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[Signature]
PERFORMANCE PRACTICE CONSIDERATIONS
IN SIX SELECTED STRING QUARTETS

A thesis submitted to the
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of the University of Cincinnati
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requirements for the degree of
DOCTOR OF MUSICAL ARTS in CHAMBER MUSIC
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by
Robert John Young
B.M.E., Northwestern University, 1959
M.M., Northwestern University, 1965
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CHAPTER I

INTRODUCTION

In the history of the string quartet many diverse styles of writing have developed. Six works that demonstrate this diversity have been chosen to illustrate various aspects of string quartet composition. In addition, performance practice considerations are presented to enable an ensemble to learn these works more swiftly and properly. The six pieces include Mozart's String Quartet in C Major, K. 465; Beethoven's String Quartet No. 10 in E Flat Major, Op. 74; Brahms' String Quartet in C minor, Op. 51, No. 1; Webern's Six Bagatelles for String Quartet, Op. 9; Bartók's Sixth String Quartet; and the Lutoslawski String Quartet.

The works mentioned above were chosen for several reasons: The Mozart quartet represents the culmination of the Classical era. Op. 74 of Beethoven offers an example of a transitional style between Mozart and the later Op. 51 quartets of Brahms. Webern's Op. 9 shows characteristics of early twentieth-century atonal practices and reveals traits found in later compositions. The Sixth String Quartet by Bartók was chosen because it contains a summation of the new techniques introduced in his earlier quartets and is felt to be the most representative of his style. Lutoslawski's quartet...
is an example of the current avant garde in string quartet writing.

Through discussions of (1) musical style and (2) technical aspects of rehearsal and performance, this study will attempt to arrive at a justifiable procedure for interpreting each of the above-mentioned works as well as others of like genre.

The area of musical style will include discussions of tempi, dynamics, phrasing, and articulation. No attempt will be made to give a harmonic or formal analysis unless it is felt that this would directly affect musical style. References will be made to articles or writings pertaining to the point in question, and other pertinent information will be included when it has some bearing on the interpretation of the work. Technical aspects of rehearsal and performance will include solutions to problems such as the use of the bow, special difficulties in the left hand, various types of pizzicato, and new twentieth-century techniques.

Because of the nature of this paper, there will not be a complete, measure-by-measure, stylistic or technical analysis used in describing each of the six quartets. However, certain sections of a movement or passage have been selected for detailed study as being the most representative of the point in question. At other times a simple statement will cover the entire work.
Comparisons between the quartets will be made with regard to musical style and performance technique. Since such a diversity of works is represented in this paper, with a span of almost 200 years between Mozart and Lutoslawski, a large variety of technical and stylistic elements is used in these pieces. This can be shown to lead to some musical trends in string quartet playing. Even though much has been written about these quartets, relatively little has been said regarding performance-practice considerations. The following is an overview of the six selected quartets.

Mozart's String Quartet in C Major, K. 465, known as the "Dissonant" quartet, belongs to a group of six quartets written between the years 1782 and 1785 and was dedicated to Joseph Haydn. These six quartets together with Mozart's last four are known as the Ten Celebrated Quartets. Part of Mozart's dedication to these six quartets translates:

To my dear friend Haydn! A father who has concluded to send his children into this world at large, thought best to entrust them to the protection and guidance of a famous man who fortunately happened to be his best friend as well.¹

The nickname given to this piece comes from the famous "dissonant" chromatic introduction with its striking cross relations and remote modulations. Throughout the work there is continued use of these short chromatic lines com-

bined into a closely-knit contrapuntal texture with much harmonic freedom. The quartet shows a perfection of form and well illustrates the culmination of the Classical period. The four movements are:

\begin{align*}
\text{Adagio - Allegro} \\
\text{Andante cantabile} \\
\text{Menuetto: Allegretto} \\
\text{Allegro molto}
\end{align*}

Beethoven's \textit{String Quartet No. 10 in E Flat Major}, Op. 74, nicknamed the "Harp" quartet, was written in 1809 following the completion of the three Op. 59 "Rasoumovsky" quartets. It was dedicated to Prince von Lobkowitz to whom, earlier, the Op. 18 quartets had been dedicated in 1800.

The Op. 74 quartet is an excellent example from the late classic-early romantic period. Written during what is usually termed Beethoven's "mature period", this quartet also represents a transitional stage in his own career between his earlier quartets, influenced by Haydn and Mozart, and the late quartets of 1824-26. This quartet is also in four movements:

\begin{align*}
\text{Poco Adagio - Allegro} \\
\text{Adagio ma non troppo} \\
\text{Presto} \\
\text{Allegretto con variazioni}
\end{align*}

Johannes Brahms' \textit{String Quartet in G minor}, Op. 51, No. 1, was written in 1873. Although Brahms had sketched and destroyed nearly twenty string quartets before this time, this was the first to be published. It was dedicated to his
friend Dr. Theodore Billroth in Vienna and was later arranged by the composer for two pianos.

Brahms published seventeen chamber music works, and his three quartets all come from what is called his "mature period". The C minor Quartet is a sonorous, dramatic, thick-textured work resulting partly from long, broad lines and a great deal of polyphonic part writing. Although the cyclic idea is used, the movement forms are classical with traits of romanticism found in the extended pitch and harmonic range and the increased activity of the three lower voices. This typical Brahms work illustrates well his renewed ideas of classicism. The four movements are:

Allegro
Romanze: Poco adagio
Allegretto molto moderato e commodo
Allegro

Anton Webern's Six Bagatelles for String Quartet, Op. 9, was written in 1913 and dedicated to Alban Berg. Among the thirty-two compositions written during Webern's lifetime, these rhythmically complex pieces are representative of his early works and, typical of Webern, are extremely short. The work was first performed in Donaueschingen in 1919 by the Amar-Hindemith Quartet.

The tessitura is extreme for all instruments. Wide leaps occur not only between notes played on one instrument, but also between different instruments. Since strict twelve-tone serial technique hadn't been formulated yet, there is no
common series of notes found throughout the work. Yet there is much chromaticism, and Webern shows a preference for tones farthest apart in the harmonic series. These factors combined with his use of silence and occasional pointillistic effects produce a sound of transparency and sparseness. This is a sound unique to Webern and is a characteristic of many of his later works as well. The six movements are indicated as follows:

Mässig
Leicht bewegt
Ziemlich Fliessend
Sehr langsam
Sehr langsam
Fliessend

Béla Bartók's last string quartet was composed in 1939 and was dedicated to the Kolisch Quartet. In contrast to the "arch" form used by Bartók in his two previous quartets, a motto theme is used in this work to achieve overall formal unity. He prefaces each movement with the motto theme and on each succeeding occasion it is presented slightly differently in a texturally richer manner until the Finale, when it becomes the actual material of the movement. This use of the motto theme, according to Robertson, produces "an exquisite example of the perfect fusion of the melodic and rhythmic inflections of Magyar music with Bartók's personal manner."²

This work, coming from the period of Bartók's life known as the "classical phase", contains all of the many innovations of string technique introduced by him in earlier works. However, the themes are now more sustained and broader in nature, the harmonies are less harsh, the textures are more transparent, and a sharper tonal awareness is evident. The quartet's four movements are titled:

- Mesto - Vivace
- Mesto - Marcia
- Mesto - Burletta
- Mesto

Witold Lutoslawski's String Quartet is a work in two parts: an Introductory Movement and a Main Movement, played without pause. It was written in 1964 for the tenth anniversary of the Stockholm concert series "Nutida Musik" on a commission from the Swedish Radio, and was first performed in Stockholm on March 12, 1965, by the LaSalle String Quartet.

Only a few passages of this quartet are written in score form, as most of the work consists of completely independent instrumental parts which are not intended to be synchronized in the traditional sense. Because of several technical and compositional innovations introduced in this work, new and different systems of notation had to be devised along with frequent verbal explanations by the composer. These new ideas produced an exciting avant garde string
quartet which presents the performers with unusual and yet rewarding musical challenges.
Of initial concern in performing any musical work is the selection of an authoritative edition. The primary sources for such an edition are, of course, the composer's autographs and the editions published while he was still alive. However, there is the question whether the autograph or the first editions contain the composer's intentions. Similarly the editor must decide whether corrections and changes made in the autograph by the composer himself were made before or after the first edition was published.

In Alfred Einstein's research on Mozart's works, he has established and documented the importance of both the first editions of the six quartets dedicated to Haydn and the autograph. Einstein found that the two differed in a remarkable number of details, and the importance and nature of these differences (tempi and dynamic modifications) make it very probable that the final printed edition incorporated corrections made by Mozart himself or at least suggested by him.3

The importance of using an edition of the quartets based on either the first editions or the autograph is discussed at great length in Dr. Einstein's Preface to his edition of Mozart's Ten Celebrated String Quartets. The Preface contains a critical report dealing measure-for-measure with the differences between autograph and first editions. Einstein states:

The engravers of the three first editions had before them either the autographs themselves or parts made from them by Mozart's copyist; in either case their intention was to provide a reasonably accurate reproduction of the autograph. Mozart's autographs, however, offer opportunities for misinterpretation, and have consequently given rise to a number of errors over and above those introduced through the engravers' carelessness. . . . In the case of Op. X, the six Haydn Quartets, it may be taken as certain that Mozart . . . also corrected the proofs of them himself. The alterations in the tempo indications, which as engraved are in several cases quite different from those given in the autographs, would alone suffice to prove it; but it is also clear from the numerous additional dynamic markings, especially in K. 464 and 465. . . . He seems to have gone through the first violin part only with any particular care, and to have thrown upon the engraver full responsibility for carrying out his directions in other parts. Thus, even with Op. X it is necessary to compare first edition and autograph if the correct reading, in other words Mozart's intention, is to be determined in every doubtful case.  

Moreover, in addition to the above concerns, Mozart's clarity of manuscript is important. On this subject Einstein is again illuminating when he states:

---

The position of the notes is never in doubt with Mozart. On the other hand in details of articulation, such as the use of slurs and staccato marks, he is not always so consistent as to leave no room for doubt. . . . In the majority of cases Mozart contents himself with indicating the articulation at the first appearance of a motive, and leaves it to the player to make subsequent repetitions consistent. . . . On the form of Mozart's staccato I have already spoken. . . . Mozart, like his father Leopold, knows only the staccato stroke, not the staccato dot. It is true that in Leopold Mozart's Violin School the dot is to be found on page 37 of the first edition, but it is used only by way of demonstration; normally he employs the dot solely in conjunction with the legato slur. In conformity with this practice the first editions also use only the staccato stroke, though it already has a somewhat wedge-shaped appearance, and reserve the dot for use under legato slurs. . . . In many cases, however, the haste, or rather rapidity, with which Mozart wrote turned the stroke into a dot, and in others the demands of expression led him after all to employ stroke and dot as distinct expression marks, denoting respectively a stronger or a slighter accentuation.  

Yet, in the publication of his edition of the quartets Einstein endorsed the editorial customs of the 19th century when he wrote:

. . . As the autographs scarcely ever permit of a clear-cut discussion on this point it is better to abandon the distinction between stroke and dot.  

This distinction was not abandoned, however, in the 1964 Bärenreiter edition of the Ten Celebrated Quartets. This edition of the parts follows the Neue Mozart-Ausgabe String Quartets, volumes two and three, which is based on the autograph and first editions. Although newly edited by Ludwig Finscher, the publication follows  

5 Ibid., pp. viii-ix.
6 Ibid., p. ix.
almost entirely Einstein's work at Novello. It does, however, differ from his version in matters of detail. These details are usually meant only to clarify a point in question (i.e. distinctions between long and short appoggiaturas.) Yet, the most important difference is the attempt (with great care) in the Bärenreiter edition to distinguish in staccato between dots and short vertical strokes. This seems appropriate since when compared to the British Museum copies these distinctions are in passages where Mozart is consistent in his writing and seems to have made his intentions clear and unambiguous. For these reasons the Bärenreiter edition is recommended.

Musical Style

Tempo

In reference to tempo, Frederick Dorian states:

... The life-work of Mozart and Haydn falls into a time before the invention of the metronome, and so the difficult task of determining the right tempo in classical and earlier scores can be based only on the musical material in the script, in conjunction with musicological facts. The tempo problem confronting the interpreter presents two aspects: (1) the initial tempo; (2) the later modification of the tempo primo.


Prior to the metronome, of course, the heartbeat was used as a fairly reliable indicator of tempo. As early as 1596, Lodovico Zacconi in his *Prattica di musica* mentions a method of employing the human pulse for setting tempi. In 1636, Marin Mersenne, in the treatise *Harmonie Universelle*, makes the time value of a minum equal to a heartbeat ($J=72$).

Attempts to measure pace by mechanical means prior to the 18th century proved inadequate and were quickly forgotten. According to Rothschild, Quantz's method of measuring pace by the human pulse was by far the best one and it remained successful until it was superseded by the invention of the metronome. Quantz, in his treatise on the flute, says that the rate of pulsation of the human heart is eighty beats to the minute. Today, Quantz's table of tempi still provides a valuable source of information on the performance of music of his time. Example 1 shows selections from Quantz's table, with the addition of corresponding modern metronome markings. The table is based on a pulsebeat of 80. Quantz indicated, however, that each piece should not be limited exactly to these pulsations.

---


and that his directions are only approximate. The relationship between alla breve and common time is important in its one-to-two ratio. The subdivision of adagio is in the same proportion, with adagio assai being twice as slow as adagio cantabile.12

Since the table states that in a 4 allegro assai tempo each minim will equal one pulsebeat (4 = 80 or 4 = 160), it can be assumed that in an allegro 3 the first and third quarter notes of the first measure and the second quarter note of the second measure fall on the pulsebeats (three pulsebeats on six quarter-notes) when M.M. 4 = 160, as shown below.

![Allegro tempo diagram](image)

The same is true for 8 time when the dotted half note equals one pulsebeat.

![8 time diagram](image)

---

QUANTZ'S TABLE\textsuperscript{13}  
(Selections) 

**Common time (\(\frac{4}{4}\))** 

- **Allegro assai**: each minim one pulsebeat 
  - M.M. \(\frac{\dot{J}}{} = 80\)  
- **Allegretto**: each crotchet one pulsebeat 
  - M.M. \(\frac{\dot{J}}{} = 80\)  
- **Adagio cantabile**: each quaver one pulsebeat 
  - M.M. \(\frac{\dot{J}}{} = 80\)  
- **Adagio assai**: each quaver two pulsebeats 
  - M.M. \(\frac{\dot{J}}{} = 80\) 

**Alta breve (\(\frac{2}{2}\))** 

- **Allegro**: each semibreve one pulsebeat 
  - M.M. \(\frac{Q}{80} = 80\)  
- **Allegretto**: each minim one pulsebeat 
  - M.M. \(\frac{\dot{J}}{} = 80\)  
- **Adagio cantabile**: each crotchet one pulsebeat 
  - M.M. \(\frac{\dot{J}}{} = 80\)  
- **Adagio assai**: each crotchet two pulsebeats 
  - M.M. \(\frac{\dot{J}}{} = 80\) 

**\(\text{\(\frac{2}{4}\)}\) or fast \(\text{\(\frac{6}{8}\)}\) time** 

- **Allegro**: each measure one pulsebeat 
  - M.M. \(\frac{\dot{J}}{} \text{ or } \frac{\dot{J}}{} = 80\) 

Example 1 

\textsuperscript{13}Ibid., p. 285-286.
In *adagio cantabile*, where the melodic line is written in eighth notes, each eighth note receives one pulsebeat (M.M. \( \dotted { \text{J} } = 80 \)). If the movement is written principally in quarter notes, then each quarter note equals one pulsebeat (M.M. \( \dotted { \text{J} } = 80 \)). If *mesto, lento*, or *adagio assai* is indicated, then each quarter note would receive two pulsations (M.M. \( \dotted { \text{J} } = 40 \)).

Frequently it is difficult to decide whether the quarter or the eighth note should represent the pulsebeat. Most likely in very slow *adagios* the eighth note will represent the beat, but through suitable phrasing and articulation a slow tempo can be enlivened. Conversely, in a fast tempo more subdued articulation and phrasing can create an impression of a more relaxed pace.

Taking all of the above-mentioned factors into consideration, the following tempi for the *C Major Quartet* seem justified.

- **Adagio** (*\( \frac{3}{4} \)) : \( \dotted { \text{J} } = 44 \) — **Allegro** (*\( C \)) : \( \dotted { \text{J} } = 66-69 \)
- **Andante cantabile** (*\( \frac{3}{4} \)) : \( \dotted { \text{J} } = 54 \)
- **Menuetto** (*\( \frac{3}{4} \)) : \( \dotted { \text{J} } = 168 \)
- **Allegro molto** (*\( \frac{2}{4} \)) : \( \dotted { \text{J} } = 160 \)

Modification of the tempo primo is the remaining aspect that needs to be considered. Standard procedure during this epoch is summarized in *Grove's Dictionary of Music and Musicians*.
Fundamental fluctuation in the tempo is chiefly necessary at cadences, where it can only be dispensed with as a rare special effect. Frescobaldi in the preface to his Toccatas of 1614 gave a number of stylistic instructions, among them: "the cadences, though written rapid, are to be played in a very sustained manner; the nearer you approach to the cadence, the more you should hold back the tempo." . . . C. F. E. Bach in 1753 mentions . . . "the customary slowing of the tempo when approaching cadences." 14

Other sources give evidence of the use of rubato. That it was used in the eighteenth century is clearly shown in the Doctrine of Affections. However, the extent of its use at that time is still debatable. In correctly interpreting Mozart's use of rubato, an exchange of letters between Mozart and his father prove helpful. On October 24, 1777, Mozart wrote to his father:

... He [Stein, the piano manufacturer] used to be quite crazy about Beecke [a piano virtuoso of the time]; but now he sees and hears ... that I do not make grimaces and yet play with such expression . . . . Everyone is amazed that I can always keep strict time. What these people cannot grasp is that in tempo rubato in an Adagio, the left hand should go on playing in strict time. 15

Three months later, on January 29, 1778, his father's answer contained the following statement:


Reicha has a better cantabile. Both, however, have Beecke's fault of dragging the time, of holding back the whole orchestra by a nod and then returning to the original tempo.16

From this correspondence it would seem that Mozart used rubato, and that rubato and tempo changes in this quartet can be considered. Since rubato should be used to enhance the singing quality of the leading parts, measures 30, 105-106 and 225-226 of the first movement and many of the cantabile solo passages in the second movement offer possibilities. The rubato needs to be carefully incorporated with no change in basic tempi. In addition, tempo modification is also traditionally appropriate at some cadences. Such moments occur in this work at measures 103, 175, 245-246 and possibly 154 of the first movement, measures 30, 44, 79 and 113-114 of the second movement, and measures 87-88 and 290-291 of the fourth movement. To give a definite sense of finality to the ending of the repeat of the Menuetto movement, a slight ritard on the last two beats will suffice. At all other cadences in this quartet, however, a forward thrust has been created through contrapuntal writing, harmony or rhythm (i.e. the ending of the final movement) and any holding back of the tempo would be contrary to the natural flow of the music.

One further possible alteration of tempo should be mentioned. This occurs in the first movement at measures 71

16Ibid., p. 672.
and 191 and in the final movement at measures 54 and 257. Prior to these measures there has been a steady drive through the cadence. To help offset the ensuing section, a slight holding back of the two-note pickups is suggested.

Dynamics

Most of Mozart's dynamic markings are clearly understood, but some used in the C Major Quartet need further explanation. Alfred Einstein has noted in his research on the Mozart string quartets that a peculiarity of Mozart's dynamic markings is the infrequency of the crescendo and diminuendo signs now generally in use. He states that:

... a diminuendo sign such as in bars 57 and 58 of the first movement of K. 387 is a rare exception. To indicate an increase or decrease of tone extending over several bars Mozart employs the words crescendo and ca-lan-do, more rarely decrescendo (the term diminuendo he does not use). The abbreviation "cresc." is used for shorter increases of tone, which often end in piano. One of his special peculiarities is the employment of forte piano, ... denoting a weaker degree of sforzando, ... (or) a short diminuendo. This peculiarity too Mozart derived from his father: "Often a note demands a strong, at other times a moderate, and frequently a scarcely perceptible emphasis. The first case usually occurs with a sudden burst of sound in which all the instruments join; this is usually indicated by the sign fp."17 (See example below.)

\[ \text{Example} \]

---

With these things in mind, it is important to note that in the C Major Quartet the words diminuendo, calando, and decrescendo are never used. There are also no markings. The forte piano sign then, as Einstein has stated, must sometimes be interpreted as meaning a decrescendo, usually when it occurs on note values long enough to permit this. Thus, in the second movement on the third beat of measures 83 and 96, and also the last measure of the introduction to the first movement, a decrescendo in all parts would be logical. On shorter note values the forte piano sign would simply be played as a gentle sforzando.

Regarding Mozart's use of sforzando in this work, the sforzando marking is always followed by the letter p (piano) except for measures 16-18 in the 'cello part in the introduction to the first movement. When a piano is desired by Mozart immediately following the sforzando, a sforzando piano (sfp) indication is given, as in measures 19-21 of the introduction. All other times a form of diminuendo occurs, such as in measure 95 of the second movement, measures 12 and 51 of the third movement, and measures 83-86 of the fourth movement in the first violin. Obviously, for correct execution in the latter instance, the first violin line needs a more forceful articulation than the others at the beginning of each second beat. (Example 2.)
Example 2

It should be noted that the C Major Quartet is written almost exclusively in the style of accompanied monody. Thus, there is usually no question as to what needs to be heard and where dynamic adjustments are required. For further clarification, Dorian states:

Philipp Emanuel Bach points out that every tone foreign to the key can very well stand a forte, regardless of whether it occurs in dissonance or consonance. This is very convincing: the dissonance had been the enlivening element of all music since the era of medieval counterpoint. Quantz . . . explains that the theme of the composition calls for dynamic emphasis. Likewise, all other notes of importance (in a theme, in a contrapuntal passage, or in a harmonic structure) must be stressed by means of dynamics.18

Applying these ideas to Mozart, in the opening measures of the C Major Quartet for example, will prove musically sound. Here obviously the style of not accompanied monody. Yet, because of cross relations, modulations and dissonant intervals an individual line or note

usually needs to be brought out. Thus despite similar dynamics in all parts, slight adjustments need to be made.

Articulation

Between 1750 and 1760 dashes and dots indicated the same kind of staccato, whereas thirty years later the two signs had begun to acquire quite different meanings. That Mozart made a distinction between the two staccato signs is confirmed by Einstein. As mentioned earlier, the Bärenreiter edition of this quartet, in trying to be as faithful as possible to Mozart's intentions, uses both the dot and the wedge. Thus, for an aural distinction to be made, parts marked with the wedge should be played more incisively than those with dots. Obviously, as with dotted notes, the general setting in which they are found will determine the amount of attack and volume to use. Moreover, notes which are marked neither staccato nor legato nor portamento should be played with the ordinary touch of the period, i.e. non legato.20

On the subject of ornamentation, Rosen states:

19Rothschild, Musical Performance in the Times of Mozart and Beethoven, pp. 46-57.

20Ibid., p. 49
The decoration of the classical style . . . articulates structure. The chief ornament retained from the Baroque is, significantly, the final cadential trill. Other ornaments are used more rarely, and they are almost always fully written out—necessarily so, as they have become thematic.21

Still, of principal concern in the C Major Quartet are the short appoggiaturas, turns and trills. It is nearly impossible to make a distinction between long and short appoggiaturas because Mozart always wrote single semiquavers, demisemiquavers, etc. with strokes through the tail (\(\text{\#}\) instead of \(\text{\#}\)). However, according to Grove, the rules of Quantz and C. P. E. Bach apply in almost all respects to the music of Haydn and Mozart, and the appoggiaturas shown by these composers must still be interpreted almost entirely in the light of the Baroque conventions, rather than by their literal appearance.22

The main rule given by C. P. E. Bach for recognizing the short appoggiatura (as it appears in this quartet) is:

When a melody ascends a second and then returns to either a large note or another appoggiatura, the middle tone may be readily decorated with a short appoggiatura.23


Further clarification is given by Quantz when in discussing short *appoggiaturas* he states: "... they are expressed very briefly, and tipped in place on the principal notes on the beat." 24 This last statement confirms that even short *appoggiaturas* are executed on their beat and not before it. Thus in measures 55 and 175 of the first movement and measures 83 and 96 of the second movement all *appoggiaturas* need to be played short and on the beat. This is further clarified in the Bärenreiter edition, since if an *appoggiatura* is regarded as short it is indicated by the addition of a stroke through the grace-note's tail, in brackets above the note in question, as shown below.

![Diagram of appoggiatura](image)

The turns appearing in the first two movements also need to follow tradition. Consequently, the first violin figures in measure 41 of the first movement are accented upper turns played evenly and the violin figures

in measures 8 and 52 of the second movement are unaccented upper turns. In the latter case, according to C. P. E. Bach and others, this type of turn on the dotted note should be interpreted as follows:

Written:  
Played:

Regarding accidentals used in turns Donington states:

Accidentals will be found . . .; but their presence in writing cannot be counted upon, even when a sign for the turn is marked. Both upper and lower auxiliary notes may be diatonic to the key of the passage; either may be chromatic; they will seldom both be chromatic at the same time. Nor will they usually both be a semitone interval from their main note at the same time, which puts them only a diminished third apart; but this is by no means unknown in Baroque music, and became less unusual at a later date.25

Thus, in a passage similar to measure 8 of the second movement in the first violin cited above, a G# is a possibility but is not probable.

The rules governing trills in the Baroque period were largely carried over into the period of the Viennese Classicists. Specific rules apply to this quartet and are summarized as follows:

1) All trills on notes of adequate length need a termination (turn) unless followed by quick notes which serve the purpose (i.e. measures 80-82, first movement).

2) The termination must be played at the same speed as the trill.

3) The trill and its turn must be slurred.

4) All trills start on their upper note, convincingly accented, but not prolonged.

The remaining embellishments, all in the second movement, again follow established procedure. Obviously, these ornaments stand in proportional relationship to the length of the principal note and the tempo. Moreover, all ornaments written in small notes relate to the following note. Thus, while the previous note is never curtailed, the following note loses as much of its duration as the small notes take away from it. Measure 36 of the first violin part is given as an example.

Written: 

Played:

For clarification of some of the above aspects, the Bärenreiter edition has added slurs without comment to connect appoggiaturas or ornamental notes to the principal note, either before or after it. Signs of articulation (dots, etc.)
have similarly been added to ornaments, and the \( \infty \) sign will always mean to begin with the main note, go one step above, return, go one step below, and return.

At the beginning of the Viennese Classical period the system of accentuation was essentially the same as that of the Style Galant. However, by the time of the C Major Quartet changes in accentuation had occurred and need to be observed. Rothschild states:

Beginning with the Russian Quartets, Haydn gave all Allegro movements—from Allegretto to Prestissimo—one and the same accentuation: the accentuation which had formerly been reserved for fast movements. From then on the distinction between the various Allegro directions was one of tempo alone and no longer of tempo and accentuation. With this change Haydn ... created the pattern for what is now regarded as the "classical Allegro" ... To be more precise: In all Allegro movements ... marked:

- C, the first and third time units were stressed.
- \( \frac{2}{4} \), the first time unit was stressed.
- \( \frac{3}{4} \) or \( \frac{3}{8} \), the first time unit was stressed.

This accentuation applied to all compositions by Haydn and Mozart written after 1781 and 1782 respectively ... [Moreover] the accentuation of slow movements also underwent changes ... Andante, meaning "walking", cancelled pronounced emphasis.\(^{25}\)

One final matter of articulation concern is the slur. The rule whereby a slight accent is given to the first of two slurred notes, regardless of its position in the bar, is an important one and the suggestions by Leopold Mozart on this

need to be followed. He states:

If in a composition two, three, four or even more notes are connected by a slur so that it is clear that the composer wishes these notes not to be separated from each other but rendered legato and cantabile, the first of these slurred notes must be slightly emphasized and the others played quite evenly and legato and becoming gradually softer . . . 27

Phrasing

Ideas concerning the need and use of phrasing appear in several treatises of eighteenth-century Germany, France and Italy. Rousseau's *A Complete Dictionary of Music* of 1775, for example, includes "phrase" as a standard topic. He describes two kinds: one formed by the rise and fall of the melodic line and one dependent on harmony. 28

From these sources one could conclude that phrasing was an important feature of early performance and that long before it became a part of scoring, the practice of phrasing flourished in both vocal and instrumental music.

Dorian mentions the following concerning proper phrasing in music of the classical period:

With the classical period as a turning point, the score script becomes increasingly binding. The relation


between score and performance reflects a new interdependence. The written character of the work tends to exclude any license from the performance. What the composer wants is more and more frequently shown in detail. These facts can best be demonstrated by comparison of handwritten manuscripts of the masters.  

He later states:

The evolution from a score without prescribed phrasing to one with phrasing indications may be ascribed to Gluck, Fommelli, the Mannheim orchestra, and, of course, the Classicists—all representing the new school of interpretation by which improvisation was not tolerated. Logically, it was after performance was emancipated from cembalo direction, and when the score script became binding, that a permanent change came about.  

In the C Major Quartet an individual line will usually dictate the phrasing as in the first violin part in the fourth movement. By following this part beginning in measure one, two eight-measure periods can be defined followed by two four-measure periods. Beginning at the upbeat to measure 25, five and four-measure phrases appear respectively. At other times the individual line does not give clues to phrasing and other parts need to be considered. Sometimes phrases are constructed in overlapping fashion, as in the introduction to the first movement. The first four measures form a phrase, but this division would not be evident from looking at individual parts. Another similar example is from the third movement. (Example 3.) Although much longer, the same principle applies and only the full score can tell the performer the truth.

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30 Ibid., p. 162.
Harmony, of course, usually helps in defining a phrase but sometimes in this quartet, in portions of the development section in the first movement (measures 125-154) and in part of the final movement, it is almost the only determining factor. In the latter case, beginning on the second beat of measure 234 after the initial sounding of the C major tonic chord for three and a half measures, there is a series of dominant and secondary dominant chords beginning in measure 238, each resolving after a two-measure interval. In this context, the correct phrasing can be readily seen as five and a half measures followed by three four-bar phrases beginning at measure 240. The four bars beginning at measure 252 contain a series of $V - l_6$ chords ending on $V$ at measure 256 to form another period. In these measures, although the two-measure dialogue between the first violin and 'cello helps in phrase definition, harmonic progression is the determining factor.

The quartet's beginning needs to be studied with respect to harmony, voice leading and other factors. (See Example 4.) A slow introduction to a quartet by Mozart is a rarity, and this tonally devious preparation for a movement in C major, with its ambiguous and strange cross relations and frequent modulations, is an example of Mozart's harmonic sophistication. Moreover, since this type of structure is coupled with overlapping lines it must give an aural sense of continuous forward motion to the $V$ of $G$ chord (which has been prolonged since measure 15) in the last measure. Sub-phrases
Quartett in C
für zwei Violinen, Viola und Violoncello
KV 465

Quartetto VI

Example 4
are found beginning and ending at cadence points, on off-beat entrances or following the dynamic line. Thus, the first eight measures can be seen as two four-measure phrases with the three eighth notes at the end of each four measures serving as a link to the next section. This eighth-note figure, along with the dissonance and sequential writing, becomes one of the propelling forces and should be stressed in each part as it occurs in the phrase between measures 9 and 15. Through measures 16 and 19 the three eighth notes begin successive one-bar phrases. The 'cello articulation beginning in measure 16 anticipates what happens between measures 19 and 21. Here articulation, dynamic markings and note values form duple groupings within the phrase leading into the fermata.

One final example of phrasing, the opening measures of the ensuing Allegro, illustrates the full musical context involved. Tempo and dynamic fluctuations in addition to phrase lengths have been shown in Example 5 to indicate the type of nuances needed here for a musical performance.
Example 5

Technical Aspects

Intonation

Many possible problems of quartet intonation can be avoided through proper tuning of the instruments. The solution lies in using elements of mean-tone tuning. Obviously, tuning in pure fifths will make the E string of the violins sound sharp to the C string of the viola and 'cello. But in mean-tone tuning we make all major thirds true. Thus, the solution is obvious: Split the superfluous comma among the fifths, and flatten each one slightly, about a 1/4 comma. Since A has already been tuned, this will mean that the C, G and D strings will be tuned sharp and the E string slightly flat.
However, beyond this there also needs to be an understanding and thus a definition formulated as to what is meant by playing "in tune". A string player, however the strings are tuned, "... is taught to stop a sharped note higher than the enharmonically equivalent flattened note—a characteristic of the Pythagorean tuning and the exact opposite of just intonation. This view of violin intonation was upheld by theorists and is explicitly stated in practical manuals."31 Also, laboratory investigations show conclusively that "... measured by the physical vibrations in the air, the melodic scale of the string player (unaccompanied) is a flexible affair. In any contrapuntal writing the string player's feeling is for his linear melody; only in a concord on the accent of the bar will his sensitive ear impel him to produce a consonance with the other strings."32 Moreover, Barbour states that "... string quartets, freed from the tyranny of fixed intonation, are supposed to use just intervals, thus interpreting music as intended by the composers. Such a conception is essentially false. There is no system of tuning that has the virtues popularly ascribed to just intonation. Neither singers nor violinists use just intonation."33

Further, "... it is probably true that all the singers and players are singing and playing false most of the time. But their errors are of equal temperament. Apparently nobody--is able to perform in correct equal temperament ..."³⁴ either.

Thus, equal, just, or any temperament for that matter is never actually attained on instruments of unfixed pitch. "... Being in tune is an ideal that, in spite of our best efforts we can never completely attain except on instruments of fixed pitch."³⁵ The question that arises then is what kind of a basis a quartet should use to play "in tune". Lloyd seems to answer this best, when he gives an argument against rigidity of intonation, the rigidity that is inherent in any fixed system of tuning. He holds that the players in a string quartet are likely to be guided by the music itself as to what intonation to use, sometimes approaching Pythagorean intervals when melodic considerations are paramount, or just intervals when the harmony demands it.³⁶

In ensemble playing the passages containing pure intervals such as octaves and unisons are always the most difficult to get in tune, and the C Major Quartet contains


many of them. Since all such parts contain the same melodic line, intonation agreement will obviously need to be made on its linear qualities. After this has been determined, the lines need to be practiced together in the following fashion. For example, in the third movement the eighth-note figures in measures 4 and 5, and 20 and 21 need to be rehearsed slowly with various combinations of instruments: the two violins, the viola and 'cello, one violin and viola, one violin and 'cello, etc. (Example 6.) Many of these octave and unison passages can be better executed through uniform fingerings and shifts. In this example the lower fingering might be used to avoid awkward string crossings in the cello.

Example 6
In the more complex passages involving additional intervals, as between measures 162-179 in the fourth movement, the following rehearsal procedure is recommended. (See Example 7.) Here, because of similarities, the two upper and two lower lines should be rehearsed separately until in tune. After this, other various combinations of instruments such as first violin and cello, second violin and viola need to be included. Later, passages involving identical notes (measures 162-164 in the second violin and measures 163-165 in the first violin; measures 173-174 in the second violin and measures 176-177 in the viola) should be practiced in unison. Here again, similar fingerings need to be used. Next, since the viola and cello notes beginning in measures 174 and continuing into 175 are the same as the violin notes beginning in the next measure, they should be practiced together until the pattern changes. Finally, the entire passage needs to be rehearsed slowly and softly by everyone.

Example 7
Harmonic implications and intervallic relationships, of course, will cause some tempering of individual pitches, as they do in initial tuning of the instruments. In the last six measures of the first movement, for example, the held C in the 'cello is the determining factor and other notes need to be "in tune" with it. This note initially needed to be sharp in order to be "in tune" with the open C string on the last note of the movement. The wider the distance between voices, obviously, the more tempering will be needed; more will also be needed in chromatic passages and modulatory sections. In a section such as measures 49 and 50 of the third movement (Example 8) the tendency tones of the seventh chord in measure 50 need to be emphasized in their direction, as do the tones that make up the diminished chord in measure 49.

Example 8

A similar situation exists in the work's introduction involving augmented chords and dissonant cross relations.

In the modulatory section mentioned earlier in Example 6, part of the intonation problem was caused when "in tune", probably Pythagorean tuned, individual lines were
were combined to form some "out of tune" intervals. For example, in measures 162-165, when the violins combined their lines for three successive minor thirds, a major third followed by another minor and major third, adjustments downward were most likely needed on the F and D-sharps. Obviously, much of the quartet contains these types of concerns and this will be time consuming. There are also intonation problems created by the use of enharmonic notes and intervals. Lloyd states: "No true harmonic ideas are based on equal temperament ..." and agrees with Tovey that "... enharmonic modulation implies true intonation and a flexible scale ..." Thus again, in chordal formations such as were found in Example 6 an attempt at just intervals instead of Pythagorean or any other tuning is suggested.

Sound

According to Dorian, "A genuine Mozart reading calls for emphasis of the vocal element—that is to say, the singing quality of the leading parts." The amount of bow used, of course, affects tone quality (as well as dynamics). Thus, in the sections of this quartet where a cantabile sound needs to be stressed, maximum bow speed (with, obviously, proper adjustment in bow pressure) should be practiced. In the

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38Dorian, The History of Music in Performance, p. 192.
many passages like measures 23-26 in the first violin and measures 107-115 in the first violin and viola in the first movement, measures 13-23 in the first violin and 'cello (in all instruments beginning in measure 20) in the second movement, the Trio section of the third movement in the first violin, and measures 89-103 in the two violins in the last movement, this will usually allow the whole bow to be used because of the available time. In all other instances "as much bow as possible" is needed and will vary accordingly.

Obviously, playing a section in a higher position on a lower string will also help produce a cantabile tone. This is especially recommended in the first violin in the fourth movement between measures 292 and 304, and in most of the first nine measures of the introduction. In the second movement between measures 13 and 19, the avoidance of the E string in the first violin and the A string in the second violin, viola and cello is suggested. (Example 9.)

Example 9

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This same technique, if applied in a forte passage, will of course result in a more intense, fuller tone quality and should be used in appropriate sections such as measures 31-34 and 163-166 in the first movement in the violins, measures 4-6 and 43-44 in the Menuetto, and in the Trio, measures 6-7 and 22-23 in the first violin.

On faster notes a more concentrated sound is usually needed with more bow pressure and less bow speed. Often this "core" sound is required for slower passages as well: for example, in the forte and crescendo sections of the introduction. The sounding point, of course, would vary according to the situation, ranging from a flautando to a point as near the bridge as feasible.

The needed clarity is, of course, partially achieved through good intonation and uniform bowings. Further clarification is possible in sections of the first and fourth movements through use of the low positions. In measures 272-239 of the fourth movement in the first violin, for example, this will cause most of the passage to be played on the more penetrating E string. The frequent open strings resulting are obviously a technical advantage. (See Example 10.)

Greater clarity can be achieved through sautille bowing and it should be used between measures 236 and 240 of the first movement and similar places in the final movement where it occurs with the underlying spiccato eighth notes.
In sections such as the opening of the fourth movement, a slight accentuation will produce more transparency. Here, if done by the second violin and viola at the beginning of each slur in measures 1-4 and 9-12 it will help in establishing the character of this lively movement as well. (See Example 11.)

This technique should be obvious to most players and thus no more examples are given. However, it is a most important aspect in performing the C Major Quartet and must not be overlooked.

Finally, the idea of contrast between movements began, of course, with pre-Baroque practice; but the intended linking together of sections into a continuous whole is a nineteenth-century technique. Thus, since there is an obvious distinction between the four movements of this quartet, the traditional pause between them (including the Menuetto and Trio) is appropriate; and the fermata signs placed above the last bar line of each movement and before the Trio section of the third movement should be interpreted in this manner. Any leanings toward attacca should be avoided.
CHAPTER III

STRING QUARTET IN E FLAT, OP. 74, "HARP"

BEETHOVEN

Many editions of the Op. 74 Quartet of Beethoven are currently available. Apart from such minor revisions and changes of editorial policy as may be expected when the quartets come out in a new collected edition, the comparatively recent one prepared by Paul Mies in 1962-63 for G. Henle Verlag is the best. This edition of parts reproduces the score as given in their new Collected Edition of Beethoven's Works issued in 1970-71. Yet, in matters of detail, this "authentic" edition must be judged with caution. One must remember that Beethoven's notation and handwriting in his manuscripts are harder to decipher than those of any other great master. That Beethoven made a distinction between the two staccato signs, for example, is confirmed by Nottebohm, who deciphered and commented on the master's sketchbooks. He states:

At any rate from 1813 onwards, Beethoven made an important distinction between dots and dashes . . . if one can judge from a few old editions, however, there can be no doubt that Beethoven distinguished between these two signs as early as 1800.39

Items of this nature are not differentiated in the Mies edition and need to be taken into account. Possibly the newer critical edition of Beethoven's music as well as the first integral publication of sketchbooks, conversation books, and documents now envisioned in Bonn will reconcile this problem. But until that time the publication suggested above needs to suffice.

**Musical Style**

**Tempo**

In discussing the correct musical style of any work, one of the most critical areas is tempo. With much music prior to the twentieth century, this subject can lead to a great deal of disagreement even among the best musicians. Beethoven realized this, and feeling a need for better interpretation of tempi in his works, published metronome markings for many of his more important compositions.

His positive reaction to the usage of the metronome was stated by him on several occasions. He wrote in the *Wiener Vaterlaendische Blatter* of October 13, 1813:

... I look upon the invention of the metronome as a welcome means of assuring the performance of my compositions everywhere in the tempi conceived by me, which to my regret have so often been misunderstood.  

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In a letter to Schott dated December 18, 1826, he stated:

The metronome indications (for the Missa Solemnis) will follow shortly. Wait for them. In our century they are certainly needed; and I have letters from Berlin saying that the first performance of the ninth symphony went off with great success, which I attribute in large part to the metronome markings. We can hardly have any tempi ordinari anymore, now that we must follow our free inspiration. 41

In other discussions and correspondences Beethoven cited the fact that the old Italian terms Allegro, Andante, Adagio and Presto seemed "nonsensical", and that they now indicated a tempo and no longer the "character" of a piece. There were new types of "character" in the music which made the old terms inadequate for both functions. According to Beethoven, a discrepancy resulted and sometimes a contradiction. Tempo and character then, should be expressed independently of one another: tempo absolutely and exactly by metronome figure, character through the adequate and discriminatory terms of the vernacular. 42

However, the traditions and conventions of performance deviate widely from the tempi denoted by Beethoven's marks and the reasons for this vary. Their authenticity is sometimes challenged by questioning whether the markings really convey Beethoven's intentions. Some argue that the tempi are unplayable, while others say that the metronome of

41 Ibid., p. 174.
42 Ibid., p. 176.
today differs considerably from Beethoven's time. Others state simply that the metronome markings are inartistic and too mechanical.

The answers to many of these questions, and an excellent guide to the "correct" tempi in the works of Beethoven, can be found in the article entitled "Tempo and Character in Beethoven's Music" by Rudolph Kolisch in the Musical Quarterly of 1943 previously cited. In this article, Kolisch states that Beethoven was always conscious of the interrelationships between tempo and character in a piece. He claims that Beethoven always indicated the same tempo for different pieces of the same character, and thus the choice of a wrong tempo in a work could destroy its character. Kolisch illustrates a table containing the tempi occurring in Beethoven arranged according to meter changes and tempo categories. He states that the absolute measure of the tempi indicated by one category (i.e., Allegro) changes according to the meter signatures and according to the relationship between the metric unit and the tempo unit. However, Beethoven's notation does not always indicate clearly to which metric unit his tempo indications refer, and according to Kolisch, this is what must be understood before a tempo can be decided upon. He also states that tempo categories are often quantitatively modified by such additions as molto, poco, non troppo and assai. Furthermore, with supplementary
indications such as serioso, mesto, con brio, scherzoso and grazioso, Beethoven strives to characterize the music.\(^{43}\)

From the above considerations, the following tempi for the Op. 74 Quartet seem justified:

- **Poco Adagio** (\(\text{♩}=60\)): Adagio (\(\text{♩}=60\))
- **Allegro** (\(\text{♩}=168\))
- **Adagio ma non troppo** (\(\text{♩}=72\))
- **Presto** (\(\text{♩}=100\)): Presto (\(\text{♩}=100\))
- **Più presto quasi prestissimo** (\(\text{♩} = 100\)): Più presto quasi prestissimo (\(\text{♩} = 100\))
- **Allegretto con Variazioni** (\(\text{♩}=100\)): Allegretto con Variazioni (\(\text{♩}=100\))
- **Un poco più vivace** (\(\text{♩}=120\)): Un poco più vivace (\(\text{♩}=120\))
- **Allegro** (\(\text{♩}=132\)): Allegro (\(\text{♩}=132\))

According to Nottebohm these tempi, with the exception of the last two, are what Beethoven suggested. (Beethoven indicated: **Un poco più vivace**: \(\text{♩}=76\) and **Allegro**: \(\text{♩}=84\)).\(^{44}\) These deviations from Beethoven's directions for faster tempi are felt justified since the sudden triplet figure in the 'cello beginning in measure 120 and the change from triplets to sixteenth notes in measure 186 already give the feeling of forward motion.

In the third movement the words indicating tempi for the trios can be misleading. It should be noted that both parts of this movement are to be played at the same pulse.

\(^{43}\)Ibid., p. 181

Cobbett states:

It is important to be quite clear as to the speed of [the] trio (piu presto quasi prestissimo) in which the crotchet has the exact value of a quaver of the preceding bars, in such a way that a single bar of the scherzo is equal to two bars of the trio.\(^45\)

Beethoven, as noted above, has also suggested this. As before, the effect of forward motion has been written into the music, this time through sudden scale-like quarter note passages and increased contrapuntal writing.

With the above metronome markings it must be understood that the use of the metronome is to determine the basic speed of the movement and the music should not be played from beginning to end at an unvarying metronomic rate. This would be inartistic and destroy its meaning. As Kolisch states:

It serves only for the objective fixing of an objective category. But it removes this category from the domain of subjective caprice, upon which it would otherwise become helplessly dependent.\(^46\)

On the question of freedom of tempo in Beethoven's early and middle works, Ries says that Beethoven stayed in time fairly strictly in his own playing.\(^47\) Czerny implies that steady time was generally appropriate.\(^48\) Although


Czerny's many writings about Beethoven's tempo changes are confined to the kinds of pushes and pulls at cadences found in the piano sonatas, a summary of suggestions on ritardas that might pertain to this quartet are given: They should be incorporated at the end of a shake or cadence, at the return of the principal subject, in a well-marked crescendo serving to introduce or to terminate an important passage, and on the diminuendo of a quick, lively passage. Further, Rothschild states:

Beethoven, more often than not, added qualifying terms to his tempo directions. He did not leave it to the performer to search for the emotion in the music but transmitted the most subtle shades of expression by his markings. Therefore, those movements to which Beethoven applied tempo directions without any qualifying terms should be performed (as a rule) in an unemotional, almost detached manner.49

He continues:

The sign \( \rightarrow \) which commonly indicates a diminuendo, had another meaning if it was placed at the end of a phrase; in this case it not only indicated a decrease in volume, but a ritardando as well.50

Based on the above criteria, the following possible tempo modifications need to be discussed. A slight ritard leading into the recapitulation at measure 139 of the first movement is plausible. However, because of the relatively static line in the second half of measure 138 and a change to duple grouping

50Ibid., p. 36.
in the first violin, one is not needed. Beginning at measure 109 in the same movement the relaxation is written into the music and again, no slowing of tempo is justified. Moreover, because of the rhythmic drive and contrapuntal nature of much of this work the traditional slowing at cadences and tempo rubato should be used sparingly. The second movement provides opportunities for the former if done in good taste (i.e., measure 17). The viola line in the second variation of the fourth movement and the solo and obbligato accompaniment passages in the second movement (similar to measures 123-131) are appropriate for the latter. Only two other suggested metronomic fluctuations are necessary. One would be the first violin passage leading into measure 64 of the first movement, where a slight ritard is justifiable at the cadence. (Example 12.)

Example 12

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The second alteration would be a slight pause between variations one and two in the fourth movement to help offset the lyric viola passage from the preceding staccato section. (Example 13.)

Example 13

Dynamics

Most of the basic dynamic markings are obvious enough and no mention of them will be made. However, Beethoven's use of crescendo is of interest. The only time he uses the markings < or <<< is for a short musical fragment about a measure long, as found in the second movement, measure 114. The great majority of the time the word is written out in abbreviated form, i.e., "cresc." Of major concern is the crescendo to piano,
unique in his works, and the open-ended type of crescendo found, for example, in the second movement, measures 68-69. In the latter case and in similar situations, one must always be conscious of the phrase in relation to what it encompasses. In this instance a rise to mezzo forte should be sufficient since the period begins at a piano level, is relatively short, and contains very little vertical motion in any of the parts. (Example 14.)

Example 14

Measures 91-102 contain an example of two consecutive open-ended crescendos. (See Example 15.) In the first, a small rise to mezzo forte in measure 95 should suffice because of the increased activity of the 'cello beginning in measure 91 and the tonal reinforcement produced by the second violin.
Example 15
entrance. At the end of the second crescendo, no more than forte should be reached because of the high range of the first violin and especially the 'cello, plus the rhythmic and melodic strengthening of the cello line by the viola.

The crescendo to piano marking used by Beethoven several times in this quartet should translate to mean an open-ended crescendo, followed by a sudden piano. To correctly interpret this sign, the above suggestions about the open-ended crescendo first need to be used. However, with the addition of subito piano, a major concern will be a technical one since invariably this situation needs a bowing which will allow for increased tonal volume and yet accommodate the start of the ensuing piano passage. To illustrate, possible bowings for two sections of the first movement are given. (See Examples 16 and 17.) In all cases the crescendo is achieved as well as the proper preparation for the subito piano by finishing down-bow at the tip. The only exception is in the last two measures of Example 16. Here, for proper results, obvious adjustments in bow pressure and speed are required in the three lower instruments. The first violinist, on the last two eighth notes in the last measure, will need a brush stroke ending below the middle part of the bow.

In interpreting all sforzando markings, their level of sound is almost always relative to the general dynamic level. Therefore, this marking in the first movement, measures 70-71, would mean a louder sound than in the second
Example 16

Example 17

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movement, measures 54-56. Moreover, the term *morendo* used at the end of this movement should only pertain to dynamics and thus one must be careful not to slow the tempo.

*Espressivo* is denoted by Beethoven six times in this work to show where an individual lyric fragment needs to stand out. In each case the dynamic level is clearly defined or assumed and a more intensified *dolce* sound is needed, with increased bow pressure and a warmer *vibrato*.

[Sotto voce] appears in the opening measures and between bars 97-100 of the fourth movement, while *mezza voce* is used only once, in the second movement. In these instances a definite dynamic level is never defined and one must be ascertained. The *mezza voce* at the beginning of the second movement in only the three lower lines indicates that the *cantabile* first violin line obviously needs to dominate. A *mezzo forte* dynamic in the first violin would accomplish this if the lower three instruments play with the restrained volume of tone prescribed. Thus, here the *mezza voce* should equal *piano*. This *cantabile/mezza voce* dichotomy continues until measure 7, where it is cancelled by new dynamic markings and increased importance of the lower lines. (Example 18.)

In this quartet *sotto voce* appears in all parts both times. Since by definition this implies a subdued sound, one must examine the surrounding material to put this in proper context. (See Examples 19 and 20.) Clearly, in both

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Example 20

Example 21
instances sotto voce would indicate a pianissimo level. However, since the term pianissimo isn't used here by Beethoven, sotto voce in these two examples should also be taken to mean a subdued quality of sound achieved through less intense vibrato (or none at all) and flautando bowing. In Example 19 this sound would continue until the change of dynamics beginning in measure 9.

The many subito fortes and pianos occurring throughout the quartet cause no special problems except for the one found in the second violin in measure 72 of the final movement. Throughout this variation the forte sixteenth notes need to be played with a concise, on-the-string type of bowing. Conversely, the piano sixteenth notes require a sautillé bowing. The solution in this case would be to play the forte notes in the middle of the bow where the piano can also be played. (See Example 21.)

The word diminuendo is never used between the dynamic levels piano and pianissimo. However, Beethoven's use of the term più p, in this quartet, should always be taken to mean diminuendo. This symbol is only used between a piano section and a pianissimo section, always being inserted only one measure after the initial piano marking as seen at measures 230 and 231 in the third movement. (See Example 22.)
Even after observing dynamic markings carefully, one still has to realize which instrument has the important line at a given time. With the increased contrapuntal complexity in this work compared to some of Beethoven's earlier quartets, this becomes a major concern for correct performance practice. One example, the introduction of the first movement, will be used to illustrate. During the first fifteen measures the melody is in the upper voice. Thus, the first violin should obviously dominate by playing his important line slightly louder than the other voices. However, during these fifteen measures and later, entrances and moving lines in other parts also need to be heard, with adjustments made accordingly. In measures 15, 16, and 17 the melodic line moves to the alto voice and the second violin should lead even though no special dynamic indication is
given. Following this, the first violin dominates again. The contrasting figure in the 'cello, beginning in measure 21, should be heard until one measure before the Allegro, where there is a crescendo to forte in all instruments.

Articulation

The ornamentation used in this work generally follows the Baroque tradition. Yet, especially in the slow movement, it is not just decoration as it might have been in the Rococo period, and should be played expressively. Concerning trills, Grove states:

Contrary . . . to current belief, the evidence shows that it is not less incorrect, though it is somewhat less damaging, to apply the modern trill to Beethoven than it is to apply it to J. S. Bach . . . It seems impossible to avoid concluding that Beethoven's trills should begin with the upper note, not prolonged but nevertheless convincingly accented; and there can be no doubt at all that the majority of them . . . should end in the standard turn.51

Apel says that the modern trill, first introduced early in the 19th century and which begins with the main note, is meant to be used only when the trill no longer fulfills the appoggiatura function, is used as a virtuoso effect and serves merely to accentuate the main note or add brilliance or color to the performance.52

Thus the trills in conjunction with the short rapid notes in measures 152-153 of the fourth movement in the first violin would probably begin with the main note. In all other instances however, the summary of rules regarding trills given in Chapter II applies.

Many of the embellishments in the second movement are written out and cause no ambiguities. However, the others should again follow pre-Classical principles. Each of the figurations (all in the first violin) in measures 23, 28, 48, 68, 69, 85, 93, 142, 147-149, 150 and 151 need to be played in the Baroque manner.

Most articulation markings are clear in this "authentic" edition. However, having the bow in the correct place or finding the correct bowing to execute these articulations is sometimes difficult because of Beethoven's use of dynamics, voice leading or phrasing. Some reference has already been made to this (i.e., suggested bowings in relation to crescendo to piano indications), but because of their importance in this quartet, more examples of possible solutions are offered below. In measures 13 and 17 of the first movement and similar instances all instruments obviously need to end on an up-bow near the frog to be ready for the subito forte on the third beat. The dotted quarter note followed by an eighth-note figure used in the theme and its development in the first movement is best executed with a "hooked" bowing (ト). However, beginning
in measure 109 when this figure becomes an isolated fragment in the first violin and cello, a separate bow on each note is more appropriate to achieve the precise and penetrating quality of sound desired. (Example 23.)

Example 23

The execution of unslurred sixteenth notes obviously should not always remain the same. For clarity, the *forte* passages containing these types of notes in the first and last movements need to be played with a concise on-the-string type of bowing in the upper half of the bow, while *piano* sixteenth notes will need a *sautillé* bowing towards the middle of the bow. Thus, in a transitional passage like measures 112-115 in the first movement, a gradual decrease of bow pressure and a gradual shift downward in bow placement is required in both the second violin and viola. (Example 24.)
The character of the third movement is unique and a possible bowing is suggested for the *Scherzo* section to help attain the excitement, drive and *leggiermente* quality required. (See Example 25.)

Another articulation indication in this work needing discussion is found in the fourth movement: \( \text{\textbullet\textbullet\textbullet} \). The last note of the grouping should be connected smoothly to the preceding note, except that the dot beneath the last note indicates a shorter than regular note length. This will cause a distinct break between figures in both sections where they are found (measures 1-20 and 169-177). To further help define this effect, a slight emphasis on the first of the three notes each time is suggested.

Finally, as was mentioned earlier, the question of differentiation between dots and strokes has been left unanswered in the Henle edition. However, at least two sections of this piece would be more appropriately marked with the *staccato* stroke than the dot. One would be in sections of the trios of the third movement where dotted half notes are
Example 25 (cont.)
indicated. The other would be for all notes in the first variation of the fourth movement. In both cases the notes in question seem to warrant this marking because of the extra accentuation needed for their proper execution.

Phrasing

Beethoven's phrases in this quartet are usually two or four measures in length, and as a general rule, will follow the rise and fall of the melodic contour within the given dynamic level.

Sometimes, however, other factors will obviously determine periods. A good example of the importance of harmonic considerations is the beginning of the fourth movement. (See Example 26.) The first violin figure should be phrased according to the underlying harmonic movement. In the first six measures, the dotted eighth note should receive emphasis, with a slight tapering off on the following two notes each time the figure occurs. Here, the underlying harmony is tied over in all parts. Later, however, with changing harmony below, the first note should be the softest, and each group should have a feeling of leaning toward the first beat of the next measure.

Rhythm determines the phrasing between measures 125 and 139 in the first movement. Since this entire section remains on the dominant chord (with the addition of the seventh in measure 129) and the melodic line contains only
Example 26
a series of arpeggios, periods are not apparent. However, through observing the groups of changing note values introduced each time in the 'cello on the half bar, one can readily see the phrases to be three groups of three measures plus a final phrase of four and a half measures. (Example 27.)

Example 27
At other times, because of a section's contrapuntal nature, much of the phrasing and overlapping must be determined through a combination of factors. In examining the opening measures of the first movement for example, the melodic shapes in measures 1-2, 11-13, and 15-17 give some clues. Between measures 4 and 11 delayed harmonic resolutions, tied notes and constantly moving horizontal lines create the effect of one long eight-bar period, with a similar effect resulting between measures 18 and 25 because of continuous chromatic progressions leading into the Allegro. (See Example 28.)

Technical Aspects
Rehearsal Problems

One difficulty in rehearsing this quartet will be the keeping of proper tempi. There are many changes of idiom, dynamics, articulations, etc., that will cause the players unknowingly to lag behind (introduction), or to speed up (eight measures before the repeat sign in the first movement). There are also many intricate rhythmic passages between instruments in which it is difficult to keep the proper tempo. Between measures 48-74 and similarly between measures 174-200 of the first movement everyone must be careful not to be late on off-beat entrances, particularly after dotted and tied notes. In instances where it is decided that the off-beat notes need to be played off the string (i.e., measure 48), bow preparation is necessary; in this
QUARTETT № 10

L. van Beethoven, Op. 74
(1770 - 1827)

Violino I

Violino II

Viola

Violoncello

Example 28
case, care must be taken to end the tied note somewhat below the middle of the bow. For measures 50-52 and in a similar passage later, the following bowing is recommended. (Example 29.)

Example 29

The bowings in parenthesis in measure 52 might be useful to obtain a better subito piano. The measures containing slurred sixteenth-note passages in dovetail fashion (52-61) need to be metronomically accurate, with good left hand articulation. The effect needed is of one continuous line and players should keep this in mind. The same idea is true in measures 125-139. These bars should be rehearsed in sections according to rhythmic groupings and articulations. Thus, measure groups 125-128, 128-131, 131-134, and 134-139 need to be practiced separately (leaving out the tied whole notes) until correct. Vibrant pizzicato here is essential. It needs to "cut through" the musical fabric with great vitality. To achieve this sound, the pluck must be a horizontal motion perpendicular to the string, accompanied by much vibrato in the left hand.
In the second movement between measures 64 and 86 the continuous flow of the underlying triplet rhythm must be maintained between instruments. This can be achieved if these figures are rehearsed separately, leaving out all other notes, first in the lower instruments and then with the first violin. After rhythmic security is established, the other notes can be added.

The unique "drive" of the third movement is partially obtained through Beethoven's combination of $\frac{3}{4}$ and $\frac{6}{8}$ feeling, creating at times a hemiola effect. This may cause temporary confusion during rehearsals. In order to stay together and maintain tempo and proper meter the quartet must always feel this movement with one beat per measure, and make sure there is a distinct difference between quarter notes and dotted quarter notes, the latter being held full value. This will make the constant shifting between duple and triple feeling much more apparent. As before, one must guard against being late after the tied note and it will help greatly to rehearse these sections with a metronome.

The sixth variation of the fourth movement up to measure 169 is quite intricate because of conflicting rhythms. The major concerns are changes of rhythm occurring within an individual line, and duple and triple groupings used together. Obviously, in rehearsing this section similar groups should be practiced individually before putting all parts together, and one should be aware that the triplet figure introduced by

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the 'cello in measure 120 will define the tempo through measure 168. However, much of the problem can be solved by being aware that in the changeover from one division to another the tendency will be for the triple rhythm to be played too slowly and the duple too fast.

Ensemble intonation in this work will, as in the Mozart quartet, take a great deal of the rehearsal time. Moreover, the same concerns still appear. Tempering of individual pitches is needed to accommodate intervallic relationships and to clarify a modulation or tendency tone in a chordal resolution. Time will be consumed rehearsing the many octave and unison passages. The "Harp" Quartet has a great deal more of this kind of writing than the Mozart, the entire third movement and the ending of the fourth movement being prime examples. Still, the suggestions offered in Chapter II for rehearsing these types of passages are recommended.

In addition to the general bowing styles discussed in connection with dynamics and articulation, several other examples should be noted. In the fourth movement beginning in measure 122, the slurred notes require the whole bow together with _flautando_ to achieve the best sound. The triplet figures beginning in measure 143 should be played in the middle part of the bow until measure 169. To obtain a more vibrant tone, the section from measure 169 to 177 should be played at the frog, working back to the middle of the bow.
in measure 177. However, to prepare for the *forte* chord on the first beat of measure 185, a gradual working back to the frog should occur during the *crescendo* between measures 177 and 185. The last two measures would again be played at the frog, where more control can be obtained for the sudden piano notes.

In the third movement at measure 9, the dotted quarter note must be held for full value at the *forte* level. If the players take too much bow on this note, they will be in the wrong part of the bow to play the eighth note. Thus, a more concise type of playing is needed with much bow pressure and little bow motion.

All *forte* chords must "ring" in all parts. The bow attack should always come from above the string, at the frog, with flat hair and a heavy, slow stroke.

Good usage of the bow many times implies "good bowings". In this piece the bowings are one of the prime factors in a musically successful performance. Generally, the articulation markings will make the proper bowing obvious, but occasionally changes must be made. Usually, the problems occur where long slurs need to be broken. This should be done in such a way that the phrases remain intact. Three examples with solutions are given. The first violin part beginning at measure 120 in the fourth movement is illustrated first. (Example 30.)
Example 30
In another instance, measures 232-246 in the first movement, the second violin and viola need to break their slurs to obtain greater sound so they can be heard over the cadenza-like first violin part. Obviously, this will require them to use more bow and pressure on each note to increase their volume. The following bowing is suggested. (Example 31.)

Example 31

Finally, in the fifth variation of the final movement, the eighth notes on the first beat of measures 108 and 120 in the first violin should have a "lift" to be musically convincing. Also in this variation, with such large skips in the melodic line, it is important to coordinate the bowing with the string crossings. A suggested bowing is given. (See Example 32.) Any bowing must be coordinated with an appropriate fingerling and, at times, can be greatly enhanced because of it. In Example 32, the suggested fingerling will contribute to the desired sound because of an attempt to shift to the sforzandos, avoidance of the weak fourth finger in landing on the sforzandos, shifting on small intervals, using open strings in shifting, and the use of enharmonic fingerings.
Other Considerations

Generally, a warm **vibrato** is needed on all instruments because of the dolce quality desired; however, in some instances a **non-vibrato** style will produce excellent results (excluding **sotto voce** passages). For example, in the first movement at measure 209, the use of this effect for almost six bars will provide a very fine contrast to the material immediately preceding and following this section. (Example 33.)
Sometimes, of course, in addition to the vibrato, a warmer tone can be achieved by playing passages in higher positions on the lower strings. Thus the first violinist could obtain a good effect in the fourth movement beginning in measure 122 by starting this passage on the D string.

Beethoven was very explicit in his directions. However, a section of the final movement has two inconsistencies. The end of the viola phrase between measures 142 and 146 differs in articulation markings from the end of the answering first violin phrase in measures 146-150. In these places dynamic discrepancies also appear. Since both phrases are
essentially the same and the more logical markings appear between measures 146-150, these indications should be incorporated into the earlier measures. These changes together with a possible bowing for measures 140-162 are given below.

(Example 34.)
Finally, it must be remembered that this piece is a transitional work, neither strictly Classical nor Romantic in concept. Eighteenth-century ideas of form are readily apparent in all movements, with the weight of the piece still resting in the first movement. No descriptive titles are used, nor are there *attacca* sections or cyclic recall. In discussing Beethoven's use of harmony, Rosen states:

When the Romantic composer is not following an academic theory of form—that is, when he is not writing what he felt should be called a "sonata"—his secondary tonalities are not dominants at all, but subdominants; they represent a diminishing tension and a less complex state of feeling, and not the greater tension and imperative need for resolution implied by all of Beethoven's secondary tonalities. . . . No comparable subdominant relationship can be found in any work of Beethoven. . . . Beethoven's harmonic practice only serves to heighten the effect of a style which depends for its dramatic expressiveness upon exactly this contradiction and its harmonious resolution. Beethoven, indeed, here enlarged the limits of the Classical style beyond all previous conceptions, but he never changed its essential structure or abandoned it, as did the composers who followed him. In other fundamental aspects of his musical language, as well as in the key relations within a single movement, Beethoven may be said to have remained within the Classical framework, even while using it in startlingly radical and original ways.53

Yet, in this quartet, some nineteenth and even twentieth-century traits can be seen. There is spread of importance among the voices, use of *obbligato* accompaniment instead of the simpler Alberti bass, much expressive contrast, frequent dialogue between instruments, more use of counterpoint, more virtuoso writing for the instruments and, of

course, the novel rhythmic drive of the third movement.
Thus, for correct performance practice the concepts of the
Classical style need to be stressed but expanded to accommo-
date the dawning of the Romantic era.
CHAPTER IV

STRING QUARTET IN C MINOR, OP. 51, NO. 1

BRAHMS

Musical Style

To gain initial insight into the interpretation of the C minor Quartet, the following paragraphs are quoted from Frederick Dorian's book, The History of Music in Performance:

The absolute ideal of transparency and formal clarity has always found its most adequate medium in chamber music. Concentration upon only a few performing parts calls for expressive economy. Obviously, the spirituality of counterpoint, the basis of all classical chamber music, is no vehicle for sheer emotionalism or virtuosity. It is primarily in chamber music that the absolute, the unprogrammatic, and the intrinsic musical content should guide the interpreter. Einstein observes that as early as the seventeenth century the chamber duet and concertante music reached noble heights of purity, never meant to be represented dramatically or naturalistically; the performance of such music must be within the limits of lyrical unity. The chamber music of the classical era likewise fulfilled the pledge implicit in its name: it is truly music for the Kammer, the intimate room, an abstract style of noble expression, in contrast to the world of theatrical effects.

Beethoven's chamber music demanded a new kind of performer, capable and willing to devote his life's work to the study of the new style and its phenomenal development from Haydn's divertimento type to the abstract polyphony of the last quartets. The protagonists of this new chamber music were the members of the Rasoumowsky quartet. Their memory lives on, not only in Beethoven's dedication of his Opus 59 to Prince Andreas Rasoumowsky, who sponsored this organization and played the second violin, but also because of their artistic courage (and their patience with the composer, who was not always too appreciative of their interpre-
Schuppanzigh, the leader of this group, became the godfather of modern quartet playing.

The greatest quartet player of the century, however, was Joseph Joachim. He and his partners brought the Beethoven tradition to the threshold of our century. Brahms was their guiding star, after Joachim's association with Liszt and the Weimar circle was severed. In the Brahms-Joachim interpretation of chamber music, the emphasis is not on emotionalism or dramatic tension, but is in affinity with the above-described historical ideals of chamber music style.

Freedom of meter, as generally advocated by the Liszt school, can be tolerated only as an exception, as in the recitative-like passages of the later Beethoven quartets. While a contrast between an energetic first group of themes and a lyrical second group is still distinctly felt, it must not be achieved, as in Wagner's case, by a dualism of tempo, i.e., by differentiation of naïve and sentimental allegro. Instead of the Wagnerian scheme of time modification, there is a unity of tempo throughout the movement. It is the interpreter's task to find a superior main tempo to suit them both, rather than to indulge in the Wagnerian device of yielding, in time, to the individualistic nature of each theme.

In the chamber music of Brahms, perhaps more than in any other of his scores, there is a glorious realization of the Kantian axiom of harmony of form and content, offering the players the most perfect opportunity for absolute music-making—for a formful interpretation along classical lines.54

Tempo

Brahms gives the following tempo indications for the C minor Quartet:

- Allegro
- Poco Adagio
- Allegretto molto moderato e comodo
- Allegro

The only two instances where he indicates any tempo changes

are the section marked "Un poco piú animato" in the third movement, and the stringendo at the end of the fourth movement. Pertaining to tempo Cobbett remarks:

... Perhaps the most important essential in starting to reproduce a work of Brahms... is the tempo. The tendency is usually to play the andantes too slowly, and the quick movements, scherzos, etc. to quickly. 55

Since no metronome markings appear for this work, we need to utilize this knowledge and the criteria for determining tempo discussed in Chapter II. Based on these criteria, the following metronomic markings seem realistic:

**Allegro** (¾): \( \frac{d}{4} = 112 \\
Poco Adagio (¾): \( \frac{d}{4} = 50 \\
Allegretto molto moderato e comodo (¾): \( \frac{d}{4} = 130 \\
Un poco piú animato (¾): \( \frac{d}{4} = 55 \\
Allegro (½): \( \frac{d}{4} = 92 \\

The stringendo marking in measure 231 of the final movement remains to be considered. (See Example 35.) Since Brahms did not indicate its length, one can only use musical common sense to determine this. With little initial harmonic or melodic movement, the solution lies in studying the articulation and rhythmic changes. Between measures 231 and 236 the first violin and viola have a slurred four-note descending quarter-note figure (followed each time by a second four-note answering figure in the viola in measures 232 and 234)


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while the second violin has a continuous eight-note pattern. Beginning in measure 236, quarter and half notes are written in half-bar syncopated groupings which had been anticipated in the 'cello beginning in measure 232. In measure 239 the second violin and viola introduce syncopated quarter notes which are reduced to eighths in measures 241 and 242. Since these articulation changes, reduced note values and syncopated notes will result in a faster sound, the written stringendo need only last until measure 235, where a new tempo (♩=112) is reached and held. To the listener this will give an impression of gradually increasing tempo, tension
and excitement between measures 231 and 241. From measure 242 to the end any further thrust of movement is not needed. Here harmonic progressions (the dissonant diminished 7th chord and its resolution in measures 242-244 and the typical V-I at the end) and voice leading (the cadential flourish in contrary motion beginning in measure 244) give the impetus needed.

Subtle tempo changes at the ends of movements are unnecessary. The increased tempo at the end of the fourth movement has already been discussed. In all other instances the effect desired has been written into the music. All parts show perfectly Brahms' method of using longer notes to give the effect of a ritard in the last ten bars of the first movement. The two violin parts in the last three measures of the second movement produce the desired slowing-down effect without any tempo change in the same manner. The slight lessening in sound needed at the end of the third movement is accomplished in the last two bars through the use of longer note values in the viola and 'cello and added quarter rests in the violins.

Within movements tempo modification is justifiable.

Cobbett states:

Brahms' manner of interpretation was free, very elastic and expansive; the balance was always there—one felt the fundamental rhythm underlying the surface rhythms. His phrasing was notable in lyric passages. In these a strictly metronomic Brahms is as unthinkable as a fussy or hurried Brahms in passages which must be
presented with adamantine rhythm . . . his marks of expression should be the means of conveying the inner musical meaning. The sign \(<>)\) as used by Brahms, often occurs when he wishes to express great sincerity and warmth, applied not only to tone but to rhythm also. He would linger not on one note alone, but on a whole idea . . . . He would prefer to lengthen a bar or phrase rather than spoil it by making up the time into a metronomic bar.\(^5\)

In the C minor Quartet such flexibility away from the strictness of the metronome is suggested for the following sections: measures 75-80, 216-221 and possibly within measures 152-160 of the first movement; measures containing the \(<>)\) sign within a bar or two in the second movement; and measures 71-81 and beginning at measure 162 of the fourth movement. Other possibilities for rubato would be in singing passages such as measures 62-75 and 203-216 in the first movement and measures 63-66 in the second movement in the first violin. This technique will also prove effective in the third movement beginning at measure 39, marked "lusingando". Obviously, in all of the above instances the degree of tempo change will depend on the musical setting in which it is found.

Dynamics

In establishing correct dynamic interpretation, the obvious first step is to define the amount of sound needed for the general dynamic markings. Since Brahms' range is from fortissimo to pianissimo, the fortissimo must equal the most

\(^{5}\)Ibid., p. 182
sound an individual can produce and still have a singing tone quality. Conversely, the pianissimo must equal the least amount of sound that can be produced with singing quality, in keeping with late nineteenth-century performance practice and emphasizing Brahms' careful dynamic scoring.

A dynamic curiosity in the C minor Quartet is the difference between poco forte (used exclusively in the fourth movement except for one time in the third movement) and mezzo forte (used only in the fourth movement). In comparing them one will find that poco forte equals mezzo forte. As an example, measures 2 and 3 of the fourth movement, marked poco forte, would be no different dynamically from measures 14 and 15, marked mezzo forte. Also, the più piano in the first movement at measures 222 and 223 equals pianissimo.

The sforzando sign is used sometimes in conjunction with a crescendo before it (third movement, measure 37) and always with a quick tapering-off immediately following (third movement, measure 37; fourth movement, measures 69-70). The sforzando itself should be accented and the amount of accent will be determined by the general dynamic level surrounding it.

The rinforzando indication used only once (second movement, measure 83) would mean to "lean" on the note indicated; that is, to reinforce it slightly. The notes marked forzando (first movement, measures 244-250), because of the
forte level, need to be played with a definite attack from above the string, and should be immediately sustained.

The terms crescendo, molto crescendo, and diminuendo are obvious in meaning. (As was mentioned earlier, the sign might also affect rhythm.) Taken in context, however, careful thought at times will be needed to determine exactly how they should be used. In Example 36, beginning in the first movement at measure 127 presumably at forte level, a crescendo is indicated ending forte at bar 129. Only with a sudden drop in the dynamic level at least to mezzo forte at measure 127 can this crescendo be successfully executed.

Example 36
In other instances, as is the case in much of the second movement, the crescendo and diminuendo are written with no definite dynamic conclusion indicated. The first twenty-six measures will be used to show how a justifiable musical interpretation can be reached. (See Example 37.) With the beginning dynamic level set at piano, the crescendo and diminuendo markings in measures 4, 5, 6, 10, 11, and 12 would seem to indicate only small rises and falls (piano--mezzo piano--piano) because of their brevity and small melodic range. However, beginning at measure 17 at a pianissimo level, the three ensuing groups of crescendo and diminuendo measures should become increasingly more wide in tonal range. Measures 17 and 18 should begin and end pianissimo, with the crescendo reaching mezzo forte. Finally, the climax should be achieved at the end of measure 23 with a strong forte in all instruments. This is followed by a one-measure diminuendo back to the pianissimo level. The above conclusion was reached because of two factors: (1) the total length of the passages involved increased from one measure (bars 4, 5, 6, etc.) to three measures (bars 23-25); and (2) the melodic range increased from an almost static state at first to two octaves in the first violin and over an octave in the cello in measures 22, 23, and 24.

In the first movement between measures 62 and 75 a somewhat similar comparison exists. (See Example 38.)
Romanze
Poco Adagio

Example 37
Example 38

No dynamic level is indicated at the end of the crescendo into measure 67 or into the second beats of measures 72 and 73. During the one and a half measure crescendo in measures 65 and 66 all four voices have increased vertical motion, with the melodic first violin eighth-note figures reaching well over two octaves above middle C in measures 66 and 67. In measure 73 the crescendo lasts for just one beat, in only the first violin (the other instruments remain piano) and involves little vertical motion. Thus, on the first beat of measure 67 a forte in all parts would seem justified while a rise to mezzo forte on beat three of measure 73 in the
first violin should prove adequate. In both examples the important line of the first violin is in no danger of not projecting because of its high range in the former case and all other instruments dropping out at the dynamic peak in the latter. For interpretation of dynamics in measures 71-72 a comparison needs to be made to a similar passage in measures 212-213. Since the latter passage includes a logical crescendo for the first violin it is suggested that a crescendo be added in the first violin in measure 71 also. A small rise to mezzo piano in all parts will suffice. Similarly, the \( < > \) signs in measures 73-74 should be added to measures 214-215. It should be noted that in this instance this marking also indicates a broadening of the tempo in addition to dynamics, as discussed on page 89.

As in the Mozart and Beethoven quartets, two other criteria for correct dynamic interpretation are noteworthy: (1) which part is most important at a given time; and (2) can one always hear the moving lines? An example of item one would be the opening measures of the first movement. (See Example 39.) All parts are marked dynamically the same, but the lower instruments obviously serve only as harmonic support for the first violin with the melodic line. Beginning at measure 23, however, the reverse is true. The lower instruments have the most important part, with the violine line supplying the supporting harmony. In both cases dynamics should be adjusted downward slightly in the accompanying
Example 39
instruments. Beginning at the second ending in the first movement is a good example of item two. (Example 40.)

Example 40

The moving notes in the 'cello part in measures 80 and 81 as well as the first four measures in the first violin part need to be brought out. Bars 84-87 should be dominated by the viola, and the next four bars alternate between 'cello and first violin. A slight adjustment, again downward, is needed by the other players.
The qualifying terms espressivo and mezza voce both appear in this work and will play a part in dynamics. Espressivo (which denotes a quality of sound, not just a dynamic) is used to Brahms seven times in this quartet to show where an individual lyric line needs to stand out. In the opening measures of the second movement, for example, all parts are marked piano, except for the first violin which has the term espressivo added. This is also true of the 'cello part beginning in the eighth measure. (Example 41.)

Example 41

In these sections a more intensified dolce sound is needed, achieved through increased bow pressure and a warmer vibrato. Mezza voce, indicating a restrained volume of tone, is used only once in measure 162 of the last movement, solely in the first violin. (See Example 42.) It is, however, combined
Example 42

with the terms dolce and espressivo. For this passage to be played sweetly with restraint and yet stand out, a change of tone color is needed, with much flautando bowing and almost no vibrato. Because of little harmonic, melodic, dynamic or rhythmic motion between measures 162 and 165, this timbre change is most effective. With the variance of dynamics, contrary voice leading and cadential drive beginning on the fourth quarter note of measure 166 a return to "natural" playing is recommended.

Phrasing

Brahms' music often avoids four-measure phrases, with complex rhythms being more characteristic (two against three, or more involved combinations.) In most instances, this avoidance of four-measure patterns is true of the C minor Quartet. In Example 43 the opening measures of the second movement form three six-measure phrases followed by two phrases of three measures each, before reaching a
Example 43
Example 44
two-bar phrase at measure 25. Here, as in much of this work, the individual line does not give much clue to phrase lengths because all parts need to be considered.

At the beginning of the third movement the articulation clearly gives the indications for a pair of one-measure phrases and a two-measure phrase which are similarly repeated and then followed by a six-measure phrase at bar 9. At bar 15 the dominant first violin figure produces a four-measure phrase continued by the second violin and viola in measure 19, but it is extended to five measures and ends at measure 24. (See Example 44.)

In the first movement, when the rising eighth-note pattern in measures 65 and 66 is linked to a one-measure downward motion in measure 67 in the first violin, a three-measure phrase is formed. The shaping of this phrase is further distinguished by the sudden half-note values and changing dynamics in the lower three instruments in measure 67. (Example 45.)
All four movements contain numerous six-measure periods. The traditional two and four-measure phrases are still evident (i.e., third movement in the Un poco più animato section) but are more the exception than the rule. (Example 46.)

Brahms use of irregular phrase lengths, however, is not evident at a first reading, and a thorough study of the score is important for correct phrase interpretation.

On careful observation, one will notice that in sections of the first movement dynamic and phrase markings are ambiguous. Therefore, what had been indicated at one time in the music might not necessarily be the same in a
similar passage. These irregularities will be found at measures 64-78 (Example 47) and measures 205-219 (Example 43) where several differences in printed dynamics and phrasing occur. First violin dynamic markings differ in measures 67 and 208, 71 and 212, and in measures 73-74 and 214-215. Second violin dynamic markings differ at measures 67 and 208, 68 and 209, and 74 and 215. Similarly, differences exist in the viola and 'cello dynamics in measures 67 and 208, and 74 and 215. Musically, the first section is marked more logically in keeping with phrase shapes. Thus, to conform, the latter markings (except those concerning dynamics, discussed earlier) should be altered.

As in the Mozart and Beethoven quartets, uniform bowings in the Brahms quartet are necessary for maximum clarity and phrasing. One rhythmic pattern occurring several times in the first movement appears first in measures 5 and 6 in both violin parts. To use separate bows for each note will result in the dotted quarter being too short. Thus, a "hooked" bowing would be more desirable \( \begin{array}{c} \text{\^} \\ \text{\textperiodcentered} \end{array} \) with an incisive staccato stroke on the eighth note. Since this figure appears in all parts at some time during this movement, all players must bow it the same way.

Most solutions to individual bowing problems are obvious, as in the above example, but occasionally irregular phrase lengths or rhythmic groupings will need special atten-
tion as in measures 62-75 of the first movement (first violin). One possible bowing is suggested. (Example 49.)

Example 49

All of the instruments are involved in a similar situation beginning in measure 54 of the second movement. (See Example 50.) Here, in addition, the important lines of the second violin beginning in measure 55 and continued by the 'cello in measure 56 need to be stressed.
Example 50

Articulation

Correct accentuation in performing Brahms is as important as with earlier composers. In fact, as Jacobson states,

... the rhythmic vitality of Brahms can readily be traced to his establishment of a new equilibrium between regularity of pulse and the elements in music that pull against it. These vary from the minor modification of pulse that approximate Beethoven's characteristic rhythmic method to the complex dissolution that makes it impossible for the unaided ear, over a given but precisely defined
stretch of music, to tell where the beat is.  

Much accentuation (written and unwritten) in the G minor Quartet is understood. However, the qualifying terms tenuto, marcato and agitato need to be put into context as does the use of the accent. The accent mark appears in both the first and third movements. But tempo, character and other considerations need to be studied first before one can decide how to interpret it. The viola passage in measures 58-60 of the first movement, marked with frequent accents at a forte level, has to be played with much strength and clear articulation in order to be heard. However, the same marking in the third movement in a piano setting with the qualifying term semplice would indicate more of a "leaning" on the notes, with only a slight increase in bow pressure, increased bow speed and warm vibrato.

The tenuto indication is used only in the third movement at a piano level and simply means to hold the notes for full value with no special emphasis. Marcato sections, occurring always in forte passages, all need a broader bow stroke almost in martelé style. Two sections are marked agitato and both follow tranquil passages that occur in the first and last movements. (See Examples 51 and 52.) In both cases the agitato section is piano followed by a crescendo, and is preceded by a quiet passage consisting of

Example 51

Example 52

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longer note values. If heard at similar tempi the calm sections will naturally sound slower. To achieve the correct effect in these places then, cleaner articulation and not increased tempo is needed. Each note or note grouping needs a slight, sharp, emphasis in its initial attack within the dynamic level indicated. This emphasis should be accomplished through a slight pinching effect in the right hand with the first two fingers and the thumb, and increased pressure on the string.

Due in a large part to the fullness of harmony, pizzicato sections occurring in the two middle movements always involve two or more notes played together. A pizzicato chord preceded by a \( \frac{5}{4} \) sign, as in measure 121 of the third movement, needs to be broken into individual notes, resulting in a spreading of the chord. The plucking finger is placed on the lowest string before beginning a strumming motion. (Example 53.)

Example 53

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Pizzicato chords not preceded by this sign, as in measure 125, should be played unbroken, with a finger stroke coming from above the string and angling away from the player at contact.

Technical Aspects

Rhythmic Problems

In rehearsing this quartet, the two most difficult problems are rhythm and intonation. The first movement has several rhythmic problem areas including the opening figure which occurs throughout the movement. The difficulty here lies in getting the eighth notes in the violins to mesh exactly with the continuous eighth-note figure in the accompanying viola and 'cello line. This becomes even more difficult in a passage like measures 22 and 23 where the accompanying eighth notes in the violins are changing while in the middle of a crescendo. To eliminate the problem, players with the figure should be very careful not to play a triplet rhythm instead.

In measures similar to 35 and 36, late off-beat entrances (in this case in the violins) can be avoided if not too much time is taken on the eighth rests and tied notes. In measures like 58-60 with four different rhythmic patterns occurring at once, only slow, meticulous rehearsing with a metronome will suffice. Beginning in measure 67 of the first
movement, if the first violinist wishes to use any tempo rubato, ensemble uncertainties might arise. The major rhythmic problem in the second movement begins at measure 40 and continues to the end because of the combined use of duple and triple groupings. The solution here is at first to rehearse only triplet figures until good ensemble is achieved. The duple rhythm can be added later, being careful to fit it in exactly. Once the tempo has been determined for the third movement and its trio, rhythmic problems will probably occur between measures 38 and 53, because of the term lusingando (which could imply some use of tempo rubato) and the dovetail effect between viola and first violin and later between the two violins (measure 45). This latter problem of late entrances after tied notes is again solved by "getting off" these notes sooner. In the fourth movement the two general areas for rhythmic concern are measures 41-70 and 132-161. Here, as in the first movement, many of these uncertainties can be avoided if care is used not to take too much time on the eighth rests and tied notes. The stringendo beginning in measure 231 presents the ensemble with another problem. A simple solution would be to increase the tempo in two-measure blocks. Thus, at measures 231, 233, and 235, there would be sudden, slight increases in tempo. This will prove much more effective than trying to increase the tempo on every beat of every measure.
Intonation

One will find that the unusual number of octave and unison passages in this quartet will be the biggest cause of ensemble intonation problems. In measures 4-6, 22-31, and 122-128 of the first movement, the opening two measures of the last movement, and many passages similar to these examples, slow, meticulous rehearsing always needs to be done between the instruments involved, as suggested in Chapter II.

Because of the large tonal range and complex part writing many intonation problems will be caused by faulty shifting. A typical passage is found in the first violin in measures 62-75 of the first movement, previously cited. (See Example 49) The suggested fingering gives greater accuracy because of the many half-step shifts, coinciding the shifts with rhythmic patterns and bow changes, use of extensions rather than actual shifts and, when possible, utilization of the open string when going from one position to another.

Obviously, in sections of the quartet where there are wide pitch ranges between instruments, greater tempering of tuning will be required. For example, on the first beat of measures 7 and 143 in the first movement the high A-flat in the first violin is almost five octaves above the low C in the 'cello and will sound very sharp if not tempered downward with necessary adjustments in the middle voices.
to match the open string of the 'cello. A similar situation exists in measures 236-237 of the first movement and measures 203 and 215 of the last movement. Here, to help offset the pitch discrepancy a slight upward adjustment in the 'cello pitches is suggested if no open strings are involved, again with the middle voices adapting.

This quartet, being conceived in terms of functional harmony but expanded in its use of secondary and altered chords, has many modified tones sometimes having a tendency to move upward or downward in their resolutions. For example, in measure 147 of the first movement in the $V^6_5$ of vii - vii progression, the 7th of the chord, A-sharp, resolves to B. Tempering the A-sharp slightly upward will help define the structure.

At other times, beginning at measure 79 of the first movement, for example, one or more tones will determine the "correct" pitch of others. In this instance, once good intonation has been achieved on the first beat of measure 79, the pitches of the ensuing notes in the measure are dependent on the held double-stop notes in the second violin and will need to be adjusted accordingly to sound in tune. In turn, the new double-stop and the viola note in measure 80 require tempering to the prevailing F-sharp in the 'cello. This kind of pitch adjustment is necessary through measure 83. (See Example 54.)
In fact, tempering of pitches is an on-going process. As stated earlier, Lloyd has given argument against the rigidity that is inherent in any fixed system of tuning. In addition, Cobbett states:

It is a curious state of affairs . . . to consider that the science of harmony can produce only a very limited proportion of true concords, and that even in the most beautifully performed music almost everything is beautifully out of tune. The use of temperament, by the musically endowed performer, is actually continuous.  

Other Considerations

Giving proper signals for beginnings and endings should be based on conducting principles. Yet many performers are ignorant in this matter, and since awareness of one of these principles is an important aspect of correct performance of the second movement, it will be mentioned. Giving an upbeat indication by raising the scroll of the violin in the prevailing tempo is usually all that is needed (i.e., the beginning of all four movements). In a passage where

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there is a rest on the downbeat (in the second movement, measure 75, following a small fermata), one must still be careful to indicate only one preparation gesture. This will mean that the first violinist will need to give a downward motion with his scroll instead of the usual upward motion. The common mistake is to give both motions, which would actually be two preparatory beats; but only under special conditions (which do not occur in this quartet) will an extra preparatory beat ever be necessary.  

Brahms in his pieces never indicates that two independent movements are to follow one another without a break. However, as Cobbett remarks:

... not only does he in all cases calculate the effect of the last chord of one movement on the first of the next, but he here (in the C minor Quartet) for the first time contrives to make a short finale gain in weight by its effect as a kind of epilogue to the previous movement and to the whole work ... . This impression of finality is enforced ... by the fact that the opening figure of the finale is a compound of those of the Romanze and the first movement.  

Brahms is more fortunate than most of his predecessors in the quality of the published editions through which his work has been handed down. The twenty-six volume Collected Edition published for the Vienna Philharmonic Society's archives in 1926-27 by Breitkopf and Härtel in

Leipzig, since revised, is the basis for most subsequent scholarship and publication. One such publication is the reprint of the Breitkopf edition by Kalmus in New York. Since parts and miniature score are readily available, this useful source is highly recommended.
CHAPTER V
SIX BAGATELLES FOR STRING QUARTET, OP. 9
WEBERN

The general approach to follow in performing the Six Bagatelles is similar to the one followed in 18th and 19th century quartets. One first needs an understanding of the composer's intentions and then a procedure which will best implement them. Questions of manuscript so critical in Mozart and Beethoven no longer exist. The Universal Edition of parts and score to the Bagatelles published about a decade after its composition still remains the authoritative source. Webern's intentions however, as well as those of his contemporaries Schoenberg and Berg, are often not understood. In trying to explain difficulties found in Schoenberg, Berg states:

The music of the nineteenth century is almost always homophonic; its themes are built symmetrically in units of two or four bars; its evolutions and developments are for the most part unthinkable without an abundance of repetition and sequences, and finally this conditions the relative simplicity of the harmonic and rhythmic action. Decades of habituation to these things make the listener of today incapable of understanding music of a different kind. He is irritated even by such things as a revival of some artistic technique that has become a rarity, or by deviations--even in only one of those musical matters--from what happens to be usual, even if these deviations are perfectly permissible from the point of view of the rules. Now imagine his position when (as in the music of Schoenberg) we find--united occurring simultaneously--all these properties that
are otherwise considered the merits of good music, but which generally crop up only singly and well distributed amongst the various musical epochs.61

He continues:

Even atonal and otherwise "progressively orientated" music manages to be accepted and even become relatively popular thanks to its adherence to such more or less established principles, such exaggerated one-sidedness, and thanks to the fact that it contents itself with being "modern, but not ultra". And even if one or more aspects of such music do present the listener with difficult tasks, it adheres so strictly to the conventional in all other respects--often being intentionally "primitive"--that it appeals to the ears of people of moderate musical discernment, just on account of those negative properties. It appeals to them all the more because the authors of such music, in order to be stylistically pure, have to be aware of the consequences of only their one particular feature of modernity, and are not compelled to draw conclusions from the combination of all these possibilities.62

Like Schoenberg, Webern completely abandoned using many of the traditionally important compositional devices (i.e., tonic-oriented harmony, repetition, etc.) during his "free atonal" period beginning in 1908. And like Schoenberg this caused for Webern a general public misunderstanding of his musical objectives. That he was strongly influenced by Schoenberg is well known, and probably the most important event of his youth was his meeting with Schoenberg in 1904. His period of apprenticeship lasted until 1910. In fact, "... everything (Webern) wrote until 1910 was entirely supervised by Schoenberg, whereas after 1910 (he) worked in-

62 Ibid., pp. 203-204.
dependently." Obviously, it was during these years that there took place those profound changes in music to which Schoenberg contributed more than anyone else.

However, by 1909 Webern had developed an economic style of writing all his own. In following the idea of simultaneous occurrences mentioned above, the Six Bagatelles of 1913 show Webernistic qualities to be seen in later works as well. There is perpetual variation with suppression of repetition of any kind, thus negating a need for large forms. The ideal of pure counterpoint is carried to the limit. With his concern for continually renewed invention come examples of Klangfarbenmelodie, which obsessed him throughout his career. Quite possibly these qualities are due in part to Schoenberg's teaching, as are Webern's choice of thematic intervals. "The juxtaposition of minor seconds and minor thirds is one of Schoenberg's typical means of breaking the bonds of tonality. Therefore, it is quite logical that Webern should have cherished, all through his career, a particular predilection for these intervals." Finally, two elements found in the Bagatelles will play an important part in Webern's later works. First a style in which rests play a preponderant role and second, a thematic discipline which leads straight to the tone-row system, culminating in the twelve-tone technique used in all his works after Op. 17.

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64 Ibid., p. 193

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Musical Style

Tempo

Webern's use of meter, tempo and rhythm in the Bagatelles is very complex and unique. The time signatures at the beginning of the six movements alternate between triple and duple meters with a combination (\( \frac{5}{4} \)) in the second movement:

\[
\begin{align*}
I & - \frac{3}{4} & IV & - \frac{3}{8} \\
II & - \frac{5}{4} \text{ (divided )} & V & - \frac{4}{8} \\
III & - \frac{2}{4} & VI & - \frac{3}{4}
\end{align*}
\]

Triplet rhythms and polyrhythms are very prevalent. There is much use of rubato in the faster movements and especially in the second movement. In spite of all the complexity, there is no question as to the correct tempo at any certain point since Webern indicated metronomic markings at the beginning of all movements and within individual movements when necessary. (His metronome markings always say "ca." ) For example, in the first movement Webern uses a total of four metronomic indications in the course of only ten measures. Because of this explicitness in such short amounts of time, the traditional unwritten pushes and pulls at "cadences" and other appropriate places need to be abandoned.
Dynamics

In the Bagatelles one will find, as in most of Webern's other compositions, a preponderance of soft dynamics. The first, third and sixth movements all begin and end pianissimo with the high point, dynamically, near the middle. The fourth and fifth movements also begin and end softly, but with lesser dynamic fluctuations. The fifth movement is especially quiet with its long note values and "high" dynamic level of pianissimo. The only movement with a fairly even distribution of dynamics, and the only one to begin and end forte, is the second movement. The Six Bagatelles contain a total of six dynamic levels: pianississimo, pianissimo, piano, mezzo forte, forte, and fortissimo, plus the frequent use of crescendo and diminuendo. Each player must be careful to make a clear distinction between the different levels. This can be extremely difficult since often two notes in succession will have one or more dynamic markings. They must be observed or the pieces lose much of their effectiveness.

Although phrasing will be discussed below, it should be pointed out that dynamic marking is an important element of correct phrasing. By following the dynamics carefully, the phrase structure can be more readily determined. Thus, the third movement can be seen as one large phrase which begins and ends very softly, with the high point in measure six. (See Example 55.)
III
Ziemlich fließend (J. ca. 76)

Example 55
In the fourth movement the use of crescendo and diminuendo in individual lines clearly illustrates the composer's frequent dynamic "overlapping". In measures 5, 6, 7, and 8 all parts except the first violin must be sure to play very softly (pianississimo) with no rise or fall. This will enable the dynamic changes in the first violin part to be effective. (See Example 56.)

Webern's use of rests contributes a great deal to reducing overall tonal volume and to the transparency and individualism of each part. Throughout the entire score every measure has at least one rest. In fact, both the first and second movements have more rest values in all parts than note values. During the entire work, Webern uses the rest almost 49% of the time. This shows the immense importance he places on silence in this composition.

Phrasing

Single pitches are of great importance and at times, as in all of the fifth movement, whole phrases are built upon just a few notes. In most of the other movements, when the melodic line contains several pitches, pointillism is frequently used. Thus, in measure 5 of the sixth movement, a disjointed melodic line will result when each instrument participates equally in the presentation of a short 12-note phrase. (See Example 57.)
Sehr langsam (p, ca 60) IV

Example 56
One of the interesting aspects of this type of melodic line is the fact that Webern does not keep the four instruments in their traditional score order of highest to lowest. By using harmonics and various clefs the 'cello and viola often play the higher notes in the melodic line. This is not readily seen by looking at the score since the sounding pitch of the harmonics is not always indicated.

Because of this lack of a "melodic line" in the traditional sense, correct phrasing can be difficult to achieve at times. Webern stated in one of a series of lectures about new music given in a private home in 1932-33, that each "run" of twelve notes marked a division within
the piece, idea, or theme. Although this technique is not consistently used in these pieces, it is important to consider. For example, the first three measures of the first movement form a short phrase in presenting the first chromatic series of notes. (Example 58.)

![Example 58](image)

The 'cello entrance in measure two is not to be considered part of this phrase. It is the start of a new, overlapping phrase. Another example would be measure 5 of the sixth movement, mentioned in Example 57 above. Here the "run" of twelve notes begins in the two violin parts on beat one and ends on the tied-over C-natural in the first violin.

**Technical Aspects**

Timbre in the Bagatelles is greatly varied because of the common use of mutes, ponticello, tremolo and tremo-

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lando, natural and artificial harmonics, glissandi, and various uses of arco and pizzicato. An unusually large number of these devices are incorporated into the very short movements, and their execution, combined with dynamics, requires technical skill and intense concentration.

Pizzicato

In these pieces three kinds of pizzicato are required. Some notes marked "pizz." have dots above or below them and others have lines. Both of these types are found at various dynamic levels throughout and require different execution. Generally, the notes indicated with a dot should be plucked in a direction more perpendicular to the fingerboard than notes with lines. Notes with lines should be plucked farther down the fingerboard with a more horizontal plucking angle. To add length and warmth to the notes with lines more vibrato should be used than on the dotted notes or notes with no special indication. Measure 7 of the fourth movement requires the short, dotted execution on one note followed immediately by a lined note calling for the vibrato and horizontal plucking angle. If done correctly, there is a surprising difference between the two. One unique use of pizzicato and arco occurs in the 'cello part in the fifth movement in measure 9. Here Webern combines a pizzicato note with a glissando to a new pitch which is played arco. (Example 59.)
One particularly exciting effect is created by the fortissimo pizzicato notes in the third movement, measure 6, which must be plucked as forcefully and vertically as possible so that the strings almost "smack" the fingerboard on the rebound. (Example 60.)

Whenever ponticello ("am Steg") is indicated, the performer must notice that it is usually in a soft dynamic situation. There are four kinds used: (1) in connection with a slur or legato section (fourth movement, measure 5);
(2) as short staccato notes (fourth movement, measure 3);
(3) a tremolo, in this case with a sforzando (third movement, measure 7); or, (4) as part of a tremolando passage (third movement, measure 2). Usually, these would all be played in the upper half of the bow. Measure 1 of the sixth movement is an exception since the composer's bowing puts the ponticello notes at the frog and by necessity off the string.

In the arco sections, as in the pizzicato passages, one must be careful to observe Webern's indications for note lengths and articulations. Notes written with a wedge-shaped marking, as in the second and third measures of the third movement in the first violin, should be played at the tip and must be very articulated. A difference must be made between notes with lines or dots as well as between these notes in connection with a tie or slur. Dotted notes connected with a slur or tie need to be played slightly shorter than lined notes and both are to be played on the string. Generally, spiccato is used very little. However, a few unslurred dotted notes need to be played off the string, as in the second measure of the first movement in the viola part. Here, a secco sound is desired with less forearm motion in the bow stroke together with a more vertical contact with the string.

Flautando occurs frequently. In the first, third and fourth movements, especially, the lyrical fragments require a large amount of bow.
A clear distinction between an accent mark and a sforzando must be made. Accent marks occur in various dynamic levels indicating a slight emphasis on a note. Webern uses the sforzando when a more violent attack is desired. He combines the two in the first violin part at the height of a climax in measures 5 and 6 of the sixth movement. (See Example 57, page 126.) The same marking occurs in the 'cello part in the first movement in measure 8. However, because it is indicated over a harmonic, the effect is much less forceful. (Example 61.)

Rehearsal Problems

As was the case with the quartets in previous chapters, intonation and rhythm will take up the bulk of the rehearsal time in the Bagatelles. These are of a different nature, however, and will be explained. Also, since all the musical material has been compacted to such a great extent, individual measures will require greater attention than before. To
illustrate, an example of each type of problem area with its solution is given below.

In most cases, since there is so much diversity to comprehend, the movements need to be rehearsed sectionally according to the phrasing. This will usually mean one to three measures at a time. In practicing the first movement, for example, the following "sections" will result: the first two and a half measures (the entrance of the cello in measure 2 being left out); from the cello entrance in measure 2 through the fourth measure; measure 5 to the first beat of measure 7; the upbeat to measure 7 in the first violin through the first beat of measure 8; and from the upbeat to measure 8 in the first violin to the end. Rhythm obviously will be of initial concern, but gradually refinements in dynamics, tone quality, articulation, etc. can be added.

Achieving good intonation, traditionally one of the more important goals of a string quartet, is important here too. However, because of Webern's use of pre-serial techniques, a different approach must be taken. There are two situations involving the entire ensemble that need to be mentioned:

1. Since much of this work involves quasi-pointillistic writing, careful attention must be paid to the intervallic relationships between a note played by one instrument and notes played before and after it on another instrument.
A good example would be the opening three measures of the first movement. In presenting the "row" in these measures, the players seldom play together. Much of the time only one instrument is used for any given beat. With so much rhythmic complexity to occupy rehearsal time it would be very easy to neglect intonation entirely in this type of situation. Each note has to be carefully matched for intonation: The second with the first, the third with the second, etc. In most cases this will involve tuning Pythagorean major and minor seconds or sevenths. At other times, as on beat three of measure 2, more traditional intervals can be used for tuning aids: the perfect fifth and perfect fourth between the viola and first violin; or on the second half of that beat, the minor sixth and diminished fifth between viola and first violin; or the minor third and perfect fourth between the 'cello and viola.

2. When three or more parts overlap one another, resulting in "chordal" formations, this will usually involve tuning major and minor seconds or sevenths instead of the more traditional octaves and unisons. When perfect intervals or major and minor thirds and sixths occur, these can be used to aid intonation. To illustrate, the fifth movement can be used as an example. (See Example 62.) In the first measure the just major third between the 'cello and viola must be matched before the second violin adds the
V

Äußerst langsam (\textit{\textfraktur} ca \textit{40})

Example 62

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C-sharp and D-sharp. In measure 3 the perfect fourth between the viola and second violin needs to be tuned before the first violin adds the F and E-flat. In measure 4 all the minor seconds need to be distinct. In measure 5 there must be a perfect fifth formed between the entering viola note C and the sustained 'cello note F. In measure 6 the second violin, viola and 'cello need to be aware of their "cluster" of minor seconds. In measures 7, 8, and 9 there is the continuing concentration of half-steps. The first violinist's G-flat in measure 10 must form a perfect fifth with the violist's B, as well as a diminished fifth against the second violinist's C. In measure 11 a major seventh exists between the viola and second violin. Measure 12 contains another minor second relationship. The last measure has a minor third between the 'cello and the first note of the viola, a perfect fifth between the 'cello and second violin, and a major seventh between the 'cello and first violin.

Because of the use of polyrhythms and the quasi-serialism of the work, rehearsal problems exist that do not exist in a more traditional score. Without a doubt, these complexities of rhythm within such short time spans cause the most serious ensemble concerns. The fourth movement will be used to illustrate ways of solving some of these problems. (See Example 63.) At first, parts with similar rhythms must be rehearsed. The second violin, viola and 'cello
Sehr langsam (Adagio 60)

Example 63
should practice their parts slowly together, but only playing when they have duple rhythm. The second violin would leave out measures 5 and 6 and the 'cello measure 2. After sufficient rehearsal, the triplet rhythm would be added. The triplet figure occurs in only one part at a time and each individual must fit it in against the basic duple groupings. To help fit in, each individual has to mathematically subdivide his groupings into a common denominator. In measure 3, for example, the first violinist would have to count six small beats for every basic unit in order to be certain of rhythmic accuracy with the triplet sixteenth notes. In measure 6, since there are four dotted sixteenth notes to fit into three basic beat units, he must subdivide his measure into twelve parts with each note receiving three small beats. The same technique would apply in the 'cello part in measure 2.

Other Considerations

In performing most 18th and 19th century string quartets the duty of leading usually goes to the first violinist because of the homophonic nature of the music. Usually, however, he would only have to "conduct" at entrances, cutoffs or tempo changes when there are two or more players involved. The rest of the time careful listening would suffice. This is true to some extent in the Bagatelles with
some differences: 1) since the pieces are not written homophonically, all players will from time to time need to lead; 2) much of the time only one instrument is playing; and 3) there are many tempo changes and different rhythms in individual parts throughout the six movements. Because of these differences, what will evolve between the first rehearsals and the actual performance will be quite unique. For example, consider the first four measures of the first movement.

(Example 64.)

Initially, since there are so many tempo changes and different rhythms in individual parts, it will be most helpful for someone to lead or "signal". In measure 1, the 'cellist would signal first since he enters first and because he plays on the beat. The first violinist would lead on the third beat and continue through the third measure because of his relatively uncomplicated rhythm. The other players with duple
or triple figures would fit in with his beats. Beginning in measure 4, it is imperative that the second violinist give a strong indication for his *pizzicato* note because it is the only one occurring directly on the downbeat. This type of procedure should initially occur throughout the movement. However, as one becomes more familiar with the first movement the need for leading should diminish to nothing. This is so because rarely are there more than two performers playing at the same time and even then, never together because of the different rhythms in each part. Thus, nobody leads but everyone listens. This evolution from leading to listening will prove true for most of the other movements as well. In performance, only occasionally will there be a need for the traditional "signal" because of tempo changes, *fermatas* or ensemble entrances. These places are measures 7 and 8 of the second movement; the first beat of measures 1 and 13 in the fifth movement; and the first beat of measures 1 and 3, the second beat of measure 6, and the third beat of measure 7 in the sixth movement.

Some problems of ensemble can be solved through subtle alterations. For example, the last two measures of the fifth movement are written as a $\frac{2}{8}$ measure followed by a $\frac{3}{8}$ measure with a rest on the first beat. If one were to think of them as a $\frac{3}{8}$ measure followed by a $\frac{2}{8}$ measure beginning on the beat, it is much easier for the first violinist to give a clear signal for the last entrance. (Example 65.)
Finally, as an aid to the performers the individual parts to this work are written in score form with each movement placed on a separate page. Since the movements last only a few seconds, turning pages between every one would lead to unnecessary interruptions. To insure greater musical continuity, each page must be reduced in size and pasted to a single large sheet of paper or cardboard to eliminate the page turns.
CHAPTER VI

SIXTH STRING QUARTET

BARTÓK

Musical Style

Bartók was thoroughly trained in the traditional manner. He was strongly influenced by Debussy and Magyar folk song in his later works.66 This can be seen in the Sixth Quartet, published by Boosey and Hawkes (publisher of all Bartók's works). There is little if any actual folk material in this music, but the Hungarian character is evident with much melodic use of the perfect fourth, general avoidance of upbeats, decisive first beats and dotted rhythms, modal variety and ornamental grace-notes. Also to be found is Debussyian color and parallel harmonic motion, i.e., much of the Marcia. However, other influences are apparent. There is great contrapuntal technique derived from Bach. A good deal of the "primitivism" of the Burletta and other sections of the quartet can be traced to Stravinsky and the quasi-serialism to Schoenberg. The cyclic idea was, of course, perpetuated by Liszt, Franck, Fauré and others.

For the performer these diversities coupled with

Bartók's complex part-writing and string scoring lead to initial difficulties of musical comprehension. However, through score study one will find the musical aspects of performance to be very clearly defined and with little doubt as to their correct interpretation.

Tempo

Bartók supplies metronomic markings for the beginning of all movements and for any changes of basic tempi within these movements. In addition, a liberal vocabulary of words is used to further indicate tempo and tempo modifications. To show how a correct tempo can be determined in this work with little or no room for variance, the opening of the first movement will serve as an example. The first twenty-three measures include the Mesto (sad, mournful) opening, indicated $J= \text{C. 96}$, followed by the sudden Più mosso section, marked $J= \text{C. 70}$. Once the tempo of the Vivace section, beginning at measure 24, has been established at the suggested $J= \text{C. 140}$, the tempo should remain exactly the same until measure 77. Here, poco a poco rallentando is indicated and leads into measure 81, marked Un poco meno vivō, $J= \text{C. 120}$.67 Because of the poco a poco tornando beginning in measure 93, there should be a gradual accelerando to measure 99. The result will be

67Note: the terms rallentando and ritard are often confused. Rallentando means a gradual slowing into the next tempo while ritard means to slow down slower than the next tempo.
a return to a faster tempo, indicated vivacissimo agitato, \( \text{\textbar \dot} = 160 \). Ancora piu vivo (still more vivo) shown in measure 117 at a metronomic marking of \( \text{\textbar \dot} = 176 \) needs to be observed. Tempo I at measure 137 must be suddenly slower, back to \( \text{\textbar \dot} = 140 \). Starting in measure 143 at the un poco rallentando, the tempo should gradually slow down to \( \text{\textbar \dot} = 120 \) shown at measure 158. Bar 166 is indicated clearly as \( \text{\textbar \dot} = 140 \). This beat unit should not vary until measure 265, where the poco rallentando indication leads into measure 268.

Questions of correct speed will not arise if the type of procedure just described is followed for the remainder of the piece. As with Webern the traditional tempo variations at cadences and other appropriate places are no longer needed. Rubato indications are written into the music in the second movement at measures 80, 98, and 115 (See Example 66) so that even these areas are not allowed a subjective tempo interpretation.

Dynamics

Bartók's dynamic markings are just as explicit, ranging from pianississimo to fortissimo. Within this range many sound levels and articulations occur; so many, in fact, that his late quartets are exceptional in this respect. Clearly differentiating between the various
Example 66
general dynamic levels is the first step in correct interpretation. Thus, it is important to realize that measures 44 and 45 of the fourth movement, marked pianississimo, are the softest in the entire work. If performed with this in mind, an effective contrast will occur between this and a fortissimo passage such as the second measure of the Burletta of the third movement.

Many levels of loudness need to be established next. The beginning of the Burletta through measure 45 will be used to illustrate. (See Example 67.) Although forte is indicated in measure 1, the players must note the fortissimo in measure 2 and not begin too loudly. At bar 25 a third level, mezzo forte, appears and at bar 33 a piano level is indicated. At bar 35 the mezzo piano is the fifth general dynamic marking in this movement. Once these levels have been defined, the unusual number of dynamic fluctuations have to be carefully observed. Between measures 33 and 45, for example, there is some kind of dynamic change indicated in every bar in conjunction with articulation variances.

The question of being able to hear an important part at any one time is largely taken care of if one carefully observes the dynamic differences written into the score by Bartók. Between measures 78 and 105 of the Burletta, dynamic variances can be seen between individual
Example 67
Un poco più mosso, \( \frac{4}{4} \)
Tempo I.

(rallent... J. see)

Piu lento, espressivo
parts. (See Example 68.) Obviously the player with the loudest dynamic at any given moment needs to be heard above the others, so the 'cello should dominate at measure 82 and the second violin and viola in measure 93. Qualifying terms (espressivo, dolce, etc.) also differentiate levels of importance. In measure 87, although all instruments are marked piano, the second violin is the most important because of the dolce indication marked only in that part. The same is true of measures 78 and 88 in the first violin. In measures 102 and 104 the term espressivo in the violins further indicates levels of importance.

Only occasionally is there any room for a subjective dynamic interpretation. An example would be in the first movement at measure 262 (Example 69).
A level has to be agreed upon because no dynamic is indicated for the end of the *poco crescendo* begun in measures 258 and 259. Since the word *poco* was used and since little vertical melodic motion occurs, a rise to *mezzo forte* would seem justified.

An excellent analysis of this work is given in Halsey Stevens' book, *The Life and Music of Béla Bartók*.\(^6^8\) A study of the analysis will give further insight into dynamic interpretation. For example, many of the main motives or themes mentioned in the analysis which are obvious in their initial appearance will sometimes appear in retrograde or inverted form later in the piece and possibly go unnoticed. At measure 166 in the first movement, for example, the ear will probably be aware of the prolongation of the first theme in the viola and 'cello but not be conscious that simultaneously its first four notes are being presented in an inverse retrograde form in the violins, which also needs to be heard. (Example 70.) Similarly important is the ostinato passage beginning in measure 180. Initially this does not make itself felt as a variant of the first part of the main theme, and subsequent imitative treatment of the remainder of the theme may seem fragmentation. Yet, upon study it becomes apparent that

both parts of the theme are present simultaneously, the first introducing and serving as support for the second. (See Example 71.)

Articulation

A typical compositional technique used by Bartok is one of permeating entire movements with a particular kind of sound. In this piece, for instance, much of the *Burletta* is of a percussive nature while the *Marcia* is more stately. The outer movements in contrast are very linear. These differences of sound for the most part are achieved through articulation.

Moreover, in discussing articulation in this work the following three general observations need to be mentioned: (1) Bartok's writing for strings, technically difficult at times, is always idiomatic; (2) his method of notation is very explicit; and (3) although some new playing techniques are introduced in the *Sixth Quartet*, its uniqueness lies in its prolific use of almost every string technique and articulation ever devised up to 1939. Obviously, before attempting to play this work, the members of the quartet need to be familiar with these basic techniques and their execution.

Several examples based on these generalizations will be given to show ways of achieving the correct charac-
ter needed for the section in question. Beginning at measure 14 of the first movement and continuing to the Vivace, all notes should be held out for full value and, as indicated, played pesante with no accents. The different note values and changing dynamics will give the necessary shape to the phrases if carefully observed. Beginning at the Vivace all instruments should play legato (no accents on entrances), softly and with a light, graceful quality because of the leggero marking. The dots above some of the notes connected with slurs indicate a semi-legato style of bowing. By the end of measure 30 forte should be reached. The glissando into this forte should extend over the entire first beat. In measure 31, because of the forte level, the sforzando in the first violin should be heavily accented near the frog, followed by a rapid diminuendo to mezzo forte in measure 32. Between measures 32 and 40 the first violinist should continue his articulation in much the same manner as the Vivace opening, except with different dynamic levels. Between measures 36 and 44 accent marks appear at a piano level and a clear distinction should be made between bow strokes with and without accents. The glissando in measure 59 ends in sforzando and should be heavily accented. The marking \( \frac{1}{3} \), beginning in measure 68 of the first violin part and measure 74 in the viola, would be translated to mean a series of notes played mezzo forte.
and held to their full value, but sharply accented. During this time the other instruments should continue to play smoothly between bow strokes since nothing to the contrary is indicated.

The opening Mesto section of the second movement (see Example 72) begins with the 'cello playing the same motif heard earlier in the first movement in the viola. The first violin has an obligato part while the two inner voices give harmonic support. The dynamic and articulation markings need to be clearly differentiated the way Bartók has indicated. The mezzo forte, espressivo marking for the 'cello (unmuted) would indicate a warm, singing tone. One does not need to force the tone since the other instruments are muted. The first violinist must play at a different dynamic level (piano) and very simply (semplice).

Here a more subdued sound is required with less intense vibrato and tone quality. The inner voices, which are marked piano to start and with a rise to mezzo forte at measure 8, need only to accompany with their tremolo. Any slight bow articulation between pitches should be avoided where Bartók connects them (bars 2 and 3, 12 and 13) with dotted lines.

In the second movement at the Marcia section, a very resolute, loud and precise type of playing is needed because of the forte, risoluto, ben marcato marking in all
Example 72
parts. (See Example 73.) This marked or pointed sound will best be achieved by playing the entire passage on the string with a "pinching" effect in the right hand to begin each new note. One must be careful at the same time to sustain the longer notes for full value. Since a good bowing is imperative here, several possibilities are suggested. (See Example 74.)

Beginning at measure 25 a curious marking is indicated. The entire passage is made up to the following two figures: $\uparrow\downarrow$ and $\downarrow\uparrow$. The dot on the eighth note shortens it and makes the two figures rhythmically identical. The reason Bartók writes them differently is to make the parts easier to read. The $\uparrow\downarrow$ figure always begins directly on the beat, while in the $\downarrow\uparrow$ figure the second note falls on the beat. The beats are further strengthened by the addition of crescendo and decrescendo marks ( $\uparrow\uparrow$ and $\downarrow\downarrow$ ) creating the equivalent of small accents on the beats.

Another example of articulation interpretation is found near the end of the fourth movement. Beginning at measure 46 all parts are marked piano, but the moving lines are obviously more important. With no other special articulation markings other than the slurs and the term molto tranquillo, very legato playing may be assumed. The line under the quarter note in the 'cello part in measure 49 indicates the separation should be very slight between notes.
Example 74
At bar 55 in the viola and second violin, pianissimo is indicated with the terms più dolce and lontano (from a distance). This would be played flautando and generally with slow vibrato, with the second violinist probably fingerling the passage on the D string.

It is clearly evident that there is much diversity of sound written into the Sixth Quartet, and these diversities must always be emphasized. Left hand articulation is needed to differentiate between trochaic and iambic rhythms in the second theme of the first movement. Crisp, jeté bowings are required for projection of any percussive colour rhythms. A greater heaviness of bow attack is a necessity when sharp, incisive playing is desired, as in much of the Burletta. This emphasis on individual techniques will produce the articulation variety needed for a convincing performance.

Phrasing

The parts and score of this quartet are so well marked by the composer that correct phrasing will be easily achieved if the following items are noticed and employed: slurs and articulation markings, bowings, dynamics, rhythms and the overall shape of the melodic line or motive.

One example, measures 180-267 in the first movement, is given to show how relatively easy it will be to determine phrasing. After a short introduction, a two-measure motive
in the viola, beginning in measure 182, is followed by a similar figure in the second violin in measure 184. This dovetail effect is shortened to one and a half measures beginning at measure 186 and is continued through measure 194 with constant dynamic changes. Beginning on the second beat of measure 193, the second violin motive lasts into beat one of measure 197 with harmonic support by the other instruments. This figure is now given to the 'cello and extended four extra bars with a descending figure ending in measure 205. This motive, and variations of it, continues in overlapping phrases until measure 267. Thus, at measure 237 there are two five-measure phrases. From measure 247, the 'cello line together with the first violin line starting at measure 249 could be thought of as one long ten-measure phrase. Because of the dovetail effect beginning at measure 256 and the crescendo, diminuendo indications, the last twelve bars can be considered one long twelve-measure phrase or two phrases of six measures each.

Because of Bartók's fondness for all forms of imitation and the use of simultaneously proceeding melodies, which are not bound by the harmonic ties that impart what is normally understood as a "contrapuntal" character, many individual phrases will seem to have very little musical meaning. When considered as a whole however, these shapes will contribute a great deal to the quartet's character.
Beethoven, of course, had expressed his concern over one hundred years earlier about the need for a musical language that not only would indicate correct tempi but also the character of a movement or work. Bartók's musical syntax for the Sixth Quartet does this. He gives an initial clue to musical character in movement dance titles such as Burletta and Marcia. Further clarifying statements not necessarily related to tempo such as Mezzo, Risoluto, ben marcato, lontano or leggero and the profuse use of dynamic and articulation markings in addition to those of tempo create yet another dimension. When these are combined with Bartók's superb idiomatic writing, the goal of shaping a preconceived quality of sound is achieved.

**Technical Aspects**

**Rehearsal Problems**

Probably the biggest rehearsal problem with this quartet will be the continuous coordination difficulty caused by the constant changes in rhythm, tempo, articulation and dynamics. An example of this can be found in the third movement, Burletta, in the section between measures 110 and 123. (See Example 75.) The many changes of articulation including ricochet bowing, accented and unaccented notes, wedge-shaped markings (indicating a more forceful accent), pizzicato, double stops and chordal formations
Example 75
often occur within only a beat or two. Dynamics are con-
stantly changing even within measures, and rhythmic figures
frequently change from duple to triple. When all this is
combined with occasional meter changes, accelerando and
tornando, a difficult rehearsal situation could exist.
(Much of this difficulty, of course, can be eliminated by
individual work prior to the first rehearsal.)

During the first few rehearsals as a group the work
needs to be broken down into "sections", such as the above
example, rehearsing one element at a time. These measures
should be practiced slowly with no tempo changes until
bowings, articulations, dynamics, etc., have been carefully
matched. Other difficult "sections" are between measures
123 and 134, 135 and 144, and 145 to the end. Once each
"section" is learned in this manner, the tempi should be
increased and tempo changes included. Finally, the connec-
ting passages (measures 109-110, 122-123, 134-135; and
144-145) need to be rehearsed until one "section" leads
smoothly into the next.

Although rehearsal procedures for the rest of the
work would largely follow the plan suggested above, the
rubato passages in the second movement can best be handled
by having all players read from full scores rather than
from individual parts. The time saved on ensemble problems
can then be put to use solving musical problems almost
immediately.
Bartók's harmonic structure in this work is basically triadic with the triad representing the main point of departure and return. The third is the constant interval, with Hungarian folk music influence shown in his frequent use of the descending melodic fourth as an important cadential interval. Thus, although we are no longer thinking in terms of eighteenth and nineteenth century functional harmony, the methods and suggestions for tuning and temperament discussed in previous chapters can still be applied. Pythagorean intervals need to be attempted when melodic considerations are dominant and just intervals when the harmony requires it.

**Pizzicato**

Occasionally left hand *pizzicato* is used in this work, i.e., in measures 363-365 in the first movement. A great variety of *pizzicato* is written for the right hand. The more traditional kind is seen in the first movement in measures 171 and 194. More diverse styles are seen in the *Burletta* beginning at measure 97. (See Example 76.) A unique type of *pizzicato* often used in Bartók is indicated on the first beat of measure 97 by the sign \( \bullet \), indicating a strong *pizzicato* with the string rebounding off the fingerboard. The string needs to be literally lifted away
Example 76
from the fingerboard and then released to produce the percussive effect desired. After this initial pizzicato note, the ensuing fortissimo pizzicato passage needs to be played with less angle than usual by the plucking finger to give a more percussive, penetrating sound. The double-stop chords in measure 98 must be played with the plucking finger close to the fingerboard due to the fast tempo, but the fourth beat sforzando chord must be plucked from farther above the fingerboard because of the emphasis needed. All quarter-note pizzicato notes in this section must "ring" and therefore one should be careful not to dampen them with the left hand after the initial attack. A different pizzicato effect is presented in the violin parts in measure 99. Since the sixteenth notes are slurred only one pluck is necessary. But, in order for the second note to sound, a firm pizzicato articulation (more perpendicular plucking angle) is needed in addition to vibrato. At measure 102 the espressivo marking indicates a need for the more traditional plucking angle with much vibrato. The initial pluck in measure 103 in both violin parts needs to be articulated enough to enable both the glissando and the second note of the slur to be heard. The glissando should be started immediately after the pluck to facilitate this.

Sometimes in chordal pizzicato passages like the final two bars of the piece in the 'cello part, the use of the
thumb will prove most effective for plucking. In measure 84 of the Marcia in the viola part, a strumming effect is required. The ↑↓ indication means that a back-and-forth motion is needed across the strings similar to down and up-bow directions.

Other Technical Considerations

Natural and artificial harmonics, both single and double, are used a great deal throughout the work. No special technical problem exists. However, Bartók's extensive use of harmonics in his chamber music is unique in that before his quartets were written they were essentially a soloistic device. Other traditionally soloistic effects are employed in the Sixth Quartet: double trills (measures 166-167 in the Marcia in viola and 'cello), double stops (measures 123-129 in the Marcia in second violin, viola and 'cello), the playing of passages all on one string (measures 99-109 in the Marcia in the first violin), and the use of mutes (opening measures of the second movement in the violins and viola). The frequent use of treble clef in the viola and 'cello parts is a practice rarely found in chamber music before the twentieth century.

When three and four-note chords need to be broken, usually the bottom notes are played first. Sometimes, however, the upper line needs to be stressed (similar to
many of the chordal passages found in the unaccompanied violin and 'cello works of Bach) so the upper notes need to be played first. In parts of the Burletta such as measures 61-62 in the 'cello part, Bartók uses an arrow pointing downward (↓) to indicate this. (Example 77.)

![Example 77](image)

The composer’s markings for quarter-tones are arrows above the notes involved (↓) indicating that these notes are to be played 1/4 tone lower. Bartók uses this sign as a colour effect in the Burletta in both violin parts. Since the two instruments are only a quarter-tone apart, careful attention is required to avoid playing minor seconds. (See Example 78.)
Example 78

General principles of bowing and fingering discussed in previous chapters apply also in this quartet. However, examples of special considerations are given. First, a suggested fingering for the difficult first violin part beginning in measure 99 of the Marcia. (Example 79.)
The 'cello passage in the *Marcia* beginning in measure 80 is especially demanding and the given fingering should prove helpful. (Example 80.) In addition, the full score is shown here to emphasize the importance of its use as a technical aid for good ensemble.

Example 80
The Burletta presents some bowing options. In choosing one for the opening measures, string crossings, dynamics and articulation marks were determining factors. (Example 81.)

Example 81

Beginning at measure 144 short, dotted notes will get the needed lift best with an up-bow. Since this means that the longer, lined notes will be played down-bow, the following bowing results. (Example 82.)

Example 82
Finally, it must be observed that both fingerings and bowings are given occasionally by the composer. Although rare in eighteenth and nineteenth century works, this technique and many of the others described earlier have become quite common in avant garde compositions after Bartók. One will find that only in rare cases will an exception to his indications need to be made: i.e., the jeté marking in measure 117 of the Burletta, marked forte, might be more effective if bowed separately. Thus, because his directions are so idiomatic, they should be followed almost exactly.
CHAPTER VII

STRING QUARTET

LUTOSLAWSKI

Musical Style

Lutoslawski and his Polish contemporaries represent an end to the long artistic isolation of Eastern European composers. Of critical importance in this development, as Salzman states,

"... was the bloodless Polish revolution of 1956 and the remarkable declaration by the Polish intelligentsia of cultural independence from the prevailing policies of artistic and intellectual direction in Eastern Europe. Since that time, Poland has quickly developed what is undoubtedly the most remarkable modern-music life in all of Europe and an important and individual creative production as well."

Almost all modern and avant-garde ideas from Western countries can be found in works by these composers. In addition, they have available to them an immense variety of resources, i.e., electronic studios, experienced ensembles, etc., which is important in understanding their new music in its variety, its extensive use of resources, and its strong, direct character.

A representative work is Lutoslawski's String Quartet. This presents a move from the development of twelve-tone and serial ideas toward a rich, intense, thoughtful kind of

\[69\text{Salzman, Twentieth-Century Music: An Introduction, p. 184.}\]
expression formulated on avant-garde concepts. Although not a serial work in a strict sense, various treatments of the chromatic motives resemble somewhat those one might expect to find in a serial work. However, pitch relationships are generally obscured by larger gestures. Some of these are explained by Selleck when he says:

"... pitch elements and durational contours seem to be strongly associated with qualities best described as varying along a continuous scale, such as color or texture. Discrete differences of pitch and duration do in some respects appear to have specific functional characteristics, but that functionality does not appear to arise from any inherent properties of the pitches or durations themselves. The most particular image projected by the piece at any one place is of a particular textural display sustained over some time span. So not only do orchestration, dynamics, attack characteristics, timbre, etc. function to mark off units of the movement with definite surface features, but pitch, interval, and rhythm, which are usually of primary concern in a piece of music, are here more or less subordinated to projecting gross variances of surface phenomena—rather than the more usual procedure of textural elements being subordinate and projecting various levels of relations among pitches and rhythms."70

To best project these ideas on paper Lutoslawski needed to use traditional notation combined with his own. For the performer this means, in many instances, an adjustment in playing technique and rehearsal procedure.

Tempo

As the composer explains, there should be a general

70John Selleck, "Pitch and Duration As Textural Elements In Lutoslawski's String Quartet", Perspectives of New Music, Vol. 13, No. 2 (1975), p. 150.
freedom for each performer in deciding upon lengths of pauses and in treating ritenutos and accelerandos. Lutoslawski states that at times a particular player should perform his part quite independently, regardless of whether he is ahead of or behind the others, and that if each performer strictly follows his instructions, all possible changes of duration of the sections will not affect the final result in any decisive way.71

In this work tempo indications are unique, yet very explicit. Speed is not shown by metronomic markings, but in terms of duration in time, i.e., seconds. This might be indicated by stating the number of notes that should be played per second, as at number 12 (indication: ca. 5 per second); or in terms of a group of measures that should be played in a certain amount of time, as at number 10 (indication: 40 measures per minute).72 Rests and fermatas receive the same treatment. More traditional markings are also used, such as accelerando, ritard, rubato espressivo, meno mosso, etc.

In order to insure a correct performance, several observations about the tempo can be made: (1) The composer was very careful to indicate his intended tempi throughout the piece and these should be followed as closely as


72Rehearsal numbers indicated in this chapter are from the Wilhelm Hansen edition, previously cited.
possible. (2) The metronome can still be used to determine the various tempi by transcribing the given information. 
(3) Since most of the tempo indications are prefaced by "ca.", some leeway is allowed for individual differences. 
(4) In most sections (except where time signatures are indicated and the different parts coincide precisely) within certain points of time individual players can perform their parts quite independently of each other.

Dynamics and Articulation

Lutoslawski uses great discretion in his profuse use of dynamic markings. With such a large gradation of sound levels extreme care must be taken by the quartet as a whole and by each individual in his own part to determine all dynamic levels and then to see that they are fully realized.

Moreover, Selleck remarks:

The particular textural identity of each section is made up of the treatment of many different aspects. Some of these, for the most part pitch content, change rather less often from section to section, providing a measure of unity. The changes in other aspects, whether duration, timbre, dynamics, or register placement, are much more important in determining the structure of the movement.73

Thus, when dynamics dominate the musical structure, they naturally need to be emphasized. The passage beginning at number 34, for example, is one such place. (See Example 83.)

73Selleck, "Pitch and Duration As Textural Elements In Lutoslawski's String Quartet," p. 161.
To achieve the desired effect here correct bow distribution is paramount. As can be seen, each grouping of notes begins and ends piano with a crescendo to fortissimo in the middle. This will require slow bow speed and little pressure at the beginning and end of the stroke, but great speed and pressure in the middle of it. In addition, the varying number of notes in each group necessitates an adjustment in bow speed and the amount of bow used.

Example 83
At number 24 (Example 84) the down-bow sixteenth-notes will need much bow with much pressure. However, each note following the sixteenth-note will need to begin slowly and softly and increase in speed and pressure to the next down-bow. To complicate matters, each of these latter notes gets successively shorter. Thus, the phrase requires a great amount of coordination.

Example 84

To achieve the desired effect at number 1, the single notes in the three lower instruments need to be played sharply with relatively strong accents at the frog. (Example 85.)
The beginnings of the crescendi immediately following these notes each time must be played very softly and near the fingerboard. To emphasize the dynamics, each swell needs to be exaggerated, especially at the end of the crescendo.

At times, because of scoring complexities, it will be difficult to hear an important entrance which serves as a cue for other entrances. In these cases a distinct initial articulation, not a louder dynamic, is needed. For example, at number 30 the second violinist must emphasize the accent as written for each entrance in order for the 'cellist to know when to begin each time. (Example 86.)
Secure entrances are also necessary in a section such as the Funebre, beginning at number 45. A slight emphasis at each poco forte marking will aid in defining the structure.

Usually the dynamic level is indicated, but occasionally during a crescendo or diminuendo it is not. In these instances one must decide which "surface phenomena" needs to be stressed and determine the dynamic level from this. For example, beginning at number 1, clearly melody and harmony are subordinate to articulation and dynamics, and both of the latter need to be emphasized. This is also true starting at number 7, although melodic contours here take on more importance. In the opening of the Main Movement rhythmic differences add greatly to the overall effect, and dynamic exaggeration will aid in its being fully realized. Pizzicato articulation dominates between numbers 14-24 and again, dynamic extremes will prove helpful. In this intense, sectional and dynamic portion of the quartet a more vertical plucking angle should be used. For longer fortissimo notes such as those between numbers 14 and 15 in the second violin, the use of the right thumb for pizzicato might be more appropriate for maximum sound. At number 5 the pizzicato passage is written in score form, as opposed to the separate, non-synchronous layout of the previous sections. Even so, the effect of this section is not too different, rhythmically, from any previous passage. The result is a
textural variation of the slow-fast variety which is more carefully controlled and the change of texture is less gross than in previous sections. Yet, dynamic contrast is still critical and a rise to at least a forte at the end of each crescendo is recommended. Conversely, at number 10 timbre (harmonics) and static, horizontal movement demand little dynamic change.

Most of the time articulation and dynamics combine when dominating the musical structure. At one extreme will be the more violent, intense and vigorous types of sounds which will call for a special kind of playing. The furious beginning of the Main Movement is one such place. At the speed indicated, and considering the dynamics and note values, the correct articulation will call for concise, on-the-string playing with very little bow, but much pressure. Care must be taken to make the decrescendos very clear. Another type of articulation is needed just before rehearsal number 5. These double octave interjections that occur throughout the Introduction need to "ring" to contrast greatly with the preceding material. They should be played at the frog, off the string, and very percussively.

At the opposite extreme, long, sustained and connected soft notes are often indicated. One such place is rehearsal number 10 where flautando bowing will be needed at the pianissimo level with very smooth bow changes.
In between these extremes many types of articulation can be found, including the peaceful bell-like tones of number 43, the skittering thirty-second notes of the ending which are best played with a ricochet bowing, the ponticello tremolo section at number 29, the cadenza-like détaché playing at number 42, the amazingly varied pizzicato sections, and the wailing Funebre at 45. With the exception of the single notes which will usually be played off the string with an attack from above, the articulation of notes in a given section will naturally depend upon their relative length, dynamic indications, and any special articulation markings accompanying them.

The opening section of the Introductory Movement, played only by the first violin, will be used as an example. (See Example 87.) In the first three lines all sixteenth-notes marked with dots should be played short and off the string. Those notes with lines in addition to the dots should also be played off the string, but with a slightly more horizontal stroke and warmer vibrato. In line four, care should be taken to articulate the slurred thirty-second notes according to their particular rhythmic groupings. At the end of line five all notes marked ♯ should be played at the frog. Beginning in line six the three sixteenth-notes should be played on the string since they are not dotted and they are part of a crescendo to forte. The two
Introductory Movement

WITOLD LUTOSŁAWSKI (1965)

Example 87
notes marked non vibrato should contrast as much as possible to the other sections. Since both of these notes are marked mezzo piano, a little added bow pressure will help produce the more "nasal" tone quality desired.

Phrasing

Phrasing will be found to be one of the least difficult problems in this work if the players carefully observe dynamics, rhythmic values, articulations, and rhythmic figurations and groupings. As has been mentioned, Lutoslawski's directions are very exact, with special markings on almost every note or rest in some sections. To help illustrate correct phrasing, the opening section can again be cited. (See Example 87.) One can see the various dynamic and articulation markings used together to give shape to individual note groups. In addition, Lutoslawski's unique way of writing rest values in terms of seconds further clarifies the phrases. Finally, one will note the different rhythmic groupings of the same note values. Sometimes only single notes are indicated and other times two or three notes are grouped together. Thus, here and throughout the piece, the composer has written the phrasing into the music.
Technical Aspects

A new coordination between the left and right hands is required in much of the Main Movement for all instruments. For example, at the beginning of the movement, glissandi in the left hand are combined with several types of bowings and rhythms in the right hand. Since all players have similar problems in this section one part, in this case the second violin, can be used for study. (See Example 88.)

Example 88

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Because of the metronomic translation (\( \frac{f}{1} = \text{Ca. 104} \)) the opening section should be played in one place on the bow with dynamic fluctuation achieved through change of bow pressure. When more time is available (i.e., the end of the first line) bow speed and sounding point should also be varied. Initially it will be beneficial to practice the rhythmic bowings on an open string and the \textit{glissandi} with long bows until they are mastered. Even at this time, however, one should be conscious of needing dynamic exaggeration. Since there will be a tendency to accent the single sixteenth-note of every \textit{diminuendo} grouping, care should be taken to avoid this. To help play the rhythm correctly, eight-note subdivisions in groups of two or three are recommended and need to be marked as in the example. On longer notes a number representing eight-note beats should be incorporated as shown. In line five, eighth-note beat marks help clarify the divisions. Whenever \textit{glissandi} markings are indicated one must be careful to begin the slide immediately and continue it evenly (the tendency, because of the rhythmic bowings, will be for it to be unsteady) together with an adequate fingering. After being learned individually, the left and right hand techniques can be combined, beginning slowly and gradually increasing tempo to the one indicated.

Penciled divisions of large groups of notes will prove technically beneficial. In Example 89 the numbers denote the number of identical groupings in each section.
Fragments, however, need to be dependent on dynamics when the latter are of special importance. Thus, the division in Example 92.

When applicable, suggested fingerings mentioned in earlier chapters need to be used. Yet, several passages
are unique and ideas are offered. Because of their rapidity in most of this piece, chromatics should be fingered to give greater clarity and slides generally should be avoided. (Example 91.)

Example 91

The same is true, at times, for quarter-tones. In Example 92 this type of fingering will also help define the thirty-second notes.

Example 92

Two examples of 'cello fingerings involving half-steps and quarter-tones are given in Examples 93 and 94. In addition, bowings and penciled rhythmic divisions have been added.
Example 93
Example 94
It is important to examine all possible string divisions in playing harmonics. In the following excerpt, for example, the result will be more clear and uniform if the harmonic is played on the A-string (dividing the string into thirds) rather than on the D-string (dividing the string into fourths). (Example 95.) This improved tone quality will make it easier to achieve the crescendo and accent indicated.

Example 95

As in the other quartets, choosing the string on which to play a particular passage depends to some extent on the tone quality desired. Thus, for example, at number 49 in the second violin the gentle "sighs" are best achieved on the A-string. (Example 96.) (The numbers above the half and dotted-half notes represent eighth-note divisions for use in counting.)

Example 96

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From number 51 to the end the delicate, quick notes are best played with a jeté bowing. One possible bowing and fingering of the second violin part is shown. (Example 97.)

Example 97

Rehearsal Problems

The two most difficult technical aspects of this piece are the individual problems which have been mentioned and the complexities than can only be worked out in a quartet rehearsal.

Originally, this piece was not provided with a full score. This lack of a score is partly compensated for by a whole system of signals written into the parts, by fragments of the piece being scored traditionally, and by an
extensive use of cues. If a normal score had been written, the superimposing of parts mechanically would be misleading, suggesting that the notes placed on the same vertical line should always be played at the same moment, contrary to the composer's intentions. Furthermore, it would prevent each performer from being free enough in his choice of tempo and his use of rubato, ritenuto, accelerando, etc. This would deprive the piece of its "mobile" character, one of its most important features.

However, by special request Lutoslawski did write a sort of score, but it differs considerably from a traditional one. In it there are very few moments in which the different parts coincide precisely. The composer marks these places with broken vertical lines (\). Short fragments which are scored traditionally are to be played normally. Throughout the rest of the score each performer plays quite independently of the others. A player must observe only certain general indications such as the approximate tempo, the approximate pause lengths, and the approximate rhythmical values. Lutoslawski put each section on a separate page in order that one might see clearly what happens in each separate "mobile". Each part is scored as illustrated in Example 98 to indicate that it is to be read independently of the others, making it impossible to read the four parts vertically except for those notes which are
placed on the same broken vertical line. This arrangement prevents the players from assuming that other notes should coincide.

Example 98

In rehearsing this quartet as a group, two general areas need to be observed: (1) the parts of the work written in traditional score form, and (2) the parts where the individual is more or less free to play "on his own". In the former instance, as at rehearsal number 5 (see Example 99), the parts are to be played exactly together while counting and listening to the other parts in the traditional sense. This particular example is complicated by the fact that although the bar lines match, each part has a different time signature. A solution to this problem is to have one player indicate the first beat of each measure, which is the only beat common to all four instruments. The
violist is the best choice to lead here because his part is the least complicated rhythmically. To keep the pizzicato rhythmically secure in this fast tempo, the thumb should be placed securely on the fingerboard, with the plucking finger always remaining close to the strings. Again, thinking in terms of rhythmic groupings will be an aid, and in Example 101 the 'cello line has been so indicated.

Example 99
An interesting scoring technique used in writing note values is seen in the passage between numbers 4 and 5. (Example 100.) Here, the wavy line indicates unequal rhythmic distances between entrances. This fragment occurs many times in the Introductory Movement, but each time the instruments enter in different order with varying numbers of octave pairs and at great speed. To avoid confusion, it helps if each player puts "beat" marks preceding his entrances to show how many other entrances he has to hear before his own.

![Example 100](image_url)

Beginning at number 43 (see Example 101) each held note would receive six counts if thought of in terms of quarter note pulses. To help avoid hearing bow changes on tied notes, bow direction should only be altered simultaneously with solo notes (circled in the example). These solo notes need to be heard and a down-bow on them is suggested.
Written-in ritards are present several times. One such place is at the end of the Presto before 43, but no tempo change is required (although it says rit. in the music) because of the steadily increasing rest values. The effect of a ritard is also written in by increasing notes values before number 48. Again, penciled divisions will make this easier to accomplish smoothly. (Example 102.)
The great bulk of the quartet is written in a free form. Individual parts must be played with similar styles, but each part should be approached soloistically and can be practiced individually. Special instructions in the parts need to be observed before beginning or ending each section. In addition, the booklet which accompanies the score contains much useful information. Such detailed directions will eliminate most coordination problems between players. The difficulty will be in rehearsing the piece long enough so that the various signals and directions become automatic.

Other Considerations

*Pizzicato* occurs between numbers 14 and 24. With such a long section of plucking it will be best to put the bow down when convenient at number 15 and pick it up again at number 23.

As an aid in studying the sections between rehearsal numbers 8 and 9, 32 and 35 and other similar passages, the following left hand practice procedure is recommended. Begin with two or three notes, then add one additional note. When they all can be played cleanly, include yet another note in the group in like fashion until all notes are present. This will point up left hand weaknesses and hopefully correct them.
Finally, the feeling of *attacca* between the two movements can be visually aided if everyone keeps his instrument up after the page turns during the 'cello solo at the end of the first movement.

**General Comments**

The change in interval size, the change in density through length of notes and frequency of rests, and the emphasis on stasis versus motion are all general terms to describe the effect on hearing this piece. As Selleck states:

> The successions of texture changes while at times very dramatic, are, nevertheless, logically related from section to section. A particular quality, say register placement, may evolve to a certain degree in one section to become the prevailing state of affairs in the following section in some other domain, say interval-class size. Despite occasional deviations, the basic idea . . . is one of expansion from limited areas of tonal and durational movement toward climactic points of maximal spaciousness in various domains.74

> It is toward this sound and ideal that the above ideas have been directed.

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74 Ibid., p. 161.
CHAPTER VIII

CONCLUSION

In summary, many factors lead to the diversity of sound found in these six selected string quartets; these factors in turn lead to several musical trends. Harmonic structure or lack of it plays an important role. Beginning with the Mozart quartet and continuing with Beethoven and Brahms there is an increased use of secondary dominants, non-harmonic tones and chordal formations leading further and further away from the functional, consonant harmony of the eighteenth century. Through Webern's quasi-pointillistic techniques and extreme use of chromaticism, approaching twelve-tone music, the break from functional harmony and treble-dominated style is complete. In this and the other two twentieth-century works, diversity of rhythms, tessiturae, timbres, dynamics and tonalities are stressed instead. For these reasons score complexity steadily increases from work to work and thus there is a corresponding need for expanded intellectualism and technical proficiency on the part of the performers.

Partly because of this diversity and partly because of improved compositional conditions (music printing and copying, new notational systems and other refinements) a
greater explicitness and clarity of score direction become evident in each succeeding work. By the time of the Lutoslawski quartet virtually nothing is left in doubt as to the correct execution or interpretation of a given passage. Yet, as Donington has stated:

It is unrealistic to think that we can give an adequate rendering of any music in the absence of a detailed acquaintance with its relevant conventions. Musical notation is a wonderful invention, but it is not as wonderful as all that. We need a vast amount of traditional working-knowledge in order to bring even the most cunning and thorough of these notated marks on paper into living performance.75

In producing the variety of sound called for in the later works, the three lower voices become more important. Because of this, the playing difficulty for these instruments steadily increases and by the twentieth century they are technically on a par with the first violin. Along with this trend for uniformity of difficulty is the increasing incorporation of soloistic devices into the ensemble in a very idiomatic fashion.

Individual and ensemble practice time will increase in proportion to the level of complexity of each score. In addition, the ways in which rehearsals are used will be as diverse as the quartets themselves. For example, much of the time spent on Mozart will be used for intonation purposes because of the many octave and unison passages. The Lutos-

slawski contains little of this type of problem, but a great deal of time will be needed for coordination of the many directions given by the composer to each player.

The number of hours spent in rehearsing these works and the relative difficulty of performing each in a concert do not necessarily correspond. Lutoslawski's quartet, for example, takes a long time in preparation. The use of "new techniques" such as the novel coordination between the bow arm and left hand, together with untraditional notation, will cause delays until learned. However, since individual parts need not coincide very often, the piece is less binding and allows for a greater flexibility in performance than any of the other works. Conversely, the initial rehearsing of the Mozart quartet has no delays because of already understood playing techniques and conventional notation; yet, it doesn't have the former quartet's individualistic elasticity and must be played with great precision and clarity. Even with proper preparation this will make a good performance of this piece most difficult.

The most significant aspect of the above discussions is the increased sophistication, dedication, intellectual knowledge and higher level of technical ability needed to perform the later works. Because of these complexities the traditional "reading" of quartets for enjoyment is missing in the Webern, Bartók and Lutoslawski works for
everyone. Moreover, because playing techniques and philosophies of the twentieth-century composers need advanced study and the newer, difficult-to-comprehend scores require determination on the part of the performers to solve their complexities, all but the serious-minded quartet players will be excluded. The ultimate satisfaction of capable performance of these pieces belongs not to amateurs, but exclusively to serious chamber music students and professional quartets.
BIBLIOGRAPHY


