Performing Beethoven's Piano Sonata in C minor, Op. 111 on the 1816 English Broadwood Pianoforte

By

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A written project submitted in partial fulfillment of

The requirements of the degree of

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Doctoral of Musical Art: Piano Performance

ABSTRACT

The Doctoral Performance and Research submitted by Jun-Hee D. Han, under the direction of Christopher Taylor at the University of Wisconsin-Madison, in fulfillment of the requirements for the degree Doctor of Musical Arts consists of the followings:

I. Written Project:

"Performing Beethoven's Piano Sonata in C minor, Op. 111 on the 1816 English Broadwood Pianoforte"

In Chapter I to research into practices of interpretation, such as articulation, dynamics, tempo, and other subjects treated below. In Chapter II the reader may read in detail descriptions of the 1816 Broadwood, its English action and a view of early steel support, separate bass bridge, straight stringing and damper system illustrated with photos. A video recording of the Sonata Op. 111 is included on a modern Steinway and the Broadwood. Chapter III includes an account of lessons learned on the Broadwood and personal observations with respect to the experience.

II. Concerto Recital, 3/30/2019, Thompson Chamber Music Hall, UT
Concerto in C Major, K. 503 - W. A. Mozart

III. Solo Recital, 4/23/2019, Freeport Masonic Temple, IL
Sonata in c minor, Op. 13 – L.v. Beethoven
Mazurkas, Op. 59 – F. Chopin
Sonata in c minor, Op. 111 – L.v. Beethoven

IV. Chamber Recital, 11/27/2019, Capitol Lake Grand Hall, WI
Clarinet Sonata in f minor, Op. 120 No. 1 – J. Brahms
Clarinet Sonata in E-flat Major, Op. 120 No. 2 – J. Brahms
Variations on a Theme of Haydn for two pianos, Opus 56 – J. Brahms

V. Solo Recital, 12/09/2019, Collins Recital Hall
Iberia, Book I – I. Albeniz
Sonnetto 123 del Petrarca – F. Liszt
Sonata in f minor, Op. 57 – L.v. Beethoven

VI. Solo Recital, 5/6/2020, Freeport Masonic Temple, IL
Nocturne in c minor, Op. 48 No. 1 – F. Chopin

Sonata in e minor, Op. 90 – L.v. Beethoven
Pictures at an Exhibition – M. Mussorgsky

VII. Lecture Recital, 5/8/2020, Virtual Lecture Recital
"A Transcription of the Third Movement of the First Symphony by Alexander Glazunov"
Parafrasi di Adagio (2020) - J. Han

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Performing Beethoven's Piano Sonata in C minor, Op. 111 on the 1816 English Broadwood Pianoforte

CHAPTER ONE

> Classic performance practices grew naturally from changes in musical styles and in the pianos themselves. Throughout the period, treatment of dynamics, touch, accentuation, articulation, ornaments, tempo, and rhythm, along with the new element of pedaling, responded to the developments in idioms and instruments. - Sandra Rosenblum[1]

Beethoven's piano works vary widely in style, with especially notable changes occurring between the first ten sonatas composed prior to 1800 and the remaining sonatas, variations, and bagatelles completed between 1800 and 1823. The great individuality of the piano writing in these works is explained in part by the rapid developments in piano building described below and thus Beethoven's broader experience of different instruments than Mozart and Haydn.

The developments in piano building to which Rosenblum refers mostly involved keyboard compass, strengthening the case for heavier stringing and increased sonority, and pedals. Descriptions of surviving pianos by John Broadwood and Anton Walter (Beethoven had a Walter when Carl Czerny about ten years of age, played for him)[2] in Martha Novak Clinkscale's *Makers of the Piano – 1700 – 1820* show that the earliest Walter (1783) spanned FF – f_3, a compass used by Walter as late as 1800 – 1810.[3] A Walter piano in her list with a compass of FF – g_3 is dated 1795 (also having an iron brace between the pinblock and the soundboard, supporting string tension and therefore enabling greater sonority),[4] one of 1800 FF – c_4, another of 1805 -1810 CC

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[1] Sandra A. Rosenblum, *Performance Practices in Classic Piano Music* (Bloomington, IN: Indiana University Press, 1988), 1.
[2] Carl Czerny, *On the Proper Performance of All Beethoven's Works for the Piano*, ed. Paul Badura-Skoda (Vienna, Austria: Universal Edition, 1970), 4.
[3] Martha Novak Clinkscale, *Makers of the Piano 1700 – 1820* (Oxford: Oxford University Press, 1993), 311.
[4] Clinkscale, *Makers of the Piano*, 312.

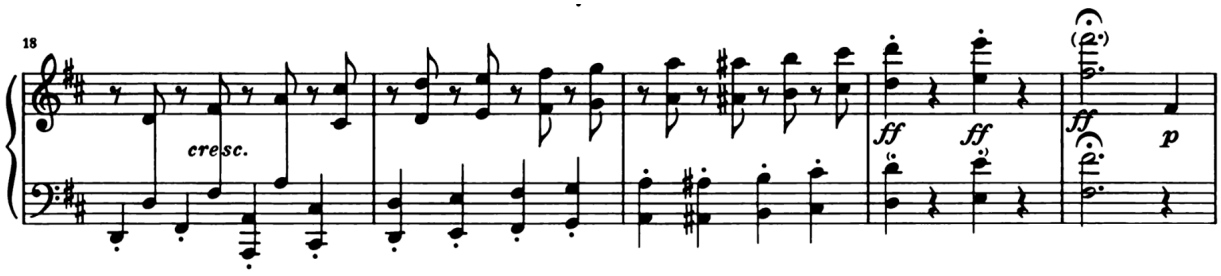
– g_4 (with 4 bracing bars and the first in Clinkscale's list described as having pedals), and a Walter of 1805 EE – c4.[5] A 1787 grand that Clinkscale believed was the earliest surviving Broadwood has a compass of FF – f_3 and 3 bracing bars, a grand of 1793 FF – c_4, another of 1794 has the same compass plus a pedal to shift the action, and a grand of 1796 with the compass CC – c_4, the same compass as the 1816 Broadwood upon which I recorded Op. 111.[6]

[Table 1.1. Fortepiano maker, year instrument built and compass]

Year/Maker	**Compass**
1795 Walter	FF – g_3
1800 Walter	FF – c_4
1805-1810 Walter	CC – g_4
1805 Walter	EE – c4
1787 Broadwood	FF – f_3
1793 Broadwood	FF – c_4
1794 Broadwood	FF – c_4
1796 Broadwood	CC – c_4
1816 Broadwood	CC – c_4

This information illustrates the fast pace of one aspect of the development of the piano during Beethoven's lifetime. For example, should one play f#3 in measure 22 of the first movement of Op. 10 No. 3, as added by the editor of the Henle edition, B. A. Wallner?

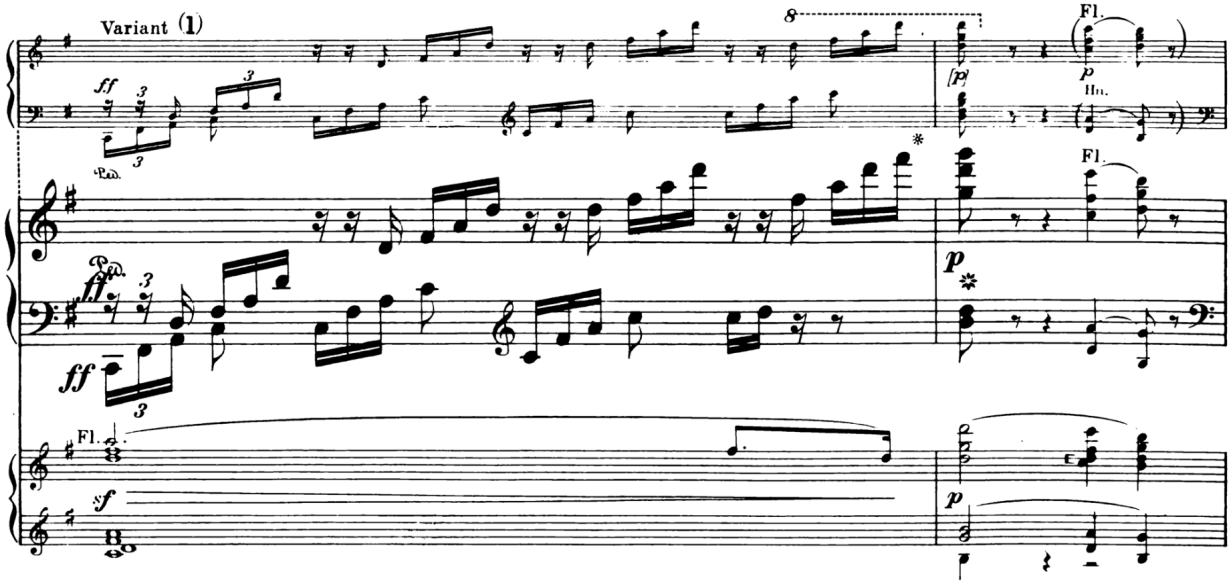
[Ex. 1.1. Beethoven Piano Sonata in D major, Op. 10 No. 3, 1st movement, mm. 18 – 22]



[5] Clinkscale, *Makers of the Piano*, 314.
[6] Clinkscale, 42 - 44.

Or Beethoven's adaptation to limited compass in this example:

[Ex. 1.2. Beethoven Piano Concerto in G major, Op. 58, 1st movement, mm. 324 – 325]



Franz Kullak (1844 – 1913), the editor of Beethoven's Fourth Piano Concerto Op. 58 as currently published by Schirmer, explains the quandary facing the interpreter choosing between Beethoven's response to the limited range of his piano and the possible solution of a present-day pianist:

> Though reluctant to deviate from Beethoven's original readings, we find this variant of recent editions the more deserving of consideration from the fact, that by the omission of the note d4, then not at the composer's command, the point of the original thought (cf. the parallel passage on p. 11) is, so to speak, broken off. On the other hand, this fact appears to throw special light on the repeated ***p*** (not found in the parallel passage); for here; according to the original reading, the highest tone g3, in *forte*, would be apt to drown the melody-tone d of the flute, whereas in the parallel passage the a of the oboe, besides its greater natural intensity, is essentially reinforced by the closing chord of the pianoforte. __ We advance no opinion as to whether the repeated ***p*** might have been merely forgotten, in the parallel passage.[7]

[7] Ludwig van Beethoven, Beethoven Concerto No. IV in G major, Op. 58, ed. by Franz Kullak (New York: G. Schirmer Inc., 1986), 30.

It is not surprising that at the time of his death he owned three pianos: an 1803 Sébastien Érard, an 1817 John Broadwood, and an 1824 Conrad Graf. The 1803 Érard had a compass of 5½ octaves and an English action; the keyboard shift (*una corda*) was later installed at Beethoven's request.[8] The Broadwood is described in detail in Chapter 7. The Graf was loaned to Beethoven in 1824. In an effort to make the piano audible to Beethoven, it was quadruple-strung from D to f4. However, the added tension on the case of the piano caused by the four strings made it necessary to use smaller gauge wire, with the result there was no gain in sonority.[9] The fact that the Érard and the Broadwood were given to Beethoven may explain why they were still in his possession at the time of his death.

Op. 111 was written relatively early in the nineteenth century (1821 – 22), confirming Czerny's description of Beethoven's treatment of the keyboard and his playing as being "ahead of his time."[10] Nevertheless, although written late in his career, the sonata shows stylistic traces from the eighteenth century as well. According to Rosenblum, Beethoven had been introduced to C. P. E. Bach – both his compositions and the *Versuch über die wahre Art* – by his teacher in Bonn, Christian Gottlob Neefe, who was partially self-taught using the textbooks of Friedrich Wilhelm Marpurg and Emmanuel Bach and who "remained a dedicated admirer of Emmanuel Bach's work."[11] When Czerny was taken to Beethoven, his father was told to purchase a copy of the *Versuch* for his son.[12]

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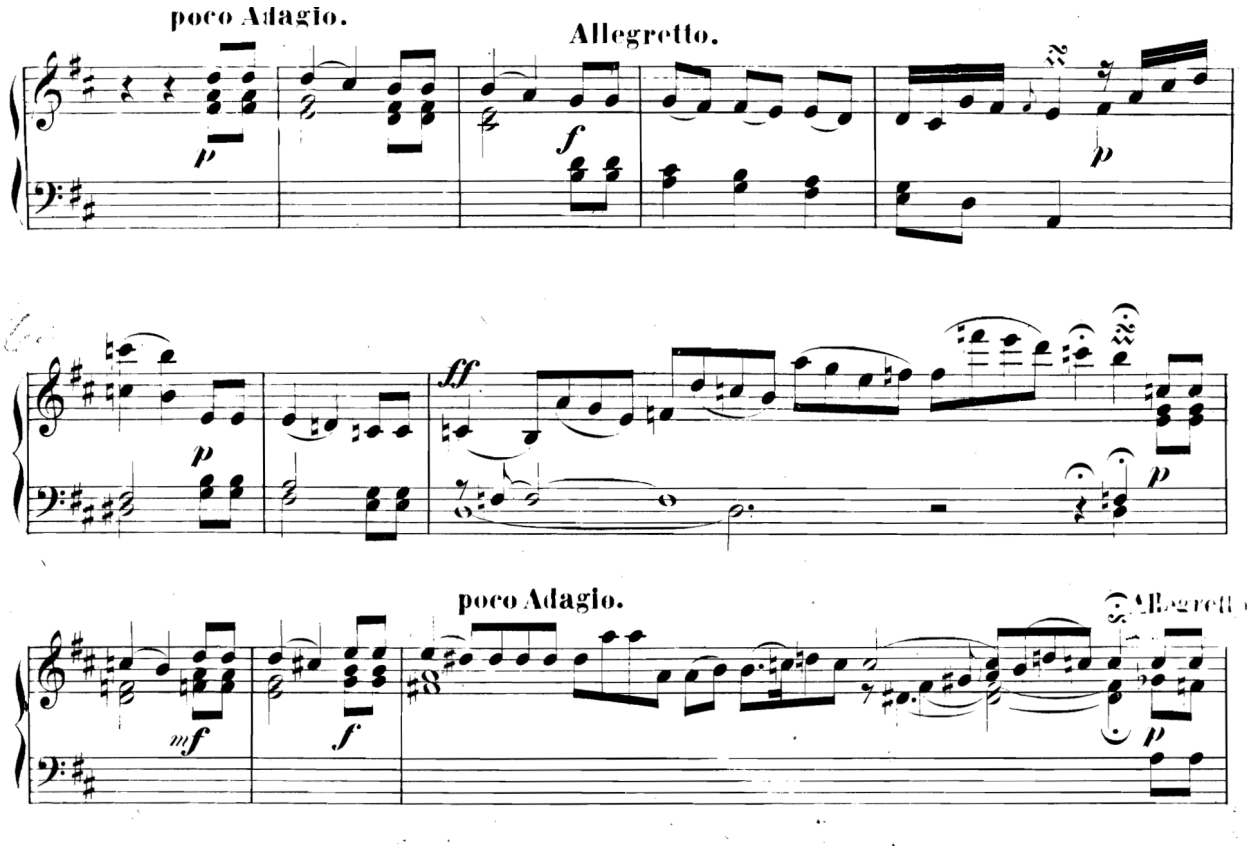
[8] Clinkscale, *Makers of the Piano,* 99 – 100.
[9] Edwin M. Good, *Giraffes, Black Dragons, and Other Pianos: A Technological History from Cristofori to the Modern Concert Grand* (Stanford, CA: Stanford University Press, 2001)*,* 115.
[10] Czerny, *On the Proper Performance,* 16.
[11] Rosenblum, *Performance Practices*, 14.
[12] Czerny, *On the Proper Performance*, 5.

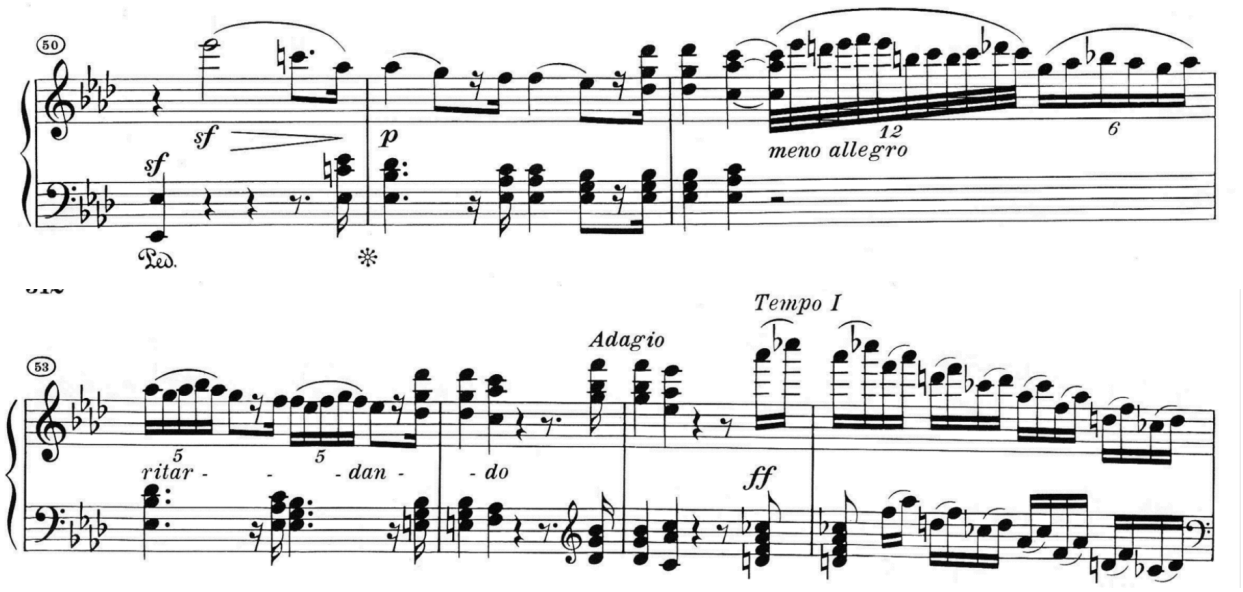
The model of C. P. E. Bach is evident in the first movement of Op. 111 in the passages featuring tempo changes and free passagework. Compare the following example from the *Rondo II* in the *Clavier-Sonaten nebst einigen Rondos fürs Forte-Piano für Kenner und Liebhaber,* Wq. 56 (1780):

[Ex. 1.3. C. P. E. Bach Rondo from *Clavier-Sonaten,* Wq. 56, mm. 91 - 110]



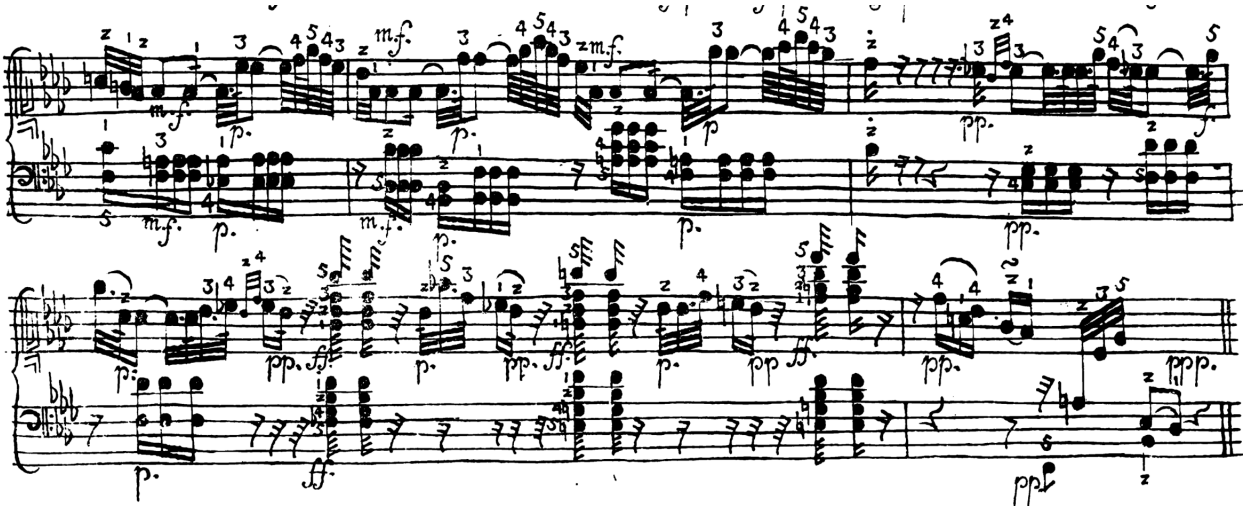
and the following passage from the exposition of Op. 111, showing one of the instances of tempo changes in the first movement, as well as the effect of free writing in the example above from C.P.E. Bach.

[Ex. 1.4. Beethoven Piano Sonata in C minor, Op. 111, 1st movement, mm. 50 – 56]

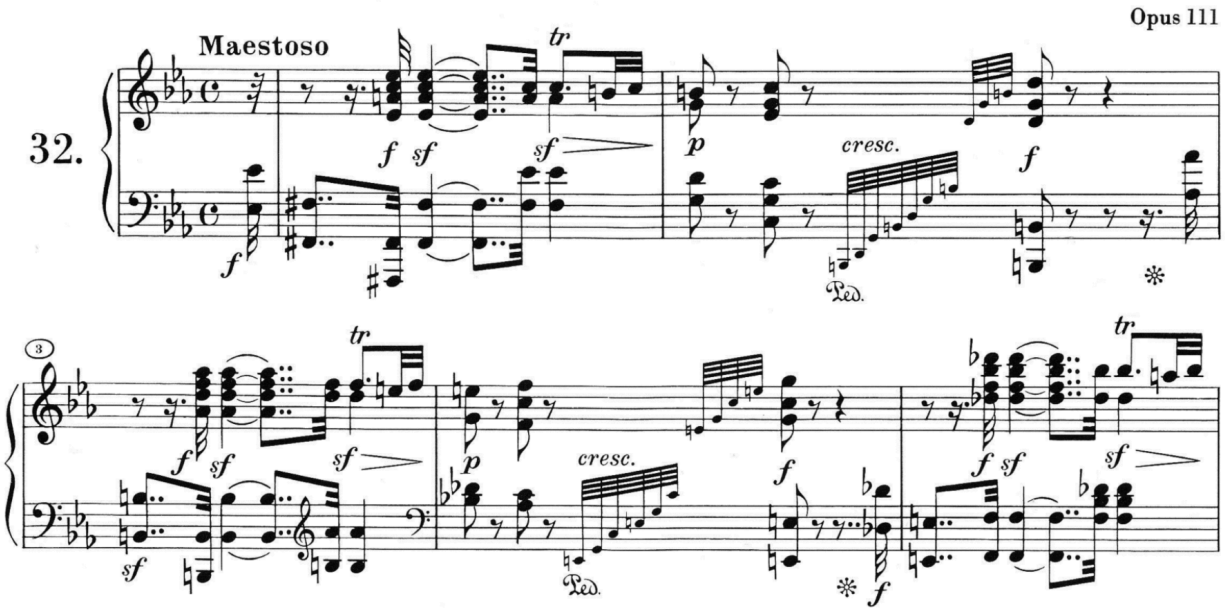


The following example from Sonata V in the *Six Sonatas als Probestücke zu dem* "*Versuch über die wahre Art das Clavier zu spielen*" (1753) shows the exploiting of extreme dynamics in a keyboard style shaped by drama and emotion, as opposed to fluency.

[Ex. 1.5. C. P. E. Bach Sonata V from *Probestücke,* mm. 16- 20 from the first edition]



[Ex. 1.6. Beethoven Sonata Op. 111, 1st movement, mm. 1 – 5]



In his memoirs Czerny also commented on Beethoven's use of legato:

> Then he went through the practices in Bach's treatise with me, making me particularly aware of the Legato of which he had such an unrivalled command, and which all other pianists at that time considered unfeasible at the pianoforte; choppy and smartly detached playing was still in favour then (as it had been at Mozart's time).[13]

In Rosenblum's words, "... as in almost all aspects of change in performance style, the shift to more extensive use of legato came about slowly enough so that Franz Schubert could write to his parents in 1825 (during Beethoven's lifetime) after giving a concert:

> What pleased especially were the variations in my new Sonata for two hands, since several people assured me that the keys become singing voices under my hands, which, if true, pleases me greatly, since I cannot endure the accursed chopping in which even distinguished pianoforte players indulge and which delights neither the ear nor the mind.[14]

[13] Czerny, *On the Proper Performance*, 5.
[14] Rosenblum, *Performance Practices*, 154.

Czerny remembered also that, although Beethoven's skill in improvisation was 'extraordinary,'

> ... it was often much less good when he played his published compositions, for he never took the time or had the patience to work something up again. Success, then, was mostly a matter of chance and mood. Like his compositions, his playing was ahead of its time, and the extremely weak and imperfect pianofortes of that era (up to 1810) often did not hold up under his gigantic playing. This is why Hummel's sparkling, brilliant playing – well calculated to the taste of the time – was bound to be more intelligible and appealing to the public at large. But Beethoven's playing of adagio and of legato in sustained style had an almost bewitching effect on everyone who heard it; so far as I know, it has yet to be excelled.[15]

The spontaneity in Beethoven's improvisations and the intense use of development in his printed works inspired a desire for greater keyboard compass and increased sonority for dynamic effects and a sustained singing quality for a closer legato.

[15] Rosenblum, *Performance Practices*, 16.

CHAPTER TWO

Score

I. Score: The Original Manuscript, Copy, and the First Edition

Before the nineteenth century, musicians and music-lovers did not usually collect autograph scores. Even had they wanted to, these were, first of all, too scarce. Used in preparing publication and afterward likely to be discarded, many autographs and copies from the eighteenth century and earlier centuries did not survive for the next generation. The autograph is defined in the fourth edition of the Harvard Dictionary of Music as "a manuscript of a musical work written in its composer's hand."[16] Fortunately, the autograph of Op. 111 and copies of the first edition have safely survived in fine condition, an indispensable aid for those comparing scores and publishing modern Urtexts. The original edition of Op. 111 was published by Maurice Schlesinger in 1823 in Paris. In the examples below I have chosen not to use a performance edition such as editor Schnabel and Tovey, and the publisher Peters. Nor do I use Breitkopf & Härtel (the *GESAMTAUSGABE*, hereafter *GA*), bearing in mind the article in *the Beethoven Compendium* by Nicholas Marston in which he writes, "there were numerous inaccuracies in the printed texts which needed correction; information concerning surviving manuscripts and early editions was necessary, as was some indication of those places where the *GA* text differed from the composer's autograph."[17] However, I chose the Henle Urtext because

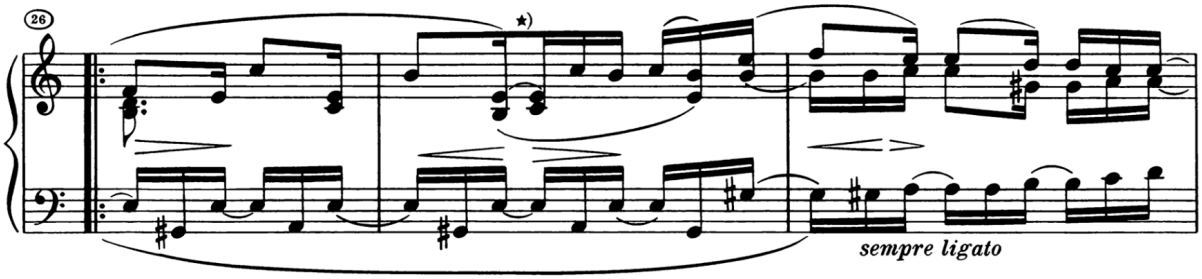
> The *NEUE AUSGABE* (hereafter *NA*) was launched from the *Beethovenhaus* in Bonn under its then director, Joseph Schmidt-Görg (editor of the Beethoven Piano Concertos and Variations in the Henle Urtext) … One

[16] Don Michael Randel, ed., *The New Harvard Dictionary*. London: The Belknap Press of Harvard University Press, 2003, 66.
[17] Barry Cooper, ed., *The Beethoven Compendium: a Guide to Beethoven's Life and Music*, (London: Thames & Hudson Ltd., 1991), 314 – 315.

> reason for the slow progress of the *NA* is clearly the greater importance now attached to textual criticism. Not only are the methods more subtle and searching, but there are also many more sources to be consulted before a truly 'critical' edition can be published…Allied to the present-day concern for textual accuracy mentioned above in connection with the *NA* is the popularity of the so-called *Urtext* edition.[18]

In Newman's opinion, Beethoven, unlike his contemporaries, was for the most part explicit writing his indications in the score.[19] The score of Op. 111 has relatively few contradictory indications; however, there was always the possibility that errors could be made by the copyist who had difficulty reading Beethoven's handwritten notation or the engraver who prepared the plates for printing. The editors of the Henle Urtext point out these errors and give the reason for their choices in a note at the bottom of the page, an example of which is found on page 318 of the Henle edition Volume II in which the editor explains that the tie between e1 – e1 in measure 27 of the second movement of Op. 111 is according to the autograph and a revised copy.[20]

[Ex. 2.1. Beethoven Sonata Op. 111, 2nd movement, mm. 26 – 28]



*) Haltebogen e^1–e^1 nach Autograph und einer überprüften Abschrift. In Originalausgabe steht der Bogen bei *h* und c^1 (wohl Lesefehler).

*) Tie e^1–e^1 according to the autograph and a revised copy. Original edition has a slur between *b* and c^1 (probably a clerical error).

*) Liaison de tenue mi^1–mi^1 d'après l'autographe et une copie verifiée. Dans l'édition originale, la liaison est entre *si* et do^1 (probablement erreur de lecture).

[18] Cooper, *The Beethoven Compendium*, 315 – 316.
[19] William S. Newman, *Beethoven on Beethoven: Playing His Piano Music His Way* (New York: W.W. Norton, 1988), 122.
[20] Ludwig van Beethoven, *Beethoven Klaviersonaten*, ed. B. A. Wallner, 2 vols. (Müchen: G. Henle Verlag, 1953), 318.

II. Repeats

The exposition of the first movement of Op. 111 is repeated, and although occasionally a pianist today may skip such a repeat in the sonata allegro form (perhaps because of time limits in auditions or competitions), in the later sonatas of Beethoven I consider the repeat sign mandatory. When Beethoven did not want the exposition repeated, he did not indicate it, as for example, in the piano sonatas Opp. 57, 90, 101, and 110. MacDonald believes that such a repeat in the first movement of the *Appassionata* (Op. 57) would have involved a "daunting" return to F minor from an exposition cadence in A flat minor. "Like the C minor Violin Sonata, the movement has an urgency that militates against the formality of a repeat."[21] In the variation form of the last movement of Op. 111, each half of the theme is of course repeated, as then also in Variations 1, 2 and 3. In Variation 4 the repeat is written out, being a double variation. It would be unusual to find a recording of a present-day pianist in which the exposition in the first movement or the repeats in the variations were not followed. Hugh MacDonald adds that,

> My conclusion is that nothing encourages us to believe that repeats in classical music are anything other than what all textbooks say they are: instructions to repeat a passage of music, equivalent in force to the instructions which determine tempo, phrasing, dynamics and the notes themselves. There is no ground for believing them to be options, to be taken or left at will. If composers wanted them played, they wrote them in; if not, they left them out. As they liked them less, they wrote them less.[22]

Newman believes that "there is good evidence that Beethoven did not regard his repeat signs as optional and that he inserted them advisedly, not merely perfunctorily."[23] He support his

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[21] Hugh MacDonald, "To Repeat or Not to Repeat," *Proceedings of the Royal Musical Association* 111 (1984): 121-38, http://www.jstor.org/stable/766166.
[22] Hugh MacDonald, *To Repeat or Not to Repeat*, 38.
[23] Newman, *Beethoven on Beethoven,* 263.

position with examples: in the first movement of Opp. 27/2, 90, 101, 109, and 110 (which Newman described as "the five most intimate of his first movements." The reason (according to Newman) that Beethoven did not repeat the development and recapitulation was the presence of a lengthy coda. He points out that Beethoven did indicate a second repeat in the first movements of the sonatas Opp. 10/2, 78, and 79, in which the coda is missing, or is short, or written to be played after the repeat.[24] Czerny's reference to the indicated repeat in the finale of the *Appassionata* indicate that he considered it necessary,

> The present Finale must not be played too fast. The passages are to be performed with distinct equality and lightness, only slightly *legato*, and but seldom impetuously. The movement and power first continually increase on the repetition of the second part and towards the conclusion, and the *Presto* winds up the Sonata with all the power which can be elicited from the Pianoforte, by employing all its means.[25]

To conclude, Friedrich Wilhelm Kalkbrenner made this observation about repeats in his *Pianoforte-Schule* (1832), "A piece of music is divided into parts, marked off by double bars, when dots are added to these bars, it means that the part, on the side of which these dots are placed, must he repeated; first part; or: second part. When, however, there are dots on both sides, both parts must he repeated."[26]

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[24] Newman*, Beethoven on Beethoven,* 263.
[25] Czerny, *On the Proper Performance*, 60.
[26] Friedrich Wilhelm Michael Kalkbrenner, *A complete course of instruction for the piano forte, with the assistance of hand guides* (Edinburg: Published by Alex Robertson, 184-), 5.

CHAPTER THREE

Tempo

In general, piano performance practice as it pertains to Op. 111 can be grouped into the categories of tempo, dynamics and accentuation, touches, articulation and slurs, fingering, and pedaling. Rosenblum writes, "For Beethoven, tempo was an inherent part of the character of a composition."[27] Beethoven was careful choosing his own tempos in performance and often had questions about tempo, whether in his own playing of his works or the playing by others. Drake quotes Schindler,

> When a work of Beethoven had been performed, his first question was always, "How were the tempi?" Every other consideration seemed to be of secondary importance to him.[28]

Beethoven was one of the earliest public exponents of the chronometer, an early form of the metronome.[29] Johann Nepomuk Maelzel (1772 – 1838), the inventor of the metronome, arrived in Vienna from Regensburg in 1792, the same year as Beethoven. He was given space in the Johann Andreas Stein workshop and drew attention with his invention of the *Panharmonicon*, a mechanical orchestra. His association with Beethoven developed when providing a hearing device for the composer and led to their discussing a mechanical device for setting tempos. Beethoven became very enthusiastic about the resulting metronome and in 1817 published markings for the Symphonies No. 1 – 8 and the Septet, Op. 20; the following year he supplied markings for the Quartets Opp. 18, 59, 74, and 95. The Piano Sonata Op. 106 is the only sonata

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[27] Rosenblum, *Performance Practice*, 321.
[28] Kenneth Drake, *The Sonatas of Beethoven* (Cincinnati, OH: Music Teachers National Association, Inc., 1972), 28.
[29] Marten Noorduin, "Re-examining Czerny's and Moscheles's Metronome Marks for Beethoven's Piano Sonatas," *Nineteenth Century Music Review* 15, no. 2 (2018): 209 – 35, doi:10.1017/S1479409817000027.

for which Beethoven left metronome markings.[30] Marten Noorduin writes that Beethoven "intended to provide markings for almost every work written after 1818, and that tempo considerations seem to have occupied his mind until the end of his life."[31]

In a letter to Hofrat von Mosel in 1817, Beethoven wrote that the traditional Italian tempo markings were now inadequate and should be replaced by metronome markings. He wrote, "the tempo is really more the body of a piece, while these terms [of character] refer to its very spirit."[32] Rudolf Kolisch says this illustrates that Beethoven considered tempo integral to the expressiveness of the work, and that the lack of understanding among his Viennese contemporaries compelled him to feel the need to supply metronome markings for his works.[33]

After Beethoven's death, Czerny published five different sets of metronome markings for the Beethoven piano sonatas. Rosenblum believed the first and the last to be the most reliable, the former because it is "closest in time to Beethoven," the latter issued just prior to Czerny's death and therefore representing a lifetime of consideration. Czerny coached with Beethoven the sonatas Opp. 13, 14, 28, 31/2, 53, 57, 101, and 106.[34] Gustav Nottebohm asserted that Czerny was "capable of impressing firmly on his memory a tempo that he had heard."[35]

During Moscheles's lifetime at least eight editions of the Beethoven Sonatas were published with Moscheles's metronome marks.[36] Because the metronome marks by Czerny and

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[30] Rudolf Kolisch. "Tempo and Character in Beethoven's Music," *The Musical Quarterly* 77, no. 1 (1993): 90-131. http://www.jstor.org/stable/742431.
[31] Noorduin, *Re-examining Czerny's*, 2.
[32] Noorduin, 95.
[33] Ibid, *95.*
[34] ibid*,* 16.
[35] Ibid, 3-4.
[36] Ibid, 8.

Moscheles are similar, Rosenblum believes these are "a fair representation of Beethoven's intentions."[37] Noorduin adds,

> The similarity of Czerny's and Moscheles's speeds for Beethoven's piano sonatas can show that their marks are likely to approximate Beethoven's intended speeds, but only if they produced these speeds independently, without copying or influencing each other.[38]

Moscheles's wife describes a visit that Czerny paid them in London in 1838, at which time they discussed music together[39], and we might assume that the topic of tempo came up. As his sources for his metronome marks, Moscheles listed his own musical receptiveness hearing performances in Czerny's apartment by Dorothea von Ertmann and Beethoven.[40]

In a letter of December 18, 1826 to the publishers Bernhard Schotts Söhne, Beethoven wrote: "We can hardly have any *tempi ordinari* any more, now we must follow our free inspiration,"[41] the meaning of which Newman interprets as follows:

> This sentence generally is taken to mean that one could no longer be restricted to the standard tempos of the immediate past, typically five – very slow, slow, moderate, fast, and very fast – but that he now felt free to choose whatever gradation seemed appropriate to the character of a particular piece.[42]

Adolph Bernhard Marx, in his *Anleitung zum Vortrag Beethovenscher Klavierwerke* (Berlin, 1875), p. 62, wrote:

> On the autograph of the song, "*Nord oder Süd*" one can clearly read, in Beethoven's hand: "100 according to Maelzel, but this is only valid for the

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[37] Noorduin, *Re-examining Czerny's*, 10.
[38] Noorduin, 11.
[39] Ibid, 14.
[40] Ibid, 12-13.
[41] Ludwig Van Beethoven, *The Letters of Beethoven*, vol. 3, ed. and trans. Emily Anderson (New York: St. Martin's Press Inc., 1961), 1325.
[42] Newman, *Beethoven on Beethoven,* 84.

> first measures, since feeling also has its beat, which however cannot be expressed completely by this tempo (namely, 100)."[43]

This suggests that Beethoven's own metronome numbers may not be straightforward for performers to interpret. For example, in the Sonata in B-flat Major, Op. 106, the only piano sonata for which he left such numbers, we find

[Table 3.1. Beethoven's metronome indications for Op. 106]

Allegro		half note = 138
Scherzo, *Assai vivace*	3/4	dotted half note = 80
Presto	2/4	half note = 152
Adagio sostenuto	6/8	eighth note = 92
Largo		sixteenth note = 76
Allegro risoluto	3/4	quarter note = 144

In attempting to follow Beethoven's seemingly unrealistic metronome marking for the first movement, should one divide the opening leap between the hands? Drake advances this reason for playing the leap with the left hand, as written:

> By indicating a virtually impossibly quick tempo, Beethoven was exhorting pianists to reach beyond their grasp technically and mentally. Play the movement comfortably in a judicious tempo, and the point of the music – pitting keyboard space and musical content against time – will be lost. Therefore, the opening leap, if divided between the hands to eliminate risk, eliminates the will to play the leap in the shortest length of time that is symbolic of a personal will to overcome whatever challenge.[44]

[43] Quoted in Drake, *The Sonatas of Beethoven,* 45.
[44] Drake, *The Sonatas of Beethoven,* 272.

The marking 80 to the measure for the Scherzo makes playing the two-note slurs clearly, with hairpins, almost impossible, and the marking 92 to the eighth note for the third movement seems 'pushed' interpreted against "sostenuto," "*con molto sentimento*," and "*con grand' espressione*." Considering the complex fugal writing in the last movement, '*risoluto*' in the tempo marking for the character of the movement would be difficult to hear if following the metronome marking 144 to the quarter note.

The absence of metronome numbers for Op. 111 means that performers can choose the tempo, as Beethoven said, following 'our own free inspiration'.[45] The range of metronome numbers given by Czerny and Moscheles[46] may provide a helpful starting point.

[Table 3.2. Metronome indications of Op. 111]

	Czerny (1842)	Czerny (1850)	Moscheles (1858)	Han (2020)
Maestoso	quarter note = 54	56	52	54
Allegro con brio ed appassionato	quarter note = 132	126	126	130
Adagio molto semplice e cantabile	dotted eighth note = 63	60	60	48

[45] Newman, *Beethoven on Beethoven,* 84.
[46] Drake, *The Sonatas of Beethoven,* 41.

I. *Maestoso*

Op. 111 begins with an introduction, as do three other sonatas: Op. 13, Op. 78 and Op. 81a. The introduction in these three earlier sonatas has a slow tempo marking: Op. 13, *Grave*; Op. 78, *Adagio cantabile*; and Op. 81a, *Adagio*. The tempo indications *Grave*, *Adagio cantabile*, and *Adagio* are standard; however, *maestoso* is not a standard indication. *Maestoso* did not occur often in the eighteenth century. When it did appear, it was generally as a modifier that suggested the mood or the character of the movement, as in '*andante maestoso'* or '*allegro maestoso'*. For example, Mozart indicated *maestoso* only once in his piano sonatas, for the first movement of the Sonata No. 8 in A minor, K. 310, '*Allegro maestoso*'. He used the indication three times in the symphonies, each time for the first movement: Symphony No. 7a in G major, K. 45a - *Allegro maestoso*, Symphony "No. 43" in F major, K. 76 - *Allegro maestoso* (GA 43), and Symphony No. 16 in C, K. 128 - *Allegro maestoso*. The indication *maestoso* does not appear in the string quartets.

Haydn did not use *maestoso* for the indication of tempo in his piano sonatas. Only once does it appear in his string quartets, Hob.III:50-56 (in the later version of *The Seven Last Words of Our Saviour on the Cross* [*Die sieben letzten Worte unseres Erlösers am Kreuze*]): *L'Introduzione*: *Maestoso ed adagio*. Among Haydn's symphonies, *maestoso* appears only four times, consistently for the first movement: Symphony No. 42 in D major, H. 1/42: *Moderato e maestoso*, Symphony No. 50 in C major, H. 1/50: *Adagio e maestoso - allegro di molto*, Symphony No. 53 in D major ('*L'Impériale*'/'*Festino*'), H. 1/53: *Largo maestoso-vivac*e, and Symphony No. 54 in G major, H. 1/54: *Adagio maestoso-presto*. Thus, Mozart and Haydn indicated *maestoso* primarily for a first movement and as a qualification to '*allegro*', '*andante*', '*moderato*', '*adagio*', or '*largo*'.

Beethoven did not use *maestoso* as often as other markings. Surprisingly, Op. 111 is the first work for the piano in which we see it. Moreover, the other instances occur only in the same period: the Diabelli Variations, Op. 120 (1823), the Ninth Symphony, Op. 125 (1824), the String Quartet No. 12 in E-flat Major, Op. 127 (1825), and also the Quintet in C Major, WoO 62 (1826).

1. Piano Sonata in C minor, Op. 111 (1822)
   I. *Maestoso - Allegro con brio ed appassionato*

2. *Veränderungen über einen Walzer* ('Diabelli Variations') in C major, Op. 120 (1823)
   Variation I: *Alla Marcia maestoso*
   Var. XIV: *Grave e maestoso*

3. Symphony No. 9 in D minor, Op. 125 (1824)
   I. *Allegro ma non troppo*, *un poco maestoso*
   IV. *Andante maestoso*

4. String quartet no. 12 in E-flat major, Op. 127 (1825)
   I. *Maestoso – Allegro*

And in addition,

5. Quintet in C major, WoO 62, Hess 41 (1826)
   I. *Andante maestoso*, "*Letzter musikalischer Gedanke*"
   (fragment, completed by A. Diabelli for piano)

Given the term's earlier use as a modifier for ordinary tempo marking, the solitary *maestoso* in Op. 111 is quite surprising, just as a solitary *cantabile* or *espressivo* would be. In the two instances in which Beethoven indicated *maestoso* as an independent marking (Op. 111 and Op. 127), deciding on a speed is not a simple matter for the performer. The definition of *maestoso* in the Oxford Online Dictionary is as follows: "J. G. Walther (1732) described it as '*ansehnlich und*

langsam, *jedoch mit einer lebhaften Expression* (stately and slow, but with a lively expression)."[47] The Merriam-Webster Dictionary describes *maestoso* as 'majestic and stately'.[48]

If Beethoven wanted *maestoso* to be slow and stately, he could have used '*Grave*', '*Largo,*' or '*Adagio*'. Brown illustrated the "the confusion and complexity" surrounding tempo markings by contrasting the writing of two early 19th century writers, William Crotch and John Jousse.

> Crotch proposed the following list of tempo terms in ascending order of speed: *grave*, *largo*, *larghetto*, *adagio*, *lento*, *andante*, *allegretto*, *allegro*, *vivacious*, *alle breve*, *presto*, *prestissimo*…

In his *Compendious Musical Grammar* (1825) Jousse consulted Bonifazio Asioli's *Principi elementari di musica*, which gave the order as follows: *largo, grave*, *larghetto*, *adagio*, *andantino*, *il tempo giusto*, *tempo di minuet*, *andante*, *allegretto*, *allegro*, *presto*, *prestissimo*, to which Jousse added,

> The above description, which the French have adopted, is according to the Italian school; in England the following order is generally adopted: 1) *Grave* 2) *Adagio* 3) *Largo* 4) L*arghetto* 5) *Andante* 6) *Andantino* 7) *Maestoso* 8) *Allegretto* 9) *Allegro* 10) *Vivace* 11) *Presto* 12) *Prestissimo*.[49]

Brown adds that the Asioli list "nicely illustrates the gulf which separated English and Continental musicians in this matter".[50]

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[47] *Oxford Music Online* (*Grove*), s.v. "maestoso," accessed March 5, 2020, https://www.oxfordmusiconline.com/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000017421.

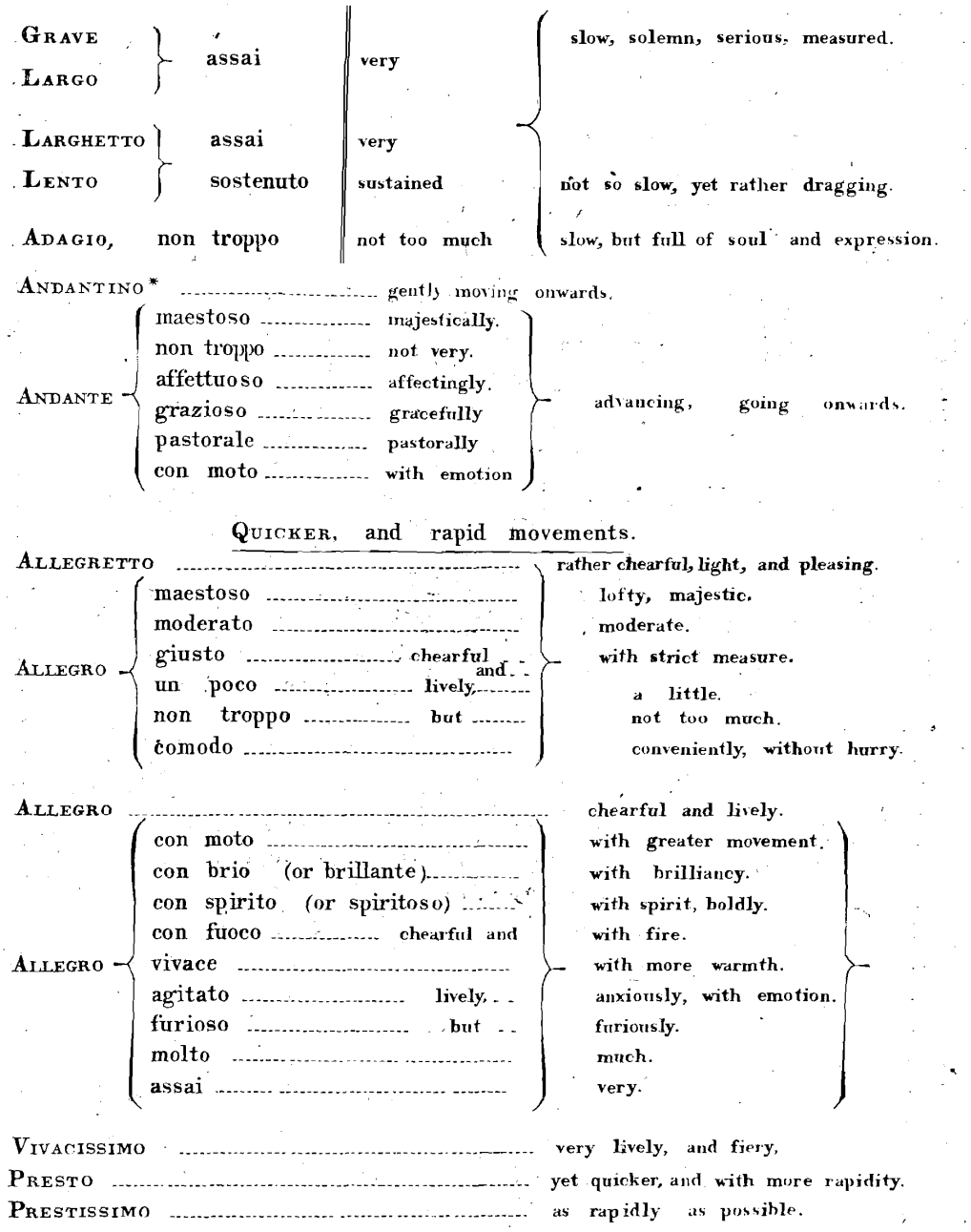
[48] *Merriam-Webster.com Dictionary*, s.v. "maestoso," accessed March 5, 2020, https://www.merriam-webster.com/dictionary/maestoso.

[49] Clive Brown, *Classical and Romantic Performing Practice 1750 – 1900* (Oxford: Oxford University Press, 1999), 337.

[50] Brown, *Classical and Romantic,* 337.

In Hummel's *The Art of Playing the Pianoforte,* published in December 1827, the year of Beethoven's death, Johann Nepomuk Hummel listed *maestoso* only in conjunction with andante and allegro, the same as the usage of Mozart and Haydn.[51]

[Figure 3.1. Definitions of tempo indication from Hummel's *The Art of Playing the Pianoforte*]



[51] Johann Nepomuk Hummel, *A complete theoretical and practical course of instructions, on the art of playing the piano forte* Hummel (London: T. Boosey, 1828), 68 - 69.

In the English order of tempos, given by John Jousse and quoted in Brown, as mentioned above, *maestoso* was placed between *andantino* and *allegretto*. *Maestoso* is in a more moderate tempo or slightly faster. It seems likely that most present-day musicians would consider *maestoso* slower than andante. Clementi, who was educated in England, published his *Introduction to the Art of Playing on the Piano Forte* in 1801, in which he placed *Maestoso* between *Tempo giusto* and *Con commodo* or between *Moderato* and *Allegro*[52]:

[Figure 3.2. Order of tempos from the *Introduction to the Art of Playing on the Piano Forte*]

1 Adagio	6 Andantino	11 Maestoso	16 Spiritoso
2 Grave	7 Andante	12 Con commodo	17 Con Brio
3 Largo	8 Allegretto	13 Allegro	18 Con Fuoco
4 Lento	9 Moderato	14 Vivace	19 Presto
5 Larghetto	10 Tempo giusto	15 Con spirito	20 Prestissimo

Even Walther said it was stately and slow, but with a lively expression. However, 'lively expression' and 'stately and slow' are contradictory. What did Walther mean by lively? Did he mean 'lively expression' as 'not dull'? In any event, "stately and slow" does not indicate moving forward. Or, he may have meant "with energy" or "forceful."

The metronome numbers given above for Op. 111 in Figure 3.2 are by Czerny and Moscheles. Again, Czerny proposes for the *Maestoso* quarter note = 54 in the year 1842 and 56 in 1850, Moscheles chose 52, while Bülow has 52 and Schnabel 52-54. Czerny's metronome numbers for the *Allegro con brio ed appassionato* are quarter = 132 (1842), 126 (1850), Moscheles = 126, Bülow = 132, and Schnabel = 138.[53] These metronome numbers indicated that

[52] Muzio Clementi, *Introduction to the art of playing on the piano forte* (London: Clementi, Collard, & Collard,1826), 21.
[53] Drake, *The Sonatas of Beethoven,* 41.

nineteenth-century musicians thought that the eighth note in the *maestoso* would be slower than the quarter note in the allegro.

Brown refers to George Simon Löhlein's concept of *maestoso* (*Anweisung zum Violinspielen*, 1774) as needing "a firm tone, that is well sustained and well-articulated." [54] One could consider that Beethoven's reason for indicating '*maestoso*' instead of '*grave*,' '*adagio*' or '*largo*' was a felt need for more movement than the other slow tempo indications would offer; at any rate, the overall musical mood seems more important than the precise speed of the introduction. The introduction of Op. 111 does not have a melody line like the '*grave*' introduction of Op. 13. With its fullness of rhythmic complexity, Beethoven was setting the stage for the listener to absorb the next section more easily– the next chapter – with all its dramatic effect.

II. *Allegro con brio ed appassionato*

Unlike *maestoso*, the markings *allegro* and *adagio* seem relatively straightforward. According to Rosenblum, although *allegro* in everyday Italian means "cheerful," "good-humored," or "lively," the term at the turn of the 18th century began to take on the meaning of speed

> when *geschwind* (swift), *alacriter* (briskly), and *hurtig* (quick) appeared as translations in treatises. By 1789 Türk wrote that allegro meant "quick [*hurtig*], i.e., not quite as fast as presto."[55]

In Beethoven's time, eighteenth-century views remained influential in assigning tempos to works marked allegro; Beethoven himself seems to have liked his allegros faster than his contemporaries. Rosenblum tells us that in Beethoven's time there was a great deal of criticism

[54] Brown, *Classical and Romantic,* 364.
[55] Rosenblum, *Performance Practice,* 318.

of "unreasonably quick" *allegros*, some of this from "Friedrich Rochlitz in the *AMZ* (1799), Ludwig Spohr while visiting Paris, and the Harmonicon of London (1825)."[56] Sachs adds that friends and contemporaries of Beethoven mentioned his fast tempos, among these, Franz Gerhard Wegeler, a German physician who knew Beethoven as a youth in Bonn, who around 1795 related that Beethoven "had played a presto which he had never seen before so rapidly that it must have been impossible to see the individual notes." Johann Friedrich Reichardt, once Capellmeister at the court of Prussia, heard Beethoven play his own Concerto in G major, Op. 58, in 1808 "in the fastest possible tempo."[57]

Alongside the quick indication Allegro in the first movement of Op. 111 we find '*con brio ed appassionato,*' defined in the Harvard Dictionary of Music as 'with vigor and spirit,'[58] and 'with passion' which is more an expressive indication than an actual tempo marking. Nonetheless, such indications may affect the speed. In Brown's opinion, using the evidence of metronome marks, "Beethoven's *allegro vivace* is normally faster than his simple allegro but not as fast as his *allegro con brio*." He adds that among tempos marked allegro, allegro con brio is the fastest. Meter could also be associated with tempo. Brown points out that movements marked '*allegro molto'*, '*presto*', and '*prestissimo*' all have an alla breve time signature, have quarters as their fastest notes (or, in the Septet op. 20, quarter triplets), and do not achieve as rapid an absolute tempo.[59]

Not just the main tempo indication, but also the markings of inner tempo alteration are important, such as *ritardando*, *ritenente, calando*, and *accelerando*. In measures 22 through 23,

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[56] Rosenblum, *Performance Practice*, 318.
[57] Curt Sachs, *Rhythm and Tempo: A Study in Music History* (New York: W. W. Norton, 1953)*,* 325.
[58] Willi Apel, *Harvard Dictionary of Music* (Cambridge, MA: The Belknap Press of Harvard University Press, 1972), 112.
[59] Brown, *Classical and Romantic,* 370*.*

Beethoven indicated *poco ritenente* with *mezzo p* and *portato*. *Ritenente* does not occur often in Beethoven's piano works; the meaning is the same as *ritardando* or *ritenuto* although, according to Oxford Music Online, "the present participle suggests something more gradual."[60] In Op. 111, Beethoven probably thought of *ritenente* as a relatively immediate slowing down, but not too much, because he preceded or associated *ritenente* with *poco* or *poco* and *espressivo* or *poco* and *portato* in measures 22 - 23, 30 - 31, 34 - 35, and 99. In other measures he indicated ritardando immediately preceded by *meno allegro*. Following the indication of actual tempo markings, such as *adagio* and *piu allegro*, the return to the original tempo is marked 'Tempo I' instead of '*a tempo*,' which he indicated after '*ritenente*'. Perhaps Beethoven thought of *ritenente* as *espressivo*, holding back the tempo of a particular passage or phrase, and *ritardando* as actually slowing down the tempo.

III. *Arietta: Adagio molto semplice e cantabile*

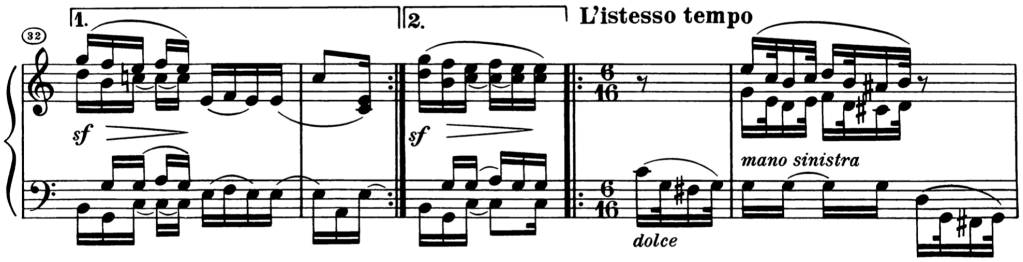
The *Arietta* movement is an *adagio* theme and variations. The *molto semplice e cantabile* creates the mood of the theme which is as simple as possible. Brown asserts that cantabile, "When used in conjunction with other terms it seems, like 'sostenuto', sometimes to have indicated a modification of the tempo and at other times simply to have specified a singing style of performance."[61]

When we leave Variation 1 in the second movement, the rhythmic pattern in Variation 2 is expressed in smaller note values, the 9/16 meter of the theme changing to 6/16 and the

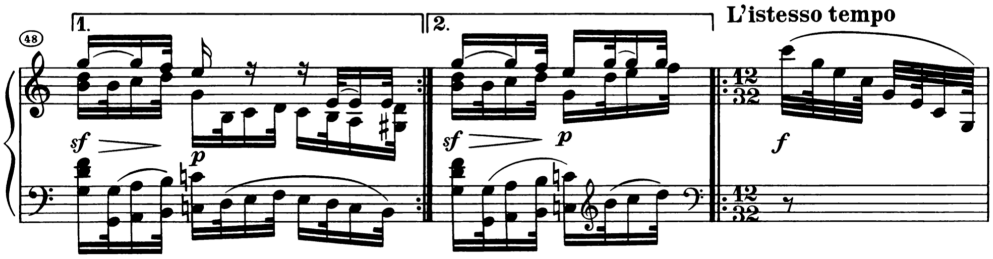
[60] *Oxford Music Online* (*Grove*), s.v. "ritenuto," accessed March 6, 2020, https://www.oxfordmusiconline.com/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000023525.
[61] Brown, *Classical and Romantic,* 374.

minimal note value of sixteenth notes becoming thirty-seconds. However, Beethoven indicated '*l'istesso tempo*,' which means the pulse is the same but in smaller note values. It is explained in the Harvard Dictionary of Music as an "indication that, even though the meter changes, the duration of the beat remains unaltered." [62] Evidently, in this case, the dotted eighth from Variation 1 would correspond to the eighth in the Variation 2. The meter of Variation 3 becomes 12/32, which means the eighth is the same as an eighth in Variation 2. It is important to observe that in the 6/16 each 16th beat is subdivided 16th plus 32nd (implying triplets), and in the 12/32 each 32nd beat is subdivided into 32nd and 64th. Beethoven changed the meter back to 9/16 following Variation 3, the same as the theme, and it continues to the end.

[Ex. 3.1. Beethoven Op. 111, 2nd movement, mm. 32 – 33]



[Ex. 3.2. Beethoven Op. 111, 2nd movement, m. 48]



For Beethoven, tempo and tempo flexibility were essential to form and the expressiveness of the music.

[62] Apel, *Harvard Dictionary*, 428.

CHAPTER FOUR

Dynamics and Accentuation

I. Dynamics

Rosenblum writes,

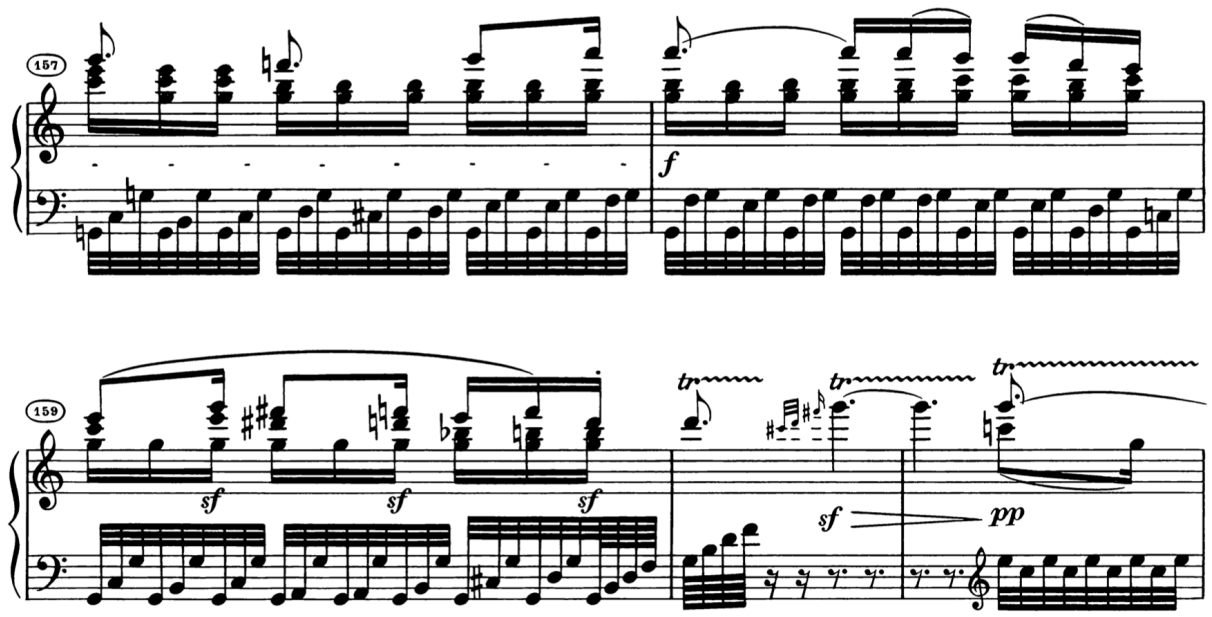
> Not as conspicuous but highly interesting is the distribution of absolute soft and loud dynamics in Beethoven's 32 piano sonatas. Of 9,297 indications of all types, approximately 24 percent are absolute soft dynamics (*mp*, *p*, *pp*, *ppp*) and 15 percent are absolute loud dynamics (*mf*, *f*, *ff*), yielding the surprising statistic that Beethoven used *pp* frequently, sometimes for surprisingly long stretches. In addition, he used other directions that generally imply some level of soft sound, such as *dolce*, *espressivo*, *sanft*, *mezzo voce*, and *teneramente*.[63]

In op. 111, approximately 36 percent of absolute markings are loud, and 63 percent are soft in both movements. My computation agrees well with what Rosenblum found for the 32 sonatas in general. Because the general dynamic impression of his music can be on the loud side, the preponderance of absolute soft indications reveals the sensitive side of this music.

In addition, he doubtless wanted to create an extremely wide dynamic range on the fortepiano for the first movement, in which dynamics range from *pp* to *ff*. Of Beethoven's 32 piano sonatas, only six begin forte or above, including Opp. 10/1, 13, 79, 90, 106, and 111. The dynamic range of the second movement of Op. 111 is *pp* to *f*, which supports the general impression of a lower level than in the first movement. Even the measures around 158 and 159, in the final complete variation, which arguably serve as the movement's climax, never rise above *forte* (along with some *sf* indications).

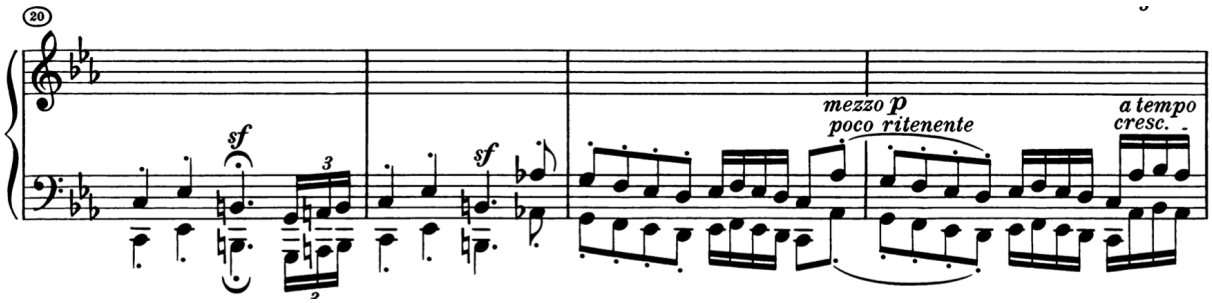
[63] Rosenblum, *Performance Practice,* 58.

[Ex. 4.1. Beethoven Op. 111, 2nd movement, mm. 157 – 161]



Leonard G. Ratner adds to this discussion that while Classic era dynamics ranged from *pp* to *ff*, the most frequent were *forte* and *piano*, often the sole dynamics in many movements.[64] Beethoven indicated *mezzo p* only once in Op. 111, in measures 22 - 23 in the first movement, and he never marks *mf* in the entire sonata. *Mezzo piano* is an unusual dynamic indication in Beethoven's music generally. He used it with *portato* and *poco ritardando* with decrescendo; however, he probably indicated *mezzo p* because he did not want the sound to lose its tension.

[Ex. 4.2. Beethoven Op. 111, 1st movement, mm. 20 – 23]



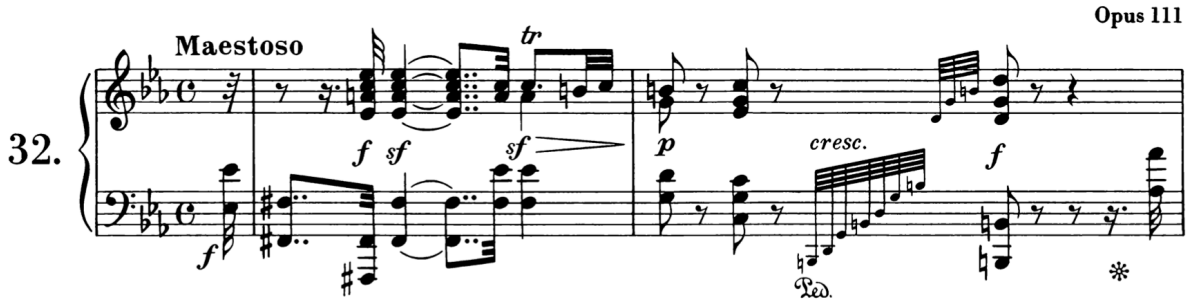
[64] Leonard G. Ratner, *Classic Music: Expression, Form, and Style* (New York: Schirmer Books, 1980), 187.

Rosenblum believes that Clementi's more frequent use of *mp* and *mf* was due to the English pianoforte, on which it was easier to produce these "middle sounds," considering its heavier action and at the same time more controllable touch, greater sonority, and extended dynamic range.[65] From my experience of using the 1816 Broadwood, I agree with Rosenblum that *mezzo piano* and *mezzo forte* are more controllable on the English piano.

II. *Sforzando*

Sforzando is one of the trademarks in Beethoven's music, since he used it much more often than Mozart or Haydn. Rosenblum refers to *sf* as "the most frequently used accent indication in the music of Beethoven."[66] The indication appears approximately 77 times in the first movement of Op. 111 and 57 times in the second movement. Poli observes that the Italian word *sforzando* is a grammatical part of the verb *sforzare* and the noun *sforzo*, meaning force or "effort." "Although it derives from *forza* (strength or force), *sforzando* means 'with effort' or 'applying effort.'"[67]

[Ex. 4.3. Beethoven Op. 111, 1st movement, mm. 1 – 2]

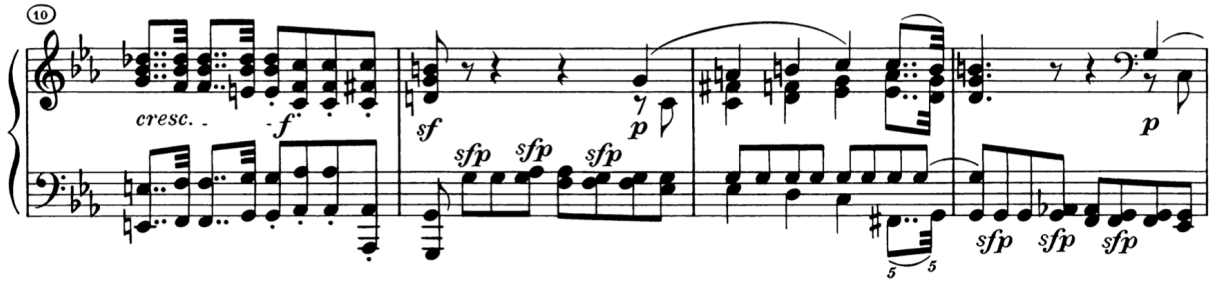


[65] Rosenblum, *Performance Practice,* 58.
[66] Rosenblum*,* 87.
[67] Roberto Poli, *The Secret Life of Musical Notation* (Milwaukee, WI: Amadeus Press, 2010), 73.

The parallel octave leap from e-flat to f-sharp is one gesture. The *sf* on the diminished chord on the second beat is preceded by *f* on the thirty-second chord. This constitutes two gestures for the reason, in my opinion, that Beethoven wanted to highlight the top e-flat by repeating it. The *sf* on the fourth beat is another gesture to point up the beginning of the trill that leads immediately into a decrescendo.

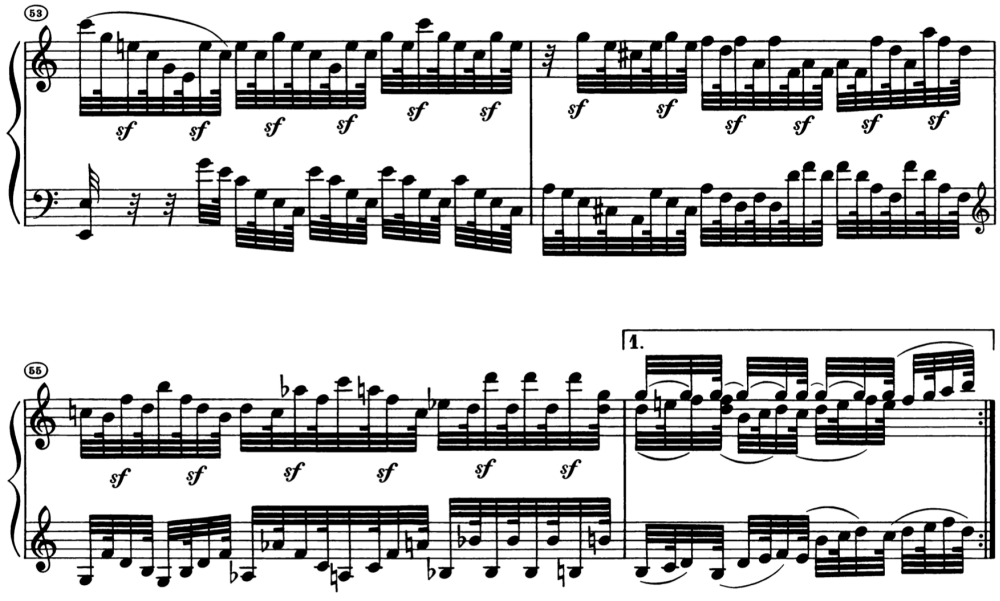
In measures 11 and 13, the *sfp* accents placed on the weak beats, (the second, fourth, and sixth eighth notes), create with their attached *p* markings especially expressive syncopations, definitely a characteristic of C.P.E. Bach.

[Ex. 4.4. Beethoven Op. 111, 1st movement, mm. 10 – 13]



This also appears in measures 53 through 55 in the second movement, where repeated sforzandos create a jazz-like expressiveness.

[Ex. 4.5. Beethoven Op. 111, 2nd movement, mm. 53 – 56]

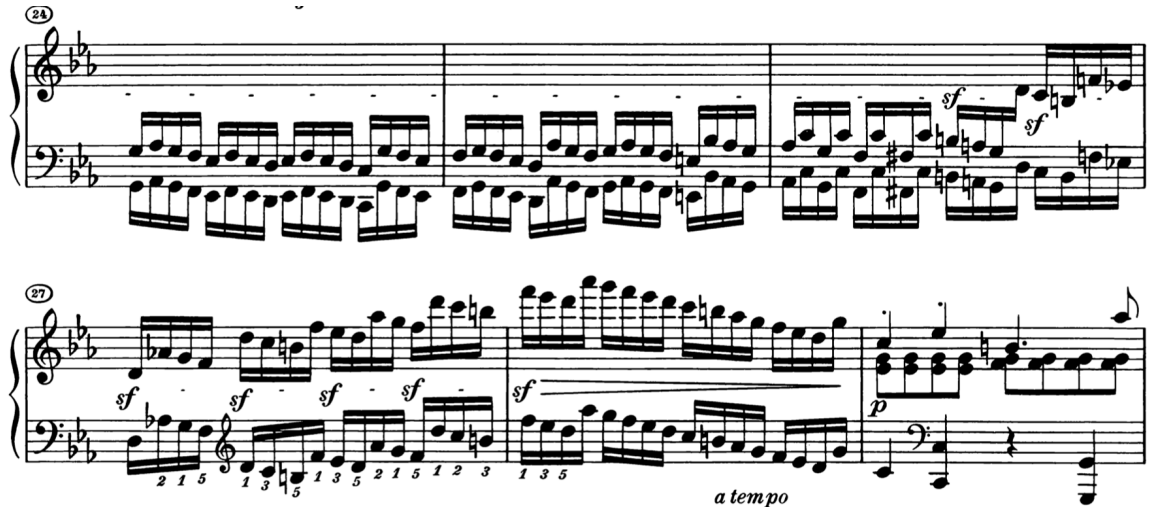


Brown points out that especially in early works Beethoven often indicated *sf* in quiet passages, but only used *sfp* to indicate a sudden decrease to *piano* from a foregoing level of *forte*.[68] In the second movement of Op. 111, Beethoven always indicated an immediate decrescendo following the *sf*, as in measures 16, 32, 48, 102, 116-117, 136, 142, 146, 147, 148, 151, 152, 160-161, 176; m. 175 is the sole exception.

In the fast-running passagework of measures 26 through 28 of the first movement, the sforzandos may cause some problems. The performer might interpret these as accents, or else as a pulling back or stretching of time.

[68] Brown, *Classical and Romantic,* 79.

[Ex. 4.6. Beethoven Op. 111, 1st movement, mm. 24 – 29]



According to Poli, instead of interpreting these *sforzandi* as "strong emphases" of the rhythm, they reorganize the pulse in opposition to an underlying organization in groups of three sixteenths.[69] The effort playing *sf* on the piano needs extra energy and time. Brown adds,

> In Beethoven's case there is no reliable evidence from the composer himself or from his contemporaries to determine whether he intended his *sfs* to denote frequent explosive accents (which may well be thought to fit his musical personality), leaving the lighter phrasing accents that he might have indicated with > (though he rarely did so) to the performer, or whether his *sfs* were meant to cover the whole range of accents from the slightest to the most powerful.[70]

My opinion is that the force of the *sf* is determined by the context in which it appears. If the pervading dynamic is *p*, *sf* might be less than in a context of *f.*

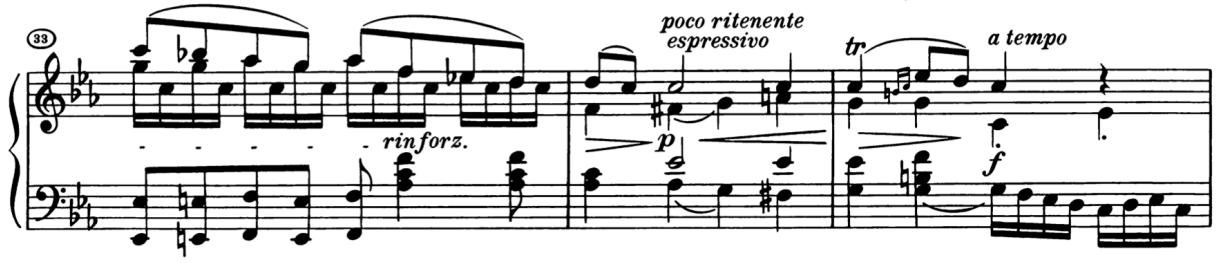
[69] Poli, *The Secret Life of Musical,* 83.
[70] Brown, *Classical and Romantic,* 82 - 86.

III. *Rinforzando*

Unlike the *sforzando*, which occurs some 150 times, *rinforzando* occurs only once in the entire sonata, showing that *rinforzando* merits special treatment, different from *sforzando*. Rosenblum expresses the opinion,

> *Rinforzando*, *rinforzi*, *rinf*, or *rf* represented two distinct expressive possibilities. One was a short, sometimes forceful crescendo over a few notes, usually two to four, as described by Clementi, the other was additional emphasis or accentuation on a single note or chord or on two or more notes.[71]

[Ex. 4.7. Beethoven Op. 111, 1st movement, mm. 33 – 35]



The *rinforzando* in Op. 111 occurs in m. 33 of the first movement, when the left hand leaps from an octave pattern in eight notes to a syncopated quarter note chord an octave higher. Poli quotes Justin Heinrich Knecht (1752 - 1817) that "*Rinforzando* can only be applied to a group of several notes to which one should give a strong emphasis." [72] According to Knecht's interpretation, *rinforzando* would apply to the last three eighth note beats in the measure, with special stress on the quarter note chord in the left hand, suggesting that *rinforzando* pertains both to dynamic level and time; it is difficult to avoid holding back when playing this bar. This holding back leads to the *decrescendo*, *piano*, *poco ritenente*, and *espressivo* in the next measure. Brown offers various reasons for *rinforzando*: Beethoven wanted to restrain a tendency to

[71] Rosenblum, *Performance Practice,* 88 - 89.
[72] Poli, *The Secret Life of Musical,*104.

decrease sound “in what would otherwise be weak parts of the phrase,” or that he is telling us “to emphasize or strongly crescendo the phrase in question: the marking often comes just before an abrupt piano.”

CHAPTER FIVE

Touch: Articulation and Slurs

All of the indications in the score are relative. Tempo in general is relative to the large-scale interpretation of movement and articulation to the small scale and detail. For the performer, Op. 111 represents an especially advanced notation of articulation in which indications are accurate and clear, even when one compares the original manuscript, the first edition, and the modern Urtext. Moreover, these indications represent the work's wide expressive range and the enlarging of imagination for both the performer and audience.

The two movements of Op. 111 have contrasting basic touches, non-legato the main touch in the first movement and legato in the second movement. When Beethoven writes different articulations in parallel sections or passages, the distinctions are meaningful, not merely inconsistent. Newman notes, "Articulation in music has been compared with some justification to facial expression in acting."[73]

I. Non-Legato and Legato

Touch in piano playing in the early nineteenth century was an heir to eighteenth century traditions. One reads in Rosenblum, "The most widely used touch through much of the [eighteenth] century was the non-legato, which is reflected in the contemporary term for it: the 'usual' (*gewöhnlich*) way of playing."[74] This means that notes not having any articulation indication would be played non-legato. According to Ratner, "C. P. E. Bach, 1753 – 1762, Quantz, 1752, and Leopold Mozart, 1756, … apply [non-legato] to notes of half-note value or less."[75]

[73] Newman, *Beethoven on Beethoven,* 121.
[74] Rosenblum, *Performance Practice,* 149.
[75] Ratner, *Classic Music*, 191.

Brown writes that Marpurg also advised using a non-legato touch in the absence of slurring or staccato, although he apparently did not favor quite as detached a sound as Bach, only that "one raises the finger from the previous key very rapidly shortly before one touches the following note…"

Türk also heard a similar detached style of playing as the ordinary one:

> In the case of notes that should be played in the normal way, i.e. neither staccato nor slurred, one lifts the finger from the key a little earlier than the length of the note requires.[76]

To this Türk added his agreement with Bach's comment that a composer would write *tenuto* over a note to be held full length.[77] Ratner also mentions that, "Tones without specific staccato or slur signs are played somewhat shorter than their indicated duration, followed by a slight rest which completes the note length. These recommendations corroborate those of C. P. E. Bach, Quantz, and Leopold Mozart." He reminds us that the length of detachment was a matter of opinion, Türk considering C.P.E. Bach's recommendation to cut a note at half value to be an exaggeration. Other than that, "all evidence points to some degree of *détaché* as a norm for performance."[78]

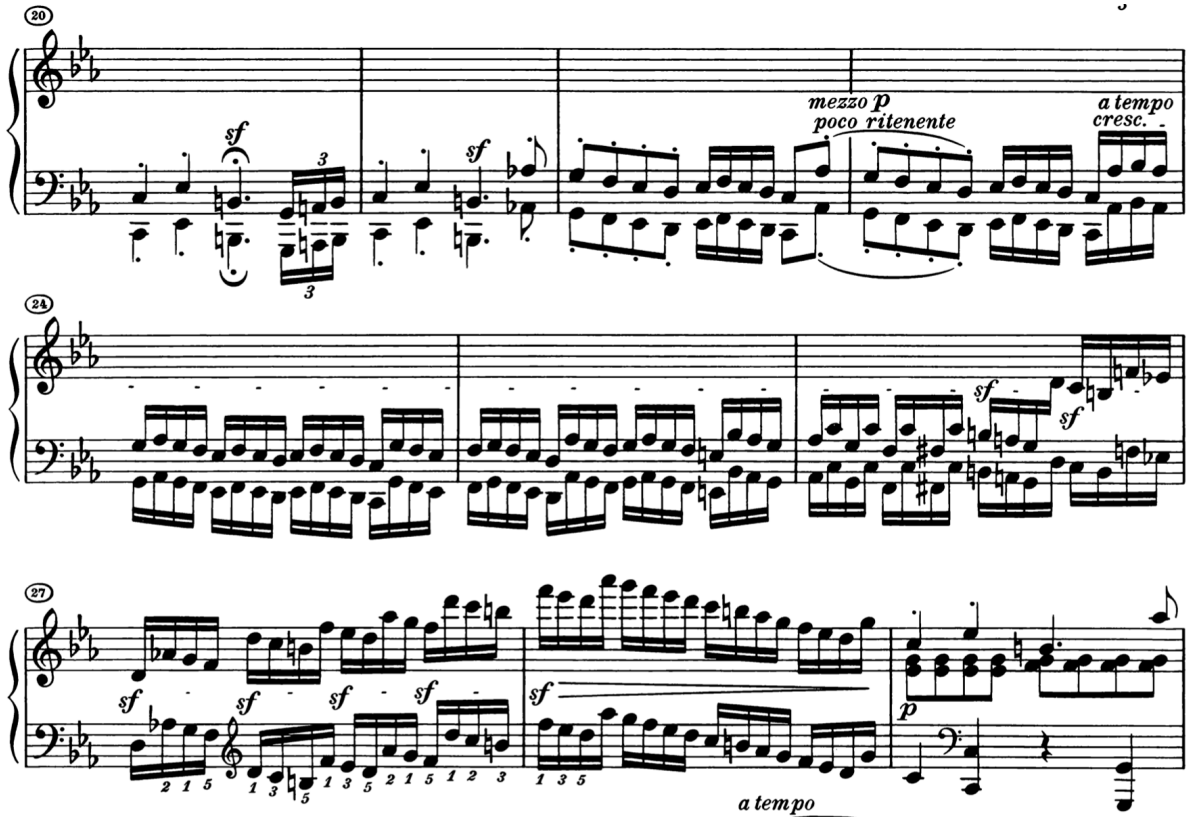
Legato playing is simply connecting the notes without pause or lifting. Rosenblum quotes Niccolo Pasquali, 1757, "… the holding the Fingers upon the Keys the exact length of the Notes, produces the good Tone; and the taking them off frequently before the Time, occasions the contrary."[79] This suggests that the preference for legato had its origins quite early (1757), although even earlier in 1713 François Couperin gave indications of this preference. In the *L'Art*

[76] Brown, *Classical and Romantic,* 170.
[77] Brown*,* 170.
[78] Ratner, *Classic Music,* 191.
[79] Rosenblum, *Performance Practice*, 153.

de toucher le Clevecin, Couperin writes in the *Plan de Cette Methode*, "Delicacy of touch depends also on holding the fingers as close to the keys as possible."[80] Holding the fingers in this position indicates a touch approaching legato.

It is possible that the eighteenth-century rule regarding detached articulation remains relevant in the first movement of Op. 111. In the first movement, the notes move quickly and fast; sixteenth note running passages are present almost from the beginning of the *allegro* to the end of the movement. For example, in measures 22 through 28 there is no slur or other indication (except for the *sforzandos*), suggesting that the touch should be detached.

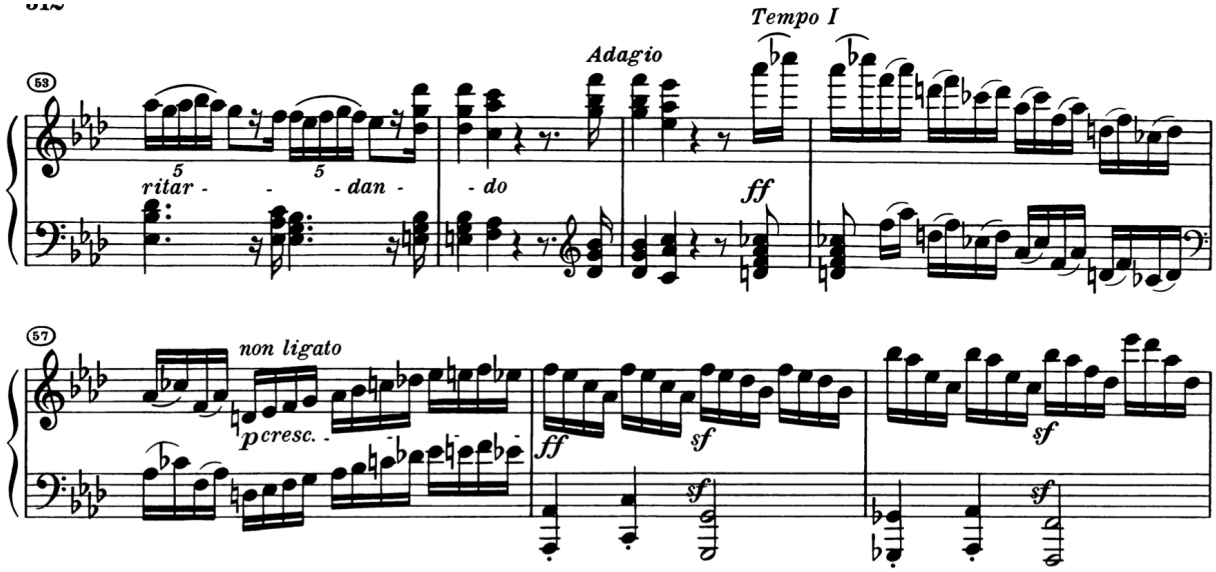
[Ex. 5.1. Beethoven Op. 111, 1st movement, mm. 20 – 29]



[80] Couperin, *The Art of Playing the Harpsichord*, 12.

In Op. 111, '*non ligato'* (non-legato) is found only once (m. 57) in the first movement. Although there are no slurs in beats 2 to 4, Beethoven wrote *non ligato*, possibly because this passage follows directly upon eleven two-note slurs.

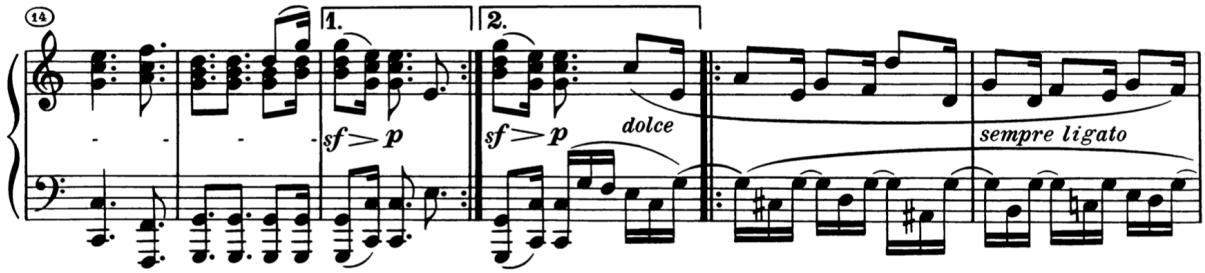
[Ex. 5.2. Beethoven Op. 111, 1st movement, mm. 53 – 59]



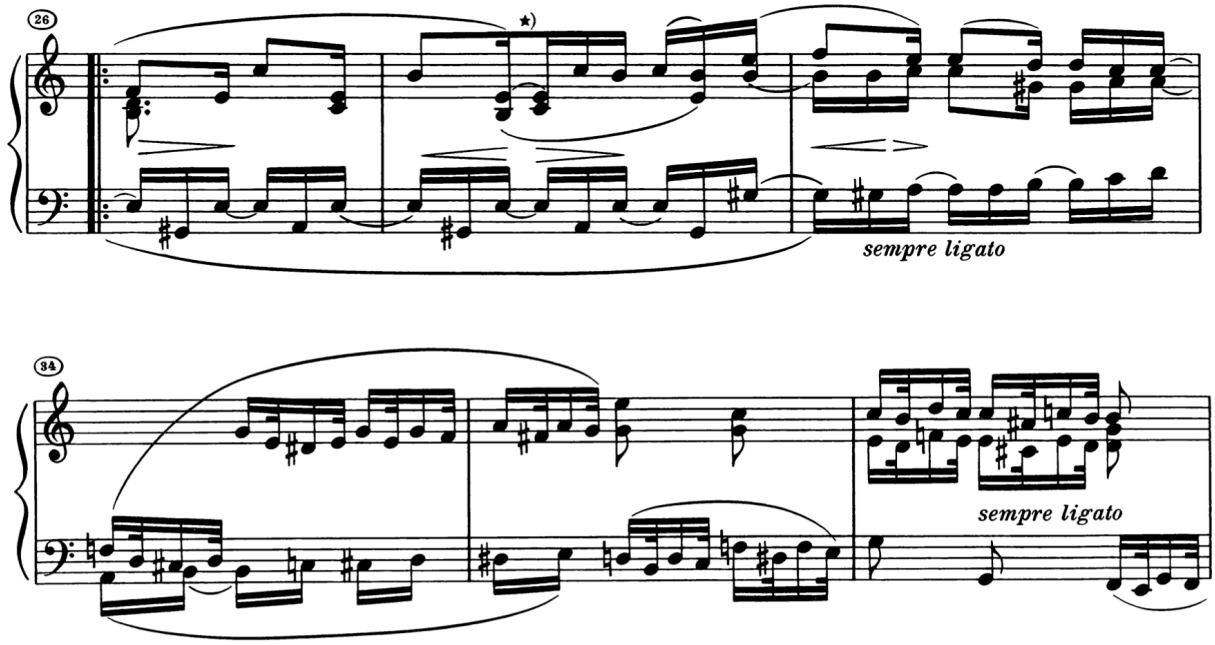
As it is, the *non ligato* of these three beats leads directly into the unslurred right-hand accompaniment in the next bar.

In the second movement, moving at a much slower tempo than the first, Beethoven notated long slurs and indicated '*sempre ligato'* in measures 18, 28, and 36 of Variations 1 and 2. *Sempre ligato* and long slurs, in the context of the *Adagio,* relate to the lyricism of writing.

[Ex. 5.3. Beethoven Op. 111, 2nd movement, mm. 14 – 18]



[Ex. 5.4. Beethoven Op. 111, 2nd movement, mm. 26 – 36]



II. Staccato and *Portato*

The general idea of staccato and *portato* is treated in Louis Adam's *Méthode du piano du Conservatoire, 1804*, as one reads in Rosenblum,

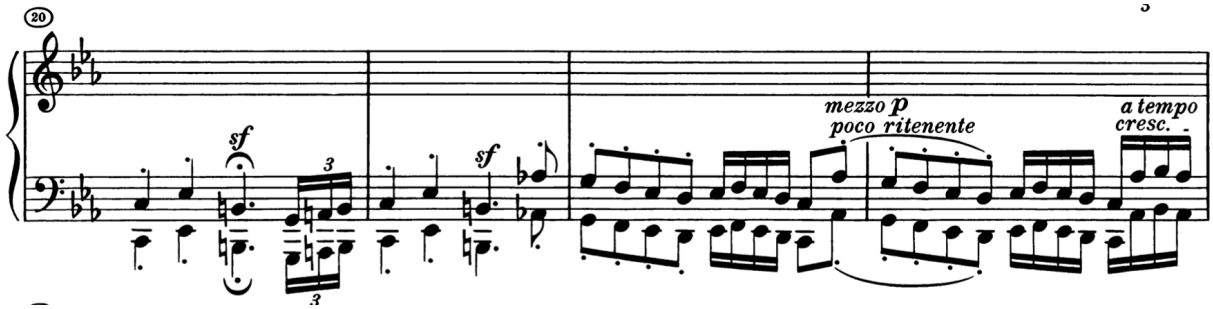
> ...he stated that notes with a stroke lose three-fourths of their value, those with a dot lose one-half, and those with dots under a slur lose only one-fourth of their value."[81]

[81] Rosenblum, *Performance Practices*, 184.

When the note does not have a slur or 'legato' indication, it refers to non-legato, not staccato. In the autograph and the handwritten copy, dots and strokes are not clearly differentiated. To quote Newman, "In Beethoven's handwriting their imprecision seems to reflect his impetuosity during the heat and drive of creating."[82] In the first edition and Henle, only staccato dots are used, no strokes.

In the first movement, most of the staccatos occur in *f* or *ff*.

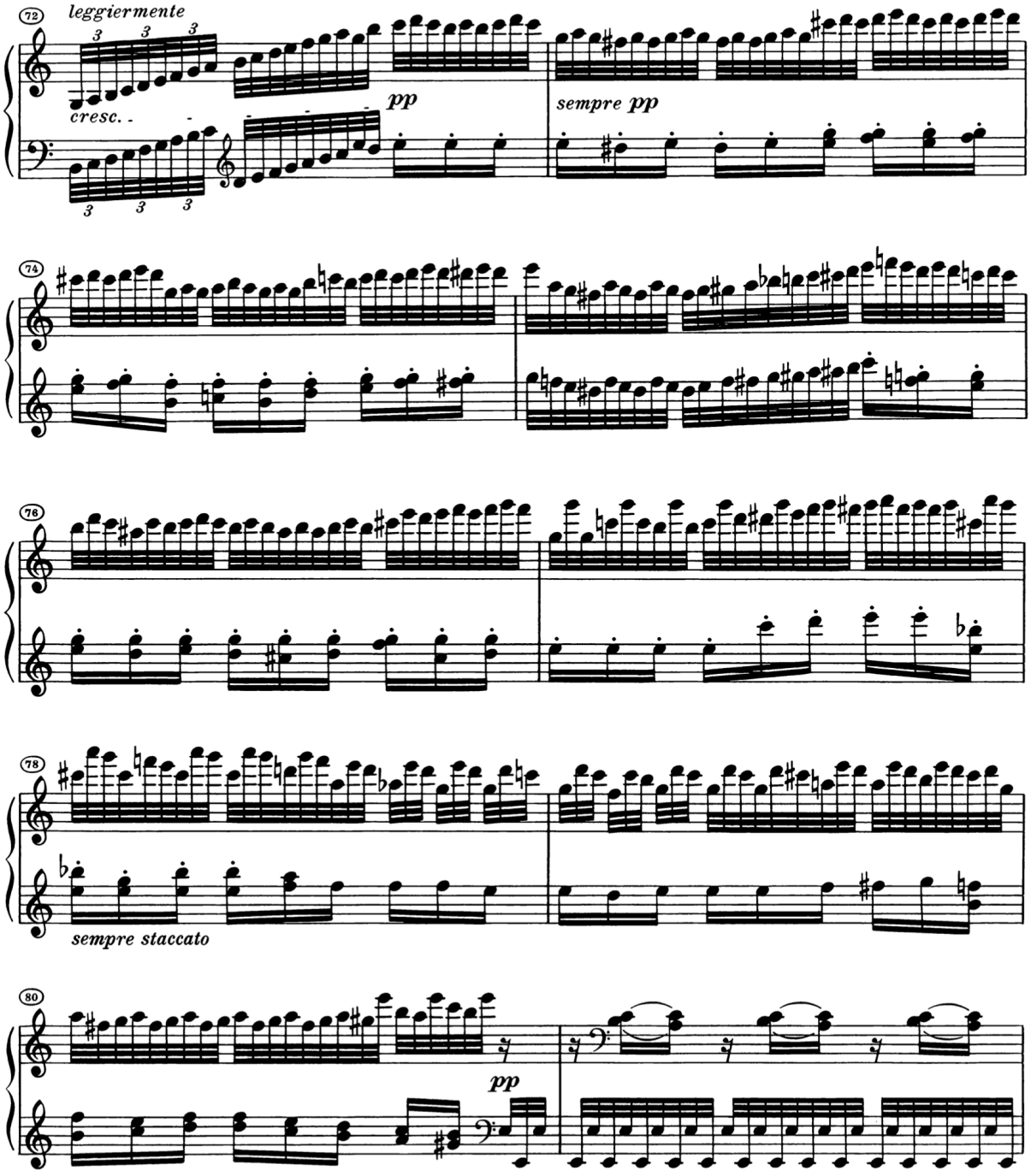
[Ex. 5.5. Beethoven Op. 111, 1st movement, mm. 20 – 23]



A light staccato touch affecting both dynamics and articulation is required for measure 29, where the theme is placed above the staff, now *p.* The lightest is in measures 72 through 80 in the second movement, where the left-hand staccatos are indicated simultaneously with '*leggiermente*' for the right-hand passages, all within *pp*.

[82] Newman, *Beethoven on Beethoven*, 139.

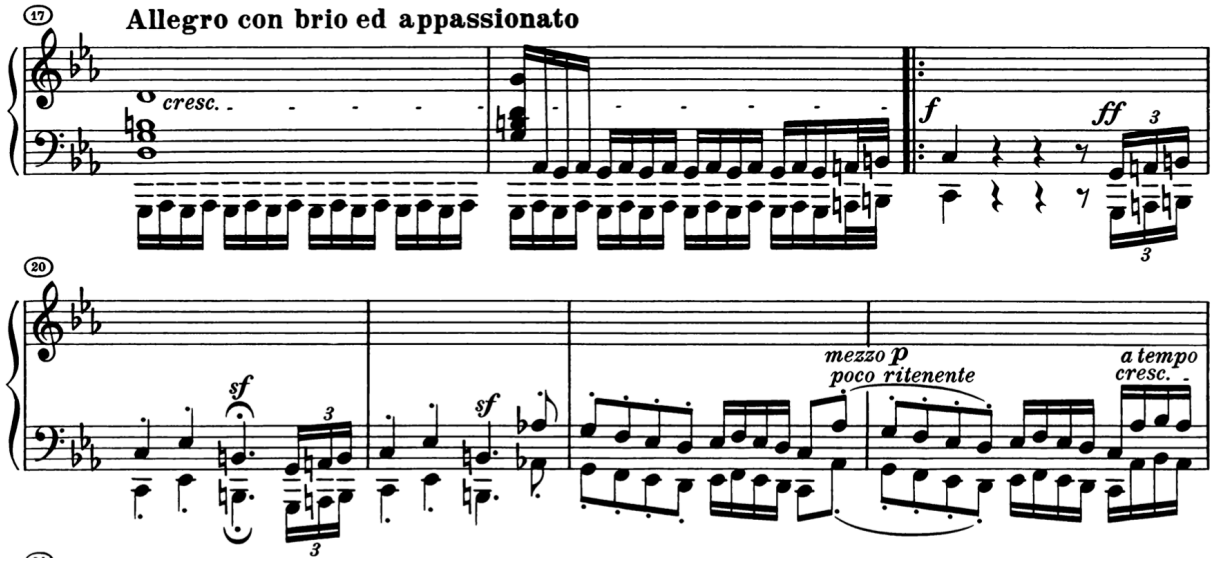
[Ex. 5.6. Beethoven Op. 111, 2nd movement, mm. 72 – 81]



Portato is found five times in the first movement but never in the second. For example of the notation for *portato*, the reader is referred to measures 22 to 23 in the example directly below. Except for measures 148 to 149, *portato* appears with *ritenente* or *ritardando*. In measure

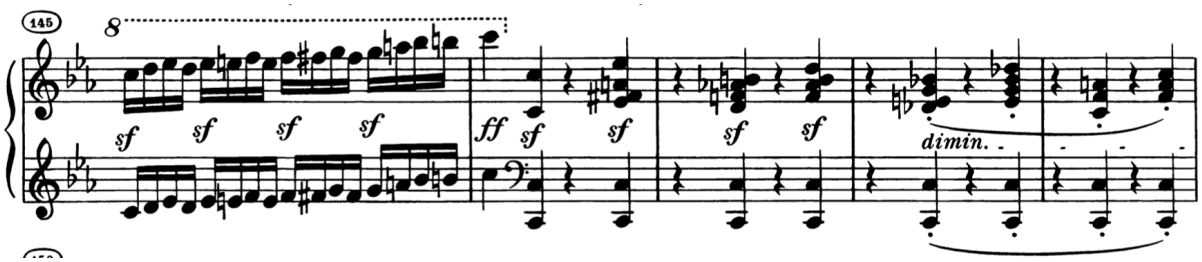
19, after the tempo has changed from *maestoso* to *allegro*, Beethoven indicates rests two quarters and an eighth in duration, followed by the main theme that includes a *fermata* on the third beat, *sf*, in measure 20. This moment creates an enormous shock for the listener, a breathtaking effect. Beethoven repeated this passage in measures 22 to 23, followed by staccato eighth notes, presumably played *ff* with a heavy and strong touch. Beethoven repeated this passage in measures 22 to 23, the second time with *mezzo p* and *poco ritenente*. As the length of individual notes become longer under *portato*, a lighter touch stays in the keys longer and produces *mezzo p*.

[Ex. 5.7. Beethoven Op. 111, 1st movement, mm. 17 – 23]



The last indication of *portato* in measures 148 to 149 of the first movement relates not only to articulation, but to the *diminuendo* leading into the codetta; it appears that the first *portato* chord should be as strong as the chord preceding, i.e., *sf* and *ff*, thereafter decreasing in dynamic level and becoming lighter in touch.

[Ex. 5.8. Beethoven Op. 111, 1st movement, mm. 145 – 149]



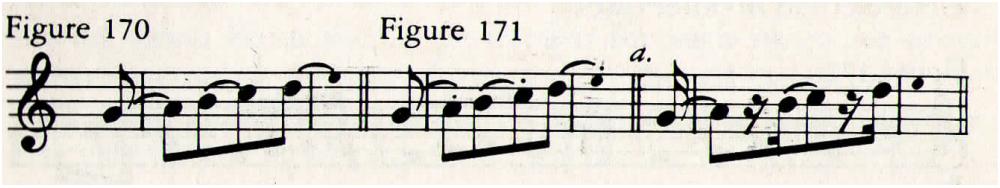
III. Slurs

Brown writes, "The principal meaning of the slur was to signify that the notes within it should be smoothly connected to one another."[83] Listeners naturally follow slurred notes more easily than non-slurred; detached sounds may come across as counter to an emotional human preference for 'sung' or 'song-like.' Non-slurred and detached notes may make the sound seem a bit empty compared with legato. Op. 111 has three different types of slurs: two-note slurs, short slurs of three or more notes, and the long slur. Rosenblum notes that, "Virtually all writers of the early Classic and Classic periods have similar views on the subject,[84] including Carl Philipp Emanuel Bach:

> The notes of Figure 170 are played in such a manner that the first of each slur is slightly accented. Figure 171 is played similarly except that the last note of each slur is detached. The finger must be raised immediately after it has struck the key… The execution of Figures 170 and 171 must not be corrupted into that of Figure 171. Example *a*, an error frequently committed by beginners.[85]

[83] Brown, *Classical and Romantic,* 228.
[84] Rosenblum, *Performance Practices*, 158.
[85] Carl Philipp Emanuel Bach, *Essay on the True Art of Playing Keyboard Instruments,* ed. and trans. William J. Mitchell (New York: W. W. Norton & Company Inc., 1949), 157.

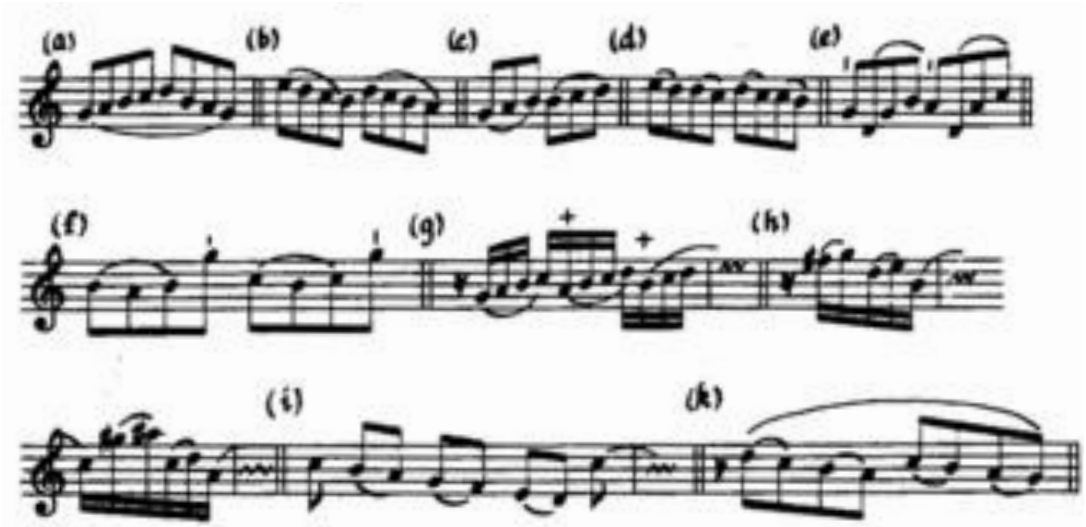
[Ex. 5.9. Figures from C.P.E. Bach's *Essay on the True Art of Playing Keyboard Instruments*]



Daniel Gottlob Türk:

> [where] the curved line begins should be very gently (and almost imperceptibly) accented.[86]

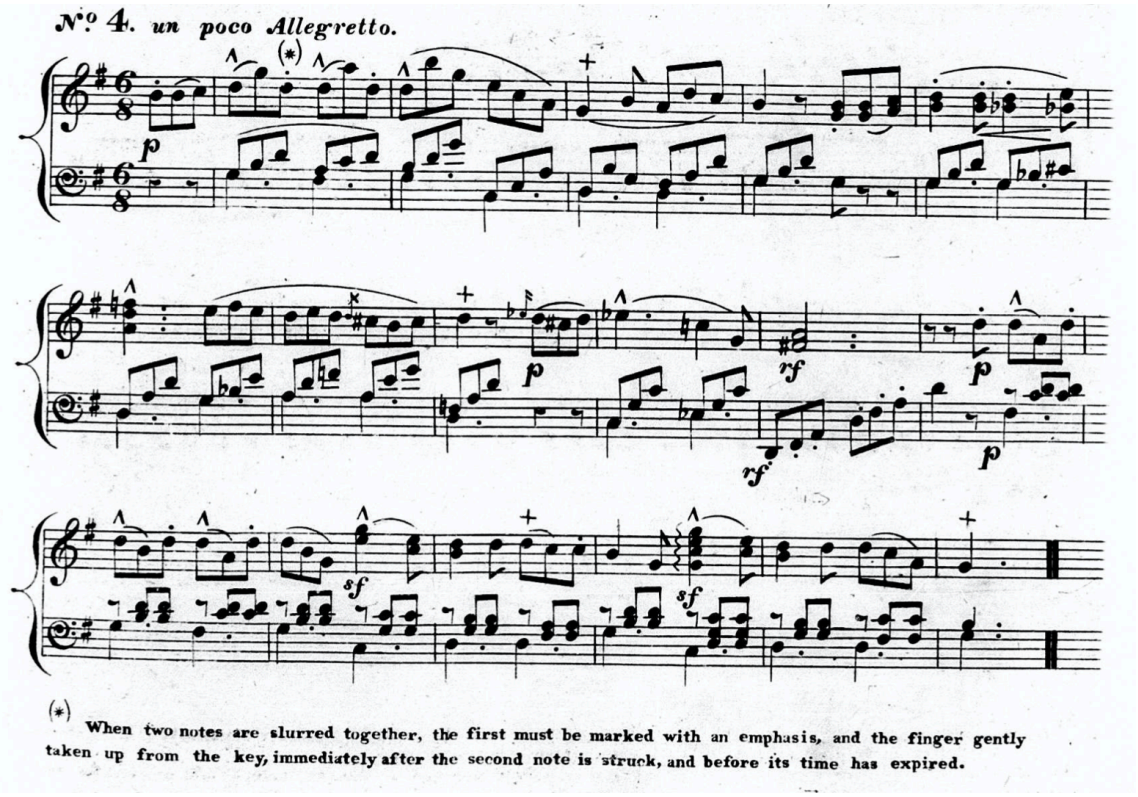
[Ex. 5.10. Examples from Türk's *School of Clavier Playing, Or, Instructions in Playing the Clavier for Teachers & Students*]



[86] Daniel Gottlob Türk, *School of Clavier Playing, Or, Instructions in Playing the Clavier for Teachers & Students,* trans. Raymond H. Haggh (Lincoln, NE: University of Nebraska Press, 1982), 344.

and Johann Nepomuk Hummel:

[Ex. 5.11. Example from Hummel's *a Complete Theoretical,* Part 3]



> When two notes are slurred together, the first must be marked with an emphasis, and the finger gently taken up from the key, immediately after the second note is struck, and before its time has expired.[87]

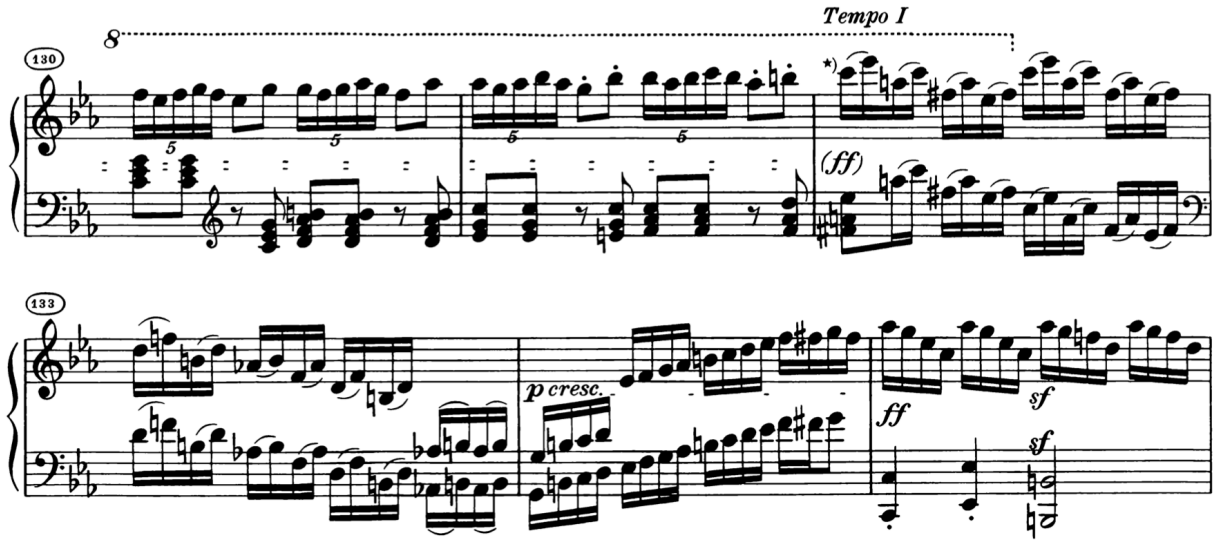
According to Brown, quoting Adam,

> when there are only two notes connected together and when the two notes are of the same value or when the second of them has half the value of the first, it is necessary, to express this slur, in the forte as well as in the piano, to press the finger a little on the first and to lift it on the second, taking away half its value while touching the second more gently than the first.[88]

[87] Hummel, *A Complete Theoretical,* Part 3, 55.
[88] Brown, *Classical,* 231.

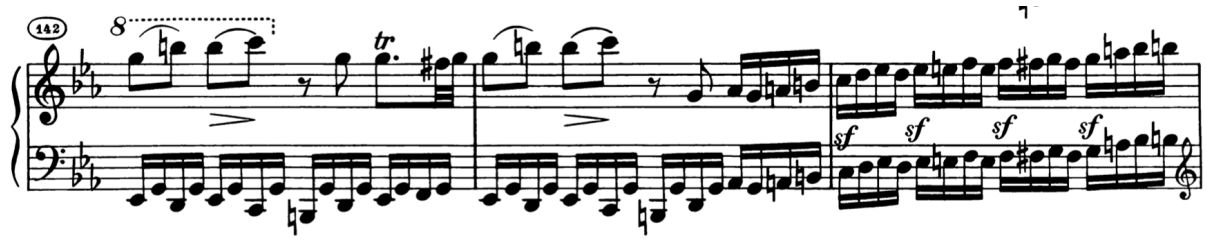
In Op. 111, two-note slurs sound either movingly *espressivo* or tremendously excited. In measures 132 through 133 in the first movement, the two-sixteenth-note slurs provide a good example of the latter. The *ff* could indicate that the first note of the two note slurs should be even more heavily accented and the second note shorter, maybe *mp* or *p*, produced by dropping the forearm on the first note and lifting on the second note.

[Ex. 5.12. Beethoven Op. 111, 1st movement, mm. 130 – 135]



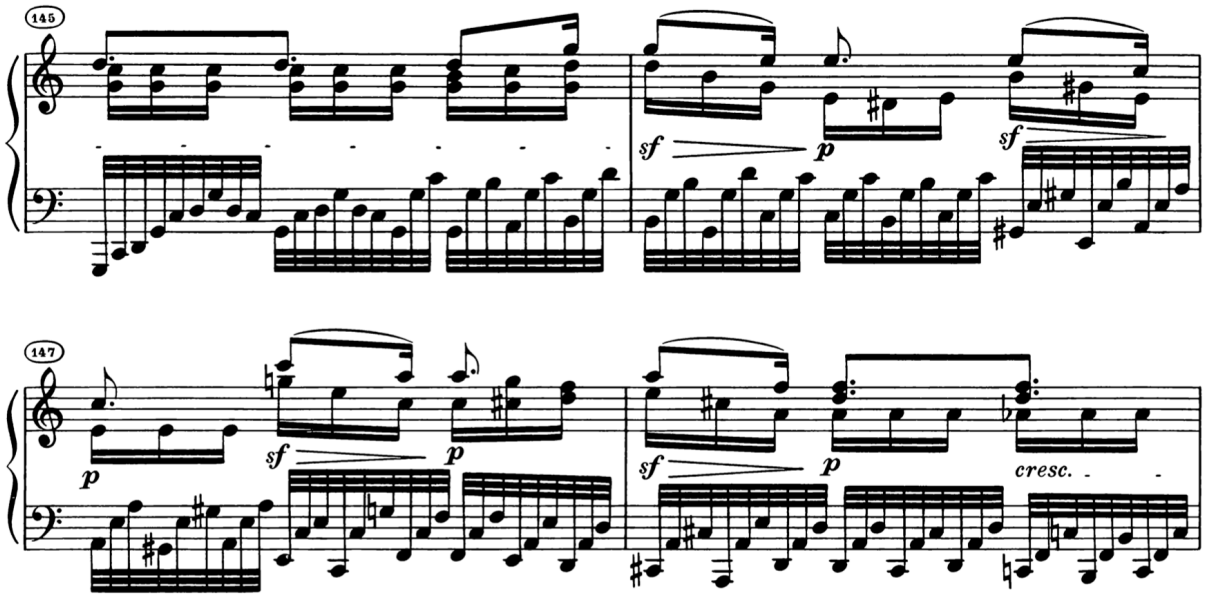
In measures 142 and 143, the two-note slurs reach as high as c4, the highest note on the 1817 Broadwood, making a strong attack on the preceding b3 especially necessary; the indicated *decrescendo* on the slur from b3 and c4 reminds the performer that the heavy-light difference between the notes must be heard as clearly as possible.

[Ex. 5.13. Beethoven Op. 111, 1st movement, mm. 142 – 144]



I think the two note slurs in measures 146 to 148 in the second movement are likewise especially expressive because of the hemiola pattern of these measures and the dynamic markings *sf* – *decrescendo* – *p*.

[Ex. 5.14. Beethoven Op. 111, 2nd movement, mm. 145 – 148]



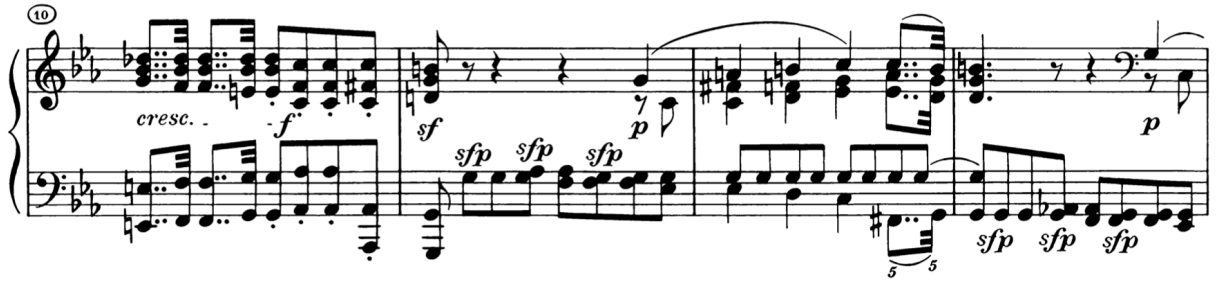
Of the many short slurs in Op. 111, most include four or five notes as a fragment, not the whole phrase. Rosenblum explains that

> Short slurs, with their initial accented attack, legato grouping, and variable release, provide a clear strong-to-weak linear direction in the shaping of a musical line, highlighting its speechlike or communicative quality.[89]

An example occurs in measures 11 - 12, where the full-bodied melody line is slurred while the inner chords and the descending bass line are non-legato.

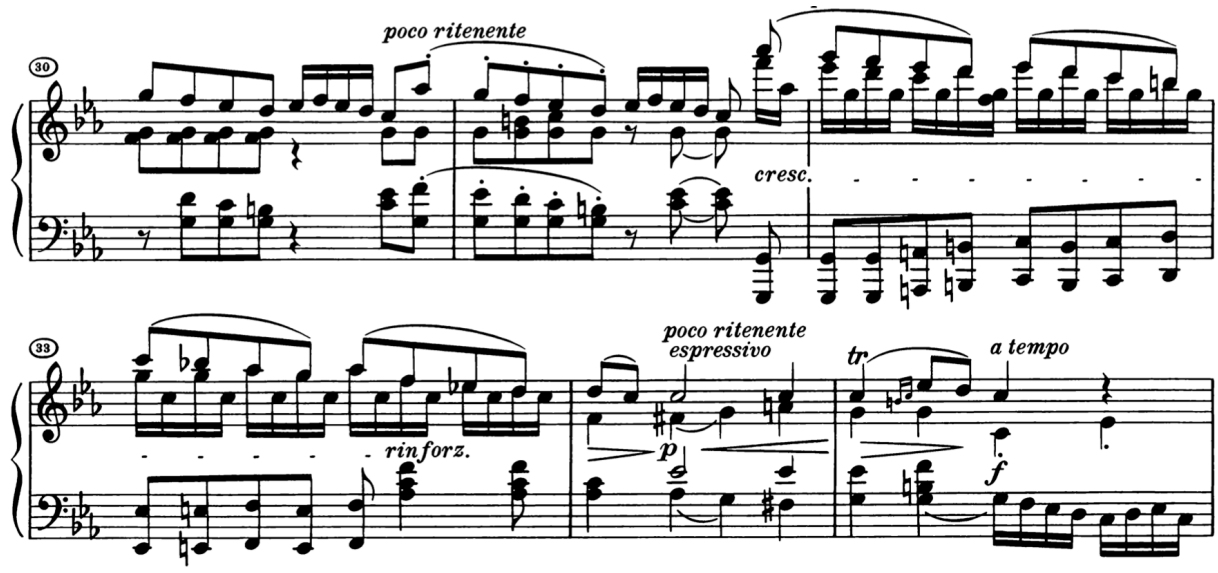
[89] Rosenblum, *Performance Practices,* 159.

[Ex. 5.15. Beethoven Op. 111, 1st movement, mm. 10 – 13]



These two different articulations highlight the individual layers, making one imagine individual instruments playing chamber music. Beethoven did this again in measures 32 to 33 in the allegro, placing a slur on the top line while the octaves in the bass are unslurred (legato would in any event have been difficult to achieve).

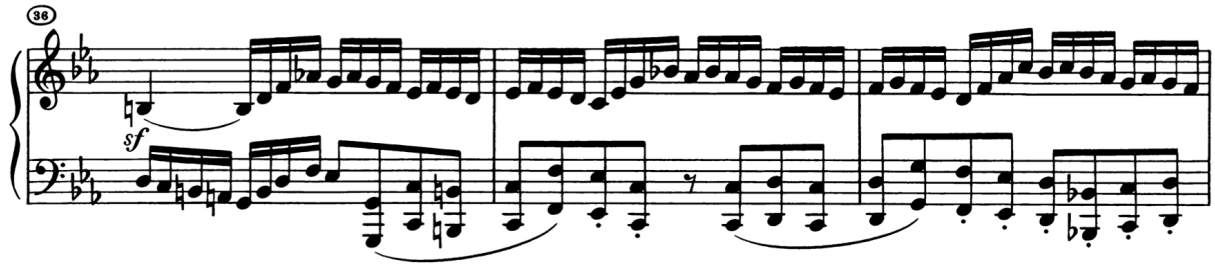
[Ex. 5.16. Beethoven Op. 111, 1st movement, mm. 30 – 35]



The stress at the start of the four and five notes slurs has the effect of holding back the tempo, while the unstressed inner sixteenth note tremolo sounds steady. The ascending eighth notes in the bass line do not have any slurred grouping to lead to the F minor chord occurring with the *rinforzando*. It is a full and complex orchestral effect that is exciting to listen to.

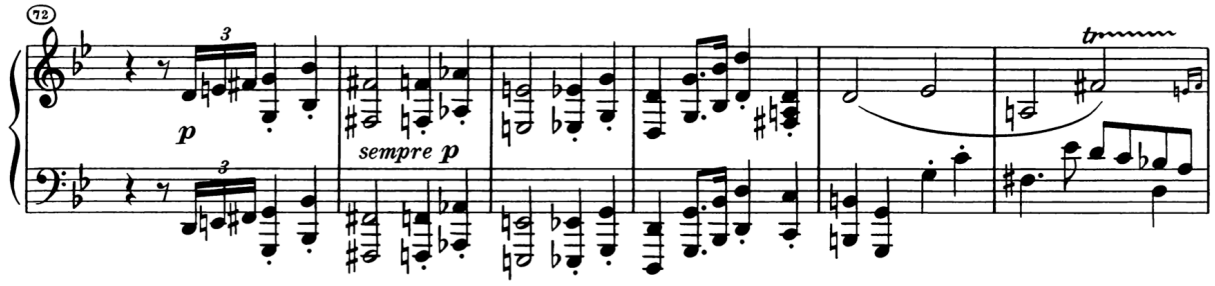
In measures 36 to 37, the short slur connects the octaves in the left hand against the non-slurred sixteenth passages in the right hand. It is technically one of the most difficult passages because only the neighboring tones, c-b-c, can be played with finger legato. Because the five slurred octaves feel awkward under the fingers, they have to be pedaled. Emphasizing the slur is necessary in order to hear the last two octaves staccato. The non-legato of the sixteenths in the right hand may risk being covered by the pedal, and the difficulty of connecting the motive in the left hand may draw the performer's attention away from the running passages in the right hand.

[Ex. 5.17. Beethoven Op. 111, 1st movement, mm. 36 – 38]



In measures 76 to 77 in the first movement, the slur extends over two measures, but covers only four half notes, a longer slur with the same effect as a short slur.

[Ex. 5.18. Beethoven Op. 111, 1st movement, mm. 72 – 77]



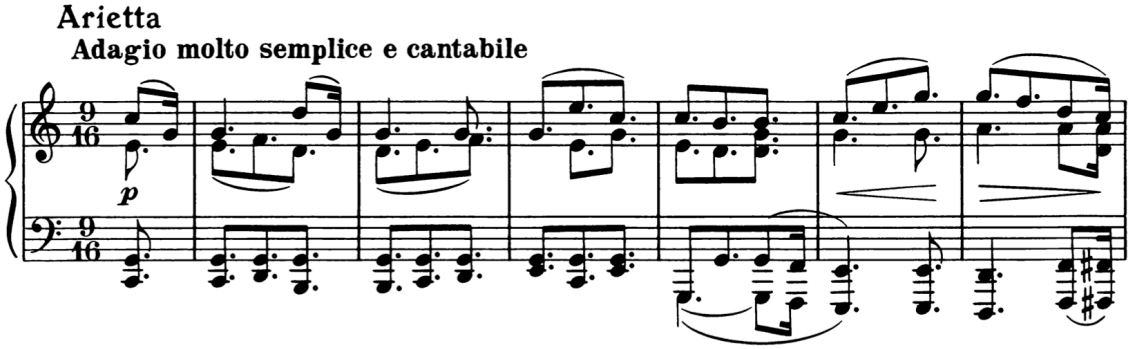
Rosenblum comments,

> Some slurs of moderate length – often one or two measures – may delineate phrase members, those sections of a phrase that end with a partial or transient "point of rest" or phrase division.[90]

Beethoven placed a trill at the end of the slur, which means he did not want to hear a break as one subject links to another in the left hand. Ordinarily, the last note of the slur might be shorter and lighter than the first note; however, by placing a trill at the end of the slur that resolves to g1 at the same time that the imitation begins in the left hand on g.

Longer slurs mostly occur in the second movement, designating full phrases, unlike the shorter slurs covering fragments. For Rosenblum, the long slurs are indicative of the dimensions of the movement. She finds it interesting that such long slurs are seldom found in a slow movement of Beethoven. She gives as a possible reason the need for "internal breathing" within the longer measure, or one might say speech-like inflections or punctuation within the musical line.[91] In the theme of the second movement, the slurs are still quite short and the chords in the left hand that are not slurred should be articulated or slightly detached.

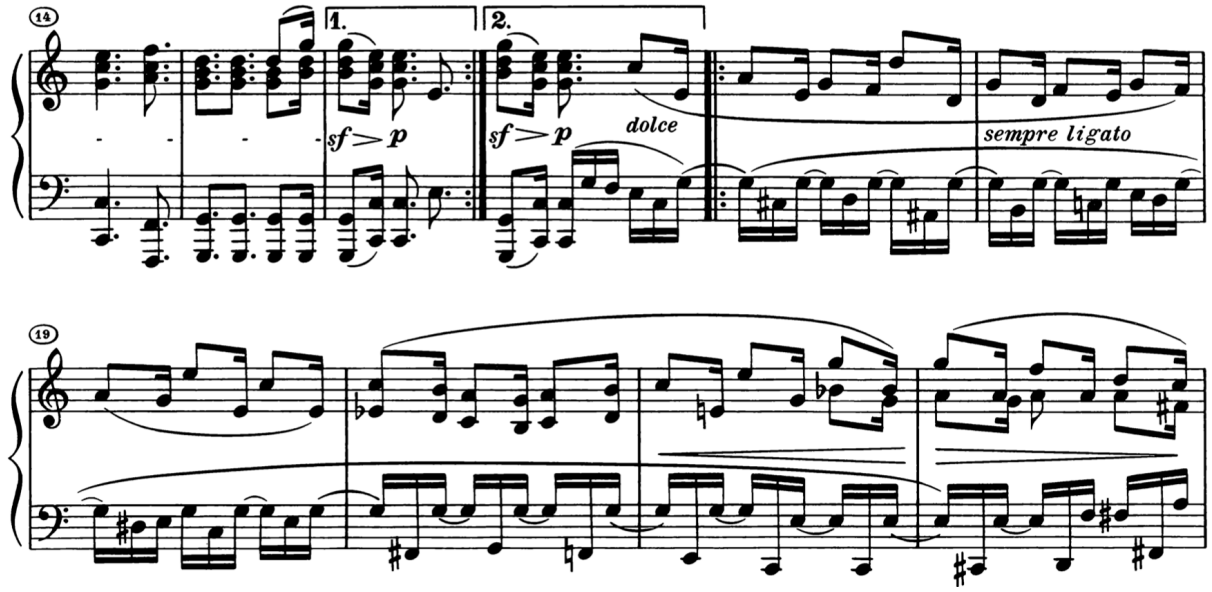
[Ex. 5.19. Beethoven Op. 111, 2nd movement, mm. 1 – 6]



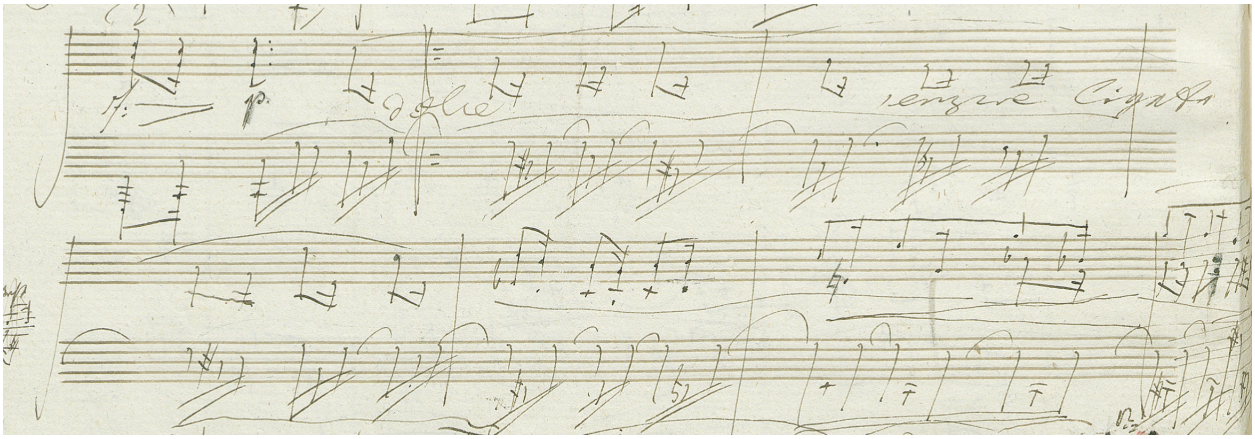
[90] Rosenblum, *Performance Practices*, 163.
[91] Rosenblum, *Performance,* 166.

In the first variation, measures 16 through 19, Beethoven has a continuous long slur in the left hand and two slurs that separate phrases in the right hand. This example is taken from the Henle edition which is based on autographs and original editions. In the autograph, however, it is almost impossible to certain that the slur between measures 18 and 19 is interrupted.

[Ex. 5.20. Beethoven Op. 111, 2nd movement, mm. 14 – 22]



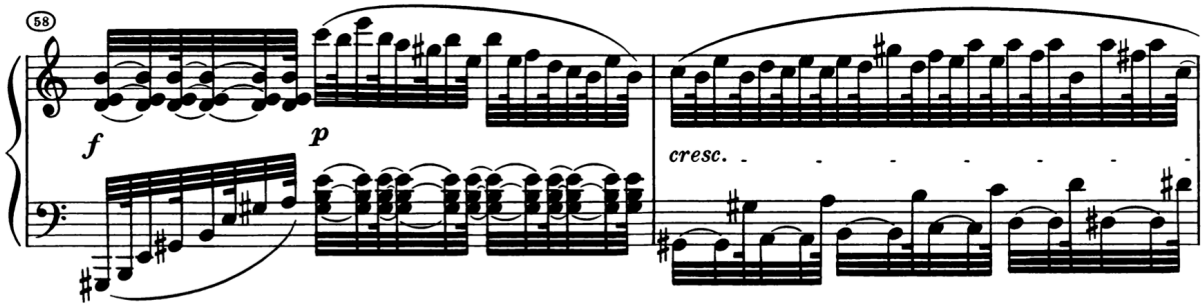
[Ex. 5.21. Beethoven Op. 111, 2nd movement, mm. 14 – 22 from autograph]



In addition to the required legato touch for this long phrase Beethoven indicated '*sempre ligato'*. Beethoven's long slur in the left hand supports the legato in the right-hand top voice. This profoundly changes the mood of the theme in which slurs indicated measure by measure create a sense of great concentration, while the long slurs in the first variation have the sound of great expansiveness.

As one of the longer slurs in this movement, the slur in the right hand in measure 59 enhances the crescendo effect. In the right hand the long notes and short notes create two sound layers. In the left hand, the contrasting detached broken octave line makes the right-hand slur sound even more prominent.

[Ex. 5.22. Beethoven Op. 111, 2nd movement, mm. 58 – 59]



CHAPTER SIX

Fingering and Pedaling

I. Fingering

Clementi writes,

> To produce the BEST EFFECT [that is, style of playing], by the easiest means, is the great basis of the art of fingering. The EFFECT, being of the highest importance, is FIRST consulted; the way to accomplish it is then devised; and THAT MODE of fingering is PREFFERRED which gives the BEST EFFECT, tho' not always the easiest to the performer …"[92]

A fine performance of Op. 111 is not easy for a pianist to achieve. Among the numerous awkward passages are dramatic octave leaps (the opening sounds of the sonata), fugal writing with legato octaves, chords spanning more than an octave, left hand sixteenth passages including leaps that must be played with force (first movement, measures 107 – 108), voicing of treble half- and quarter-note line above eighth note repeating chords (measures 138 – 140), double and triple trills, and trills combined with melody lines in one hand at the end of the second movement.

To become manageable and effective, these difficult passages need practice over time; however, mere repetition may not suffice, which is where fingering comes in. Most modern editions include not only an editor's fingerings but also the composer's fingerings. When Beethoven indicated his fingerings in the score, it was for two reasons: first, to help the performer solve technical problems and second, to give us a hint how to interpret and clarify articulation or the significance of a particular passage. In practical terms, every hand is different and therefore each individual pianist must find suitable fingerings for technical difficulties.

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[92] Clementi, *Art of playing,* 23.

For Robert Taub, Beethoven's fingerings are "part of the fabric of the work" and, along with pedal markings, were intended to be published.[93] Compared with editors of his works, Beethoven did not write a great number of fingerings. However, he indicated more than his contemporaries like Mozart, Haydn, Clementi, or Schubert. According to a tabulation (done by Newman),

> Beethoven inserted about 300 fingerings (including recurrences in the same or similar passages) in his scores for piano and for the various stringed instruments. Some 120 of these appear in his [solo] piano scores. Understandably, the piano fingerings are the ones that reveal his most innovational techniques and interpretive effects.[94]

In Op. 111, Beethoven indicated fingering five times, four times in the first movement and once in the last movement. These examples illustrate concern for enhancing the articulation and for strengthening difficult passagework and making the note clearer.

[Table. 6.1. Beethoven's fingering for Op. 111]

First Movement

m. 12	Left hand, 5-5
m. 14	Left hand, 5-5
mm. 27 – 28	left hand, 2-1-5-etc.
m. 67	left hand, 3-2-1

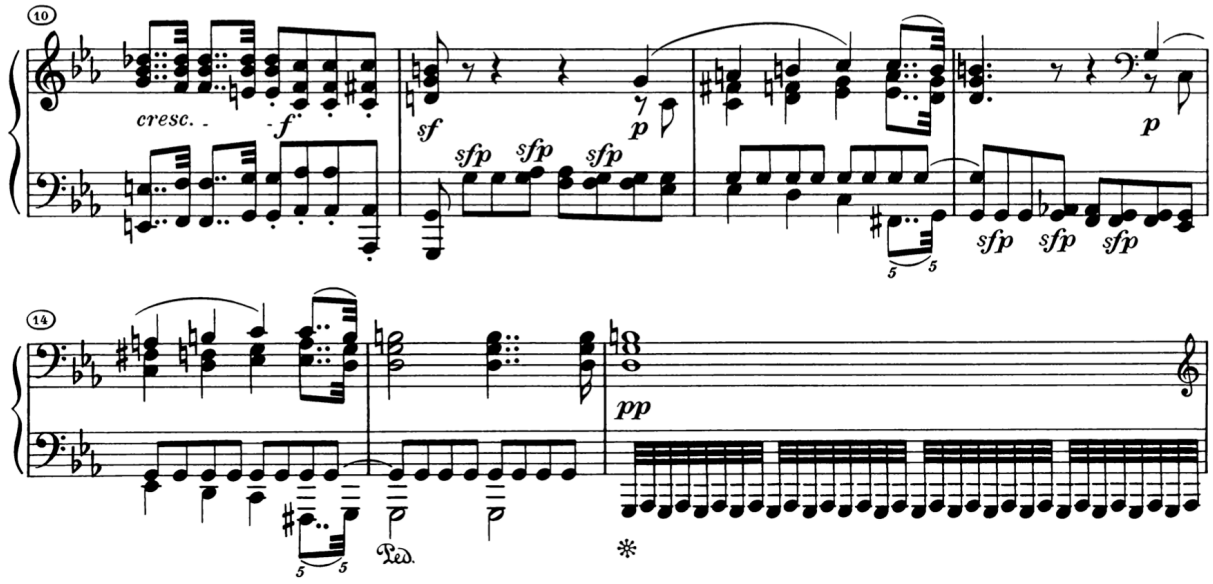
Second Movement

mm. 112 – 114	double trill, right hand

[93] Robert Taub, "Beethoven, His Hands, and His Feet." *International Journal of Musicology* 7 (1998): 404-09, www.jstor.org/stable/24620648.
[94] Newman, *Beethoven on Beethoven,* 286.

Beethoven's fingerings for the bass on the fourth beat in measures 12 and 14 follow this procedure. The introduction of the same pattern, in the same hand, and for the same purpose of connecting F# to G by sliding the fifth finger off the black key to match the two-note slur in the right hand has an interpretive reason. This is a sliding technique dating from the previous generation, and according to Rosenblum, it is frequently appropriate in Beethoven as well.[95]

[Ex. 6.1. Beethoven Op. 111, 1st movement, mm. 10 – 16]

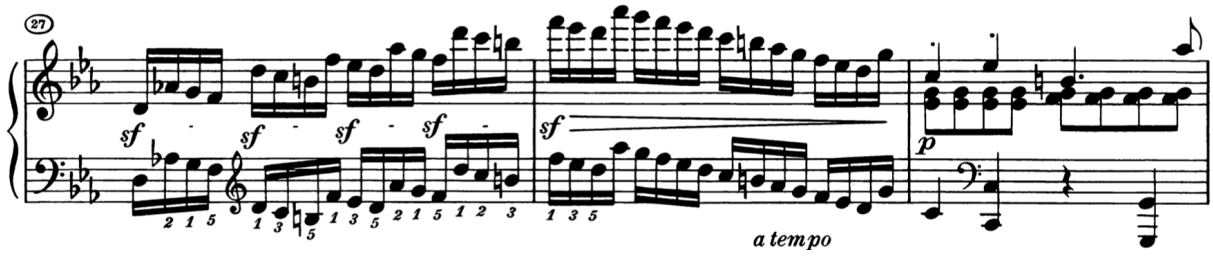


Measures 27 – 28 are an unusual situation. The fingering is for the ascending sixteenth notes in the left hand. Because this passage requires so much strength, marked with a *crescendo* and *sforzandos*, a fingering of 1-3-5 and 1-2-3 avoids the less independent fourth finger. Beethoven's fingering makes each note in the groups of three strong. However, the sforzandos which make us hear groups of four do not always get played by the same finger. Bringing out groups of 3 would be easier than groups of 4; having to use a different finger on the *sfs* creates a feeling of effort. It may be significant that in this passage Beethoven wrote fingering only for the left hand

[95] Rosenblum, *Performance Practices*, 214.

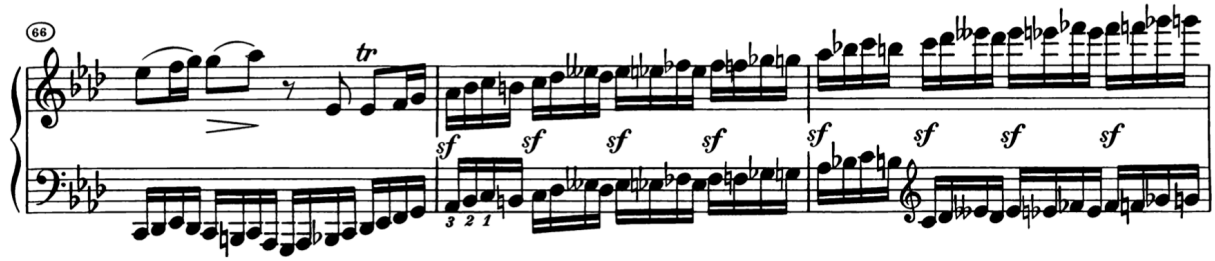
because the pianist could easily avoid the fourth finger in the right hand passage, but, without fingering in the left hand, the pianist might easily follow the right hand and use the weaker fourth finger. Thus, the purpose for these fingerings is both interpretive and technical, as Newman said.

[Ex. 6.2. Beethoven Op. 111, 1st movement, mm. 27 – 29]



The 3-2-1 fingering in the left hand in m. 67 has the same purposes, placing a strong third finger on the first *sforzando*, the thumb on beats two and three, and finger two on the fourth beat (left hand) – all of which makes the fingering easier.

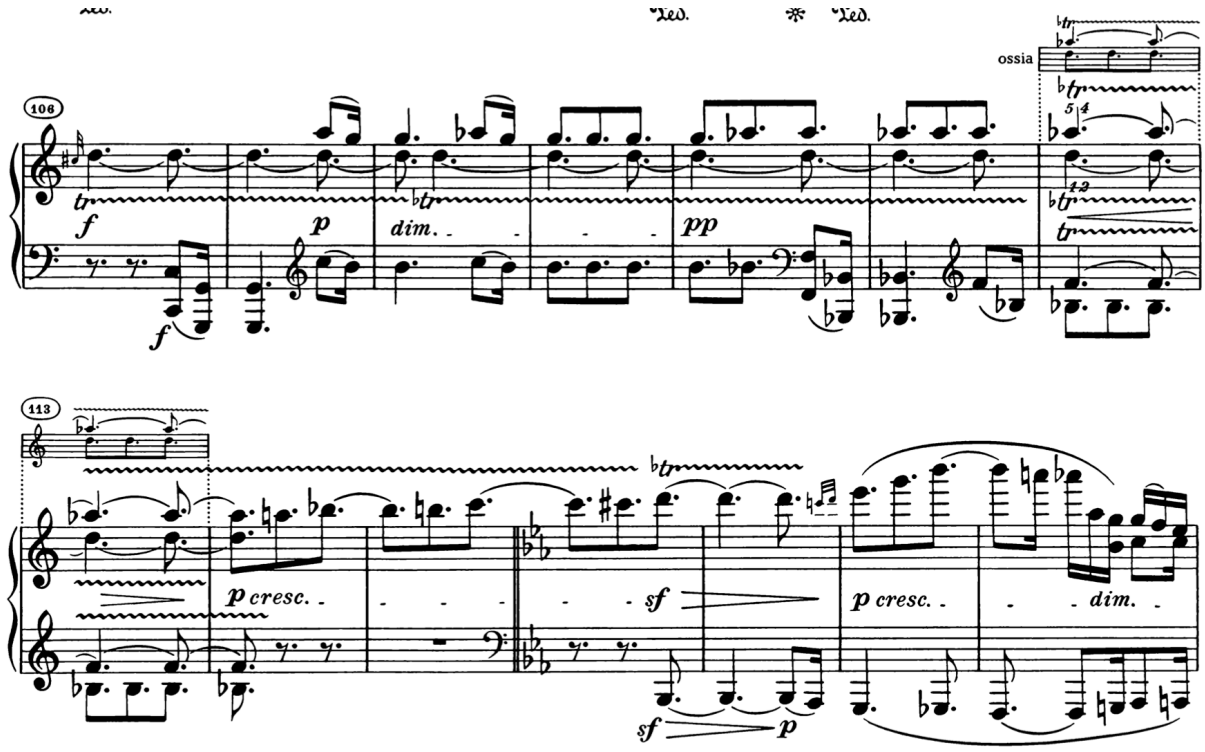
[Ex. 6.2. Beethoven Op. 111, 1st movement, mm. 66 – 68]



The double trill in the second movement (m. 111 – 114) is one of the most difficult and unusual passages in this sonata. The fingering Beethoven provided sheds light on issues relating to the problem of trills in his music generally. Rosenblum quotes Hummel's opinion as the last word on the subject: "In general, *every shake* should begin *with the note itself*, over which it stands, and not with *the subsidiary note* above, unless the contrary be expressly indicated."[96]

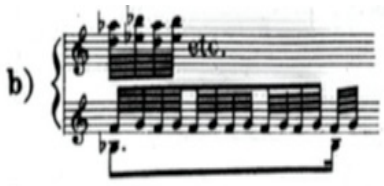
[96] Rosenblum, *Performance Practices,* 252.

[Ex. 6.3. Beethoven Op. 111, 2nd movement, mm. 106 – 119]



When the performer thinks about the double trill, most consider parallel motion – 5-4 on the top notes, 2-1 for the bottom notes. Hans von Bülow, in his editions of Beethoven sonatas, began all three trills on the main note. He adds, "The illusion of a 6/4 chord would result from beginning on the auxiliaries."[97]

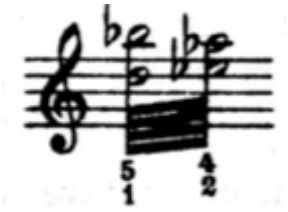
[Ex. 6.4. Hans von Bülow's suggestion for the triple trill]



[97] Ludwig van Beethoven, *Beethoven Sonatas for the Piano*, Book II, rev. by Hans von Bülow and Sigmund Lebert, trans. by Theodore Baker (New York: G. Schirmer, Inc., 1923), 678.

Donald Francis Tovey, in his notes to this sonata, wrote that Beethoven "meant the middle shake to be in the opposite phase from the upper, producing this almost easy double shake."[98]

[Ex. 6.5. Donald Francis Tovey's suggestion for the triple trill]

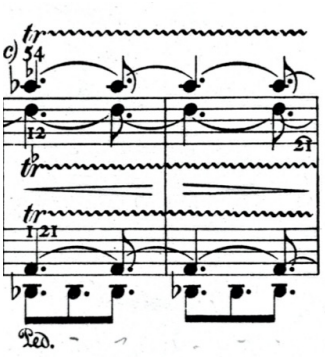


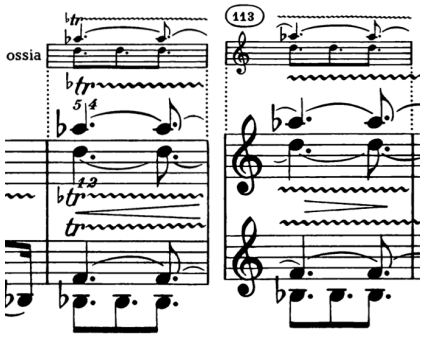
or complete,

Schnabel says that the trill is to begin on the auxiliary notes b-flat – e-flat.

> Strange to say, later editions, including some of the most widely circulated, have removed the original fingering without a word and have replaced it with 4-5, 1-2 (less easy and sounding worse) which changes the shake's commencement to the principal notes, therefore making Beethoven's (unmistakable) demands impossible.[99]

[Ex. 6.6. Artur Schnabel's suggestion for the triple trill and Beethoven's ossia]
[Schnabel] [Ossia]





However, Beethoven's fingering is another point of view to solve the problem. His fingering, 5-4 on the top, 1-2 on the lower notes instead of 2-1, creating contrary motion is much easier, as

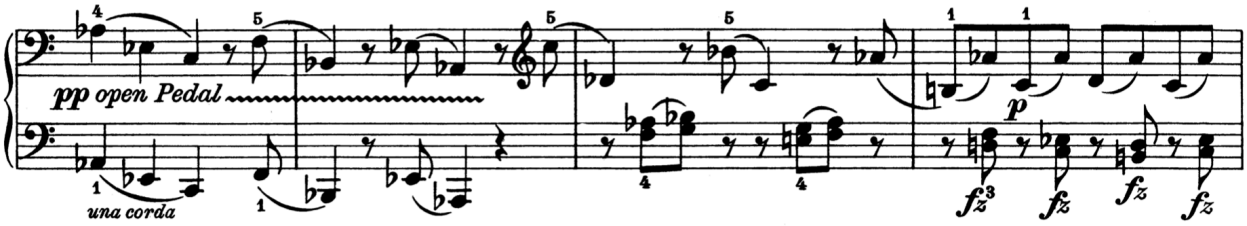
[98] Ludwig van Beethoven, *Beethoven Sonatas for Pianoforte*, Vol. III, edited by Harold Craxton, commentaries by Donald Francis Tovey (London: The Associated Board of the Royal School of Music, 1958), 240.
[99] Ludwig van Beethoven, Sonatas for the Pianoforte, vol. 2, edited by Artur Schnabel (New York: Simon and Schuster, Inc., 1935), 852.

Tovey points out, resulting in less tension in the right hand. In this particular solution the upper trill on a-flat begins on the upper note, the trill on d begins on the main note. Beethoven's ossia on the margin of the autograph is shown above. Beethoven's emphasis on the repeated d in the ossia supports my desire to match the repeated b-flat in the left hand.

II. Pedaling

Beethoven's pedal indications occur more often than in scores of the previous generation. Haydn used a pedal marking once, an 'open pedal' in m. 72 -73 in the first movement of his Piano Sonata in C major, H. XVI/50/I. There is no instance of a pedal marking in Mozart's published keyboard works. Beethoven, as a fine pianist working with a developing fortepiano, very likely used the damper pedal with great frequency. Newman quotes Czerny: "Beethoven used the pedal much more than he indicated in the scores."[100]

[Ex. 6.7. Haydn Piano Sonata in C major, XVI/50/I, mm. 72 – 75]



Remembering Czerny's observation, pedaling in Beethoven is determined by the performer's taste and judgment. However, observing Beethoven actual pedal indication is

[100] Newman, *Beethoven on Beethoven,* 234.

exceedingly important, as much so as the notes, slurs, dynamics, and fingerings. Newman discerns seven reasons for which Beethoven indicated using the damper pedal:

> These include sustaining the bass, improving the legato, creating a collective or composite sound, implementing dynamic contrasts, interconnecting sections or movements, blurring the sound through harmonic clashes, and even contributing to the thematic structure.[101]

In Op. 111, Beethoven's pedal indications are quite clear and simple, notated as '*Ped*' and '*O*' between the staves. He used only the damper pedal sign, unlike the '*con sordino*,' '*senza sordino*,' and '*una corda'* marks in his earlier works. Newman relates that Beethoven's original pedal indications occur nearly 800 times, 98 percent calling for the damper pedal and 2 percent for the *una corda*. Moreover, more or less 60 percent of all the indications are present in the solo piano works, and almost 15 percent are in the chamber works.[102] Presumably the remaining are found in the concerti. In Op. 111, Beethoven indicated the damper pedal 9 times in the first movement and 4 times in the second movement.

The first pedal and second pedal indications in measures 2 and 5 respectively follow the same pattern and have the same purpose. As stated by Newman, this pedal indication combines two ideas, namely, creating a collective or composite sound and implementing dynamic contrasts. In both cases we have an arpeggio ascending from a low pitch, and rising *crescendo* approximately three octaves, crescendoing from piano to forte. To create greater volume, Beethoven's pedal indication implies not releasing until the arrival of the next note.

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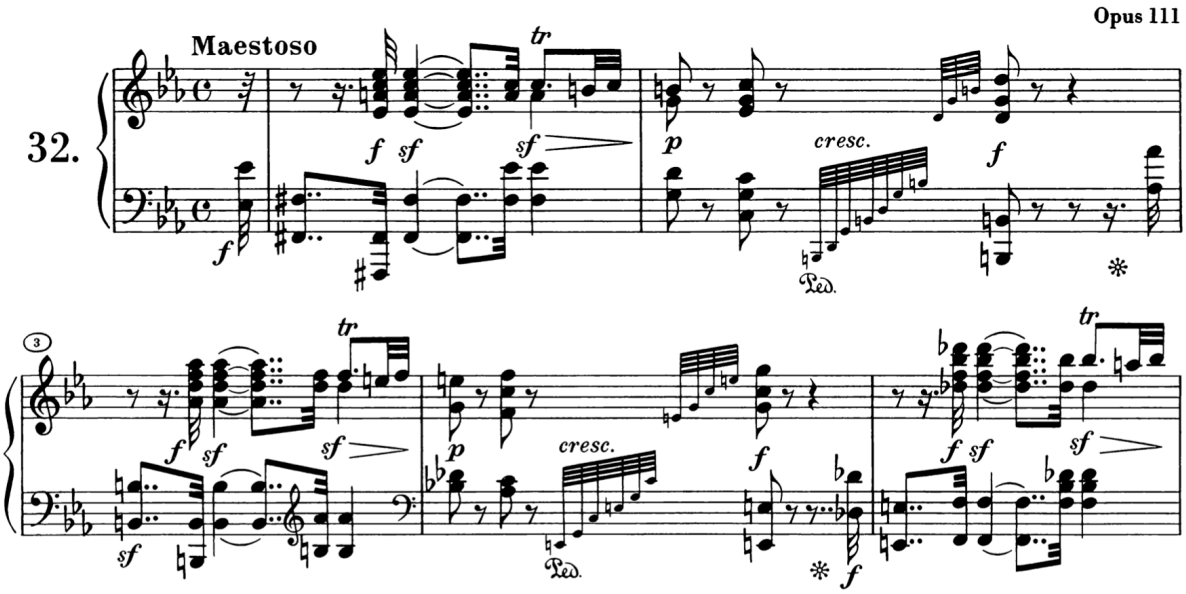
[101] Newman, *Beethoven on Beethoven,* 236.
[102] Newman, *Beethoven,* 232.

[Ex. 6.8. Beethoven Op. 111, 1st movement, mm. 1 – 5]



One interesting point is Beethoven's implication that one holds the pedal the length of a quarter rest and the dotted sixteenth rest; he chose not to notate the preceding chord with a longer duration that fills the time when the pedal remains down. Holding both the pedal and the keys evidently creates a different sound effect than releasing the keys and holding pedal, at least in Beethoven's estimation. Holding the pedal creates a more spacious sound effect because it releases the sympathetic vibration in all of the piano's undamped strings, thus lasting longer.

[Table 6.2. Beethoven's pedaling for Op. 111]

First Movement

m. 15	This pedal indication is for sustaining the bass.
m. 48 and m. 49	sustaining the bass and creating *ff*
m. 50	sustaining the bass and getting sympathetic vibration to support the high notes
m. 114	Same as m. 48, 49
m. 116	Same as m. 50
mm. 157 - 158 (end)	blurring the sound for even diminuendo

Second Movement

m. 103 m. 104 m. 105 (x2)	Blurring the sound Sustaining the bass and the crescendo

CHAPTER SEVEN

The 1816 Broadwood and the 1817 Broadwood

I. Beethoven's Broadwood

In 1817, Thomas Broadwood, the son of the founder John Broadwood, was on a trip to the continent and visited Vienna, where he met Beethoven, possibly more than once. As a result, he decided that the company might present a piano to Beethoven. Upon his return to London he assembled a group of five musicians, including Friedrich Kalkbrenner, Johann Baptist Cramer, Ferdinand Ries, Giacomo G. Ferrari, and William Knyvett, to choose the particular grand piano to present to Beethoven. The piano (No. 7362) was shipped in late December 1817, arriving in Vienna July 18, 1818, where it was set up in the Streicher warehouse.[103] Viennese pianists who tried it liked its tone and nuance, but thought it was not brilliant enough compared to Viennese pianos. Beethoven wrote a letter to Broadwood, promising to send "the fruits of the first moments of inspiration I spend at it."[104] This was never carried out.

Moscheles used Beethoven's Broadwood and a Graf grand piano on a concert in late 1823. In his diary he wrote, "I tried my Fantasia to show the value of the broad, full, though somewhat muffled tone of the Broadwood piano; but in vain. My Vienna public remained loyal to their countryman – the clear, ringing tones of the Graf were more pleasing to their ears …"[105]

The capacity for more nuance in the English pianoforte differed from contemporary Viennese fortepianos in part due to the 'pushing' action that is more similar to the present-day piano action than Viennese 'bouncing' action. Viennese pianists found the action heavy, which

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[103] Newman, *Beethoven on Beethoven*, 52.
[104] David Wainwright, *Broadwood by appointment: A History* (London: Quiller Press, 1982), 116.
[105] Newman, Beethoven, 56.

relates to the personal physical involvement required when playing Beethoven's piano music.[106] William Newman also comments that the English action "was much heavier than the Viennese action but also more expressive and dynamic."[107]

The English piano technician and harp maker Johann Andreas Stumpff saw the piano in 1824 and remembered, "What a sight confronted me! The upper registers were mute and the broken strings in a tangle, like a thorn bush whipped by the storm!"[108] In 1825, the German poet Ludwig Rellstab visited Beethoven, and years later remembered the composer's words about the piano. "It is a beautiful piano. I received it from London as a gift. Notice the names there … and it has a lovely tone."[109] It would appear that Beethoven was able to hear something of it, at least during the first years that he possessed the piano. After Beethoven's death the Broadwood was bought by a Viennese music store owner and publisher by the name of Spina, who sold it to Princess Caroline Sayn-Wittgenstein. She later gave the piano to Liszt, who willed it to the Hungarian National Museum in Budapest, where it remains today.[110]

The 1817 Broadwood was used by Beethoven the last ten years of his life, the years when he composed the four Sonatas, Opp. 106, 109, 110, and 111. [111]

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[106] Elliot Forbes, *Thayer's Life of Beethoven* (Princeton, NJ: Princeton University Press, 1967), 695.
[107] Newman, *Beethoven on Beethoven,* 49.
[108] Edwin M. Good, *Giraffes, Black Dragons, and Other Pianos: A Technological History from Cristofori to the Modern Concert Grand* (Stanford, CA: Stanford University Press, 2001), 110.
[109] Newman, *Beethoven,* 56.
[110] Good, *Giraffes,* 105.
[111] Ibid, 384.

II. The Original 1816 Broadwood

The particular six-octave 1816 Broadwood pianoforte (No. 7005) that I am working on is the same model and size as the 1817 Broadwood given to Beethoven (No. 7362) by Thomas Broadwood. In addition to the action and separate bass bridge, the 1816 Broadwood, like the Beethoven Broadwood, has a shift pedal and a split damper pedal controlling separately dampers in the bass and treble.

According to a copy of a page from the Broadwood Porter's Book, the 1816 Broadwood serial number 7005 was originally purchased by a certain Miss Slow on August 6, 1816. On October 25 of the same year, she exchanged it for the same model grand with a more ornamented case, serial number 7004, and then five days later, on October 30, 1816, changed her mind and reclaimed instrument number 7005.[112] According to Robert Simonson of the Surrey History Centre in England, after 1816 "the ledger has various entries for piano tunings up to 19 September 1825 and no. 7005 is specifically mentioned on 2 April 1822."[113] Mr. Simonson assumes Miss Slow still owned the piano in 1832, after which there is no record of its whereabouts. At some point in the intervening years the leather hammer coverings were replaced by felt. Alastair Laurence, who restored the pianoforte in 1976, replaced the felt again with leather.[114]

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[112] Copy of the page from the Broadwood Porter's Book sent to Kenneth Drake by Robert Simonson, Surrey History Center in the UK.

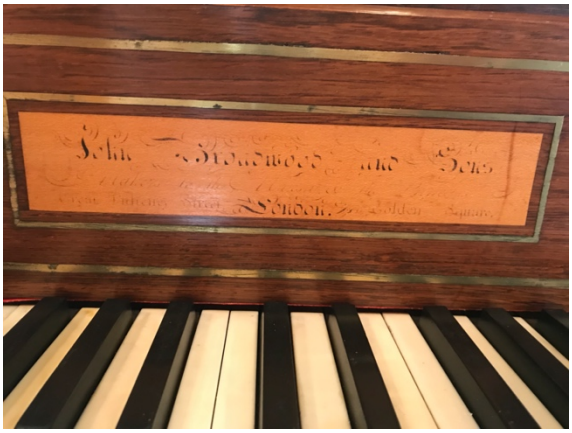
[113] Email from Robert Simonson, Surrey History Center in UK, to Kenneth Drake, present owner of 1816 Broadwood, June 16,2010.

[114] Alastair Laurence, "The Evolution of the Broadwood Grand Piano" (DPhil. diss., University of York, 1998), Abstract.

Information about the restoration is supported by correspondence between Mr. Laurence and the present owner, Kenneth Drake. This piano has been restrung with historical piano wire drawn by Stephen Birkett, a metallurgist who teaches in the University of Waterloo in Canada.

III. Appearance

[Picture 7.1. (Left) The 1816 Broadwood showing the twist the case]
[Picture 7.2. (Above) Split damper pedal]



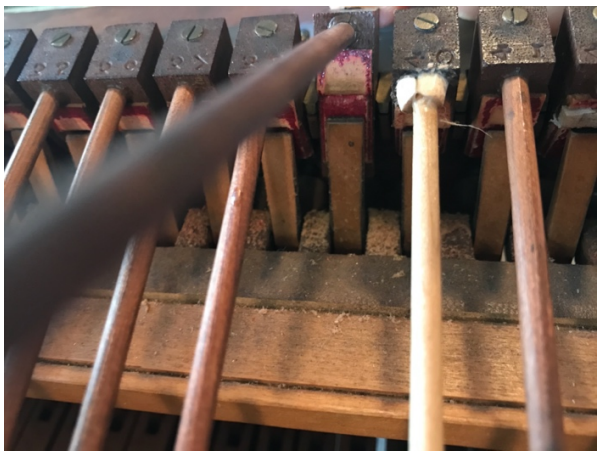
[Picture 7.3. Name Board of the 1816 instrument]

[Picture 7.4. Interior of 1816 instrument, and the 5 bracing bars]

[Picture 7.5. Strings and original square tuning pins]

[Picture 7.6. Soundboard crack and hitch pin rail separation from the case]

[Picture 7.7. (Left) Dampers (Bottom – Bass, Middle – Treble, Top – High Treble)]



[Picture 7.8. (Left) The original leather covered hammers of an 1806 Broadwood, showing what the original hammer of the 1816 Broadwood would have looked like before substitution with felt]
[Picture 7.9. (Right) Jack and hammer butt pushing action]

The piano is 98 inches long and stands on four legs. Notice the twist in the case on the right side, popularly called 'cheek disease', which is common in English pianos of that period. The twist was the result of rising pitch and string tension that the pianoforte was never constructed to support. The damper pedal is split, the right side raising the dampers from middle C throughout the treble, the left side the dampers in the bass. (In the autograph of Op. 53 Beethoven wrote that he wanted the dampers raised in the treble and the bass. "*Wo ped. stecht wird die ganze Dämpfung sowohl vom Bass als Dißkant aufgehoben,* ***O*** *bedeutet daß man sie*

wieder fallen laße.") The nameboard reads *John Broadwood and Sons - Makers to his Majesty and Princesses – Great Pultney Street - London - Golden Square*.

Looking inside the piano, there are features of construction and effects of age that have a direct effect upon tone quality and sonority and thus upon possibilities for interpretation that will be discussed in the succeeding chapter. Notice in picture 4 the five bracing bars between the pinblock and the belly rail of the soundboard, the only metal bracing at this point in Broadwood piano building. The strings are held down on the nut by pins, there being no agraffes as in the modern piano. There is no hole in the original square tuning pin, the string held on the pin by friction.

Picture 6 shows the crack in the soundboard in the uppermost treble, the result of the twist in the case that created downward pressure on the bridge and soundboard. The relative loss in downbearing of the strings on the bridge reduces the sound of the top five notes above the uneven edges of the soundboard crack. To restring with original gauge wire would increase the risk of further twisting and, especially, disastrous separation of the hitch pin rail from the case.

Alastair Laurence, who restored the piano in Leeds, England, kept a record of the strings as he removed them, the original iron strings in black, early iron replacements in blue, and modern steel replacements in red. (This listing is given at the end of this paper.) Replacements, especially in the upper treble, were larger gauge than the original strings. For example: the original a#3 was 0.565 mm and was replaced by modern steel wire 0.625 mm; the note a#2 one octave lower was 0.570, replaced with modern steel 0.620. This, along with rising pitch, would

explain the twist in the case at the right-hand corner (the top note of the treble). From d#2 down the piano had, except for 10 notes, the original strings.

As mentioned above, the piano is now strung with historical piano wire from Stephen Birkett who informs us that this wire contains phosphorus, unlike carbon in modern steel piano wire. The result is a more singing, sensuous tone. The following numbers show the difference in size between the original stringing and the present throughout the compass.

original A – f 0.690, present 0.640

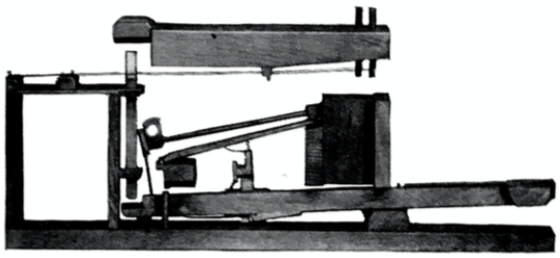
original f# - d#1 0.690 - 0.660, present 0.57

original e1 – g#2 0.680 - 0.570, present 0.51

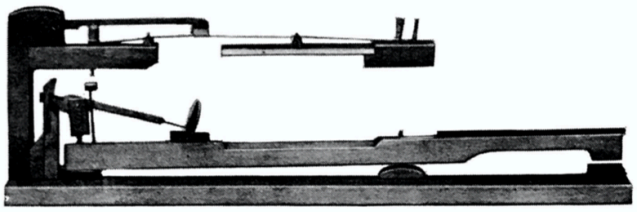
All of these lower gauges lessen the strain on the case and specifically the separation of the hitch pin rail from the case, shown in Picture 6.

IV. Action

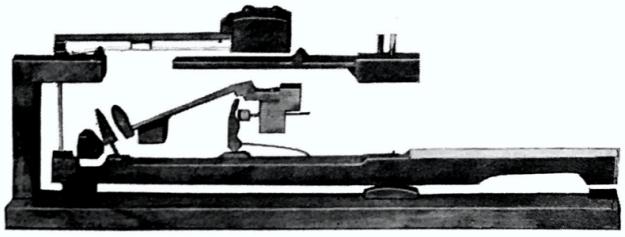
[Picture 7.11. Cristofori Action]



[Picture 7.12. Viennese (German) Action]



[Picture 7.13. English Action]



(Action Pictures taken from W.L. Sumner, *The Pianoforte*)

These pictures of the Cristofori, Viennese, and English actions show the difference between a pushing and a bouncing action in which the hammer is levered against the string. It is interesting that the Cristofori action was already a pushing action like the English action and similar to the modern double escapement action. My personal experience is that one has more control of nuance on the English pushing action, but the feel of the Viennese bouncing action is lighter and livelier. When I played the Schantz fortepiano in the Hofburg collection in Vienna, the action was very light, the lightest action I have ever played. In comparison, the heaviest action I have ever played was a late nineteenth-century Steinway B grand piano in the Sullivan Room in Roosevelt University.

V. Comparison of key dip and weight for depressing the key

[Table 7.1. Comparison of key dip and weight for depressing the key]

Piano	**Key Dip**	**Key Resistance and Return**
Fortepiano (John Lyon copy)	1/4 inch	40g =1.4oz 20g =0.7oz
1806 Broadwood	5/16 inch	40g =1.4oz 15g =0.425oz
1816 Broadwood	1/4 inch	30g =1+ oz 10g =0.5- oz
Steinway 'B'	3/8 inch	80g =2.8oz 40g =1.4oz

With each piano the top gram figure is the weight needed to lift the hammer to the strings. The lower number is the minimum weight required to keep the key in its depressed position. These figures are approximate but indicate in particular the difference between the period piano and the modern piano.

CHAPTER EIGHT

Experience of Performing Op. 111 on the Original 1816 Broadwood

All the observations made in this section regarding playing Op. 111 on the 1816 Broadwood and the modern piano represent my personal reactions.

When the modern pianist plays the original 1816 Broadwood pianoforte, some surprising issues appear. The first reaction to the Broadwood is that it is original and it is old. At 204 years in age the pianoforte (as these instruments were called in England) presents some problems associated with structural change, rising pitch, and unknown care by previous owners over the centuries, all of which could not be anticipated when the piano was made. As mentioned in the previous chapter, the corner where the cheek meets the curved side of the case has twisted downward, putting pressure on the uppermost 3¾ inches of the soundboard and decreasing the downbearing of the strings on the bridge in that area, specifically for the pitches g3, g#3, a3, and a#3. As explained above, it would be unwise to restring the piano with the same gauge wire with which it was strung when new; therefore, it was necessary to reduce the original string gauge and thus the tension supported by the case. (String gauges recorded during restoration of the pianos are included in appendix B.)

The loss of downbearing for these pitches presents the interpreter with greatly reduced singing quality at the emotional high point of the second movement, measures 154 to 160. In the attempt to compensate for this deficiency, the pianist may hold the pedal down throughout m. 159 and also broaden the tempo, already promoted by the sforzandos on the third of each brace of triplet sixteenths. The combination creates the illusion of sound – the ecstatic high point of the movement – even though the level of sonority might not be measurably greater.

Traditional pianists, when playing the 1816 Broadwood, are immediately challenged by the limited volume (due to lighter gauge stringing and lower string tension) and the light action, ongoing issues in forceful passages throughout the Sonata Op. 111 requiring incisive articulation. Naturally, the over 200-year-old Broadwood has a weaker sound than when it was a new; even a listener in 1816 who heard the piano's original sonority and appreciated the warmth of its sound could not have imagined the power and brilliance of the present day piano. We hear the Broadwood through ears accustomed to the sound of the modern piano.

The challenge for the traditional pianist playing the Broadwood is to find expressiveness in the lowest level of its sound, the level of piano on the 1816 piano corresponding to pianissimo and triple piano on the modern piano. After becoming acquainted with the lower dynamic range of the 1816 piano, the Beethoven interpreter learns to listen for intimacy of sound when returning to the modern piano, possibly an intimacy of which one has not been previously aware. Control of sound, especially in levels of piano or lower, is easier to achieve on a modern piano on which one feels greater key resistance.

On an early piano, with its lower and narrower dynamic range such as the 1816 Broadwood, making a difference between *p* and *pp* demands greater fingertip control of touch and listening that is more discriminating. The confined loudness of the Broadwood in its restored state makes the player aware of the character of frustration in the music of Beethoven; however, it guides one to bring out in the music the will to overcome frustration using exaggerated effort. This includes the effect of forcing *fortissimo* beyond the capacity of the Beethoven-era piano, making sudden dynamics and articulation slurs unmistakably clear, avoiding premature crescendos, and choosing tempos that give details enough time to be heard.

Thankfully, unlike the Viennese fortepiano on which the black and white color of sharps and naturals is reversed, the keyboard of the Broadwood looks the same as ours today, and the function of the foot pedals for action shift and for damping, mounted on a lyre as today, are also the same. However, the range of the 1816 Broadwood pianoforte's compass is shorter than the modern piano, which makes it difficult to maintain one's visual bearings, since the highest and lowest notes in the score are also the highest and lowest notes on the 1816 Broadwood and Beethoven's Broadwood. (This is the same sense of disorientation one feels when seeing the lowest bass notes – FFF to GGG# -- on the Bösendorfer Imperial Grand.) Fortunately, Op. 111 can be played on the 1816 Broadwood, Beethoven having written an ossia for the e-flat4 in measure 132. Once one gets used to the visual disorientation, the feeling of the touch becomes the main troublesome issue.

The English single-escapement action gives the physical feeling of emptiness when one presses down the keys, not the feeling of substance caused by friction in the middle of the key descent on modern double-escapement actions. While the English action has a jack that pushes against the hammer shank butt in the let-off of the hammer – just as the jack in the modern action pushes against the roller under the hammer shank – the rubbing sensation is almost negligible in the English action. On the modern piano, this sensation gives a feeling of resistance and also support, making one feel secure, as though walking on solid earth. Furthermore, the reaction of the original English action seems much slower than the modern piano.

The key weight given in a previous chapter [Table. 7.1] not only represents effort demanded of the pianist, but also the response of the action. The English and Viennese actions do not have a wippen or repetition lever between key and hammer shank, another action part

that adds to the resistance of the key one feels on the modern piano. For example, when playing sixteenth running passages in Mozart or Haydn on the fortepiano, the lighter action, with its smaller hammers and fewer layers of leather, promotes the instantaneous feel of a 'tapping' touch on the key with which it is easy to produce a non-legato articulation. The pushing action of the English piano does not have the quick, snappier feel of the Viennese bouncing action. The Viennese pianists who tried Beethoven's Broadwood when it arrived in Vienna in July 1818 complained that the action felt too heavy. What would they have said playing non-legato articulation on our modern piano on which extra effort is needed to move heavier action parts? On the modern action I find that non-legato requires a 'kicking' touch with the fingertip instead of a 'tapping' touch.

On the Broadwood, lighter, less efficient dampers do not stop the vibration of the string instantly, causing a ghosting effect that makes non-legato articulation difficult to hear; maybe these dampers were never intended to be efficient. The 'ghosting effect' of light dampers on articulation and the relative lack of clarity and brilliance on the 1816 Broadwood encourages a somewhat slower tempo in which individual notes will not be lost in the overhanging of the sound. Although I am playing the tempo to which I am accustomed, because of the muddiness of the slow damping I feel as though I am playing slower. The tempo modifications that Beethoven indicated in the score are therefore the starting point for my own subtle response on the Broadwood to fugal writing and dynamics in the score. Within less efficient damping, the *sf* on the first note of each sixteenth note group in measures 26 to 28 of the first movement of Op. 111 can be interpreted as an indication of effort, holding back the tempo and giving the *sforzandos* more time to be heard. In general, a more forceful touch to produce *ff* in the upper dynamic level

of the 1816 Broadwood impedes tempo, an effort that, as it pertains to interpretation, one may wish to transfer to the modern piano. Because of the lower dynamic range of the Broadwood, voicing a particular note of a chord louder seems easier than on a modern piano on which the vastly increased sonority makes discriminating more difficult.

No doubt the modern Steinway piano is a far advanced instrument in sonority and structure than the 1816 Broadwood pianoforte, all of which I mentioned above. The modern piano supports far stronger string tension, creating greater sonority and making possible huge dynamic contrast. This helps to produce a wide variety of tone colors and tons of different sound effects. This fullness of function is closer to our modern ears, which means this tone and timbre fits post Classical music better than the Classical period.

Tovey says, "few players without special information have any idea of the weight of Beethoven's *staccato fortissimos*. They belong to the resources in which the early pianoforte sounded formidable because it was obviously displaying its full strength, whereas the modern *pianoforte* sounds weak in them because it can make much more noise in other ways."[115] I subscribe to Tovey's words, for example that the modern piano when compared with the 1816 Broadwood, helps the pianist make a *ff* dynamic level without the player's extra effort. Nevertheless, through support from the instrument, the pianist may possibly lose contact with the contents of the music. When playing Beethoven's music, which do you believe was more important in his mind, the instrument or the pianist? If we think about the sound of the instrument, this effortlessness or ease would be welcomed by a pianist. However, I believe that

[115] Ludwig van Beethoven, *Beethoven Sonatas for Pianoforte*, Vol. I, commentaries by Donald Francis Tovey (London: The Associated Board of the Royal School of Music, 1958), 32.

true Beethoven can be heard only if the player is willing to risk failure persuading the audience to believe in meaning outside the tonal frame of his piano.

We have been taught techniques and tastes of modern piano performance that we then use playing composers of the Classic era. Studying performance practice is trying to understand techniques and tastes that the eighteenth-century writer was explaining, but which we cannot hear, not having recordings from that era. The early piano fills that need because it teaches with sounds and not words. Because the sound is new to our ears, we feel freer to experiment than on the modern piano. Practicing on the 1816 Broadwood, one is constantly discovering anew the effect of pauses, fluctuations of tempo, and note lengths that one can also apply on the modern piano.

Performance on the period instrument has the same ongoing novelty for us. In my opinion, since we are disconnected from how pianists played in the Classic period, we discover spontaneity imagining in the sound of the piano the ways Beethoven would have communicated indications in the score. This makes the music sound fresh again and may be the most important lesson from playing instruments like the 1816 Broadwood.

The words of Yo-Yo Ma, quoted by Bruce Haynes, summarize my experiences during this project: "Whenever you have gone beyond the world that you know, and then go back to the familiar world, you find it changed. Whenever you move into a different world like that, it's not with a sense of losing something from our traditional music. You end up with greater freedom, not less."[116]

[116] Bruce Haynes, *The End of Early Music: A Period Performer's History of Music for the Twenty-First Century* (Oxford: Oxford University Press, 2007), 226-227.

Appendix A

Recordings

1816 Broadwood Pianoforte Recording

Beethoven Piano Sonata in C minor, Op. 111

I. Maestoso – Allegro con brio ed appassionato

https://youtu.be/WH8JcDyYD3U

II. Arietta: Adagio molto semplice e cantabile

https://youtu.be/pbwITb7L7ug

Steinway and Sons Modern Piano Recording

Beethoven Piano Sonata in C minor, Op. 111

I. Maestoso – Allegro con brio ed appassionato

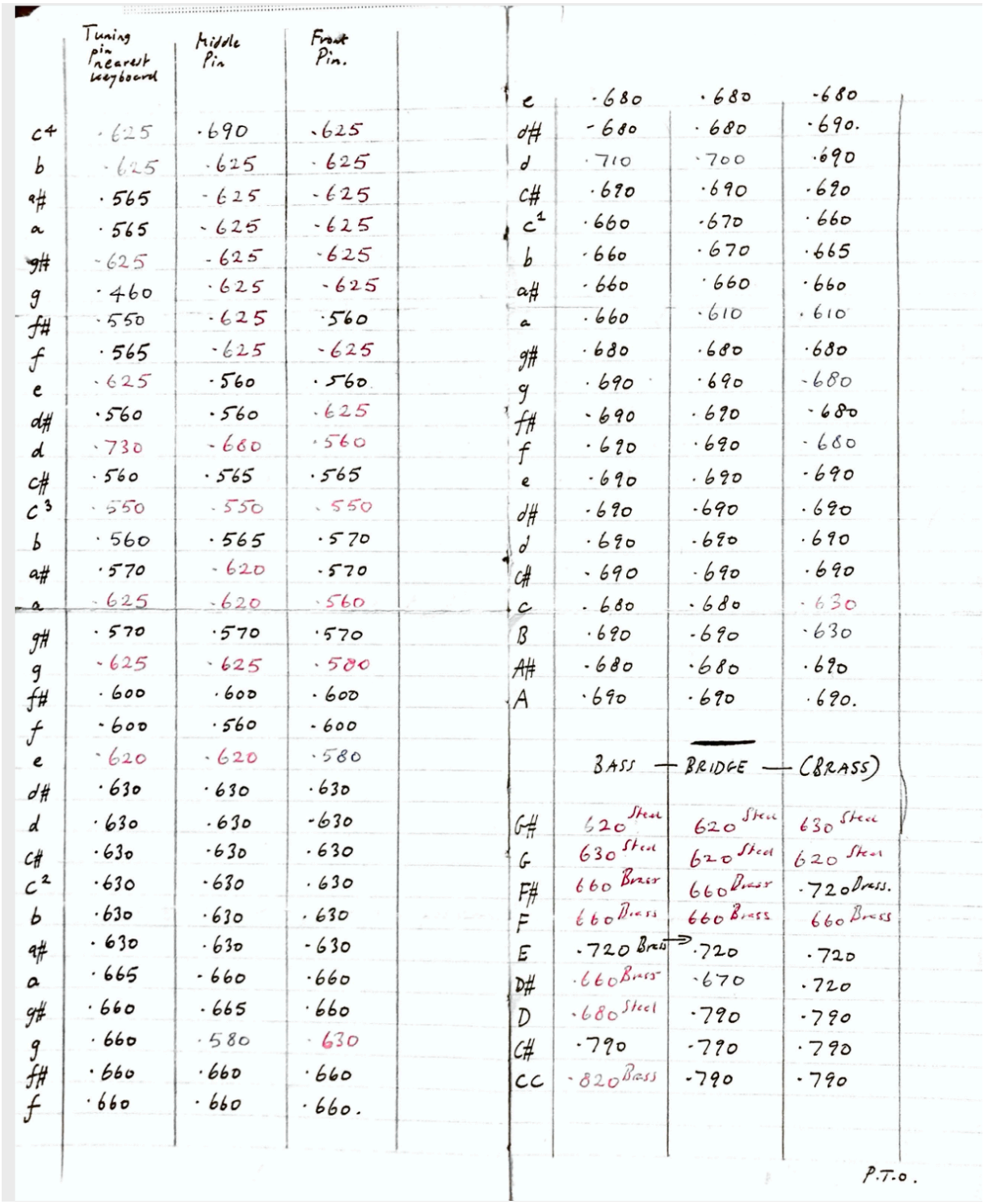
https://youtu.be/raI8LJNBwfQ

II. Arietta: Adagio molto semplice e cantabile

https://youtu.be/4fpvulxYDsM

Appendix B

The register of piano wire taken from the 1816 Broadwood during restoration



	Tuning pin nearest keyboard	Middle Pin	Front Pin.
c^4	.625	.690	.625
b	.625	.625	.625
a#	.565	.625	.625
a	.565	.625	.625
g#	.625	.625	.625
g	.460	.625	.625
f#	.550	.625	.560
f	.565	.625	.625
e	.625	.560	.560
d#	.560	.560	.625
d	.730	.680	.560
c#	.560	.565	.565
c^3	.550	.550	.550
b	.560	.565	.570
a#	.570	.620	.570
a	.625	.620	.560
g#	.570	.570	.570
g	.625	.625	.580
f#	.600	.600	.600
f	.600	.560	.600
e	.620	.620	.580
d#	.630	.630	.630
d	.630	.630	.630
c#	.630	.630	.630
c^2	.630	.630	.630
b	.630	.630	.630
a#	.630	.630	.630
a	.665	.660	.660
g#	.660	.665	.660
g	.660	.580	.630
f#	.660	.660	.660
f	.660	.660	.660.

	BASS	BRIDGE	(BRASS)
e	.680	.680	.680
d#	.680	.680	.690.
d	.710	.700	.690
c#	.690	.690	.690
c^1	.660	.670	.660
b	.660	.670	.665
a#	.660	.660	.660
a	.660	.610	.610
g#	.680	.680	.680
g	.690	.690	.680
f#	.690	.690	.680
f	.690	.690	.680
e	.690	.690	.690
d#	.690	.690	.690
d	.690	.690	.690
c#	.690	.690	.690
c	.680	.680	.630
B	.690	.690	.630
A#	.680	.680	.690
A	.690	.690	.690.
G#	620 Steel	620 Steel	630 Steel
G	630 Steel	620 Steel	620 Steel
F#	660 Brass	660 Brass	.720 Brass.
F	660 Brass	660 Brass	660 Brass
E	.720 Brass	.720	.720
D#	.660 Brass	.670	.720
D	.680 Steel	.790	.790
C#	.790	.790	.790
CC	.820 Brass	.790	.790

P.T.O.

BB	·720	·76 Brass	·790
AA#	·790	·790	·790
AA	·790	·790	·790
GG#	·900	·900	·900
GG	·900	·900	·900
FF#	·900	·910	·900
FF	·900	·900	Missing
EE	·910	·900	·900
DD#	Missing	Missing	·970
DD	1·01 Brass	·970	·920 Brass
CC#	·970	·970	1·01 Brass
CCC	·970	1·00 Brass	·920 Brass.

1816 Broadwood Grand.

Wires found during restoration - Nov. 76.

BLACK INK: Original iron or brass wire

BLUE INK: Early iron replacements & brass in bass

RED INK { Modern steel replacements.
{ Modern brass replacements in bass

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