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PERFORMING CLASSICAL-PERIOD MUSIC ON THE MODERN PIANO

**Presented in Partial Fulfillment of the Requirements for the Degree
Doctor of Musical Arts (DMA)**

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Contents

Acknowledgements.....	iii
Abstract.....	iv
List of figures.....	v
Preface.....	vi
<i>i. Historical issues.....</i>	vi
<i>ii. Editions used in this study.....</i>	xiii

PART ONE: THE INSTRUMENTS

Chapter 1: The early and the modern piano.....	1
<i>i. The origins of the piano and its early mechanical features.....</i>	2
<i>ii. Significant developments in the nineteenth century.....</i>	10
<i>iii. The effects of these developments on touch and tone.....</i>	18
<i>iv. The modern instrument.....</i>	21
Chapter 2: Composers, their instruments and sound aesthetics in the Classical era	25
<i>i. Composers and their instruments: Haydn, Mozart, Clementi and Beethoven...25</i>	
<i>ii. Sound-perceptions in this era</i>	32

PART TWO: THE MUSIC AND ITS PERFORMANCE

Chapter 3: Articulation and touch	40
<i>i. Articulation and musical rhetoric.....</i>	40
<i>ii. Short articulating slurs</i>	45
<i>iii. Longer slurs and the legato style</i>	55
Chapter 4: Dynamics and accentuation	64
<i>i. Dynamic range</i>	65
<i>ii. Sudden changes in dynamic level</i>	66
<i>iii. Gradual dynamic changes</i>	77
<i>iv. Accents.....</i>	80
Chapter 5: Pedal indications	90
<i>i. Pedal markings indicating tonal mixtures.....</i>	93
<i>ii. Pedal markings not indicating tonal mixtures.....</i>	100
<i>iii. The left pedal</i>	104
Chapter 6: Timbre and register	106
<i>i. Separation and balance</i>	106
<i>ii. Close-position chords</i>	112
<i>iii. Extending the range.....</i>	115
Chapter 7: Case Study: Mozart Piano Sonata in G Major, KV283	122
Bibliography	137

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Abstract

Most performances of Classical-period keyboard music today are given on the modern piano. However, the understanding of the sound-differences between the modern piano and the instrument for which this music was composed will most probably reveal that some features of Classical music can be problematical on our present-day instrument. This study will present the main differences between early and modern pianos and will focus on certain aspects of performance practice of the music under discussion, including articulation, dynamics, pedalling and timbre relationships that can prove challenging when transferred on to the modern piano. It will analyse their role and significance, and will demonstrate how they are affected by the changes that have been applied to the piano in the last two centuries. This dissertation will also attempt to suggest possible solutions for the modern player whose aim is, as much as possible, to maintain the style and project the right spirit of the music on the present-day instrument.

List of figures

1. Maffei's diagram of Cristofori's piano action.....	3
2a. Viennese action.....	5
2b. English action.....	5
3. <i>Prellmechanik</i> action (Heilman c.1785).....	6
4. English action (Broadwood, c.1799).....	7
5. Comparison between six piano hammers and strings.....	11
6. Érard's double-escapement action after the English patent of 1822.....	14
7a. Straight-strung piano (Broadwood, c.1794).....	15
7b. Cross-strung piano (Steinway, c.1890)	15
8. Keyboard compass.....	17
9. Hammer response of Walter piano compared with a Steinway grand.....	19
10. Tone decay.....	20
11. Reconstruction by R. Maunder of Mozart's Walter piano with pedalboard.....	28
12. Piano by Clementi & Company, c.1821	29
13. Beethoven's Érard piano, c.1803	31

Preface

i. Historical issues

A modern pianist, on playing the fortepiano for the first time, will probably be astonished: the instrument that Mozart and Beethoven composed for is remarkably different in touch and sound from the instrument to which we are accustomed today, and music, when played on it, sounds remarkably different from when it is played on a modern instrument. Alfred Brendel asserts, '[W]e have to resign ourselves to the fact that whenever we hear Beethoven on a present-day instrument, we are listening to a sort of transcription'.¹ Yet, it is the modern piano on which this music is most often played, and indeed, Brendel prefers this instrument:

The modern concert grand . . . not only has the volume of tone demanded by modern orchestras, concert halls and ears; it also — and of this I am deeply convinced — does better justice to most of Beethoven's piano works than the Hammerklavier [fortepiano]: its tone is far more colourful, orchestral, and rich in contrast, and these qualities do matter in Beethoven, as can be seen from his orchestral and chamber music.²

Frederick Neumann offers similar views concerning the performance of Mozart's works, claiming that '[When this music is] played by a fine artist on the modern piano [it] offers

¹ Alfred Brendel, *Musical Thoughts and Afterthoughts* (London: Robson Books, 1976), p.16.

² Ibid, p.16.

an artistic experience that to a listener with an open mind will convey the spirit of the work with greater immediacy, power, and intensity.’³

On the other hand, one of the leading fortepianists of our time, Malcolm Bilson, has frequently affirmed the ‘unsuitability’ of the modern instrument to the music of Mozart and Beethoven, comparing it to a ‘Wagnerian’ soprano trying to sing a Mozart opera.⁴ He claims that, ‘[T]o try to recapture the 18th-century language with 19th- or 20th- century instruments is to find oneself misguided on a number of central aspects of music’.⁵

Those who adhere to the ‘authenticity’ or ‘early music’ movement constantly strive for ‘historically-informed’ performances, using original sources, techniques and instruments. One of the pioneers of this movement during the late nineteenth and early twentieth centuries was Arnold Dolmetsch. In his highly influential study, *The Interpretation of the Music of the XVII and XVIII Centuries, Revealed by Contemporary Evidence*, he famously stated that ‘[W]e can no longer allow anyone to stand between us and the composer’.⁶ His strong belief that the use of early instruments is vital in the performance of early music also led him into early-instrument manufacturing. Amongst his successors were Thurston Dart and Robert Donington who developed Dolmetsch’s theories and established the modern manifestation of the movement, which is considered as ‘one of the most significant developments in performance styles in the 20th century’.⁷

³ Frederick Neumann, *New Essays on Performance Practice* (Rochester: University of Rochester Press, 1992), p.28.

⁴ Malcolm Bilson, ‘Beethoven and the Piano’, *Clavier*, vol.22 (Oct.1983), p.18.

⁵ Malcolm Bilson, ‘Keyboards’, in Howard Meyer Brown and Stanley Sadie (ed.), *Performance Practice: Music after 1600* (New York: Norton, 1990) p.238.

⁶ Arnold Dolmetsch, *The Interpretation of the Music of the XVII and XVIII Centuries Revealed by Contemporary Evidence* (London: Novello, 1915), p.471.

⁷ John Butt, ‘Authenticity’, *The New Grove Dictionary of Music and Musicians*, vol.2 (London: Macmillan, 2001), p.242.

Nevertheless, seekers of ‘authenticity’ draw much criticism. One of the main arguments its detractors claim most strongly is that, regardless of whether the reproduction of an ‘original’ sound is possible today, such a sound could not replicate its original effect on an audience. Jacques Handschin writes:

An exact reproduction of the acoustical phenomenon — supposing that science were capable of realizing it — does not match the reconstruction of the musical phenomenon as long as one does not reconstruct the contemporary listener with his exact musical perceptions and habits.⁸

Therefore, a modern audience listening to a Mozart sonata played on Mozart’s fortepiano, even with all the acoustical conditions of Mozart’s time, would perceive this differently from an audience which is innocent of the music of Liszt, Rachmaninov and Boulez. Peter Kivy surmises that Bach’s St. Matthew Passion, when first performed with double chorus and double orchestra (still modest numbers from our point of view), must have had an impressive, almost overwhelming effect on its audience, similar to that of Berlioz’s Requiem on us today: ‘If our paradigm of "large" music is Berlioz’s Requiem or *Carmina Burana*, then the opening chorus of the St. Matthew Passion, with the numbers available to Bach, far from sounding like massive forces, is going to have a rather modest, almost chamber music-like sound’.⁹

⁸ Jacques Handschin, *Musica Aeterna* (Zurich, 1950), p.126; quoted in Neumann, p.25.

⁹ Peter Kivy, *Authenticities: Philosophical Reflections on Musical Performance* (Ithaca and London: Cornell University Press, 1997), p.53.

Regardless of the merits of 'historically-informed' performance, commentators such as Richard Taruskin point out that our lack of knowledge permanently prevents us from faithfully reproducing music of the past. He declares that:

[T]he claim of self-evidence for the value of old instruments, like the claim of self-evidence for the virtue of adhering to a composer's "intentions", is really nothing but a mystique, and more often than one can tell, that is the only justification offered'.¹⁰

Charles Rosen puts it more plainly: '[H]istorical purity is not the most important goal of a performance, particularly when we consider that we can never be sure that we are getting it right'.¹¹

Other writers have questioned the principles of period-instrument usage, using comparisons with other art-forms. Neumann, particularly, wonders why performances of Shakespeare are not confined today to male performers using sixteenth-century pronunciation.¹² Robert Taub puts it thus:

An analogous concept of authenticity for paintings, therefore, might suggest viewing Rembrandts only under natural light or by aids of candles. But I do not know of a single museum that does not offer modern lighting conditions for viewing and appreciating its treasures.¹³

¹⁰ Richard Taruskin, 'The Limits of Authenticity', *Early Music*, vol.12 (Feb.1984), p.7.

¹¹ Charles Rosen, *Piano Notes* (London: Penguin Books, 2002), p.204

¹² Neumann, *New Essays*, p.25.

¹³ Robert Taub, *Playing the Beethoven Piano Sonatas* (Portland: Amadeus Press, 2002), p.93.

Probably the most important problem for someone who chooses to play on the early instrument nowadays is the fact that our concert halls are too big to welcome its relatively small sound. Besides, as Badura-Skoda says, '[G]ood historical instruments are seldom available and replicas do not always sound as satisfying as the originals do.'¹⁴

On the other hand, the performer who decides to play this type of music on the modern instrument can also face problems. The evolution of the pianoforte led to advances, such as a bigger and more sustained sound, that are widely considered 'improvements'. At the same time though, several features of the early instrument, even some of those which inspired the music, have had to be sacrificed. These, in particular, have major implications for performance of this repertoire on the modern piano.

This study will point out such features, not to suggest that this kind of music should not be performed on the modern piano, but to alert and at the same time stimulate the modern player to look for possible solutions.

One of the earliest accounts relating to problematic issues that arise when playing late eighteenth- to early nineteenth-century music on modern instruments is Czerny's remark (1839) concerning the effect of the pedal in Beethoven's pianos:

Beethoven (who publicly played this Concerto [no.3, op.37] in 1803 continued the pedal during the entire theme, which, on the weak-sounding pianofortes of that day, did very well, especially when the shifting pedal (*una corda*) was also

¹⁴ Paul and Eva Badura-Skoda, *Interpreting Mozart on the Keyboard*, translated by Leo Black (London: Barrie and Rockliff, 1986), p.6.

employed. But now, as the instruments have acquired a much greater body of tone, we should advise the damper pedal to be employed anew, at each change of harmony.¹⁵

Modern scholarship however has devoted only sporadic attention to some of these issues. The most obvious problems, such as the use of pedal, and the modern instrument's expanded range, have been discussed by scholars and performers such as David Rowland, Joseph Banowetz, Charles Rosen, York Bowen, however. These two issues are also frequently mentioned in most modern editions of Haydn and Beethoven Piano Sonatas.

Clive Brown's *Classical and Romantic Performing Practice 1750-1900* offers a thorough guide to performance practice of the period in general, but without any special focus on piano music. Sandra Rosenblum's *Performance Practices in Classic Piano Music* offers a specialized guide, with a systematic approach to all aspects of piano performance practice, such as technique, dynamics, articulation, pedalling, ornamentation, tempo, etc. The present study is particularly indebted to this work. Rosenblum occasionally refers to the problems of performance of early music on the modern piano, especially on the chapter regarding dynamics.¹⁶ Malcolm Bilson has often mentioned the 'inadequacies' of the modern piano in some of his published articles, and likewise Richard Troeger.¹⁷

¹⁵ Carl Czerny, *The Art of Playing the Ancient and Modern Piano Forte Works, Together With a List of the Best Pieces for that Instrument by All the Celebrated Composers from Mozart to the Present Day. Being a Supplement to the Royal Piano Forte School op.500/ by Carl Czerny*, translated by John Bishop (London: R.Cocks, 1870), pp.107-78.

¹⁶ Sandra Rosenblum, *Performance Practices in Classic Piano Music* (Bloomington and Indianapolis: Indiana University Press, 1988), pp.55-56.

¹⁷ Malcolm Bilson 'Beethoven and the Piano', pp.18-21; 'Keyboards', pp.223-238; 'Period Drama', *Piano* (Jan./Feb.2001), pp.13-17; Richard Troeger, 'Mozart's Piano and the Modern Grand', *Clavier*, vol.10 (Dec.1991), pp.18-23.

This dissertation attempts to present, systematically, these issues, and others which have not yet been adequately confronted. Chapter 1 offers a summary of the evolution of pianoforte construction, describing the main mechanical differences of the early and modern instrument as well as the effects those differences have on sound and touch, while Chapter 2 discusses ideals of sound in relation to different manufacturing approaches in the historical period under discussion. The remaining chapters of this dissertation deal with several aspects of Classical-period music that prove problematic when played on the modern instrument. Chapter 3, on articulation, demonstrates the significant role of short articulating slurs in music of the Classical period. It also discusses the trend towards a more legato approach to playing. Chapter 4, on dynamics, considers the significance of sudden dynamic changes and accents. Chapter 5, on pedalling, will discuss the execution of pedal indications on the present-day instrument while the following chapter will present other issues such as the timbre relationships between registers, the bass notes, close-spaced chords as well as note addition due to the expanded keyboard compass of the modern piano. The final chapter, devoted to case studies, identifies several of the above issues in a single piece, Mozart, Piano Sonata in G major, KV283, while at the same time proposing some ways of dealing with them. This Sonata was chosen as a case study firstly because the autograph score is extant (situated in the Biblioteka Jagiellonska, Krakow), and secondly because most of the issues discussed in this dissertation can be identified in this piece. The plethora of articulation and dynamic indications which appear in Mozart's manuscript help us develop a clear idea about the compositional intent, whereas in other, less marked, pieces such intentions can only be assumed.

The aim of this dissertation is to urge the modern performer to become familiar with the instruments whose sound inspired the music one performs, thereby allowing him/her have a thorough understanding of the medium through which this music communicates. In Elisabeth Norman McKay's words, 'It is necessary for a musician to have some understanding of the composer's conception of a work he is playing. Only when he understands the language can he begin to speak and express fully the composer's aims.'¹⁸

ii. Editions used in this Study

All the musical examples discussed and/or quoted in this study are extracted from the following urtext editions:

- Mozart, *Piano Sonatas* (New Edition) Vol. 1-2 (Vienna: Wiener Urtext Edition, 2004) edited by Ulrich Leisinger.
- Haydn, *Complete Piano Sonatas*, Vol. 1-3 (Munich: G. Henle Verlag, 1998) edited by Georg Feder.
- Clementi, *Selected Piano Sonatas*, Vol. 1-2 (Munich: G. Henle Verlag, 1982) edited by Sonja Gerlach and Alan Tyson.
- Beethoven, *Piano Sonatas*, Vol. 1-3 (Vienna: Wiener Urtext Edition, 1997) edited by Peter Hauschild.

The following editions have also been consulted:

¹⁸ Elisabeth Norma McKay, *The Impact of the New Pianofortes on Classical Keyboard Style: Mozart, Beethoven and Schubert* (West Hagley: Lynwood Music, 1987), p.2.

- Mozart, *Piano Sonatas*, Vol. 1-2 (Munich: G. Henle Verlag, 1992) edited by Ernst Herttrich.
- Mozart, 'Klaviermusik' in *Neue Ausgabe Sämtlicher Werke*, Vol. 20 (Kassel and Basel: Bärenreiter, 1991) edited by Ernst Schnid, Wolfgang Plath, Wolfgang Rehm, Rudolf Angermüller and Dietrich Berke.
- Haydn, *The Complete Piano Sonatas*, Vol. 1-3 (Vienna: Wiener Urtext Edition, 1964) edited by Christa Landon.
- Clementi, 'Works for Pianoforte Solo', in *The London Pianoforte School*, Vol. 3 (New York: Garland, 1984) edited by Nicholas Temperley.
- Beethoven, *Piano Sonatas*, Vol. 1-2 (Munich: G. Henle Verlag, 1980) edited by Bertha Antonia Wallner.

All the above editions follow a similar editorial policy: the autograph score is always taken as a principal source; where it is not extant, the oldest surviving source is taken as the main source instead.

According to the preface of the Haydn Henle Edition, '[S]upplemental material not appearing in the respective principal sources but in secondary ones of significance is shown within round brackets. For such supplemental material based on analogy or musical necessity but not appearing in the standard sources square brackets are used'.

The editorial policy of the Mozart Wiener Urtext Edition is similar in this regard. This edition refrains from adding articulation indications by analogy, but any accidentals 'obviously missing' from the original sources are added in square brackets.

In the Clementi Henle Edition, all editorial additions are indicated in round brackets. In the Beethoven Wiener Urtext Edition, additions from sources other than the original are not indicated in brackets but all relevant places are referred and discussed in the 'Detailed Notes'. 'Uncertain' additions to the Beethoven from early prints are indicated in parentheses, and any other additions of the editor in square brackets. However all are commented on in the 'Detailed Notes'. All these are reproduced, using computer software, in the quoted examples, and issues that are discussed in critical commentaries and are relevant with this dissertation are pointed out as footnotes.

The composers' original fingerings are indicated in italics in the editions, and these are included in the musical examples; all editorial fingerings have been omitted, however. All pedal markings indicated in these editions (and thus the examples) are original. The musical examples from the case study, Mozart, Sonata in G major KV283, are taken from the autograph score.

PART ONE: THE INSTRUMENTS

Chapter 1: The early and the modern piano

The piano, since its invention in the early-eighteenth century, has undergone radical modifications, improvements and refinements. Indeed, the instrument that we know today has only very few features in common with the early model. This chapter will present some key aspects of its origins and early mechanical features, delineate the major developments which took place during the nineteenth century, and discuss the effects those changes had on touch and sound production, and therefore on performance itself.

Between 1716 and 1851 only, the number of patents for inventions relating to the pianoforte's construction amounts to 1132;¹ in a brief study such as this it would therefore be impossible to mention all detailed phases of its evolution. Indeed a considerable number of book-length studies already exist.² So, here, only a brief outline of the main developments will be given. This will include the origins of the piano, its evolution into the modern grand piano whose sound can fill a concert hall and the implications of these developments for the modern performer of the classical repertoire.

¹ David Ward and Alistair Jones, *A Short History and Technology of Keyboard Stringed Instruments* (Reading: International Centre for Research in Music Education, 1995), p.42.

² For a comprehensive discussion of the development of the piano see the following: Rosamond Harding, *The Piano-Forte, Its History Traced to the Great Exhibition of 1851* (Surrey: Gresham Books, 1978); David Rowland (ed.), *The Cambridge Companion to the Piano* (Cambridge: Cambridge University Press, 1998), pp.1-56; Stanley Sadie (ed.), *The New Grove Musical Instruments Series; The Piano* (London: Macmillan, 1988), pp.1-74; David Grover, *The Piano: Its Story, from Zither to Grand* (London: Halle, 1976) and Stewart Pollens, *The Early Pianoforte* (Cambridge: Cambridge University Press, 1995), to which sources this outline is indebted.

i. The origins of the piano and its early mechanical features

By the beginning of the eighteenth century there was a general desire for a keyboard instrument that would combine the expressiveness of the clavichord (through its ability to produce dynamic variation) with the force and the brilliance of the harpsichord. This desire is expressed by François Couperin in 1713:

The Harpsichord is perfect as to its compass, and brilliant in itself, but as it is impossible to swell out or diminish the volume of its sound I shall always feel grateful to any who, by the exercise of infinite art supported by fine taste, contrive to render this instrument capable of expression.³

The invention of the piano is most generally accredited to Bartolomeo Cristofori (1655-1731), a keeper of instruments at the Medici court in Florence, Italy. What he calls ‘gravicembalo col piano and forte’ (harpsichord with soft and loud) was almost certainly built in 1709. Scipione Maffei, who visited Cristofori in 1709, reported his reactions in the *Giornale de Litterati d'Italia*. He notes that, when listening to a musical theme, it is important to hear dynamic diversity as well as the incremental graduation of volume from *p* to *f* and, of Cristofori’s instruments, he writes:

He has already made three, of the usual size of other harpsichords, and they have all succeeded to perfection. The production of greater or less sound depends on the degree of power with which the player presses on the keys, by

³ Ruth Dyson and George Menhennick, ‘Piano’, *The New Oxford Companion to Music*, vol.2 (Oxford: Oxford University Press, 1983), p.1421.

situated in the Musikinstrumenten-Museum of Karl-Marx-Universität in Leipzig and the other (dated 1720) in the Metropolitan Museum in New York. Paradoxically, Cristofori's invention did not receive much acclaim in Italy.⁶

The next significant development in pianoforte manufacturing occurred in Germany, and was undertaken by the famous organ-builder and clavichord-maker, Gottfried Silbermann (1683-1753). His instruments were very similar to Cristofori's, the actions being almost identical; however, Silbermann added two tone-modifying devices.

The introduction of the piano into England is strongly associated with a pupil of Silbermann, Johannes Zumpe (1735-1783), a German refugee who came to London. Zumpe developed a small square piano with a very simple construction. Its action consisted of neither an 'escapement' nor a back-check; however the instrument became very popular on the English market.

The following account, given by Charles Burney, connects the development of the piano in England with the settling in London, in 1762, of Johann Christian Bach:

After the arrival of J. C. Bach in this country, and the establishment of his concert, in conjunction with Abel, all the harpsichord makers tried their mechanical powers at pianofortes; but the first attempts were always on the large size, till Zumpe, a German, who had long worked with Shudi, constructed small pianofortes of the shape and size of the virginals, of which the tone was very sweet, and the touch, with a little use, equal to any degree of rapidity.⁷

⁶ For more information about Cristofori's inventions see Grover, *The Piano*, pp.69-74; see also Kenneth van Barthold and David Buckton, *The Story of the Piano* (London: British Broadcasting Corporation, 1975), pp.25-34.

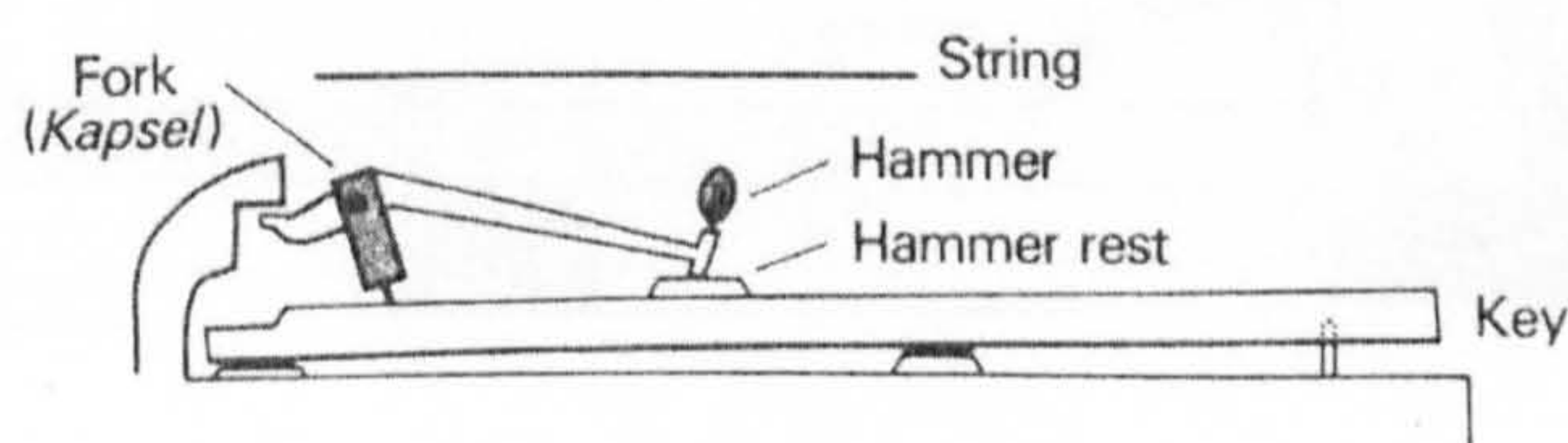
⁷ Dyson and Menhennick, 'Piano', p.1423.

During the second half of the eighteenth century, two styles of pianofortes dominated Europe, one emanating from Germany/Austria (using the so-called ‘Viennese’ action) and the other from England/France, (using the ‘English’ action). The fundamental difference between these two styles of instrument derived from the physical relationship between the key and the hammer. This distinction was also the basis for several other differences.

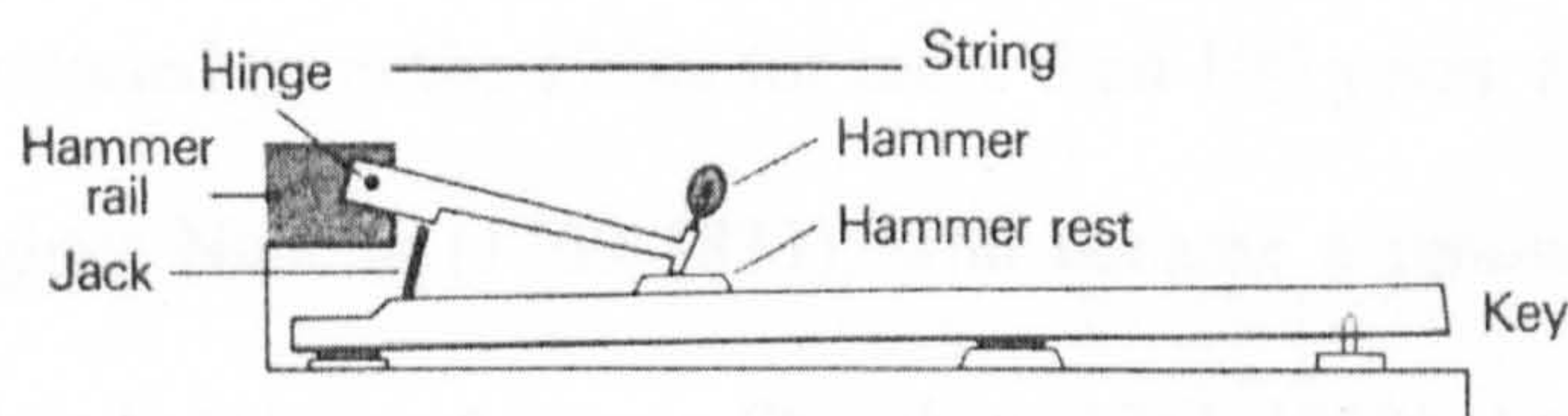
The basic principle of the ‘Viennese’ action was that the shank of the hammer was connected directly with its own key through a wooden fork (Kapsel). In the ‘English’ action, the hammer, instead of being connected to its key, was hinged at its tail to a common rail, necessitating a pusher (jack) near the back of the key to set the hammer in motion (see Figure 2, a and b).

Fig. 2:

a) Viennese action.⁸



b) English action.⁹

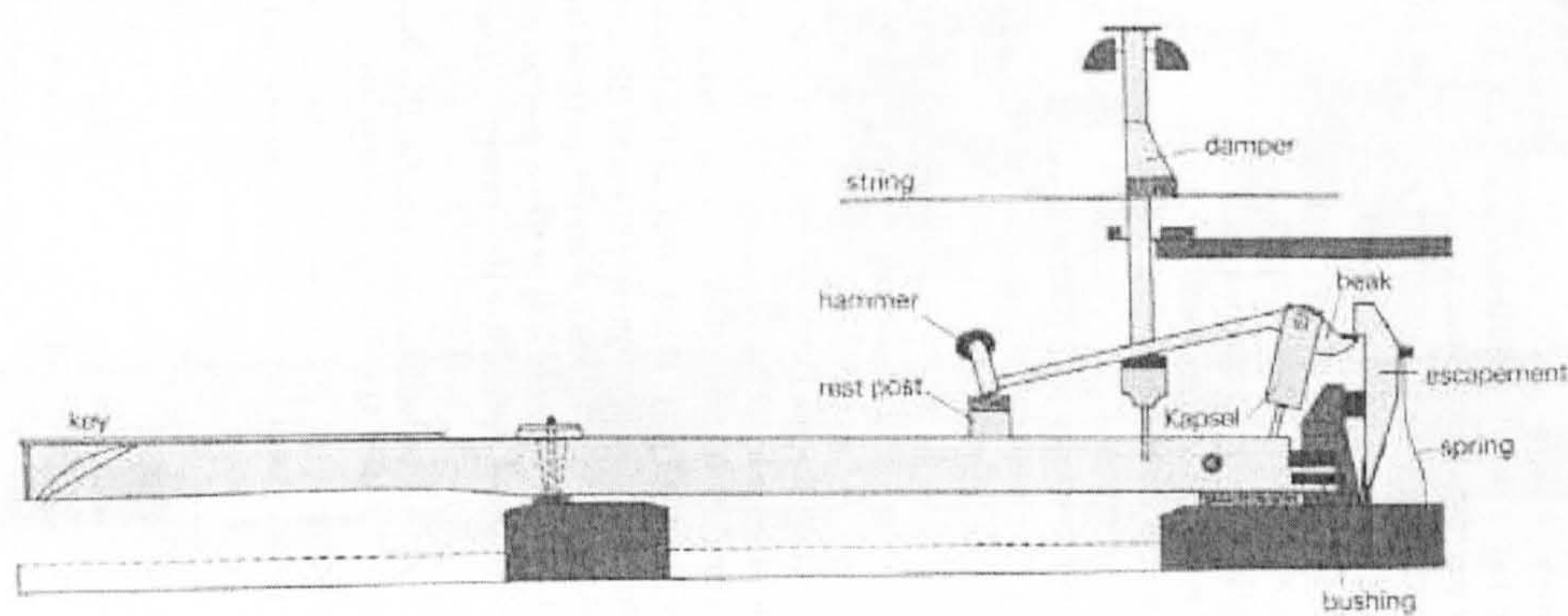


⁸ Taken from Rosenblum, *Performance Practices*, p.45.

⁹ Ibid.

The ‘Viennese’ action was invented by the German maker, Johann Andreas Stein, who was an apprentice of Silbermann. Stein did not follow his master’s designs, which were copied from Cristofori; the action that he invented – known as *Prellmechanik* – was closely allied to that of the clavichord. In the developed *Prellmechanik* there are escapement levers for its key instead of a stationary rail. Each lever has a notch into which the beak of the hammer shank fits, and each lever has its own return spring (see Figure 3).

Fig. 3: *Prellmechanik* action (Heilman c.1785). As the key is depressed, the beak is caught by the top of the notch in the escapement lever, lifting the hammer. The combined arcs traversed by the key and the hammer shank cause the beak to withdraw from the escapement and slip free just before the hammer meets the string, after which it is free to fall back to its rest position. When the key is released, the beak slides down the face of the escapement lever back into the notch.¹⁰



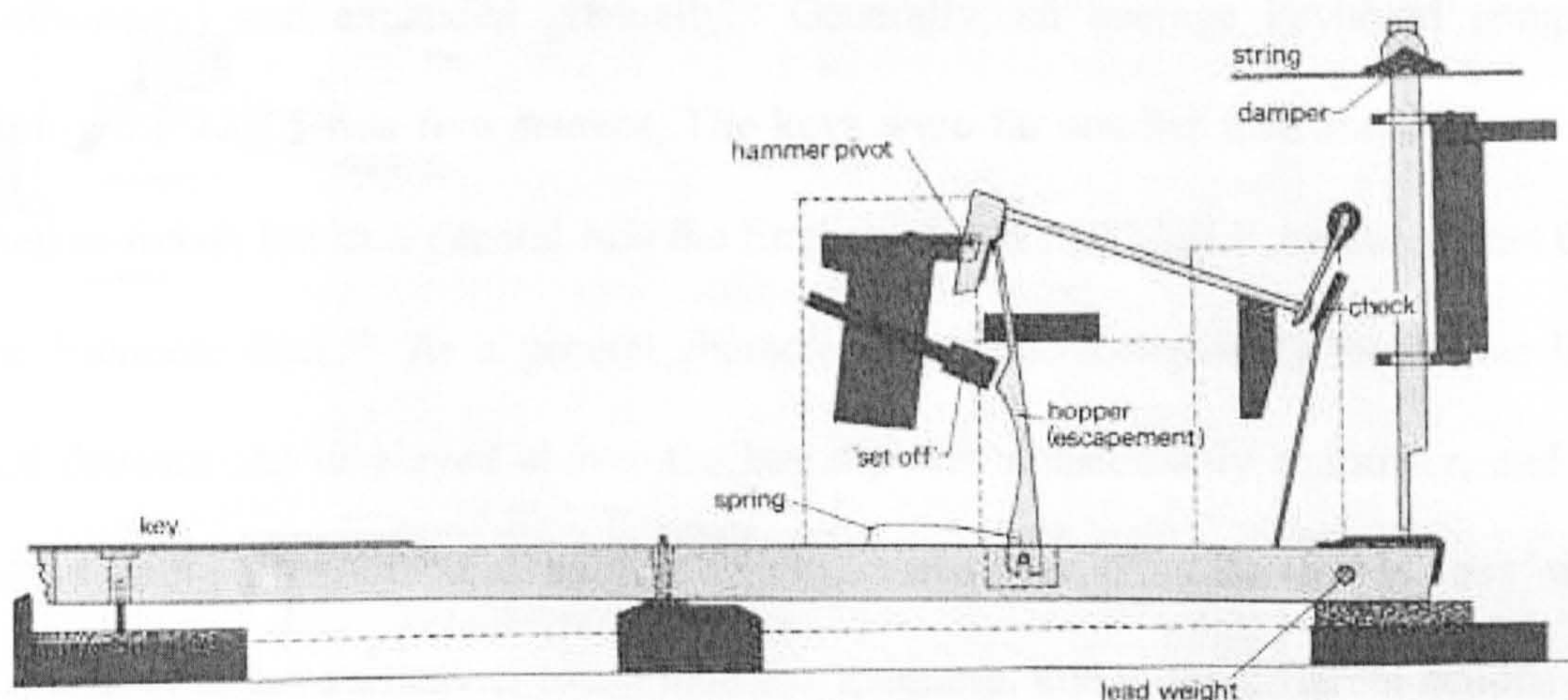
This type of action was the foundation of the ‘Viennese’ school of piano-making, which extended from the 1770s for more than 100 years. Successors to Stein included his daughter Nanette (1769-1833), who became a renowned piano maker. She and her husband, Johann Andreas Streicher (1761-1833), lived in Vienna and established a successful piano-making firm. Among other renowned makers are

¹⁰ Figure and commentary taken from Philip Belt, ‘Germany and Austria, 1750-1800’ in Sadie (ed.), *The New Grove Musical Instruments Series; The Piano*, pp.14-15.

Anton Walter (1752-1826), Michael Rosenberger (1766-1832), Joseph Brodmann (1771-1848) and Conrad Graf (1782-1832).

In the ‘English’ action, when the key is depressed, the hopper (escapement) which is attached to the key pushes the hammer shank which is pivoted in a common rail, and causes the hammer to strike the string (see Figure 4). Immediately afterwards the head of the hopper ‘escapes’ from the hammer shank allowing the hammer to fall back to its rest position. The check catches and holds the hammer after it has fallen from the strings, to prevent it from rebounding against them.

Fig. 4: English action (Broadwood, c.1799)¹¹



This action has its origins in the Cristofori model and was developed by Americus Baker (?-1778), a Dutchman living in London. He was helped by two makers who eventually started their own businesses: John Broadwood (1732-1812) and Robert Stodart (1748-1831). Broadwood’s firm has now become the oldest established piano manufacturing company in the world. Other important makers

¹¹ Taken from William Conner, ‘England and France to 1800’, in Sadie (ed.), *The New Grove Musical Instruments Series; The Piano*, p.24.

include the well-known pianist-composer Muzio Clementi (1752-1832) and the Frenchman Sebastian Érard whose later inventions in pianoforte construction are still implemented in modern instruments.¹²

Fortepianos were made at first in two shapes: the 'square' pianos which were actually rectangular, and the 'grand', which were wing-shaped, resembling a large harpsichord. The English instruments looked 'heavier' and were square at the tail, whereas the Viennese had a more elegant style with a double bentside (the S-shaped piece of wood on the long side of the piano to the right of the performer). Both were entirely made from wood and had a relatively light and fragile construction.

The earliest instruments had a four-octave range (as in Cristofori's instruments) and expanded gradually. Generally, an average keyboard compass during the 1780s was five octaves. The keys were far smaller than the ones we are used to today, but as a general rule the English pianos had bigger measurements than the Viennese ones.¹³ As a general characterisation the fortepiano's touch was light and delicate. As displayed above, the key dip was considerably shallower, and the action lighter than in the modern piano. However, English fortepianos were considered to have a heavier touch than the Viennese, due to the different actions and physical laws that apply to them: as stated earlier, in the Viennese action the hammer was directly connected with the key whereas in the English one was not. The greater resistance found in English pianos could have also resulted from the friction produced when the hopper pushes the hammer shank (see Figure 4).

Some explanation for the difference between the Viennese and the English schools of piano-making in terms of touch is given in a letter from the Viennese maker, Streicher, to his colleague, Gottfried Härtel, who had informed him about

¹² More information about the piano in England can be found in Harding, pp.53-72.

¹³ For exact measurements see Katalin Komlós, *Fortepianos and Their Music; Germany Austria and England, 1760-1800* (Oxford: Clarendon Press, 1995), p.18.

Clementi's demand for a heavier action in Viennese pianos:

There is one remark in your letter with which I cannot concur, namely the heavier action and deeper [key] fall of pianos such as Clementi demands. I can assure you from twofold experience that a pianist can become accustomed much more sooner to a poor tone, dragging, sticking of the keys, and all kinds of evil than to the heavy action and even less to the deep fall of the keys.¹⁴

He also points out that if all instruments were built in the English way (with the heavy action), the fortepiano would not have remained a universal instrument because most keyboard amateurs would have had to give up playing.¹⁵

The strings of early pianos of the late eighteenth century were relatively thin, and were made of steel in the treble and unwrapped brass in the bass. They were hitched parallel to each other in fairly low tensions, as the wooden construction could not support anything greater. The hammers were quite small and light, covered with several layers of leather. In Viennese instruments the hammers pointed towards the performer while in the English, they were attached on a separate frame and pointed in the opposite direction (see Figure 2, a and b). The damping system of the fortepiano was quite effective, especially in those Viennese instruments that used leather dampers for lightning-quick damping and damped even the highest strings. Therefore the sound decayed almost immediately after releasing. The English instruments had feather-duster dampers that sat slightly on the strings and damped only modestly, not quite hindering the after-vibration of the string, and producing a kind of 'halo' around the sound. Although the English late eighteenth-early nineteenth century pianos were

¹⁴ Wilhem Loetge, 'Andreas and Nannette Streicher', *Der Baer* (Jahrbuch von Breitkopf & Haertel), vol.4, 1927, pp.65-66, quoted in Komlós, *Fortepianos*, p.19.

¹⁵ Komlós, *Fortepianos*, p.19

known to be more sonorous and resonant than their Viennese counterparts, they were still far more modest in this regard than today's instruments.¹⁶

ii. Significant developments in the nineteenth century

During the nineteenth century, pianoforte manufacture changed dramatically. A constant demand for greater volume, more sustaining power and sturdier construction led to several developments which took place gradually throughout the century and remained throughout the twentieth. One major contributor to volume is string-mass. Early pianos had quite thin strings but during the nineteenth century piano manufacturers started using thicker and heavier strings. In Figure 5 we can see how the string-mass has developed: from 0.4mm, on a German instrument of 1785, to 0.9mm, which is a bit more than double the size, on present-day instruments.

Thicker strings however required stronger tension in order to maintain the same pitch. According to the laws of physics, pitch (f) is determined by the length of the string (L), the mass per unit length (m) and the tension according to the equation:

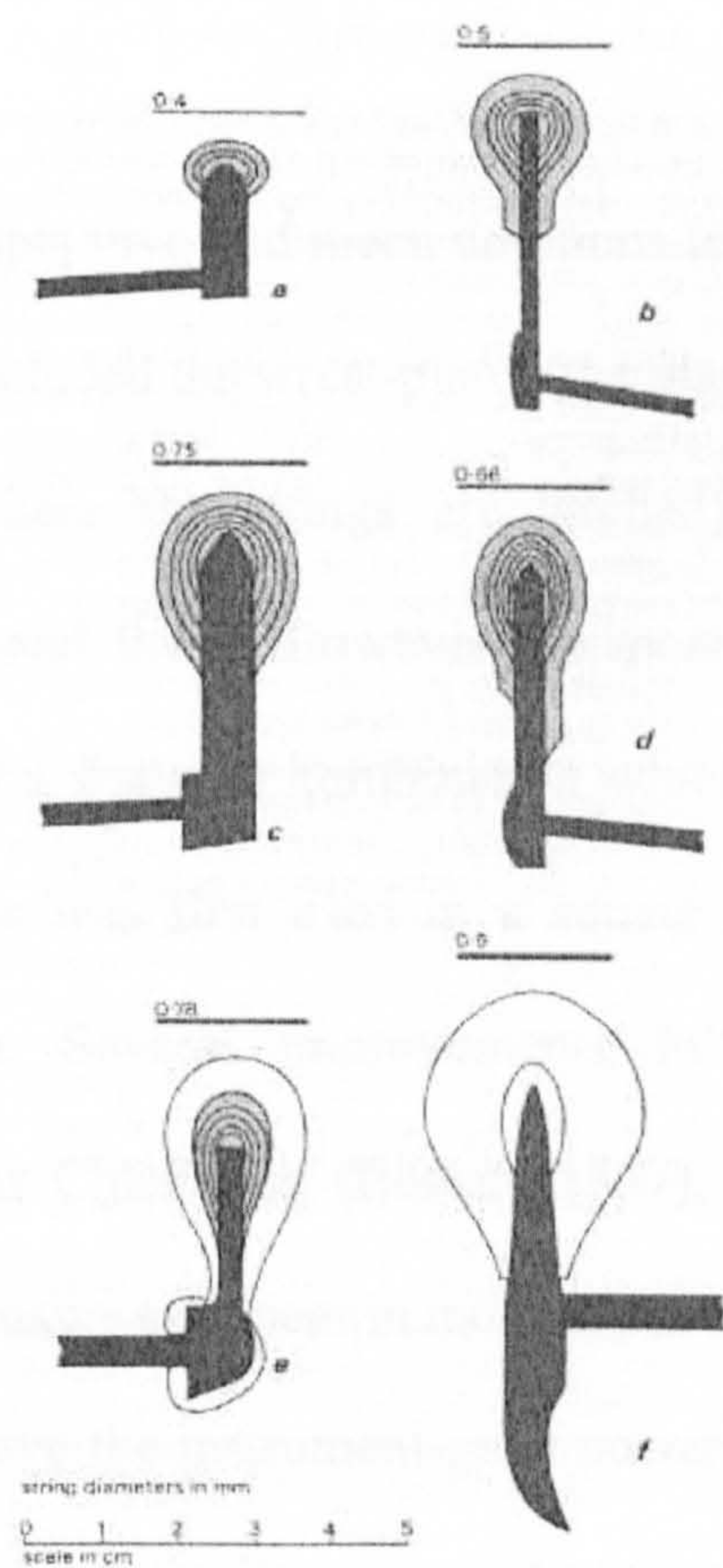
$$f = \frac{1}{2L} \sqrt{T/m}^{17}$$

Therefore, the heavier the string, the greater the tension has to be, bearing in mind practical restrictions on length. The wooden frames of the early pianos however, were unable to support the increasingly amounts of string tension required; therefore some solution had to be found.

¹⁶ For comprehensive information about early pianos see Michael Cole, *The Pianoforte in the Classical Era* (Oxford: Clarendon Press, 1998).

¹⁷ Bernard Richardson, 'The Acoustics of the Piano' in Rowland (ed.), *The Cambridge Companion to the Piano*, p.102; Harding, *The Piano-Forte*, p.185.

Fig. 5: Comparison between six piano hammers and strings (all sounding the note f¹), showing the gradual increase in mass of both as the instrument developed: (a) south German (Heilman), c.1785; (b) English (Broadwood), c.1806; (c) Viennese (Graf), c.1826; (d) English (Broadwood), c.1823; (e) French (Érard), c.1825, (f) American (Steinway) c.1970.¹⁸



The introduction of iron into the pianoforte’s construction was a revolutionary move for the development of the instrument. Early experiments introduced metallic bars to reinforce the wooden construction. The most significant addition, the compensation frame, was invented by James Thom and William Allen, two Englishmen, employees of William Stodart, and was patented in 1820.¹⁹ It consisted of several tubes, about an inch in diameter, and made from the same metal as the strings underneath: brass for the bass and steel for the treble. This prevented the strings going out of tune with

¹⁸ Philip Belt, ‘The Viennese Piano from 1800’, in Sadie (ed.), *The New Grove Musical Instrument’s Series; The Piano*, p.37.
¹⁹ Harding, *The Piano-Forte*, p.202.

changes in atmospheric temperature because the tubes expanded or contracted at the same rate as the strings. Érard patented the same design in 1822; so did Broadwood by 1823. Viennese makers were more conservative and remained faithful to wooden structures during the 1820s. Streicher and several others started using iron braces around 1835.²⁰

Several other attempts involved metal additions to strengthen vulnerable parts of the mechanism; these included the wrest-plank (the plank where the tuning pins are driven) and hitchpins (where the strings are hitched), and were introduced by Broadwood, Pleyel, Pape and Érard. However the most significant invention came from America: the cast-iron frame, a combination which united all metal additions into a single casting. This was first used in a square piano in 1825 by Alpheus Babcock of Philadelphia. Several improvements followed, by Conrad Meyer (Philadelphia, 1832), Jonas Chickering (Boston, 1837), and finally Steinway (New York, 1856), a firm that became a pioneer in modern pianoforte history.²¹

The metal frame gave the instrument great power and contributed not only to the stability of tuning but also to the improvement of tone quality and enhancement of volume, because the tension of the strings could now be as much as 20 tons;²² if this tension had been applied to an early instrument it would have probably destroyed it completely.

Heavier strings and greater string tensions had a natural consequence of larger and heavier hammers. The pea-sized hammer used in early pianos was no longer sufficient. (Comparison of the string diameters and hammer dimensions can be seen in the above Figure 5.) In addition, the hammer-covering material (deer skin or other

²⁰ Belt, 'The Viennese Piano from 1800', p.43.

²¹ For more detailed information about metal additions and cast-iron frame see Harding, *The Piano-Forte*, pp.198-213.

²² Dyson and Menhennick, 'Piano', p.1426.

types of leather were used in Germany/Vienna) was no longer adequate as it dried and hardened with age thus producing harsh and pinched tones. Several experimental materials, including woollen cloth over the layer of leather, were used (the former by the English), but it was the Parisian Henry Pape who introduced felt, which received a French patent in 1826 and continues to be used to the present day.²³ Felt was a much more durable material and produced a rounder tone. Several makers followed Pape's invention, initially applying felt as a final covering on top of several layers of leather, but it was Alfred Dolge in 1880s who finally applied a single thick layer of felt throughout the hammer.²⁴

Larger and heavier hammers, however, were not able to be supported by the rather delicate action of the early constructions. The main problem was note repetition. The Viennese and English actions described earlier had a single escapement formula, which allowed the hammer to fall back to its original position after hitting the string. This, however, meant that if the hammer was to be re-struck, the player had to lift the finger from the key before pressing it again.

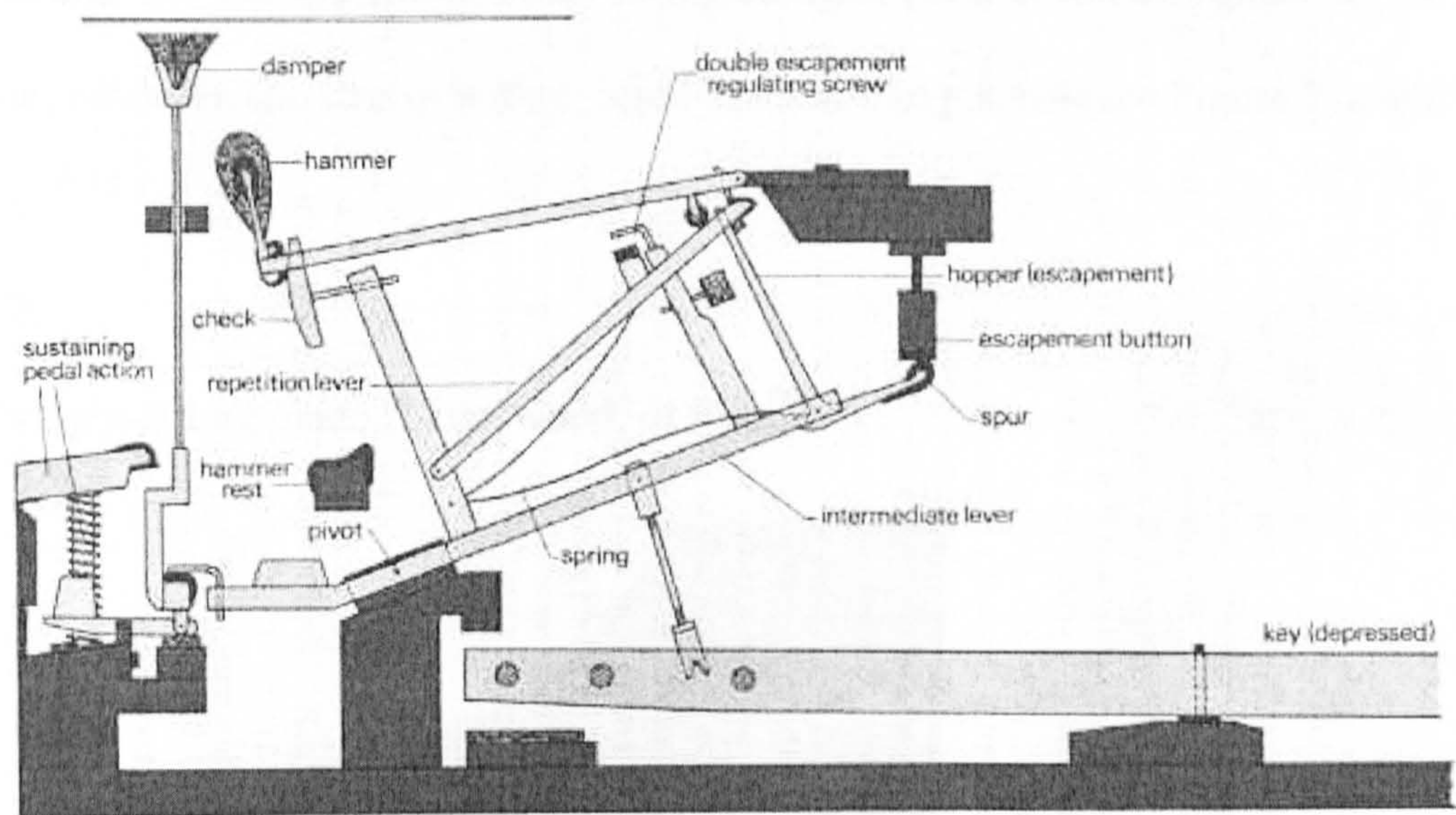
The solution was devised by Sebastian Érard, whose famous 'double-escapement action' was one of the instrument's greatest advances. Érard invented a formula (see Figure 6), based on the English-action model, where the hammer, after hitting the string, does not fall back all the way through, but stops in a distance of 10mm from the string. As the key is released, the hopper quickly re-engages under the hammer, so the key needs to be released a distance of only 5mm or less before it can strike again.²⁵

²³ David Grover, *A History of the Piano from 1789 to 1980*, http://www.uk-piano.org/history/d_grover.html (accessed on 05/01/04).

²⁴ Rowland, 'The Piano Since c.1825', p.45.

²⁵ Cole, *The Pianoforte*, p.279; a more detailed description of Érard's double-escapement action can be found in Ernest Closson, *History of the Piano* (London: Elek Books, 1974), p.136.

Fig. 6: Érard's double-escapement action after the English patent of 1822.²⁶



This type of action was a popular success as it added suppleness and sensitivity to the instrument and enabled players to execute fast trills and repeated notes softly with great facility. A famous pianist of the time, Ignaz Moscheles, writes of Érard's action: 'It consists in the key, when only sunk half way, again rising and repeating the note. I was the first to play upon one of the newly completed instruments and found it of priceless value for the repetition of notes.'²⁷

Érard's double escapement action was patented in 1822; it was adopted by most makers of the nineteenth century, and after several modifications and simplifications, most notably that of Herz in 1860, it remained the foundation of the

²⁶ Taken from Derek Adlam, 'England and France, 1800-1860', in Sadie (ed.), *The New Grove Musical Instruments Series; The Piano*, p.42.

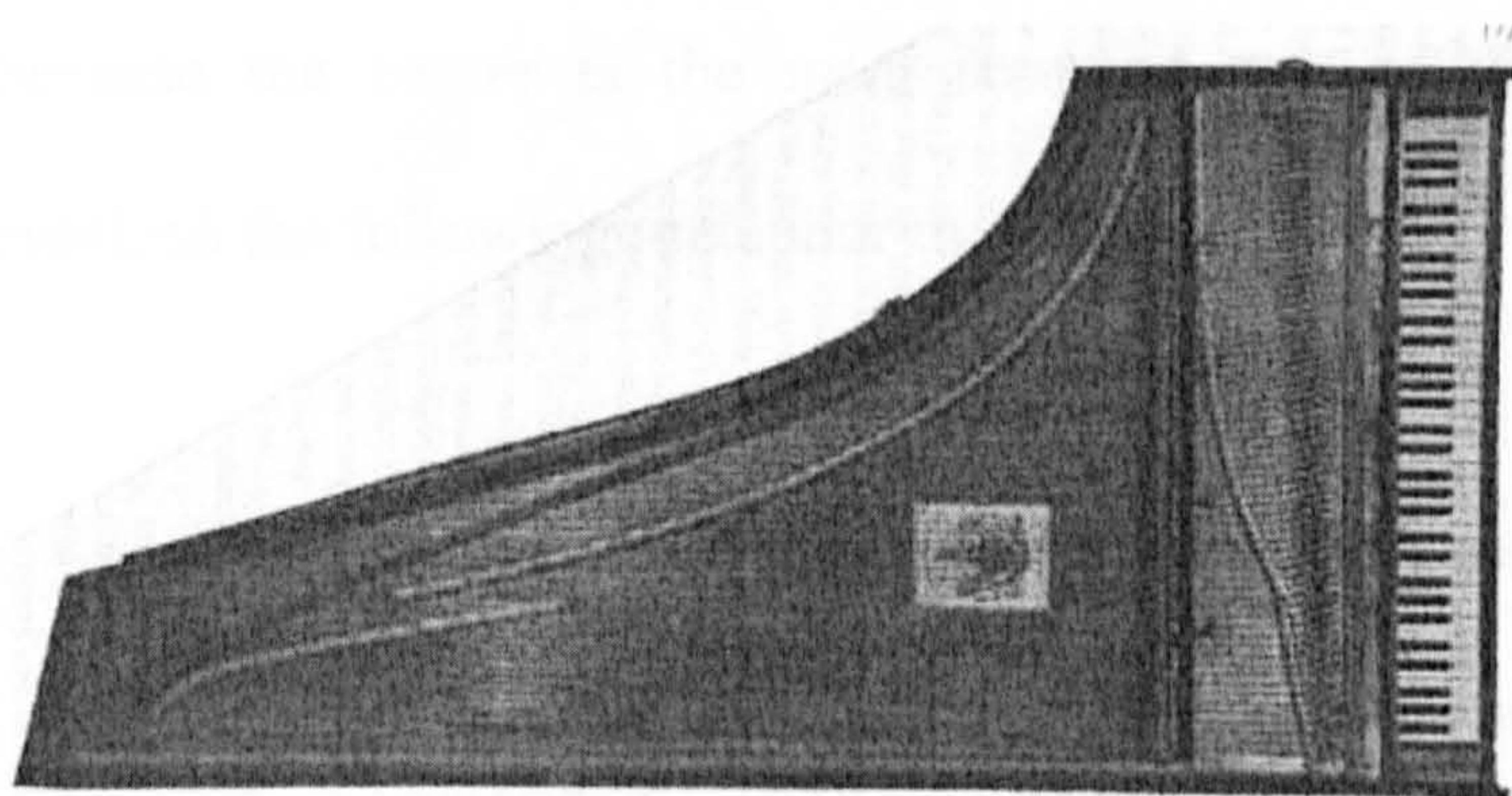
²⁷ Constance Moscheles, *Life of Moscheles by His Wife*, (London, 1873), pp.106-107, quoted in Harding, *The Piano-Forte*, p.159.

grand's action up to modern times.²⁸

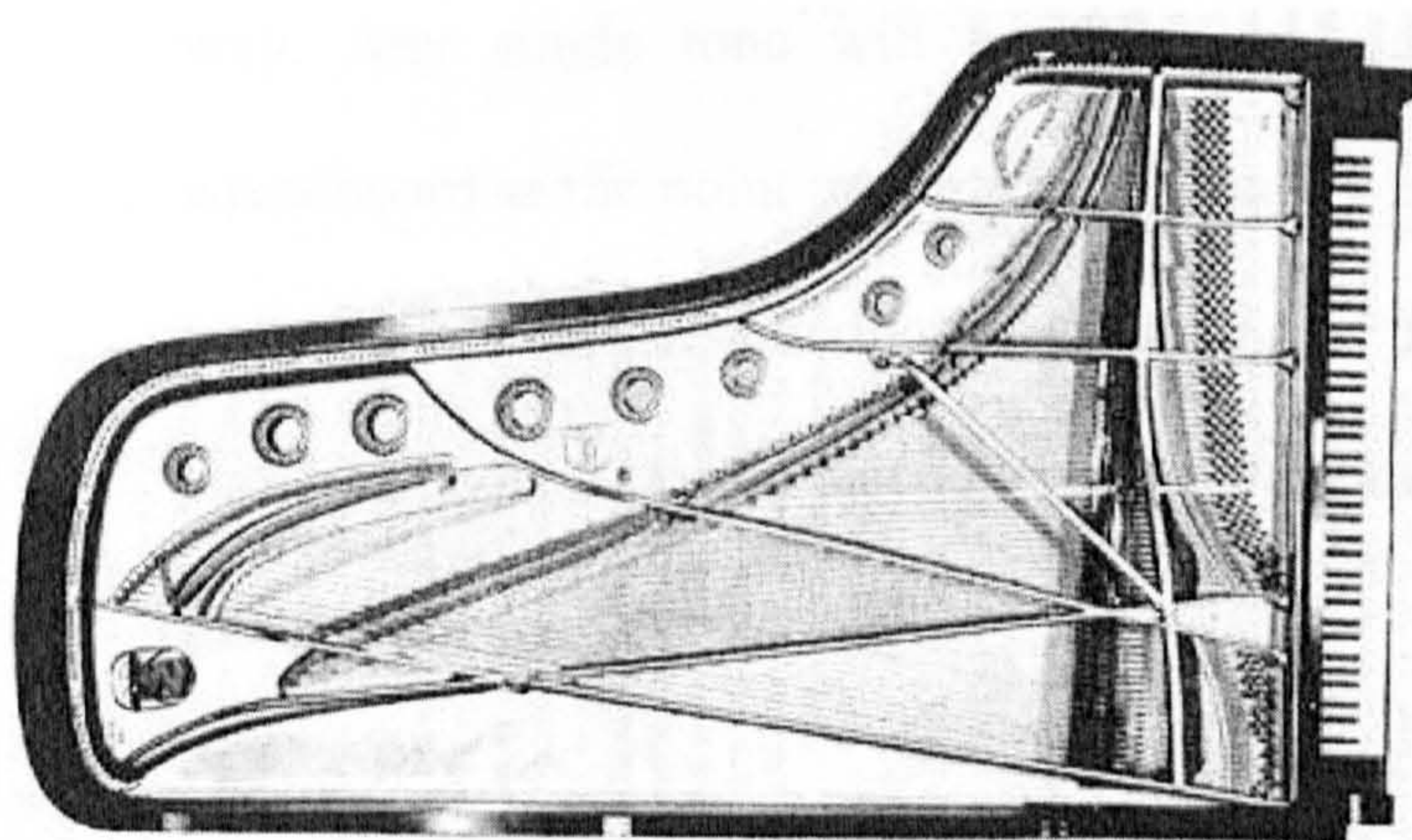
One further development which contributed fundamentally to the increased volume and sustaining power of the instrument was the modification of the layout of the strings. So far, the strings were strung straight, parallel to each other. In the new layout, however, the strings were crossed in a fan-like pattern (see Figure 7, a and b).

Fig.7:

a) Straight-strung piano (Broadwood, c1794)²⁹



b) Cross-strung piano (Steinway, c1990)³⁰



²⁸ David Grover, http://www.uk-piano.org/history/d_grover.html (accessed on 05/01/04).

²⁹ Conner, 'England and France to 1800', p.27.

³⁰ Cyril Erlich, '1860-1915', in Sadie (ed.), *The New Grove Musical Instruments Series; The Piano*, p.55.

Overstringing was first introduced by Henry Pape in 1828 who applied it to the upright piano. He placed the bass strings, which were longer, diagonally across the instrument merely for economy of space. The application of this design to grand pianos was made several years later by Steinway in 1859 and this method of stringing survives until the present day.³¹

The advantages of overstringing in grand pianos are several. The reason that this practice still survives is that, by moving the bridges of the bass strings towards the middle of the soundboard, a greater and much more sustained tone is achieved because the centre is the most resonant part of the soundboard. Robert Winter employs the following metaphor to describe it:

The reason [for overstringing] was to increase the piano's sustaining power, and the method was based on the trampoline principle. If you jump on a trampoline, the springiest, most responsive portion that the nearest the middle. You get less elasticity and lift near the rim. A soundboard works the same way. Any single tone will be fuller and last longer if it activates the soundboard at the point nearest the centre. By moving all the bridges as close to the middle of the soundboard as spacing of the strings permitted, Steinway and those who followed suit achieved a remarkably sustained sound that is the glory of the modern piano.³²

Technically speaking, the outer parts of the piano's soundboard are indeed more inflexible and therefore less reverberant due to the fact that those are the points where

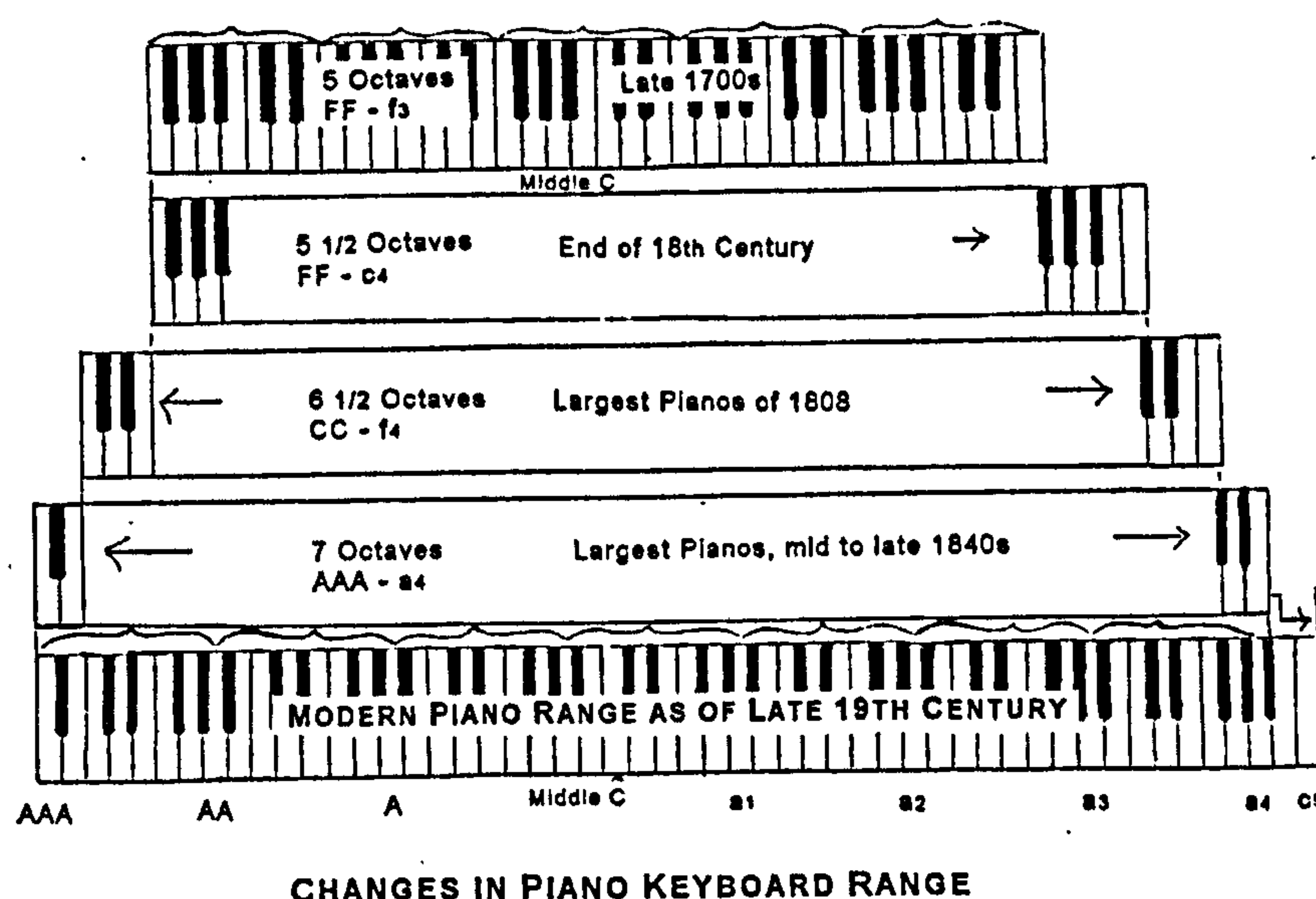
³¹ Rowland, 'The Piano Since c.1825', p.44.

³² Robert Winter, 'Orthodoxies, Paradoxes, and Contradictions: Performance Practices in Nineteenth Century Piano Music', in Larry Todd (ed.), *Nineteenth Century Piano Music* (New York: Schirmer Books, 1990), pp.37-38.

the soundboard is actually attached to the iron frame.

A natural consequence of nineteenth-century tendencies for 'expansion' was the extension of the keyboard's compass. As mentioned earlier, a typical fortepiano in Mozart's time had five octaves ranging from FF to f3. Since then the compass has expanded gradually (see Figure 8).

Fig. 8: Keyboard compass³³



During the latter part of the century Broadwood under Dussek's initiatives, extended the range considerably, to five-and-a-half (FF-c3) and later, six octaves (CC-c3).³⁴ One of the reasons for this expansion was the increasing popularity of duets as well as the interest for piano arrangements of famous orchestral works that required a greater compass.³⁵ By the 1830s the standard range of pianos followed by most makers was six-and-a-half octaves, and by the middle of the century, seven, some

³³ Taken from <http://www.ashburnham.org/Frederickcollection/keyboards.htm> (accessed on 08/01/04).

³⁴ Komlós, *Fortepianos*, p.20.

³⁵ Rosenblum, *Performance Practices*, pp.33-34.

ranging from AAA to a₄ and others from GGG to g₄.³⁶ By the 1870s the seven-and-a-quarter-octave range (AAA- c₅) had arrived and has remained typical for concert grand pianos. In 1908, however, Bösendorfer expanded the compass even more in the bass from FFF to c₅, and in 1969 introduced the eight-octave Imperial Concert Grand (CCC-c₅).³⁷

iii. The effects of these developments on touch and tone

Anyone who has played on both early and modern piano must have immediately appreciated the difference between the touch of these instruments, and the difficulty of adjusting from the modern instrument to the early one; in Alfred Brendel's words, it is like using a furniture mover to do a watchmaker's job.³⁸

The average key dip of a late-eighteenth century Viennese fortepiano is about 5-6 mm. Although the English is a bit deeper (around 7mm), it is still much more shallow than the standard modern grand which is 10 mm.³⁹ Key-dip is closely linked with the distance between the hammer in its rest position and the point where it actually hits the strings. This distance is about 34mm on a late-18th century instrument and about 48 on the modern.⁴⁰

The weight of the keys also differs, depending on dimensions, type of action and weight of the action parts being moved by the key. Since the keys of the modern piano have greater dimensions, double-escapement action and heavier hammers, as described earlier, they also have a heavier touch. Hence, the key-weight (in the middle

³⁶ Rowland, 'The Piano Since c.1850', p.46.

³⁷ Barrie Heaton, *Pianos, Harpsichords and Keyboard Compass*, <http://www.uk-piano.org/history/compass.html> (accessed on 08/01/04).

³⁸ Brendel, p.17.

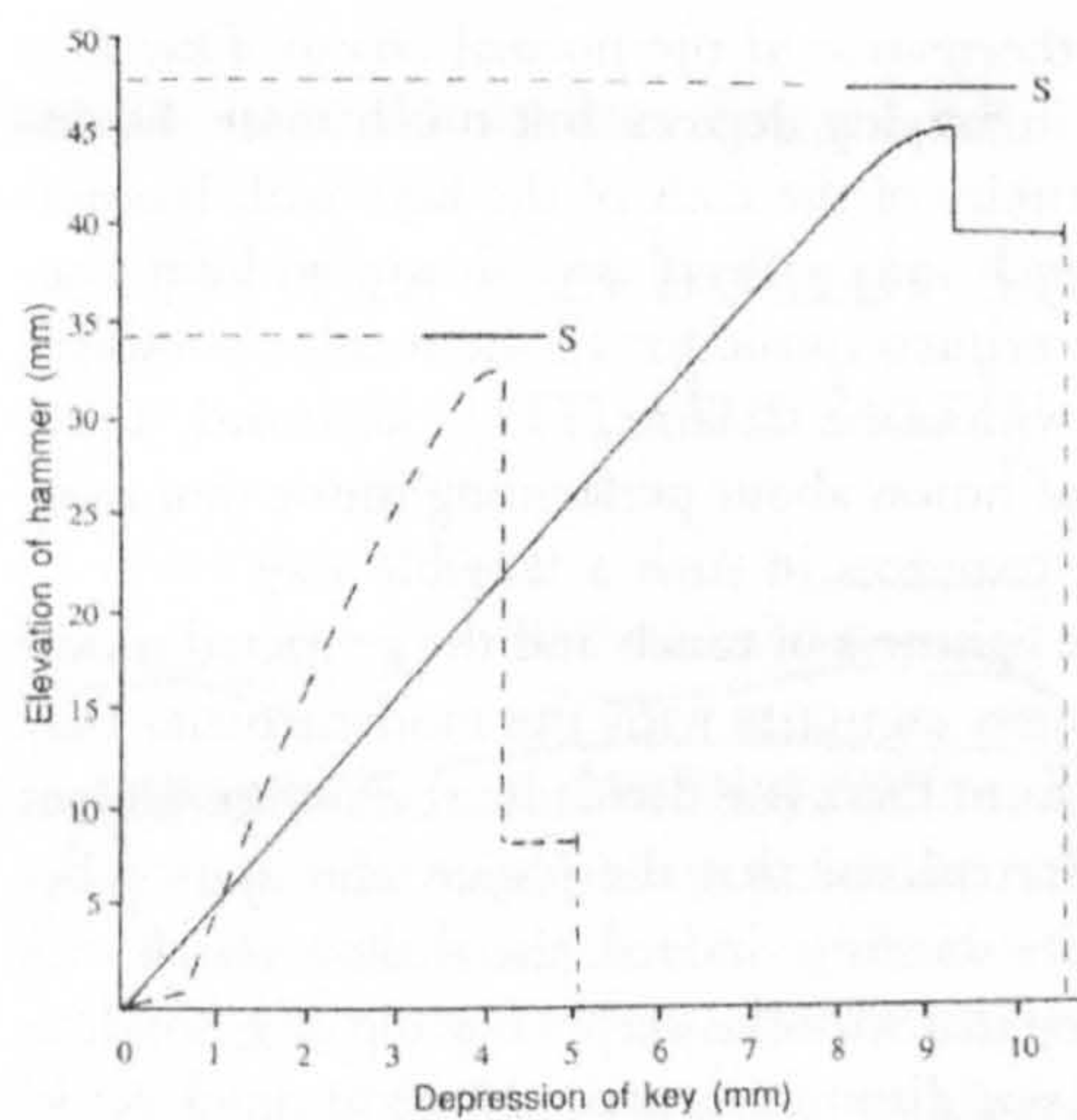
³⁹ Measurements are taken from Cole, *The Pianoforte*, p.301.

⁴⁰ Ibid, p.294.

register) of a Walter instrument c.1795 is around 36mgs, as opposed to 92mgs for a c.1990 Steinway grand.⁴¹

Another significant area of difference between instruments, as far as touch is concerned, is the effort/result ratio, that is, the speed of the hammer's elevation in relation to the key's depression by the player. This measurement is called the 'velocity ratio' and, in this case, is defined as the displacement of the hammerhead per unit displacement of the finger on the key during the hammer's rise towards the string. Michael Cole, a well-known present-day fortepiano maker, measured and compared the velocity ratios of a Walter and a modern Steinway piano and his study revealed some interesting results (see Figure 9). From this diagram we can clearly see that modern pianos, with their double-escapement actions and relatively heavy hammers, as described earlier, react more slowly than their Viennese counterparts with *Prellmechanik* action and lighter hammers.

Fig. 9: Hammer response of Walter piano of c.1795 (broken line) compared with a Steinway grand of 1990 (continuous line). The key dip, shown on the horizontal axis, is for the Walter instrument just over 5 mm, and for the Steinway 10½ mm. The hammer stroke, shown on the vertical axis, is for the Walter instrument about 34 mm, and for the Steinway 48 mm. The velocity ratio, indicated by the gradient, is for the Walter 11:1, for the Steinway 5:1.⁴²



⁴¹ Ibid, p.301; the exact method of the measuring process is described in detail on p.304.

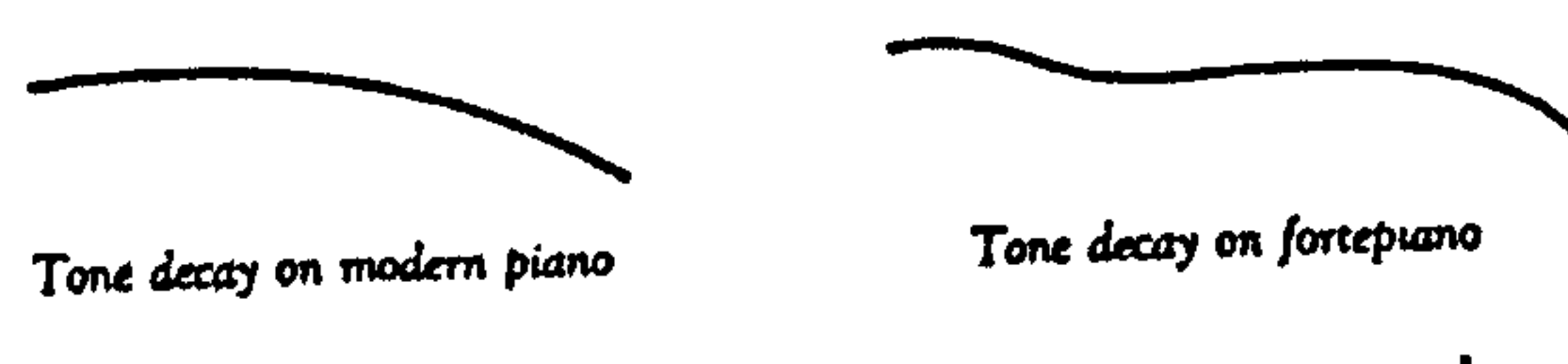
⁴² Ibid, p.294.

All the developments undergone by the piano during the nineteenth century had a great impact on the instrument's tone production, not only in terms of dynamic volume and sustaining power, but also in timbre-relationships between registers.

Late eighteenth to early nineteenth-century fortepianos, due to their wooden, lightly-constructed soundboards, thin and low tensioned strings and light and small hammers, produced a relatively weak sound with a rather limited dynamic scope. A full-scale sound on the fortepiano is comparable only with an average sound on the modern instrument. This latter, with its iron-framed, strong soundboard, thick high-tensioned strings, heavy and large hammers, is capable of producing a vast sound dynamic palette ranging from the softest *pp* to the most extreme *fff*.

Sustaining power is also less on the fortepiano, due to the reasons mentioned above, plus the efficiency of the leather dampers and the leather-covered hammers. Leather is a material with a relatively hard surface, causing a light, dry, clear, incisive, rapidly diminishing sound. In contrast, the tone of the modern piano with its powerful construction, plus its felt-covered hammers, can be described as a more round, fleshy, prolonged, sustained and slowly-diminishing, with more *legato* and *cantabile* qualities. Richard Troeger gives a simplistic but rather to-the-point graphic impression of the two instruments' tone decay (see Figure 10).

Fig. 10: Tone decay⁴³



The effect of the sustaining pedal also varies between the two instruments.

⁴³ Troeger, 'Mozart's Piano', p.20.

The principle of the sustaining pedal is that, as the dampers are raised, the strings vibrate sympathetically and therefore a sound resonance is achieved. On the fortepiano, this effect is less pronounced, and therefore the stroked strings still have the principal role while the sympathetically vibrating strings sound in the background. On the modern piano, however, due to its increased number of strings owing to expanded compass and triple stringing, as well as the strings' own thickness and tension, when the dampers are raised, a 'swollen', thick and blended sound is generated.

The different manner of stringing on the early and the modern piano also has a great impact on the timbre-relationships of registers. As described earlier, the fortepiano is straight-strung, which means that its strings are hitched on the middle as well as the outer parts of the soundboard (see Figure 7, a and b). Also, different parts of the soundboard have different vibrating capabilities. As a result, the strings of the bass-middle-treble registers have a different quality of sound from each other. On the modern instrument, where the strings are hitched as near to the centre of the soundboard as possible, the quality of sound between different registers is more even and homogenized.

iv. The modern instrument

The modern piano underwent several radical 'improvements' during the nineteenth century following which there has not been any significant change in its construction, except for the invention of the sostenuto pedal, a selective sustaining mechanism now eagerly exploited by contemporary composers, and (perhaps less significant) the fourth pedal (*dolce* pedal), a mechanism already employed on the upright piano that

reduces the hammer and key movement, and therefore enables a softer sound without change of timbre. This fourth pedal is still quite rare though.

However, the modern instrument has received many criticisms, especially during the latter part of the twentieth century, when an increased interest in ‘authenticity’ arose. Many contemporary scholars and performers have expressed their concerns about the fact that, in aiming for a fuller and more sustained sound, the pianoforte lost several of its predecessor’s qualities, essential for the music that was written expressly for it.

Malcolm Bilson has repeatedly expressed his concerns, stating that early pianos were ‘marvels of art and engineering, as suited to what they were designed and understood to do’ and that the music of Beethoven ‘is not better served by the Steinway model than by the instruments he [Beethoven] knew’.⁴⁴ And on another occasion, although admitting the ‘limitations’ of early instruments, he has stated that ‘the limitations of today’s pianos compromise Beethoven’s visions to a very large degree’.⁴⁵

Concerning tone, Paul and Eva Badura-Skoda define the sound of early pianos as translucent, sharply-defined, silvery and rich in overtones. While they admit that the modern instrument has a fuller and louder tone they also describe it as ‘darker’ and ‘duller’,⁴⁶ ‘intrinsically indifferent’ and ‘characterless’.⁴⁷ Thomas Wendel is more critical, describing the modern piano as ‘seemingly puffed-up’, with ‘upholstered fulsomeness’.⁴⁸

Regarding the dynamic capabilities, although Richard Toeger admits that the

⁴⁴ Bilson, ‘Period Drama’, p.13.

⁴⁵ Bilson, ‘Beethoven and the Piano’, p.18.

⁴⁶ Badura-Skoda, *Interpreting Mozart on the Keyboard*, p.8

⁴⁷ Ibid, p.16.

⁴⁸ Thomas Wendel, ‘Beethoven Recordings on the Fortepiano’, *The Beethoven Newsletter*, vol.1 (1986), p.10.

modern instrument has a greater range than the early piano, he insists that ‘the effect of dynamic contrast is much greater than if the same levels were transferred to the modern piano’⁴⁹ and Joseph Kerman claims – rather exaggeratedly – that ‘it is almost impossible to play Mozart emotionally on the modern piano without sounding vulgar’.⁵⁰

Concerning the sustaining power of the modern overstrung instruments, Curt Sachs avers in 1940 that present day instruments are ‘lacking in transparency, [sic] and certain full chords that composers of the beginning of the nineteenth century have written in the basses cannot be played on the modern piano without causing confusion’.⁵¹ The sustaining power of the bass notes is also criticised by Malcolm Bilson who said that the bass ‘becomes muddy and virtually useless for clear passage work’,⁵² and according to Martin Hughes, clarity of texture and brightness of attack ‘are more easily attainable on the fortepiano than on the modern instrument’.⁵³

Several critics claim that the creation of homogenized sounds, due to overstringing in modern grands, means that these sounds lose their individuality. Robert Winter, continuing his trampoline metaphor mentioned earlier, states:

Imagine a trampoline with many persons jumping on it. If all of them try to jump in the centre, the profile of any single jumper becomes blurred. On the piano where many tones sound at once, the distinctiveness of individual tones is the trade-off for sustaining power. On straight-strung instruments the sound

⁴⁹ Richard Troeger, ‘Mozart’s Piano’, p.19.

⁵⁰ Quoted in Wendel, ‘Beethoven Recordings’, p.10.

⁵¹ Curt Sachs, *The History of Musical Instruments* (New York: W.W.Norton & Co, Inc., 1940) p.397; quoted in John Golightly, *The Piano Between 1800 and 1850: The Instruments for which the Composers Wrote* (DMA diss, Ohio State University, 1980) p.23.

⁵² Bilson, ‘Beethoven and the Piano’, p.20.

⁵³ Martin Hughes, ‘Beethoven’s Piano Music’, in Robin Stowell (ed), *Performing Beethoven* (Cambridge: Cambridge University Press, 1994), pp.231-232.

is distributed more equally across the entire soundboard.⁵⁴

Thomas Wendel, after quoting Wilfrid Mellers who stated that ‘variety of timbre stimulates the aural imagination’, describes the fortepiano’s registration as ‘reedy in the bass to flute-like in the soprano’.⁵⁵

Finally, the modern piano’s double escapement is often criticised as complex, leaving the fingers ‘with no sense of striking the keys,’ while the Viennese *Prellmechanik* is ‘far more rapid and responsive’ where ‘everything that happens to the hammer is felt by the finger itself’.⁵⁶

Although the claim made by fortepiano enthusiasts and early music specialists may be coloured by their strong allegiance to historical instruments, no pianist who performs eighteenth-century music on the concert grand should ignore them entirely. In later parts of this dissertation, several problems concerning performance of the music of the late eighteenth/early nineteenth century on twentieth-century instruments will be discussed and evaluated, and some possible solutions will be proposed.

⁵⁴ Rober Winter, ‘Orthodoxies, Paradoxies, and Contradictions: Performance Practices in Nineteenth Century Piano Music’, pp.37-38.

⁵⁵ Wendel, ‘Beethoven Recordings’, p.10.

⁵⁶ Troeger, ‘Mozart’s Piano’, p.21; Walter Pfeiffer, *The Piano Hammer*, translated by J. Engelhardt, (Frankfurt: Verlag das Musikinstrument, 1978) p.25; quoted in Golightly, *The Piano*, p.48.

Chapter 2: Composers, their instruments and sound aesthetics

in the Classical era

This chapter examines the link between the music of the Classical era and the sound aesthetic of the time. It therefore, of course, must examine the evidence presented by the instruments themselves. A considerable amount is known about the instruments possessed by the major composers of the period.

i. Composers and their instruments: Haydn, Mozart, Clementi and Beethoven

Although it is not clear as to which instruments Haydn had in mind for his keyboard works, it is believed that his early works were almost certainly composed for the harpsichord. The first work indicating a variety of dynamic markings (*f*, *p*, *fz*, *fp*) which might possibly suggest the use of fortepiano, is his Sonata Hob. XVI:20, composed in 1771.¹ However, it was not until the 1780s and especially the late 1780s when he composed keyboard works solely for the fortepiano.² The first clear evidence of Haydn owning such an instrument comes from his letter to Artaria (his editor) asking them to pay the instrument-maker Wendel Schanz thirty-one ducats, because ‘in order to compose your 3 pianoforte Sonatas particularly well, I had to buy a new fortepiano’.³

Unfortunately none of Haydn’s pianos are still in existence. Nevertheless, it has been reported that he had also acquired a fortepiano by the English maker

¹ Joseph Haydn, *Haydn Sämtliche Klaviersonaten*, vol.2, edited by Christa Landon (Wien: Wiener Urtext Edition, 1973), Preface, p.xiii.; James Webster, ‘Haydn, Joseph’, *The New Grove Dictionary of Music and Musicians*, vol.11 (London: Macmillan, 2001), p.203.

² Webster, ‘Haydn’, p.203.

³ Robbins Landon (ed.), *The Collected Correspondence and London Notebooks of Josef Haydn* (London: Barrie & Rockliff, 1959), p.79.

Longman & Broderip during the 1790s, and one by Érard in 1801, and that he also possessed a small 'Klavier' (which must have been either a square piano or a clavichord).⁴ However, his favourite instrument, and probably the one that must have been in mind while composing most of his fortepiano works was his Viennese Schanz.⁵ He praises Schanz's instruments in his correspondence with Marianne von Genzinger, stating:

I should like Your Grace to try one made by Schanz; his fortepianos are particularly light in touch and the mechanism very agreeable. A good fortepiano is absolutely necessary for Your Grace, and my Sonata will gain double its effect by it.⁶

Haydn was attached to his Schanz up until the end of his life; at old age, he taught on that instrument and refused to let it be removed from his study until his doctor had suggested doing so, in 1803.⁷

At the beginning of his career, Mozart was almost certainly acquainted with harpsichords and clavichords, since they were the only instruments available in Austria and South Germany around the 1760s. Although most of his keyboard works were written for the fortepiano, some of the early concertos (KV175, KV238, KV242, KV246) and some sets of variations (such as KV179) were most probably designed

⁴ László Somfai, *The Keyboard Sonatas of Josef Haydn: Instruments and Performance Practice, Genres and Styles* (Chicago & London: The University of Chicago Press, 1995), pp.20-21.

⁵ Bernard Harrison, *Haydn's Keyboard Music: Studies in Performance Practice* (Oxford: Clarendon Press, 1997), p.11.

⁶ Robbins Landon (ed.), *The Collected Correspondence and London Notebooks of Josef Haydn*, p.107.

⁷ Somfai, *Keyboard Sonatas*, p.20.

for the harpsichord.⁸ One of Mozart's early contacts with the fortepiano took place in winter of 1774-5 where he played on an 'excellent fortepiano' in the house of 'Mr Albert' in Munich.⁹

The instrument that he certainly composed most of his keyboard works on was a fortepiano made by the Viennese maker, Anton Walter, which he acquired during 1782 once he settled in Vienna. It was one of Walter's early pianos; as Michael Latham states, 'not all the surviving pianos by Walter are suited to Mozart's music',¹⁰.

During the last decade of the eighteenth century, pianoforte manufacturing in Vienna underwent several radical modifications due to the constant demand for more volume and Anton Walter was a leading light in this respect. Mozart's 1782 piano, now situated in the Mozart-Geburtshaus in Salzburg, is a five-octave instrument ranging from FF to f³. It has two knee-levers to operate the dampers; the left one is only for those dampers in the treble. In the case above the keyboard there is also a knob-operated moderator. In addition, Mozart had his piano equipped with a pedalboard underneath (see Figure 11).

This pedalboard, which derived from the organ, had an independent action and strings, is used primarily to expand the keyboard's compass in the bass. Its lowest note is the lowest C on the modern grand, and its compass was two octaves. Mozart frequently used the pedalboard in his performances and in his compositions; for example in Concerto in D minor KV466, I, bb.88-91. Unfortunately, this cannot be simulated on a modern grand piano though the range can of course be

⁸ Rowland, 'Pianos and Pianists c.1770- c.1825', p.27.

⁹ Ibid, p.27.

¹⁰ Michel Latham, 'Mozart and the Pianos of Anton Walter', *Early Music*, vol.25 (Aug.1997), p.383.

accommodated.¹¹

Fig. 11: Reconstruction by R. Maunder of Mozart's Walter piano with pedalboard ¹²



Muzio Clementi is considered to be the father of the pianoforte. Many contemporary sources labelled him ‘the venerable father of modern pianoforte music’ and even ‘the founder of the pianoforte school’.¹³ However, he did not perform on the pianoforte in public before 1780. Meanwhile, Mozart and J. C. Bach had already started playing the pianoforte in the previous decade. Clementi who began purely as a harpsichordist, was completely converted to the pianoforte during the mid-1780s, while he was in his 30s. His first works solely for this instrument were op.7, 8 and 9. Although he was an Italian native his prolonged stay in England influenced him to favour the English-action pianos over the Viennese. In fact, he became a piano manufacturer, and his firm, one of the leading brands in England.

¹¹ Badura-Skoda, *Interpreting Mozart on the Keyboard*, pp.13-14. The authors also give several examples in Mozart's works where a player could consider augmenting the bass, having in mind Mozart's pedalboard.

¹² Taken from Rowland, ‘Pianos and Pianists c.1770- c.1825’, p.28.

¹³ The former appellation was given by the *Quarterly Musical Magazine* in 1828, and the latter by the critic William Gardiner, in 1838; see Leon Plantinga, *Clementi, his Life and Music* (London: Oxford University Press, 1977), p.292.

Clementi's pianos were normally six-octave instruments, ranging from CC to c⁴ instead of the FF to f⁴ range of the Viennese instruments, a fact which is clearly indicated in his *Didone Abbandonata* Sonata, which never goes above top C.¹⁴ In a constant pursuit for more volume, Clementi introduced a new device in his pianos, called 'harmonic swell' – actually a patent of his business partner, William Frederick Collard – which employs a set of high-pitched strings that sympathetically vibrate with the hammer-struck strings, amplifying the volume and enhancing the resonance without causing muddiness (see Figure 12).¹⁵

Fig. 12: Piano by Clementi & Company, c.1821¹⁶



Clementi's pianos had three or four pedals, with the optional fourth being a mechanism to lock the others in place. The left pedal moved the keyboard to a *due corde* position, the middle was the damper pedal, and the right was the 'harmonic

¹⁴ Richard Burnett, 'Muzio Clementi: Pianist, Composer and Piano Maker', *The Organ Yearbook*, vol.23 (1992-93), p.100.

¹⁵ Margaret Cranmer-Peter Jones, 'Clementi' *The New Grove Dictionary of Music Online*, ed. L. Macy, <http://www.grovemusic.com> (accessed on 08/07/02).

¹⁶ Taken from www.finchcocks.co.uk/instruments/clem1821.htm (accessed on 29/02/04).

swell' pedal. With the left pedal locked in *due corde* position and by using the sustaining pedal and the 'harmonic swell', in Clementi's words, 'a most harmonious and atmospheric effect can be produced.'¹⁷

Beethoven was never quite satisfied with the pianos of his time. Although he possessed a number during his life, hardly any entirely fulfilled his sound ideals. While in his early years he worked with both the clavichord and the harpsichord, it was the pianoforte that dominated his life. One of the first that we know he possessed was one by the same maker as Mozart's, Anton Walter; Beethoven wrote his early compositions on it. When Czerny first played for Beethoven, in about 1801, he found this Walter piano in his house and called it 'the best (piano) at that time'.¹⁸ Unfortunately, as far as we know, this piano no longer exists.

In 1803 Beethoven received as a gift a pianoforte by the famous French maker Sebastian Érard; however, from the start, he was not completely satisfied with it, principally because of its heavy action. In a letter to Streicher in 1810 requesting a new piano, he wrote: 'As for my French piano, which is certainly quite useless now, I still have misgivings about selling it, for it is really a souvenir such as no one here has so far honored me with'.¹⁹ This piano is now housed in the Kunsthistorisches Museum in Vienna (see Figure 13).

Beethoven's next piano from abroad (1818) was another English-action instrument – given to him by the maker John Broadwood – now in the National Museum in Budapest. The next extant instrument (1826), now in the Beethovenhaus in Bonn, is one by Conrad Graf. This was tailor-made for Beethoven, with his serious

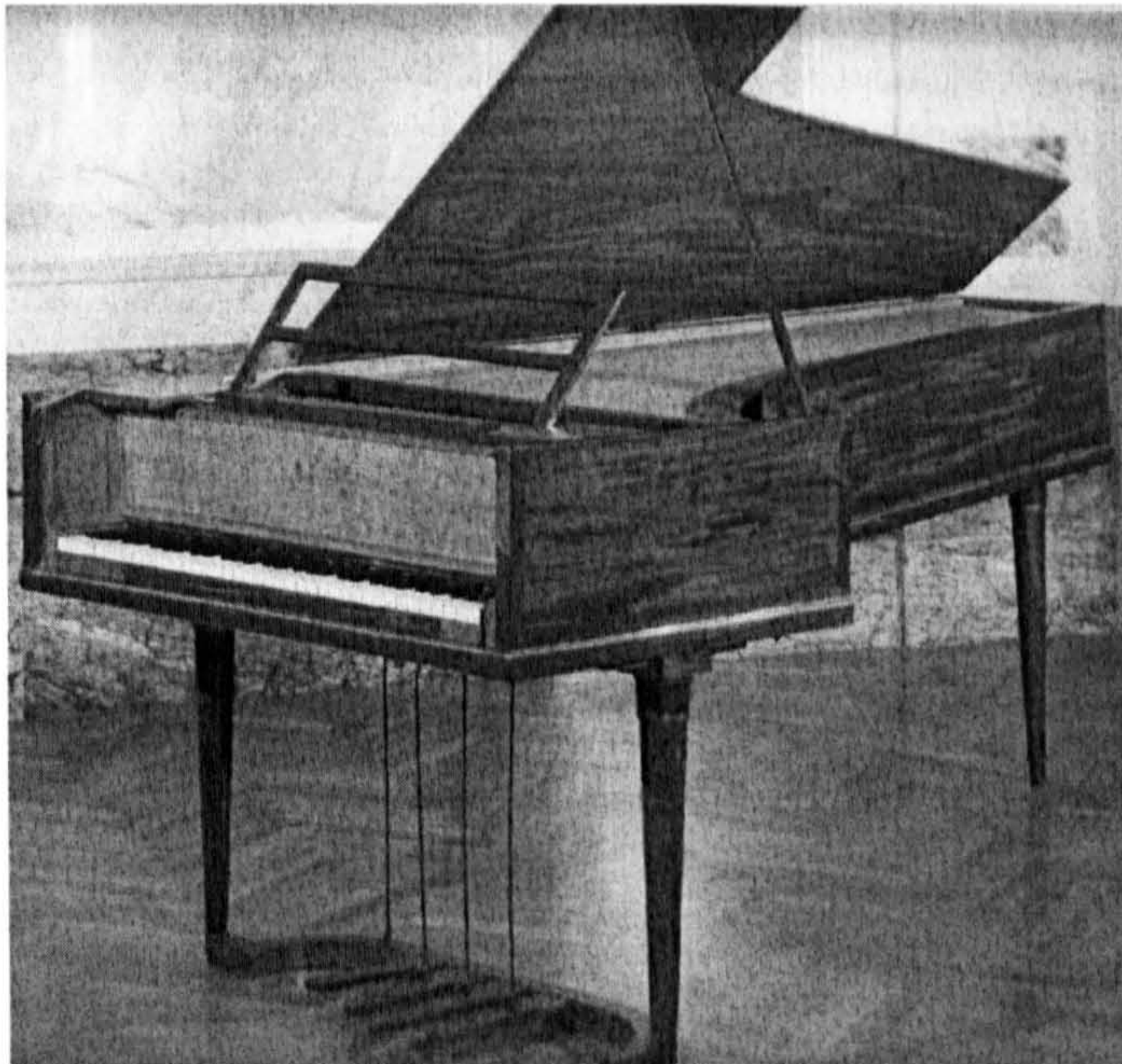
¹⁷ Burnett, 'Muzio Clementi', p.102.

¹⁸ William Newman, *Beethoven on Beethoven: Playing His Piano Music His Way* (London: Norton, 1988), p.51.

¹⁹ Emily Anderson (ed.), *The Letters of Beethoven*, vol.1 (New York: Norton, 1985), p.300.

hearing problems, with quadruple stringing on the treble and triple stringing on the bass.²⁰

Fig. 13: Beethoven's Érard piano, c.1803²¹



Although many scholars have stated that Beethoven preferred his Broadwood to the Viennese instruments, William Newman has demonstrated that Beethoven's preference was for those instruments made by the Viennese Stein-Streicher family.²² However, out of the fourteen instruments that have been associated with Beethoven, he was never fully satisfied with any of them. Comments such as 'the inadequacy of the grand piano, on which, in its present state, one could not play with strength and effectiveness' were often made.²³

²⁰ Deborah Wythe, 'The Pianos of Conrad Graf', *Early Music*, vol.12 (Nov.1984), p.457.

²¹ Taken from http://www.physics.usyd.edu.au/~simonj/lvb/piano_sonatas.html (accessed on 29/02/04).

²² Newman, *Beethoven on Beethoven*, pp.45-82.

²³ Rosenblum, *Performance Practices*, p.52.

Although the instruments Haydn, Mozart, Clementi and Beethoven owned were quite different from each other, given that each maker was experimenting with different manufacturing techniques, they had some common features (described earlier in this chapter) regarding touch, tone, sound production, sustaining power and timbre relationships that differentiate them from the concert grand piano we know today. These pianos and their capabilities (*pace* Beethoven) reflected contemporary sound ideals and perceptions, and thus compositional concerns such as articulation, dynamics, pedalling, etc., issues that will be discussed later on in this dissertation.

ii. Sound-perceptions in this era

Before exploring other aspects of performance practice in the Classical era, it is important to examine the way sound was generally perceived at that time: the ideal tone of the fortepiano, what kind of resonance the sound produces, and the relationship of all the above with the pianoforte itself.

For the Viennese maker, Johann Andreas Streicher, lightness and precision were among his sound ideals and he advised that, ‘If the tone of the fortepiano is both to move and please the listener, it should as much as possible resemble the sound of the best wind instruments.’²⁴ His special preference was the resemblance of the flute’s sound (*‘flötenartig’*).²⁵ The ‘flute’ character of the fortepiano’s sound was also mentioned in Johann Nikolaus Forkel’s *Musicalisches Almanach für Deutschland*, where he praised the tone of Count Brühl’s instruments:

He found, after he had various pianofortes made under his supervision, that

²⁴ Richard Fuller, ‘Andreas Streicher’s notes on the fortepiano’, *Early Music*, vol.12 (Nov.1984), p.463.

²⁵ Komlós, *Fortepianos*, p.26.

one can produce a softer and more harmonious tone from blued strings. He therefore had pianofortes strung in this manner, and, instead of the harsh and stifled tone, which it used to have, especially in the treble, the instrument acquired a pleasant, flute-like tone.²⁶

Streicher emphasises the role of 'light' touch in order to achieve a beautiful 'silver tone' in contrast to the 'iron tone' produced by overplaying. In his *Notes on the Fortepiano*, he surmises why pianists often fall into this trap: they are not in close contact with their soundboards, as other instrumentalists are, and therefore not in close command of their sound. The soundboard 'carries away' the sound directly to the audience, thus the player is only aware of part of the sound s/he is producing.

As we have two poles of pianoforte manufacturing during the eighteenth and early nineteenth centuries, in the same way we have two different aesthetics of the 'ideal' tone and sound resonance. Streicher clearly specifies those two different approaches to sound in the beginning of his chapter, 'On Tone':

It is very difficult, if not impossible, to agree upon what constitutes a really beautiful instrumental tone since everyone has a more or less different idea about it. For this reason, some prefer a *sharp, cutting or shrill* tone; others on the contrary, prefer a *full, well rounded* tone.²⁷

It is quite obvious here that the 'sharp, shrill' tone was preferred by the advocates of the Viennese/German tradition and the 'full, well rounded' tone, by the English/French one.

²⁶ Johann Nicolaus Forkel, *Musikalisches Almanach für Deutschland* (Leipzig, 1782), p.16, quoted in: Cole, p.347.

²⁷ Fuller, 'Andreas Streicher's notes on the fortepiano', p.463.

Milchmeyer emphasizes the importance of good damping as a significant factor in choosing an instrument:

[O]ne turns to the dampers, and tries whether all the notes, including especially the lowest bass notes, are damped well. . . . One also must give close attention whether the tone stops quickly, [so that it] does not leave a certain unpleasant reverberation or buzz.²⁸

The efficient damping of the fortepiano was praised by Mozart in the famous letter of 17 October 1777 where he stated how much he preferred Stein's instruments because of their efficient damping system. In the same letter he mentions how well his Sonata KV284 is suited to these instruments:

The last [Sonata], in D, sounds exquisite on Stein's pianoforte. The device to which you work with your knee is better on this than on other instruments. I have only to touch it and it works; and when you shift the knee the slightest bit, you do not hear the least reverberation.²⁹

This reverberation of sound was characterized by Forkel as 'very detrimental to good performance'.³⁰

The 'minimal' sound resonance of the German aesthetic can also be understood by the fact that in early German traditions the use of the pedals was rather

²⁸ Johann Peter Milchmeyer, *Die Wahre Art das Pianoforte zu Spielen* (Dresden, 1797), pp.57-58, quoted in David Rowland, *History of Pianoforte Pedalling* (Cambridge: Cambridge University Press, 1993), p.160.

²⁹ Emily Anderson (ed), *The Letters of Mozart and His Family* (London: Macmillan, 1966), p.327.

³⁰ Johann Nicolaus Forkel, *Musikalisches Almanach für Deutschland*, p.16, quoted in Cole, p.347.

limited, mainly to creating ‘special’ effects. On a review of Milchmeyer’s tutor (chapter 5 of which deals with the pedals) by *Allgemeine Musikalische Zeitung* (1798-9) a very strong, exaggerated language is used:

It must be the worst chapter in the whole work. The author recommends the purchase of small square pianos – why? Because there are more stops and mutations on them! He cannot praise sufficiently those instrument makers who put several stops and mutations on their instruments. Steibelt is the man who has shown the world how to use the stops! etc. No more need be said. We Germans would rather stick by our Stein instruments, on which one can do everything without stops.³¹

This clear, dry, highly articulated sound preferred by the German/Viennese tradition completely matches the notion that music is like speech — the rhetoric aesthetic — often mentioned in the early sources. Türk writes accordingly:

He who performs a composition so that its inherent affect is expressed to the utmost even in every single passage, and that the tones become, so to speak, a language [Sprache] of the feelings, of him one says that he has a good execution.³²

This aesthetic of rhetoric will be discussed more extensively in the next chapter of this dissertation.

³¹ Quoted in Rowland, *History of Pianoforte Pedalling*, p.40.

³² Daniel Gottlob Türk, *Klavierschule*, translation, introduction and notes by Raymond Haggh (London & Lincoln: University of Nebraska, 1982), p.332.

On the other hand, the English/French traditions strive for fuller well-rounded sounds with much more resonance. An article by an unknown author published in the *European Magazine* (London, 1796-7) tells us much about the sound ideals in England:

To acquire a rich, a full, and mellifluous TONE is the DESIDERATUM beyond all other qualities in a Performer; [...] The mellow, impressive, Organ-like Tone is superior in significance and effect to that quilly and vapid sound produced by the Generality of Piano Forte Players.³³

In order to achieve the desired full sound with greater resonance, the English/French had a different attitude towards the sustaining pedal of the instrument. 'Nothing on an instrument that adds to the charm of the music, and the emotions, should be neglected, and in this respect the pedals used appropriately and skillfully obtain very great benefits', Louis Adam begins his chapter, entitled, 'The manner of using the pedals'. He acknowledges the fact that the sound of the pianoforte diminishes too quickly and in order to overcome this 'defect' the use of pedals is highly advisable. He calls those who use the pedals appropriately in order to 'enhance and sustain the sounds of a beautiful melody and fine harmony', 'true connoisseurs'.³⁴

Jan Ladislav Dussek, the highly celebrated pianist and one of the founders of the London Pianoforte School was known to use the sustaining pedal abundantly in his performances. In fact it was reported that he put the pedal down at the beginning of the concert and took it up at the end!³⁵

³³ Quoted in Komlós, *Fortepianos*, p.27.

³⁴ Louis Adam, *Méthode de Piano du Conservatoire*, (Paris: Magasin de Music du Conservatoire Royal, 1804), p.218; quoted in Rowland, *History of Pianoforte Pedalling*, p.170.

³⁵ Bilson, 'Keyboards', p.230.

The fullness and ampleness of sound was not equally applauded by the German/Viennese audiences. The English-influenced pianist Ignaz Moscheles once gave a concert in Vienna using a Viennese and English instrument interchangeably. The Viennese was a piano made by Conrad Graf while the English was a Broadwood piano borrowed from Beethoven. Moscheles describes the audience's response as follows: 'I tried in my Fantasia to show the values of the broad, full, although muffled tone of the Broadwood piano; but in vain. My Viennese audience remained loyal to their countryman – the clear, ringing, tones of the Graf were more pleasing to their ears'.³⁶

Johann Nepomuk Hummel, in his Tutor, distinguishes the two different sounds produced by English and Viennese instruments. Although he praises the English ones for their durability and fullness of tone, he states that the flute-like tone of the Viennese instruments prevails in an orchestral context, because its distinctive sound contrasts well. On the contrary, he declares that the English instruments 'are less distinguishable than ours, when associated with complicated orchestral accompaniments; this, in my opinion, is to be attributed to the thickness and fullness of their tone.'³⁷

These two different aesthetics of sound correspond intimately with the two different 'styles' of pianoforte manufacturing. One can only wonder whether pianoforte manufacturing was based on the music aesthetics that ruled at this specific era, or whether the sound-ideals actually derived from the instruments themselves.

Kalkbrenner's account of the European piano playing tells us that:

The instruments of Vienna and London have produced two different schools.

³⁶ Komlós, *Fortepianos* p.29.

³⁷ Johann Nepomuk Hummel, *A Complete Theoretical and Practical Course of Instructions* (London: T. Boosey & Co., 1829), part iii, pp.64-65.

The pianists of Vienna are especially distinguished for the precision, clearness and rapidity of their execution; . . . English pianos possess rounder sounds and a somewhat heavier touch; they have caused the professors of that country to adopt a grander style, and that beautiful manner of *singing* which distinguishes them.³⁸

This ‘adoption’ of a grander style can also be seen in the last three sonatas of Josef Haydn, the so-called ‘London Sonatas’. Specifically, according to Malcolm Bilson, in the opening of his Sonata Hob:XVI:52, I, 1-2, those ‘full’ opening chords must have almost certainly been conceived having in mind the fullness of sound of the Broadwood’s pianos that he encountered during his stay in London (see Example 2.1).³⁹

Ex. 2.1: Haydn, Sonata Hob:XV1:52, I, 1-2.



On the other hand, many composers/performers urged piano manufacturers to improve their instruments and inspired their innovations. Specifically, as Reichardt tells us, Beethoven was concerned about the broad range of the piano sound:

Streicher . . . on Beethoven’s advice and request, has given his instruments more resistance and elasticity so that the virtuoso who performs with strength

³⁸ Frederich Kalkbrenner, *Methode pour Apprendre le Pianoforte* (London: 1862), p.10.

³⁹ Bilson, ‘Keyboards’, p.225.

and conviction has more control over the instrument for sustaining and supporting (the tone) and for sensitive pressing and release (of the keys).⁴⁰

Similarly, Dussek urged Broadwood into several alterations of the pianoforte, leading him for instance to build the first six-octave instrument in 1794 ranging from CC to c⁴ while the Viennese six octave instruments ranged from FF to f⁴.⁴¹

Therefore, interaction between composers/performers and makers led the latter to improve their design of instrument in order to suit the desired sound aesthetics. In addition, the case of Clementi being a celebrated performer, composer, manufacturer and publisher shows the interrelationship between pianoforte and music-making.

The above shows us that, on the question of whether sound ideals were influenced by piano manufacturing or whether they were themselves the driving force for setting construction standards, the answer is that it was a ‘two-way relationship’: one that led to innovations in both areas and which almost certainly had an impact on the music itself.

⁴⁰ Johann Friedrich Reichardt, *Vertraute Briefe Geschrieben auf einer Reise nah Wien, 1808-1809*, vol.1 (Amsterdam: Im Kunst- und Industrie-Comtoir, 1810) pp.385-386; quoted in Rosenblum, *Performance Practices*, p.48.

⁴¹ Rosenblum, *Performance Practices*, p.33.

PART TWO: THE MUSIC AND ITS PERFORMANCE

Chapter 3: Articulation and touch

Meticulous articulation-marking was a major feature in the notation of Classical-period music while articulation itself was a vital ingredient for expression in performance. This chapter will commence with a brief description of the association between articulation and musical rhetoric, and will demonstrate the role and the significance of the short articulating slurs in Classical-period music, as well as the implications of this for playing on the modern piano. It will conclude with a discussion of the movement, in composition and performance, towards a more legato style. The relation between the use of longer articulating slurs and pianoforte construction will be examined.

i. Articulation and musical rhetoric

The importance of the articulating slur in keyboard music of the late eighteenth and early nineteenth centuries depends upon the notion of the so-called 'speaking aesthetic' of music. Malcolm Bilson uses this term in his attempts to associate the short articulating slurs that pervade the works of Haydn, Mozart and other Viennese composers with the 'use of inflection' in speech, while declaring that although such articulations are at the very heart of the expressiveness of this music, they 'are rarely if ever heard in modern performance'.¹

Analogies between music and rhetoric are made in many early sources. The

¹ Bilson, 'Keyboards', pp.228-229.

German theorist Heinrich Koch writes, for example: 'The essence of melody exists in expression. It must always depict a passionate feeling or a mood. Everyone who hears it must imagine that he is hearing the speech of a man who is absorbed by a certain feeling.'² The relationship between music and speech is more clearly described by Quantz:

Musical execution may be compared with the delivery of an orator. The orator and the musician have, at bottom, the same aim in regard to both the preparation and the final execution of their productions, namely to make themselves masters of the hearts of their listeners, to arouse or still their passions, and to transport them now to this settlement, now to that. Thus it is advantageous to both, if each has some knowledge of the other.³

Johann Matheson discusses the issue of music and rhetoric in great detail in his *Vollkommene Capellmeister*. In the chapter, *On the Sections and Caesuras of Musical Rhetoric*, he compares the hierarchies of grammatical and melodic structure.⁴ Similar views are expressed by Koch in his *Versuch einer Anleitung zur Composition*. He states that as speech is divided into various sentences [*Perioden*] and those sentences into separate clauses [*Sätze*] and parts of the speech [*Redetheile*], in the same way, 'the melody of a composition can be broken up into periods . . . and these, again, into single phrases [*Sätze*] and melodic segments [*Theile*].'⁵

² Heinrich Koch, *Musicalisches Lexicon* (Frankfurt: Hertmann dem jüngern, 1802) col.941; quoted in Rosenblum, *Performance Practices*, p.9.

³ Johann Joachim Quantz, *On Playing the Flute*, 1752, translated and edited by E. R. Reilly (London: Faber and Faber, 1966) p.119.

⁴ Johann Matheson, *Der Vollkommene Capellmeister*, translated and edited by Ernest Harriss (Ann Arbor: UMI Research Press, 1981), pp.380-404.

⁵ Heinrich Christoph Koch, *Versuch einer Anleitung zur Composition*, [The Mechanical Rules of Melody, Sections 3 and 4] translated by N. Kovaleff Baker (New Haven and London: Yale University Press, 1983), p.1.

Using the terms of grammatical punctuation, Türk makes similar analogies. He compares a musical period [*Abschnitt*] with the period in speech which is followed by a dot (.), and then he associates a musical rhythm [*Rhythmus*] with the smaller parts of speech which are followed by colon (:) or semicolon (;). Then he compares the phrase [*Einschnitt*], the smallest melodic division, with the part of speech which is followed by a coma (,). He also adds that if one wanted to include the caesura [*Cäsur*], one would have to compare it with the caesura of a verse.⁶ Türk also strongly stresses the importance of correct and precise punctuation. As an example, he offers the sentence (in its German original): ‘He lost his life not only his fortune’.⁷ He then presents various interpretations of this sentence according to its punctuation (‘He lost his life, not only his fortune’, or, ‘He lost his life not, only his fortune’) and states that, ‘in the same way the execution of a musical thought can be made unclear or even wrong through incorrect punctuation’.⁸ He then continues with a musical example and argues that if the performer would play the passage without a break (version ‘a’), it would be as faulty as when one reads beyond the point where a phrase or a sentence ends without interruption (see Example 3.1).

Ex. 3.1: Türk’s example.⁹



The importance of this break between musical phrases is also described by Sulzer, who states that ‘the phrase divisions are the commas of a melody which, as in speech,

⁶ Türk, *Klavierschule*, pp.332-333.

⁷ Ibid, p.329, the translation is by Raymond Haggh.

⁸ Ibid.

⁹ Ibid.

should be made apparent by a small pause'. Later on he states that these divisions 'should be marked in the clearest manner and correctly'.¹⁰ Koch refers to these small pauses between the musical phrases as 'resting points' [*Ruhepunkte des Geistes*] and claims that, just as they are necessary in speech in order to make it comprehensible, they are equally as necessary in melody 'if it is to affect our feelings.'¹¹

From all these references to music and rhetoric in the late eighteenth century, we clearly see the importance of the delineation of musical ideas; a major medium used by composers to notate this demarcation is the articulating slur. Therefore, slurs can divide a musical period into phrases and smaller melodic fragments. One example is the melody in Mozart Sonata KV570, II, 1-4, which can be seen as a musical period (see Example 3.2).

Ex. 3.2: Mozart Sonata KV570, II, 1-4.



This musical period can be divided into two phrases [*Sätze*]; the first phrase in bb.1-2 and the second in bb.3-4. This division is marked by the last articulating slur of b.2. In addition, the first phrase, bb.1-2, is divided into five smaller melodic fragments [*Theile*]. The division of those fragments is marked by the five articulating slurs. One of the roles of those articulating slurs is to create small breaks which should be perceptible in-between those five melodic fragments; the 'commas of a melody' as described by Sulzer, and as 'resting points' [*Ruhepunkte des Geistes*] by

¹⁰ Johann Georg Sulzer, *Allgemeine Theorie der schönen Künste*, (Leipzig: 1771-4) iv. p.700, quoted in Clive Brown, *Classical and Romantic Performance Practice* (Oxford: Oxford University Press, 1999), pp.139, 141.

¹¹ Heinrich Christoph Koch, *Versuch einer Anleitung zur Composition*, p.1.

Koch. Therefore, we clearly see the contribution of the short articulating slur to the demarcation of musical ideas; an important aspect of the musical rhetoric.

The short articulating slur can also be seen as a tool for applying scansion in music. The issue of music and prosody is discussed in great detail in eighteenth-century theoretical treatises. Mattheson devotes a whole chapter, 'On the Length and Shortness of Sound, or the Construction of Tone-Feet', to trying to apply poetic-scansion in music: 'What metres are in poetry, rhythms are on music, for this reason we will call them tone-feet, since song as it were walks along them'.¹²

Beethoven himself, in his annotations to Cramer's Etudes, mentions the importance of the application of the correct scansion in music:

The study of long and shorts in passages is here the aim. . . . By paying heed to these longs and shorts the melodic movement stands out in the passages; without so doing, every passage loses its meaning.¹³

The thesis is that, as in languages certain syllables are given more emphasis than others, the same is true of music; in notes that appear with equal duration some should be given more length than others. Johann Adam Hiller states:

Of two notes, side by side, of the same kind and value, and in a duple or equal division of the beat, one will always be long and the other short. . . . [T]his fact has its basis in man's natural feelings, and also in speech. Two syllables cannot be spoken together without it appearing that one is shorter than the

¹² Mattheson, *Der Vollkommene Capellmeister*, p.344.

¹³ John Baptist Cramer, *Selection of Studies with Comments by L.v. Beethoven*, preface, translation, explanatory notes and fingering by J. S. Shedlock (London: Augener, 1908), p. v.

other.¹⁴

The application of short articulating slurs to a sequence of notes of the same duration automatically creates the sense of long and shorts. The function of the slur is based on the attack-release notion; the first note is given more emphasis while the second is shortened. Therefore, a sequence of quavers slurred in groups of two can be seen as: – U – U – U – U – U. For example, if the quavers in Mozart Sonata KV311, I, 49-50, were not slurred they would have all the same duration stress. (See Example 3.3) By slurring them in this manner, Mozart emphasizes the first, third, and fifth of each bar and shortens the second, fourth and sixth and therefore in a way applies poetic scansion (trochaic metre) into the music.

Ex. 3.3: Mozart Sonata KV311, I, 40-41.




ii. Short articulating slurs

Late-eighteenth century keyboard scores exhibit a wealth of slur markings. How difficult is it to execute all those slurs effectively on the modern piano? One should first examine the importance of those slurs and the meaning they have in this repertoire.

¹⁴ Johann Adam Hiller, *Anweisung zum Musikalisch-Richtigen Gesange* (Leipzig, 1774), pp.47-48, quoted in George Houle, *Meter in Music, 1600-1800: Performance, Reception and Notation* (Bloomington: Indiana University Press, 1987), pp.83-84.

Eva and Paul Badura-Skoda identify two kinds of slurs: the ‘legato’ slur and the ‘articulation’ slur.¹⁵ The legato slurs indicate legato touch over a fairly long period. However, eighteenth-century tradition did not allow a slur to last more than a bar, therefore, a new slur had to start over the next bar of the section. This manner (peculiar, in our eyes) to indicate long legato lines originated from violin bowing techniques where one bow cannot normally last for more than one bar and therefore a change of bow is necessary.¹⁶

Articulating slurs are normally short and usually connect two or three notes. They have a stress-release function where the first note under the slur is given more emphasis while the last is shortened:  There are a few exceptions to this rule where the function of the slur is different; in some cases the composer indicates that the second note should not be shortened and less emphasized. For example, in Beethoven, Sonata op.110, I, 30-31, a *sf* is marked on the last note of the slur (c'') and serves as the climax of the whole phrase (see Example 3.4). However, these instances are only exceptions to the rule and are relatively infrequent.

Ex. 3.4: Beethoven Sonata op.110, I, 30-31.



The emphasis on the first note of the slur is described in Leopold Mozart's treatise as follows:

¹⁵ Badura-Skoda, *Interpreting Mozart on the Keyboard*, p.54. See also Howard Ferguson, *Keyboard Interpretation* (London, Oxford University Press, 1975), p.64.

¹⁶ See also Clive Brown, 'Articulation Marks', *The New Grove Dictionary of Music and Musicians*, vol.2 (London: Macmillan, 2001) p.89, and Rosenblum, *Performance Practices*, pp.172-174.

Now if in a musical composition two, three, four, and even more notes be bound together by a half-circle (i.e. by a slur), so that one recognizes therefrom that the composer wishes the notes to be separated but played singly in one slur, the first of such united notes must be somewhat more strongly stressed, but the remainder slurred on to it quite smoothly and more and more quietly.¹⁷

Leopold Mozart gives several musical examples of the different ways of slurring. In fact he offers three bars of quavers in 3/4 metre that are slurred in 33 different ways, and differently once again as in semi-quavers in 3/8 meter and states that the way the notes are slurred each time ‘changes indisputably the whole style of performance.’¹⁸ Similar examples are also given by Türk.¹⁹

Slurs may be categorised depending on their position in the bar: those that support the metre, that oppose the metre and that are independent of it. This categorization can be related to the classification in accentuation where there are metric (grammatical), contra-metric and independent accents (rhetorical).²⁰

The slurs that support the metre create a form of metrical, or ‘grammatical’, accentuation which was a basic principal in performance practice. The distinction of ‘good’ and ‘bad’ notes within a bar is often mentioned in early sources. Marpurg characterizes as ‘Good’ the first, third, fifth and seventh divisions of the bar in duple meter and as ‘Bad’ the second, fourth, sixth and eighth. In ternary meter the first beats

¹⁷ Leopold Mozart, *Versuch einer Gründlichen Violinschule* (Augsburg, 1756), VII, I, § 20, quoted in Badura-Skoda, *Interpreting Mozart on the Keyboard*, p.58.

¹⁸ Leopold Mozart, *A Treatise in the Fundamental Principles of Violin Playing*, translated by Edith Kocker, 2nd ed. (London: Oxford, 1951), pp.123-124, quoted in Rosenblum, *Performance Practices*, p.159.

¹⁹ Türk, *Klavierschule*, p.344.

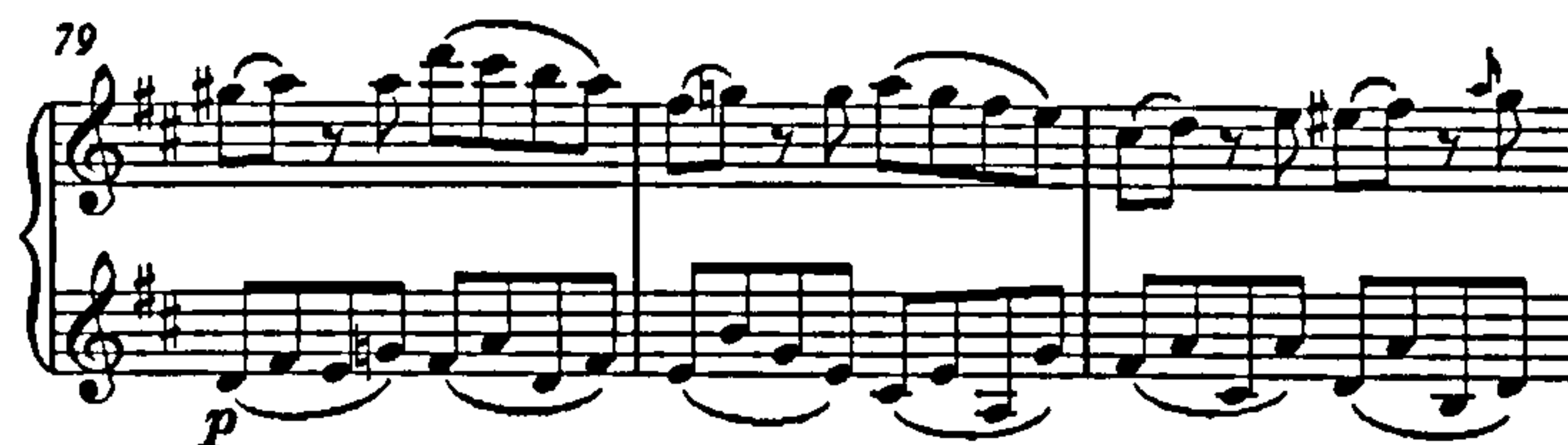
²⁰ Newmann, *Beethoven on Beethoven*, p.148.

are ‘Good’ and the second and third ‘Bad’. In subdividing each beat into two other notes, each first is ‘Good’ in comparison with the following.²¹ Türk’s descriptions are similar.²² Sulzer adapts symbols of poetic sanction, (–) and (U), to represent the ‘Good’ and ‘Bad’ notes respectively.²³

Slurs that support the metre occur very frequently in Classical period music in melodic as well as in accompanimental figures (see Example 3.5, a and b)

Ex. 3.5:

a) Mozart Sonata KV311, I, 79-81.



b) Mozart Sonata KV280, II, 9.



In Example 3.5a, each of the slurs in both the melody and the accompaniment support the first and third beat: the ‘good notes’ of each bar. In Example 3.5b, apart from supporting the metre, the slurs in the accompaniment also coincide with the harmonic structure. Therefore, a slight separation is needed in order to determine the changes of harmony.

²¹ Friedrich Wilhelm Marpurg, *Principes du Clavecin* (Berlin, 1756; facsimile reprint, Geneva: Minkoff, 1974), pp.23, 25; Harrison, *Haydn's Keyboard Music*, pp.58-59.

²² Türk, *Klavierschule*, pp. 90-91.

²³ Johann George Sulzer, *Allgemeine Theorie der Schönen Kunste* (Leipzig, 1771), s.v. ‘Tact’, quoted in Harrison, *Haydn's Keyboard Music*, p.59.

Slurs that contradict the metre also appear quite frequently in Classical music.

Türk gives several examples (see Example 3.6).

Ex. 3.6: Some of Türk's examples of contrametric slurs.²⁴



On contrametric slurs, the first note, which is given more emphasis, coincides with the weak beat of the bar creating in that way an aesthetic tension. The 'emphatic' first note of the slur contradicts the 'strong' note of the bar and this 'conflict' can create a humorous and sometimes sarcastic effect. A humorous example is the opening of the third movement of Haydn, Sonata HobXVI:28. The contrametric slurred demisemiquavers in b.13 on Mozart Sonata KV330, I, can be seen as a sarcastic in relation to the semiquavers in b.11 (see Example 3.7, a and b).

Ex. 3.7:

a) Haydn Sonata HobXVI:28, III, 1-2.



b) Mozart Sonata KV330, I, 11-13.²⁵

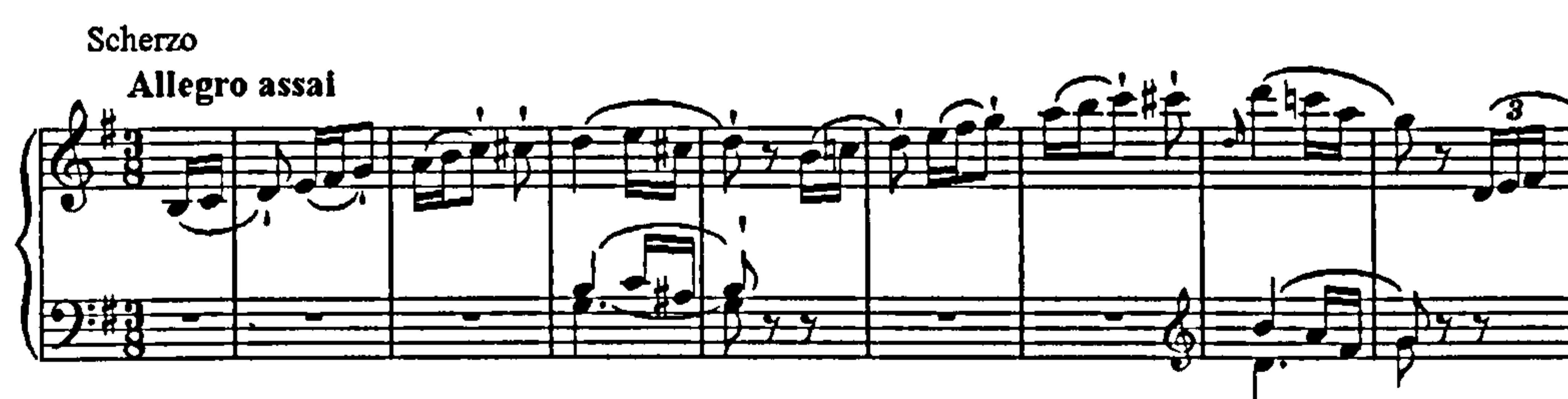


²⁴ Türk, *Klavierschule*, p.344.

²⁵ The dynamics in parenthesis appear only in the original edition and not the autograph score.

The upsetting of metric stress can sometimes create illusory rhythmic effects. An example is the opening of the Scherzo in Beethoven, Sonata op.14 no.2, where, according to some writers, the listener here might think for a moment that the metre is duple instead of triple (see Example 3.8).²⁶

Ex. 3.8: Beethoven Sonata op.14 no.2, III, 1-8.



The next type of slur which may or may not correspond to the metre is that which is independent of it. This type of slurring coincides with the often-mentioned 'rhetorical' accentuation which Koch relates to accentuation in speech:²⁷

Just as in speech, particularly if the speaker speaks with feeling, certain syllables of the words are marked by a special emphasis, by which the content of the speech is mainly made clear to the listener, so in the performance of a melody which has a definite feeling, it is necessary to execute certain notes with a conspicuous manner of performance if the feeling which it contains is to be clearly expressed.²⁸

Such slurring is used primarily for expressive reasons such as to emphasize a

²⁶ See, for instance, Rosenblum, *Performance Practices*, p.161.

²⁷ For more information on rhetorical accentuation see Harrison, *Haydn's Keyboard Music*, pp.58-59; Newman, *Beethoven on Beethoven*, p.148.

²⁸ Koch, *Musicalisches Lexicon*, art.'accent', quoted in Brown, *Classical and Romantic Performance Practice*, p.19.

peak of a melody or to create an emotion, variation, contrast, etc. It should be noted here, as William Newman points out, that pianists lack several of the expressive resources of other instrumentalists; for example, they cannot swell or control the sound of a tone, they cannot choose timbre, use vibrato or alter intonation; therefore, articulation is an important medium of expression.²⁹

Short articulating slurs are often used to mark a peak of a melody; see for instance Mozart Sonata KV283, III (see example 3.9).

Ex. 3.9: Mozart Sonata KV283, III, 1-8.



Here one can identify two peaks in the melodic line: G in b.3 and E in b.7. Both of those pinnacles are marked with a slur and it is interesting to observe that these two slurs are the only ones in this melody. This justifies this particular role of those slurs.

Short articulation slurs occur several times in order to create contrast. An example can be found in Haydn Sonata Hob.XV1:47, 63-66 (see Example 3.10).

Ex. 3.10: Haydn Sonata Hob.XV1:47, 63-66.

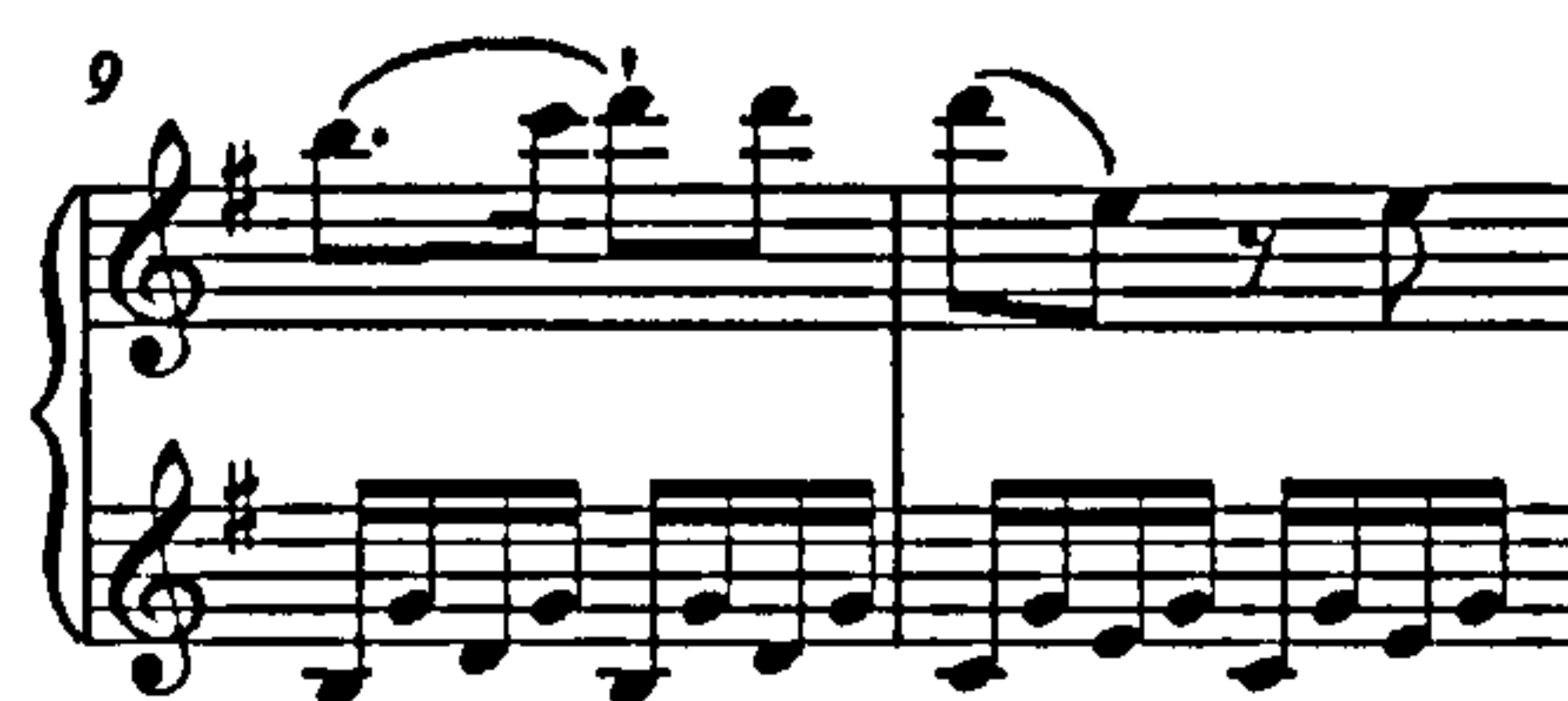


²⁹ Newmann, *Beethoven on Beethoven*, pp.121-122.

Here the slurred semiquaver figures (bb.63-64) contrast with the similar but non-slurred semiquaver figures that follow (bb.65-66).³⁰

Articulation slurs can also create variation of touch on repeated notes. In Haydn Sonata Hob. XVI/34, III, 9-10, the repeated Ds gain variety of touch (see Example 3.11).

Ex. 3.11: Haydn Sonata Hob.XVI/34, III, 9-10.



The first is short, being the ending of the slur (Haydn has also added a staccato mark which emphasizes the shortening), the second, a bit longer, as it has no articulation mark, and the third even longer and more emphatic, being the beginning of the next slur.

Small articulating slurs can also create variation, especially in theme recurrences. Such an example can be found in Haydn, Sonata Hob.XVI:50, I (see Example 3.12, a and b).

Ex. 3.12:

a) Haydn Sonata Hob.XVI:50, I, 1-2.



³⁰ Of course this could be interpreted in another way: first time, play as shown, second time, repeat the articulation.

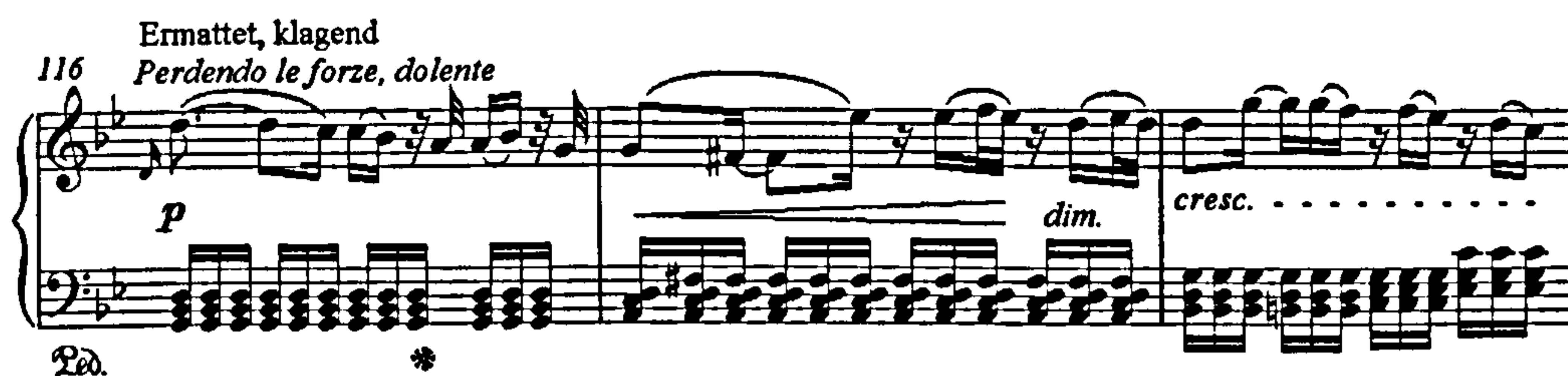
b) Haydn Sonata Hob.XVI:50, I, 102-103.



In the exposition, (bb.1-2), the theme is presented in staccato quavers; however, in the recapitulation, (bb.102-103), the fifths A-D and G-C are slurred creating also a slight tension, as being slurred opposed to the metre.

Short articulating slurs contribute significantly to emotional effects. In the reprisal of the *Arioso* in Beethoven, Sonata op.110, III, 116-118, the slurring, and the rest that follows each slur, create, for this author at least, a feeling of despair that justifies Beethoven's indication *Perdendo le forze, dolente*. This effect is particularly effective on the early piano with its rapidly-diminishing tone (see Example 3.13).

Ex. 3.13: Beethoven Sonata op.110, III, 116-118.



In the opening of the first movement of Haydn, Sonata Hob.XVI:49, the short slurs on the semiquavers add a certain charm which again is easily attainable on the early piano (see Example 3.14).

Ex. 3.14: Haydn Sonata Hob.XVI:49, 1-2.



All the above examples show the significant role and the expressiveness of short articulating slurs in the music of the Classical period. These slurs can be executed more effectively on the early piano than the modern one for two reasons: because of the light action and shallow key dip of the former, and because of its fast diminution of tone once the key is pressed. The stress-release function of the articulating slur can be easily achieved on the fortepiano with just the motion of the fingers. Accordingly, Streicher advises: ‘When single notes are connected together, . . . you should move *only the fingers*, without raising the hand for the attack’.³¹ Similarly, Adam suggests that one should play the slurred notes ‘without making any movement of the hand’.³²

After the last note of the slur is played, the sound diminishes quickly on the fortepiano, the stress-release effect occurring naturally and leaving a small gap of sound which is so vital for the ‘pronunciation’ of the Classical period music. On the modern piano, the performer has to overcome many difficulties in order to translate the slur into sound. It is obvious that due to the heavier action and deeper keys of the modern piano, a bigger force is needed than the power of the fingers alone. Therefore, an involvement of the wrist and hand is almost vital in order to accomplish the ‘stress’ part of the stress-release function of the slur. The ‘release’ is even more problematic. Due to the greater sustaining power of the modern piano, the small gap of sound at the

³¹Andreas Streicher, *Brief Remarks on the Playing, Tuning, and Care of Fortepianos* (Vienna: Alberti, 1801), p.2, quoted in Rosenblum, *Performance Practices*, p.191.

³²Louis Adam and Ludwig Menzel Lachnith, *Méthode ou Principe General du Doité pur le Forté-Piano*, 2nd ed. augmentée (Paris: Sieber, 1814), p.155, quoted in Rosenblum, *Performance Practices*, p.159.

end of each slur, described earlier, is not as easy to attain. One should aim for a quicker release of the slur; thus, the complete stress-release action requires a much more energetic movement on the modern piano.

iii. Longer slurs and the *legato* style

Towards the end of the eighteenth century, a change in slurring techniques occurs. Short articulating slurs no longer dominate musical scores while longer slurred groups begin to appear. Longer slurs are often used to connect notes of a single phrase, to demarcate complete phrases, phrase-members, or to indicate a general legato touch. Although slurs beyond a single bar appear quite infrequently in the music of Haydn and Mozart, longer slurs consisting of 2, 3, 4, or even more bars are not uncommon in the works of Clementi and Beethoven, as well as Schumann, Brahms, and to an even greater extent, Liszt and Chopin. A typical example can be found in Chopin's Prelude op.28, no.5, where the composer uses a single slur for 37 bars, from the beginning of the piece until the last two bars. This change in slurring can be seen as part of a general alteration of performance practice techniques, which started taking place during the beginning of nineteenth centuries.³³

The earliest examples of longer legato groups can be seen in the works of Muzio Clementi. Although short articulating slurs appear very frequently in his scores too, Clementi, who has been considered as the originator of 'true' pianoforte technique, introduces longer legato slurs over several bars.³⁴ This can be more clearly seen by comparing similar passages in his and Mozart's works. Clementi and Mozart

³³ For more information about the changes in articulation see Sandra Rosenblum, 'Concerning Articulation on Keyboard Instruments: Aspects from the Renaissance to the Present', *Performance Practice Review*, vol.10 (1997), pp.31-40.

³⁴ Reginald Gerig, *Famous Pianists and Their Technique* (New York: R. B. Luce, 1974), p.59; Peter le Huray, *Authenticity in Performance* (Cambridge: Cambridge University Press, 1990), p.169.

were celebrated keyboardists who lived approximately at the same period and their compositional style in general may be regarded as quite similar; however, they composed for different instruments. Mozart was accustomed to the Viennese-action pianos, Clementi, to the English. This fact may have had some influence on their attitudes to the use of the slur.

Mozart's slurs in the opening of Sonata KV332, I, *Allegro* are marked over each single bar, breaking the phrase into four segments. Clementi's approach, in a similar context (with regard to metre, similar rhythmic pattern, and same tempo indication) is quite different. In the opening of Sonata op.50, no.3, 1-4, instead of using a slur over each bar of the melody, Clementi uses one single slur throughout (see Example 3.15, a and b).

Ex. 3.15:

a) Mozart Sonata KV332, I, 1-4.



b) Clementi Sonata op.50, no.3, 1-4.



The treatment of a melody in 2/4 metre is similar. In Mozart, Sonata KV310, III, 21-24, the phrase is again broken into four sections. In a passage with an identical rhythmic pattern, in Sonata op.34, n.2, III, 1-4, Clementi again uses a single slur and

leaves uninterrupted this four-bar melodic line (see Example 3.16, a and b).

Ex. 3.16:

a) Mozart Sonata KV310, III, 21-24.



b) Clementi Sonata op.34, no.2, III, 1-4.



Contrasted slurring also occurs in slow movements. For example, in Sonata KV570, II, 1-2, Mozart uses several short slurs in the opening phrase, breaking it up into smaller melodic fragments, according to a more 'speaking' aesthetic. Clementi's slurring in *Adagio* movements is again different; he prefers a long, unbreakable *cantabile* line in the opening of *Molto adagio, sostenuto, e cantabile*, of Sonata op.40, no.1, II, 1-4 (see Example 3.17, a and b).

Ex. 3.17:

a) Mozart Sonata KV570, II, 1-2.



b) Clementi Sonata op.40, no.1, II, 1-4.

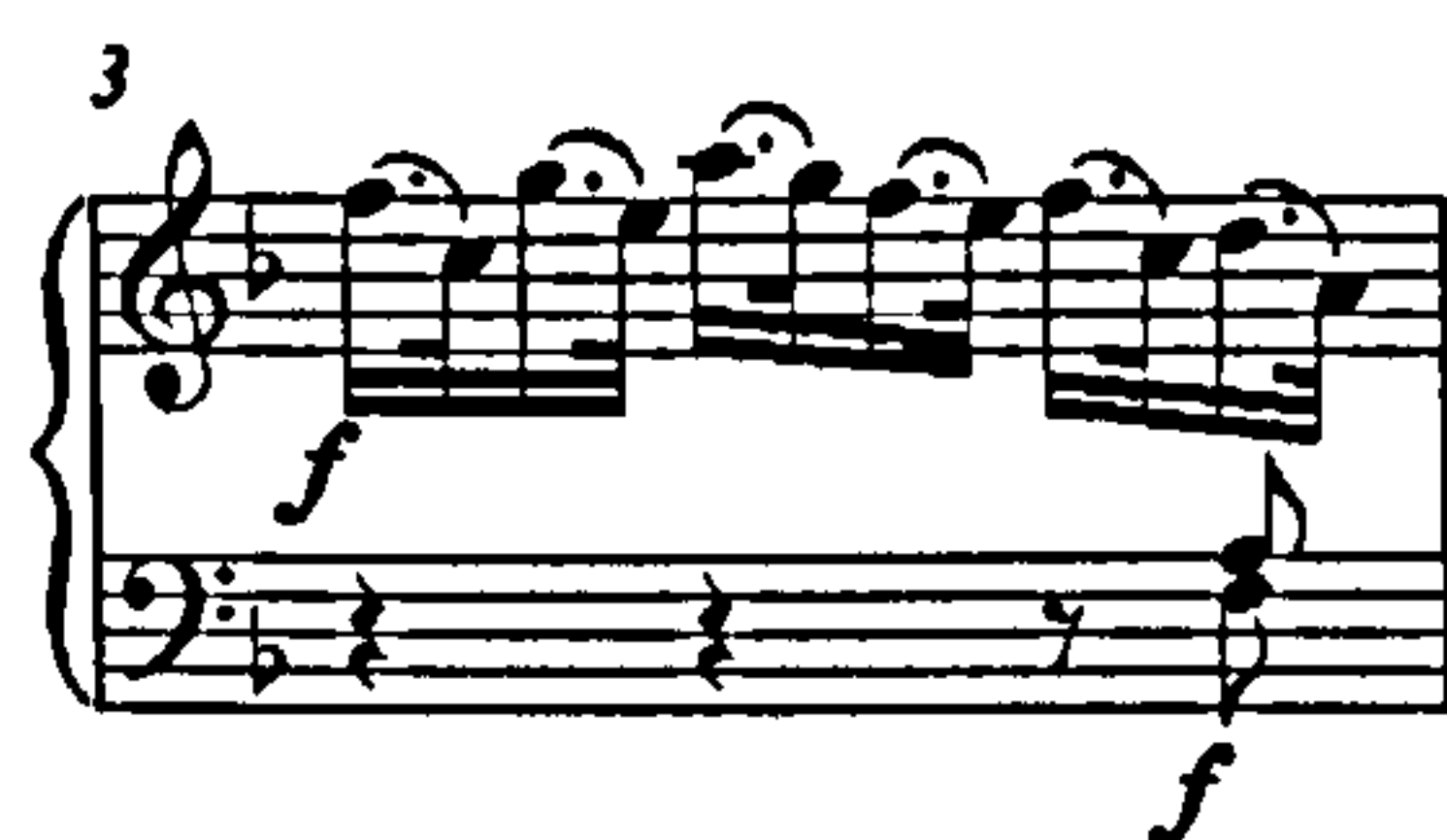


A similar approach can also be seen in the opening of the '*Molto adagio e sostenuto*' of Sonata op.40, no.2, I. In some slow movements such as the '*Largo, mesto e patetico*' of Sonata op.40, no.2 or the '*Adagio sostenuto e patetico*' of the Sonata op.50, no.1, Clementi hardly uses any articulation slurs; however, he marks the beginning '*sempre legato*'. It should be noted here that the indications: *legato*, *sempre legato*, *molto legato*, etc., often replace slurs in his scores.

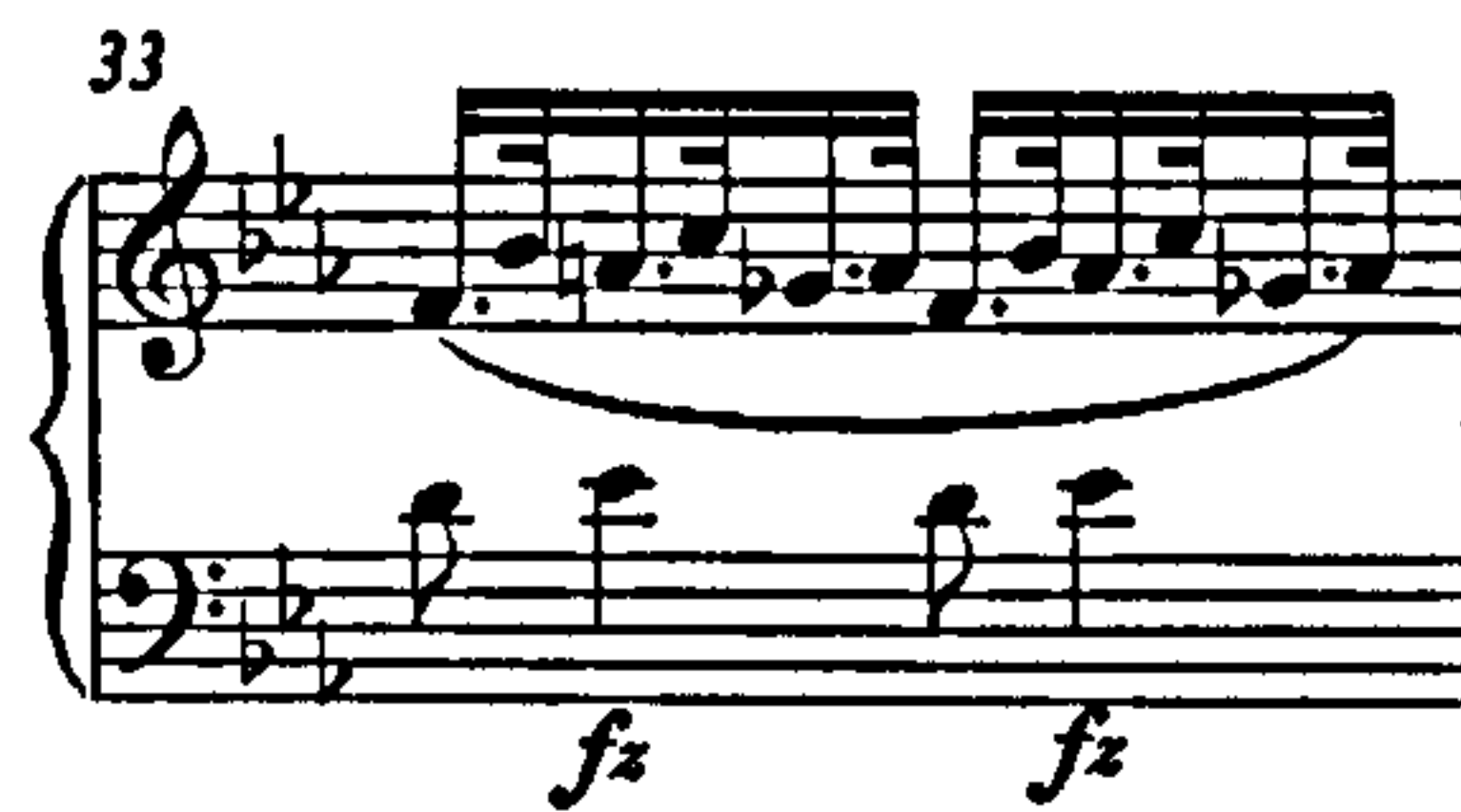
The treatment of the two composers of sequential 'dotted semiquaver-demisemiquaver' rhythmic patterns also bears comparison. In Mozart, Sonata KV309, II, 3, these figures are slurred in groups, requiring a small accent on each dotted semiquaver plus a small cut between each demisemiquaver and the following note. As a result, a feeling of metrical accentuation and articulating clarity is produced: features which are absolutely necessary in Mozart's music. On a similar occasion in Clementi, Sonata op.34, no.2, II, 33, one single slur carries throughout; articulating clarity is evidently not demanded here (see Example 18, a and b).

Ex. 3.18:

a) Mozart Sonata KV309, II, 3.



b) Clementi Sonata op.34, no.2, II, 33.



Similar comparisons can be made between the dotted crotchet-quaver figures of Mozart Sonata KV310, III, 179-181 and Clementi Sonata op.34, no.2, III, 149-151.

It seems therefore that Mozart favours short articulating slurs which bring out crispness in performance, while, in analogous textures, Clementi introduces longer slurs which result in a more *cantabile* style. The change in slurring techniques can be regarded as part of a general change of attitude towards keyboard touch, as shown by the different approaches of contemporary music theorists and performers towards unmarked notes. Although there is a general agreement that the notes under a slur (as opposed to notes marked with a dot stroke or wedge) should be played smoothly, opinions concerning the execution of unmarked notes varied considerably.³⁵

Most of the German late eighteenth-century treatises advocate that unmarked notes should be played with a touch between *legato* and *staccato*, the so-called '*non-legato*' touch. Marpurg writes that:

Both legato and staccato are different from the ordinary movement [*ordentlichen Fortgehen*], in which one raises the finger from the preceding key quite quickly and just before depressing the following note. Because this

³⁵ There is a confusion about the function of those marks between editors. More information can be found in: Rosenblum, *Performance Practices*, pp.183-189; Brown, *Classical and Romantic Performance Practice*, pp.200-227; Harrison, *Haydn's Keyboard Music*, pp.49-57; Newman, *Beethoven on Beethoven*, pp.139-146.

ordinary movement is assumed at all times, it is never indicated.³⁶

Türk similarly states that notes should be played in the ‘customary’ way unless a ‘*ten.* or *tenuto*’ is written over them in which case they should be held for their full value.³⁷ According to Türk’s musical examples, notes played in the ‘customary’ way should be held between 6/8 and 7/8 of their actual value according to the musical context. He disregards C. P. E. Bach’s desire that unmarked notes should be held for the half of their value.³⁸ Referring to detached and sustained as ‘heavy’ and ‘light’ execution, he declares that the degree of detachment can be determined from the character of the piece, tempo, metre, note values, and progression of notes, as well as national taste, composer’s style and instrument.³⁹

Notwithstanding the differences between C. P. E. Bach and Türk concerning degree of separation, the *non-legato* was the ‘ordinary’ touch in late eighteenth-century German traditions and in fact it prevailed in the pianism and the music of Mozart and Haydn.⁴⁰ Beethoven’s description of Mozart’s playing as ‘delicate but choppy . . . with no legato’ also supports this argument, but also pinpoints a change of tradition in performance practices.⁴¹

Legato as ‘ordinary’ touch was described as early as 1758, in Niccolo Pasquali’s treatise *The Art of Fingering the Harpsichord* where he states that: ‘The legato is the touch that this treatise endeavors to teach, being a general Touch fit for almost all Kinds of Passages’, and that all unmarked notes ‘must be played Legato,

³⁶ Friederich Wilhelm Marpurg, *Anleitung zum Clavierspielen* (Berlin: Haude & Spener, 1765). Reprinted, NY: Georg Olms Verlag, 1970, p.29, quoted in Daniel Raessler, ‘Change in Keyboard Touch Around 1800: From Non-legato to Legato’, *Early Keyboard Journal*, vol.1 (1982-3), p.25.

³⁷ Türk, *Klavierschule*, p.345.

³⁸ Ibid, pp.345-346.

³⁹ Ibid, pp.347-348.

⁴⁰ Harrison, *Haydn’s Keyboard Music*, p.48; Rosenblum, *Performance Practices*, p.149; Badura-Skoda, *Interpreting Mozart on the Keyboard*, pp.54-55.

⁴¹ Robbins Landon and Donald Mitchell (eds.), *The Mozart Companion* (London: Faber and Faber, 1965), p.33.

i.e., in the usual Way'.⁴² However, according to Charles Burney, Pasquali's influence had remained local.⁴³

By the end of the eighteenth century several tutor books were published that advocated the *legato* style. Among them was Nicolas-Joseph Hüllmandel's *Principles of Music, Chiefly Calculated for Piano Forte or Harpsichord*, which was published in London in 1796 and states that one of the most essential rules is that, unless it is specified as *staccato*, the player should hold the key until the next is struck.⁴⁴ By the turn of the century *legato* was established as a basic keyboard touch and is praised by Clementi in his *Introduction to the Art of Playing the Pianoforte* (1801):

When the composer leaves the LEGATO and STACCATO to the performer's taste; the best rule is, to adhere to the LEGATO; reserving the STACCATO to give SPIRIT occasionally to certain passages and to set off the HIGHER BEAUTIES of the LEGATO.⁴⁵

Three years later Louis Adam in his *Méthode du Piano du Conservatoire* (1804), which was published in France, paraphrases Clementi:

Sometimes the author indicates the musical phrase which should be smooth, but if he abandons the choice of legato or staccato to the taste of the performer, it is best to adhere to the legato, reserving the staccato to make

⁴² Niccolo Pasquali, *The Art of Fingering the Harpsichord* (Edinburgh: c.1758) p.26, quoted in Brown, *Classical and Romantic Performance Practice*, p.171.

⁴³ Raessler, 'Change in Keyboard Touch', pp.28-29.

⁴⁴ Nicolas Joseph Hüllmandel, *Principles of Music Chiefly Calculated for the Piano Forte or Harpsichord* (London: 1796), p.20, quoted in Brown, *Classical and Romantic Performance Practice*, p.172.

⁴⁵ Muzio Clementi, *Introduction to The Art of Playing the Pianoforte* (London: Clementi, Banger, Hyde, Collard & Davis, 1801), facsimile edited by Sandra Rosenblum (New York: Da Capo, 1974), p.9.

certain passages stand out and to make the advantages of the legato felt by means of a pleasant artistic contrast.⁴⁶

As we can see from all the above quotations, the *non-legato*, which was the 'ordinary' touch, and was supported by the German treatises, gave way to the *legato* which became the favourite way of playing. It is also interesting to observe that most of the treatises that advocate the 'beauties' of the legato touch were published in England or France. In the opinion of the present author, therefore, it is possible to relate the German/Viennese *non-legato*-influence to the German/Viennese-action pianos and the English/French *legato*-influence to the corresponding instruments. It is also possible to relate the predominance of the latter style to that of English/French-action pianos, through constant developments during the nineteenth century; these (longer and larger hammers, improved escapement, more equal and greater string tension, etc.) had a much greater reflection on *legato*-production. This theory can be also supported by a testimony of Ludwig Berger, a pupil of Clementi, who states that Clementi told him that he had 'achieved a more melodic and noble style of performance after listening attentively to famous singers and also by means of the perfected English pianos, the construction of which formerly stood in the way of a cantabile and legato style.'⁴⁷

All the above show, once again, the bond between the music and the instrument it was written for. Although we cannot be totally sure if Clementi and his followers composed in a more legato style because they were inspired by the sustaining power of their instruments, or if piano manufacturers built the instruments in order to match the music that was written at the time, nevertheless, we cannot

⁴⁶Louis Adam, *Méthode de Piano du Conservatoire* (Paris: A l'Imprimerie du Conservatoire Impérial de Musique, 1804) p.151, quoted in Raessler, 'Change in Keyboard Touch', p.30.

⁴⁷Gerig, *Famous Pianists*, p.57.

neglect this interrelationship when we perform short-articulated music on the modern instrument.

As shown earlier, it is probably less problematic to play English/French-influenced music on the modern piano because sustained smooth lines come easily to this instrument. However, the Viennese/German-influenced music written in that era with its less smooth, non-legato touch is better suited to the sharp, short-lived tone of the fortepiano. On the modern piano, the separation of tones in a non-legato passage can be more challenging for the player, on account of the instrument's greater sustaining power which makes the tones sound connected to each other.

Chapter 4: Dynamics and accentuation

Dynamic nuance, indicated by both dynamic markings and accentuation, plays a significant, expressive role in the repertoire under study. Much exploited by composers, it is granted a prominent position in contemporary treatises. Mozart's call for strict observance of the notated dynamics can be seen from a letter to his father on 14 November, 1777, describing the lessons with his student Mlle Rosa: 'The Andante will give us most trouble, for it is full of expression and must be played accurately and with the exact shades of forte and piano, precisely as they are marked'.¹ Beethoven, who notated his dynamic directions punctiliously, was even more strict, growing angry with those performers who did not follow his indications. In a letter to the singer Sebastian Mayer, in 1806, he writes about a performance of *Fidelio*:

My patience will not be so severely tried, as when close by I hear my music murdered. . . . [A]ll pp, crescendos, all decrescendos and all fortes FF were struck out of my opera. . . . If that's what I have to hear, there is no inducement to write anything more!²

This section will discuss issues of transferring dynamics meant for Classical-period instruments onto the modern piano. Two main areas will provide a focus: the comparative dynamic ranges of the instruments, and the use of dynamic change in the music itself. It will investigate the differing effect of accents, as well as swift changes in dynamic level, between the two instruments.

¹ Anderson (ed.), *The Letters of Mozart and his Family*, p.549.

² Ludwig v. Beethoven, trans. with preface by J. S. Shedlock, *Beethoven's Letters* (New York: Dover, 1972), p.59.

i. Dynamic Range

The use of dynamic markings in piano music has increased steadily over the past 300 years, and one of the reasons for this is the development of the instrument. An obvious example is the increasingly frequent appearance of *ff*, *fff*, or even *ffff* in the last two centuries, which reflects its increasing dynamic power. However, other more subtle responses occur within the Classical period. For example, as Sandra Rosenblum suggests, Clementi's frequent use of moderate dynamics such as *mp* and *mf* can be related to his acquaintance with English pianos, with their heavier and therefore more controllable touch, or Beethoven's first use of *ppp* in his Sonata op.53, III, 400, with the arrival of his Érard piano which had an *una corda* pedal as well as a moderator.³

The first challenge for a modern pianist playing Classical-period music is to produce an appropriate volume of sound. Many writers have been concerned about this matter.⁴ As stated in Chapter 1, the dynamic range of the early piano is far narrower than that of the modern one, so, in absolute terms, one might claim that, roughly, the *ff* of the early piano is as loud as the *f* of the modern piano, the *f* with the *mf*, the *mf* with the *mp* etc. Should a modern pianist simply scale down the volume and play *mezzo forte* when Mozart indicates *forte*? In other words should we adjust the volume range of the modern piano to the dynamic capabilities of the early piano? Or should we consider the issue in relative terms, so that *ff* evokes the loudest volume on the piano, whichever it is?

A further consideration here is the circumstances of the performance. It would

³ Rosenblum, *Performance Practices*, pp.58-59.

⁴ Badura-Skoda, *Interpreting Mozart on the Keyboard*, pp. 6-26; Rosenblum, *Performance Practices*, pp. 55-56; Kenneth Drake, *The Sonatas of Beethoven* (Cincinnati: Music Teachers National Association, 1972), pp.7-13.

seem unthinkable, in the author's opinion at least, to play for example the opening of the third movement of Mozart's Piano Concerto, KV488, at an *mf* dynamic where the composer indicates *f*, when the performer must project the right spirit of the passage up to the last row of a 3000-seat concert hall and also compete with a modern symphony orchestra, pleasing a modern audience who, in Badura-Skoda's words, is accustomed to 'the street noises, the thunder of railways and the roaring of airplanes'.⁵ After all, the main reason for the modern piano's predominance over the fortepiano in modern concert halls is the latter's limited volume.

As Sandra Rosenblum and Kenneth Drake both claim, in the Classical period, music often gives us the impression of stretching the instrument's limits, creating a sense of struggle. (Whether it gave this impression to an eighteenth-century audience is of course a matter of conjecture.) Therefore, the music could actually sound 'grander' on an early instrument.⁶ If a modern performer playing on a modern instrument adjusts its volume levels to replicate those of the early instrument, any 'struggling' effect contained within the music would be lost.

ii. Sudden changes in dynamic level

Classical-period piano music includes many sudden changes of dynamics. These occur when moving from one constant dynamic level to another ('terraced' dynamics in Baroque music), and when a graduated dynamic is followed by a sudden change (for example from a *crescendo* to *subito p* or from a *diminuendo* to *subito f*). These changes, quite clearly pronounced on the early piano, can prove problematic on the modern one.

⁵ Badura-Skoda, *Interpreting Mozart on the Keyboard*, p. 20.

⁶ Rosenblum, *Performance Practices*, p.57-58; Drake, *The Sonatas of Beethoven*, p.8.

Sudden changes in dynamic level continue the afore-mentioned Baroque phenomenon of terraced dynamics, required at that time principally by the harpsichord, which, although unable to create dynamic gradients, can create abrupt dynamic contrast by means of its second manual which creates a ‘loud’ effect.⁷

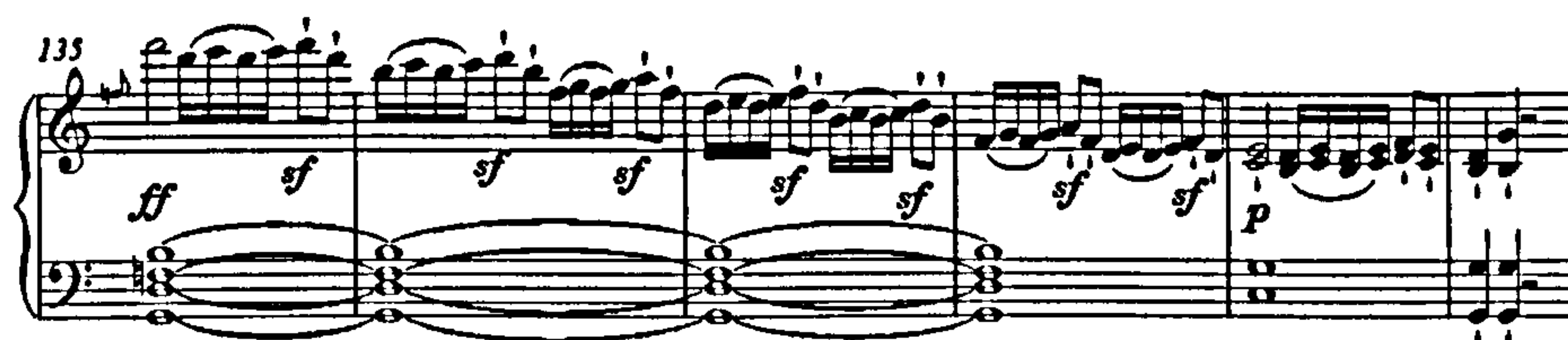
Swift dynamic changes are indicated in Classical-period music mostly in the form of *p* and *f*; their occurrence often helps clarify structure and form, uniting musical ideas and, at the same time, separating them from each other. This is the case for larger structural units such as an exposition or development section as well as for smaller ones such as themes, or even motivic fragments of themes. For example, level dynamics from *ff* to *p* intensify the textural and structural difference between the exposition and the development section of Beethoven, Sonata op.2 no.3, I at b.90, and also between the development and the recapitulation section of the same movement, at bb.138-139 (see Example 4.1, a and b)

Ex. 4.1:

a) Beethoven, Sonata op.2 no.3, I, 88-90.



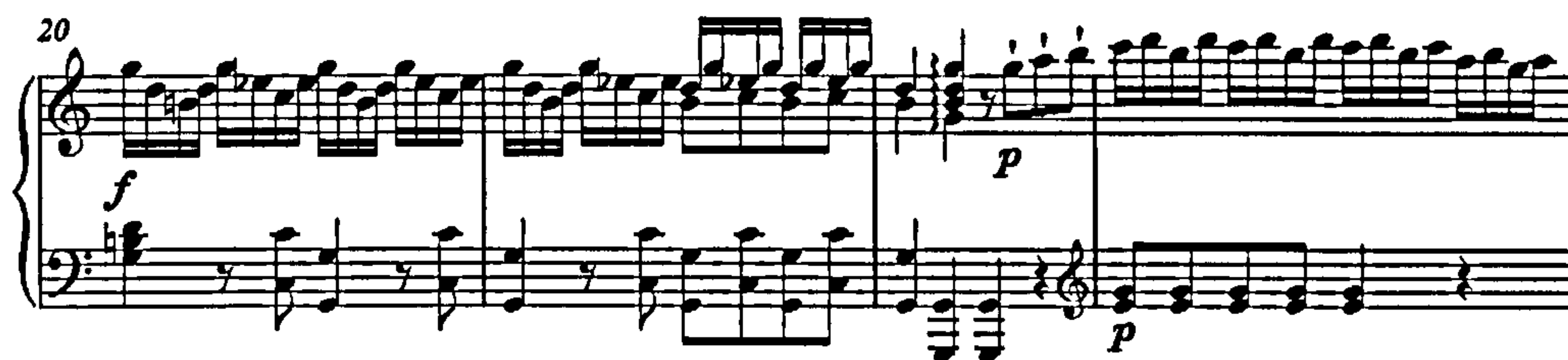
b) Beethoven, Sonata op.2 no.3, I, 135-140.



⁷ According to Howard Ferguson, ‘Terraced dynamics’ is a baroque keyboard practice used mostly on the harpsichord in order to reproduce the *tutti/solo* effect of the Ritornello or Concerto forms. (See his *Keyboard Interpretation*, p.158.) However it also occurs in string writing, etc.

Similarly, level dynamics from *f* to *p* occur at the presentation of theme B, in Mozart, Sonata KV 310, I, at b.22 (see Example 4.2).

Ex. 4.2: Mozart, Sonata KV 310, I, 20-25.



Phrases of contrasting characters within a single theme are also sometimes delineated by different dynamic levels, such as in the case of the opening theme of Mozart Sonata KV311, III (see Example 4.3).

Ex. 4.3: Mozart Sonata KV311, III, 1-8.



The 3rd movement of Mozart, Sonata KV281, offers a good illustration of the relationship between level dynamics and musical structure. The movement is written in a straightforward rondo form, A B A' C A D A'' E A.⁸ Apart from the last entry of the *ritornello*, A (b.142), and the two previous sections, A'' and F, which carry no

⁸ A (bb. 1-17) B (bb. 18-43) A' (bb. 43-51) C (bb. 52-70) A (bb. 71-89) D (bb. 90-113) A'' (bb. 114-123) E (bb. 124-142) A (bb. 142-162).

dynamic indication, all the other main sections begin with sudden change of volume.⁹

Such manipulation of dynamics occurs within sections too. For example, the initial statement of theme A (see Example 4.4) can be divided into two main phrases: *A* (bb.1-8) and *B* (bb.8-17).

Ex. 4.4: Mozart Sonata KV281, III, 1-17.

The musical score for Mozart's Sonata KV281, III, measures 1-17, is presented in a single system with five staves. The key signature is one flat (F major), and the time signature is 3/4. The tempo is marked 'Allegro'. The score is divided into two main sections, A and B, with sub-phrases indicated by brackets and labels. Section A (measures 1-8) is marked 'p' (piano) at the beginning. It is divided into two sub-phrases: 'a1' (measures 1-4) and 'a2' (measures 4-8). Section B (measures 8-17) is marked 'f' (forte) at the beginning. It is divided into three sub-phrases: 'b1' (measures 8-11), 'b2' (measures 11-14), and 'b3' (measures 14-17). The score includes dynamic markings: 'p' at the beginning of A, 'f' at the beginning of a2, 'p' at the beginning of b1, 'f' at the beginning of b2, and 'pp' (pianissimo) at the end of b3. The score also includes articulation marks and phrasing slurs.

The first phrase is divided into two sub-phrases, the first, 'a₁', which is marked *p* and the second, 'a₂', which has the same motivic material in the right hand but octaves in the left, and is marked *f*. The next phrase, which consists of running triplets, is divided into three sub-phrases, the first, 'b₁', is marked *p*, the second, 'b₂', *f*, while the markings in the next sub-phrase, 'b₃', are even more punctilious. As well as helping to clarify structure, sudden dynamics also outline changes of character and mood, and

⁹ bb.17-18, *pp* to *f*; b. 43, *f* to *p*; bb.51-52, *f* to *p*; bb.70-71, *f* to *p*; bb. 89-90, *f* to *p*.

highlight harmonic, textual and registral changes. Dramatic changes of mood are a hallmark of Beethoven's piano music. The second movement of Sonata op.2, no.2, is written in rondo form, with the initial theme re-appearing in D major. However, at b.58, at the last statement of the initial theme, the mood changes dramatically, with a sudden dynamic change to *ff* along with a harmonic change to D minor (see Example 4.5).

Ex. 4.5: Beethoven Sonata op.2, no.2, II. 57-60.



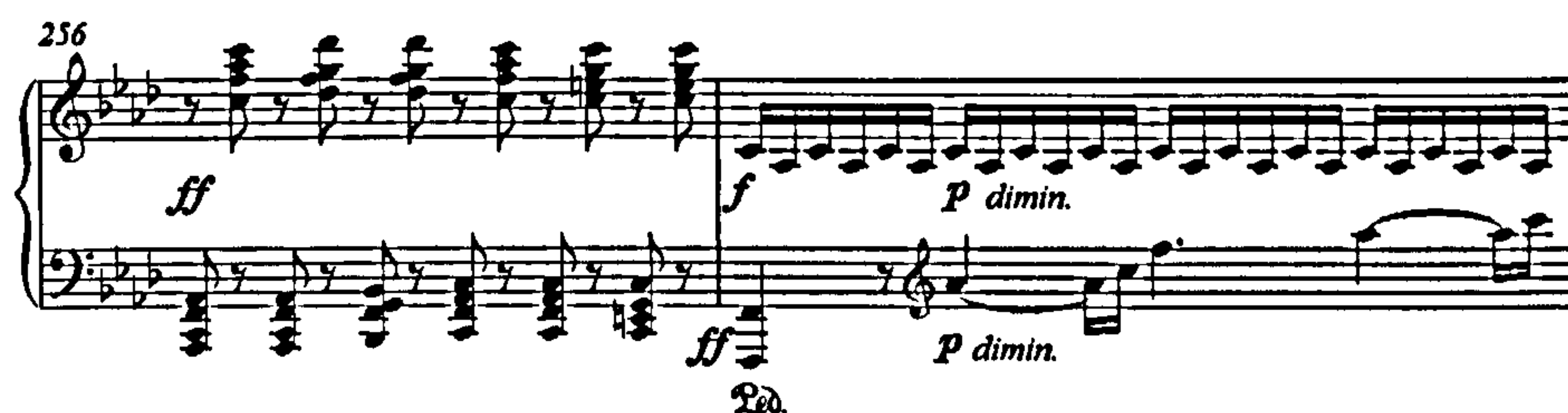
Another typical Beethovenian dramatic outburst takes place in the *Appassionata*, op.57, I, 238 (See Example 4.6).

Ex. 4.6: Beethoven Sonata op.57, I, 238-239.



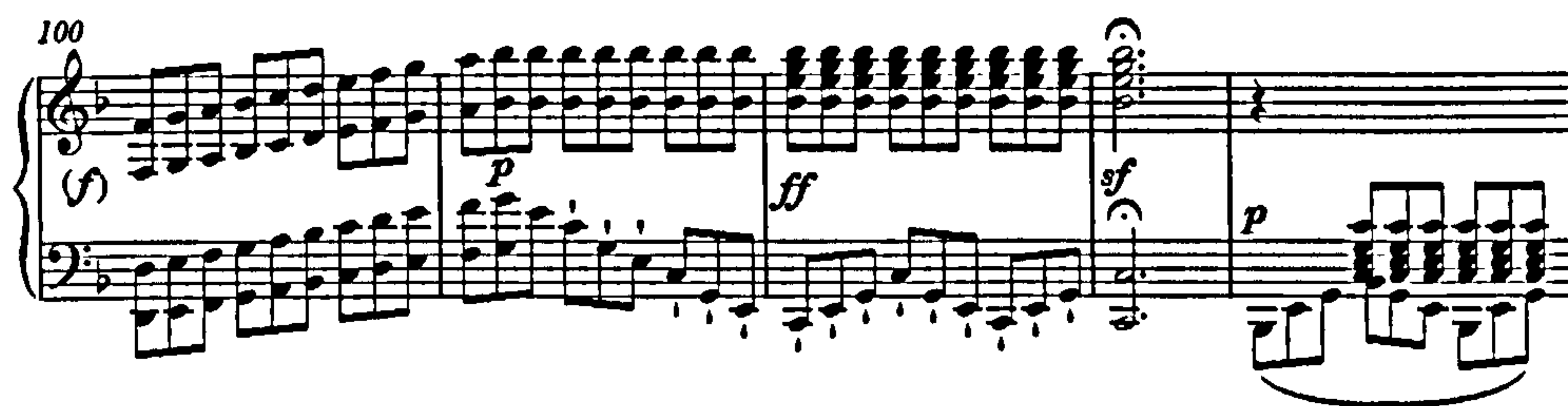
Here, abrupt *ff* chords, followed by a sudden drop to *p* (b.239) lead directly to the coda. Again, towards the end of the coda, at b.257 (see Example 4.7), the final phrase drops suddenly changing dramatically the mood.

Ex. 4.7: Beethoven Sonata op.57, I, 256-257.



Consecutive, swift changes of mood can be seen in Example 4.8. Here dynamics move rapidly from *f* to *p* to *ff* and then to *p* again, over a constant harmony, creating a sort-of emotional ‘rollercoaster’ within a period of just four bars.

Ex. 4.8: Beethoven Sonata op.54, I, 100-104.



Such changes of dynamics may mark changes of spirit, from ‘serious’ to more ‘light-hearted’; this may be the case with the continuous shifts from *ff* to *p* simultaneous with changes from tonic to diminished seventh in Beethoven, Sonata op.53, III, 441-452 (see Example 4.9).

Similarly, rapid shifts from *f* to *p* can evoke humour in Classical period music. See, for example, Mozart, Sonata KV 279, III, 124-132 (Example 4.10) where, if this passage were played with single or graduated dynamics, such lightheartedness might be lost.

Ex. 4.9: Beethoven, Sonata op.53, III, 441-448.

Excerpt from Beethoven's Sonata op.53, III, measures 441-448. The score is in G major and 3/4 time. It features a piano (p) and forte (f) dynamic contrast. The right hand plays a melodic line with slurs and ties, while the left hand provides harmonic support with chords and single notes. The key signature has one sharp (F#).

Ex. 4.10: Mozart, Sonata KV 279, III, 124-132.

Excerpt from Mozart's Sonata KV 279, III, measures 124-132. The score is in G major and 3/4 time. It features a piano (p) and forte (f) dynamic contrast. The right hand plays a melodic line with slurs and ties, while the left hand provides harmonic support with chords and single notes. The key signature has one sharp (F#).

Another instance occurs in the 1st movement of the same Sonata, at b.29 where the ‘unexpected’ drop to *p* adds a touch of humour and possibly some sarcasm as well (see Example 4.11).

Ex. 4.11: Mozart Sonata KV 279, I, 28-29.

Excerpt from Mozart's Sonata KV 279, I, measures 28-29. The score is in G major and 3/4 time. It features a piano (p) and forte (f) dynamic contrast. The right hand plays a melodic line with slurs and ties, while the left hand provides harmonic support with chords and single notes. The key signature has one sharp (F#).

Sudden altered-dynamic indications can also highlight the conflicting

characteristics of a single theme. In Example 4.12, for instance, the ‘ponderous’ and the ‘delicate’ aspects of the opening theme are emphasized with *f* and *p* indications respectively. Similar examples can be seen in Mozart, Sonata KV311, II, 1-4, or in Haydn, Sonata Hob. XVI/52, no. 63, I, 1-5.

Ex. 4.12: Mozart Sonata KV457, I, 1-4.



A dramatic interruption of a theme can also be created by this means. Beethoven, for example, uses sudden *ff* interpolations into the re-statement of the initial theme in the introduction to Sonata op. 13 in bb. 5-7 (see Example 4.13). A similar example occurs in the *Appassionata*, op. 57, I, 16-23.

Ex. 4.13: Beethoven Sonata op.13, I, 5-7.



Sudden changes of dynamic level can help create contrast between repeated passages. An ‘echo’ effect can be seen for example in Mozart, Sonata KV281, II, 32-

38 (see Example 4.14).¹⁰

Ex. 4.14: Mozart, Sonata KV281, II, 32-38.



Yet another example occurs in Mozart, Sonata KV309, III, 42-43 (see Example 4.15) where, here, the sudden drop to *p* also highlights a harmonic change from C major to C minor, intensifying the ‘darker’ colour.

Ex. 4.15: Mozart, Sonata KV309, III, 42-43.



Abrupt drops of volume sometimes intensify changes of register in repeated passages. In Beethoven, Sonata op.53, III, 515-522, for instance (see Example 4.16) the *ff* right-hand melody in bb.515-516 and 519-520 is repeated softly (*p*), one octave lower. This could be seen as a humorous or even sarcastic effect. A similar device, but with change of register in the left hand, is used in Mozart, Sonata KV279, I, 51-55.

¹⁰ Howard Ferguson observes that this effect is reminiscent of Baroque practices. (*Keyboard Interpretation*, p.158.)

Ex. 4.16: Beethoven, Sonata op.53, III, 515-522.



The sudden dynamic drop following a *crescendo* is a highly expressive tool, especially when used by Beethoven. It often highlights or stresses melodic or harmonic peaks more subtly than a straightforward accent. An example of this can be found in Mozart, Rondo KV511, 2-5 (see Example 4.17). Although one might anticipate A as the loudest note of the phrase, it is marked with a sudden *p*, therefore creating greater stress and intensity than an accent could achieve.

Ex. 4.17: Mozart, Rondo KV511, 2-5.



A similar situation can be seen in Beethoven, Sonata op.110, I, 19-20 where the stressing of the melodic peak through *subito p* is successfully achieved. (see Example 4.18).

Ex. 4.18: Beethoven, Sonata op.110, I, 19-20.



Equally, the '*crescendo* to *p*' effect appears occasionally on harmonic climaxes and highlights the harmonic arrival in Beethoven Sonata op.53, I, 21-23 (see Example 4.19).

Ex. 4.19: Beethoven Sonata op.53, I, 21-23.



Other similar instances can be found in Beethoven Sonata op.13, III, 31-33 and 40-51.

All the abrupt changes described above are more pronounced on the early instrument, from loud to soft and, to a lesser degree, from soft to loud. On the early piano, the latter instantly exposes the two dynamic extremes of the instrument. In addition, as Richard Troeger notes, loud sounds on the early piano emphasize the upper partials to a particularly high degree.¹¹ On the modern piano, a sudden loud sound does not usually invoke such extremes, except perhaps in the mid- to late-20th century repertoire (Messiaen, Boulez, Stockhausen, Ustvolskaya, etc.).

More problematic for the modern pianist, however, is the transition from loud

¹¹ Troeger, 'Mozart's Piano', p.19.

to soft. This effect on the early piano can be produced quite naturally because of the quick decay of notes on this instrument; a loud sound diminishes rapidly allowing space for the soft sound to enunciate. On the modern piano, however, the loud sound does not decay quickly enough and therefore is in danger of blending with the soft sound that follows. In music, this 'overshadowing' reduces the intensity of the articulated dynamic swifts, an effect used as a great expressive tool in the music of the late eighteenth and early nineteenth centuries.

iii. Gradual dynamic changes

Although sudden dynamic changes in the form of level dynamics predominate in musical scores of the Classical period, not all the *p* or *f* indications can be considered 'level'; indeed, the lack of notated graduated dynamics does not always exclude their existence in performance. Mozart, for example, rarely marks *crescendo* or *diminuendo*; does this mean that he does not intend dynamic graduation? A lack of dynamic indications is fairly commonplace in the scores of Classical period music. There are several totally unmarked movements, for example Mozart, Sonata KV570, II; one could argue that dynamic variation is actually intended here, as in other of his scores. Also, given the practice amongst composers of only partly notating ornamentation, it seems reasonable to assume that the same attitude applies to dynamics. Therefore, one may cautiously surmise that level dynamics are not always intended.¹² Kenneth Drake illustrates certain instances in the music of Beethoven that invite the assumption that Beethoven intends a *crescendo* or *diminuendo* before an *f*

¹² For an interesting discussion concerning level and graduated dynamics see Rosenblum, *Performance Practices*, pp 62-71. See also Brown, *Classical and Romantic Performing Practice*, pp.59-63.

or *p* respectively, confirmed in the edition of Beethoven's student, Ignaz Moscheles.¹³

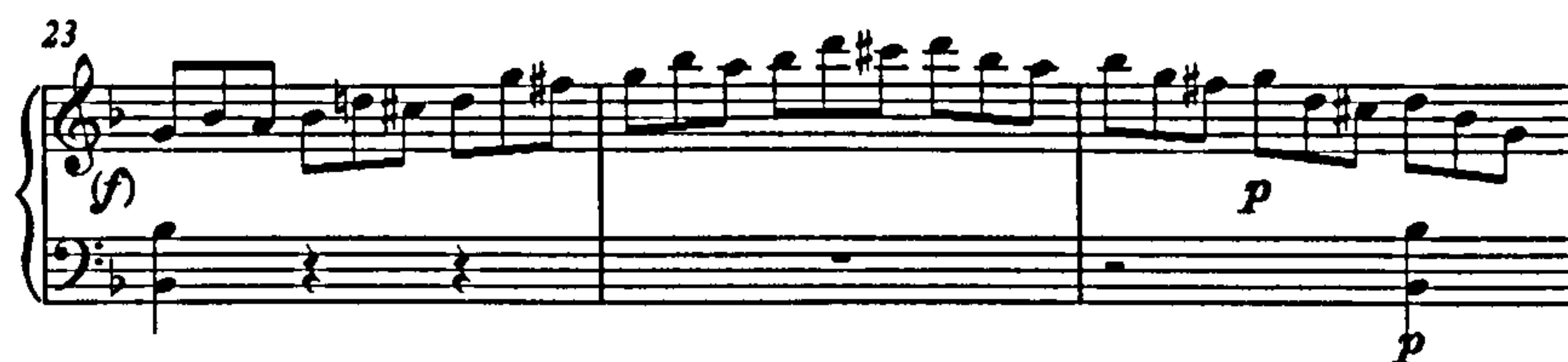
There are several places in the music of Mozart and Clementi too which invite the application of this thesis. In Mozart Sonata KV280, I, 35-39, for instance, the succession of descending and ascending triplets is marked *f* and *p* respectively (see Example 4.20).

Ex. 4.20: Mozart Sonata KV280, I, 35-39.



One could hypothesise that the transition from *f* to *p* and vice versa was gradual rather than sudden, with a dynamic increase on the ascending triplets and decrease on the descending ones. Of course, this is only a hypothesis; the music could equally be played in one-bar blocks of *f* or *p*. In fact the markings might encourage the pianist to interpret the music in this latter way. However, there are no such markings in the next example. Here, ascending and descending triplets occur in bb.23-25 of the same movement (see Example 4.21).

Ex. 4.21: Mozart Sonata KV280, I, 23-25.

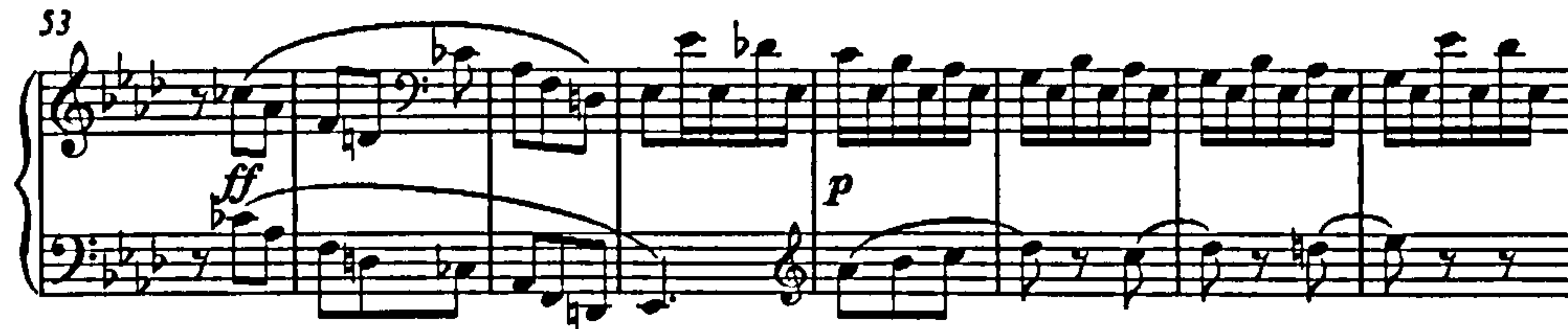


¹³ Drake, *The Sonatas of Beethoven*, pp.92-95.

Here, *p* appears at the second beat of b.25. A sudden drop to *p* (from the previous *f*), half way through the melodic descent seems awkward, and occurs in a much narrower range of the keyboard. A gradual dynamic increase, from the first beat of b.23 until the third beat of b.34, followed by a gradual dynamic decrease, reaching soft levels on the second beat of b.25 might be more persuasive. After all, the implication of graduated dynamic increase on ascending melodic lines and dynamic decrease on descending ones is often mentioned in early treatises. As Czerny states: ‘According to the general rule, every ascending passage must be played *crescendo*, and every descending passage, *diminuendo*.’¹⁴

One more example which seems to invite graduated transition is Clementi, Sonata op.13, no.6, III, 53-60 (see Example 4.22).

Ex. 4.22: Clementi, Sonata op.13, no.6, III, 53-60.



A sudden drop from *ff* to *p* at b.56 is problematic, because although a sudden *p* indication might apply to the left hand melody, it would not do so as happily for the right hand tune, which starts two beats earlier and acts as a counter-theme. A gradual dynamic decrease across the descending quavers, leading to a *mp* entry of the right-hand semiquavers, which again gradually drop to *p* at b.56, where the left hand enters, would create a smoother transition.

¹⁴ Carl Czerny, *Complete Theoretical and Practical Piano Forte School: From the First Rudiments of Playing to the Highest and Most Refined State of Cultivation With the Requisite Numerous Examples Newly and Expressly Composed for the Occasion*, translated from the original by J. A. Hamilton, vol.3 (London: R.Cocks 1839), p.15.

Despite the reasoning offered above, in Classical-period music, we cannot be totally certain whether particular dynamic shifts are meant to be sudden or gradual. Although the majority should probably be executed suddenly, a considerable number of questions remain for the modern performer to resolve, according to his or her careful examination of the sources, experience, stylistic awareness, 'taste' and intuition.

iv. Accents

Another prevalent phenomenon related to dynamics is accents. Accentuation has a prominent position in most eighteenth-century treatises and accents play a vital role in the music of the period which, as described earlier, is often associated with rhetoric. Türk, for example, often makes this correlation:

Whoever would read a poem and the like in such a way that it becomes comprehensible to the listener must place a marked emphasis on certain words or syllables. The very same resource is also at the disposal of the practising musician.¹⁵

Some years later, Hummel makes a similar connection:

As, in speaking, it is necessary to lay an emphasis on certain syllables or words, in order to render our discourse impressive, and the meaning of our

¹⁵ Türk, *Klavierschule*, p.324.

Ex. 4.24: Beethoven, Sonata, op.7, I, 359-360.

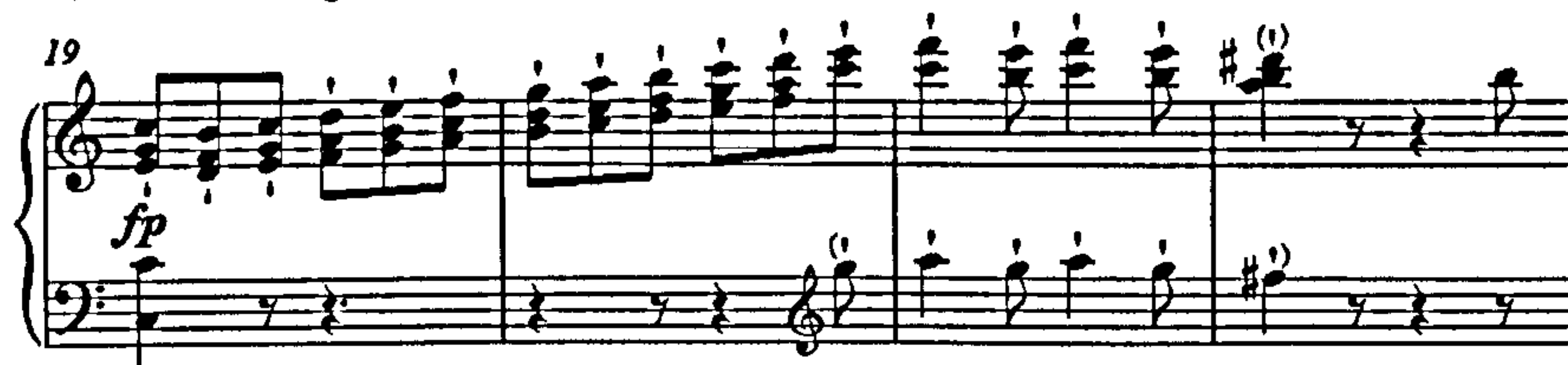


In the period being discussed, accents often highlight melodic, harmonic and rhythmic structure. In this way, their function resembles that of the short articulating slur described earlier.

Theme entries, for instance, are sometimes identified by accent signs, for example, in Beethoven, Sonata op.2, no.3, IV, 19, where a *fp* sign highlights the reappearance of the initial motif, and also in Mozart, Sonata, KV311, III, 173, where the same sign marks the *ritornello* entry after the *recitativo* in bar 173 (see Example 4.25, a and b).

Ex. 4.25:

a) Beethoven, Sonata Op.2 no.3, IV, 19-22.



b) Mozart, Sonata, KV311, III, 173-174.



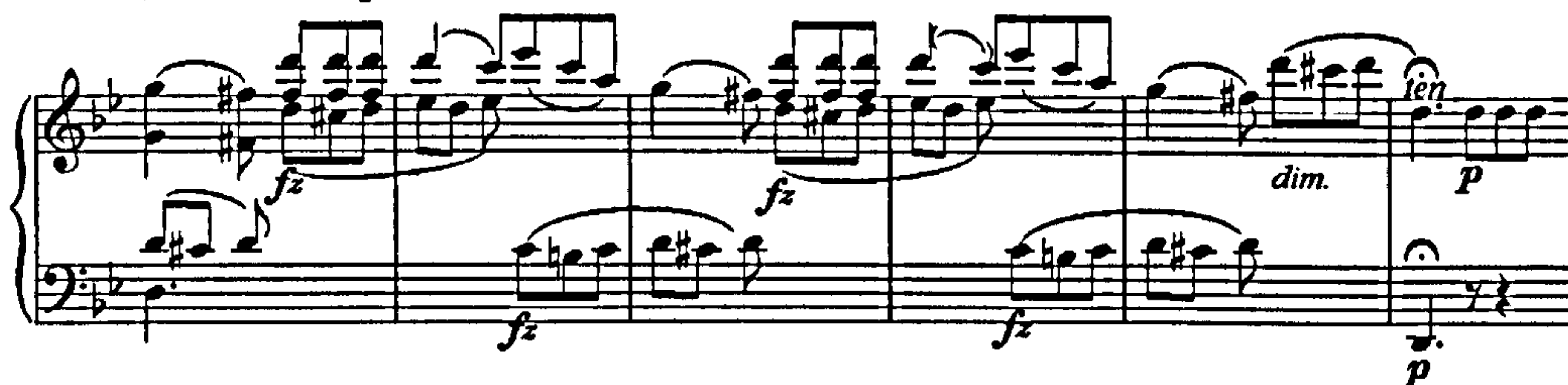
On both occasions the attack draws attention to the theme entry, with a rapid return to *p*, the theme's original dynamic.

Accent indications can also point out voice entries on contrapuntal textures.

See for instance Clementi, Sonata, op.34 no.2, I, 18-22, where *fz*'s mark every counter-subject entry on the left hand, and Beethoven, Sonata, op.10 no.3, III, 17-24, where *fs* marks highlight canonic entries (see Example 4.26, a and b).

Ex 4.26:

a) Clementi, Sonata, op.34 no.2, I, 18-22.



b) Beethoven, Sonata, op.10 no.3, III, 17-24.



Notated accentuation can delineate the shape of a melody. For example, see Mozart, Sonata KV310, II, 1, where the *fp* sign suggests that the A¹ in bar 1 is the peak of that melodic fragment, and also Mozart, Sonata KV309, III, 131-134, where the *fp* signs can define the shape of the melody with A (b.132) and E (b.134) the two melodic peaks (see Example 4.27, a and b).

Ex. 4.27:

a) Mozart, Sonata KV310, II, 1.



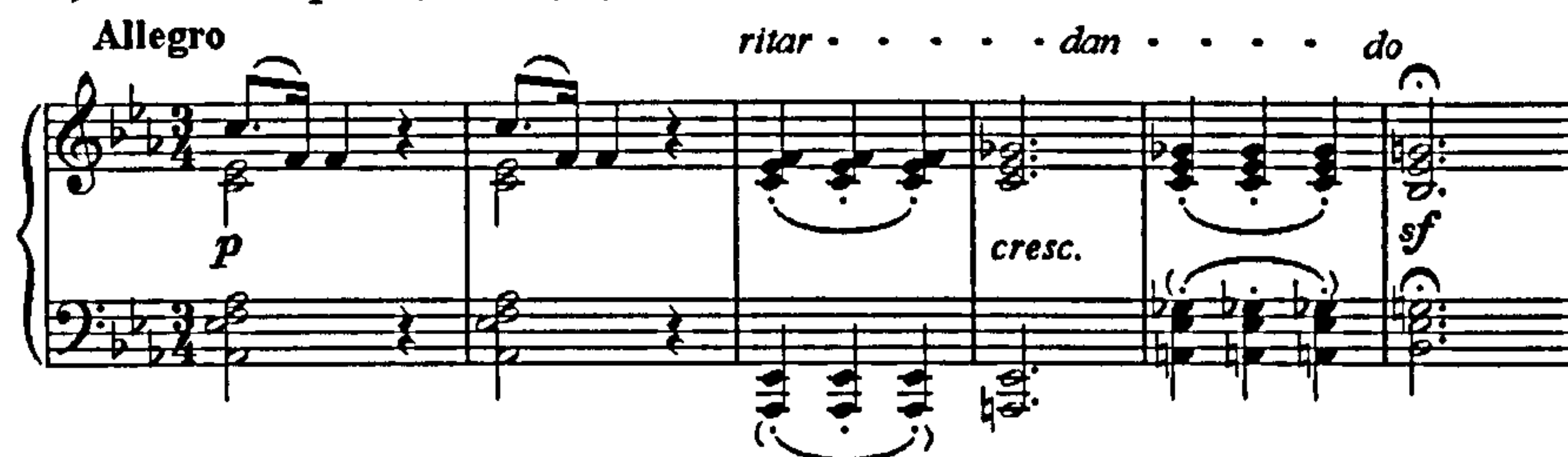
b) Mozart, Sonata KV309, III, 131-134.



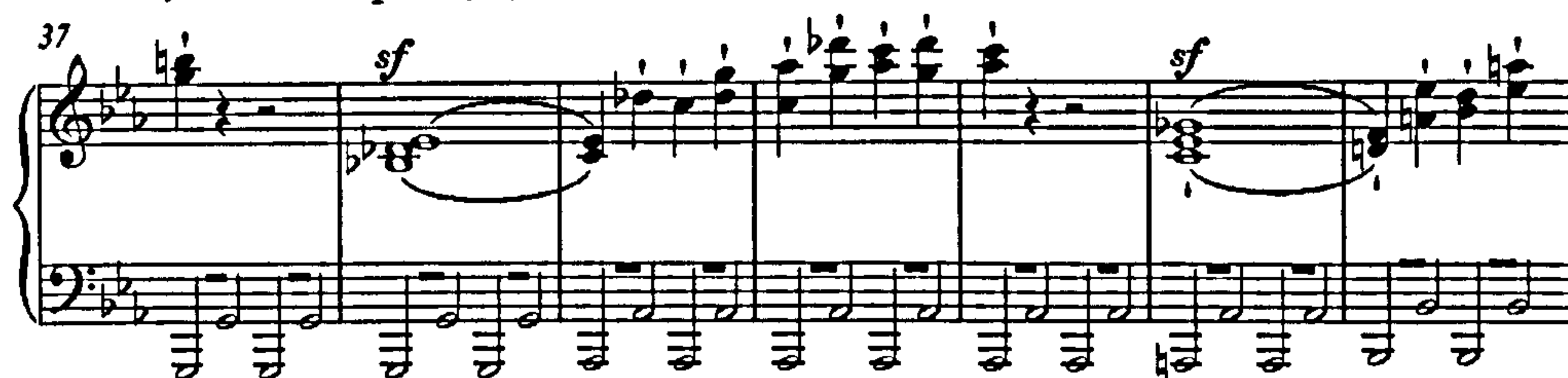
Accents can also highlight harmonic structure. See for example, Beethoven, Sonata op.31, no.3, I, 1-6, where the *sf* marks the harmonic arrival in b.6, and Beethoven, Sonata op.13, I, 38-44, where the *sf* markings in bb.38 and 42 point out the harmonic modulations (see Example 4.28 a and b).

Ex. 4.28:

a) Beethoven, Sonata op.31, no.3, I, 1-6.



b) Beethoven, Sonata op.13, I, 38-44.



Notated accentuation is frequently used to highlight rhythmical structure too. There are several places where accents emphasize the strong beats of the bar (metric accents) as well as the weak beats (contra-metric accents) in a way similar to that of articulating slurs, as discussed in Chapter 3.

Accentuation on weak beats of the bar can sometime upset the metre, as in Beethoven, Sonata op.54, I, 30-32 (see Example 4.29).

Ex. 4.29: Beethoven, Sonata op.54, I, 30-32.



Here, although the movement is in 3/4 time, the *sfs* on bb.30-32 could give the impression to the listener that the metre has changed for a moment to 2/4, thus creating an aesthetic tension. A characteristic example where accent signs are used to upset the metre as well as establish it can be seen in Clementi Sonata op.34 no.2, I, 102-109 (see Example 4.30).

Ex. 4.30: Clementi Sonata op.34 no.2, I, 102-109.



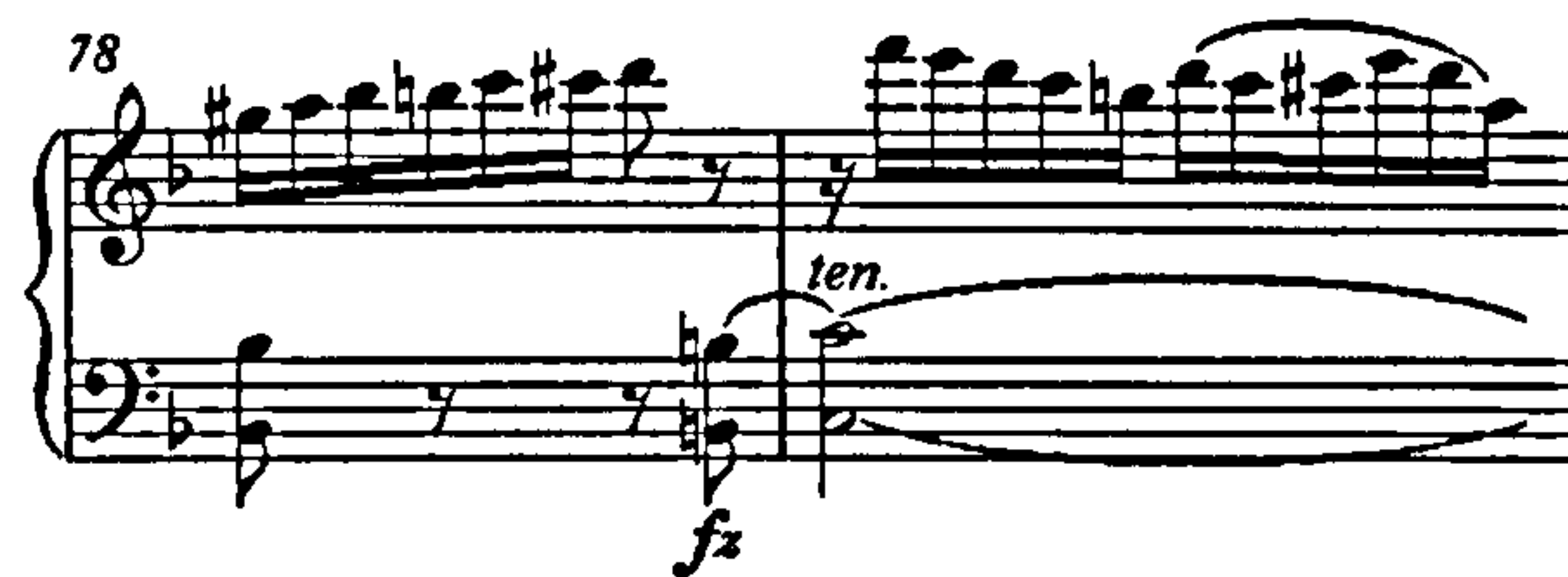
Here, the 3/4 metre is clearly defined by the *fz* markings in b.102. In bb.105-106 it is disturbed by the slurred semi-quaver figures on beat 1 and 3 (b.105) and beat 2 (b.106). The *fz* markings in bb.105-106 'confirm' the metre's disruption, while those in bb.108 and 109 set re-establish it.

According to early treatises, appoggiaturas and dissonances are normally places that require more emphasis.¹⁸ Accordingly, in Classical-period scores, there are several places where appoggiaturas and dissonant chords are marked with an

¹⁸ Türk, *Klavierschule*, p.326.

accent sign following the rule of tension-release. There are also places where accents are placed to create an appoggiatura-like feeling. In Clementi. Sonata op.24 no.2, II, 78-79 for example, the *fz* marks the lower neighbour of C, giving the impression that it is, in fact, an appoggiatura, resulting in rhythmic play (see Example 4.31).

Ex. 4.31: Clementi. Sonata op.24 no.2, II, 78-79.



The use of *fp* and *ffp* as accent indications appear frequently in Classical scores and have a highly expressive role. Leopold Mozart describes their function as ‘the expression which the composer desires when he sets *f* and *p*, namely forte and piano against a note.’¹⁹ Likewise, Haydn describes the *fp* effect in a marginal note with his handwriting in the score of *Armida*:

The author prays that, in the following and various similar passages, his ultimate object and true expression be reached, namely, that in all parts the first stroke of the forte should be *of the shortest duration*, in such manner that the forte *immediately* gives the impression of disappearing.²⁰

This effect is most achievable in stringed and wind instruments, where the player has full control of the sound. However, on the early piano, even though the player loses

¹⁹ Leopold Mozart, *Violinschule*, xii, §8, quoted in Badura Skoda, *Interpreting Mozart on the Keyboard*, p.24.

²⁰ Karl Geiringer, *Joseph Haydn* (Potsdam, 1932) p.114, quoted in Miriam Sheer, ‘The Role of Dynamics in Beethoven’s Instrumental Works’ (PhD diss. Bar-Ilan University, 1989) p.47 (italics mine).

the sound control after the note is struck, the *fp* effect can be brought out due to the instrument's rapid diminishing tone. The most characteristic example can be found in the opening chord of Beethoven's *Pathétique* Sonata op.13, which Beethoven marks *fp* obviously seeking a sharp attack on the chord followed by a 'dramatic' dynamic decrease that would lead to the next chord which should start *p* (see Example 4.32).

Ex. 4.32: Beethoven, Sonata op.13, I, 1-2.



This expressive effect cannot be totally attained on the modern piano because the sound decreases much more smoothly and slowly. For the execution of this particular passage, Sandra Rosenblum advises that the modern player could imitate the swift dynamic decrease by pedalling on or after the chord while releasing the keys and then controlling the sound with the pedal.²¹ This technique does work quite effectively but requires extremely careful finger control and great familiarity with each individual instrument that the passage is performed. A slight miscalculation could lead to unwanted sound gaps and therefore it is not suggested in a concert performance, to the author's opinion at least.

Another way to produce the *fp* effect on the modern piano is to depress the pedal just before the chord is struck thus letting all the strings to vibrate and then to lift the pedal after the chord is played, immediately afterwards, continuing to hold down the keys with the fingers, leaving only the chord's string in vibration. This does produce a swift dynamic decrease, although possibly not as effective as Rosenblum's

²¹ Rosenblum, *Performance Practices*, p.86.

suggestion, but certainly a 'safer' one.

The role of accents, as revealed by all the above examples, is quite significant in Classical piano music and the instruments for which this music was written, quite capable for producing the required effects. As described previously, due to its mechanical construction (leather-covered hammers, wooden frame etc.) the early piano has a more incisive and rapid-diminishing tone and therefore can produce a more distinctive and clear sound attack. On the modern piano, the tone cannot decrease quickly to its original level and therefore the sound of the accented note or chord is just a loud sound and in a way blended with the next one. After all, clarity of sound was an essential requirement according to early sources, and as Türk asserts: 'every tone must be played with its proper intensity, plainly and clearly separated from the others'.²²

Thus, on modern instruments, the production of accents is more problematic; in Sandra Rosenblum's words: 'On the fortepiano the *sforzando* can produce more bite'²³ and in Malcolm Bilson's, 'the modern piano has no *sforzando* in the Beethovenian sense'.²⁴ The dynamic nuance, particularly in a quiet context, achievable on the early piano, is simply not, on the modern one. Therefore, the modern pianist may have to scale the attack down dynamically; yet, 'this loses some flavour' according to Richard Troeger.²⁵ However, by recognizing and understanding this problem, the modern pianist can try to imitate or at least approximate the 'fortepiano effect' by using the pedal, for example (as described earlier on in Example 4.32) or even by allowing some extra time for the sound to diminish etc., issues which

²² Türk, *Klavierschule*, p.324.

²³ Rosenblum, *Performance Practices*, p.86.

²⁴ Bilson, 'Beethoven and the Piano', p.21.

²⁵ Troeger, 'Mozart's Piano', p.20.

will be further developed in the last chapter of this dissertation.

Chapter 5: Pedal indications

Pedalling is probably one of the most problematic aspects of playing Classical music on the modern piano, and has preoccupied many latter-day performers and scholars. The damper-raising mechanism itself has undergone many modifications, moving from hand-stop to knee-lever and later to a foot-operating system, which is the sustaining pedal that we use nowadays. It has always had the same objective, however: to raise the dampers in order to sustain the tone after the release of the key. Yet its actual sound-effect has varied considerably. Thus, the execution of certain pedal indications in Classical music on the modern piano might create quite a different effect here from that on the instrument for which they were intended; indeed, they might even sound quite incongruous.

As described in Chapter One, the modern instrument, with its bigger and heavier hammers, thicker strings, and larger soundboard, produces a much more sustained tone. With the release of the dampers, the sound is sustained not only by the vibration of the struck strings, but also by the sympathetic vibration of all the rest. A seven-and-a-half octave instrument, which obviously has many more strings than a five-and-a-half octave one, therefore produces a much thicker and broader sound when the pedal is depressed. Additionally, cross-strung (modern) instruments allow the tones to merge, creating a much more blended sound than the straight-strung instruments.

Pedal indications are not very frequently found in Classical period music. There are none in Mozart's manuscripts, while there are only two in Haydn's and both occur in the Sonata Hob.XVI/50. In Clementi's works, the first pedal indications occur in the Sonatas op.37; more appear later, and with greater frequency. Pedal

indications appear more often in Beethoven's music, especially in that of his middle and late period. The rarity of pedal markings especially in Mozart and Haydn, however, does not mean that the pedal was not used in contemporary performance of their music, including by the composers themselves. Mozart's enthusiasm for the damper-raising mechanism can be seen from an often-quoted letter to his father in 1777 praising Stein's fortepianos for their effective tone-sustaining device.¹

Several passages in his music suggest that Mozart might have intended the use of the pedal and in fact many scholars have addressed this.² And although the number of Beethoven's pedal indications is estimated to be as large as 800, Czerny reported that Beethoven used the pedals 'much more than is indicated in his works'.³ However, the issue of exactly how and where contemporary pianists of the Classical repertoire might have applied the pedal is a topic deserving of a whole dissertation in itself; for that reason, this study will confine itself to issues that arise in places where the pedal is actually indicated.

Unlike Romantic piano music, where the sustaining pedal is used relentlessly, in Classical music its use cannot be considered a norm: in the latter repertoire, where it is indicated, it has a particular expressive role and function and produces a special effect; these cannot be distributed globally across the rest of the music. The role of this pedal in Classical music, especially in the works of Beethoven, has been described in detail on a number of occasions.⁴ For instance, it can improve the legato; support the tone of an important melodic note; sustain the bass; create a collective or

¹ Anderson (ed.), *The Letters of Mozart and His Family*, p.327.

² Paul Badura-Skoda, 'Mozart without the Pedal?', *The Galpin Society Journal*, vol.55 (Apr.2002), pp.332-351; Rowland, *A History of Pianoforte Pedalling*, pp.82-94; Joseph Banowetz, *The Pianist's Guide to Pedalling* (Bloomington: Indiana University Press, 1985), pp. 136-141.

³ William Newman 'Beethoven's Uses of the Pedals', in Banowetz, *Pedalling*, pp.143, 146.

⁴ See Drake, *The Sonatas of Beethoven*, pp.141-163; Charles Rosen, *Beethoven's Piano Sonatas* (New Haven and London: Yale University Press, 2002), pp.107-114; Rosenblum, *Performance Practices*, pp.126-136.

compound sound especially in arpeggiated figurations; implement and highlight dynamic contrasts, support smooth graduations of a *crescendo* and mix different harmonies for a special blurring effect. It can also highlight form and structure by connecting movements or sections or by emphasizing and colouring important motives, sections or re-statements of themes. Beethoven's pedal indications, signalling the theme and its reappearances in the Rondo of his Sonata op.53, 1-7 (see Example 5.1), are very characteristic. Here he gives the theme a special colour by mixing the bass C with the tonic and dominant harmonies.⁵ Concerning this, Czerny remarks that, 'without the pedal [this movement] would lose its effect altogether'.⁶

Ex. 5.1: Beethoven Sonata op.53, III, 1-22.

Rondo
Allegretto moderato

The musical score for Example 5.1 shows the first 22 measures of the Rondo movement from Beethoven's Sonata op.53, III. The tempo is marked 'Allegretto moderato'. The score is written for piano in 3/4 time. The left hand features a continuous arpeggiated bass line, while the right hand plays a melody. The dynamics are marked as 'sempre pp' (measures 1-5), 'pp' (measures 6-10), 'pp' (measures 11-15), and 'pp' (measures 16-20). Pedal markings are indicated at measures 1, 6, 11, 16, and 20.

⁵ Newman, 'Beethoven's Uses of the Pedals', p.143-163.

⁶ Czerny, *Pianoforte School*, vol.3, p.64, quoted in Newman 'Beethoven's Uses of the Pedals', p.157.

i. Pedal markings indicating tonal mixtures

Among all the pedal indications in Classical period music, the more controversial and problematic to realize on the modern piano are the ones that produce a special sound effect by mixing different harmonies or single melodic notes that do not belong to the same harmony (see Example 5.1).

These instances are not rare. Examples include the two Haydn pedal indications in Sonata Hob.XVI/50, I 73-74 and 120-123 which appear in two strategically important reappearances of the theme, the recitatives in Beethoven Sonata op.31, no.2, I. 143-148 and 153-158, and in Sonata op.110, III, 4, the statement of theme B in Clementi Sonata op.41, I, 30-34, and the first movement of Beethoven 'Moonlight' Sonata op.27, no.2 where Beethoven indicates pedal throughout the entire movement.⁷

The effect of the undamped vibrating strings has been praised in many early sources. Characteristic is C. P. E. Bach's famous statement that 'the undamped register of the fortepiano is the most pleasing to the ear'.⁸ Accordingly, Czerny describes the effect thus:

In passages which are to be played with extreme softness and delicacy, the pedal may occasionally be held down during several dissonant chords. It produces in this case the soft undulating effect of the [A]eolian Harp, or of a very distant music.⁹

⁷ See Rosenblum, *Performance Practices*, p.127.

⁸ Carl Philip Emanuel Bach, *Essay on the True Art of Playing Keyboard Instruments*, translated and edited by William Mitchell (London: Eulenburg Books, 1974), p.431.

⁹ Czerny, *Pianoforte School*, vol.3, p.61.

The imitation of other instrumental sounds on the piano through the use of pedal was not uncommon in the late eighteenth and early nineteenth centuries. Similar associations can be found in Andreas Streicher's *Notes on the Fortepiano*:

In a *fortissimo*, he [the piano player] makes us believe that we are hearing an organ or the fullness of an entire orchestra through the lifting of the dampers. In a *pianissimo*, he conjures up through the same means the gentle sound of the glass harmonica.¹⁰

Milchmeyer also evokes a comparison with glass harmonica: 'The harmonica can effectively be imitated without the dampers, but as with any instrument that you wish to imitate, you must treat it according to its true character'.¹¹ Here this writer lets his imagination reign, illustrating with several music examples how the pedals can be used to imitate other sound effects such as bells, several vocal effects, a rocket being launched, etc.¹²

On the early piano, the mixing of all those harmonies creates a unique sound effect, a kind of 'harmonic mist'. On the modern piano, however, following those pedal indications literally would produce a blurred sound mass. Therefore, many teachers, performers and scholars advise pedal changes on every change of harmony. Kullak, for example, with regard to Beethoven, Piano Concerto no.2, I, 335-346, advises that 'when this passage is played on present day instruments it is best to change the pedal in every bar and perhaps to discontinue it entirely during the

¹⁰ Fuller, 'Andreas Streicher's notes on the fortepiano', p.465.

¹¹ J. P. Milchmeyer, *Die wahre Art das Pianoforte zu spielen* (Dresden 1797), quoted in Rowland, *History of Pianoforte Pedalling*, p.165.

¹² For more information about the use of the pedal described in early sources see Rowland, *History of Pianoforte Pedalling*, pp. 42-51.

scale'.¹³ Christa Landon discourages the indicated use of the pedal in Haydn, Sonata Hob.XVI/50, I, 73-74, in the appendix II of her edition.¹⁴

Is, therefore, changing the pedal on each harmony, or totally avoiding the pedal, acceptable when attempting a 'historically-informed' approach? It seems quite astonishing to disregard completely certain long pedal markings such as in the recitatives of Beethoven Sonata op. 31 no.2, I, which clearly were designed to produce a special sound effect, for as it has been often reported, Beethoven wished that they should 'recall someone speaking from a vault'.¹⁵

All the sources discussed earlier indicate that the harmonic blurring effect was actually practised during the Classical period. Excluding this special effect entirely from modern performances surely cannot be justified. As Robert Taub comments:

Yet – amazingly – some of these [pedal] markings, if they are even noticed, are not taken seriously even today: 'impractical on the modern Steinway', 'too difficult on the modern Steinway', 'appropriate only on the older fortepianos with smaller, more intimate sound'. This is nonsense. To disregard such markings violates the implied moral contract between the performer and composer; to take them seriously can help elevate a performance to a higher level of artistry.¹⁶

At the other extreme, some advocates believe that the pedal indications should be

¹³ Reimar Riefling, *Piano Pedalling* (London: Oxford University Press, 1962), p.4.

¹⁴ Joseph Haydn, *Haydn Sämtliche Klaviersonaten*, vol.3, edited by Christa Landon (Wien: Wiener Urtext Edition, 1973), p.124.

¹⁵ Newman, 'Beethoven's Uses of the Pedals', p.160; see also Ludwig van Beethoven, *Beethoven Sonatas*, vol .2, edited by Donald Francis Tovey and Harold Craxton (London: Associated Board of the Royal Schools of Music, 1931), p.125.

¹⁶ Robert Taub, 'Beethoven his Hands and Feet', *International Journal of Musicology*, vol.7, (1998), p.404.

followed literally on the modern instrument.¹⁷ A good example is the renowned Beethoven performer and editor, Artur Schnabel. In his edition of the Beethoven Sonatas he constantly advises strict loyalty to Beethoven's pedal markings. For instance, for the long pedal marks in the recitatives of Sonata op. 31, no. 2, he notes:

Pedal mark by Beethoven, which must be carried out without fear. The pedal must be held through, up to the release sign. Changes of pedal would deprive these measures of their profound background, their innermost essence.¹⁸

He advises a similar approach to the long pedal marks of the opening theme of the Rondo in Sonata op.53 and adds: 'To change the pedal in the third and fourth bar would defeat the very apparent intention of always letting the bass note sound until the next bass follows.'¹⁹ Is this approach, however, feasible on the modern instrument? Although any answer is ultimately a matter of taste, one can be informed by Schnabel's recordings.²⁰ In the opening theme of Rondo in Sonata op.53, for example, he applies 'without fear' a single pedal as indicated, in bb.1-8, 9-12, and 13-23 (see Example 5.1). The result is not totally convincing to the present author, at least, because the sounds are confused to such an extent that the harmonies are almost unrecognizable. Further, if Schnabel considered that mixing harmonies in such way on the modern piano was acceptable, why did he advise a pedal change on every harmonic change in the first movement of Moonlight Sonata, op. 27, no.2, where

¹⁷ Eva Badura-Skoda, 'Performance Conventions in Beethoven's Early Works', in Robert Winter and Bruce Carr (ed.), *Beethoven, Performers, and Critics*, p.74.

¹⁸ Ludwig van Beethoven *32 Sonate per Pianoforte*, edited by Artur Schnabel (Milano: Edizioni Curci, 1983) vol.II, p.128.

¹⁹ Ibid, p.238.

²⁰ L.v. Beethoven, Sonata op.53 'Wandstein', Artur Schnabel, recorded 25/04/1933, EMI 7243 5 62912 2 5.

Beethoven indicates a single pedal throughout?²¹

Another approach to the interpretation of these problematic pedal markings is neither to ignore them nor to follow them completely but to adapt them to the modern instrument's resources in an attempt to approximate the early piano's pedal effect.²² One interesting technique is described by Howard Ferguson.²³ He suggests that in certain cases, where the previously-described haze of sound is desired, the modern pianist could silently depress a handful of low notes and sustain them with the sostenuto pedal or with the fingers where appropriate (in the manner of Schoenberg, Op. 11, no.1). Thus, the sympathetic vibration caused by those undamped strings creates a 'sound mist', while frequent changes of the right pedal will prevent any excessive blur.²⁴ This technique does not quite produce the intended effect, however, because the blur is only produced by the vibration of bass strings, and is in general much feebler than that on the early piano.

A more widespread approach is the use of partial changes of the pedal, so-called 'half-pedalling'. This technique was exploited towards the end of the nineteenth century in order to attain certain effects, especially in impressionistic music. In Classical music, half-pedalling can be used to approximate the fortepiano's blurring effect; thus the initial harmony or the main bass note is caught by a full depression of the pedal and, thereafter, on every harmonic change of any non-harmonic melodic notes, the pedal is lifted only half-way through, allowing some sustaining of the previous harmony but preventing 'excessive' blurring. This type of pedalling has been often suggested for the execution of long pedal markings, as for

²¹ Beethoven, *32 Sonate per Pianoforte*, vol.2, edited by Artur Schnabel, pp.29-33.

²² Rosenblum, *Performance Practices*, pp.138-141; Banowetz, *Pedalling*, pp.167-178; Ferguson, *Keyboard Interpretation*, pp.161-165.

²³ Ferguson, *Keyboard Interpretation*, pp.163-164.

²⁴ This technique is also described in Ludwig van Beethoven, *Beethoven Sonatas*, vol.2, edited by Donald Francis Tovey and Harold Craxton, p.125.

example in Beethoven Sonata op.57, I, 233-237 (see Example 5.2), or the opening theme of Rondo in Sonata op. 53 (see Example 5.1).²⁵ However, although it works quite successfully, half-pedalling is not the safest solution, as there is always the danger of lifting the pedal more than necessary.

Ex. 5.2: Beethoven Sonata op.57, I, 233-237.

The musical score for Beethoven Sonata op.57, I, measures 232-237, is presented in three systems. The first system (measures 232-233) shows a right-hand melody with a 'sempre Ped.' instruction. The second system (measures 234-235) shows a right-hand melody with 'p diml. rit.' and 'mar.' markings, and a left-hand bass line with 'sempre Ped.' instruction. The third system (measures 236-237) shows a right-hand melody with 'Adagio' and 'pp' markings, and a left-hand bass line with 'Ped.' instruction.

On similar occasions the effect of half-pedalling can be enhanced by the holding over of certain bass notes, either with the hand or with the (modern) sostenuto, or 'middle' pedal. Banowetz for example, advises, with regard to Beethoven, Sonata op.57 (see Example 5.2), to hold over the notes C – E – G – B flat in b.234 with the left hand, and play the D flat-C motif with the right hand, changing the pedal partially on C in bb.235 and 236.²⁶ On other occasions he recommends sustaining certain bass notes with the sostenuto pedal; however, these bass notes would have faded away much earlier on the fortepiano. As a possible solution in the Rondo in op.53 (see Example

²⁵ York Bowen, *Pedalling the Modern Pianoforte* (London: Oxford University Press, 1936) p.22; Banowetz, *Pedalling*, p.173.

²⁶ Banowetz, *Pedalling*, p.176; A similar approach is described in Riefeling, *Pedalling*, p.44.

5.1), he suggests the application of the sostenuto pedal to sustain every bass note, in conjunction with partial pedalling on each harmonic change.²⁷ Although this method might work for the initial pedalled passage (bb.1-8), it is not so appropriate for the next pedalled passage (bb.9-12). The sostenuto pedal here will catch the note B as well, which is meant to be struck simultaneously with the bass G. As a result, the balance of the right-hand semiquavers will be lost because B is to be played four times in bb.9-10. In addition, the re-engagement of the sostenuto pedal might prove problematic as it is difficult to isolate single notes in fast semiquaver figurations.

Another pedalling formula that works quite effectively on the modern piano in such passages, and, in the author's opinion at least, is probably easier to operate, is so-called 'soft' or partial damping. The modern piano's pedal action is much harder, and therefore more controllable, and its mechanism more sensitive than that of the early one. In a well regulated pedal action, the slightest depression of the pedal can result in the lifting of the dampers in such a way so that they can still touch the strings but not throw their full weight. As felt is a relatively soft material, the strings can still vibrate, but at a reduced level. Thus, this type of damping can actually be continued over a long passage on the modern piano, producing the desired 'harmonic mist' without causing a 'fog', provided of course that it is executed by a well-controlled foot and judged by a sensitive ear.²⁸

From all the above-mentioned pedalling techniques it is not always easy to choose one for a certain passage, as sustaining mechanisms vary considerably from instrument to instrument. A careful evaluation of each instrument's pedalling device, as well as the room's acoustics, is always needed.

²⁷ Banowetz, *Pedalling*, p.174.

²⁸ For more information about soft damping see Bowen, *Pedalling*, p.12; see also Rosenblum, *Performance Practices*, pp.139-140.

ii. Pedal markings not indicating tonal mixtures

There are also several other problems concerned with those pedal indications that do not seem to be intended to create a harmonic blur, and if followed literally on the modern instrument could cause unwanted results. For example, there are certain examples of pedal indications which result, on the early instrument, in sustaining a too-quickly decaying bass note or notes. A clear example can be seen in Clementi, Sonata op.50 no.1, I, 113-117, where application of the pedal is indicated in bb.113 and 116 (see Example 5.3). The result on the early instrument is a support of the E octave on the left hand. A pedal release, indicated during bb.114-115, where increased left-hand activity occurs, implies that the marking is not intended to produce a harmonic blur. On the modern piano, where the bass can be sustained for longer, several pedal changes might be allowed in order to avoid the blur invoked by the right-hand semiquavers, changing the pedal marking given on this example (which are Clementi's own).²⁹

Ex. 5.3: Clementi Sonata op.50 no.1, I, 113-117.

The musical score for Clementi's Sonata op.50 no.1, I, measures 113-117, is presented in two systems. The first system covers measures 113 to 115, and the second system covers measures 116 to 117. The key signature is G major (one sharp), and the time signature is 3/4. In measure 113, the right hand plays a series of eighth notes, and the left hand plays a single quarter note (E). A 'Ped.' marking is placed below the left hand. In measure 114, the right hand continues with eighth notes, and the left hand plays a quarter note (F#). A 'fz' (forzando) dynamic marking is placed below the left hand. In measure 115, the right hand continues with eighth notes, and the left hand plays a quarter note (G). A 'dim' (diminuendo) dynamic marking is placed above the right hand. The second system starts in measure 116, where the right hand plays eighth notes and the left hand plays a quarter note (E). A 'Ped.' marking is placed below the left hand. In measure 117, the right hand continues with eighth notes, and the left hand plays a quarter note (F#). A 'p' (piano) dynamic marking is placed below the left hand. A 'rall.' (rallentando) marking is placed above the right hand in measure 116, and a 'cresc.' (crescendo) marking is placed below the right hand in measure 117. The score is marked with asterisks at the end of measures 115 and 117.

Pedalling through rests is another problematic issue because of the persistence of the

²⁹ Similar examples in Beethoven can be found in Newman, 'Beethoven's Uses of the Pedals', pp.149-150.

pedalled sound on the modern piano. In Beethoven, Sonata op.53, III, 98-101, two quaver rests are written instead of a crochet one, possibly because of the need to emphasise the pedal release sign right at the end of b.101 and not earlier (see Example 5.4). On the early instrument, this would allow the pedalled sound produced in bb.98-99 to diminish smoothly and finally vanish on the last rest sign. On the modern piano, if the pedal is fully depressed throughout, the loud sound caught in bb.98-99 will carry through bb.100-101 and therefore a smooth *diminuendo* will not be possible. A half change of the pedal on B in b.100 and another one on the first quaver rest in b.101 will facilitate the realization of the intended effect.

Ex. 5.4: Beethoven Sonata op.53, III, 98-101.



In Example 5.5 below, the use of the pedal is indicated all the way through, which results, on the early instrument, in both the sustaining of the bass octave E and the creation of a general fullness of sound. The rests and the staccato marks indicate that the hands should be lifted after each note is struck while the sound is maintained with the pedal. Kenneth Drake argues of this passage that ‘the staccato marks are touch indications determining a quality of sound rather than the length of the notes’.³⁰ Indeed, the striking of the keys from above can create a bell-like sound which was perhaps Beethoven’s intention, hence the *sf* markings.

On the early piano, however, the *sf*s are better pronounced because of the

³⁰ Drake, *The Sonatas of Beethoven*, p.147.

slight diminishing of sound that occurs during the rests allows the accented notes to stand out like bell rings. On the modern piano if the pedal is fully depressed, these accents will sound just like loud notes. Half-pedalling here might make the *sf*'s more effective.

Ex. 5.5: Beethoven, Sonata op.81a, III, 130-133.



In the opening of Sonata op.106, the pedal is indicated in the first four bars, which quite evidently creates a full, majestic sound with a triumphant character (see Example 5.6).

Ex. 5.6: Beethoven Sonata op.106, I, 1-4.



Of this passage Kenneth Drake comments that 'in utilizing a long pedal . . . Beethoven augments the *fortissimo* over the sustained B-flat major harmony'.³¹ Taub's remark is quite similar and, in addition, he advises the modern pianist to 'depress the pedal as far as possible'.³² On the early piano the pedal indeed helps to

³¹ Ibid, p.174.

³² Taub, *Playing the Beethoven Piano Sonatas*, p.36.

maintain the bass and the fullness of sound that the passage requires but at the same time does not prevent the top voice as well as the characteristic rhythmical figure to stand out distinctively, in accordance with the staccato marks.

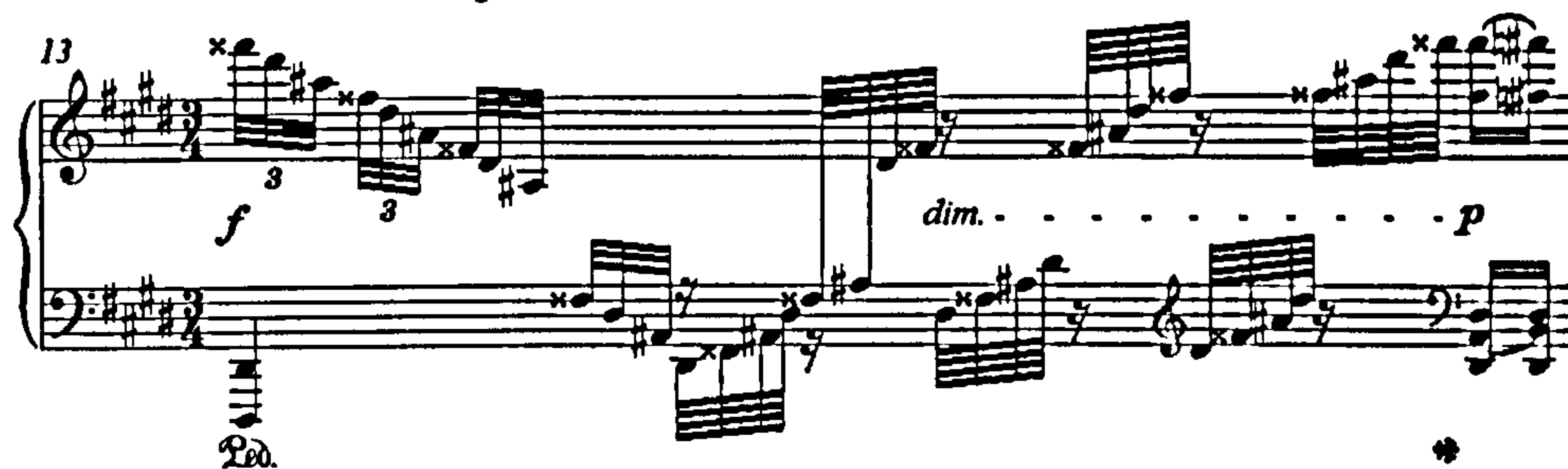
On the modern piano, unfortunately, the washes of sound produced by the pedal reduce this effect. A half-change of the pedal on the fourth beat of bars 1 and 3 will ensure a better articulation of the rhythm as well as the top voice's melody. A similar situation occurs in Example 5.7 where by pressing the pedal all the way down on the modern piano, the rhythmical, almost percussive feeling of the passage might be lost.

Ex. 5.7: Beethoven Sonata op.57, III, 1-4.

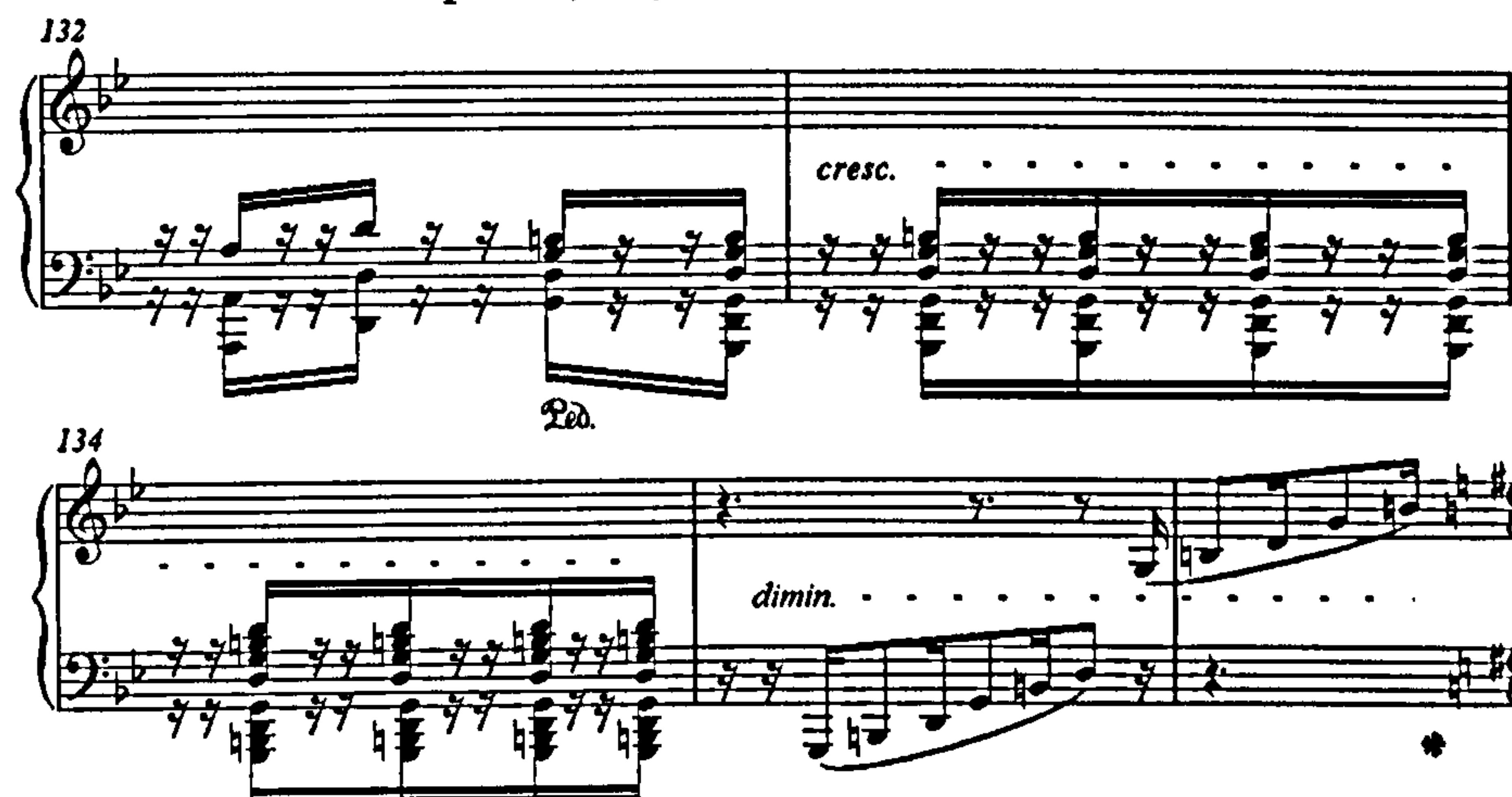


Similar issues occur when a *diminuendo* follows a *ff* or *f* within a long pedal indication, as for example in Beethoven Sonata op.109, I, 13 (see Example 5.8). This effect is almost impossible on the modern instrument because the *forte* sounds prevail. The pedal indication here is probably aimed at sustaining the bass octave D#. On the modern piano however, a few half-changes of the pedal would not prevent this, and at the same time would ensure some diminishing of the sound. In an analogous instance shown in Example 5.9, it is not possible to achieve a proper *diminuendo* with a single pedal while having in the background the sound which has accumulated from the previous *crescendo*.

Ex. 5.8: Beethoven Sonata op.109, I, 13.



Ex. 5.9: Beethoven Sonata op.110, III, 133-136.



iii. The left pedal

Fewer problematic issues occur when applying soft-pedal markings on the modern piano. Although the action-shifting mechanism did exist in the instruments of Mozart and Haydn, its use is never indicated in their scores. Soft-pedal indications occur frequently in the works of Beethoven, especially the later works, by means of 'una corda'.

By pressing the left (soft) pedal on the early piano, the action is shifted so that each hammer can strike one string instead of three (in the upper register), thus producing a much quieter effect as well as a change of timbre. When the left pedal is depressed on the modern piano, however, while the hammers are shifted in part of the keyboard's range, they strike two strings. Therefore, as Kenneth Drake remarks, the

effect of the left pedal is more obvious on the early piano.³³ In part-compensation, on the modern piano, a change of tone colour is produced by the felt-covered hammers' hitting the strings with their lesser-used, softer, area, but this is still not as effective as the *una corda* on the early instrument.³⁴

Lifting the left pedal gradually rather than swiftly is more problematic on the modern instrument. On the early piano, the hammer would initially strike one string, then two and finally all three strings. Accordingly, Beethoven often indicated '*poco a poco due ed allora tutte le corde*', for example, in the 'Hammerklavier' Sonata, op.106 III, bb.76-77 and 87-88. A similar indication occurs in Sonata op.110, III, 165 where '*poi a poi tutte le corde*' appears, which on the early instrument produces a gradual increase of volume as well as a gradual shift to a brighter tone colour as the final section of the movement is introduced. On the modern piano this gradual shift is of course impossible, because the hammers can either strike two or three strings. In such instances the modern player could try to approximate this effect with finger-controlled dynamic graduation, as well as modification of touch.

Therefore, it is not always possible to follow the composer's pedal indications literally because sometimes the effect on the modern piano might be quite different from that produced on the earlier instrument, as with the sustaining pedal, or simply not realizable, such as with the graduated left pedal release. However, as shown above, it is possible for the modern pianist to adjust such indications to the modern instrument, reproducing many integral compositional effects, if with some compromise.

³³ Drake, *The Sonatas of Beethoven*, p.160.

³⁴ For a more explicit description see Banowetz, *Pedalling*, pp.110-111.

Chapter 6: Timbre and register

The early piano possesses a very different timbre and compass from that of the modern piano. As mentioned in Chapter 1, the modern instrument's distribution of strings, struck as near to the centre of the soundboard as possible by virtue of cross-stringing, produces a rather homogenized sound throughout its range; in contrast, on the straight-strung early piano, the timbre varies between the low, middle and high registers because its strings are hitched in different parts of the soundboard – left, middle and right respectively – showing, in Richard Troeger's words 'distinct colours from one register to another'.¹

i. Separation and balance

This quality of the early piano is reflected in its repertoire, in both contrapuntal and homophonic textures. For instance, according to the following examples, the voice entries in the different registers of the instrument emerge more clearly on the early piano (see Example 6.1, a and b).

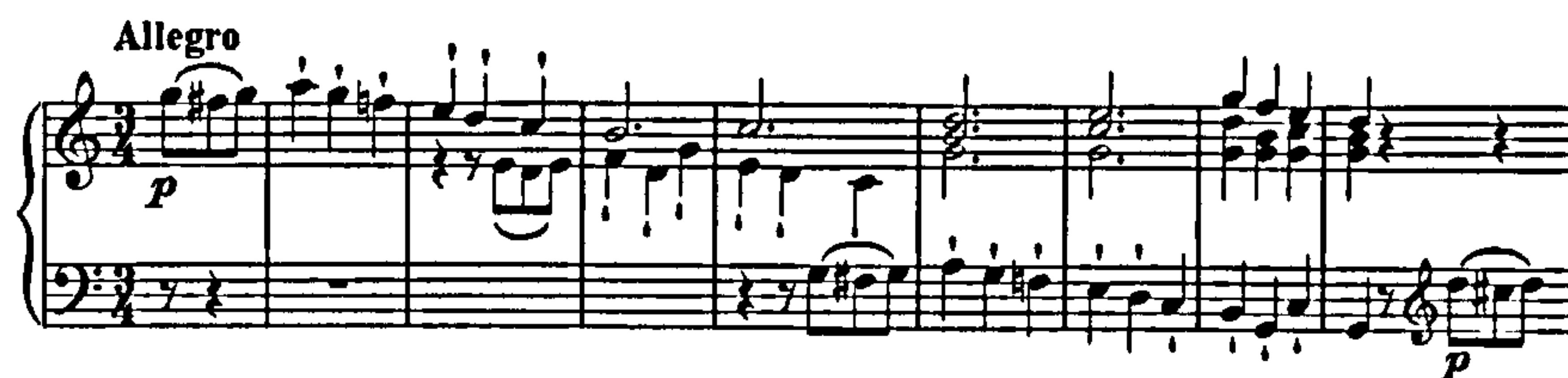
Ex. 6.1:

a) Beethoven Sonata op.2, no.3, I, 47-50.



¹ Troeger, 'Mozart's Piano', p.20.

b) Beethoven Sonata op.2 no.3, III, 1-8.



In homophonic passages too, on the early instrument, the melody is more easily distinguished from the accompaniment even if played at the same dynamic level (see Example 6.2).

Ex. 6.2: Mozart Sonata KV 545, II, 1-4.



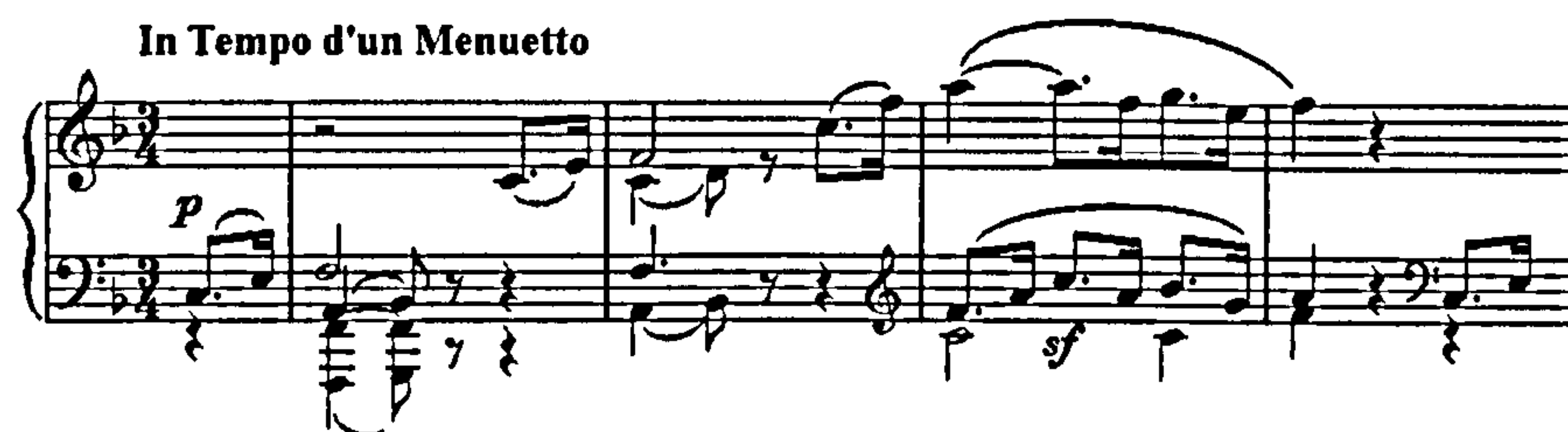
There are several places in Classical music where a single melody shifts from one register to another exposing thus its range of character. The third main thematic idea in the exposition of Mozart Sonata KV457, I, 36-43 for example moves from a high register to a lower one, evincing two, almost conflicting characters on the early instrument (see Example 6.3).

Ex. 6.3: Mozart Sonata KV457, I, 36-43.



Another example can be found in the opening of Beethoven, Sonata op.54, I, where the initial motive is explored in the three main registers of the keyboard (see Example 6.4).

Ex. 6.4: Beethoven Sonata op.54, I, 1-4.



Thematic repetition is another area enhanced by the timbres of the early piano. There are countless instances in Classical music where a theme is repeated and, in many of these, the repetition takes place in a different register creating a sense of variation. For example, in Example 6.5, the theme (bb.50-53) is repeated one octave lower (bb.54-57).

Ex. 6.5: Beethoven Sonata op.81a, I, 50-57.



Other similar examples can be found in Beethoven Sonata op.53, I, 35-42, and in Mozart Sonata KV280, III, 1-16.

Phrase repetition in different octaves is often used to good effect. In Example 6.6, the initial phrase is repeated three times, the third time (b.45), one octave higher, in a brighter register, intensifying the climax.

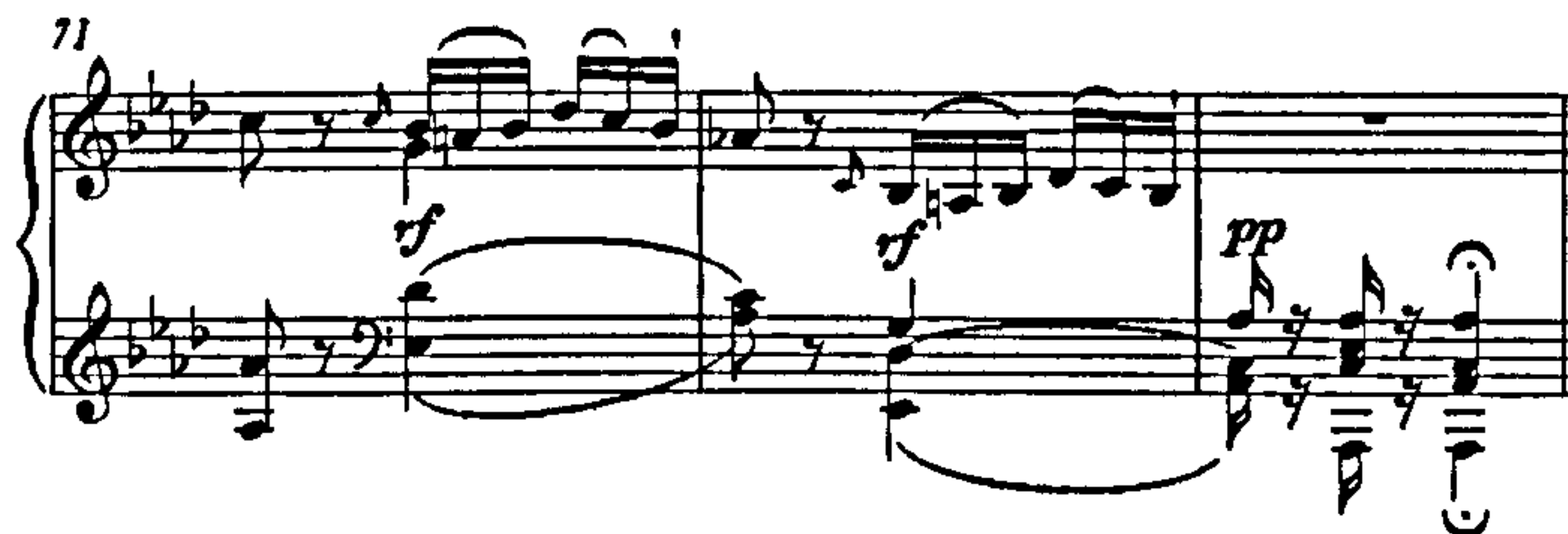
Ex. 6.6: Beethoven Sonata op.2 no.1, I, 41-47.



Such repetition of a phrase in a different register is quite common; as in the example above, it can intensify the sense of conclusion, not only by moving up an octave, but also, down. (See Example 6.7, a and b).

Ex. 6.7:

a) Beethoven Sonata op.13, II, 71-73.



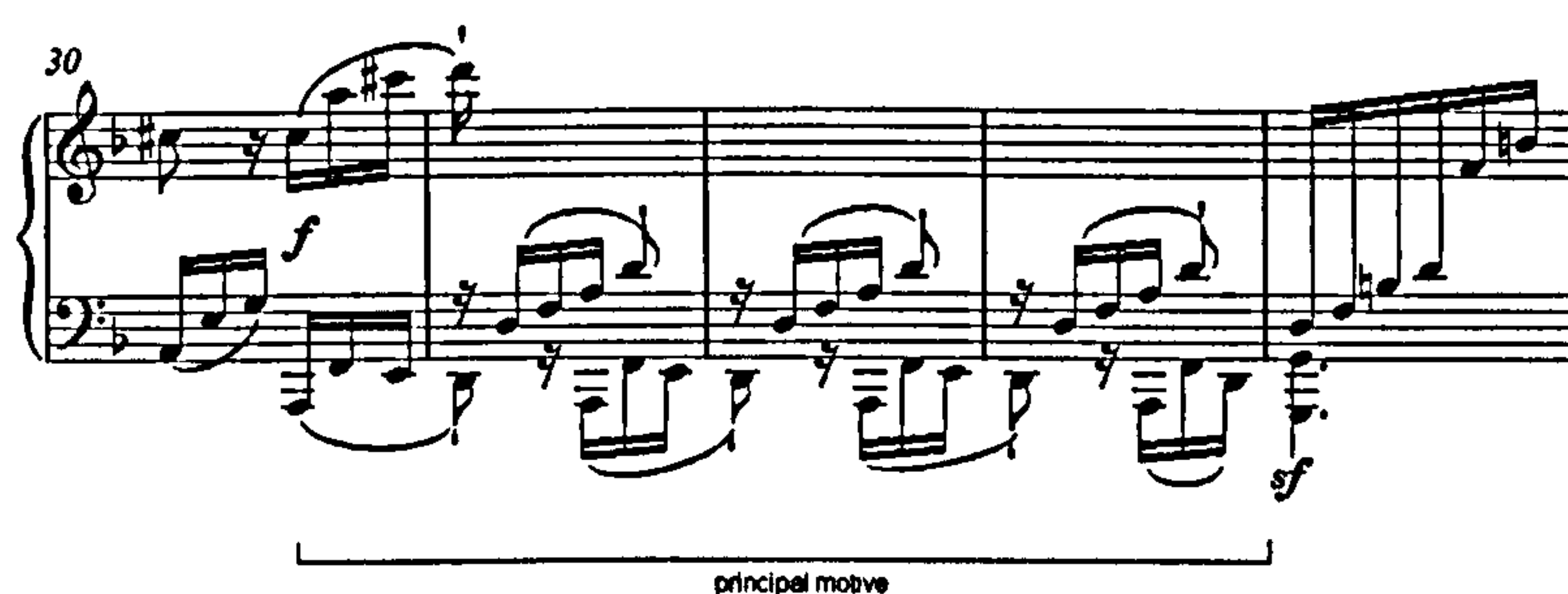
b) Mozart Sonata KV280, II, 21-24.



Another challenging area for the modern pianist who performs music originally written for the early piano is the execution of bass notes, which may sound too thick and blurred on the modern piano. The over-strung bass strings have had to become shorter, in order to fit in the middle part of the soundboard, and therefore also fatter, for maintaining the pitch. The result is extra-thick strings covered with a spiral thick metal wire, with a sound that has often been characterized as ‘murky’, ‘dull’ and ‘stodgy’.²

Classical composers frequently employ the lower register of the keyboard for important material such as principle themes and counter-themes, which on the modern piano, given the above, sound thick and unclear. The music that suffers probably the most is four-hand piano music where the *secondo* part is mainly employed on the lower part of the keyboard, but there are several instances in solo piano music as well. See, for example, the principle motive in Beethoven, Sonata op.31 no.2, III, which is restated by the left hand in bb.30-34 (Example 6.8).

Ex. 6.8: Beethoven Sonata op.31 no.2, III, 30-34.

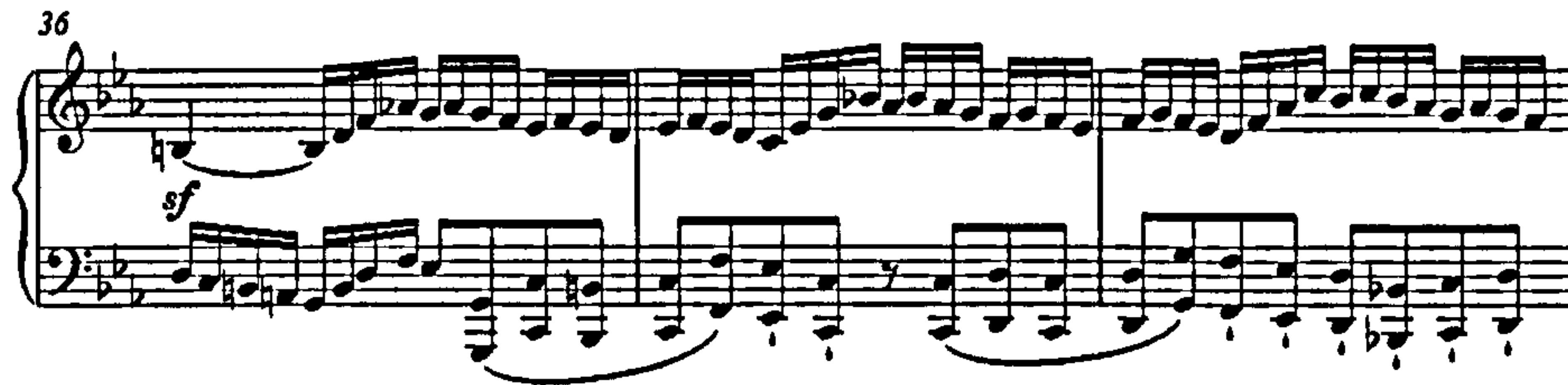


When the left hand employs octaves, the situation is exacerbated; in Example 6.9, such octaves serve as a kind of counter-subject to the elaborated reappearance of the initial theme. As well as their own lack of crispness, they also tend to mask the

² Bilson, ‘Keyboards’, p.233; Badura-Skoda, *Interpreting Mozart on the Keyboard*, p.15.

lucidity of the right-hand semiquavers that form an elaborated version of the Sonata's first theme.

Ex. 6.9: Beethoven Sonata op.111, I, 36-38.



Low register accompanimental figurations can also sound awkward on the modern instrument especially if they are meant to be played fast and loud. See, for instance, the left-hand semiquavers in Example 6.10. Horowitz, in a 1954 recording, for example, adheres to Clementi's indication, *ff*, in both parts, producing such a blurred sound that it is almost impossible to distinguish the left-hand's harmonic progressions so vital in this development section of the Sonata. In addition, the resonance produced by these low notes spoils the effect of the meticulous right-hand articulation marks.³

Ex. 6.10: Clementi Sonata op.34 no.2, I, 97-104.

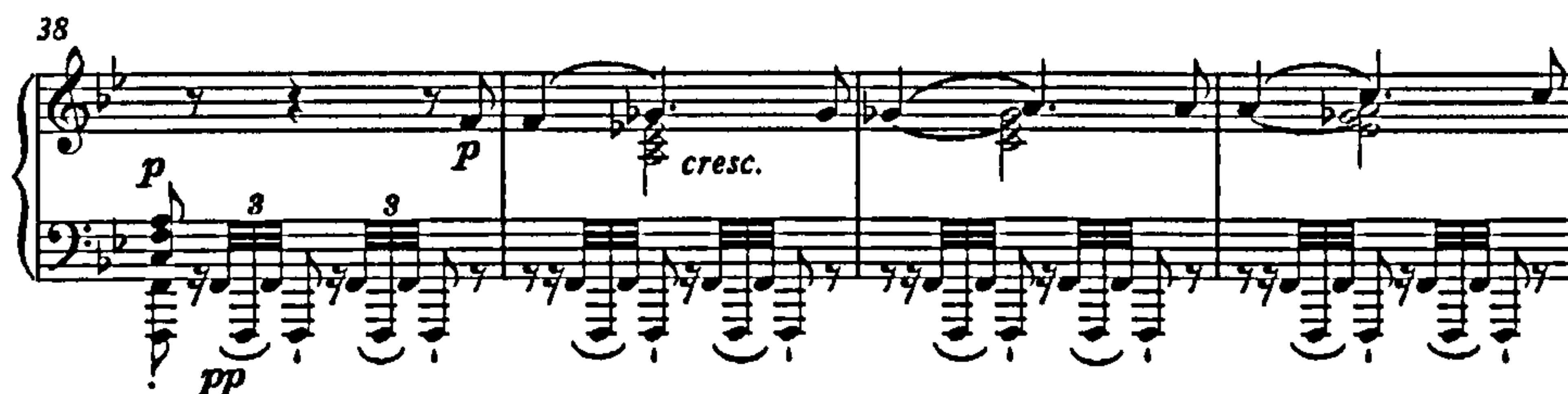


³ Vladimir Horowitz, *Horowitz Plays Clementi*, RCA VICTOR, GD87753, 1954.

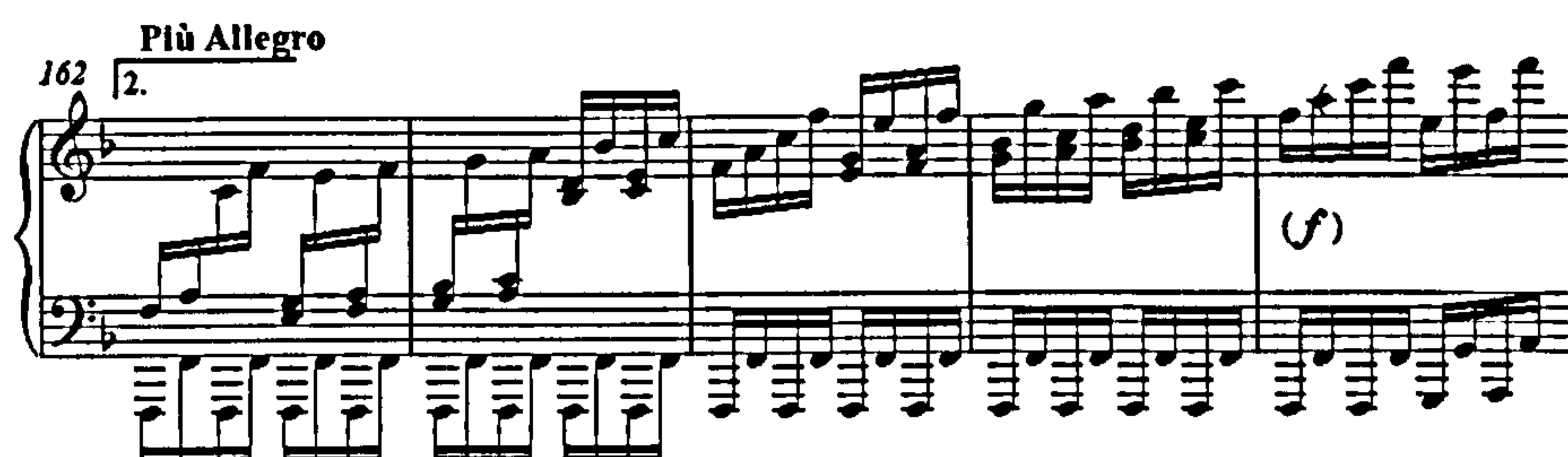
Other examples of accompanimental figures in the low register are the timpani-like, left-hand broken octaves in Example 6.11a, and the long left-hand octave tremolos in Example 6.11b.

Ex. 6.11:

a) Beethoven Sonata op.31 no.2, II, 38-41.



b) Beethoven Sonata op.54, II, 162-166.



Thus, the modern piano's lower register offers many challenges to the pianist playing Classical music. A careful balancing between registers, as well as an application of a somewhat lighter touch on the lower part of the keyboard might offer a satisfactory compromise.

ii. Close-position chords

Close-position chords are also a feature of this repertoire; on the lower register of the modern instrument they often sound muddy. For instance, the repeated diminished seventh chords with the added F in the bass, in Example 6.12, which lead to a

resolution in b.151, can create considerable tension on the early piano where one can actually hear all the intervals. On the modern instrument, they can simply sound confused and loud.

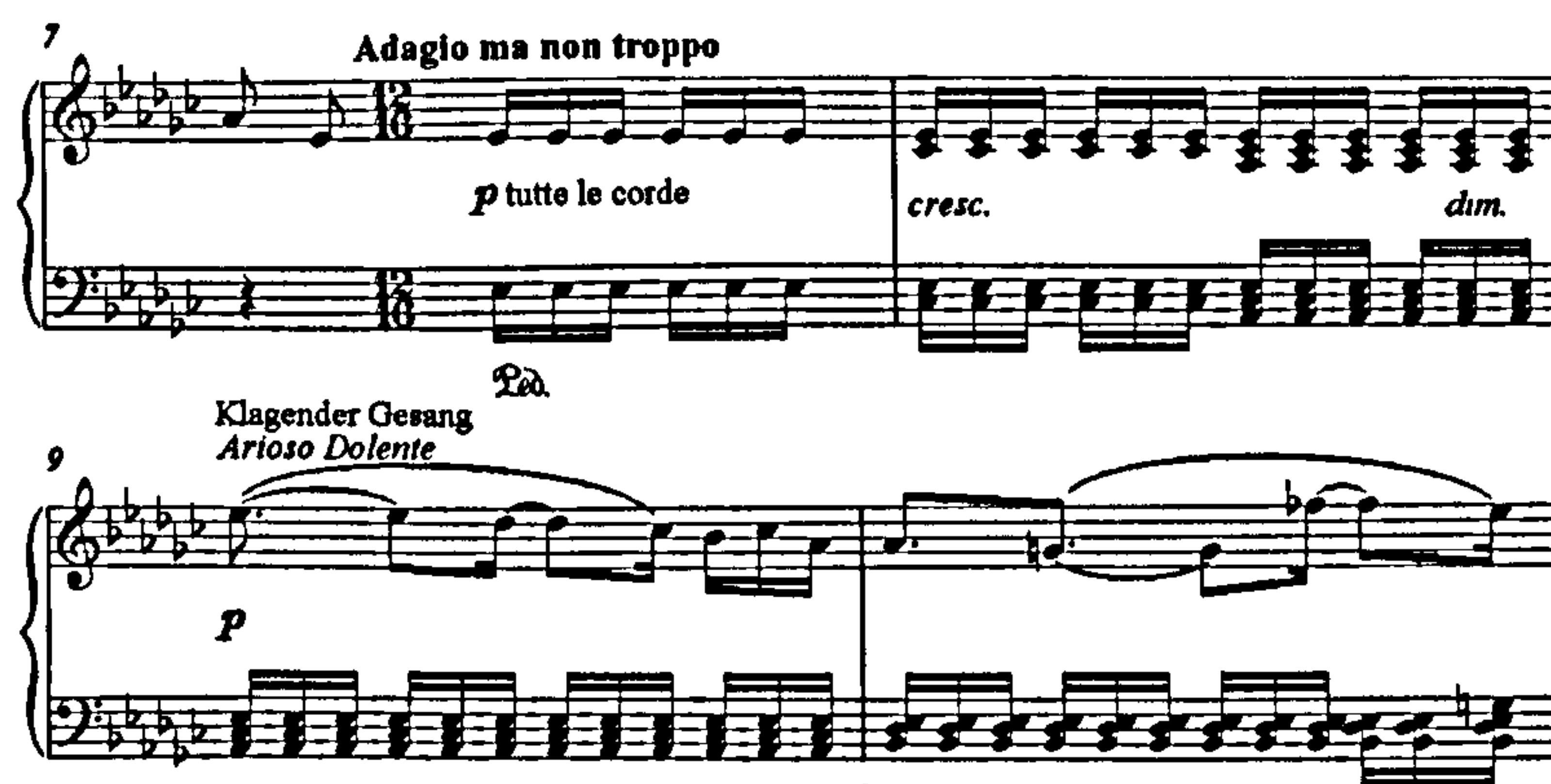
Ex. 6.12: Beethoven Sonata op.54, I, 148-151.



Malcolm Bilson addresses the issue of closely-voiced chords in the slow movement, *Arioso Dolente*, of Beethoven Sonata op. 110 (see Example 6.13). He claims:

He [Beethoven] put the weight of the suffering (dolente) in the heavy left-hand chords; on a piano of his day, the performer could lean into them fully. On a modern piano these chords are simply too heavy when played full out; one is forced to lighten them, thereby reducing them to much more of an accompaniment than Beethoven originally conceived them to be.⁴

Ex. 6.13: Beethoven Sonata op.110, III, 7-10.



⁴ Bilson, 'Beethoven and the Piano', p.19.

Indeed these left-hand closely-voiced chords are significant in determining the mood of this movement. On the early piano they are awarded an almost protagonist-like role. Beethoven's marking, '*tutte le corde*', in b.7 where the chords are established, and not in b.9, where the melody actually begins, is one more indication that these chords were not meant to be underplayed.

The problem of closely-voiced chords on the modern piano has preoccupied other performers/scholars too. Artur Tollefson, for example, suggests that 'softening the thirds and fifths in thick close-positioned bass triads will produce a thinner and more authentic sonority'.⁵ Paul and Eva Badura-Skoda, who also acknowledge the fact that this type of chords sound 'distinctly unpleasant on the modern instrument', go even further, recommending the omission of the fifth or the third, for instance:



and also playing the middle note, third or fifth respectively, softer than the outer ones. Thus the resulting sound will be 'a good deal more agreeable.' On other occasions they even recommend a transposition of the third, one octave higher (see Examples 6.14, a and b), which would result 'more like the sound Mozart intended.'⁶ Howard Ferguson's suggestion in similar situations, and especially in accented chords, is 'to break the chord slightly: i.e. play it as a very quick arpeggio'.⁷

Badura-Skoda's and Ferguson's suggestions might be seen as rather extreme approaches today, when adherence to the printed score is held in such high regard. A careful and controlled voicing of such chords on the modern piano, close to Tollefson's approach, might prove more acceptable to our modernist (and possibly anachronistic) aesthetic.

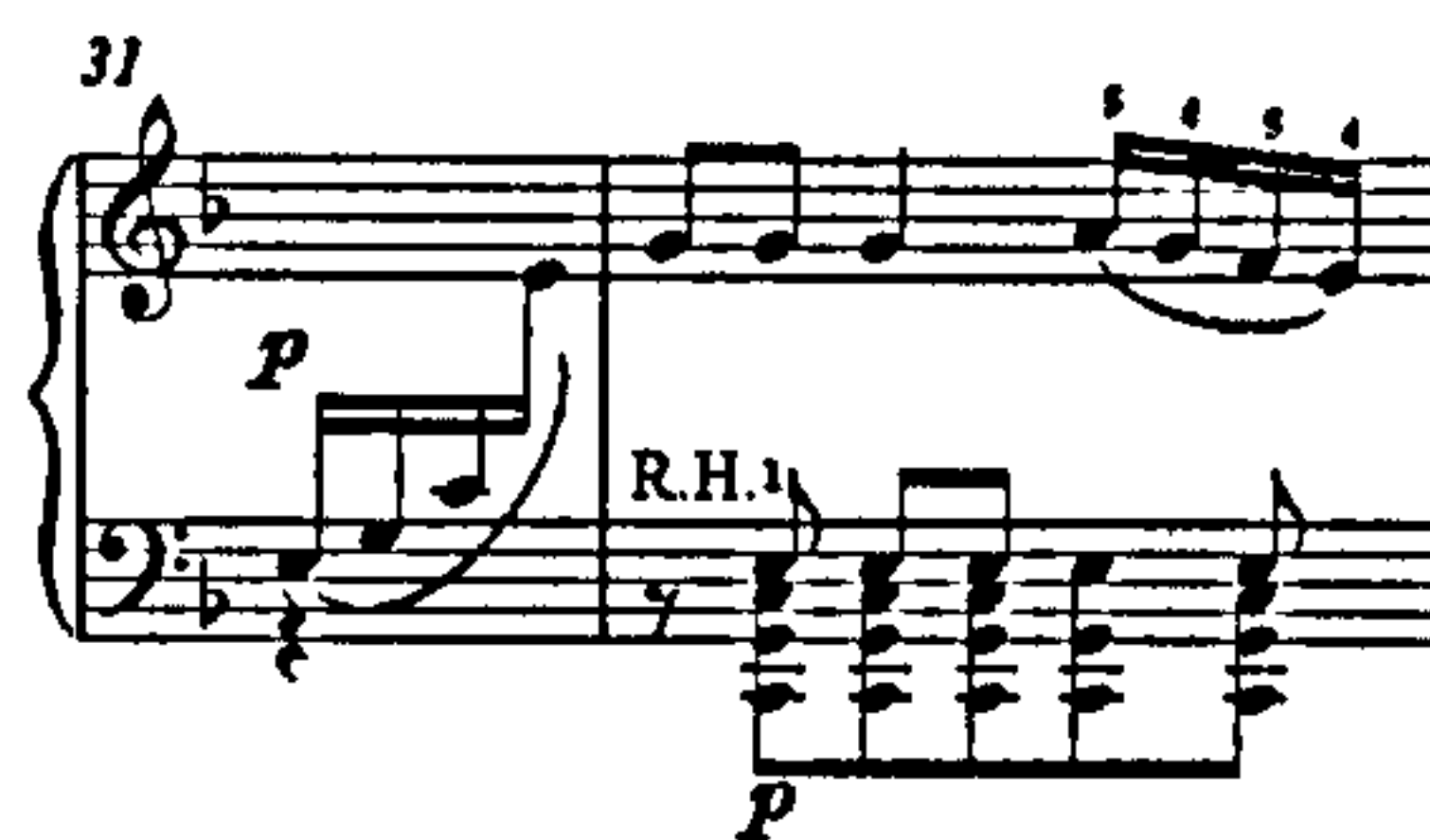
⁵ Artur Tollefson, 'Solving Interpretive Delemmas', *Clavier*, vol.17 (Feb.1978), p.19.

⁶ Badura-Skoda, *Interpreting Mozart on the Keyboard*, pp.152-153.

⁷ Ferguson, *Keyboard Interpretation*, p.156.

Ex. 6.14:

a) Mozart Sonata KV310, II, 31-32 (Badura-Skoda's suggestion)



b) Mozart Sonata KV310, II, 31-32 (original)



iii. Extending the range

Another issue that every pianist who plays Classical period music on the modern piano should take into consideration is the issue of note 'restoration', which relates to the early piano's limited keyboard range. As described in Chapter 1, a typical keyboard range in Mozart's time was five octaves (FF-f³), which expanded towards the end of the century to five-and-a-half (FF-c³), later to six octaves (CC-c³) and by the end of the nineteenth century gradually to seven and a half octaves, which is the standard range of today's concert grand. Although early composers often contain their musical ideas within the compass of their chosen instrument, there are a numerous instances where an idea seems to require a more extensive range, and has been contained only by octave transposition of its extremities. The dilemma that today's pianist often confronts when playing such a passage on the modern piano is whether to 'restore' its musical extremities (which can now be accommodated by the modern

instrument's greater range or to follow the score. Many authors have been concerned with this sensitive matter.⁸

Among those who believe that no note restoration should be made to the passages under discussion is Robert Taub, who claims that 'it is possible to obtain stylistic consistency with the five-octave range of Beethoven's early pianos and to maintain this style in performance today on our modern instruments.'⁹ He also points out that Beethoven, though he vowed to do so, never actually produced a new edition of his works with passages reworked to fit a larger compass.¹⁰ William Newman, who also disapproves of 'note restoration', adds that the new-edition project that Beethoven was to undertake was, according to Streicher, initiated merely for commercial reasons, in order to sell the new edition to the people who had already bought the previous one.¹¹ Newman's argument is also based on the fact that both Czerny and Schindler declared themselves against note restoration in Beethoven's work, and Beethoven's often demonstrated assertion that *only he* was qualified to make any re-arrangements of his music.¹²

Charles Rosen states that, on an early instrument, such passages have 'a kind of dramatic power, as if Beethoven were literally pushing against the physical limits imposed by the material object he was playing', and reveal 'his refusal to allow the physical limitations of instrument or musician to dictate his inspirations'.¹³ With regard to playing such passages on the modern instrument 'no straightforward global answer can be given . . . in so many cases the advantages of extending the range or of

⁸ See for instance Lamar Crowson, 'The Expanding Keyboard Range and the Sonatas of Mozart and Beethoven', *Clavier*, vol.27/2 (Feb.1988), pp.17-23; Rosenblum, *Performance Practices*, pp.33-37; Newman, *Beethoven on Beethoven*, pp.57-62; Rosen, *Beethoven's Piano Sonatas*, pp.117-120; Taub, *Playing the Beethoven Piano Sonatas*, pp.91-92.

⁹ Taub, *Playing the Beethoven Piano Sonatas*, pp.91-92.

¹⁰ *Ibid*, p.91.

¹¹ Newman, *Beethoven on Beethoven*, p.62.

¹² *Ibid*, p.62.

¹³ Rosen, *Beethoven's Piano Sonatas*, p.117.

sticking to the original are fairly equally balanced'; however, his own preference is 'to stay with the original'.¹⁴

Paul and Eva Badura-Skoda declare that, in Beethoven's works, one frequently 'comes across passages in which the compass of the contemporary piano seems to have imposed unwelcome limitations'; however, they claim that, in Mozart, 'it is hardly ever necessary, nor in the most cases possible, to make alterations such as many present day pianists make in these passages from Beethoven'.¹⁵ They believe that Mozart observed the compass limitations of his instrument in a remarkable way, and whenever a theme in the recapitulation threatened to go above the registral limits because of its transposition into the tonic, 'the motive would be altered, and in so subtle a way that necessity became a virtue'.¹⁶

On the other hand, there are authors, including pianists, who believe that there are indeed many passages in the music of both Mozart and Beethoven, where the confinements imposed by the early keyboard range should be removed on the modern instrument. Amongst them is Lamar Crowson, who gives a plethora of examples in the works of Mozart and Beethoven where such restorations 'should' be done. In Mozart Sonata KV333, I, for example, he suggests playing bb.44-45 an octave higher, in order to match the parallel passage in the recapitulation in b.140 (see Example 6.15, a and b).¹⁷

This suggestion, however, seems rather odd, in this author's opinion at least, especially for those who do not regard all parallel passages as 'identical'. In this example one could certainly argue that b.44 is the original thought, and b.140, a source of further tension or surprise, with the compound diminished fifth interval in

¹⁴ Ibid, p.119.

¹⁵ Badura-Skoda, *Interpreting Mozart on the Keyboard*, p.12.

¹⁶ Ibid, pp.11-12.

¹⁷ Crowson, 'The Expanding Keyboard Range', p.19.

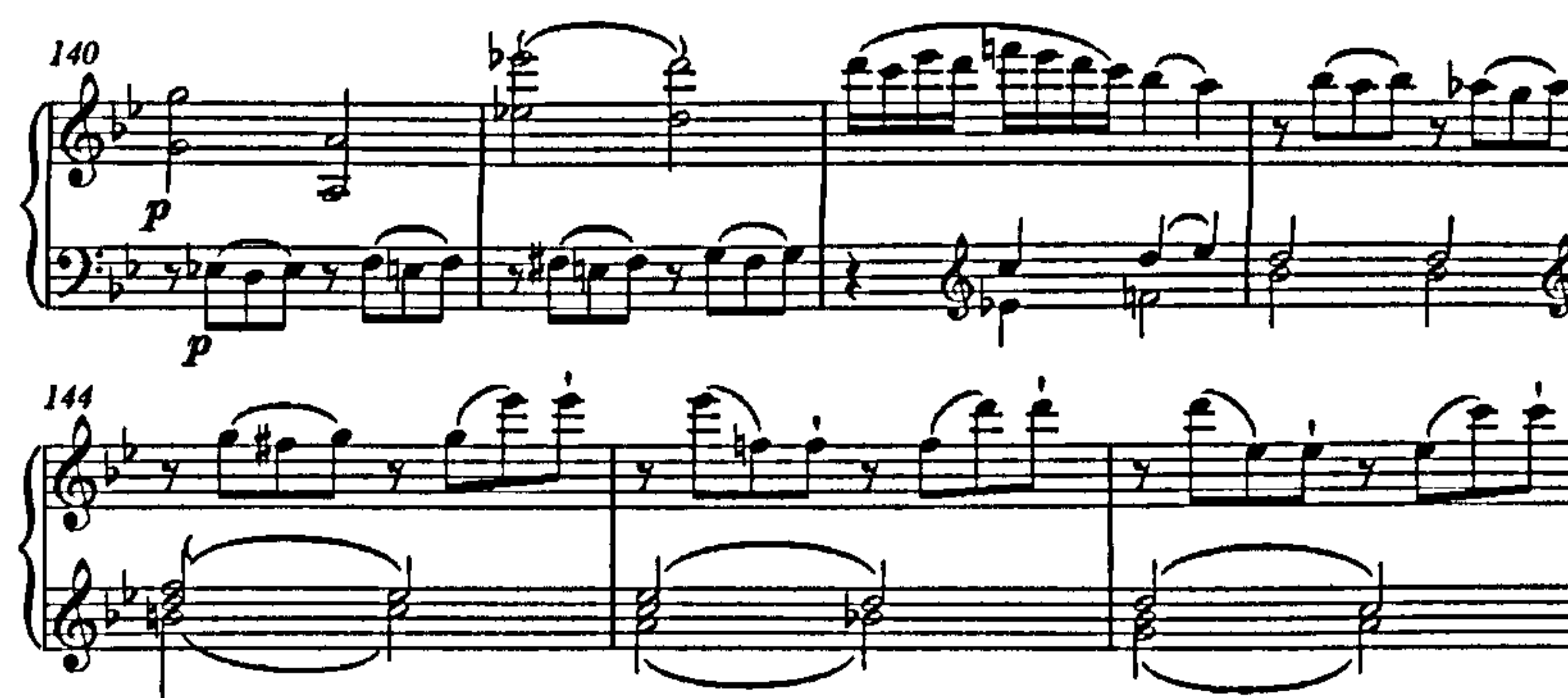
bb.139-140. But even if one still believes that these two parallel passages should match, should then bb.143-145 also be altered in order to match with bb.46-48?

Ex. 6.15:

a) Mozart Sonata KV333, I, 43-48.



b) Mozart Sonata KV333, I, 139-145.



In another instance, Beethoven Sonata op.10, no.3, I, 104, in a passage which strongly implies transpositional containment, Crowson suggests 'restoration' in b.285 in order to match recapitulation to exposition (see Example 6.16, a, b and c).¹⁸

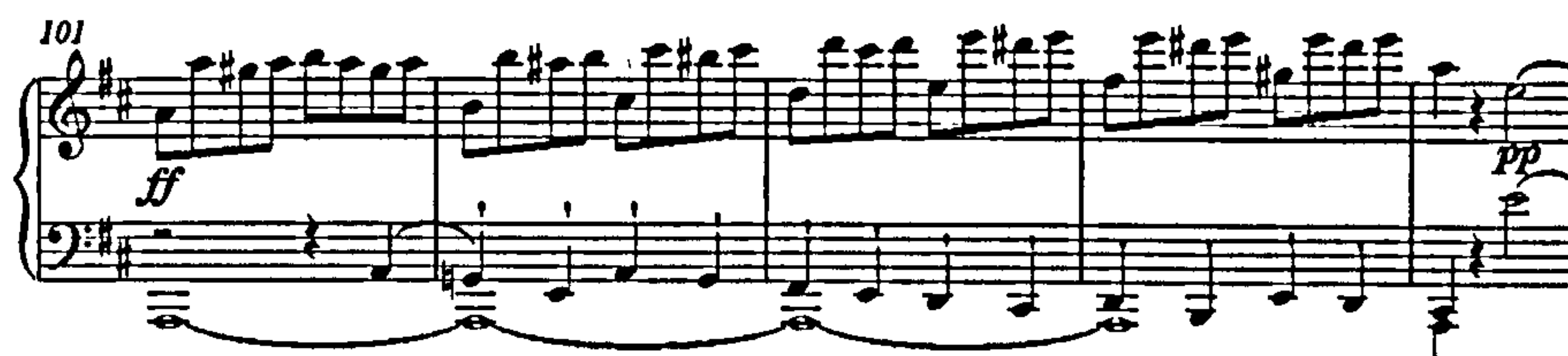
Here, indeed Beethoven may have well adjusted the passage so that it fitted his instrument's limits but this adjustment may also have an aesthetic justification; in Badura-Skoda's words, a 'necessity' that 'became virtue', as quoted earlier: the repetition of e^3 , as well as the diminished 7th and minor 6th intervals produce a rather intense effect. The parallel passage in the recapitulation (see Example 6.16c) can

¹⁸ Ibid, p.19; this suggestion is also given in Ferguson, *Keyboard Interpretation*, p.169.

therefore be seen as a more triumphant resolution.¹⁹

Ex. 6.16:

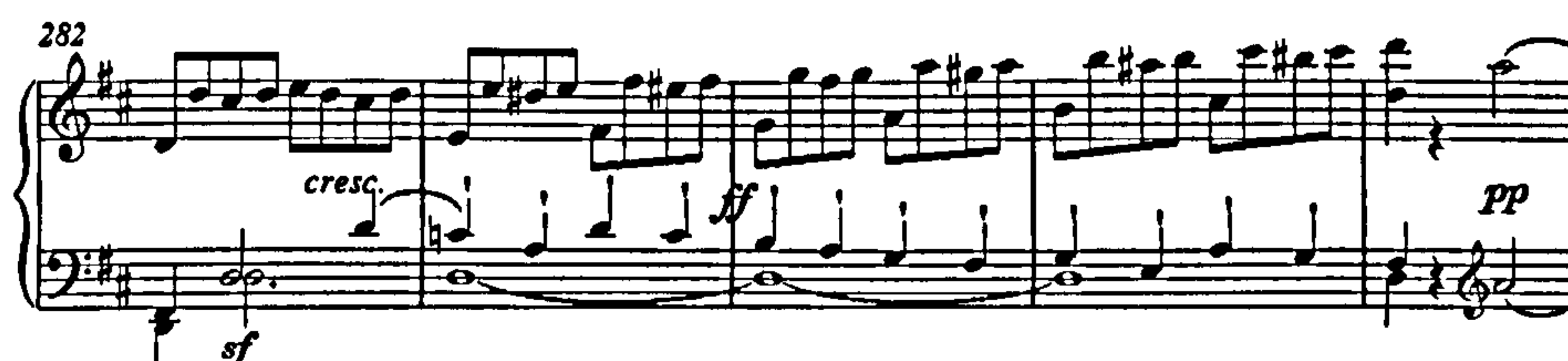
a) Beethoven Sonata op.10, no.3, I, 101-105 (original).



b) Beethoven Sonata op.10, no.3, I, 101-105 (suggestion by Crowson/Ferguson).



c) Beethoven Sonata op.10, no.3, I, 282-286 (analogous passage in recapitulation).

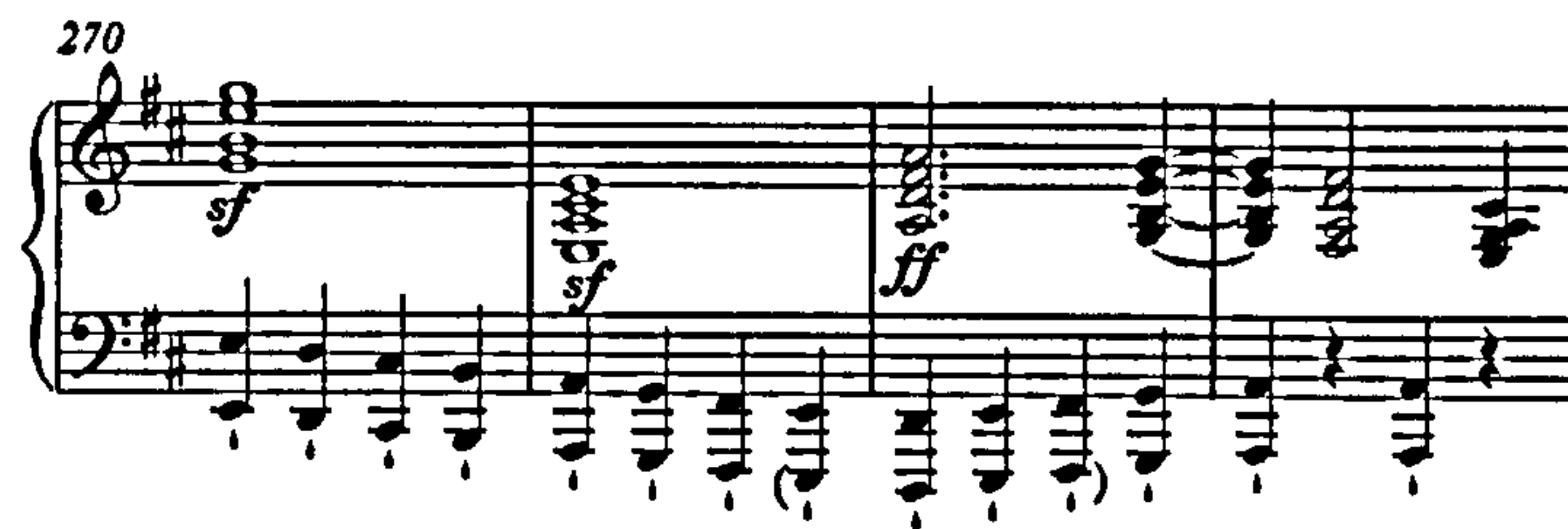


Another situation where note 'restoration' is very often suggested by a modern performer/editor is where a pattern of octaves, extended throughout the passage in the bass would not fit to the early piano's bottom register. Crowson, for example, suggests octave doubling in Beethoven op.10, no.3, I, 271-271 (see Example 6.17) and this option is also offered in many modern editions too.²⁰

¹⁹ Similar instances occur in Beethoven op.31, n.2, I, 189-192 and op.14, no.2, I, 102, both examples given in Rosenblum, *Performance Practices*, p.37.

²⁰ Crowson, 'The Expanding Keyboard Range', p.20; L.v. Beethoven, *Piano Sonatas*, vol. 1 (Vienna: Urtext Wiener Edition, 1997), p.131; L.v. Beethoven, *Klaviersonaten*, vol.1 (Munich: Henle Verlag, 1980), p.131.

Ex. 6.17: Beethoven op.10, no.3, I, 270-273.



It is almost certain here that Beethoven was not able to continue the octaves because his instrument could not go below FF and therefore it is not unreasonable to suggest a 'restoration' of those octaves on an instrument with the appropriate range. However, taking into consideration issues of sonority involving the bass notes of the modern piano discussed earlier in this chapter, one might have second thoughts. Bass notes within the five-octave range are already heavy on the modern instrument. Any further low notes would only add more complexity, particularly since in this instance (Example 6.17) they are marked staccato. Playing this passage as it was originally written, while focusing more on the upper notes of the octaves (which are anyway less resonant) would make the single notes sound more comparable with the rest, and offer a more staccato presentation, as required.

On the other hand, certain octave additions in the treble could be more justifiable, as generally the higher register of the modern piano is a less problematic area, plus the doubling 'omissions' are more audible in the treble. Therefore the octave doubling of G flat in Beethoven, Sonata, op.10, no.1, I, 128 (see Example 6.18) as Crowson, Rosenblum and many editors urge for melodic consistency, is acceptable.²¹

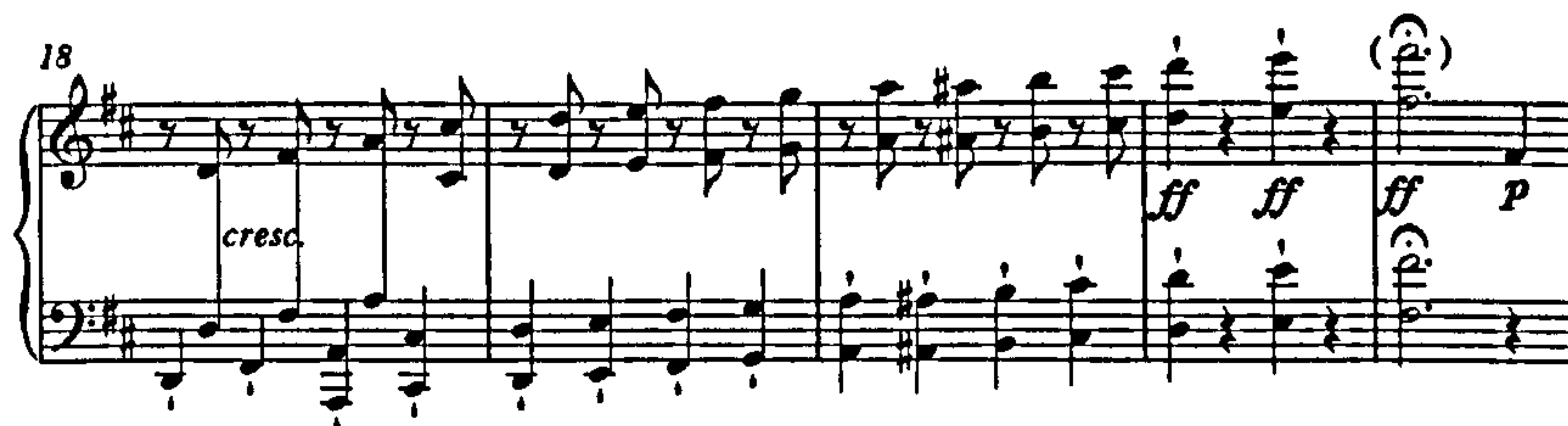
²¹ Rosen, *Beethoven's Piano Sonatas*, p.117; Rosenblum, *Performance Practices*, p.36; L.v. Beethoven, *Piano Sonatas*, vol.1 (Vienna: Urtext Wiener Edition, 1997), p.98; L.v. Beethoven, *Klaviersonaten*, vol.1 (Munich: Henle Verlag, 1980), p.98.

Ex. 6.18: Beethoven Sonata, op.10, no.1, I, 127-129.



Similarly, the octave doubling of the F sharp in Beethoven Sonata op.10, no.3, I, 22, (see Example 6.19) would increase the sense of arrival which was quite obviously intended by Beethoven, and, as Charles Rosen remarks, '[N]ot to play the F sharp on a modern instrument does not make sense, except to a few connoisseurs in the audience who know that the early pianos stopped at F.'²²

Ex. 6.19: Beethoven Sonata op.10, no.3, I, 18-22.



It is not always easy to take a decision as to whether follow the original score strictly or use the resources of the modern instrument in this sensitive issue of note restoration. As Edwin Fischer declares, '[S]uch matters have to be handled with good taste and great discretion. The ear must always be the right judge.'²³

²² Rosen, *Beethoven's Piano Sonatas*, p.117.

²³ Edwin Fischer, *Beethoven's Pianoforte Sonatas* (London: Faber & Faber, 1959), quoted in Crowson, 'The Expanding Keyboard Range', p. 23.

Chapter 7: Case Study: Mozart Piano Sonata in G Major, KV283

This final chapter will illustrate several issues described in previous chapters, as exemplified within a single piece, Mozart, Sonata in G major, KV283. This is one of the composer's early works for solo keyboard and belongs to a cycle of six sonatas (KV279, KV280, KV281, KV282, KV283, KV284) often called the 'Munich Sonatas'. The exact date of these works has not been identified; however, it is believed that they were probably composed between January and March 1775, during Mozart's stay in Munich, where he went for the premiere of his opera, *La Finta Giardiniera*.¹ Mozart considered them 'difficult sonatas' and performed them frequently on his tours to Augsburg, Mannheim and Paris.²

The Sonata KV283 is written in the 'joyful' key of G major with an 'Italian' character and, as Dennerlein remarks, '[in] this Italianate of the early sonatas . . . the light clarity and vigour of the themes bring to mind an opera *buffa*'.³

All three movements are written in straightforward *Sonata-Allegro* form and contain, astonishingly, profuse articulation and dynamic directions, which is one of the reasons that this piece has been chosen for this study. One possible explanation for the wealth of these markings in this piece might be Mozart's enthusiasm for the new, touch-sensitive instrument, the pianoforte, which he had just met at that time.

The first issues to consider with regard to this piece are articulation and touch. Mozart marks a plethora of short articulating slurs throughout the piece; they can lose some of

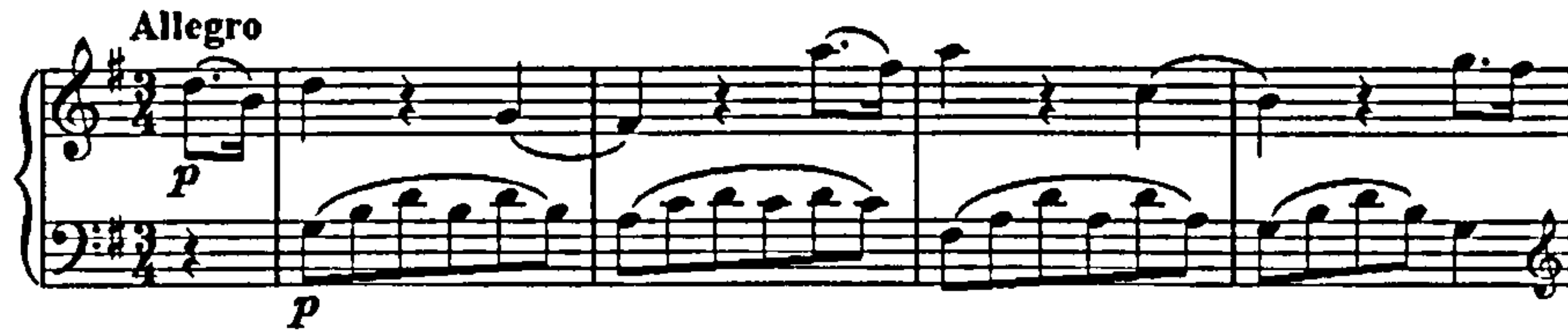
¹ Michael Davidson, *Mozart and the Pianist* (London: Kahn & Anerill, 1998), p.64; W. A. Mozart, *Piano Sonatas*, vol.1 (Vienna: Wiener Urtext Edition, 2004), preface by Ulrich Leisinger, pp.xv-xix.

² Eva and Paul Badura-Skoda, notes for Paul Badura-Skoda recording of Mozart Sonatas (ASTRÉE, E8865, 1990), p.10.

³ Hanns Dennerlein, *Der Unbekannte Mozart* (Leipzig, 1951), p.48; quoted in Davidson, p.70.

their expressiveness when performed on the modern instrument. The first example is the opening dotted quaver–semiquaver figure (see Example 7.1).

Ex. 7.1: Mozart Sonata KV281, 1-4.⁴



This rhythmic motif, which serves as a building block for the statement of the first theme, re-appears seven times in the first 12 bars. Mozart endows it with a short slur, obviously intending a slight break between the semiquaver and the following crotchet. This is much more easily achievable on the early piano with its incisive, short-lived tone, allowing the semiquaver still to be pronounced clearly while facilitating a fresh attack on the following downbeat crotchet.⁵

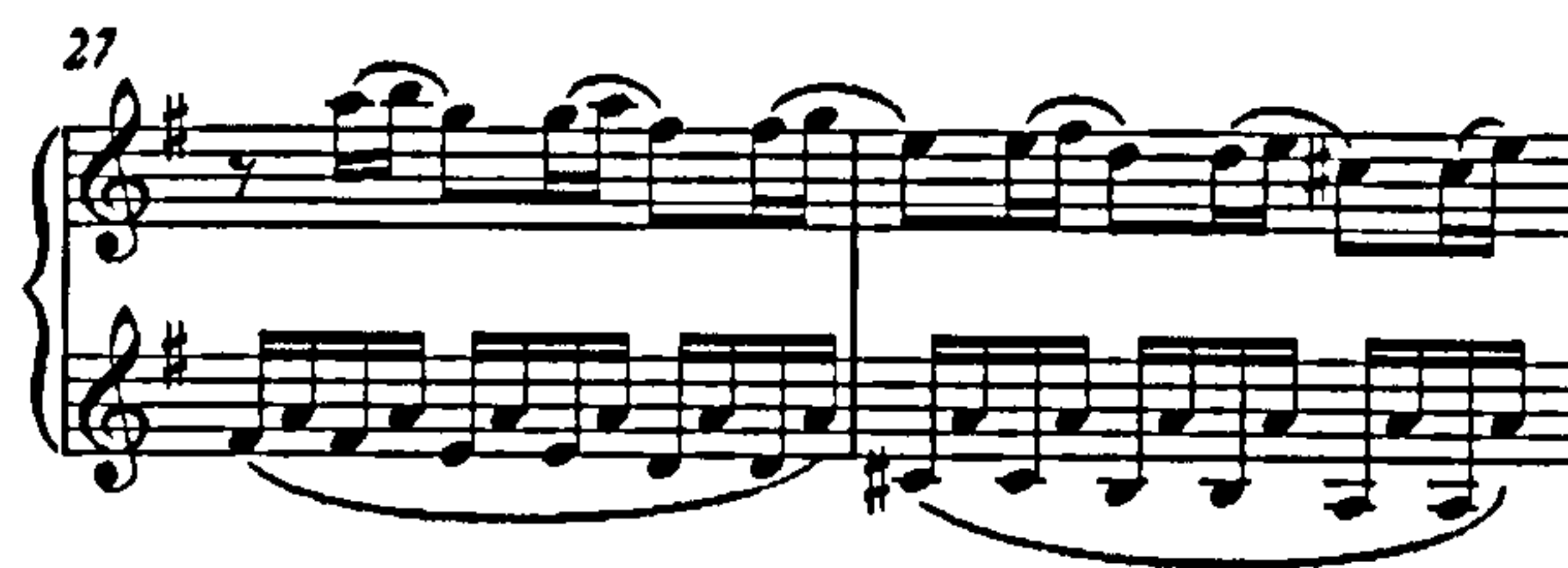
On the modern piano, the delicate character of the semiquaver B is easily submerged between the two Ds. The modern pianist must therefore handle this passage with extreme delicacy, possibly applying a finger staccato touch on the semiquaver B to allow the slight break between B and D, while applying a slight attack to the second D.

The short articulating slur also appears during the statement of the second theme of this movement, first, in bb.23-26 and more elaborately in bb.27-30. The right-hand slurs in bb.27-28 (see Example 7.2) offer a variation on the smoother initial entry.

⁴ All musical examples for this study are taken from the autograph score which is situated in Biblioteka Jagiellonska, Krakow.

⁵ For more details on the role of this slur in this and other similar passages, see Kenneth Drake, *The Beethoven Sonatas and the Creative Experience* (Bloomington & Indianapolis: Indiana University Press, 1994), p.17; see also Davidson, p.66.

Ex. 7.2: Mozart Sonata KV281, 27-28.



Here, the descending melodic line produced by the off-beat semiquavers probably may not emerge as distinctively on the modern piano unless the players should hold each quaver for somewhat less time and apply a small attack to each initial off-beat semiquaver.

Slurred semiquavers occur in bb.35-37 and 40-42 of the exposition and in the corresponding passages in the recapitulation (see Example 7.3).

Ex. 7.3: Mozart Sonata KV281, 35-36.



Here slurs cover groups of four semiquavers, thus offering metrical accentuation on each beat of the bar. On the early piano, the separation between each group can be projected much more distinctly than on the modern one, where these semiquavers, at such speed, can easily sound as a continuous legato, as one often hears in modern recordings.⁶ Slightly accenting the first note and playing the fourth almost with finger-staccato can help alleviate this.

⁶ See for example Maria João Pires, *Mozart Complete Piano Sonatas* (Brilliant Classics, 92733/1, 1974) or Mitsuko Uchida, *Mozart: 4 Piano Sonatas* (PHILIPS, 420 186-2, 1988).

Such metrical groups of four occur throughout the slow movement of this sonata; however their incumbent articulation can be executed reasonably well on the modern piano, at this slower speed. On other occasions, the delicate touches provided by such slurs can easily be hidden on the modern piano, however. Such an instance occurs at b.10, in the second movement (see Example 7.4, a and b). Here, the initial motif of the second theme, stated in b.9, is repeated more elaborately, the two-demisemiquaver-note slurs given a more graceful character. This detail cannot be projected as charmingly on the modern piano. The problem, however, might be solved with a reconsideration of fingering. According to Clementi:

To produce the BEST EFFECT, 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 PREFFERED which gives the BEST EFFECT, tho' not always the easiest to the performer.⁷

On the sequence of notes, D-D-C-B-B-A-G, it seems quite natural for the hand to play with a 3-3-2-1-3-2-1 fingering. However, another fingering, 3-3-2-3-3-2-3, changing the position of the hand at the end of every two-demisemiquaver-note slur, will automatically create a tiny break at this point.

Ex. 7.4:

a) Mozart Sonata KV283, II, 10 (conventional fingering).



⁷ Clementi, *The Art of Playing the Pianoforte*, p.14.

b) Mozart Sonata KV283, II, 10 (alternative fingering).



The change of hand position at that speed will call for a swift finger staccato on the last note of each two-note slur as well as a minuscule delay which will allow the requisite sound decay.⁸ Although this fingering option might not fit as comfortably on the hands as the one in Example 7.4b, it would probably result in a more desirable effect.

A similar approach can be considered for the two-note slur at b.18 of the third movement (see Example 7.5, a and b). Here, a small break between C and E will highlight the syncopated E, which seems to be the peak of that phrase. At that speed, on the modern piano, this effect is almost impossible to attain if one uses 'conventional' fingering in bb.17-18. Therefore, for the reasons mentioned above, one might find it effective to deliberately change the hand position as shown.

Ex. 7.5:

a) Mozart Sonata KV283, III, 17-18 (conventional fingering).



b) Mozart Sonata KV283, III, 17-18 (alternative fingering).



⁸ It should be noted here that fingering suggestions can be very subjective, depending, among others, on hand measurements, etc. There are certainly other ways in creating a break in this particular passage. This fingering suggestion is based according to the author's preference.

Another contentious issue is the articulation of notes which lack any articulation markings. There are a number of such occasions in this sonata, particularly semiquaver runs. These include the ascending and descending runs in bb.7-6 and 14-15, the transitional passage in bb.16-21 between the first and second themes in the exposition section of the first movement, and several passages in the third movement. We often hear those passages played *legato* in modern recordings.⁹ Yet, in this sonata at least, Mozart seems to indicate legato semiquavers profusely and precisely. Look, for example, at the left-hand accompanimental figures in bb.26-30, Mvt I, the right-hand runs in b.29, Mvt I, and the chromatic run in bb.168-169, Mvt III. Yet a problematic passage occurs between the first and second themes in the exposition of the third movement. At b.26 the semiquavers are marked *legato*, but are unmarked at the repeat at b.30. The analogous passages in the recapitulation, in bb.197 and 201, are treated in the same way. Two interpretations of the markings are possible here: either a different articulative approach is required for the two statements, or else a repeated passage implies, in tandem, a repeat of articulation. It is not possible to decide definitively which interpretation is correct here, but the performer must choose one or the other each time! The second approach is straightforward; however, taking the first approach, and proceeding according to the common practice of Mozart's time (as mentioned in Chapter 3), the notes should be played with a somewhat shorter duration. The short-lived tone of the early piano encourages this effect. On the modern instrument, it is not always easy to project it, especially in fast movements. The modern pianist might therefore use a lighter, non-legato touch, occasionally (depending on the acoustics and the instrument) employing finger-staccato. Eva and Paul Badura-Skoda compare the touch of the old and the modern instrument:

⁹ See for instance Maria João Pires, *Mozart Complete Piano Sonatas* (Brilliant Classics, 92733/1, 1974).

Lightness of touch is so important because present-day pianos . . . have a tone that is basically too full for Mozart's music. To make legato scales as clear on a modern instrument as on a Mozart's piano, one must often play non-legato: and a 'non-legato' on the old instrument must nowadays be played 'staccato'.¹⁰

In this sonata, Mozart indicates many dynamic changes from loud to soft, in most cases in terms of *f* and *p*. However, not all of them are problematic because either a rest of considerable duration separates contrasting sections, or a dynamic shift occurs within a slow tempo (thus leaving enough time for the loud sound to diminish). Other dynamic changes may be assumed to occur gradually. (See the discussion concerning this on pp.77-80).

The first challenging passage involving swift dynamic changes occurs in Mvt I, bb.31-33 (see Example 7.6) where the *p* 'interruptions' of the slurred ascending triadic-appoggiatura successions might be covered by the preceding *f* appoggiaturas.

Ex. 7.6: Mozart, Sonata KV283, I, 31-33.



To alleviate this, the modern pianist could focus on the top, less resonant, note of the triads while shortening the last quaver of the bar somewhat. Another parallel issue

¹⁰ Badura-Skoda, *Interpreting Mozart on the Keyboard*, p.147.

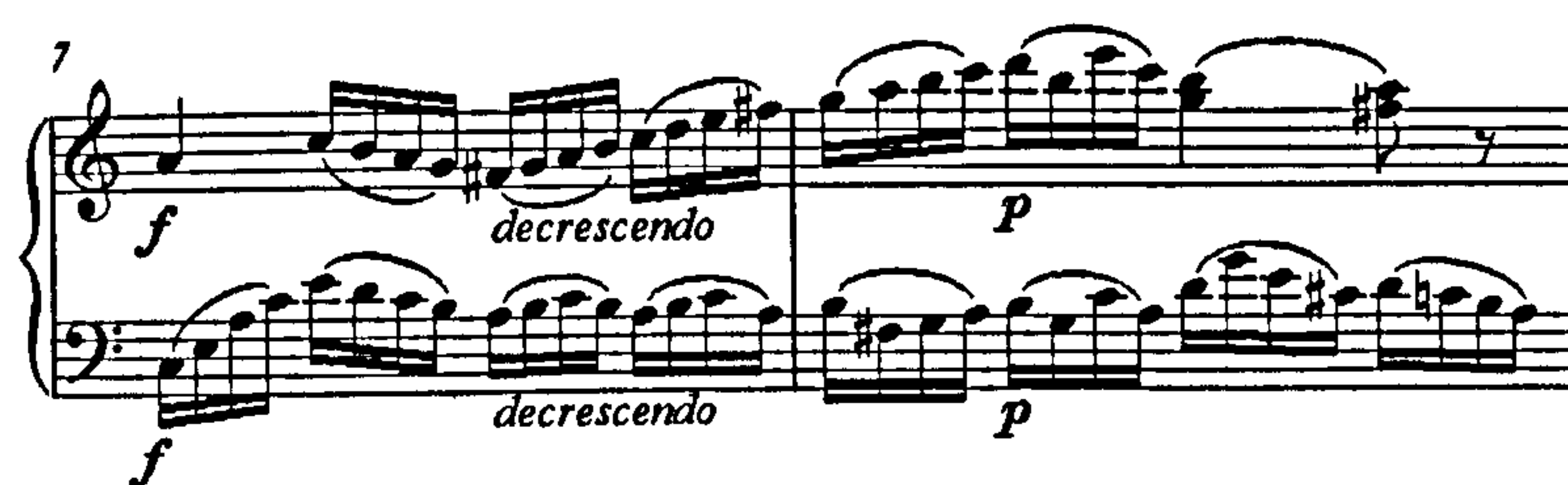
arises some bars later where the second theme of this movement reappears, *subito p*, in b.45 (see Example 7.7).

Ex. 7.7: Mozart Sonata KV283, I, 43-46.



If the change to *p* were gradual, there would be no problem; however, the larger context suggests the opposite. For instance, one might take into consideration that ascending passages, as described in Chapter 4 may involve a natural dynamic increase; indeed, in places where the composer wishes the opposite, he indicates so, as he does in the second movement of this sonata, where ‘*decrescendo*’ appears on the ascending semiquaves in bb.7-8 and 30-31 (see Example 7.8).

Ex. 7.8: Mozart Sonata KV283, II, 7-8.



In addition, the ascending-semiquaver passage under discussion (Example 7.7) is certainly taken from the transitional passage in bb.16-22, of the same movement, a section that connects the initial statements of first and second themes (see Example 7.9).

Ex. 7.9: Mozart Sonata KV283, I, 16-24.



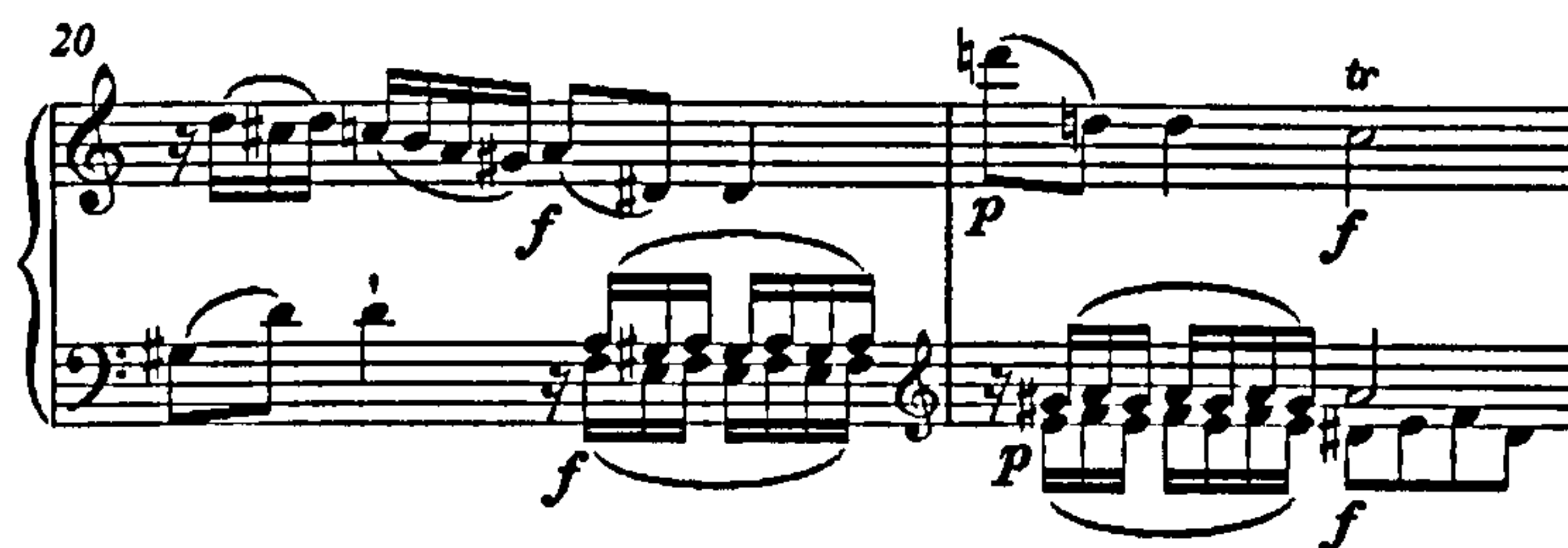
In bb.22-23, the dynamic shift between that section and the appearance of the second theme in b.24 is probably sudden, as that transitional passage ends emphatically in the dominant.¹¹ Thus one might conclude that the transition in bb.44-45 (Example 7.7) might also be sudden.

The recurrence of the second theme here comes as a surprise, as there is no preceding crotchet rest this time. This makes the transition more difficult on the modern piano as it is almost impossible to reduce the volume of the last semiquaver in b.44 in time to give way to the *p* entry of theme B. One might consider allowing some extra time between bb.44 and 45, a kind of discreet hiatus, which would emphasize even more the entry of the second theme that follows. In addition, one could also make the right-hand trill a fraction shorter in order to eliminate the resonance between bb.44 and 45.

A similar approach could also be considered for the left hand in the second part of Mvt II, b.20, another instance of swift dynamic change (see Example 7.10).

¹¹ This transition from loud to soft here is not so problematic on the modern piano due to the crotchet rest that is marked in-between.

Ex. 7.10: Mozart Sonata KV283, II, 20-21.



Here the left-hand thirds must remain loud throughout, if not increase dynamically, in order to maintain the harmonic intensity. A gradual decrease from *f* to *p* should not be undertaken as it would reduce the emphatic effect of the following *p* top right-hand D, two octaves higher, in b.21.

There are also many places in this sonata, especially in the Presto, an 'Italianate, opera buffa-style' movement, where contrasting dynamics can prove problematic even if rests are laid in-between. Instances of this occur in bb.40-41, 97, 102-103, 143, 145, 147 and beyond. In b.97, for example, after the sound of the triumphant, dominant chord on the first beat, the *p* concluding section which follows enters as a real surprise. A similar case occurs in the development section where, in bb.142-147, the alternating *f* and *p* cadences which mark exciting harmonic modulations can not be articulated as incisively on the modern piano (see Example 7.11).

Ex.7.11: Mozart Sonata KV283, III, 142-147.



Again here, in compensation, the modern player could play the loud chords as staccato as possible, bringing out the higher notes rather than the lower, more resonant, notes of the chords.

Places such as bb.42 and 102-103, where two quaver-rests separate dynamically contrasting sections, also pose problems on the modern piano, because, although there may be enough space for the sound to diminish before the following *p* section, yet, there is no space for the complete silence that may have been intended between the main sections of the movement. Taking this, as well as the acoustics of the room, into account, a slightly longer silence might be inserted. This action could be musically justified before a main structural unit such the entry of the second theme or the beginning of the development section, in bb.42 and 102-103 respectively.

Another challenging issue in this sonata is that of accents. For example, in the first movement, the *fp* markings in bb.5-6 sharply accent F sharp and E respectively, pointing out the melodic direction and at the same time highlighting the appoggiaturas and downbeats of each bar (see Example 7.12).

Ex. 7.12: Mozart Sonata KV283, I, 4-6.



On the early piano they can be articulated while maintaining the delicate nature of the passage. On the modern piano, they can overshadow the notes that follow. One way to overcome this problem is to apply the accent only to the right-hand quaver. The case in b.62 of the same movement, where the *f* marking highlights a new structural

unit, is similar. Here, the right-hand D is the melodic note with a longer duration. If the *f* is applied to the left-hand staccato D only, it will not obscure the right-hand note, and the sound will gain more of the sharpness of the early piano. Similar instance occurs in the third movement, bb.65-70, where the *f*, contra-metric, accents would be more convincing if a staccato touch were applied in both hands.

As mentioned previously, the lack of contrasting timbre between keyboard registers is another issue for the modern piano playing Classical music. In this sonata, many passages are repeated in a different register. For example, the second part of the first theme of the first movement, bb.4-10, is repeated again in bb.10-16; however, this time the initial fragment, bb.10-12, is written one octave lower. The modern pianist must look for effects other than timbral contrast here: for instance, the passage could be played a fraction softer than the previous one, or, maintaining the same dynamics, the left pedal could be applied to produce a different quality of sound.

The previously-mentioned transitional passage, in bb.43-44 (see Example 7.7) can also offer a timbral challenge. Here, the right hand plays a motif which recalls the transitional passage in b.16. Almost half-way through it is interrupted by the left hand which repeats the motif a tenth lower in a kind of a contrapuntal interchange. On the early piano the distinctive timbre of each voice entry creates a joyful dialogue. Attempting to conjure up such diversity between the contrapuntal entries, the modern pianist could experiment altering the tone of the lower voice in terms of dynamics and particularly touch.

Another instance of repeated passages in different areas of the keyboard occurs in the concluding section of the exposition of the first movement. This passage, beginning in b.51, consists of a succession of right-hand chords which are

repeated a bar later, an octave higher (see Example 7.13).

Ex. 7.13: Mozart Sonata KV283, I, 51-53.



On the modern instrument, one could accentuate the difference between registers by slightly altering the dynamics, and the way of re-voicing the chords, for example, focusing the first time on the top voice of each chord, and the second time on the lower voices.

There are however several places in this sonata where repeated passages in different registral areas do not prove as problematic, for instance the corresponding passage in the recapitulation of the previously mentioned example, bb.118-120. Here Mozart repeats the same chords one octave higher but writes them in different inversions which gives them a different colour overall. Then, in the last movement, in the exposition, the third main thematic idea, bb.73-81, is repeated one octave lower, bb.81-88, while in the recapitulation, bb.244-252, it is repeated two octaves lower, bb.252-259 (see Example 7.14).

Ex. 7.14: Mozart Sonata KV283, III, 244-259.



Ringling the timbral contrast between these passages is not so difficult because, although they are repeated in different registers, their accompaniment appears now above, played by the right hand and slightly altered.

The playing of bass notes is another thorny consideration for the modern pianist playing this sonata. In the transitional passage from the first to second themes of the first moment, bb.16-21, the left-hand octaves might sound rather 'muddy' preventing the right-hand ascending broken thirds to project translucently (see Example 7.9). Some authors have expressed caution concerning this particular passage.¹² The modern pianist here may use a non-legato touch and, despite previous strictures about gradual dynamic change and the terraced dynamics which seem to apply in much of this music, might start the passage softly, increasing the dynamic as the runs ascending to less resonant higher register of the instrument. In addition, both notes of the octaves need not be played with the same weight, but with an emphasis on the upper ones which are, again, less resonant. A similar approach can be considered for the low left hand ascending octaves in the third movement, bb.9-12.

Finally, the low-register, close-spaced chords in this sonata must be approached cautiously by the modern pianist. One of the few such occurrences appears in the development section of the third movement. Here the left-hand diminished chords in bb.107-110 and 119-121 create a sinister and dramatic ambience, unique in this work, and not so obvious on the modern piano. Lightening up the middle notes will clarify the chords. A similar effect can be produced if one brings out the bottom more than the two top notes in the left-hand chords in bb.150-152, in the third movement, something which will also produce a counter-melody to the right-hand tune.

¹² See for example Davidson, p.66 and Badura-Skoda, notes (ASTRÉE, E8865, 1990), p.10.

The above discussion indicates that it is not always easy to play late eighteenth to early nineteenth-century music on a twentieth-century piano. One might wonder, given all the problems, whether we should attempt to play it on this instrument at all. There are several areas, where the early piano is superior to the modern one, but on the other hand, there are many areas where the modern piano prevails. And regardless of the comparative qualities of the instruments, if a solo performer is going to play a recital which crosses historical boundaries and only one piano is available, it must be the modern piano. Without such a decision, large parts of the repertoire would have to be eschewed altogether. And as regards the concerto soloist playing with an orchestra of modern instruments, there is no choice: the modern instrument is *de rigueur*.

The modern performer who respects the intrinsic relationship between instrument and repertoire, and yet for pragmatic reasons must break that relationship, should therefore attempt to ameliorate the anomalies of the modern instrument as best as s/he can. The various technical approaches suggested in this last chapter may not be totally sufficient to evoke the effects available on the early piano; nevertheless, they can offer a satisfactory compromise in an attempt to bridge the disparities between the two instruments. For a performer such as myself, trained on the modern piano and performing the repertoire professionally on this instrument, there are no better words to conclude this study than those of Peter le Huray:

Humility must be a vital ingredient of the modern performer's equipment: the humility to read, to analyze and to listen, and the humility to modify accepted assumptions where necessary.¹³

¹³ Huray, *Authenticity in Performance*, p.4.

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