. The appearance of this material between the first and second themes rather than prior to it as might be expected, shows a further avoidance of the "first you do this, then you do that" syndrome in modern music, of which Carter was critical. The flourishes themselves play a special role in this system of anticipation and flashback; they recall the Scorrevole material within the Maestoso section, thereby combining, in one passage, the two basic contrasting materials that make up the movement, and at the same time, they anticipate the treatment of the right and left hand lines found in the final Coda (Figure 6.32). As in the first flourish in m. 256, the Coda begins with sixteenth notes in the right hand only, but is later joined by the left hand at the octave, paralleled in the second flourish of m. 257. Similarly, the divergence of the two lines in m. 283 of the Coda is anticipated by the third flourish in m. 259.

Like the recapitulation of the first theme material at m. 224, the return of the Maestoso at m. 252 is not simply a repetition of the Introduction material; rather, it presents a further development of the material. The Tempo primo begins like the opening of the movement, but there are some important differences between the two passages. Contrary to sonata-form convention, the passage starts transposed up a perfect fourth. A fuller texture is achieved in the latter passage by the doubling of certain tones. Only the B♭ of m. 253 has no equivalent note in the parallel bar of the Introduction (see Figure 6.31). It is an important addition, as it conflicts with the B natural above it, a conflict which will prove to be the essence of the entire passage. Another important difference between the two passages is the opposition of consonance and dissonance. In the Introduction, the initial B stands as a kind of stable tonic in a B major tonality which is
Figure 6.32: First movement, mm. 279–285. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
gradually broken down with the appearance of the foreign tones E♯, B♯, and Fx. In the later Maestoso, the transposition of B, (E) functions as an unstable, dissonant tone in the midst of a collection of notes, combining the B♭ major and G♭ major triads, that is established as stable in the measures prior to the Tempo primo (m. 249). The dissonant quality of these measures is enhanced by the frequent appearance of conflicting semitones, a feature pointed out in several of the previous passages. The resolution of these conflicting semitones into a consonant sonority is attained at the point where the tonality returns to B major, with the arrival of the F♯6 in m. 255. The progression back to B major is brought about through a momentary divergence from the established transposition, the first flourish (m. 253) being only a semitone above the original, rather than a perfect fourth. At the appearance of the C♯5 in m. 255, the perfect-fourth transposition is reestablished.

The note collections in the remainder of this section rely heavily on the fundamental sonorities found in the Introduction, specifically the C♯ major and D♯ major triads and the C♯–E♯ and D♯–F♯ dyads. The overall harmonic motion of mm. 257–260 is based on three chords as heard in the right hand: B major second inversion, C♯ major second inversion, and D♯ major root position, with the flourish in m. 259 presenting a compression of these harmonies (Figure 6.33). These same collections, and especially the D♯–F♯ dyad have been shown to play an important role in many passages of the Sonata and most specifically the final pages of the work. Against the upper moving B–C♯–D♯ triads moves a contrary bass line in octaves, D♯–C♯–B♭, concluding with a large left hand leap. These are cadential characteristics that are now expanded over five bars. The enharmonic equivalent of the D♯ (Eb) reappears between the two statements of the B♭ octaves (m. 262). It was this same tone that served as the pedal point in the extensive second movement passage (see Figure 3.14), and appeared as the transposed tonal area at m. 330 of the same movement. Its prominence is significant as it is the only common tone,
Figure 6.33: First movement, mm. 255-264. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.
other than A♯/B♭, between the two main harmonic areas of B major and B♭ major.

The final three measures of this section (mm. 262–264) show a very dramatic example of how Carter extracts specific tones out of a larger collection. The chords found in m. 262 and m. 263 are a combination of B♭ major and G♭ major triads, which again recall the earlier measures (m. 249). The composer indicates that the only notes from this combined collection to be left sounding are those of the B♭ triad. This is achieved by leaving these keys depressed while executing a change of pedal. This is followed by the main climactic point of the movement, in which B♭ octaves appear in the greatest possible range, a span of seven octaves. In m. 263, the tones extracted from the collection are now those of the G♭ major (F♯ major) triad, showing the conflict between the B major and B♭ major tonalities in its starkest form.

The stretto portion of the second theme (Figure 6.34), now an augmented fourth

Figure 6.34: First movement, mm. 265–267. ©1948 Mercury Music Corporation. Used by Permission of the Publisher. Sole Representative, Theodore Presser Company.

higher than the original material, emerges out of the isolated F♯ of m. 264. It also takes on a different character from its appearance in the exposition. Since the climax of the movement has been reached, this theme need no longer possess the same intensity it had in the exposition. Instead, it provides a moment of calm separating the dramatic climax from the fury of the final closing measures.
The architectural ingenuity found in Carter's Piano Sonata makes this work one of the most important contributions to twentieth-century piano literature. As William Glock stated:

"The true criterion is whether the music says something worth saying. In Carter's case, there seems no doubt on this point, for one can hardly help being impressed by the intensity of expression and by the imaginative power of the music, in terms both of the sheer sound and of the grandeur and subtlety of organization." (Glock 1955, 52)

The compositional techniques used in the Piano Sonata establish the essential features of Carter's mature style. Many aspects of his writing found in the compositions from 1945 to the present can be traced back to the ideas explored in this study. The use of metric modulation in the *Cello Sonata* (1948), the association of specific intervals and sonorities with certain instrumental groups in the *Double Concerto* (1961), and the overlapping of material from different movements in the *Symphony of Three Orchestras* (1976), are just a few examples of techniques that stem from the Piano Sonata of 1945. An understanding of these middleground features is therefore essential, not only for a deeper appreciation of the Sonata in particular, but also for a greater insight into Carter's compositional style in general.


