

Schenker and the Moonlight Sonata: Unpublished Graphs and Commentary

Kiyomi Kimura

Heinrich Schenker had a great interest in Beethoven's Moonlight Sonata. In 1921, he published a facsimile edition of the sonata, with an introduction discussing Beethoven's autograph and sketches.¹ In addition, at his death, he left unpublished graphs of the work and a commentary on its performance. In this paper I will introduce these unpublished materials, which include an analysis of the first movement in differing versions. The paper consists of two parts: in the first I discuss the origin and purpose of the graphs and commentary. In the second and main section I compare the variant forms of the analysis and attempt to link them with the commentary and with Schenker's published fingerings. I hope to show that these unpublished materials may serve the practical musician as well as the theorist.

1. Introduction to the Graphs and the *Notizen*

The Graphs and the Seminar

I found these unpublished materials on the Moonlight Sonata in the Felix Salzer Papers at the New York Public Library. These papers are divided into two series. The first series comprises Salzer's own papers; the second consists of papers from Schenker's *Nachlass*. In 1936, Salzer purchased four folders of

¹ See John Rothgeb, "Schenkerian Theory and Manuscript Studies: Modes of Interaction," in *Schenker Studies* (Cambridge: Cambridge University Press, 1990), 7-11.

Schenker's *Nachlass* from Jeanette Schenker.² Each folder is called a "*Mappe*."³ One of the four *Mappen* (*Mappe* 28) contains analyses prepared in a seminar conducted by Schenker from 1931 until the spring of 1934. This *Mappe* contains Schenker's notes, sketches (partial analyses), and full-length analyses of Beethoven's Moonlight Sonata. In addition to the pages of the analyses, there is a commentary on performance interpretation titled *Notizen zum Vortrag der Mondscheinsonate* ("Notes on the performance of the Moonlight Sonata").⁴ The discussion of this commentary will be presented later in this paper.

The newly discovered unpublished graphs were brought almost to completion in the seminar. They include three full-length graphs of the first movement shown in five levels.⁵ Of the three, one is a complete graph in the hand of Greta Kraus;⁶ two, in the hand of Angelika Elias,⁷ are nearly complete.⁸ Elias was not

² For a biography, see http://mt.ccnmtl.columbia.edu/schenker/profile/person/schenker_jeanette.html

³ "*Mappe*" is derived from Jeanette Schenker's terminology as found in the list she made of the items in Schenker's *Nachlass* after his death in 1935. The NYPL Finding Aid to the Salzer Papers explicates the terminology used: "The original German words '*Nachlass*' and '*Mappe*' have been retained to describe the contents of the papers. '*Nachlass*' refers to all the papers of Schenker, while '*Mappe*' refers to each individual file from the collection." See <http://www.nypl.org/ead/2898>.

⁴ Salzer Papers, b. 55, f. 7, 28/9 – 28/ 13.

⁵ The only published graphs of the Moonlight Sonata's first movement are the partial or background graphs in *Der freie Satz* (Figures 7,a; 54,3; 56,1b; 76,7; 77; 149,4). See Heinrich Schenker, *Free Composition* (Hillsdale, NY: Pendragon Press, 2001).

⁶ Salzer Papers, b.55, f.7, 28/2.

⁷ See http://www.schenkerdocumentsonline.org/profiles/person/elias_angelika.html for a brief biography.

a member of the seminar; according to Schenker's lesson book,⁹ she studied the Moonlight Sonata on December 24, 1931, in one of her private lessons with Schenker. Therefore, Elias's graphs do not originate in the seminar, but they are valuable for purposes of comparison. They can be viewed as a record of the ideas that Schenker transmitted to her.¹⁰ Kraus's complete graph seems to be a clean copy prepared for the seminar. Appendix I gives a facsimile of Kraus's complete graph.

Let me briefly discuss the history of the seminar. In this seminar, Schenker's four pupils, Manfred H. Willfort, Trude Kral, Greta Kraus, and Felix Salzer, worked together to help Schenker prepare analytic studies in the most careful graphic form.¹¹ The goal

See also Michaela R. Rejack. "Introducing Angelika Elias: A Discovery in Schenkerian Studies" (Master's thesis, Ohio State University, 2004), http://etd.ohiolink.edu/view.cgi?acc_num=osu1208904067.

⁸ Salzer Papers, b. 55, f. 8, 28/14 and b. 56, f. 1, 28/25 - 28/26

⁹ Oster Collection, item 16/14. See <http://www.nypl.org/archives/2854>.

¹⁰ It is possible that Elias was asked to prepare a clean copy of the graph to supplement the seminar's work – as happened with the graph of Bach's C Major Prelude. See Schenker's letter to von Cube at http://schenkerdocumentsonline.org/documents/correspondence/OJ-5-7a_40.html.

¹¹ Felix Salzer explains: "Each of us was assigned a different composition; the work on the voice-leading graphs went through many stages until they represented Schenker's point of view.... In my opinion, the ... graphs show the profound insights of Schenker in his most mature and convincing manner." See Heinrich Schenker, *Five Graphic Music Analyses*, introduction by Felix Salzer (New York: Dover Publications, 1969), 17 and 20. The seminar is briefly described at <http://schenkerdocumentsonline.org/profiles/organization/entity-002499.html>.

for the seminar was to complete the graphs of a number of pieces, and eventually to issue them all. For the seminar, Schenker made a list of sixteen compositions to be analyzed.¹² Graphs of the first five pieces were published as the *Five Graphic Music Analyses*, but the graphic analyses of the remaining pieces on the list were not completed or published during Schenker's lifetime. Beethoven's Moonlight Sonata Op.27/2 is the eighth, and one may speculate that it would have been published in the second series.¹³ The graph of only one of the remaining pieces on the list, Brahms's *Auf dem Kirchhofe* was published after Schenker's death. In the 1960s Salzer worked on an introduction and planned to publish the graph, but the project came to a standstill for uncertain reasons. The graph was later published in *Theory and Practice*.¹⁴

¹² The list is published in facsimile on pages 18-19 of *Five Graphic Music Analyses*.

¹³ In letters written to von Cube in 1934, Schenker, at least twice, specifically indicated that graphs of the Moonlight Sonata (all movements) were in preparation for the second series of *Urlinie-Tafeln*. See http://schenkerdocumentsonline.org/documents/correspondence/OJ-5-7a_49.html and http://schenkerdocumentsonline.org/documents/correspondence/OJ-5-7a_51.html.

¹⁴ Heinrich Schenker, "Graphic Analysis of Brahms's *Auf dem Kirchhofe*, Op. 105, No. 4," with an introduction by Hedi Siegel and a commentary by Arthur Maisel, *Theory and Practice* 13 (1988), 1-14, <http://hdl.handle.net/1802/5206>. The published graph is based on copies in the hands of Kraus and Elias (see Salzer's comments on p. 2).

The *Notizen*

What makes these unpublished materials unique is that they contain graphs and detailed performance instructions on the same piece. The *Notizen* are commentaries on performance interpretation dictated by Schenker to his wife.¹⁵ They seem to have been dictated after Schenker had clearly discerned what he wished to suggest to pianists. These performance instructions consist of five manuscript pages on the first and second movements. No notes on the third movement exist, although the title and space are provided for them; we may therefore conclude that the project was abandoned. A facsimile of the commentary on the first movement is given in Appendix II, along with my transcription and translation.

Even though the *Notizen* were found in *Mappe* 28, they may not have originated in relation to the seminar. They are not dated, and may have been written before the 1930s; the handwriting seems somewhat more rounded than Jeanette Schenker's mature script.¹⁶ It is natural to think that this may have been an independent project.

Reading through the *Notizen*, we immediately notice that Schenker wished his instructions to serve as a practical and concrete guide to help with the actual execution of the composition by a pianist. He did not simply give elusive metaphorical suggestions such as “play such a measure with a *decrescendo*,” or “play the

¹⁵ Because of Schenker's deteriorating eyesight, his wife Jeanette took over the writing of his diary, as well as the texts of his analyses, articles, and theoretical works. See http://mt.ccnmtl.columbia.edu/schenker/profile/person/schenker_jeanette.html.

¹⁶ Personal communication from Hedi Siegel.

high note with a crisp sound.” Instead he explains, always with a supporting theoretical or analytical reason, how to execute each note to bring out the desired musical result; or he refers to the nature of the piano, and describes practical techniques to make us aware of specific physical and psychological problems. But he does not limit himself to technical questions alone. He also tells pianists how to feel and interpret the harmony, the pulse and the agogic accents.

I will attempt to relate the graphs and the *Notizen* in the hope that together they will serve both pianists and theorists as an important guide to Schenker’s analysis and provide them with insights into his ideas on the performance of the Moonlight Sonata.

2. The analyses

First, let us compare the graphs of the Moonlight Sonata.¹⁷ There are three variant passages I would like to highlight. The first noteworthy passage is in the bass line in measures 19–22 (see Graphs 1–2 and Score 1).

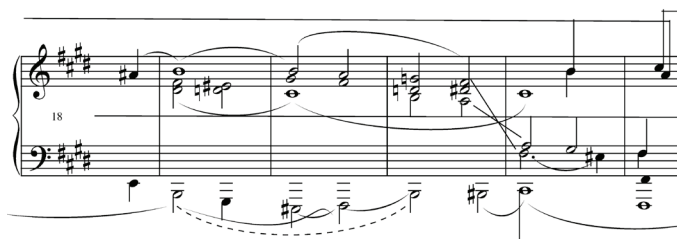
Looking at the bass, Kraus graphs the B1–G#1–E#1 as a motion by two consecutive steps and shows E#1–F#1–B1–B#1–C# as a single phrase associated with the right-hand melody by indicating the voice exchange between the tenor and bass lines. On the other hand, Elias’s graph slurs together B1–G#1–E#1–F#1, picking up on the sense of resolution from the applied dominant $\frac{6}{5}$ to the F# minor chord on the

¹⁷ For convenience, I used the labels “Kraus” and “Elias” for excerpts from the graphs in the hands of Greta Kraus and Angelika Elias, respectively.

third beat in measure 20. The F# minor chord leads to a local $\sharp\text{II}_6$ on the bass B1, and then the diminished VII_7 on B#1 leads to the C# which is the bass of the cadential $\frac{6}{5} \frac{4}{3}$ in F# minor.



Graph 1: Kraus (measures 18–23).



Graph 2: Elias (measures 18–23).

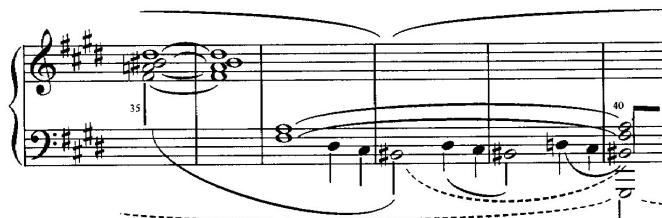


Score 1: Beethoven, ed. Schenker (measures 16–23).

Because of the indicated voice exchange, Kraus's bass slur, tying $E\sharp_1$ and $C\sharp_1$, lessens the significance of the Neapolitan $\natural II_6$ chord on B_1 ; instead, it emphasizes the V_5^6 chord on $E\sharp_1$, which appears as if it were resolving to the $C\sharp$ at the cadential $\frac{6}{5}-\frac{4}{3}$ progression. In Elias's graph, the V_5^6 chord on the $E\sharp_1$, after a brief resolution to $F\sharp_1$, continues further, in accordance with Beethoven's right-hand slur in measures 20–21 (given in Schenker's edition).¹⁸ Elias's graph replicates this slur; moreover, the dotted slur in the bass calls attention to the prolonged B_1 , since the departing B_1 (measure 19) has a totally different meaning from the returning B_1 (measure 21). The first B_1 is the root of V in E minor. The arpeggiated bass descent through the $E\sharp$ diminished chord, $B_1-G\sharp_1-E\sharp_1$, brings us closer to $F\sharp$ minor and when the B_1 returns as the bass note of the Neapolitan $\natural II_6$ chord it stimulates the tonicization of $F\sharp$ minor. Therefore, Elias's graph is truer to the broader melodic and harmonic flow, and is more pertinent to performance.

¹⁸ L. v. Beethoven, *Complete Piano Sonatas*, edited by Heinrich Schenker, introduction by Carl Schachter (New York: Dover Publications, 1975). In his preface (p. xii) Schenker clarifies his editorial stance: "Beethoven's notation alone can lead to an understanding of his musical ideas. Any alteration ... tends rather to obstruct the access to Beethoven's compositional ideas and even makes the technique of playing more difficult! This includes ... attempting to "interpret" the text by means of so-called phrasing slurs and other aids intended to facilitate playing." Carl Schachter adds in his introduction (p. viii): "This edition, of course, contains no interpretative supplements to the score, for Schenker wished to avoid anything that would obscure Beethoven's text." The excerpts from the score of the Moonlight Sonata given in this paper are drawn from Schenker's edition.

The second noteworthy spot is in the tenor line in measure 37 (see Graphs 3–4 and Score 2).



Graph 3: Kraus (measures 35–40).



Graph 4: Elias (measures 35–40).

As opposed to Kraus's graph, Elias's separates this subordinate three-note melody line, $d\sharp-c\sharp-B\sharp$, from the arpeggiated run of the $B\sharp$ -diminished chord starting in measure 35. This three-note melody is an inversion of the previous three-note melody, $b\sharp^1-c\sharp^2-d\sharp^2$, which appears in the soprano line in measures 25–26 accompanied by the voice exchange against the bass line. Kraus's graph shows only the first idea, but Elias's shows both. This emphasizes the motivic connection and respects the separating slurs in measure 37.

The image shows a musical score for piano, measures 24-39, in D major. The score is in two systems. The first system contains measures 24-29, and the second system contains measures 30-39. The music features a complex, flowing melody in the right hand and a more rhythmic, accompanimental line in the left hand. Measure 25 is marked 'cresc.' and measure 29 is marked 'decrec.'. Measure 30 is marked 'p'. The score includes various musical notations such as slurs, ties, and dynamic markings.

Score 2: Beethoven, ed. Schenker (measures 24–39).

The *Notizen* also refer to this measure and emphasize the recurrence of this line:

M37: the lower voice reemerges.

Thus Elias's graph seems more precise and more pertinent in regard to Schenker's ideas on performance.

Moreover, the *Notizen* provide an important performance instruction regarding measure 39.

M39: Play the Phrygian d instead of d-sharp with deeper expression.

The fingerings in Schenker's edition also imply how to execute this Phrygian d. In measures 37 and 38, the R. H. fingerings 2 and 1 are indicated twice for the d# and c#; in measure 39, where the Phrygian d takes place, Schenker instead indicates 1 and 2 for d[♮] and c#. His intention is to alert pianists to play the Phrygian d[♮] with a certain distinction by indicating a different fingering than for the two d#'s. The use of the thumb on the d[♮] results in a deeper sound simply because of the thumb's greater weight. It is evident that Schenker's fingerings are truly more than mere numbers; they are fully equivalent to his commentary.

Lastly, from measure 28, both Kraus's and Elias's graphs show the occurrence of the submerged shifting b# and c# (or b#¹ and c#¹), which form intervals of a third and fourth against the dominant bass G#₁ (see Graph 5). The undulating 3-4 intervals prolong until the recapitulation's cadence in measure 42.

More precisely, Kraus's graph presents two sets of 3-4-3 and a set of 3-4-4-3, while Elias's graph exhibits a long 3-4 and two sets of 3-4-4-3. Kraus disregards the b#1 in measure 35 and instead takes account of the b#1 in measure 38. This may answer Kraus's slur previously discussed at graph 3. Kraus interprets the motivic three-note melody d#-c#-B# as part of the fourth that is suspended until the B# appears in the bass. Thus, the first three-note melody is not shown with the separated slur. Elias's graph, on the other hand, adheres to the pattern of the undulating 3-4-4-3 more coherently than Kraus's. Elias's graph not only displays the importance of the 3-4 undulation but also shows the metric diminution. From measure 28 to 31, the harmony changes every two measures but at the

following 3-4-4-3 the harmonic change occurs at each measure. Furthermore, in the recurring 3-4-4-3 at the end of the dominant pedal section the harmony changes every half measure. This metric diminution gives a sense of acceleration. By showing the intervallic sequences, Elias gives us a hint of how to feel the musical flow.

In the *Notizen*, Schenker has the following commentary on measures 28–32:

M28: The dialogue is presented in fairly lively manner on the dominant, mm32ff must be completely flowing, even hurrying, it is as if two voices were lost in the fog.

With his usual consistency, Schenker suggests an acceleration here. According to the fingering given in his edition of the sonata (see Score 2, above), the 2nd finger is used on the two consecutive notes between measures 33 and 34. This peculiar fingering shows that Schenker wishes to disconnect these two notes because they belong to two different harmonies. Therefore, even though the fourth is suspended in the undulating 3-4-4-3 pattern, the accelerating pulse may become apparent by articulating the point at which each harmony changes.

The subject of Schenker's fingerings needs to be addressed further. There are a number of points of comparison between the graphic analysis, the *Notizen* and Schenker's fingerings as shown in his edition. Let us compare the two cadences at measures 8 and 14. Firstly, the graph helps us to see the structural importance of these two cadences. Secondly, the *Notizen* support the analyses in the graph and give pianists practical advices and rational explanations.

And lastly, the fingering coherently realizes both the analysis and the performance interpretation by putting them into execution.

The image shows two staves of music for measures 28-41 of the Moonlight Sonata. The top staff is labeled 'Kraus:' and the bottom staff is labeled 'Elias:'. Both staves have a treble clef and a key signature of two sharps (F# and C#). The music is written in a single system. Above the staves, there are various annotations and markings. On the Kraus staff, there are markings such as '3-', '4-', '3-', '4-', '3-4', '4-3', and '3-4-4-3'. On the Elias staff, there are markings such as '3-', '4-', '3-', '4-', '3-4', '4-3', and '3-4-4-3'. The music itself consists of a series of chords and intervals, with some notes marked with 'x' and 'y'.

Graph 5: Kraus (measures 28–41), with the 3-4 intervals as marked by Kraus (top) and Elias (bottom)

The image shows a musical score for measures 5-15 of the Moonlight Sonata. The score is written in a single system with a treble clef and a key signature of two sharps (F# and C#). The music consists of a series of chords and intervals. Above the staff, there are various annotations and markings. On the left, there is a marking 'Übergangsfrage: I.'. On the right, there are markings such as 'I/VI', '(III+ $\frac{5}{2}$ V $\frac{7}{5}$ VII II) V $\frac{7}{5}$ II- $\frac{5}{3}$ I/IV', '(V $\frac{7}{5}$ I II $\frac{5}{2}$)', and 'V $\frac{7}{5}$ II- $\frac{5}{3}$ I/IV'. The music itself consists of a series of chords and intervals, with some notes marked with 'x' and 'y'.

Graph 6: Kraus (measures 5–15) with Kraus's harmonic analysis and additions (in parentheses) by the author of the paper.

In Kraus's graph, the cadence in measure 14 appears as one of the important cadences on a structural level; it is comparatively more important than the one in measure 8 (see Graph 6).

Starting on the third beat of measure 12, the progression gives a strong sense of tonicization. In measure 7, on the other hand, only the F# minor chord gives a momentary sense of E major before the cadence. As the graph tells us with the beam, the cadence in measures 8–9 indicates it is part of an *Übergreifzug* (the technique of shifting or overlapping tones) and can be regarded merely as part of a passing motion.

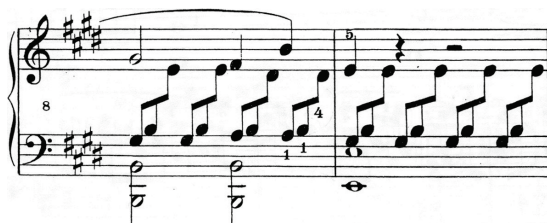
Here is what the *Notizen* suggest concerning these measures:

M8: The legato melody of the last quarter in the melody b¹ with the following first quarter note e¹ is created through substitution by means of an illusion: the 2nd eighth of the triplet b is struck and held with the thumb, whereupon d-sharp is played with the 4th finger as if it came from the b of the accompaniment. The actually created *legatissimo* in the accompaniment also creates the illusion of a legato in the melody.

M14: At the barline, express a little hesitation on the occasion of the cadence by articulating the last 3 eighths.

Schenker's gives a greater priority to the later cadence, which he considers more important. At measure 14, he clearly alerts pianists to the cadence and suggests a little *ritardando*. At measure 8, on the other hand, his discussion is not about the cadence but is prioritized on creating *legatissimo*.

Measure 8 in his edition is consistent with the *Notizen*: his fingering obliges the pianist to hold b^1 instead of b^1 by using the 4th finger on $d\sharp^1$ (see Score 3).



Score 3: Beethoven, ed. Schenker (measures 8–9).

In the graph in measure 8, in addition to the half note b , the whole note b is written in the tenor part (see Graph 6). The structural voice-leading line is now made more distinct through the elimination of the embellishing b^1 in the soprano. If one is aware of this in performance, the voice leading serves to create a stronger sense of *legato* in the five-note melody line, $g\sharp^1$ – a^1 – $g\sharp^1$ – $f\sharp^1$ – e^1 . Schenker's suggestion that the right-hand thumb should hold the b for the support of the melody appears to be pertinent to execution of this phrase. Beethoven's slur disconnects b^1 and e^1 in the soprano and Schenker's fingering agrees, by disconnecting them physically, but the suggestion to hold the right-hand thumb makes it musically possible to create an illusional *legatissimo*.

In sum, at measure 8 the graph shows that the cadence is relatively less important since it occurs in the middle of an *Übergreifzug*. Because of this subordinate status, Schenker's fingering shows that the graph's whole note b should be held by the thumb in order to make an illusional *legatissimo* in the melody.

Thus Schenker's fingering exactly translates this idea into the physical motion.

Let us also examine Schenker's fingerings in the important cadence at measure 14 (see Score 4).



Score 4: Beethoven, ed. Schenker (measures 12–15).

We may relate it to the graph and the *Notizen* at measures 11–15. The voice leading of the soprano and the alto are shown in the graph (see Graph 6). The alto line, indicated by the beam between measures 13 and 14, shows that the important voice leading deviates from the soprano's $f\sharp^1$ and becomes a $\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$ line in B minor, which supports the structural cadence. Schenker suggests that the 4th finger should be used on $d\sharp^1$, the 3rd on $c\sharp^1$ and the 1st on b , which seems to be redundant because these are most likely the fingerings that pianists would naturally choose even without suggestions. It is apparent that he is calling pianists' attention to these three notes and is emphasizing their psychological importance through exposing the fingerings. Schenker's suggestion regarding the physical connection between $\hat{2}$ and $\hat{1}$ may cause the performer to make a natural hesitation at the cadence. In short, his fingerings endorse the melodic connection in the $\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$ alto line by attracting the pianists' attention, and perhaps causing a slight and natural *ritardando*.

As a music pedagogue, as a theorist and as a musician, especially in terms of piano performance, Schenker's

contributions to music and music performance show that he was more than a master of just one area. If he had been just a theorist, he could not have suggested such detailed fingerings; if he had been just a piano teacher, he could not have discovered the *Urlinie*, or developed his succinct and pithy graphic analysis; if he had been just an instrumentalist, he could not have explicitly discussed music in such an analytical, philosophical and conceptual way. His unpublished work on the Moonlight Sonata, like his published analyses and writings, demonstrates the value of his multifaceted approach. I hope my discussion of this unpublished material has shown that this approach can guide pianists and theorists in their own further study.

This image shows a handwritten musical score for the Moonlight Sonata, likely a student or working draft. The score is written on multiple staves, with various musical notations including notes, rests, and dynamic markings. Key features include:

- Staff 1 (Top):** Contains a series of notes with fingerings (3, 2, 1) and a dynamic marking of *p* (piano). A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 2:** Features a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 3:** Contains a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 4:** Features a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 5:** Contains a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 6:** Features a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 7:** Contains a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 8:** Features a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 9:** Contains a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 10:** Features a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 11:** Contains a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 12:** Features a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 13:** Contains a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 14:** Features a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 15:** Contains a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 16:** Features a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 17:** Contains a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 18:** Features a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 19:** Contains a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.
- Staff 20:** Features a series of notes with fingerings (3, 2, 2) and a dynamic marking of *p*. A bracket indicates a phrase, and a handwritten note "(Bach 1800-1810)" is visible.

A handwritten musical score on ten staves. The notation is dense and includes various musical symbols such as notes, rests, and dynamic markings. The score is written in a cursive, handwritten style. The first staff has a key signature of one flat and a time signature of 3/4. The notation includes many notes, some with accidentals, and rests. There are also some markings that look like "p" for piano and "f" for forte. The score is written on aged, slightly yellowed paper. In the top left corner, there is a small logo that says "New York Public Library".

Appendix 2: Facsimile with author's transcription and translation of Heinrich Schenker's manuscript "Notes on the performance of the moonlight sonata"

Notizen zum Vortrag der Mondscheinsonate	Notes on the performance of the moonlight sonata
1. Satz	1. Movement
Durchaus das alla breve zu beachten.	Be sure to observe the alla breve.
T. 5: Das Melodie-Sechzehntel gis im 5. Takt ist sehr bequem nach dem letzten Achtel der Triole u. dem 1. Achtel des nachfolgenden Viertels zu spielen, jedoch muß die Triole entsprechend langsamer gespielt, die einzelnen Achtel artikuliert werden, damit die Breite des letzten Achtels nicht plötzlich auf falle.	M 5: The sixteenth note of the melody in measure 5 is to be played very leisurely after the last eighth of the triplet and the first eighth of the following bar, but the triplet must accordingly be played slower and the individual eighths articulated, so that the last eighth is not conspicuously longer than the others.
T. 6: Das 1. Achtel gis bei der Begleitung des 2. Viertels muß etwas stärker als die übrigen 3 gis desselben Taktes angespielt werden, etwa: >. Der (tiefe?) Grund davon ist der, daß der Einsatz der Melodie beim 4. Viertel des vorhergegangenen Taktes die Aufmerksamkeit auf den schwachen Taktteil überhaupt gelenkt hat, dem durch den Druck auf das kleine gis beim 2. Viertel eine neue, aber konsequente Huldigung dargebracht wird.	M 6: The 1st eighth note, g-sharp, in the accompaniment of the 2nd quarter note must be played slightly stronger than the other 3 g-sharps of the same measure, like so: >. The (deep?) reason for this is that the entrance of the melody at the 4th quarter note of the previous measure attracted the attention to the weak part of the bar which receives a new but consistent homage from the emphasis on the g-sharp at the 2nd quarter.

Notizen
zum Vortrag der Mondscheinsonate:
1. Satz.
Durchaus das alla breve zu beachten.
T. 5: Das Melodie-Sechzehntel gis im 5. Takt ist sehr bequem nach dem letzten Achtel der Triole u. dem 1. Achtel des nachfolgenden Viertels zu spielen, jedoch muß die Triole entsprechend langsamer gespielt, die einzelnen Achtel artikuliert werden, damit die Breite des letzten Achtels nicht plötzlich auf falle.
T. 6: Das 1. Achtel gis bei der Begleitung des 2. Viertels muß etwas stärker als die übrigen 3 gis desselben Taktes angespielt werden, etwa: >. Der (tiefe?) Grund davon ist der, daß der Einsatz der Melodie beim 4. Viertel des vorhergegangenen Taktes die Aufmerksamkeit auf den schwachen Taktteil überhaupt gelenkt hat, dem durch den Druck auf das kleine gis beim 2. Viertel eine neue, aber konsequente Huldigung dargebracht wird.

M 8: The legato melody of the last quarter in the melody b1 with the following first quarter note e1 is created through substitution by means of an illusion: the 2nd eighth of the triplet b is struck and held with the thumb, whereupon d-sharp is played with the 4th Finger as if it came from the b of the accompaniment. The actually created *legatissimo* in the accompaniment also creates the illusion of a legato in the melody.

M 14: At the barline, express a little hesitation on the occasion of the cadence by articulating the last 3 eighths.

M 16: Strike the ninth (ninth) at the beginning of the 1st quarter exactly together. The < to the 3rd Quarter (see Bass) calls for a small acceleration, which must be reversed at >. (Articulate the last 3 eighth notes!)

M 22: As in bar 14.

T. 8: Das legato des letzten Melodie-Viertels h1 zum nachfolgenden 1. Viertel e1 wird auf dem Wege einer Täuschung durch Vertretung erzeugt, indem nämlich das 2. Achtel der Triole h mit dem Daumen angeschlagen und gehalten wird, worauf dis mit dem 4. Finger gegriffen wird als käme es vom h der Begleitung. Das wirklich hergestellte *legatissimo* bei der Begleitung täuscht das legato auch bei der Melodie vor.

T. 14: An der Wende des Taktes ein kleines Zögern aus Anlaß der Kadenz auszudrücken durch artikulieren der letzten 3 Achtel.

T. 16: Die None (ninth) zu Beginn des 1. Viertels durchaus gleichzeitig anschlagen. Das < zum 3. Viertel (siehe Bass) fordert eine kleine Beschleunigung, die beim > zurückgegeben werden muß. (Letzten 3 Achtel artikulieren!)

T. 22: wie beim T. 14

Op. 10. No. 10. Largo. Die letzten Melodie-Viertel h1 zum nachfolgenden 1. Viertel e1 wird auf dem Wege einer Täuschung durch Vertretung erzeugt, indem nämlich das 2. Achtel der Triole h mit dem Daumen angeschlagen wird, worauf dis mit dem 4. Finger gegriffen wird als käme es vom h der Begleitung. Das wirklich hergestellte *legatissimo* bei der Begleitung täuscht das legato auch bei der Melodie vor.

Op. 14. An der Wende des Taktes ein kleines Zögern aus Anlaß der Kadenz auszudrücken durch artikulieren der letzten 3 Achtel.

Op. 16. Die None zu Beginn des 1. Viertels durchaus gleichzeitig anschlagen. Das < zum 3. Viertel (siehe Bass) fordert eine kleine Beschleunigung, die beim > zurückgegeben werden muß. (Letzten 3 Achtel artikulieren!)

Op. 22. wie beim T. 14

- T.23: Die höhere Lage in der sich Melodie
mit Begleitung befinden, macht eine
besondere Vorsicht dahin notwendig, den
Daumen nicht mit dem Melodieton gleich
stark zu spielen. In dieser hohen Lage
müssten sich dann bei zu starkem
Daumendruck die Oktaven ungleich
bemerklicher machen als in der tieferen
Lage, wie z.B. bei T.4ff.
- T.28: Auf der Dominante wird der Dialog
recht lebhaft vorgetragen; vollends
fließend, ja sogar eilend sind die T.32ff zu
spielen; es ist, als wenn zwei Stimmen sich
in den Nebel verloren hätten.
- T.37: taucht die tiefere Stimme wieder auf.
- T.39: Das phrygische d statt dis mit
vertiefterem Ausdruck spielen.
Ritenuo der Kadenz erst in T.41 spielen.
- T.58: Das < auch bei der linken Hand.
T.60ff: Trotz pp den Gesang der linken
Hand durchdringend u. sonor vortragen.
T.67: Pedal zum 4. Viertel weglassen, da
es zur engen Lage, die dort erscheint,
nicht taugt.
- T.23: Die höhere Lage in der sich Melodie
mit Begleitung befinden, macht eine
besondere Vorsicht dahin notwendig, den
Daumen nicht mit dem Melodieton gleich
stark zu spielen. In dieser hohen Lage
müssten sich dann bei zu starkem
Daumendruck die Oktaven ungleich
bemerklicher machen als in der tieferen
Lage, wie z.B. bei T.4ff.
- T.28: Auf der Dominante wird der Dialog
recht lebhaft vorgetragen; vollends
fließend, ja sogar eilend sind die T.32ff zu
spielen; es ist, als wenn zwei Stimmen sich
in den Nebel verloren hätten.
- T.37: taucht die tiefere Stimme wieder auf.
- T.39: Das phrygische d statt dis mit
vertiefterem Ausdruck spielen.
Ritenuo der Kadenz erst in T.41 spielen.
- T.58: Das < auch bei der linken Hand.
T.60ff: Trotz pp den Gesang der linken
Hand durchdringend u. sonor vortragen.
T.67: Pedal zum 4. Viertel weglassen, da
es zur engen Lage, die dort erscheint,
nicht taugt.

Sources Consulted

Beethoven, Ludwig van. *Complete Piano Sonatas*. Edited by Heinrich Schenker. New introduction by Carl Schachter. New York: Dover Publications, 1975.

Bent, Ian and William Drabkin, eds. *Schenker Document Online*. <http://mt.ccnmtl.columbia.edu/schenker/>;
<http://schenkerdocumentsonline.org/html>.

Cook, Nicholas. *The Schenker Project*. New York: Oxford University Press, 2007.

Oster, Ernst, Collection of the Papers of Heinrich Schenker. Music Division, The New York Public Library for the Performing Arts. New York, NY.

Pankhurst, Tom. *Schenker Guide*. New York: Routledge, 2008.

Pastille, William. "The Development of the Ursatz in Schenker's Published Works." In *Trends in Schenkerian Research*, edited by Allen Cadwallader, 71–86. New York: Schirmer Books, 1990.

Rejack, Michaela R. "Introducing Angelika Elias: A Discovery in Schenkerian Studies." Master's thesis, Ohio State University, 2004. http://etd.ohiolink.edu/view.cgi?acc_num=osu1208904067.

Rothgeb, John. "Schenkerian Theory and Manuscript Studies: Modes of Interaction." In *Schenker Studies*, edited by Hedi Siegel, 4–14. Cambridge: Cambridge University Press, 1990.

Rothstein, William. "Heinrich Schenker as an Interpreter of Beethoven's Piano Sonatas." *19th - Century Music* 8 (1984): 3–28.

- Salzer, Felix. Papers. Music Division, New York Public Library for the Performing Arts. New York, NY.
- . *Structural Hearing*. New York: Dover Publications, 1962.
- Schenker, Heinrich. *The Art of Performance*. Edited by Heribert Esser. Translated by Irene Schreier Scott. New York: Oxford University Press, 2000.
- . *Der Tonwille*. Edited by William Drabkin. Translated by Ian Bent, William Drabkin, Joseph Dubiel, Joseph Lubben, William Renwick, and Robert Snarrenberg. 2 vols. New York: Oxford University Press, 2004–5.
- . *Five Graphic Music Analyses*. New introduction and glossary by Felix Salzer. New York: Dover Publications, 1969.
- . *Free Composition*. Translated and edited by Ernst Oster. Hillsdale, NY: Pendragon Press, 2001.
- . “Graphic Analysis of Brahms’s *Auf dem Kirchhofe*, Op. 105, No. 4.” Introduction by Hedi Siegel. Commentary by Arthur Maisel. *Theory and Practice* 13, (1988): 1–14.
- . *J.S. Bach’s Chromatic Fantasy and Fugue*, critical edition with commentary. Translated and edited by Hedi Siegel. New York: Longman, 1984.
- . *The Masterwork in Music*. Edited by William Drabkin. Translated by Ian Bent, Alfred Clayton, William Drabkin, Richard Kramer, Derrick Puffett, John Rothgeb, and Hedi Siegel. 3 vols. Cambridge: Cambridge University Press, 1994–97.

Terrigno, Loretta. "Schenker's Interpretive Fingerings: A Comparison of Two Beethoven Piano Sonatas." *Music Research Forum* 24 (2009): 1–24.

Abstract

This paper examines Schenker's unpublished materials on the first movement of Beethoven's Moonlight Sonata — analytic graphs of the work and a commentary on its performance. The materials, which are found in the Felix Salzer Papers at the New York Public Library, include analyses prepared in a seminar conducted by Schenker from 1931 until the spring of 1934. There are three full-length graphs of the first movement shown in five levels. Of the three, one is a complete graph in the hand of Greta Kraus (a member of seminar); two, in the hand of Angelika Elias, are nearly complete. (Elias was not a member of the seminar; she studied Beethoven's Moonlight Sonata in her private lessons with Schenker.) In addition to the pages of the analyses, there is a commentary on performance interpretation titled *Notizen zum Vortrag der Mondscheinsonate* (Notes on the performance of the Moonlight Sonata). I will provide a facsimile, transcription, and English translation of the commentary on the first movement. I will also present Kraus's complete graph of the first movement in facsimile and will compare selected passages with the interpretations given in the graphs by Elias. As a supplement, I will offer a few analytic interpretations of my own.

In my paper, I will relate the unpublished graphs, the *Notizen*, and Schenker's fingerings in the hope that together they will serve both pianists and theorists as an important guide to Schenker's analysis and provide them with insights into the performance of the Moonlight Sonata.

Umsatz:



1. Schicht

3
0
1
0
I

2. Schicht



(Brechung: $ga^1 - c^2$)

3. Schicht



(konsonanter Durchg.)

Takte:

5

10

15

20

(Übergreifende: 1.)

2.)

Vordergrund:



Stufen, Hintergrund:
Hintergrund:
Mittelgrund:

I II $\text{V}_{\text{b}}^{\text{7-6-5-4-3}} \text{I} = \text{VI}$ $\text{IV}_{\text{b}}^{\text{3}} \text{I} = \text{IV}$ $\text{IV}_{\text{b}}^{\text{6-5}} \text{I} = \text{IV}$

Handwritten musical notation for the first staff of 'The Rose Tree'. The melody is written on a five-line staff. Above the staff, the notes are labeled with numbers: 3, 4, 2, 2, 1. The notes are: a quarter note G4 (labeled 3), a quarter note A4 (labeled 4), a quarter note E4 (labeled 2), a quarter note D4 (labeled 2), and a quarter note C4 (labeled 1). The notes are connected by a slur. Below the staff, there are four vertical lines, each with a horizontal bar across it, representing a simple graphic representation of the notes or a rhythmic pattern.

3 2 2 1

49

I-II-V-I
3 4 2 2 1

55

60

155

$$\begin{pmatrix} 3 & 2 & 1 \end{pmatrix} \quad \begin{pmatrix} 3 & 2 & 1 \end{pmatrix}$$

$(0-5, 6-5, 6-5, 6$

$$\begin{array}{cccc} (N_{R_2}) & \text{I} & \text{II} & \text{V} & \text{I} \\ \hline & \text{I} & \text{II} & \text{V} & \text{I} \end{array}$$

(I-IV-VI-III-VI-IV-I-II-V-I-VI-I-VI-I)

Notizen
zum Vortrag der Mondscheinsonate:

I. Satz.

Durchaus das alla breve zu be-
achten.

G. 5 Das Melodie-Sechzehntel gis
im 5. Takt ist sehr bequem
nach dem letzten Achtel der
Triole n. dem 1. Achtel des
nachfolgenden Viertels zu
spielen, jedoch muß die Tri-
ole entsprechend langsamer
gespielt, die einzelnen Ach-
tel artikuliert werden da,
mit die Freiheit des letzten
Achtels nicht plötzlich auf-
falle.

G. 6 Das 1. Achtel gis bei der
Begleitung des 2. Viertels
muß etwas stärker als die
übrigen 3 gis desselben Takt,
bespielt werden. es
na: —. Der tiefe Grund
daran ist der, daß der Ein-
satz der Melodie beim 4.
Vierteil des vorhergegangenen
Taktes die Aufmerksamkeit
auf den schwachen Takteil
überhaupt gelenkt hat, dem
durch den Druck auf das
kleine gis beim 2. Viertel eine
neue, aber konsequente Huld-
igung dargebracht wird.

Notizen zum Vortrag der
Mondscheinsonate

Satz

Durchaus das alla breve zu beachten.

T. 5: Das Melodie-Sechzehntel gis im 5. Takt
ist sehr bequem nach dem letzten Achtel der
Triole u. dem 1. Achtel des nachfolgenden
Viertels zu spielen, jedoch muß die Triole
entsprechend langsamer gespielt, die
einzelnen Achtel artikuliert werden, damit
die Breite des letzten Achtels nicht plötzlich
auffalle.

T. 6: Das 1. Achtel gis bei der Begleitung des 2.
Viertels muß etwas stärker als die übrigen 3
gis desselben Taktes angespielt werden,
etwa: >.

Der (tiefe?) Grund davon ist der, daß der
Einsatz der Melodie beim 4. Viertel des
vorhergegangenen Taktes die
Aufmerksamkeit auf den schwachen Takteil
überhaupt gelenkt hat, dem durch den Druck
auf das kleine gis beim 2. Viertel eine neue,
aber konsequente Huldigung dargebracht
wird.

Notes on the performance of the moonlight
sonata

Movement

Be sure to observe the alla breve.

M 5: The sixteenth note of the melody in
measure 5 is to be played very leisurely
after the last eighth of the triplet and the
first eighth of the following bar, but the
triplet must accordingly be played slower
and the individual eighths articulated, so
that the last eighth is not conspicuously
longer than the others.

M 6: The 1st eighth note, g-sharp, in the
accompaniment of the 2nd quarter note
must be played slightly stronger than the
other 3 g-sharps of the same measure, like
so: >.

The (deep?) reason for this is that the
entrance of the melody at the 4th quarter
note of the previous measure attracted the
attention to the weak part of the bar which
receives a new but consistent homage
from the emphasis on the g-sharp at the
2nd quarter.

Schenker and the Moonlight Sonata
Appendix II-ii

Q.8 Das legato des letzten Melodie-
Tertels h¹ zum nachfolgenden
1. Tertel e¹ wird auf dem h¹,
ge einer Täuschung durch Ter-
ketung erreicht, indem näm-
lich das 2. Achtel der Triole h¹
mit dem Daumen angeschla-
gen n. gehalten wird, worauf dis
mit dem 4. Finger gegriffen
wird als käme es vom h¹
der Begleitung. Das wirklich
hergestellte Legatissimo bei
der Begleitung täuscht das
legato auch bei der Melodie
vor.

Q.14 An der Wende des Taktes ein
kleines Zögern aus Anlaß der
Kadenz ausdrücken durch ar-
tikulieren der letzten 3 Achtel.

Q.16 Die Note zu Beginn des
1. Tertels durchaus gleichzei-
tig anschlagen. Das < zum
3. Tertel (siehe Bass) fordert
eine kleine Beschleunigung,
die beim > zurückgegeben
werden muß. (Letzten 3 Achtel
artikulieren!)

Q.22 wie bei Q.14

T.8: Das legato des letzten Melodie-Viertels
h1 zum nachfolgenden 1. Viertel e1 wird auf
dem Wege einer Täuschung durch
Vertretung erzeugt, indem nämlich das 2.
Achtel der Triole h mit dem Daumen
angeschlagen und gehalten wird, worauf dis
mit dem 4. Finger gegriffen wird als käme es
vom h der Begleitung.
Das wirklich hergestellte legatissimo bei der
Begleitung täuscht das legato auch bei der
Melodie vor.

T.14: An der Wende des Taktes ein kleines
Zögern aus Anlaß der Kadenz auszudrücken
durch artikulieren der letzten 3 Achtel.

T.16: Die None (ninth) zu Beginn des 1.
Viertels durchaus gleichzeitig anschlagen.
Das < zum 3. Viertel (siehe Bass) fordert eine
kleine Beschleunigung, die beim >
zurückgegeben werden muß. (Letzten 3
Achtel artikulieren!)

T.22: wie beim T.14

M 8: The legato melody of the last quarter
in the melody b¹ with the following first
quarter note e¹ is created through
substitution by means of an illusion: the 2nd
eighth of the triplet b is struck and held with
the thumb, whereupon d-sharp is played
with the 4th Finger as if it came from the b
of the accompaniment. The actually
created legatissimo in the accompaniment
also creates the illusion of a legato in the
melody.

M 14: At the barline, express a little
hesitation on the occasion of the cadence
by articulating the last 3 eighths.

M 16: Strike the ninth (ninth) at the
beginning of the 1st quarter exactly
together.
The < to the 3rd Quarter (see Bass) calls
for a small acceleration, which must be
reversed at >. (Articulate the last 3 eighth
notes!)

M 22: As in bar 14.

T. 23 Die höhere Lage, in der sich Melodie samt Begleitung befinden, macht eine besondere Vorsicht dahin notwendig, den Daumen nicht mit dem Melodieton gleich stark zu spielen. In dieser hohen Lage müssen sich dann bei zu starkem Daumendruck die Oktaven ungleich bemerklicher machen als in der tieferen Lage, wie z.B. bei T. 4ff.

T. 28 Auf der Dominante wird der Dialog recht lebhaft vorgebracht, vollends fließend, ja sogar eilend sind die T. 32ff zu spielen; es ist als wenn zwei Stimmen sich in den Nebel verloren hätten.

T. 37 taucht die tiefere Stimme wieder auf.

T. 39 Das phrygische d statt dis mit vertiefterem Ausdruck spielen. Ritenuto der Kadenz erst in T. 41 spielen.

T. 58 Das < auch bei der linken Hand.

T. 60ff Trotz pp den Gesang der linken Hand durchdringend u. sonor vortragen.

T. 67 Pedal zum 4. Viertel weglassen, da es zur engen Lage, die dort erscheint, nicht taugt.

T.23: die höhere Lage, in der sich Melodie samt Begleitung befinden, macht eine besondere Vorsicht dahin notwendig, den Daumen nicht mit dem Melodieton gleich stark zu spielen.
In dieser hohen Lage müssten sich dann bei zu starkem Daumendruck die Oktaven ungleich bemerklicher machen als in der tieferen Lage, wie z.B. bei T.4ff.

T.28: Auf der Dominante wird der Dialog recht lebhaft vorgetragen; vollends fließend, ja sogar eilend sind die T.32ff zu spielen; es ist, als wenn zwei Stimmen sich in den Nebel verloren hätten.

T.37: taucht die tiefere Stimme wieder auf.

T.39: Das phrygische d statt dis mit vertiefterem Ausdruck spielen.
Ritenuto der Kadenz erst in T.41 spielen.

T.58: Das < auch bei der linken Hand.

T.60ff: Trotz pp den Gesang der linken Hand durchdringend u. sonor vortragen.

T.67: Pedal zum 4. Viertel weglassen, da es zur engen Lage, die dort erscheint, nicht taugt.

M 23: the higher register in which the melody and accompaniment are placed, necessitates a special caution, not to play the thumb as strong as the melody note. In this high register, heavy thumb pressure would make the octaves expressively noticeable, unlike in the lower register at the measure 4.

M 28: The dialogue is presented in fairly lively manner on the dominant, mm32ff must be completely flowing, even hurrying, it is as if two voices were lost in the fog.

M 37: the lower voice reemerges.

M 39: Play the Phrygian d instead of d-sharp with deeper expression.
Play the Ritenuto at the cadence until T.41.

M 58: The < with the left hand, too.

Mm 60ff: despite the pp, play the left hand melody ringingly and with the good tone.

M 67: Omit pedal at the 4th Quarter, because it does not suit the close position of the harmony which appears there.