CHAPTER III

A DUET FOR VIOLAS, OP. 94

Perhaps no area of music repertoire has more enjoyed the liberation from functional tonality in this century than the solo and duet literature. With the notable exception of Bach's solo works for violin or cello, the works written in the Baroque, Classic, and Romantic styles for one or two melodic (as opposed to chordal) instruments generally relied upon implied or assumed harmony. Consequently, these works often sounded as if they might be improved by the addition of another voice. Such works generally fell into one of two categories: "consumable" music for enthusiasts, and pedagogical literature for the student.[1]

The present century has witnessed a renewed focus on the melodic, rhythmic, and contrapuntal aspects of music, and this has provided fertile ground for exploration in the solo and duo genres. Works for unaccompanied stringed instruments by Ysaÿe, Bartók, Hindemith, Badings, Bacewicz, Kodaly, Krenek, and Messiaen, as well as duos by Ravel,

[1] Even the works of J.S. Bach were not always distinguished from these categories. Schumann and Mendelssohn both supplied piano accompaniments for the Six Sonatas and Partitas for Unaccompanied Violin, BWV 1001–1006, and the publisher's preface to Leopold Auer's *Twelve Characteristic Preludes*, op. 9 (New York: Carl Fischer, Inc., 1924) lists the Bach works alongside etudes of Kreutzer, Rode, Rovelli, Fiorillo, Gavinies, and Campagnoli as "instructive material" preceding the "admirable" works by Dont, Wieniawski, Ernst, and Paganini.

Kodaly, Prokofiev, and Martinů, represent only a handful of the important and serious works written in this century for these smallest of ensembles, works which have enriched the post-Romantic repertoire. Arnold Rosner (who has also added to the unaccompanied string repertoire with his *Danses a la Mode* for cello [and its subsequent arrangement for violin], op. 101) has made an important contribution to the non-tonal duet literature with his 1991 work *A Duet for Violas,* op. 94, as well as to the even sparser repertoire of works, from any stylistic period, for two violas.

Although this work is the most recent of the three being examined, it serves as a logical starting point for a specific discussion of these works, because it features the contrapuntal style which is the basis for much of Rosner's melodic and harmonic generativity. It was composed in 1991 for Jeffrey Irvine and Lynn Ramsey, professors of viola at Oberlin Conservatory, in appreciation for their assistance with the recording of Rosner's fourth quartet by the Alorian Quartet.[2]

A Duet for Violas received its premiere at the opening concert of the twenty-first International Viola Congress, held at Northwestern University in 1993, with the dedicatees performing. It was subsequently performed and recorded in 1994 by Diedre

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[2] This compact disc recording, titled "A Second Trio of Quartets," (Opus One CD 150) also includes Irwin Swack's fourth quartet played by the Ondine Quartet, and Lester Trimble's first quartet played by the Sierra Quartet.

Buckley and Mark Ottesen, respectively the incumbent and former violists of the Ad Hoc String Quartet. The recording was reviewed by Walter Simmons, who praised the work for "a tightness of focus and concentration of expressive intensity reflective of a greater compositional maturity. I find it a thoroughly consummated work…skeptical listeners are likely to be pleasantly surprised."[3]

The work is in two movements—*Adagio* and *Allegro*—which are to be played without an intermittent pause.[4] In addition to reflecting the duality of the ensemble in the large-scale form, this structure also invokes the familiar feel of the paired works of the Baroque, or perhaps the *Introduction and Allegro* of the Romantic period. The choice of this bipartite structure and the dedication to a married couple might be more than mere coincidence, especially considering the penchant for mathematical significance which is idiosyncratic of Rosner's compositional style.[5]

The discussion of this work is more technical in nature than that of the two which follow, and borrows more from the terminology and concepts of modern post-tonal

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[3] Walter Simmons, *Fanfare* 20:5 (May/June 1997), 230.

[4] The use of the term "movement" here merits clarification. It might be argued that the work is technically in a single movement of two contrasting sections, which are joined *attacca.* Furthermore, Rosner closes the *Adagio* with a single barline, and numbers the measures consecutively, with the *Allegro* section beginning in m. 69. Nonetheless, the term "movement" is appropriate here in its most literal sense, and less confusing than "section" in this context.

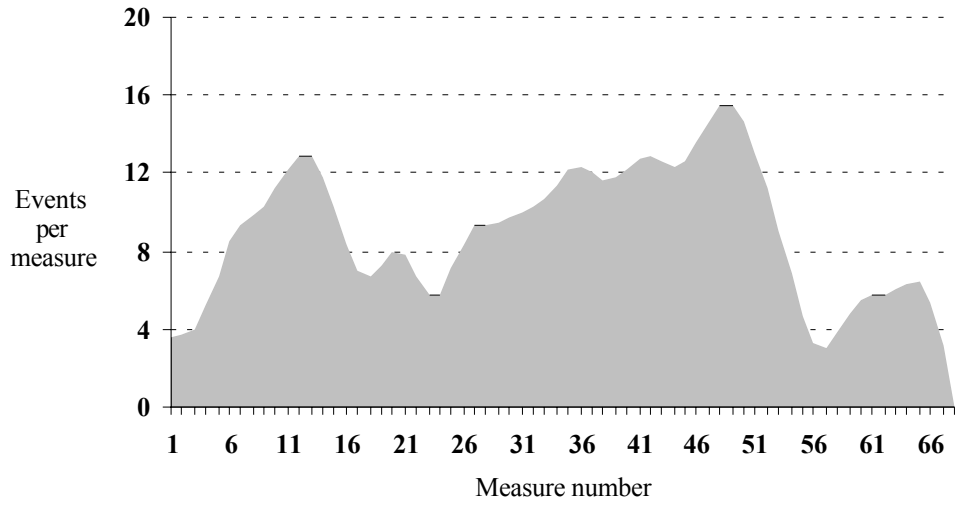
[5] Another two-movement string chamber work is the Sextet, op. 47, also dedicated to a musical husband and wife team.

analysis methods. This is largely due to the nature of the contrapuntal writing, as well as to the relative scarcity of triadic materials, which requires a reliance upon implied harmony; these factors combine to render some of the methods of traditional analytic observation less relevant.

FIRST MOVEMENT: *ADAGIO*

RHYTHM. The predominant feature governing the progress of the first movement is the pace of rhythmic activity. The interplay of the two voices, and the resulting aggregate rhythms, is of central prominence. Figure 3.1 shows the progress of rhythmic activity throughout the movement in a graphic representation. This was generated by tabulating the melodic events (appearances of new pitches) in each measure, and plotting a third-generation moving average at the three-measure level. The repetitive

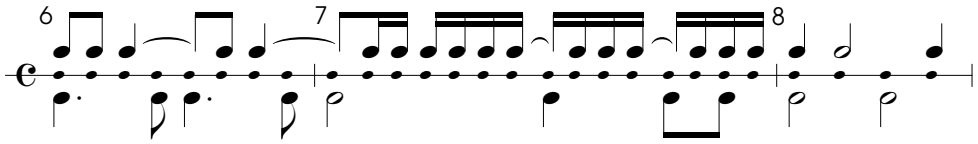
FIGURE 3.1. Op. 94, i, Surface rhythm topography.



averaging creates a smoother graph, emphasizing large-scale motion.[6] From this graph it can be seen that the overall pace of rhythmic activity is essentially three crescendos of varying degrees, the middle one occupying the majority of the movement.

The use of aggregate rhythms is important in both movements of the Duet. The first movement is entirely contrapuntal; virtually no homophonic motion exists. Rather, unity between the parts is achieved in places by assigning complementary rhythms, with

FIGURE 3.2. Aggregate rhythms, op. 94, mm. 6–8. Viola I is above the staff line, Viola II is below, and the surface rhythm is indicated by noteheads on the line.



the sum of attacks providing a regular and continuous rhythmic patter. Figure 3.2 shows how the overall pace in mm. 6–8 changes from eighth notes to sixteenth notes to quarter notes. Such passages must be rendered with a sensitivity toward the entire rhythmic

[6] This approach of averaging already averaged data is similar to calculating tertiary derivatives in calculus. While subsequent averages will progressively smooth the graph, asymptotically approaching a straight line, the method cannot create a contour opposite to what the original data support.

Calculating the pace of surface rhythmic events for measures of varying duration is somewhat problematic. For these data, 4/4 measures were considered the norm. The values of shorter measures were increased in proportion to the shortness of the measure, so that for example, a 3/4 measure with six events would receive a value of eight. A more sophisticated (and complicated) approach could be applied, calculating events on a shorter metric unit, but the overall shape of rhythmic activity would be similar, and little benefit would be realized.

fabric, with each player making their own attacks prominent, and relegating sustained material to a more subservient role.

MELODY. Before investigating specific melodic concerns, it will be useful to establish a level of familiarity with the octatonic scale, which figures prominently in op. 94. While the use of this modal set is seen in limited degree in the other two works under discussion, neither work employs this feature to the extent seen in the Duet. Familiarity will be aided by practicing three-octave octatonic scales and applying metrical, rhythmic, and articulative variations such as those accompanying the three-octave major and minor scale exercises suggested by Galamian.[7] Finding a comfortable fingering for passages which employ these scales can be deceptively difficult. Standard fingering theory considerations, such as shifting on semitones, preserving intervallic spacing in the fingers, avoiding excessive consecutive shifts (e.g., 1–2–1–2–1–2), and avoiding large shifts (spanning a range greater than three positions) become incompatible aims, often forcing the player to choose between two or more awkward fingerings.

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[7] See Ivan Galamian, *Principles of Violin Playing and Teaching*, 2nd ed. (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1985), 96–8. Here Galamian offers several rhythmic variations to be applied to a 48-note scale. The more exhaustive variations presented in Galamian's and Frederick Neumann's *Contemporary Violin Technique*, Vol. I (New York: Galaxy Music Corp., 1966) offer little added practical advantage here, save for the written-out acceleration exercise on p. 5.

FIGURE 3.3. Three-octave octatonic scales, with fingerings suggested by the author

Two solutions are offered in Figure 3.3. In this example, the upper fingering maintains semitone spacing where possible between first and second fingers and between third and fourth fingers. The lower fingering places the semitones between second and third fingers. As in the diminished seventh chord, the fingers move one semitone lower when crossing to a higher string, and the one semitone higher when crossing to a lower one. The lower fingering, with a semitone between second and third fingers, is more familiar to the tonally trained hand, as this occurs frequently in major and minor scales. The spacing of the upper fingering, with semitones between first and second fingers and third and fourth fingers, only occurs diatonically in scale degrees 7^8–2^3 of the harmonic minor and ascending melodic minor scales. However, the relative comfort

gained by using the 1–2^3–4 finger spacing is offset by the resulting extension (or half-step shift) encountered when crossing strings in either direction.[8] Other fingerings can and should be investigated, including coordinating shifting with the metric groupings, and fingerings which favor lower positions and open strings for greater security. Each individual should strive to find a fingering which uses their own fingering style to the best advantage.

In practicing these scales they should be transposed to all tonics, applying the various fingering principles to the transposed scales. The benefit of such work will become quickly evident. The scales will begin to sound more familiar, and the semitones will lose their directional force in the ear. Until this is achieved, it will be difficult to perform the music which uses these scales without added intonation problems.

As mentioned earlier, the work begins with a twelve-tone row (fig. 3.4). Examining this row closely offers insight into the composition as a whole. The construction of the row is such that the opening does not sound atonal (nor is it), and it would take an astute listener to discover the serial nature of this melodic line. Various properties of the row are worth examining. The melodic shape, taken without regard to specific pitch, could belong anywhere in the common practice era. There is an elegance

[8] The carat symbol (^) denotes half-steps.

FIGURE 3.4. *A Duet for Violas*, op. 94, mm. 1–4: Initial row statement with pitch-class numerals (PC0=C)

and simplicity in the balanced rhythms and overall gentle arching contour. The semitone motion between beats 1 and 3 of m. 1 (pitch classes 9–10), and the downbeat-to-downbeat motion of an ascending minor third in mm. 1 and 2 (PC9–6)[9], are answered by the notes in identical rhythmic positions in mm. 3 and 4, evoking a Classical sense of antecedent-consequent phrase. The entire line, rich with chromatic motion (including the resolution in m. 5, fully half of the first twelve melodic intervals are half-steps), imparts a variety of potential tonal suggestions, while the division of the four measures into four non-overlapping registers underscores the symmetry of the phrase.

[9] Throughout this chapter, the designation "PC" is used to precede numerals representing *individual* pitches. These pitch classes will be used when the focus is upon intervallic or chordal considerations where letter-based names would improperly emphasize or suggest tonal relationships which are not relevant. To further avoid confusion, a fixed pitch-class system has been adopted consistently here, even when a tonal center is present. Hence, PC0=C, PC1=C♯/D♭, PC2=D, and so forth.

When pitch-class *sets* are described, the customary notational practice of enclosing the numerals in braces will be observed (e.g., [0,3,6,9] in footnote 10 of the previous chapter). However, the permuting of the sets to determine prime forms, which is essential to analyzing atonal music, is of no practical value here. Hence, sets will tend to appear in "normal" order, but not inverted or transposed to achieve prime order. For more information on set orders, read Allen Forte, *The Structure of Atonal Music* (New Haven: Yale University Press, 1973), 3–13.

Mitigating these traditional "classical" elements, however, are a number of "modern" details. Each measure begins a tritone above the previous note, and the line contains no perfect fourths nor fifths. The semitone pairs (*a*—*b♭* in m.1, *a♭'*—*g'* in m. 3) which anchor the two halves of the phrase are followed both times by a note a third beneath, creating a sense of major/minor ambiguity from the very outset of the piece (PC9–10–6 in m. 1; PC8–7–4 in m. 3). And the melodic element which appears most prominent is the octatonic ascent in the first two measures (PC9–10–0–1–3, excluding the metrically and melodically disadvantaged *g♭*), followed by the octatonic collection PC8–7–4–5–11–10 beginning in m. 3.

While the performers obviously do not need to be experts in post-tonal analysis to play this Duet, examining the presence of these contradictory conservative and modern elements even in the initial statement sets the tone for an effective approach to the piece as a whole.[10] To assume that simplicity in gesture equates with simplicity in substance would indeed be selling the work, and the eventual performance, short.

The well-informed performer (or listener), upon discovering that the opening theme is a tone row, might instantly launch into an investigation of the ensuing material

[10] Overall, the discussion of the op. 94 duet involves more of the terminology and concepts of twentieth-century music analysis than that of the other two works. This is largely because of the focus on the two-voice contrapuntal style, the use of the non-traditional (octatonic) scale, and the relative lack of tertiary harmony.

in search of inversions, retrograde forms, and the like. But only frustration awaits the dodecaphonic sleuth. As the composer states, “Listeners who know my music may find it hard to believe that the Duet begins with a twelve-note permutation, or row, but I assume they will be relieved to know that nothing in the continuation and development resembles serial treatment.”[11]

This movement is nearly devoid of rearticulated pitches, a fact which underscores the contrapuntal derivation of the melody. Of the nine occurrences of repeated pitches, eight appear in contexts where the repeating pitch is combined with a different one in the same voice (*g* in m. 13, *d* in mm. 20–1, *d*' in m. 27, *g* in m. 34, *a*' in m. 37, *f*♯'in mm. 38–9, *g* in m. 54, and *b*♭ in m. 66), so that the repetition does not have melodic significance. Only in m. 32 are pitches rearticulated for rhythmic impetus (*a*' and *d*'), and even here the chord changes after each sixteenth-note repetition.

HARMONY. In the usual sense, harmony is not a central force in the first movement. Rather, it is an incidental byproduct of the juxtaposition of the contrapuntal lines. Certainly, as is the case with any musical performance, careful attention to intonation is crucial to a successful rendition of this work, but here the vertical intervals

[11] Arnold Rosner, liner notes to *Chamber Music of Arnold Rosner, Volume II* (Albany 210), 2.

must be approached simply as vertical intervals, without falling into the usual tonal-harmonic methods of evaluating the music. Jan LaRue reminds us that counterpoint and harmony are at once opposing and related elements: "It is useful to place Harmony and Counterpoint at opposite poles, contrasting the horizontal, linear approach with the vertical, block-chordal approach.…[these] form the two ends of a single continuous spectrum, and we will quickly find that discussions of one aspect tend to overlap the other."[12]

Another particular challenge in successfully interpreting Rosner's music involves the issue of balance between parts. Because the harmony is contrapuntally derived, it is often far from obvious which line or lines should predominate. In the Duet, attention to balance becomes all the more essential. The dynamic indications are almost entirely in parallel,[13] but this does not release the performers from the necessity of making decisions regarding balance. The dynamics must be considered aggregate dynamics, achieved

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[12] Jan LaRue, *Guidelines for Style Analysis* (Warren, Michigan: Harmonie Park Press, 1992), 45–6.

[13] The only absence of parallel dynamics in the Duet is found in m. 19, where the second voice is marked ***pp*** against ***p*** in the first. This ***pp*** is clearly the end of the decrescendo in the second part. The performer should endeavor to play the open-string "drone" pitches in mm. 19–20 in ***pp***, while playing the melodic subject in ***p***, to avoid a strange and inconsistent increase in volume in m. 20, as shown below (dynamics in parentheses are added by the author).

through the combining of two often unequal voices. This consideration of combined sound brings to mind the terraced dynamics of the Renaissance and Baroque periods. Only occasionally does the movement depart from the contrapuntal style, such as in mm. 13–8, mm. 37–41, and mm. 54–8, in which one part steps out of a melodic role to serve as accompaniment to the other.

The decision of which line to emphasize at a given point is often neither obvious nor subjective. Consider the opening subject in the first movement. Each time this subject reappears, it is coupled with a different countersubject. Should the subject be emphasized to underscore the fuguelike nature of the structure? Or should the transposed repetitions serve as a foil for the countersubjects, highlighting the variation technique at work? Such questions must be investigated thoroughly, and will lend an individual and distinctive interpretation in performance. Failure to adequately evaluate such balances creates a textural homogeneity that can result in a mellifluous sound, thereby rendering performances of the music heavy and lifeless.

STRUCTURE. Like the melody, the form of the first movement is similarly a mixture of conservative and progressive elements. The direct imitation of the opening unaccompanied subject by the second voice strongly suggests fugal procedure. Although the imitation is at the seventh, the disorienting effect of the tritone shifts in the opening

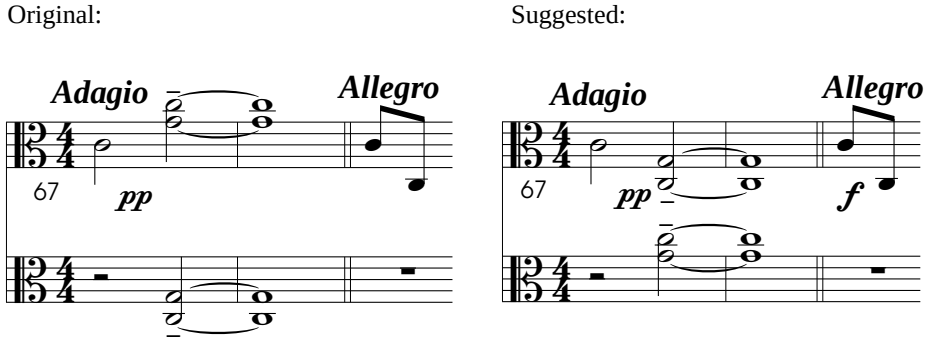
subject is such that the second voice sounds like a plausible real fugal answer. But when the first voice reappears in m. 9 (at the interval of a fourth above statement two, or a fifth above statement one), it is coupled with a countersubject entirely different from that of the second statement. In nine appearances of the subject, no two countersubjects are alike. The compositional procedure is best described as a hybrid of fugue-like imitation and variation form.

Meanwhile, the large-scale motion of the first movement is governed largely by rhythmic and dynamic trends. Four crescendos of increasing duration occupy 80% of the movement, with the last dozen measures taking on the role of epilogue. This closely mimics the surface rhythm topography on page 34 above. In general, Rosner is not overly specific regarding dynamics. The dynamic level and direction is typically indicated at the phrase level, but some degree of latitude and contour dynamics is expected, and many decisions need to be made and pencilled into the parts in the preparation stage. When Rosner discusses performances of his music, he rarely criticizes a performer's choice of dynamics. Absence of dynamic interest, however, is another matter entirely, and one which must not be tolerated. Sparsity in printed dynamics does not release a performer from the responsibility to continuously breathe life into the sound fabric by varying the amount and quality of sound. The unaccompanied string works of Bach provide a fitting example of this, with dynamics typically printed only for echo effects.

For example, the piece reaches ***fff*** in m. 45, with no other dynamic indicated until m. 56. Obviously, maintaining the ***fff***, especially on the long notes in mm. 51 and 55, is neither feasible nor desirable. The maxim to interpret dynamics as indications of intensity rather than simply volume is as vital to Rosner's music as any other. The intensity of a ***fff*** can be prolonged by strong articulation and a bright tone with the bow near the bridge, while allowing loudness to vary with melodic contour. Meanwhile, subtle transformations in the speed and amplitude of the vibrato should also contribute to the sense of growth throughout this long passage. In this way, the desired effect can be obtained.

Creating an effective transition between the two movements requires special attention. The somewhat awkward task of attacking the ***pp*** dyads in m. 67 can be avoided if the two players switch lines mid-measure (see fig. 3.5). This is advisable for two reasons: The higher part can be easily prepared by the second voice during its two-beat rest, and the first voice can better prepare for the sudden change of character while

FIGURE 3.5. Suggested voice exchange, op. 94, mm. 67–9



playing the easier chord. In my direct experiences with the composer, Rosner does not object to voice exchanging for facility's sake, as long as the integrity of the melodic line does not suffer, the instrumentation is not altered, and all material is accounted for. This is consistent with the keyboard-based compositional approach, which was discussed earlier in regards to intonation.

The second movement begins *attacca*, and the sense of continuity from the first movement is strong. Contributing to the strength of this connection, the first viola begins on middle C. This is the specific pitch which concludes the enigmatic first-movement coda section (downbeat of m. 67) and which is notably absent from the center of the final open-fifth chord.

SECOND MOVEMENT: *ALLEGRO*

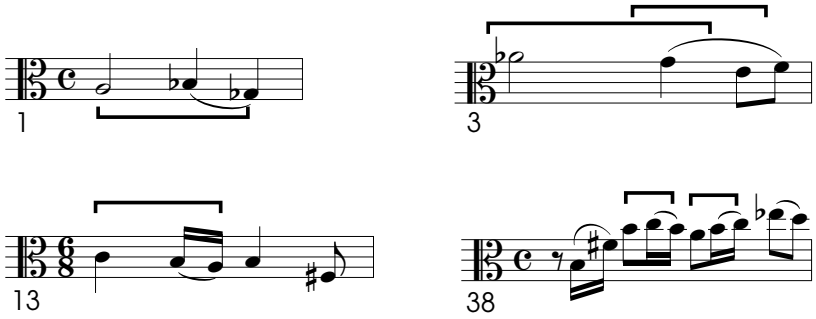
RHYTHM. The buoyant exuberance with which the second movement sets forth offers an immediate contrast to the more ponderous first movement. This exemplifies the Romantic notion of a work as a process, revealing the struggle ending in the attainment of a triumphant goal, a notion which appears frequently in Rosner's music.[14] Most striking,

[14] Rosner uses the phrase "durch Nacht zum Licht" in discussing his third string quartet in an interview with Bettina Ciechowski on 16 March 1997, quoted in her dissertation. In a similar vein, he uses the words "suffering and redemption" in describing the overall sense of the two movements in his Sextet, op. 47 (Pre-performance remarks, Northwestern University, 26 February 1998).

though, is the rhythmic opposition between the two movements. The rhythmic cell which pervades the first movement is the dactyl rhythm ("long-short-short"), while the prominent material of the second movement features the anapest rhythm ("short-short-long"). Figure 3.6 displays these rhythms as they appear in the melodic material of both sections, indicated by heavy brackets. There are, of course, numerous occurrences of each rhythm in both sections, but the melodic prominence of the material in these examples

FIGURE 3.6. Prominent rhythmic cell of op. 94

First movement:



Second movement:

sets them apart. This retrograde relationship unifies the two movements, and at the same time, situates the perceived axis of symmetry between them.

Repeated aggregate rhythms appear in the *Allegro* as well, but to a lesser extent and with less prominence than in the *Adagio*. Typically these are running sixteenth notes, created by combining the anapest pattern either with its retrograde, or with a dotted-eighth–sixteenth pattern. No lengthy sequences of these rhythms are present here. The energy of the front-loaded motive is sufficient to propel the music forward without the need for further intensifying the surface rhythm.

The prevalence of this driving rhythm, coupled with a regularity of meter that persists almost throughout the bulk of the movement, creates a feeling comparable to perpetual motion. The tactus remains largely undisturbed. The few exceptions to the four-beat-measure norm are summarized in table 3.1. In each of these instances, the continuation of the quarter-note beat, although challenged, can persist in the mind of the listener. In mm. 108–19, there is a certain level of metric ambiguity, which is increased with the divisibility by four of the two sections. It is important that the performer realize the implication that this strength of rhythmic drive has upon the performance of the work. Whereas the first movement will allow for, and even benefit from, a tastefully restrained degree of temporal flux, such liberties taken with the pacing of the second movement will only detract from the vitality inherent in the work. Only in mm. 137–41 should the metric

machinery be allowed to falter, and here the hesitation is written in, so that any additional variance in tempo must be subtle. The overall effect in these measures is a wonderfully humorous moment, where the parts almost sound as if both players are lost and groping around for each others' line; then suddenly, the last ten measures appear from the rubble. A certain amount of *piu mosso,* again subtle, will make this ending even more effective.

TABLE 3.1 Atypical meters in op. 94, ii

MEASURE[15]	METER	REMARKS
78 & 79	9/8 (3/4 + 3/8)	Metric "hiccup" created by expansion of fourth beat
108–111	3/4	Two-measure idea, repeated with exchanged voices. Textural accent in accompanying voice creates ambiguity of notated 3/4 + 3/4 vs. perceived 4/4 + 2/4
112–119	6/8	Further voice exchanges on two-measure ideas. Notated accents (in mm. 112, 114, and 116) create metric conflict between parts.
137–141	5/4	Five measures, with quarter rests on fifth beat of each. Creates feeling of hesitation prior to final closing.

MELODY. As in the first movement, imitation is prevalent here, but the associations with the fugue are less apparent. This is largely due to the canonic imitation at the outset of the *Allegro,* where the first two measures of the upper line are repeated at

[15] In the score, which is the only extant printed version, there is an error in measure numbering, causing all measure numbers after 76 to be numbered one less than the actual measure number. For simplicity's sake, the measure numbers in this discussion will correspond with the printed score.

identical pitch in the lower in mm. 3 and 4. The theme appears in m. 74 beginning on F♯, and is answered in m. 76 a minor third higher. A similar instance of imitation occurs in m. 98 where the opening theme begins on D, and is answered in m. 101 a major third lower.

FIGURE 3.7. Op. 94, ii, initial statement of theme

This distinctive opening theme, like that of the first movement, will reward the performer who takes the time to examine it closely. In contrast to the first movement theme, which avoided tonicization, here the presence of the repeated pitch *c*' firmly establishes a harmonic root. In m. 70, the first two notes combine with the *c*' to create a sense of major/minor ambiguity, while the overlapping four-note melodic groups E♭–E–F–E and E–F–G–F♯ , which are conspicuous because of their placement atop the melodic contour, invoke the memory of the second measure of the *Adagio.* The subsequent return to *c*' and following leap to *g*' reinforce the panmodal triad. The final semitone descent to *f* ♯' adds the suggestion of a diminished triad, and frames the entire subject within a tritone, the same interval which figures so prominently in the *Adagio* theme.

Like the harmony, the melody is also closely tied to the octatonic mode. Exercise caution with accidentals. The transpositions are exact, with trivial exceptions. The descending octave is raised an octave in m. 76; were this not the case, the lower octave *A´* would be below the range of the instrument. And the *d* which alternates with the lower octave *e♭* in the anapest rhythm in m. 120 is a semitone below, as opposed to the whole-tone alternation which appears everywhere else.

Literal voice exchanges occur in mm. 108–16. The performers must attempt to match not only articulation, but also dynamics, timbre, and phrasing. Whatever timbral difference lies between the two instruments will provide sufficient individuality to distinguish the lines; no attempt should be made to further differentiate them.

The pizzicato chords in the first viola (mm. 88–93) are cumbersome, and marked ***fff***. All of the three-note chords in this passage are root-position open-fifth trichords. Consequently, fingering them all with second and first fingers offers two advantages that outweigh the inconvenience of the extra shifts. First, the intervallic spacing of the hand is preserved. Second, the fifth is stopped with the second finger, which is the widest and least diagonal of the available choices. The chords will sound more loudly if struck in a broad, diagonal motion, extending the right index finger and moving the right arm from the shoulder.

The lengthy trill on the open *c* (second viola, mm. 142–7) is rather awkward, and difficult to execute cleanly. Any first-finger open-string trill is inherently weak, both because of the lack of security in the gripping the neck of the instrument, and the rarity of the task. Three considerations will assist in producing a clearer and stronger trill: (a) Adjust the speed of the trill. Too fast a trill sounds muddled, and consequently slower than one that is actually slower, but cleaner; (b) trill slightly sharp on the *d*♭ upper note, for greater distinction in pitch and to facilitate the string speaking quickly; (c) consider anchoring the first finger on the G string at the nut, and trilling the *d*♭ with the second finger.

A couple of interesting melodic items merit mention. In m. 80, there is a four-note motive, *b*"–*c*'"–*a*"–*g*♯", which is a transposition of the Shostakovich signature motive, D–S–C–H. The pitches appear ***ff*** in even quarter notes, in the highest register of the entire Duet, and the passage contains the greatest registral separation between the two parts. When asked about this, Rosner denied any conscious attribution, pointing out that the occurrence of these pitches is likely in music based upon octatonic scales.[16] Even more remarkable is the resemblance of the melodic line in the second viola part in m. 120 (following a significant rhythmic cadence, and marked *subito* ***mp***, from ***fff***) to the

[16] Correspondence from Arnold Rosner, 23 September 1998.

FIGURE 3.8. Comparison of op. 94, mm. 120–1, with Bartok, Concerto for Viola and Orchestra, op. posth., mm. 1–2 (© Boosey & Hawkes, Inc., used with permission)

opening of the Bartok concerto for the same instrument (see fig. 3.6). Regardless of whether these similarities are playful salutes to earlier masters, or the workings of the subconscious mind, such references in music provide an additional element of reward to the attentive and informed musician.

HARMONY. The importance of the octatonic scale, which lent a particular harmonic flavor to the first movement, is elevated to a central and integral role in the *Allegro*. Far beyond being a mere feature, the octatonic mode becomes the defining harmonic material, to an extent that virtually redefines consonance and dissonance by inclusion or exclusion from the modal collection. The use of the octatonic scale as

organizing material also appears in larger strata of the compositional process. The opening melody is stated nine times throughout the movement, transposed to start on various pitches.

TABLE 3.2. Op. 94, ii, transpositions of main theme

Measure:	69	71	74	76	80	98	101	120	149
Starting pitch:	C	C	F♯	A	G♯	D	B	E♭	C
PC:	0	0	6	9	8	2	11	3	0

These starting pitches, when arranged in normal order (pitches F♯, G♯, A, B, C, D, E♭, or in pitch-class notation [6,8,9,11,0,2,3], transposable to [0,2,3,5,6,8,9]), form seven consecutive notes of the mode 2 scale, third transposition, as defined by Messiaen.[17]

To understand how mode replaces key as an organizing feature, the criteria for evaluating the governing mode must first be established. In the Allegro, a remarkable majority of the notes can be assigned to one of two octatonic collections, namely, the first transposition [0,1,3,4,6,7,9,10] and the third [0,2,3,5,6,8,9,11]. The remaining

[17] Messiaen's nomenclature for describing the transposed modes is employed here, although the term "transposition" might seem to wrongly suggest that there exists an untransposed version. It is tempting to borrow the chordal terms "root, first, second," etc., but that would bestow an inherent elevated importance upon one mode over another.

transposition, the second [1,2,4,5,7,8,10,11], curiously only appears in m. 107, where it fits exactly. When a measure does not fit the incumbent transposition, it becomes readily apparent, because the level of dissonance suddenly jumps higher than the average of slightly more than one note per measure. In most of these cases, another transposition becomes obvious when placing the employed pitches in scale order.

TABLE 3.3 Transposition of governing octatonic modes in op. 94, ii

Measure numbers	Segment length[18]	Transposition	Remarks
69	10	1	
78	10	3	
88	6	various	Transposition by measure: 1–3–x–3–3–3
94	10	3	Two segments, 4+6 measures
104	3	1	
107	1	2	
108	18	1	Three segments, 4+8+6 measures
126	8	(1)	Chromatic, but closest to transposition 1
134	19	1	Two segments, 8+11 measures

In all, a search for notes outside of the governing mode reveals only 79 modally dissonant *notes* in 83 *measures*.[19] Disregarding the largely chromatic passage in mm. 126–33 improves the consonance factor to 63 pitches in 75 measures. Table 3.3 shows

[18] The original measure numbering is preserved; for an explanation, see footnote 14 above.

[19] Oddly, m. 90 is the single measure which fits no transposition of the octatonic mode. This measure is represented by an ‘x’ in the Remarks column for mm. 88ff.

the assignment of these modes to the music, and reveals medium-level structural segments, which interchange and balance much like the tonal key areas in a classical work.

STRUCTURE. The form of the *Allegro,* like that of the first movement, is loosely similar to, rather than tightly cast in, a standard form. As discussed above, the opening two-measure idea contains the genetic code for most of the material that follows. In a sense, this is a monothematic movement. The return of the theme, easily identifiable by the downward octave leap and distinctive anapest rhythm, provides structural anchor points invocative of rondo form, although the transposition of the theme to a fourth and tritone above the original defy the textbook definition for that form. If a formal label is helpful, the performer may think of this movement in terms of a four-part ritornello form.

This return occurs three times, in m. 98, m. 120, and m. 149. Each time, the rhythmic machinery is interrupted at these points, creating a rhythmic, if not harmonic, cadence point. The four-beat *d* in the upper part in mm. 97–8 (following two quarter-notes, an augmentation of the anapest motive), is the longest undisturbed note value in the movement thus far, and ties across the barline into the first return. The length of that note is surpassed in the movement only by the C-minor chord in mm. 118–9, which lasts three full beats in duration, and precedes the second return (the one with the

aforementioned Bartók reference). The final return is led into by the five-measure section (137–41) in 5/4 meter, in which each fifth beat is empty, as if the music is needing to catch its breath before the “sprint to the finish.” The return to a tonic pedal on the trill in mm. 142–8 serves as the start of the final ritornello, even though the theme itself is withheld until the last four measures of the work.

The performer would do well to pay attention to the places where the texture changes, as these places correspond either with mode shifts or ritornello passages (sometimes both). This will aid in achieving a grasp of both the inner and large-scale structure of this movement, and provide for a more directed sense of movement.

Imitative entrances of the opening material become less prevalent as the movement proceeds, as the measure numbers in Table 3.2 indicate. (this was the case in the first movement as well, although to a lesser degree. This scarcity makes the reappearance of the theme increasingly important, and particular prominence must be given to these lines in mm. 98 and 120, where they follow developmental passages. In both of these cases the theme is paired with contrasting lyrical material. The distinction should be present, but discreet; subtle emphasis of the melodic line by articulation is to be preferred over the more obvious method of simply playing the theme more loudly.