Honorary Doctor of Music Bernard Greenhouse has earned a worldwide reputation as one of the leading cellists of our generation. As the founding cellist of the Beaux Arts Trio, he has garnered international acclaim for his supreme artistry; as a teacher, he has exerted major influence on many of today’s cellists. This dissertation documents Greenhouse’s approach to music making in the context of his interpretation of Beethoven’s Sonata in D major for Cello and Piano, Op. 102 No. 2.

In a series of interviews by the undersigned, Greenhouse demonstrates ways to seize the sonata’s dramatic impulses. He refers to his own studies with Pablo Casals when discussing his approach to interpretation. Among his many suggestions, he emphasizes the performer’s role in “turning music into speech that can be understood.” To this end, he provides techniques for clear enunciation and for creating dynamic inflections and rhythmic momentum in the music.

This dissertation begins by surveying Greenhouse’s contribution to cello playing and existing literature related to Beethoven’s D-major sonata and Greenhouse. Then it documents Greenhouse’s suggestions for the sonata in the form of commentaries and measure-by-measure annotations in a performer’s edition of the score. More than a set of specific instructions for how to perform Beethoven’s sonata, this dissertation seeks to describe an approach to string playing that can apply in a wide variety of musical contexts.
BEETHOVEN’S D MAJOR SONATA FOR CELLO AND PIANO, OP. 102 NO. 2:
AN ANNOTATED PERFORMER’S EDITION BASED ON
THE SUGGESTIONS OF BERNARD GREENHOUSE

by
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CHAPTER I
INTRODUCTION

Honorary Doctor of Music Bernard Greenhouse is widely recognized as one of the leading cellists of our generation. In over 4,000 concerts worldwide, he has performed as a soloist and chamber musician in collaboration with major conductors and orchestras, and has recorded virtually the entire chamber music repertoire for piano and strings as a founding member of the Beaux Arts Trio. His multi-faceted career has been hailed, in a word, as “legendary.”¹,² That his recordings with the Beaux Arts Trio on the Philips label continue to set the bar for modern performers is evidence of his lasting influence.³

Perhaps more than any of his accolades however, Greenhouse treasures most this compliment from Pablo Casals: “Bernard Greenhouse is not only a remarkable cellist, but


² After studies with Felix Salmond, Emanuel Feuermann and Pablo Casals, Dr. Bernard Greenhouse developed an international career as performer and teacher. He is emeritus professor at Rutgers University and the New England Conservatory, and has been a member of the faculties of the Julliard School of Music, Manhattan School of Music and State University of New York at Stony Brook, where he was conferred an Honorary Doctorate. He received the National Service Award from Chamber Music America, “Artist-Teacher of the Year” from American String Teachers Association, and along with Mstislav Rostropovich, the Award of Distinction from the Royal Northern College of Music in England. Although he has retired from the rigors of concertizing, he continues to teach master classes in North America, Asia, and Europe.

³ In a review of a recent recording of the Schubert Piano Trios, Michael Jameson writes “Once again, it is the definitive Beaux Arts Trio performances (especially the earlier ones, when the trio was comprised of violinist Daniel Guilet, the great Bernard Greenhouse on cello, and Menahem Pressler at the piano) that repeatedly prove that understatement lies at the heart of humanity involving Schubert performance.” Michael Jameson, “Schubert: Piano Trios: No. 1 in B[flat]; No. 2 in E[flat]; Notturno in E[flat]; Sonatensatz in B[flat],” Fanfare 24 (May-June 2001): 218-20.
what I esteem more, a dignified artist.” Greenhouse's teaching reflects Casals' perception of him. Like Casals, he emphasizes artistry over technical displays that have no consequence for the music.

His teaching focuses on helping players develop tonal variety so that they can speak the language of music for themselves. To many accomplished cellists who have played for him, Greenhouse points out that music that is burnished with a uniformly beautiful sound offers only a limited range of expression. “We must wake up to the fact that there is more to cello than a beautiful sound. We must learn how to build phrases,” Greenhouse asserts.4

Greenhouse's approach to music making is rooted in the work of Casals.5 During his lessons with the Spanish Catalan cellist, Greenhouse observed in Casals' playing what would become a central aspect of his own performance and teaching—Casals' seeming ability to speak through the cello as though musical phrases formed lines of poetry. Greenhouse made it his life's work to find out how this was done, and developed techniques to permit it to be taught to others.

**Goal**

This dissertation will explore Greenhouse's approach to performance. A longtime student of Greenhouse, I did not want merely to present his ideas on cello playing in a

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5 Greenhouse refers often to Casals when discussing lessons on artistry. He studied with Casals in Prades, France in the 1940's.
treatise format, as some have done before me. Instead, I asked Greenhouse to demonstrate his ideas through a piece of music. He chose Beethoven's fifth sonata for cello and piano, the Sonata in D major, Op. 102 No. 2. He regards the slow movement as one of Beethoven's most profound works.

By examining Greenhouse's approach to music with specificity, through the lens of Beethoven's notoriously problematic D Major Sonata, this dissertation will demonstrate ways in which Greenhouse's suggestions can enhance performance. This dissertation is therefore primarily for the performer's benefit. It will document Greenhouse's interpretation of the D major sonata and include an annotated performer's edition of the work.

_About Beethoven's Sonata in D Major, Op. 102 No. 2_

_It was born out of crisis._

Written in 1815, the Sonata in D major, Op. 102 No. 2 appeared during the lowest point of Beethoven's personal life, and possibly his artistic life as well. It is known that in 1812, the composer's spirit collapsed after the most serious romantic relationship of his life ended in dismal failure. In the three years that followed, he sunk into severe depression and composed very little. When he resumed composing, he had entered what

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7 After Beethoven ended his relationship with his “Immortal Beloved” in 1812, he renounced the possibility of marriage and fatherhood and vowed to devote himself to his art. This striking transformation in personal outlook was accompanied by a dramatic transformation in compositional style. Maynard Solomon, “Beethoven’s _Tagebuch_ of 1812-1818,” _Beethoven Studies_ 3 (1982): 193-288.
scholars now consider his “late period.” His then-emerging style has been described as experimental in character, bristling with otherworldly musical expressions and drawing on “. . . a bottomless pool of imagery with which to depict the hitherto undescribed . . .”

The Sonata in D major for Cello and Piano, Op. 102 No. 2 was one of the earliest pieces to appear during this period. Although the work was Beethoven’s last accompanied sonata for any instrument, it stood for the beginning of an experiment that would redefine the composer’s musical legacy. The sonata has thus been held a “harbinger of [Beethoven's] last period.”

The D major sonata conforms to the traditional, three-movement structure of a classical sonata. But stylistically it was new. The sonata begins with an explosion of energy. Then it offers the only full-length slow movement for cello and piano Beethoven ever wrote. Lastly, it plunges into a craggy world of barbed textures in a fugue that critics still call one of Beethoven's most “abrasive fugal finales.” Because the sonata features stark contrasts—within as well as among the movements—it has been described as a “terse drama.” The work defies classical decorum to the extent that it flirts with romantic sensibility.

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9 Lewis Lockwood justifies this view by pointing out that the Opus 102 No. 2 sonata was written in the “twilight period between the composer’s second and third periods.” Lewis Lockwood, “Beethoven’s Emergence from Crisis: The Cello Sonatas of Op. 102 (1815),” *The Journal of Musicology* 16 (Summer 1998): 302.


It challenged performers and listeners alike.

Since its premiere, Beethoven’s D-major sonata, Op. 102 No. 2 has aroused a mixture of curiosity and skepticism. “Most singular, most strange,” wrote a German critic shortly after cellist Joseph Linke premiered the work. Others have unleashed harsher views: “One cannot describe its fugue as beautiful, despite the fact that it is skillfully wrought and highly original.” In fact, the sonata challenged even Europe’s most cultured musicians, including Mannheim's Court Conductor Michael Frey, who deemed the work “so original that no one can understand it on first hearing.”

Performers have expressed similar sentiments—for many years the sonata was considered virtually unplayable. Notwithstanding the passage of time, many continue to view Beethoven’s last cello sonata as one of his strangest pieces. A listener’s guide published in 2006, for example, describes the sonata as one of Beethoven’s most “austere and cerebral compositions.” Another recent publication describes the sonata as “among the composer's most complex and technically challenging works.”

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Existing Literature

On the Cello Sonata in D Major

Despite the shelves of literature on Beethoven's life and music, surprisingly few sources in the English language have examined his cello sonatas in depth, as most literature on the cello sonatas is in German.\textsuperscript{18} Publications in English have surveyed the historical background of the sonatas and analyzed the sonatas’ formal makeup. Such comprehensive surveys appear in the dissertations by Edward Szabo (1966),\textsuperscript{19} Stephen Gates (1989),\textsuperscript{20} and Ruth Lee Crawford (1995).\textsuperscript{21}

With regards to the Sonata in D Major, Op. 102 No. 2, writers have examined its stylistic peculiarity in relation to other works for cello and piano by Beethoven, and in particular, remarked on the sonata's unconventional texture. In his dissertation “The Treatment of Cello and Piano in Beethoven's Five Sonatas,” Stephen Gates characterizes the sonata as “conflict between idiom and medium.” He cites the ever-changing texture and rapid exchange of melodies between the cello and piano as reason that blending of sound is difficult for the two instruments.\textsuperscript{22} Lewis Lockwood expressed a similar view;

\textsuperscript{18} See Beethoven-Haus Bonn for a complete, up-to-date list, on website http://www.beethoven-haus-bonn.de


\textsuperscript{21} Judith Lee Crawford, “Beethoven’s Five Cello Sonatas” (M.A. diss., San Jose State University, 1995).

\textsuperscript{22} Gates, 116-53.
in his article he states that the “bizarre quality” of the fugal movement magnifies the “inherent compositional problem of any serious cello sonata,” that is, “to reconcile the material of the piece with the unequal relationship between the two instruments in registral scope, sonority, and volume.” Gates and Lockwood similarly point out a major challenge in this sonata—that performers must negotiate their discrepant timbre amid the thrashing seas of the barbed texture.

The sonata’s unconventional textures do have ramifications for performance. But aside from enumerating performance problems, few writers offer specific solutions for realizing performance objectives. Suggestions for performance are largely left to score editors. But even so, editions geared towards performers usually contain only fingerings, bowings and articulation markings, but lack nuances related to interpretation such as timing and phrasing. Thus arises an opportunity for discussion of the major performers’ interpretation of the sonata.

One such source does exist. David Schepps wrote a dissertation on Pierre Fournier’s interpretation of the D-major Sonata. He surveyed Fournier’s general approach to cello playing and produced an annotated performer's edition of the sonata through the lens of Fournier. Like Schepps, I have interviewed my subject on his interpretation of Beethoven’s D-major sonata and documented his ideas in the form of

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commentaries and a performer's edition of the score. I also provide a concise treatise on my subject’s cello technique and preferred principles of musical interpretation.

On Bernard Greenhouse.

Bernard Greenhouse has imparted his knowledge about cello playing in numerous interviews and master classes. One may find descriptions of his basic tenets in David Blum's article “Evergreen Principles,”25 Tim Janof’s “Conversation with Bernard Greenhouse”26 and Laurinel Owen's biography of Greenhouse.27 Readers wishing to experience Greenhouse’s teaching first-hand are urged to review the VHS set entitled *Bernard Greenhouse Cello Master Class*28 and a recent DVD entitled *Bernard Greenhouse at Wigmore Hall.*29

Although Greenhouse has never recorded Beethoven’s cello sonatas, he has recorded the complete Beethoven piano trios with the Beaux Arts Trio, and did perform Beethoven’s sonatas frequently with the trio’s pianist, Menaheim Pressler. Greenhouse donated his own copy of the sonata to the Cello Music Collections at the University of North Carolina at Greensboro. The cello part reveals his choice of fingerings, bowings

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25 David Blum, “Evergreen Principles.”


and articulation. But his choices regarding interpretation appear only in David Blum’s 1992 article, “Beethoven’s Cello Sonatas Opus 102 No. 2.” In this article, Greenhouse offers his suggestions on a handful of selected passages, but does not offer a measure-by-measure instruction for performance. That is what this dissertation will provide.

Since Beethoven’s sonata Op. 102 No. 2 challenges performers and listeners alike, to fully realize the dramatic impulses in the piece requires recourse to the context of the composer’s temperament and life circumstances. As such, the sonata provides an opportune context in which to discuss interpretation. In this dissertation, the sonata will serve as the context through which I will demonstrate Greenhouse’s interpretation and lessons in artistry.

Procedure

I conducted a series of interviews with Mr. Greenhouse at his home in Wellfleet, Massachusetts. The research was conducted in accordance with the ethical guidelines of the UNCG IRB (Institutional Review Board), which ensure that any human subject involved in research is adequately protected against coerced participation. Prior to the research, Mr. Greenhouse was notified of the purpose and procedures. He voluntarily agreed to participate and permitted the recording and publication of results.

In the interviews, he was asked about his studies, his performing and teaching experience and his interpretation of Beethoven’s D-major cello sonata. His comments

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30 David Blum, “Beethoven’s Cello Sonatas Opus 102 No. 2.”

31 A list of interview questions appears in Appendix A.
and demonstrations at the cello were recorded on digital audio and video to ensure accuracy of subsequent annotation. Since Greenhouse’s ideas on the sonata have remained essentially unchanged from the time he was interviewed by David Blum, reference was made to key points in Blum’s article, and Greenhouse was asked to demonstrate his suggestions at the cello and add examples not mentioned in the article. At the conclusion of our interviews, his suggestions were annotated in a Henle edition of the score.

Document Roadmap

This dissertation consists of four Parts. Part one comprises the introductory material of this chapter. Part two surveys Greenhouse's overall approach to the cello. This part, which appears as Chapter II, is further divided into two sub-parts: the fundamental mechanics of cello playing, on one hand, and Greenhouse's technique for making music, on the other. The goal of this chapter is to provide readers with the necessary technical tools for executing Greenhouse's advice on Beethoven's D-major sonata.

Then, in part three, which appears as Chapters III, IV, and V, the dissertation enumerates Greenhouse's suggestions for performing Beethoven’s sonata. Each chapter corresponds to each of the three movements. In these chapters, performance-related challenges are reviewed and Greenhouse's suggestions for performance are documented with a detailed, measure-by-measure list of instructions.
This dissertation concludes in part four, with chapter VI and an annotated performer's edition of Beethoven's D-major sonata based on the suggestions of Bernard Greenhouse. This edition is reprinted with the permission of Henle publishers and appears as Appendix C.

The ideas presented in chapters II through V are those of Bernard Greenhouse unless specified otherwise. Direct quotes from Greenhouse provide immediate expression of his ideas, and appear throughout this document in direct quotation marks without prefices such as “he said,” etc. This eliminates unnecessary clutter and makes for smoother reading.
CHAPTER II

PRINCIPLES OF TECHNIQUE

The elements that distinguish Greenhouse’s teaching are lessons in artistry. He urges players to do more than merely play in tune or produce a consistently beautiful sound. He asserts, to attain a high level of artistry, one must employ techniques for making music, which are methods for building and communicating musical phrases. While Greenhouse never hesitates to review the fundamental mechanics of cello playing, he always teaches them with the aim of building a foundation for making music.

The goal of this chapter is to provide readers with a framework for musicianship and tools for realizing Greenhouse's suggestions in the context of Beethoven's D-major cello sonata. A discussion of the fundamentals of cello technique is obviously beyond the scope of this dissertation. Indeed, this dissertation assumes a high level of competence at the instrument. However, certain fundamentals will be briefly revisited to lay the groundwork for the discussion on Greenhouse’s techniques for making music.

Fundamental Mechanics

Playing should be as natural as possible and free of extraneous tension that has no positive consequences for the music. One can often hear Greenhouse urging students to

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32 See the videotape Bernard Greenhouse: Cello Master Class, directed by John Mucci.
“Get the whole body involved.” By this, he is asking for the player to use the muscles of the back. The alternative to involving the back muscles is undue strain on muscles of the arms, hands and fingers, which leads to poor tone production.

The bow arm

The bow rests on the string with the weight of the arm, and acts as an extension of the player’s body. The bow moves primarily in response to the pivoting motion of the torso, not manipulation of the wrist or fingers. Greenhouse asks students to move the bow as though it stretched beyond its actual length.

A supple left hand

One must cultivate flexibility in the left hand. The fingers should land on the fingerboard with the weight of the arm and at a diagonal angle, slanted towards the scroll. The string is pushed down with the strength of the arm and back muscles, with a feeling of “pulling the cello towards the body.” Although effort is needed to keep the playing finger down on the fingerboard, this effort should not be excessive or forcefully sustained. Instead, the tension in the hand should vary. Just before a shift, for example, the downward pressure must ease.

Independence of fingers of the left hand

Greenhouse keeps down only one finger at a time. When more than one finger is kept down on the fingerboard, the vibrato invariably suffers. Playing with just one finger
(with the exception of playing double stops) allows the playing finger to vibrate with maximum range of motion.

Avoidance of extensions

Greenhouse avoids extensions altogether because they strain the left hand. He prefers darting the fingers of his left hand from one position to another and shifting his left arm along. Darting and shifting rather than extending the hand was particularly an attribute of Feuermann who, according to Greenhouse, never utilized extensions.

Shifting

All shifts, however large or small, must be prepared. Just before a shift, Greenhouse swivels his wrist in the direction opposite the direction of the shift, then releases his hand to the new position. When leaping a large distance, he “goes for it” using a coordinated movement of both hands. Moreover, the torso should be involved in shifting. To play a succession of shifts in the same direction, Greenhouse moves his torso and glides his left hand along the fingerboard while "catching" the intermediate notes with his fingers.

Vibrato

Vibrato can add infinite variety to the sound, but its indiscriminate use can also get in the way. One must therefore regulate the intensity of the vibrato to reflect the
mood of the music. Greenhouse encourages students to experiment with not just the speed, but also the width of vibrato.

_Technique for Making Music_

_On Artistry_

Greenhouse is astounded by the technical ability of today’s cellists, but he laments the lack of individualistic artistry.

There is less latitude in personal expression. Now cellists are taught ‘the instrument’ and purity of technique. Many aspiring cellists today have skills on a par with Feuermann or Piatigorsky, but they don’t have the freedom and have a limited range of expression.  

The problem is that I cannot tell the difference between the finest talents anymore. When I listen to a recent recording, I can't tell who's playing, since they sound mostly the same. Occasionally I'll hear a moment of creativity and individuality, but it still lacks the stamp of an individual artist. 

Greenhouse cautions against this trend towards homogeneity among performers. Emulating other players without finding a way to speak the language of music for oneself “can be destructive,” he asserts. “We must develop a freedom of expression that is personal, that has nothing to do with what we hear others do.”

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33 Owen, “Full Speed Ahead,” 55.

34 Tim Janof, "Conversation with Bernard Greenhouse."

35 Ibid.
While Greenhouse encourages performers to be active interpreters of music, he also cautions that they must exercise their creativity within the confines of appropriate respect for the composer. He cites Pablo Casals’ approach to interpretation as the quintessence of artistry. Whether Casals took liberties with a rhythmic figure or indulged in a delicate *glissando*, his choices always served the music. Like Casals, Greenhouse applies techniques that serve the music rather than those that merely flaunt technical prowess.

"Speaking" through music

To help discover tonal nuances in the music, Greenhouse frequently makes analogies between music and the spoken word. He says: “Even though I don't translate directly into words, there is always a feeling of the relationship between music and speech. When I play a phrase, I have something in mind that relates to poetry or literature.”

He frequently asks students to “turn music into a language that can be readily understood.”

Greenhouse points out that just as in speech, in music there generally is a rise to the most important material, then a fall from that point to the end. Musical phrases have to be therefore expressed through variations in the intensity of sound and pacing.

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36 Quote from an interview with the author during the summer of 2006.

37 It is important to recognize that when Greenhouse talks about music as "speech," he makes an analogy, not an argument. For he does not take sides in the longstanding debate about whether music possesses the syntactic features of spoken language—a debate that is beyond the scope of this dissertation. Rather, Greenhouse believes that music should communicate, and possess nuances similar to those found in verbal speech. By associating music with words, he enhances his ability to discern and give emphasis to these nuances, but he does not claim to prove an equivalency of music and language.
Tonal inflection

Greenhouse finds that often, cellists play whole phrases with an unfailingly consistent tone, preventing them from conveying the emotional nuances of the music. Greenhouse blames the uniform use of vibrato and bow. “One often hears performances in which a player has a beautiful sonority in general, but monotony sets in because the vibrato and the use of the bow are too uniform.”

To remedy the problem, one has to develop tonal variety, argues Greenhouse, then learn to render every inflection of the musical line with variations of energy in the left hand. Once a note starts, the vibrato should not labor at producing more of the same sound, but should instead vary according to the rise or fall of the musical phrase. To give more intensity to the sound at the height of a phrase, the vibrato should widen; this is done by engaging the back muscles. Conversely, to give a feeling of relaxation in the sound when a phrase tapers, the vibrato should relax; this is done by easing the downward pressure on the string.

Greenhouse contends that the width of the vibrato—rather than its speed—is responsible for creating tonal inflections. Additionally, he reminds players that the left hand must work in tandem with the bow. The relationship between the vibrato and the bow “is one of the most creative aspects of string playing.”

The intensity of sound is related to but distinct from dynamics. Within a dynamic range, the intensity of sound may be graded according to the context of the phrase. In

38 Blum, “Beethoven’s Cello Sonata Opus 102 No. 2,” 419.

other words, one may infer tonal inflections from the context of the phrase without exceeding dynamic markings. Dynamic markings in the score are therefore to be interpreted as indications of dynamic range rather than an exact volumetric.

To help cellists cultivate sensitivity in the left hand, Greenhouse asks students to first eliminate the indiscriminate use of vibrato. He recounts a lesson with Casals. While working on the slow movement of Bach's third Viola da Gamba Sonata, Casals asked his American student to practice without vibrato but to use his bow instead as the sole expressive device. A week later, Greenhouse was allowed to add the vibrato back in—but only to the extent that it would color the sound to taste. He was surprised by how much less he had to vibrate, and how he had become more selective in his use of the vibrato. This lesson illustrated one of the ways to develop an expressive vibrato—to practice first without it.

One must keep in mind the distinction between a uniform vibrato and an even vibrato. While Greenhouse rejects the use of a uniform vibrato, he does not contradict the conventional wisdom that a vibrato should always be even. An even vibrato is one in which the left hand oscillates symmetrically in both directions in relation to the core note. A uniform vibrato, on the other hand, is one that stays the same in width and speed throughout a passage. A vibrato should always be even, but it can still vary in width and speed to produce an array of tonal colors.

In addition to emphasizing the role of vibrato in expressive playing, Greenhouse also discusses "expressive" shifts. Like the vibrato, shifts should also reflect the mood of the music. While a fast shift suits a vigorous passage, in a lyrical passage it would ruin
the delicate feeling of *dolce*. When trying to convey relaxation in the music, the shift should be deliberate. The left hand should thus be "expressive," emulating the natural *glissando* of a singer's voice.

*Motion*

To make music "speak," one must also utilize variations in pacing. According to Greenhouse, music should almost never move squarely; rather, it should proceed with either forward or receding motion. Without changing the fundamental pulse, a degree of rhythmic give and take brings music to life. For example, a string of notes of equal duration ought not simply proceed in a mechanistic straight line, but should instead move according to the architectural momentum of the phrase. In Greenhouse’s view, rhythmic notations are not necessarily prescriptions for the precise durations of notes, but may be seen as templates for a deeper artistic and musical reality that must be divined within the context of the music.

*Enunciation*

Greenhouse advises string players to articulate notes the same way syllables are recited in poetry, igniting each note with a consonant, audible beginning. He observed that in Casals' playing, individual notes—especially the first note of a phrase—were enunciated by the fingers of the left hand. Casals would strike the fingers percussively on
the fingerboard the same moment he pulled the bow, setting the string in immediate
vibration and giving the note instant vitality.40

Casals percusses his left hand fingers even in legato or soft passages. Greenhouse
maintains that notes in these passages must speak with utter clarity. However,
enunciation with the left hand should not produce unintended accents in the bow.

Enunciation is important for articulating short notes that are buried among longer
notes, for example, ornaments. Enunciation offsets the tendency of fast notes to lose
resolution when played against slower notes. Ultimately, the degree to which one
enunciates individual notes should depend, always, upon the musical context. In aid of
this, Greenhouse finds it helpful to put words to musical phrases. This helps him refine
his musical message and discover the technical details needed to deliver it.

40 Casals has spoken at great length about diction in string playing. He believed that string players
tend to overuse their ability to "sneak the sound in" with the bow and neglect what he called the
"expressive impulse inherent in the first note." He considered the first note "the portal through which the
divine impulse entered our earthly domain," which should be introduced with taut clarity. David Blum,
Casals and the Art of Interpretation (Berkeley: University of California Press, 1977), 67, 112.
CHAPTER III

GREENHOUSE’S SUGGESTIONS ON THE 1ST MOVEMENT

ALLEGRO CON BRIO

General Comments

Consider the musical context: the movement opens with an explosion of energy, then just four bars later, the mood changes abruptly to a piano dolce. The rest of the movement continues to reveal an extraordinary range of contrasts. The music veers abruptly from the brusque con brio character into fleeting moments of lyrical beauty, with hardly an instant of transition between; each theme appears evanescent.

Greenhouse’s main critique of performers regards an inability to express the abrupt changes in mood in this movement. Players adhering to a metronomic tempo or a uniform sound throughout produce a result that fails to convey the eruptive temperament of the work. To seize upon contrasts immediately, players must “go beyond the confines of elegant playing.” They must employ a rich palette of sound colors and incorporate a degree of rhythmic freedom.

Dynamic inflection

In forte passages, the cellist must play close to the bridge to penetrate the sound of the piano, even to the extent of wringing out overtones. In piano passages, the cellist

41 In this chapter, the first paragraph serves to describe the musical context. The rest of the chapter consists of Greenhouse’s suggestions for performance. His own words appear in direct quotation marks.

42 Blum, “Beethoven’s Cello Sonata Opus 102 No. 2,” 418.
plays softly but should still bring forth lyrical lines with varying intensity in the sound. Additionally, players must maintain dynamic interest on long and repeated notes. For example, the long note in the cello part at mm. 90-91 should intensify toward the sixteenth notes. To do so, Greenhouse attacks the long note with an initial *sforzando*, and softens slightly before surging with a *crescendo* through the remainder of the note.

Referring to inflections of tone, Greenhouse reminds players that one can vary the intensity of sound without overstepping the dynamic range. His suggestions for dynamic inflection appear in the annotated score as normal dynamic markings, but in parentheses. They indicate changes in the intensity of sound, not in volume.

**Pacing**

“There is always a great question about movement in Beethoven. Without actually changing the tempo, one should have either a forward motion or receding motion—especially in Beethoven.” To effectively bring out the abrupt changes of mood, a degree of rhythmic give and take is necessary.

In this movement, *dolce* passages are transitory. Greenhouse dramatizes their short-lived presence by holding the tempo back just before. He also plays these passages more expansively than the surrounding vigorous passages. We can illustrate this point with reference to the cello entrance at measure 4. The cello must enter with a robust sound, but change course to *dolce* by the next bar. To prepare the listener’s ear for the unexpected change of mood, Greenhouse holds back the last two eighth notes of measure 4.
By contrast, in vigorous passages, Greenhouse pushes forward in the direction of the climax. For example, the sixteenth notes at mm. 86-89 should build momentum toward measure 90, where the recapitulation occurs. Greenhouse presses the sixteenth notes ahead, which intensifies the impending climax.

Although Greenhouse advocates motion in music, he nevertheless maintains the balance of timing within each phrase. For example, he shapes the opening four with both forward and receding motion. The introductory motive at mm. 1 and 2 suspends the listener’s feeling of time, and the sixteenth notes in measure 3 break this suspense and usher the cello’s dramatic entrance. Greenhouse asks the pianist to fully sustain the dotted half notes in mm. 1 and 2, and then play the sixteenth notes in measure 3 with a slight feeling of accelarando toward the cello’s entrance. This example illustrates how Greenhouse moves a string of steady notes in the direction of architecturally important points in the music.

Greenhouse takes rubato elsewhere in this movement. For instance, he shapes the motion of tutti eighth notes in mm. 50-51 by holding back the tempo slightly for the initial octave leap, then moving the descending eighth notes forward. This example shows that players can create motion in every phrase without changing the basic pulse, and never allow the line to stagnate.

Greenhouse’s suggestions for pacing in the music are grounded in Beethoven’s dynamics. To dramatize an impending subito piano or sforzando, for example, he hesitates slightly just before playing them. In measure 14, for instance, Greenhouse holds

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43 His suggestions are marked in the annotated score with undulating arrows pointing in the direction of motion.
back just before playing the *sforzando* on second beat. The time he takes, however, is slight; it is just enough to allow the lifting of the bow before the *sforzando* attack.

*Performance Notes* 44

1-4. The piano’s opening phrase should build momentum to the cello entrance. Play the second bar more insistently than the first. Hold the dotted half note in bar 2 fully—a bit longer than the dotted half note in bar 1—to add tension in the suspense. In bar 3, move the sixteenth notes forward and play a *crescendo* over them.

4. The cellist should enter with enormous energy. Greenhouse recalls that Casals had devoted so much energy to the opening notes that he sent the powder of his rosin flying in the air. Then, in bar 5, “I heard sudden sweetness in the sound (from Casals).” The mood has to change abruptly by the end of this bar. The brusque character is immediately in retreat. To set the first note in immediate vibration, pluck the C string with the third finger of the left hand while simultaneously attacking the string with a sudden thrust of the bow. Begin with a heavy and broad *martelé* stroke, then gradually lighten the bow in preparation for the *dolce* in bar 5. The last two eighth notes should be sung and articulated with a little space in between, and not too short.

44 The numbers indicate measures in the score.
5-7. Begin to sing right away. Avoid a diminuendo in bar 6; instead, play a crescendo through the half note, B. This communicates a longer phrase. Take care to maintain the dolce character by shifting gently from B to G.

8-11. The quarter notes should not sound uniformly, but follow the contour of each phrase. Intensify the sound toward the peak of each rainbow-shaped phrase by increasing the vibrato and bow speed, but without increasing the overall volume. Relax the sound as the line falls.

12-13. The two Ds in bar 12 should become more insistent. Lift the bow off the string just before articulating the C-sharp. Be sure to follow through with the bow. Lifting the bow off the string allows the cello to ring.

14. Lift the bow off the string after the first A, then attack the sforzando A with sudden bow speed.

14-15. Shape the eighth notes according to the rise and fall in the phrase.

16. Emphasize the interruptive nature of the dotted rhythm. Lift the bow off the string after the first note, and then articulate the sixteenth note with renewed energy in the bow.
18. Clarify the downbeat by doubling the note; finger the note on the G-string simultaneously as the same note on the open D string.

19-21. Play the second set of sixteenth notes beginning at bar 20 with greater emphasis, and with more of a singing tone than the first set. Play all sixteenth notes on the string.

22. Relax the sixteenth notes in the piano part, preparing the way for the lyrical cello melody.

23. Play this lyrical line with rubato, and do not play it too softly. Apply tenuto to the A-sharp, and hesitate a little before leaping to the E. Then move the latter part of the bar forward.

26. Articulate the grace notes clearly by lightening the bow pressure just before them.

28. Allow the bow stroke to become heavier. Lift the bow off the string just before attacking the fp in the next bar.

29-30. The downbeat of bar 29 concludes the previous phrase. Relax the vibrato to finish this note. Create a feeling of dolce by stretching this lyrical phrase. Vary the
intensity of the vibrato and the speed of the bow according to the shape of the phrase, again by varying the intensity of the vibrato and bow speed without changing the overall dynamic level. In bar 30, lessen bow pressure to allow for a delicate glissando from E to C-sharp.

31-32. The quarter notes should not be played too softly. Play them with a full tone, but with air in the sound; use a fast bow speed and use nearly the full bow.

33. Make the pizzicato dramatic. Wait just a little before playing it, and play it close to the bridge.

33 (piano part) and 39 (cello part).

Reveal a sudden change of character from the sustained note to the triplets. After suspending the long note, hurry the triplets forward, making them sound almost at a faster tempo.

39-42. In bar 39, hold back the last two quarter notes. Retracting motion here prepares for the explosive crescendo of the next two bars.

43-47. Play near the bridge, and use more bow than is comfortable. Do not be afraid to sound rough or to make excessive overtones. Wait just before playing piano in bar 45.
46-47. Sustain the half notes, and enunciate the beginning of each one with a percussive stroking with the fingers of the left hand.

48. Observe Beethoven’s *diminuendo*, which lasts just a half bar. This will enliven the *crescendo* in the next bar.

49-52. This *Tutti* passage should proceed with a sense of motion. Hold back the last two eighth notes of bar 49. After the dotted quarter note in bar 50, lift the bow off the string to allow the cello to ring. Then, immediately pick up the tempo by moving the eighth notes forward, towards the downbeat of bar 52. Emphasize the D and C-sharp in the cello part in bar 51. The bow stroke becomes heavier over the successive eighth notes.

53, 56. Keep the brusque character of the opening gesture, leaping the octave at once, but change the mood immediately on the *fp* sustained note.

53-58. Do not play these sustained notes too sweetly. Use virtually no vibrato to create a *misterioso* atmosphere. In bar 54, the pianist should wait a little before entering. Coming in too soon would spoil the suspense. In bar 55, gradually broaden the eighth notes, and observe Beethoven’s sudden *crescendo* over the bar.
63. This bar provides a short transition from the rigors of chromaticism to the lyrical second theme. Change the mood by holding back and lengthening the bow stroke.

64-68. Shape the cello line according to harmonic changes in the piano part.

69-71. Do not play the mordants in the piano part too quickly; rather, sing them. They are not “hiccups.”

68-83. Use the whole body to play forte. Articulate the grace notes clearly.

74-75. & 82-83.

Apply diminuendo over the three repeated pianissimo notes to give them a sense of direction, but do not inadvertently slow down.

83-84. The quarter note in the piano part at bar 83 should not be treated as a pick up to the theme in bar 84. Give this note its full duration so that the forte entrance in bar 84 comes as a surprise.

85. Play a crescendo through the long note.

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45 Blum, “Beethoven’s Cello Sonata Opus 102 No. 2,” 420.
88. Emphasize the quarter note pulse by accenting the first note of each group of sixteenth notes. This gives the listener a clear rhythmic orientation.

90. After the initial attack on the sforzando, back off with a little diminuendo, and then crescendo through the rest of the note. “This brings interest to the long note and makes subsequent sixteenth notes more brilliant.”

92-94. Hold back the tempo to usher in a new mood. Stretch the eighth note A.

98-107. See notes for similar passages, mm. 22-52.

124. Take two down bows for the first two notes. This holds back the tempo just enough to accentuate the offbeat feel. Then move the rest of the eighth notes forward.

126-28. Play the sixteenth notes forcefully. Then approach the final dotted half note, E, as if “dropping a ton of bricks” on the cello. Sustain this note, but relax the vibrato so the cello matches the piano’s sound decay.

129. Wait a little before entering.

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46 Ibid., 420.
131. The B comes as a surprise. Lighten the bow pressure just before the note to allow a delicate *glissando* to it.

134-9. Although the passage is marked *pianissimo*, each note should still speak with a clear and audible beginning. Enunciate the beginning of each note by striking the fingers of the left hand on the string. Do not play the sustained notes with a sweet sound. The music should sound frightening. Use a narrow vibrato and tailor the vibrato according to the direction of harmonic tension. Each pair of long notes, bars 133-4, 135-6, and 137-8, should sound softer than the pair before. The A-flat in bar 139 should sound the softest, as though “one’s breath were taken away.” For this note, use almost no vibrato at all.

140. After the harmonic digressions in bar 134-39, in bar 140 restore a sense of tempo.

144-end. Play the sixteenth notes on the string, and give impulse to the first of each four-note group. Push the tempo forward towards the end. Be sure to follow through with the bow on the last three chords.

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47 Ibid., 421.
CHAPTER IV
GREENHOUSE’S SUGGESTIONS ON THE 2ND MOVEMENT
ADAGIO CON MOLTO SENTIMENTO D’AFFETO

General Comments

Greenhouse considers this movement the most profound of all of Beethoven's music. Following the tempestuous first movement, the Adagio Con Molto Sentimento D’affeto opens “by way of its own kind of shock,” introducing to its listeners a new set of conflicting emotions. The mood of the movement is “sorrow without tears”—introspective, but without overt sentimentality. The most significant performance problem thus arises from finding the tonal colors needed to convey the movement's emotional subtlety.

Tone

The mezza voce marking in the opening indicates an air of restraint. The theme should be played with the veiled voice of someone who is ”full of feelings but cannot express them.” Greenhouse recommends against using excessive vibrato. The opening, he argues, should be played with a distant yet focused sound.

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48 Ideas presented in this chapter are those of Bernard Greenhouse. His own words appear in direct quotation marks.


50 Ibid., 421.
*Tonal inflection*

Despite the simplicity and restraint of the opening material, the performer’s task is to enrich each phrase with a variety of tonal colors. Greenhouse asks that the cellist "speak" each note of the opening, and consider each note as “having its own landscape.” To do so, the cellist must assign each note its own vibrato and bow speed based on its place in the phrase.

At the height of each phrase, Greenhouse intensifies the sound by widening his the vibrato and speeding up the bow, but without forcing the dynamics to the level of *forte*. In some instances, to add intensity in the sound, Greenhouse goes so far as to use nearly an entire bow for a single eighth-note. For example, to show that the note C in bar 5 is the highest peak of all surrounding phrases, Greenhouse spends three-quarters of the bow to play just that note.

Greenhouse looks for ways to vary repetitious material. Citing Casals, who said, “Repetition is the death of music,” Greenhouse explains that as just in speech, repetitious material in music should never be said the same way. To illustrate, consider the four identical phrases in bars 13-16. Greenhouse plays each phrase with a different sense of pacing and tonal inflection from the others. His choices are based on the underlying harmony.

*Enunciation of notes*

Cellists should strive to enunciate the beginning of each note, especially when playing in the low register, in soft passages, or at the end of phrases. Greenhouse dislikes
the masking of note changes in soft passages, such as the coda (mm. 67-85). He advises cellists to pronounce soft notes by percussively striking the fingers of the left hand with each note change; the desired legato can still be maintained by the bow. Similarly, when a soft phrase comes to an end, the last few notes tend to become inaudible. To offset the ebbing of sound, cellists should enunciate soft notes.

Enunciation also applies to passages that require that the cello and piano sound as one instrument, with matching timbre. An example is the passage at mm. 25-26 and mm. 34-35, where the cello accompanies the piano part. Enunciation of notes in the cello part can enhance the integrity of the ensemble.

Performance Notes

1-8. This opening is full of “feelings that are difficult to express in words.” The tone should be subdued but focused. Play with a quiet vibrato, and consider each note as a “landscape in itself,” with its own vibrato and bow speed. To do so, change the tonal color of every note by following the underlying harmony and the rise and fall of each two-bar phrase. As the line goes up, intensify the sound by widening the vibrato and increasing the bow speed. Do not be afraid to play with a fast bow for the highest note of each phrase. Then, as the line falls, lighten the bow pressure and ease the vibrato. At the end of each phrase, enunciate the last two or three notes by the striking fingers of the left hand on the fingerboard. This gives clarity to the soft notes. But maintain the legato by connecting the vibrato from one finger to the next, and avoid accents.
Mm. 3-4 should have more intensity than bars 1-2. Sustain the A in bar 4 slightly longer before a delicate glissando down to the F. Take the pressure of the finger off the A before the glissando. Bars 5-6 is the highest point of the opening. Widen the vibrato towards the C, and then hesitate a little before a glissando down to the G. The feeling is of resignation, as if one is “left with no more strength to speak.”

Subdivide each moving eighth note into sixteenth or even thirty-seconds to help with the ensemble.

10. The cello should emerge immediately with an expressivo sound. Use more bow on the F.

13-16. Enunciate the notes of smallest values with the left hand. Shape each of the four phrases differently. In bars 13 and 14, hesitate a little before playing the sixty-fourths. In bar 15, sing the sixty-fourths to accompany the build up of a longer line in the piano. In bar 16, wait a bit longer than the proceeding bar before finishing the phrase with the final sixty-fourths turn.

20. Slow down the bow towards the end of this bar for the diminuendo.

21-24. Follow the harmonies in the piano part. Shape every note by varying the intensity of the vibrato without increasing the volume.
25-27. Make the cello sound like the left hand accompaniment in the piano part. Articulate each note by striking the fingers of the left hand on the fingerboard. But maintain a legato vibrato, especially in bar 27.

30-31. Intensify through the small notes. Vary the width of the vibrato according to the direction of the phrase.

32 & 37. The suggested glissandi should be delicate and tender.

33. Follow the bow through the end of the bar for the crescendo before subito piano.

34-36. Enunciates notes in the cello part to match piano’s sound.

39. These triplets proceed, as Casals once said, “a leaf falling in the air.” Do not play them metronomically, but alternate between forward and receding motion.

49. Play a delicate glissando to end the phrase. Relax the vibrato on the G before sliding down to the C-sharp.
51-58. The theme from the opening is now pianissimo, and it should conjure a very special color. “Make them listen with two ears.” On the long note, use a light and fast bow, with air in the sound.

Vary the inflection and pacing of each phrase. For example, the first pattern in bars 52-53 may proceed at first rhythmically, should then relax with a slight ritardando towards the end of the phrase. Alternatively, the same phrase (still bars 52-53) may begin hesitantly—with extra time taken on the long C to allow for a mood change—then proceed straightforwardly towards the end of the phrase. For the second phrase, one may enter eagerly after the long first note, then push the moving notes forward, and then hesitate before the final note. For the last pattern in bars 57-58, play with a more singing tone than the rest, on the A-string, because it leads to the expressivo theme in bar 59. The idea is to vary the four phrases so they are different from one another.


67-end. Be absolutely rhythmic. Subdivide into sixteenths. Do not play pianissimo with a sluggish vibrato. Soft passages require energy in the left hand. Create intensity in the sound with the left hand, with a focused and narrowed vibrato, but keep the bow calm.

Notes that come after a long note—in the cello’s low register—should be articulated with percussive fingers in the left hand. One should hear a clear start to each note as the finger comes down on the string.
71 & 75. Play bar 71 with an intense, singing vibrato. But change to a “lazier” vibrato in bar 75.

72. Articulate with two up bows for the last two low notes so they are heard.

74. On the last note of the bar, change the vibrato to create urgency in the sound. This note leads to a diminished harmony in the next bar.

83 & 84. Make these two bars different. Play the sextuplet in bar 83 rather straight, but in bar 84, hold back.
CHAPTER V
GREENHOUSE’S SUGGESTIONS ON THE 3rd MOVEMENT
ALLEGRO FUGATO

General Comments

Greenhouse acknowledges the many performance-related problems inherent in the fugue. He cites that first of all, the movement is technically difficult, especially for the pianist. Second, the problem of balance; the cellist must struggle to assert his sound through the ensemble's thick texture. And third, the question of bringing dynamic interest to the dense texture amid long spans of music without dynamic indication.

Despite the complexity of this fugue, Greenhouse urges performers to approach the Allegro fugato not as a pedantic exercise in fugal writing, but as a lively fugue with a defining character. Players should find a character that unifies the movement, he argues. For Greenhouse, the theme represents a jovial German peasant dance, and he imagines the dancers slap their lederhosen (leather trousers) on the off-beat accents.

Rhythm and tempo

To bring out the dance-like character of this movement, one should maintain the 3/4 metric feel, and shape each phrase toward the strong downbeat and away from the

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51 Ideas presented in this chapter are those of Bernard Greenhouse. His own words appear in direct quotation marks.
weak third beat. One should maintain a strict tempo throughout and avoid the tendency to slow down when the musical texture thickens.

**Achieving balance in the ensemble**

In *forte* passages, the cellist must play with a heavy bow stroke, and close to the bridge. Do not shy away from the steely noise of the overtones, which usually dissipates in the concert hall anyway. With the exception of a few soft passages, the cellist should assert energy in the sound throughout the movement.

Contrary to conventional wisdom for performing fugues, in this movement the cellist should not play countersubjects too softly, since he must rival three fugal voices in the piano part. Even in *pianissimo* passages, the sound of the cello must convey electrifying energy. The bow stroke should therefore be focused and exact, and invoke the full strength of the large muscles of the back. Accents should be brought out with vitality in the vibrato and abrupt bow speed.

Persistent energy in the bow stroke, however, is not meant to suggest an invariable tone. One may add inflections to a phrase by varying the type of bow stroke. For example, Greenhouse begins the sequence at m. 94 with a heavy, *martelé* stroke; then, as the music begins to soften, he broadens the stroke to a *detaché*.

Likewise, one may adapt the bow stroke to differentiate the various motivic segments. For the motive at mm. 24-25, the slurred notes should sound focused, using the bow economically. By contrast, for the motive at mm. 150-52, the slurred notes should have more air in the sound.
Dynamics

One of the main difficulties of this movement is the pacing of dynamics over long stretches of music. Unquestionably, players must first observe Beethoven’s dynamic markings, especially his *subito piano*. For passages without dynamic markings however, players may designate arrival points in the music and shade dynamics accordingly.

Greenhouse believes that Beethoven was serious even when he wrote "happy" music. The *Allegro fugato* should not, therefore, be played with the appearance of glib facility. It must burst with volatile energy that borders madness.

Performance Notes

1-2. Play the opening phrase simply, as if asking a question.

4-10. The fugal subject brings to mind an image of a German country-dance, the dancers slapping their *lederhosen* on the accented off-beats. Maintain the lilt of the dance by emphasizing the downbeats in the 3/4-meter and lightening the third beats. Play the accents with an energetic vibrato and a fast bow speed.

11. Play the eighth notes short.

14-17. Although the cello is no longer the subject, maintain interest in the line. Play the ascending figure of this countersubject with a crescendo to the top note. Then vary the shape of the phrase for bars 16-17.
19. Greenhouse plays the second beat with a fast bow speed.

26 & 30. Be sure to observe the *subito p*.

30-34. Although the initial marking is *piano*, sing the phrase with a full tone.

40-41 & 42-43.

Do not taper the sound at the ends of these figures. Follow through with the bow for the continued *crescendo*.

45. Observe the dot under the slur on beat 2. Lift the bow off the string after the F-sharp.

46. Observe the *subito p* on the third beat.

50-51. Although the dynamic marking is *piano*, do not play the countersubject in the cello part too delicately. Maintain shape and substance in the sound.

53-55. Bring out the *pesante* character. Play a *crescendo* through these figures.

57. Keep a heavy bow stroke.
63-67. Vary the bow stroke to create contrasts among the eighth notes. Play the eighth notes in bars 63-65 with a longer bow stroke to produce a singing tone. Then in bars 66-67, change to a shorter, martelé stroke.

66-72. Keep a rough character. Play close to the bridge; do not back away from producing excessive overtones. For each sforzando, retake the bow. Play sforzandi with articulation in the left hand fingers, energy in the vibrato, fast bow speed, and using nearly the whole bow. Also, play each sf with more sound than the one before it. The third sf (in bar 69) should be the loudest. To increase the impact of the last sf, hesitate just before playing it.

94-101. Shape the running eighth notes by varying the bow stroke. For example, play bars 94-96 with a heavy, martelé stroke, then change to a lighter, broader stroke in bars 98-101. Additionally, lengthen the downbeat eighth note in bars 98 and 100.

139-42. Observe the diminuendo on the C-sharp. Relax the vibrato on this note, then slide delicately up to the F-sharp.

150-52. Come away from the downbeat in each figure. Use more bow on the eighth notes to add air to the sound.

160. Play a crescendo through the ascending eighth-note figure.
165-68. Play this line with a singing tone and a focused vibrato.

169-71. Keep the *pesante* character of the movement. Play the second beat with a rather rough sound. Follow through with the bow.

179-81 & 183-85.

For each slurred gesture, lift the bow off the string to allow the cello to resonate. Emphasize the beginning of each figure, and then taper off.

185-94. Grade the dynamics within *forte*.

203-06. Do not allow the vibrato to become flabby in *diminuendo*. Keep the vibrato rather tight and focused.

207-10 & 214-21.

Maintain interest in the running eighth notes. Shape them according to the rise and fall of the phrase.

218-20. The primary fingering given here is intended to minimize the distance of shifts. The alternative fingering, which appeared in Greenhouse’s own copy of the score, is in parenthesis.
228-29. Lift the bow off the string after the *sforzando* quarter note pick up, F-sharp.

235-40. Enunciate each note with the fingers of the left hand.

235-end. Push the tempo forward towards the end, giving the listener the feeling that the end comes almost too soon.

243-44. Play the note in bar 243 slightly longer than the one before it, and follow through with the bow. Then play last note, in bar 244, short.
CHAPTER VI
CONCLUDING REMARKS

This dissertation has outlined the basic principles of Greenhouse’s approach to making music within the context of Beethoven’s Cello Sonata in D major, Op. 102 No. 2. The ideas discussed herein constitute the distilled essence of Greenhouse’s own studies with the great cellists of the Twentieth-century, particularly Casals, and his years of performing and teaching experience. Ironically, some of the assumptions about technique utilized in service of fine cello performance—for instance, having fast shifts or a continuous vibrato—can ruin the music. Greenhouse points this out, and provides techniques by which already accomplished cellists can fine-tune in the service of music.

Greenhouse stresses that the performer’s task is to communicate the emotional immediacy of music. This cannot be accomplished by a uniform sheen of beautiful sound. Greenhouse urges cellists to shape every phrase so that a performance is elevated to the realm of artistry. To this end, he demonstrates techniques to improve music’s communicate powers: the enunciation of individual notes, dynamic inflection, and rhythmic flow.

Greenhouse's teaching has great relevance for today's musicians. The current era teems with a plurality of performance styles, yet in Greenhouse's observation, many performances and recordings resemble one another. He is not alone in his view. In an
article that appeared in a recent issue of The American Scholar, titled “In Praise of Flubs,” the author argued

Listen to almost any classical CD today, and you will hear flawlessness. As technology has advanced, a standard of technical brilliance, however artificial, has been set by the recording industry. Nobody today would release a new record with a patch of wrong notes buried in the middle of it. There's no going back to the golden days (the 1920s, '30s, and '40s) when a musician's flaws—the occasional intonation lapse or imprecise articulation—were preserved on vinyl, along with their triumphs and insights. That, to me, is a pity.\(^\text{52}\)

In this setting, it is increasingly important that performers find an individual voice—and have a wide variety of tonal expressions at their disposal.

By discussing Greenhouse's approach, this dissertation does not suggest that one should copy the great masters of the past. Greenhouse's teaching is not concerned with matters of taste, but with how to express music most effectively and bring to life the composer's intentions. What Greenhouse hopes to accomplish is not to churn out copycats, of course, but to provide string players with many colors in their tonal palette. His credo is this: by learning the specific tools for making music, performers attain freedom of expression.

Greenhouse’s suggestions are not the only possibilities. Players should not stop here, but should instead use these ideas to discovering their own approaches to interpretation. Greenhouse, who has often been cited as a surviving link to Casals, says:

“I take heart in believing that eventually players will look beyond mere instrumental perfection. Interpretation is an art form and offers limitless possibilities.”\textsuperscript{53}

Ultimately, this is not a dissertation about a formulaic approach to the D-major sonata; rather, it is an attempt to describe an approach to making music that can apply, with a degree of variability, in a variety of musical contexts. Beethoven’s D-major sonata happens to be a particularly challenging work, and as such, provides an ideal springboard for discussion of the application of Greenhouse’s ideas. The point is not merely to say ‘this is how it ought to be done;’ rather, the aim of this dissertation is to provide tools to enable performers to reach for clarity of musical speech in any context. In the final analysis, this dissertation surveys Greenhouse’s approach to music with the hope that readers will use it as a catalyst for exploring the ever-evolving art of musical interpretation.

\textsuperscript{53} Owen, \textit{Bowed Arts}, 57.
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APPENDIX A

INTERVIEW QUESTIONS

1) Describe your musical background.
   a) Describe your studies with Pablo Casals. When, where, and why did you study with him?
   b) Casals has been your role model whom you emulate in your own teaching. Why?
   c) What are Casals’ key points and unique ideas on music interpretation?

2) Describe your career.
   a) Describe your experience as a chamber music, and how your work with the Beaux Arts Trio have informed your interpretation of Beethoven’s D major sonata.
   b) Describe your career as a teacher. When and where did you teach?
   c) As an experienced teacher, what criticisms do you commonly offer to cellists?

3) Describe the challenges in Beethoven’s D major sonata, and offer solutions to them.
   a) What are the stylistic challenges of playing Beethoven’s music in general?
   b) What are stylistic and technical challenges in performing Beethoven’s D major sonata?
   c) What solutions do you offer to address these challenges?
d) What are principles of your cello technique, and how do you apply them to an interpretation of Beethoven’s D major sonata?

4) Other

a) What advice do you offer today’s cellists?

b) What advice do you offer today’s teachers?
APPENDIX B

EXPLANATION OF ANNOTATION SYMBOLS

A. Fingerings, bowings and cello string indications are annotated using traditional symbols.

B. Dynamic markings:
   
   Change in the intensity of sound. They do not indicate changes in the dynamic level.

   Add impulse to a rhythmic figure or bring out a note.

C. Rhythmic markings:

   Musical motion within a phrase (rubato): an arrow pointing to the right indicates forward motion; an arrow pointing to the left indicates receding motion.

   Accelerate slightly.

   Hold back.

D. Articulation markings

   A cesura (break or pause)

   A comma indicates very short pause (less than a cesura)
A line over a note indicates *tenuto* (hold the note for its full value).

A broken slur segment coming from a note indicates to linger on the note for its full length. Follow through with the bow.

A dot above the fingering indicates that the note should be enunciated with the playing finger of the left hand.

E. Other

\[
\begin{array}{c}
2 \searrow\nw \swarrow\nw 3
\end{array}
\]

Glissando between the fingerings.
APPENDIX C

BEETHOVEN’S D MAJOR SONATA FOR CELLO AND PIANO, OP. 102 NO. 2:
AN ANNOTATED PERFORMER’S EDITION BASED ON
THE SUGGESTIONS OF BERNARD GREENHOUSE
Acknowledgement

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