The Interpretation of Unusual Dynamic Markings in Beethoven's String Quartet in Bb Major, Op. 130: a Study of Selected Twentieth-Century Recordings

A thesis submitted in partial fulfillment of

the requirements for the degree

of Doctor of Philosophy in Performance

2016

Cardiff University

School of Music

Owen Cox

DECLARATION

This work has not been submitted in substance for any other degree or award at this or any other university or place of learning, nor is being submitted concurrently in candidature for any degree or other award.

Signed …… (candidate) Date ……..

STATEMENT 1

This thesis is being submitted in partial fulfillment of the requirements for the degree of PhD in Performance

Signed …… (candidate) Date ……..

STATEMENT 2

This thesis is the result of my own independent work/investigation, except where otherwise stated.

Other sources are acknowledged by explicit references. The views expressed are my own.

Signed ……(candidate) Date ……

STATEMENT 3

I hereby give consent for my thesis, if accepted, to be available online in the University's Open Access repository and for inter-library loan, and for the title and summary to be made available to outside organisations.

Signed ……(candidate) Date ……

Summary

This study takes as its stimulus the unusual dynamic markings in Beethoven's String Quartet, Op. 130. Presenting an immediate interpretational problem for performers this leads to questions of execution and how this influences the character of the music. Whilst both analysts and performers use evocative metaphors to describe musical character, the explication of how this is achieved through performance has been little explored in academia. The study focuses on the intersection between metaphors found in the literature surrounding Beethoven's late quartets and the performance choices made in eight renowned string quartet recordings. The ambiguity of Beethoven's late style and unusual nature of his dynamic indications offer a fascinating case study of this intersection.

The methodology uses metaphor as an analytical frame work through which discussions about performance decisions take place, suggesting one metaphor or another, usually in a spectrum of variations. This sees dynamics as a potential stimulus for manipulation of not just volume, but also vibrato, rubato, articulation, portamento and other factors often framed by the choice of tempo. Different treatments of these performance techniques suggest varying metaphorical characterisations. These are summarised through verbal descriptions of the performer's choices with reference to the score.

Chapter 1 focuses on two awkward dynamic markings that dominate the first movement: the hairpin *crescendo* to *piano* and rapid alternations of *forte* and *piano* in fast music. Chapter 2 focuses on hairpin swells which create not only unusual disruptions in the middle movements but also expansive lyricism in the Cavatina movement. Chapter 3 moves from localised dynamic markings to longer passages which are characterised by unusual dynamic stasis and descriptive terms in the Cavatina.

This study shows how these dynamics have been interpreted in many different ways, through the variety and interaction of a number of different performance techniques. Far from establishing fixed definitions for these dynamics, this opens up possibilities for more expressive freedom for performers, not less.

Acknowledgements

I would like to thank my supervisors, Dr. Keith Chapin, and in the earlier stages, Dr. Robin Stowell, for their support in getting me through the PhD. Since I have worked full time through the entire process, keeping me going was an impressive feat on their part. I would also like to thank my parents for their support, in particular my mother who helped with editing at the end of the process. I would also like to thank my wife, Katie, who kept encouraging me to continue through the difficult times, and I would also like to thank my son, Noah, whose imminent arrival made the completion of the thesis an urgent necessity. And finally, I must thank the members of the quartet who agreed to play in the performance; my wife Katie Stillman, Graham Oppenheimer and Nicholas Jones, who are also invaluable colleagues at Chetham's School of Music.

Table of Contents

Introduction

Ex. 0.1 – Beethoven, String Quartet in Bb major, Op. 130/i, bars 1 - 4[1]

When a string quartet is first confronted by the opening four bars of Beethoven's Op. 130 (Ex. 0.1), what issues will arise? There are obvious technical difficulties such as playing the opening octaves with good intonation, moving together with rhythmic uniformity and good ensemble, but there is one specific element which differentiates this music from that of many other quartets: the awkward dynamic markings of a hairpin *crescendo* to *piano* occurring twice. What does this mean, how can it be effected and how do different approaches affect the character of the music?

Fourteen bars later, the performers will then be confronted by a similar difficulty provoked by the dynamic markings (see Ex. 0.2). An otherwise straightforward *Allegro* theme is once again disrupted by an awkward dynamic marking with rapidly alternating *forte* and *piano*.

[1] All musical examples are from *Ludwig van Beethovens Werke, Serie 6: Quartette für 2 Violinen, Bratsche und Violoncell, Band 2, Nr.49* (Leipzig: Breitkopf und Härtel, 1869). This can be accessed online at: http://imslp.nl/imglnks/usimg/4/4d/IMSLP04767-Beethoven_-_String_Quartet_No.13_Dover.pdf . Accessed on 22/11/15. The reason for using this edition is both because it is in the public domain and because many of the quartets in this study may have used this score. Editions are discussed on pp. 31 – 32.

An example from a later movement presents further problems (see Ex. 0.3). Should this music be played so that it sounds 'seasick' as Joseph Kerman has written?[2]

Ex 0.2: Op. 130/i, bars 13 - 19

Ex. 0.3: Op. 130/iv, bars 1 - 8

These issues would strike a performer as problematic early in the interpretational process, and to an experienced musician be a particularly 'Beethovenian' problem.

[2] Joseph Kerman, *The Beethoven Quartets* (New York: Norton, 1967), p.318.

Daniel Barenboim describes Beethoven's usage of *crescendo* to *piano*: 'It requires a lot of courage and energy to really go with the c*rescendo* to the end, as if you're getting to the precipice and then stop short.'[3] Yet in the extensive world of Beethoven scholarship, dynamics have had a limited hearing, primarily showing up in literature on performance practice. This is no surprise as performance indications are traditionally thought of as being beyond the 'essence' of the score and superfluous to the scope of analytical enquiry, which tends to focus on diastematic elements, such as pitch, harmony and structure.

This study engages in the analysis of variations in character that can be achieved through the performance of non-standard dynamic markings in late Beethoven. These markings carry a degree of disagreement between performers as to how they should be carried out, and hence are subject to sometimes subtle and sometimes quite radically different interpretations. It hopes to contribute to the fields of music analysis and criticism by showing how the use of metaphor, which is widespread in both, can be pulled in various directions by the interpretations of performers. Currently most studies that engage in such activities do so primarily through the score rather than taking into account individual performances. It also hopes to contribute to the field of performance studies through a detailed analysis of approaches to particularly problematic dynamic markings, showing how these have been interpreted in practice, rather than the more traditional approach of attempting to locate fixed meanings of such markings. Through the use of metaphor it also aims to help performers think about how to effectively verbalise complicated performance decisions, which are an invaluable part of rehearsal and teaching practice.

[3] Daniel Barenboim and Edward Said, *Parallels and Paradoxes: Explorations in Music and Society* (London: Bloomsbury, 2003), pp. 143 - 144.

It will do so by looking at how the dynamic markings of Beethoven's String Quartet in Bb Major, Op. 130 have been interpreted by eight different string quartets through the twentieth century. The analyses of the recordings will focus on how these groups have deployed various performance techniques including the manipulation of volume, tempo, rubato, agogic inflection, vibrato, portamento and articulation, to interpret the dynamics, and what effect this has on the character of the music. The methodology involves an analytical use of metaphor and also verbal description of what the groups do with reference to the score. The full recordings are widely available and are recommended as supplements to the analyses.

The focus on expressive character, and the multiple expressive factors that go into such interpretations, hopes to build upon the work on musical meaning already more widespread in recent scholarship, but pushes it into the arena of performance studies. It also hopes to contribute to the burgeoning study of recordings, which now forms an important part of performance studies, by focusing on the relationship between dynamics and multiple performance techniques.

Dynamics within Beethoven scholarship

There is a general consensus that Beethoven and his contemporaries lived at a time when there was a huge increase in the number of dynamic and expressive markings used.[4] In particular, composers attempted to regulate what performers did: 'Many composers, especially in the German sphere of influence, came increasingly to regard accentuation and dynamic nuance as integral to the individuality of their conceptions and were unwilling to entrust this merely to the performer's instinct. During the nineteenth century there was a proliferation of markings, designed to show finer grades

[4] Clive Brown, *Classical and Romantic Performing Practice 1750 - 1900* (Oxford: Oxford University Press, 1999), pp. 59 – 137.

or types of accents and dynamic effects, and performance instructions of all kinds were used ever more freely.'[5] Nancy November concurs, 'Beethoven's unprecedented use of dynamic markings can likewise be partly understood as an attempt to specify particular qualities of performance that he desired - some new, some fast fading from common practice – as integral features of the composed musical text, rather than the province of the performers.'[6]

A writer who agrees that the dynamics are 'integral features' is Miriam Sheer, a scholar who has devoted significant attention to Beethoven's use of dynamics. She makes the case that 'dynamics are of prime importance since they help convey the musical meaning of the piece by their choice, placement, and varying degree of emphasis.'[7] There is also evidence that Beethoven himself was not only very fussy about performers observing his dynamic markings, but likewise publishers getting them in the right place in the score. When complaining about the latter he wrote, 'the marks p < >, etc., etc., have been horribly neglected and frequently, very frequently, inserted in the wrong place.... For God's sake please impress on Rampel to copy everything exactly as it stands.'[8]

It was not just signs that were important. Leo Treitler notes that 'Beethoven's oeuvre marks a pivot in the history of the use of words alongside "notation" as musical signs'[9] and quotes a letter from Beethoven about the importance of these written indications, 'It is a different matter when it comes to the words designating the character of the composition. These we cannot give up…these [words] themselves already have

---

[5] Brown, *Classical and Romantic Performing*, p. 62.
[6] Nancy November, *Beethoven's Theatrical Quartets* (Cambridge: Cambridge University Press, 2013), p. 46.
[7] Miriam Sheer, 'Patterns of Dynamic Organization in Beethoven's Eroica Symphony', in *The Journal of Musicology,* vol. 10, no. 4 (Autumn, 1992), p. 484.
[8] Quoted in Sheer, 'Patterns of Dynamic Organization',.p. 484. For more quotes from both Haydn and Beethoven about the importance of dynamics to their work, see Thomas Schmidte-Beste, 'Preventive and Cautionary Dynamics in the Symphonies of Mendelssohn and his Time', in *The Journal of Musicology*, vol. 31, no. 1 (Winter, 2014), pp. 51 - 53.
[9] Leo Treitler, 'Beethoven's "Expressive" Markings', in *Beethoven Forum 7* (1999), p. 100.

reference to the spirit of the piece'.[10] Critically, it is the connection between these dynamics and the character of the piece that becomes more important. Previously, performers would have been trusted to understand the character of the music without explicit direction, but the increasing complexity of styles in Beethoven's music warranted more instructions. An increase in the number of instructions, however, does not necessarily mean greater clarity of intentions, as this study constantly shows. Though some have argued that this indicates a change in the roles of composers and performers, reducing creative freedom for the latter,[11] perhaps the reality is more complex. According to Leonard Ratner, '*Crescendo, decrescendo,* their appositives, and their signs - < and > appeared with increasing frequency in musical scores toward the end of the century, but these nuances were present in musical performance much earlier.'[12] With the rise in such notation, a more complex musical language comes to the fore with an increased ambiguity in the case of late Beethoven. Perhaps unintended, the consequence of this attempt to control the performers is in fact greater freedom from those previous conventions to which Ratner refers. It is as though musical expression has been liberated from convention and taste and awakened to the possibilities of stranger and more diverse interpretations. The awkward and unusual dynamic markings serve to highlight the ambiguities, making the meaning more problematic and ultimately more contested and varied.

In terms of Beethoven's creative process, Lewis Lockwood notes that dynamic indications tended to be added after pitch content and articulation were established, but that, 'At times the indication of dynamics may seem haphazard or insignificant but on

[10] Quoted in Treitler, 'Beethoven's "Expressive" Markings', p. 101. Beethoven is contrasting these "expressive" markings with the use of *Allegro,* which he complained had become simply a tempo marking rather than having any relationship to its meaning of 'cheerful'.
[11] See November, *Theatrical Quartets*, p. 46.
[12] Leonard Ratner, *Classic Music: Expression, Form and Style* (New York: Schirmer, 1980), p. 188.

later reflection may furnish clues to performance intentions that should be followed.'[13] This is based on his research into the original manuscripts and an argument for performers to take an interest in such study.

With the rise in importance over the past few decades of historically-informed performance, there has been greater interest in the meaning and interpretation of these dynamic and expressive markings. In addition to Brown's survey,[14] there have been attempts at cataloguing the use of dynamics in Beethoven,[15] and for the piano repertoire in particular there have been some notable attempts to locate the meanings of such markings.[16] What comes to the fore frequently in these studies, is the ambiguity of meanings, often because individual composers were not consistent with themselves, let alone with each other. Equally, theories and practice of such usage did not always correlate. The more minimalist dynamics of Baroque composers and Haydn and Mozart would generally serve to aid the overall characterisation of a passage or section, which may impose a degree of loudness or softness beyond which it may seem tasteless to go. The proliferation in Beethoven's music of different levels of dynamic as well as when these levels of dynamic are put in combination with each other, makes most of these writers try to produce ever more subtle hierarchies of dynamic volume, rather than explore the myriad of other expressive possibilities beyond volume change that those indications might suggest. There is a fundamental problem in these studies in that they attempt to locate exactly what Beethoven meant these markings to signify by assigning a fixed meaning to them; a very noble, if nearby impossible aim, since we have no aural evidence from Beethoven's time. As Newman notes, 'the point needs to be made at

[13] Lewis Lockwood, *Beethoven: Studies in the Creative Process* (Cambridge: Harvard University Press, 1992), p. 226.
[14] See Brown, *Classical and Romantic Performing*, pp. 59 – 138.
[15] Fritz Rothschild, *Musical Performance in the Times of Mozart and Beethoven* (London: A&C Black, 1961), pp. 34 – 35.
[16] See in particular William S Newman, *Beethoven on Beethoven: Playing His Piano Music His Way* (New York and London: W. W. Norton & Company, 1988), pp. 252 – 255 and Sandra Rosenblum, *Performance Practices in Classical Piano Music* (Bloomington: Indiana University Press, 1988), pp. 57 – 60.

once that only infrequently can one document Beethoven's intentions with hard evidence…Most of the time one must rely on circumstantial evidence.'[17] But even the rare 'hard' evidence to which he refers is still a matter of translating something from the score, or from a contemporary written treatise on performance practice, into sound, itself a very problematic exercise.

The pianist Roberto Poli certainly thinks that certain dynamic markings of the nineteenth century have been widely misunderstood in the twentieth and beyond, in particular hairpins, sforzandi and rinforzandi. In contrast to a literalist performance aesthetic that assigns very definite meanings to dynamic markings, he states, 'I realized how predominant the faculty of listening should have been in the way I sought to understand the function of hairpins. The presence of a marking in the score should not have been taken at face value but explored in regard to the way it could serve the musical narrative.'[18] He finds that hairpins in particular often go against the dynamic marking, and so may mean agogic accents, or sometimes even a reference to voicing.[19] Though his focus is mainly on nineteenth century romantic composers, there are examples from Beethoven, whose notation would presumably have influenced the Romantic generation. If he is indeed correct, then many twentieth-century performers have misunderstood this marking and others. (This meaning of hairpins will be discussed in both chapters 1 and 2).

This literature is largely attempting to help modify (wherever 'false' interpretation has been the case), but it does not particularly attempt to bridge the divide between theory and practice.[20] In other words, there is limited discussion of how such

[17] Newman, *Beethoven on Beethoven*, p. 17.
[18] Roberto Poli, *The Secret Life of Musical Notation* (Milwaukee: Amadeus Press, 2010), p. 10.
[19] Poli, *Secret Life of Notation*, pp. 1 – 67.
[20] For discussion of the problems with this see Nicholas Cook, 'Analysis Performance, Performing Analysis' in eds. Nicholas Cook and Mark Everist, *Rethinking Music* (Oxford: Oxford University Press, 1999), p. 251. He identifies the problem of attempting to 'translate' between two essentially different acts, writing on the one hand and playing on the other. This is a problem all literature faces when it does not engage with recordings or other forms of 'actual' performance.

markings have *actually* been interpreted (whether 'correctly' or not), and how this has contributed to the understanding of the music for performers, listeners and scholars.

With reference to listeners, Sheer stakes a claim for the importance of dynamics to a wider audience, 'even for those who are not able to perceive subtle harmonic and rhythmic effects'.[21] There is a certainly a case to be made for the importance of dynamics in order to distinguish one performance from another. Whereas performers do not usually change the diastematic elements of a work, the dynamics afford a certain amount of creative free will individualising one performance from another.[22] But with Beethoven this sets up a central contradiction between his apparent fussiness of his notation and the individualising effects of the performers themselves. As will be seen in this study, there are a variety of approaches to the dynamics, which can at times quite radically affect the interpretation. Does this ultimately indicate the ineffectiveness of dynamics to transmit a meaning between composer and performer, or more fruitfully, open up creative space for the performers? This issue will be revisited in the conclusion.

Analytical literature on the late quartets

Inevitably the discussion of dynamics in Beethoven takes a path into performance-practice literature rather than analytical literature, but can the language of the analysts offer clues for the performers of this music, and in particular the metaphorical representations that frame these analyses?

The overriding sense from the discourse surrounding the late quartets is one of ambiguity; from the initial reactions of the audience (and the dearth of performances for

[21] Sheer, 'Patterns of Organization', p. 484.
[22] There is growing evidence that performers regularly changed many other elements of the music, including pitch, in the nineteenth century and even into the twentieth. See chapter 6, 'The Letter of the Score', in Kenneth Hamilton, *After the Golden Age: Romantic Pianism and Modern Performance* (Oxford: Oxford University Press, 2007), pp. 179 - 224.

a time) to the wrestling over their meaning today. In contrast to the 'heroic' works of the middle period, which seem to solicit similar reactions and have a direct and straightforward mode of expression,[23] the late works leave listeners, writers, performers and academics both enthralled and puzzled. 'The particular kind of inwardness of Beethoven's last style period has impressed many listeners as complex, involuted, and esoteric,' writes Kerman, noting that he had revised opinions originally voiced in his 1967 book. There, 'I argued that Beethoven's music was *not* arcane, that in it Beethoven had deliberately sought the simple, the direct, and the immediately communicable.'[24] Even Kerman, one of the greatest chroniclers of Beethoven's quartets, had 'changed or at least softened my view of this question.'[25]

Others have used these works to consider their political content, pitching anywhere between 'exemplars of Enlightenment rationality and clarity' and 'a positive affirmation of new conservative ideals.'[26] And this had fed into a long-running debate about whether Beethoven's works (and his late ones in particular) constitute the height of Classicism in music, or the founding of musical Romanticism.[27] Beyond stylistic concerns about the music itself, this discussion involves political, philosophical and aesthetic concerns that usually lead beyond an essentialist search to reception history, whereby shifting concerns and values of different ages are reflected in their

[23] See chapter 1 in Scott Burnham, *Beethoven Hero* (Princeton: Princeton University Press, 1995), pp. 3 – 28. He looks at the striking commonalities in the reception of the *Eroica* symphony: 'Emphasis throughout will be on the similar ways in which all these commentators react to the musical events of the movement, however dissimilar their language and explicit agenda', p. 3.
[24] Joseph Kerman, 'Beethoven Quartet Audiences: Actual, Potential, Ideal', in eds. Robert Winter and Robert Martin, *The Beethoven Quartet Companion* (Berkeley: University of California Press, 1994), p. 17.
[25] Kerman, 'Beethoven Quartet Audiences', p. 18.
[26] Stephen Rumph, *Beethoven After Napoleon: Political Romanticism in the Late Works* (Berkeley and Los Angeles: University of California Press, 2004), p. 245. For a summary of other writers on Beethoven see chapter 9, 'A Modernist epilogue', pp. 222 – 245.
[27] As well as in Rumph there is a summary of the debate in Maynard Solomon, 'Beyond Classicism' in in eds. Robert Winter and Robert Martin, *The Beethoven Quartet Companion* (Berkeley: University of California Press, 1994), pp. 59 – 75.

interpretation of Beethoven.[28] The fact that interpretations of the late works are so heterogeneous is a testament to both the quality and the ambiguity of the expressive language.[29]

In these discussions the tools most commonly used are historical enquiry and analysis, but the broader issue of performance and more specific element of dynamics are rarely heard, though the former's importance has been noted by Maynard Solomon: 'The issue is by no means settled…for it has an important bearing on whether we perceive and perform works such as the quartets primarily as outgrowths of eighteenth-century traditions and performance practices or as auguries of fresh traditions in the process of formation.'[30]

Spitzer's book on Beethoven's late style provides a clue as to how both performance in general, and dynamics specifically, may contribute to this study. In a discussion of the complexity of Beethoven's late style and how he manipulates his musical material, 'he does so in order to compose *against the grain* of its natural properties'.[31] In Op. 130, there is a constant feeling that the dynamics undercut or go against what is natural in terms of performance. Due to their training, analysts have tended to focus instead on the formal and tonal elements of these disruptions, and the discussion usually comes down to whether the analysis can make sense of the formal elements of the structure, but on a localised level dynamics certainly contribute to these complications and ambiguities.

---

[28] For a brief summary of Beethoven's reception history see Scott Burnham, 'The four ages of Beethoven: critical reception and the canonic composer', in ed. Glenn Stanley, *The Cambridge Companion to Beethoven* (Cambridge: Cambridge University Press, 2000), pp. 272 – 291.

[29] Nicholas Cook suggests that Beethoven may have been purposefully ambivalent in the Ninth Symphony, and that this may be part of the reason so many wildly opposing political entities lay claim to the music. See Nicholas Cook, *Beethoven's Ninth* (Cambridge: Cambridge University Press, 1993), *pp*. 100 – 105.

[30] Solomon, *Beyond Classicism,* p. 59.

[31] Michael Spitzer, *Music as Philosophy: Adorno and Beethoven's Late Style* (Bloomington: Indiana University Press, 2006), p. 25.

One writer whose analyses come one step closer to performance is Robert Hatten.[32] His work was part of a new wave of analytical literature in the 1990s broadly concerned with musical meaning, which has now become mainstream. It uses semiotic and topical analysis as well as more traditional harmonic and formal analysis to try to illuminate the expressive content of the music. Inspired by Leonard Ratner's work on topics,[33] this kind of analysis has significant relevance for performers due to its use of expressive categories and metaphors ('lyrical', 'tragic') and its multiplicity of musical parameters (register, texture, dynamics, instrumentation as well as form, harmony and pitch). These are also common considerations for performers, who often need to decide what expressive parameters, such as bow speed, vibrato, portamento and tempo, should be used in performance to achieve these expressive categories.

Even more traditional types of analysis end up enriching the drier aspects of technical description with evocative metaphors that provide an insight into the ways in which this music might be performed. As well as Kerman, there is the work of Daniel Chua on the late quartets, which provides particularly vivid analogies and descriptions of the way in which the quartets critique the society in which they were forged.[34] And much of this work, as well as Spitzer's, comes from the revitalisation of interest in Adorno's critical commentaries on Beethoven, which themselves provide an appropriately complex and ambiguous critique of the late style.[35]

The task is to push these aspects of the analysts' insights and enriched vocabulary into the sphere of performance studies, focusing in particular on the

---

[32] Robert Hatten, *Musical Meaning in Beethoven: Markedness, Correlation, and Interpretation* (Bloomington: Indiana University Press, 1994).
[33] See chapter 2, 'Topics', in Ratner, *Classic Music,* pp. 9 – 29.
[34] Daniel K. L. Chua, *The "Galitzin" Quartets* of Beethoven: Opp. 127, 132, 130, (Princeton: Princeton University Press, 1995).
[35] See Theodor W. Adorno, ed. Rolf Tiedemann, trans. Edmund Jephcott, *Beethoven: The Philosophy of Music* (Cambridge: Polity Press, 1998), pp. 123 – 161. For a summary of Adorno's view on the late style see Rose Rosengard Subotnik, 'Adorno's Diagnosis of Beethoven's Late Style: Early Symptom of a Fatal Condition', in *Journal of the American Musicological Society,* vol. 29, no. 2 (Summer, 1976), pp. 242 – 275.

metaphors used to describe the character of the music and how this relates to performance. Conversely, analysis of performances invites its own metaphorical representations which feeds back into the work on metaphor and analysis.

Performance studies and recordings

The study of performance is now a well-established discipline within the academy. Whereas previously it focused on historical treatises for the aid of performance practice of early music alongside the development of early music practitioners, it has now spread to the performance of Classical, Romantic and twentieth-century music, and its tools for study have extended into the study of recordings. There is now an extensive literature on recordings,[36] widespread availability of materials including historic recordings[37] and user-friendly software to analyse recordings.[38] The original lone pioneer for this research was Robert Philip who began analysing recordings in the late 1960s, which eventually culminated in his 1990s book *Early Recordings and Musical Style*.[39] For a long time he was alone in his research, but many of the basic tenets of his book formed the conventional wisdom about historical recordings versus more recent recording trends. His general conclusion that, 'It is possible to summarise all these elements as a trend towards greater power, firmness, clarity, control, literalness, and evenness of expression, and away from

[36] For histories of recordings see Timothy Day, *A Century of Recorded Music: Listening to Musical History* (New Haven and London: Yale University Press, 2000) and Mark Katz, *Capturing sound: How Technology has Changed Music* (London: University of California Press, 2005). An anthology considering the issues around studying recorded music is eds. Nicholas Cook, Eric Clarke, Daniel Leech-Wilkinson and John Rink, *The Cambridge Companion to Recorded Music* (Cambridge: Cambridge University Press, 2009).
[37] There is a wealth of material available free or cheaply at www.spotify.com, www.naxosmusiclibrary.com, www.youtube.com, and the National Sound Archive at the British Library has online access to historic Beethoven recordings at http://sounds.bl.uk/classical-music/beethoven.
[38] See http://www.sonicvisualiser.org/ which was developed at CHARM (http://www.charm.rhul.ac.uk/index.html), an AHRC-funded project looking at the history and analysis of recorded music.
[39] Robert Philip, *Early Recordings and Musical Style: Changing Tastes in Instrumental Performance 1900 – 1950* (Cambridge: Cambridge University Press, 1992).

informality, looseness and unpredictability' has a widely accepted currency.[40] Moving from comments about general style to purpose, he also suggests, 'the general change in emphasis has nevertheless been from the characterisation of musical events to the reproduction of a text'.[41] This interpretation suggests an analogy with music theory and analysis, where more poetic criticism gave way to more technical and positivistic approaches in the post-war period.

Notable in Philip's work, elements of which have also dominated the discipline, is the primary emphasis on particular characteristics of performance style and its historical contingency. His focus is on 'the habits which make the performances on early recordings sound most old-fashioned to a modern listener.'[42] This leads to the discussion of the categories of rhythm and tempo (and its flexibility), vibrato and portamento, and these are the categories that remain most widely analysed in term of recordings. Tempo in particular has been widely analysed, perhaps because it is a fairly straightforward parameter that can be quasi-objectively measured, but also because 'duration…often has a significant effect on the way a movement is perceived.'[43] This is undoubtedly true, but only begins to scratch the surface of interpretative decisions made.[44] There has also been sophisticated work on intonation and phrasing by Peter Johnson and Nicholas Cook respsectively, which though quite technical in its initial approach, concludes with interpretative insight into how these aspects affect performance expression.[45]

---

[40] Philip, *Early Recordings*, p. 229.
[41] Philip, *Early Recordings*, p. 230.
[42] Philip, *Early Recordings*, p. 2.
[43] Nancy November, 'Performance History and Beethoven's String Quartets: Setting the Record Crooked', in *Journal of Musicological Research,* vol. 30, no. 1 (2011), p. 10.
[44] For discussions of different tempos in Beethoven symphony see Jose A. Bowen, 'Finding the Music in Musicology: Performance History and Musical Works', in eds. Nicholas Cook and Mark Everist, *Rethinking Music*, (Oxford: Oxford University Press, 1999), pp. 434 – 436.
[45] For intonation see Peter Johnson, '"Expressive Intonation" in String Performance: Problems of Analysis and Interpretation', in ed. Jane Davidson, *The Music Practitioner: Research for the Music Performer, Teacher and Listener* (Aldershot: Ashgate, 2004), pp. 79 – 90. For phrasing see Nicholas

It is this latter element in which much of this work had previously fallen short: how do variations in these performance parameters affect specific interpretations, rather than simply changes in general performance style over time. Before much of the recent work on recordings was done, Daniel Leech-Wilkinson noted how musicology had generally neglected performance, and 'if you ask how Boehm's 'Jupiter' [symphony] differs from Hogwood's we can offer no more than generalizations.'[46] Though this charge could be laid at the door of much work on recordings, it is perhaps inevitable in a relatively new field that a good deal of spade-work on basic parameters is necessary, and historical trends are an obvious place to begin. Because detailed discussion of an interpretation involves consideration of the multiple interpretative choices going on simultaneously, it takes a highly specific focus on short passages of music to be able to do this (much like sophisticated analysis of the score can do). Due to the advances in computer-analytical software, there can also be a tendency to focus on the potential for simply providing extensive data, rather than on what that data might show about the music (somewhat similar to the charge against over-technical types of musical analysis). For example, Cook critiques a scattergram on different tempos in recordings by pointing out that 'they...reduce the temporal evolution of music to a single value...[and] are hard to relate to the music as experienced.'[47]

Cook, 'Squaring the Circle: Phrase arching in Recordings of Chopin Mazurkas', in *Musica Humana,* vol. 1, no. 1 (2009), pp. 5 - 28.

[46] Daniel Leech-Wilkinson, ''Playing and Thinking' Book review: *Inside Early Music: Conversations with Performers* by Bernard D. Sherman', in *Early Music,* vol. 27, no. 2 (May, 1999), p. 319. Unsurprisingly, Leech-Wilkinson is responsible for the most wide-ranging study so far of performance style through recordings blending computational technical analysis with evocative language. See Daniel Leech-Wilkinson, *The Changing Sound of Music: Approaches to Studying Recorded Musical Performances* (London: CHARM, 2009), http://www.charm.rhul.ac.uk/studies/chapters/chap1.html.

[47] Nicholas Cook, 'Methods for Analysing Recordings' in eds. Nicholas Cook, Eric Clarke, Daniel Leech-Wilkinson and John Rink, *The Cambridge Companion to Recorded Music* (Cambridge University Press, 2009), pp. 235 – 236. Cook's chapter outlines the ways in which computer software analysis has been used and the issues surrounding its usefulness for musicological study of recordings, for which he is largely in favour.

It was ultimately decided that the use of computer software to analyse recordings would not form a central part this study. An easily accessible analysis software programme Sonic Visualiser[48] was used in the early stages of listening; above all it aids acute listening of short phrases and multiple recordings, so that it is possible to tease out differences more easily. This kind of programme can furnish all sorts of enlightening detail and is a big part of future research into recordings, along with the increasingly sophisticated ways to represent data gleaned from such recordings.[49] However, these technologies are primarily best at analysing discrete properties (such as tempo) and producing large data sets, which is ideal for looking at style change over time, whereas this study often considers multiple properties in conjunction with each other, and is less concerned with general performance style change. Sonic Visualiser is also problematic when it comes to string quartets because it cannot separate the instrumental strands; it is no surprise that the most useful information from such software is for solo piano, violin or singing where an individual line of sound can be focused upon. [50] Dynamics can also be problematic to analyse through computer software, since having one individual soundwave representing the group does not allow you to talk about differential dynamics between the instruments.

Partly because they are a specific and localised aspect of performance, rather than a general aspect of historical performance style, the analysis of how dynamics have been interpreted on recordings has had a limited hearing. In her work on post-war Bach recordings, Dorrotya Fabian did look at dynamics: 'Interestingly, there has been considerably more discussion of tempo than dynamics (both then and now), yet the analysis presented here points toward a reverse order of importance for an historically

[48] www.sonicvisualiser.org
[49] See fn. 47.
[50] Daniel Leech-Wilkinson focuses on these three instruments in Leech-Wilkinson, *Changing Sound of Music.*

informed and musically effective performance.'[51] This is particularly notable for the limited explicit dynamics markings in the repertoire at which she was looking. For a rare example of where the study of recordings have been used to prove (or disprove) the meaning of specific dynamic markings, David Hyun-Su Kim has studied historic recordings of Brahms' contemporaries to argue that the meaning of hairpins has been widely misunderstood in the twentieth century (as Poli has also argued).[52] This will be discussed further in chapters 1 and 2. The interpretation of Beethoven's dynamics hangs tantalisingly between these two studies, where the notation of dynamics has increased, but recording technology came far too late to know what *his* contemporaries did, though it is reasonable to assume that Kim's work on hairpins could also relate to Beethoven's use of them.

Analysis and performance studies; shared concerns

Although analysis and performance are often thought of as being far apart (at least in the musicological tent), what is striking about much analysis is how much of the language of analysis depends on 'idealised' performances. This is not surprising in the evocative language of Scott Burnham on the slow movement of Mozart's Clarinet Concerto: 'Note the warmly cohesive, floating quality of the string sonority: the pedal tone in the viola sustains the sound, while the murmuring figures in the violins lend it a gentle animation.'[53] To achieve a 'warmly cohesive, floating quality' and a 'murmuring' takes all sorts of performance decisions. In the analytical literature on Beethoven's late quartets, Kerman's 'seasick',[54] Daniel Chua's 'violence'[55] and

[51] Dorottya Fabian, *Bach Performance Practice, 1945 – 75: A Comprehensive Review of Sound Recordings and Literature* (Aldershot: Ashgate, 2003), p. 97.
[52] David Hyun-Su Kim, 'The Brahmsian Hairpin', in *19th-Century Music*, vol. 36, no. 1 (Summer, 2012), pp. 46-57.
[53] Scott Burnham, *Mozart's Grace* (Princeton: Princeton University Press, 2012), Kindle Edition, loc. 195.
[54] See fn. 2.
[55] Chua, *The "Galitzin" Quartets*, p. 3.

Hatten's 'genres' such as 'serene' or 'tragic'[56] all require performance choices that reflect such metaphors. How those choices can or do reflect such metaphors is a topic of enquiry rarely pursued.

An explicit example of where this comes to the fore is in Susan McClary's analysis of a Mozart Piano Concerto where she describes an argument with a colleague over the performance of the concerto, and how the nature of the performance brought to the fore their 'radically divergent concepts of….the whole of the eighteenth century and its significance.'[57] The performance choices created an interpretation that divided McClary and her colleague by highlighting 'unusual compositional strategies' that brought a particular 'social meaning' to the music. Even more tellingly she complains about the soundtrack of the film *Amadeus* being performed (by the Academy of St Martin in the Fields) in a 'flat and undifferentiated fashion.'[58] Though only forming part of her anecdotal introduction, she touches on an issue which has had limited discussion; how performance does impact on the analysis of the meaning and expression of music.

The intersection between performance and analysis has been hotly debated, and is a significant subset of performance studies. In the 1990s there was a widely-developed critique that books on performance, usually by theorists (or analysts), tended to be a one-way process and that performers and performances were largely absent from these discussions: 'Implicit or explicit in all these writings is a view that performance and analysis intersect only when performers follow theoretical edicts or actually become theorists,' states Joel Lester.[59] Cook concurs about the difficult relationship between

[56] Hatten, *Musical Meaning*, p. 207.
[57] Susan McClary, 'A Musical Dialectic from the Enlightenment: Mozart's "Piano Concerto in G Major, K. 453", Movement 2', in *Cultural Critique*, no. 4 (Autumn, 1986), p. 130.
[58] McClary, 'A Musical Dialectic', p. 130.
[59] Joel Lester, 'Performance and Analysis: Interaction and Interpretation', in ed. John Rink, *The Practice of Performance: Studies in Musical Interpretation* (Cambridge: Cambridge University Press, 1995), p. 198.

the two disciplines.[60] He complains about scholars who see performance as simply realising an appropriate analysis: 'In other words, you complete the analysis, and then you decide on appropriate performance 'interventions' on the basis of that analysis'.[61] Lester, Cook[62] and Janet Levy[63] are amongst those who discuss actual performances, through recordings, with their own or others' analytical insights. Their work shows how a particular performance can result in analytical insight as well as vice-versa, and tends to point to analysis as a way to open up performance possibilities rather than searching for a singular 'correct' version.

With particular pertinence to the methodology of this study, Lester talks about how different performance strategies result in differing interpretations of what the music expresses: '…these varying perspectives show that there are different strategies for projecting structural issues in pieces, just as we commonly recognise the existence of various strategies in projecting the affect of pieces – for instance, whether a given passage in Tchaikovsky's Sixth Symphony comes across as resigned or anguished.'[64] And it is this latter aspect, with its loaded metaphorical associations, that has generally been avoided in favour of structural implications; for example, when a performer slows down or diminuendos in order to articulate a change of section/key/thematic grouping.[65] This is because such metaphorical terms are often seen in terms of their subjectivity, and are therefore considered to be lacking in scholarly clout, even though there almost certainly are shared understandings of what such terms mean, particularly amongst

[60] Nicholas Cook, 'Analysing Performance, Performing Analysis' in eds. Nicholas Cook and Mark Everist, *Rethinking Music* (Oxford: Oxford University Press, 1999), pp. 239 – 261.
[61] Cook, 'Analysing Performance', p. 248.
[62] Nicholas Cook, 'The Conductor and the Theorist: Furtwangler, Schenker and the first movement of Beethoven's Ninth Symphony' in ed. John Rink, *The Practice of Performance: Studies in Musical Interpretation* (Cambridge: Cambridge University Press, 1995), pp 105 – 125.
[63] Janet Levy, 'Beginning-ending ambiguity: consequences of performance choices' in ed. John Rink, *The Practice of Performance: Studies in Musical Interpretation* (Cambridge: Cambridge University Press, 1995), pp. 150 – 169.
[64] Lester, 'Performance and Analysis', p. 213.
[65] For example Levy, 'Beginning-ending ambiguity'.

performers. The importance of metaphor in any discussion of music will be discussed in the methodology section below.

There is also a sub-literature that involves distinguished performers themselves, which, whilst less grounded in scholarly research, is notable in itself.[66] One example that attempts to bridge the divide is by Lewis Lockwood and the Juilliard String Quartet, whose book includes an annotated score, a recording and discussions of interpretative difficulties, including dynamics, between Lockwood and the musicians.[67] Lockwood claims early in the book that 'performers and scholars, typically live in [metaphorically] different neighbourhoods'[68] and outlines their differing preoccupations. He explicitly aims to 'link musical scholarship and performance' in this book.[69] However, because the book is separated into scholarly introductions, discussions with the quartet, and then the scores, it feels like the barriers between the disciplines largely remain, but are collected slightly closer within the same building (to echo Lockwood's geographical metaphor). Because of the informality of the discussions there is no space for a more rigorous attempt to link ideas arising from scholarship and performance and to feed them back into one another. And it is precisely this area where there is still much space for a greater interaction of both elements which the study of recordings in particular has opened up.

One of the musicologists at the centre of this new pursuit into recordings is Cook who calls for a 'performative perspective', where 'If we think of analysis, or for that matter any musicology, in terms of what it does and not just what it represents, then we have a semantic plane that can accommodate any number of metaphorical

[66] Poli's book straddles this genre; he does not write like an academic and it reads somewhat like a detective story, but there is a certain degree of scholarly research in his book.
[67] Lewis Lockwood, *Inside Beethoven's Quartets: History, Performance, Interpretation* (Cambridge: Harvard University Press, 2008). Similarly illuminating discussions appear in David Blum, *The Art of String Quartet Playing: The Guarneri Quartet in Conversation with David Blum* (Ithaca: Cornell University Press, 1987).
[68] Lockwood, *Inside Beethoven's Quartets,* p. vii.
[69] Lockwood, *Inside Beethoven's Quartets,* p. iv.

representations of music.'[70] It is this accessing of the mutual space that both analysts and performers often share (the 'metaphorical representations' that abound in even the most technical of analyses), which feeds into the language that is at the heart of how performers talk about music. Primarily this is what most performers refer to as the character, meaning or spirit of the music, and this mutual space incorporates how both analytical insights and performance choices play into that.

Whilst Philip feels that performance style has departed from the 'characterisation of musical events',[71] it is clear that Beethoven himself was preoccupied with such issues as remarked by one of his pupils Ferdinand Ries: 'When I left out something in a passage, a note or a skip...he [Beethoven] seldom said anything; yet when I was at fault with regard to the expression, the crescendo or matters of that kind, or in the character of the piece, he would grow angry. Mistakes of the other kind, he said, were due to chance; but these last resulted from want of knowledge, feeling, or attention.'[72] Two issues stand out here. Firstly, the importance of expression and character of the music over accuracy shows that for Beethoven the performer played a very active part in the interpretation and was indeed of primary significance. Second is the fact that he links the importance of dynamic markings to character and expression. This latter point in particular seems to argue for the dynamics being a crucial factor in the characterisation of the music.

Critical language and metaphor

So how can further study of dynamics serve to enrich not only performers' understanding of how to interpret them, but also the general analytical literature on

[70] Cook, *Analysing Performance,* p. 258.
[71] See fn. 41.
[72] Robert Hatten, *Interpreting Musical Gestures, Topics and Tropes: Mozart, Beethoven, Schubert* (Bloomington: Indiana University Press, 2004), p.133.

Beethoven? In recent decades discussions of musical meaning and expression have come to the fore,[73] and some attention as to why composers put in certain dynamic and expressive markings would seem to be a useful part of this enquiry. This kind of focus on meaning and expression was partly a reaction to what was seen as 'positivist' or 'objective' forms of analysis. One of the main critiques of this was by Joseph Kerman in the 1980s.[74] He regularly called for more 'critical' engagement with music beyond the technical analysis which he felt was just the beginning of an engagement with the music as music. In the 'Afterword' to his book about Bach's *Art of Fugue*, he makes the case for critical language to be fused with analysis. 'Another premise for criticism is that music's character is somehow accessible to words. No one believes that the technical information put forth by critics and analysts can explain music's affective quality, only that it can offer support for assertions – verbal constructions – that they make about quality.'[75] He admits, using appropriately colourful language, that, '…prose cannot track the immediacy of aesthetic experience. But prose can cozy up to it, suggest it, create an aura about it that heightens sensitivity. Such writing depends on simile…metaphor…the pathetic fallacy…logorrhea'.[76] His book on the Beethoven string quartets is a testament to this kind of blending of technical detail with critical engagement that uses such evocative metaphorical language.

A good example of more recent analytical writing that similarly blends technical detail with a highly colourful language is Scott Burnham's book, *Mozart's Grace*. He traces the kind of concepts that had been largely shunned in post-war analytical circles, but that have been used by non-analysts to describe Mozart's music – 'grace' and

[73] For this study in particular see Hatten, *Musical Meaning*.
[74] See Joseph Kerman, *Musicology* (London: Fontana, 1985) and Joseph Kerman, 'How We Got into Music Analysis, and How to Get Out' in *Critical Inquiry,* vol. 7, no. 2 (Winter, 1980), pp. 311 – 331. There is a quick and accessible summary in Nicholas Cook, *A Very Short Introduction to Music* (Oxford: Oxford University Press, 1998), pp. 87 – 104.
[75] Joseph Kerman, *The Art of Fugue* (Berkeley: University of California Press, 2005), p 145.
[76] Kerman, *Art of Fugue*, p. 146.

'sonority' for example - and illuminates these metaphors with attention to simple technical details. 'I deploy simple analytical accounts of musical effects, but always relate these effects to other domains of human significance…I will explore qualities of expression, intimation, interiority, innocence, melancholy, grace, and renewal.'[77] What makes his analyses so illuminating is precisely this embrace of general qualities and values, which when linked to specific musical details, tap into how people *can* experience this music (because though it is Burnham's own experience, it is one shared by many others).

Metaphors and their relationship to both analytical concepts and performance choices will form a key part of this study and the analytical language used. When writing about music it becomes clear from the outset that using metaphor is unavoidable: 'To think, talk, or write about music is to engage with it in terms of something else, metaphorically,'[78] states Spitzer who has devoted an entire study to the basis of analysis in metaphor. The idea that a 'literal mode of engagement, one generally associated with technical music theory' would bring us closer to music, 'would cut little ice with the overwhelming majority of listeners' who find the technical language associated with music theory 'alienating'.[79]

There is now an open embrace and acknowledgment of metaphor in mainstream musicology, and theorising on the subject is now common.[80] Even technical observations of apparently objective criteria such as pitch and harmony are to an extent metaphorical.[81] As Spitzer notes, there is analytical insight to be won from the structure of metaphors, as he shows through his correlation of metaphors with musical elements,

[77] Burnham, *Mozart's Grace,* loc. 136.
[78] Michael Spitzer, *Metaphor and Musical Thought* (Chicago: University of Chicago, 2004), p. 1. Cook states how Elvis Costello reputedly said that 'writing about music is like dancing about architecture', in Cook, *A Very Short Introduction,* p. Vii.
[79] Spitzer, *Metaphor*, p. 2.
[80] As well as Spitzer's book, see Hatten, *Musical Meaning,* pp. 162 – 172 and Lawrence Kramer, 'Music, Metaphor and Metaphysics', in *The Musical Times,* vol. 145, no. 1888 (Autumn, 2004), pp. 3 – 18.
[81] For example pitch 'rising' and harmonic 'progression'.

'so that there is a natural fit, or isomorphism, between harmony and painting, rhythm and language, and melody and life.'[82] And so musicians talk of dark or bright harmonies, rhythmic stresses and melodies growing and developing. Dynamics and movement can be added as a fourth isomorphism adding another metaphorical variation; after all, dynamics are metaphors anyway, because they are the use of language or visual notations, such as a hairpin, to provoke a musical reaction. Think of playing 'softly' (*piano*), 'growing' in volume (*crescendo*), or to be more evocative, a 'sudden outburst' (*subito forte* or s*f*). A further important idea from Spitzer is the notion of 'hearing as',[83] which removes the search for an essentialist answer that the music *is* something, and instead opens up the possibilities of how music can be heard *as* something.

Spitzer, Hatten and Kramer have been strong proponents of metaphor's importance in analysing music, but its foray into discussions of performance in a scholarly context has thus far been more limited, or at least not openly acknowledged, though the signs are there. Along with Lester's comment on Tchaikovsky,[84] Lawrence Kramer discusses conflicting performances of a Chopin prelude in Ingmar Bergman's film *Autumn Sonata*, 'The question raised...is whether to emphasise the disparity of melody and harmony (the way of aggrieved reverie) or to reconcile them with the help of a certain ironic detachment (the way of suppressed pain).'[85] In typically evocative language Kramer is linking different interpretational outcomes, described in rich metaphorical language, to the manner in which particular musical elements are performed.

[82] Spitzer, *Metaphor,* p. 13.
[83] Spitzer, *Metaphor*, pp. 7 – 10.
[84] See fn. 64.
[85] Kramer, 'Music, Metaphor and Metaphysics', p. 15.

In his own study of recordings Leech-Wilkinson embraces metaphor by going on the defensive, 'Far from being a symptom of perceptual and intellectual failure, metaphor is fundamental to human perception, an index of the ways our brains connect up stimuli to generate knowledge and ideas.'[86] The idea that metaphors are fundamental to the way we think has been explicated by linguists George Lakoff and Mark Johnson in a book that has been highly influential to musical thinkers including both Spitzer and Cook.[87] The latter used the concept of metaphor to develop a model for analysing musical multimedia, and it is a simple step to see how theories of performance can be developed from this.[88] For example he compares different analytical interpretations of the recapitulation of the first movement of Beethoven's Symphony No. 9 (by Donald Tovey and Susan McClary) and shows that each interpretation highlights different musical attributes resulting in different meanings.[89] In the same way different performances will bring out different attributes of a composition and warrant it with different meanings; this is what performers mean when they talk of interpretation. And in discussions such as these, metaphor can be the key to illuminating the relationship between the performance choices and the musical elements.[90] How a performance sounds graceful as opposed to jaunty is the result of an interaction of performance choices, for example tempo and articulation, with the information contained within the score. Take an example from Leech-Wilkinson about the differences in performance of the opening quavers of Beethoven's fifth symphony, 'In Berlin in the 1900s (conducted by Arthur Nikisch) they were drawn out, admonitory, almost a warning of what was to come; in London in 1955 (Klemperer) they were

[86] Leech-Wilkinson, *Changing Sound of Music*, chapter 1.2.3, paragraph 29, http://www.charm.rhul.ac.uk/studies/chapters/chap1.html#par29.
[87] George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: Chicago University Press, 1980).
[88] For details of the model see 'Chapter 2: Multimedia as Metaphor', in Nicholas Cook, *Analysing Musical Multimedia* (Oxford: Oxford University Press, 1998), pp. 57 – 97.
[89] Nicholas Cook, 'Theorizing Musical Meaning' in *Music Theory Spectrum,* vol. 23, no. 2 (Fall, 2001), pp. 181-185.
[90] Cook calls this the 'blended space' in his multimedia model.

heavier, more portentous; by 1988 (Norrington) they had become urgent and brash'.[91] This provides a way of thinking and hearing these pitches that is far more alive than a technical description of three quaver Gs on its own, but also demands further explication as to what performance choices serve those metaphors. It is the interactive relationship between the technical description (relating to the score), the metaphors relating to character (the interpretation) and the performance choices (tempo, vibrato, rubato, articulation and so on) that provide illumination of musical meaning in this instance. Whilst in analysis the first two elements have enjoyed a renaissance in recent years, and Burnham's *Mozart's Grace* is a good example, the third element which puts music in its practical, and arguably living, context is only just beginning to be explored.

The language used, therefore, will be that of both the critic and the analyst; the former with its use of metaphor, and the latter with its eye to technical detail. It has been noted how currently it is primarily the language of the critic that is involved in discussing recordings. Johnson says 'The best accounts of recordings at this level remain those of certain critics, who have developed a sophisticated language for dealing with the listening experience.'[92] Leech-Wilkinson notes that it is 'reviewers' highly developed ability to find analogues in words for the features they hear.'[93] At the same time it is the ability to note technical details of pitch, key, harmony, texture, and so on, as well as detailed descriptions of the performance choices, that can allow a sophistication of insight into what was initially the record reviewer's purview.

[91] Leech-Wilkinson, *Changing Sound of Music,* chapter 2.1, paragraph 25.
[92] Peter Johnson, 'The Legacy of Recordings', in ed. John Rink, *Musical Performance: A Guide to Understanding* (Cambridge: Cambridge University Press, 2002), p. 208.
[93] Leech-Wilkinson, *Changing Sound of Music*, chapter 1.2.3, paragraph 29.

Methodology: metaphor and gesture

In this study the use of metaphor frames the analysis of the differing interpretations of the dynamics. The analyses select core metaphors to characterise the musical passages with unusual dynamics, and these are often taken from the analytical literature surrounding the quartet, and late Beethoven in general; sometimes there is quite a consensus about the character amongst analysts and sometimes divergence. The differences in interpretations of the recordings then suggest further variations of metaphors beyond the initial core because of their different performance choices. Often it becomes clear that there is a spectrum of interpretations rather than eight distinct versions; an emphasis on one important performance choice in one direction or the other (for instance a fast or slow tempo) tends to point toward one characterisation or another, with many groups falling somewhere in between. In this relationship between the metaphorical characterisation and the performance choices is an area that has been relatively little explored in academia. It is hoped that by going into some detail of the performance choices, that readers and listeners can begin to construct a more sophisticated way of relating character to performance than the journalistic approach which 'has set the parameters for the subject of discussing recordings in...an unfortunately loose way', according to Nicholas Kenyon's critique.[94]

As well as the use of metaphor, the study uses the concept of gesture to unpack the various components of a musical passage. This is a methodological answer to the issue of how one analyses complex performance situations in which dynamics along with harmonic progressions, melodic trajectories and rhythmic formations can each individually demand particular responses in performance. In the case of late Beethoven these components can demand conflicting responses rather than mutually reinforcing

[94] Nicholas Kenyon, 'Performance Today' in eds. Colin Lawson and Robin Stowell, *The Cambridge History of Musical Performance* (Cambridge: Cambridge University Press, 2012), p. 14.

ones. Hatten, who has studied musical gesture in Viennese classicism, defines the ability to interpret musical gestures at its most general as 'the ability to recognise the significance of energetic shaping through time.'[95] In a way this is an extension of the metaphor of music embodying movement in a physical space.[96] The dynamics form a crucial part of the 'energetic shaping', as it is the way in which they alter and influence other components of the musical gestures that are integral to their effect.

Hatten's formulation also allows for multi-parameter interaction: 'Gestures may be comprised of any of the elements of music…specific timbres, articulations, dynamics, tempi, pacing.'[97] Whilst emphasising the importance of multiple elements in combination, Hatten gives a personal anecdote about his admiration for Menachem Pressler's playing, 'The difference was in their *synthesis*, their *continuity* beyond the mere sequence of enchained pitches and rhythms, which fostered an *emergent expressivity*, that will be central to my study of musical gesture.'[98]

The importance of different gestural components of any given musical phrase becomes a significant way to frame how performers respond to multiple musical stimuli. Short musical passages that have unusual dynamic markings will be analysed for their multiple gestural components; primarily melodic, harmonic and rhythmic, and the interaction of these with the dynamic component. Rather than an analysis which simply says what a harmony is and how it functions or what the pitch structure of a melody does, this way of thinking considers how these elements might vary in shape or intensity, with implications for how the performer might approach them. Often it becomes clear that the dynamics undercut gestural implications of one or more other factors. Performers react to all these stimuli – for instance a rising melody often subtly

[95] Hatten, *Interpreting Musical Gestures*, p. 93.
[96] Spitzer, *Metaphor*, p. 8.
[97] Hatten, *Interpreting Musical Gestures,* p. 94.
[98] Hatten, *Interpreting Musical Gestures*, p.112.

changes the dynamic volume – and because Beethoven creates particularly complex gestures, it is through the choice of which aspects of this to emphasise or under-emphasise that the interpretation takes on nuanced meanings. The importance of combinations of musical elements and performance choices will also become apparent in the analyses.

Finally, the following analyses are also based on the notion that listeners have shared experiences and competencies. Obviously this study is directed at readers who will have a particular interest and competency in Western classical music in general and Beethoven's string quartets in particular. As Spitzer says, 'musical listening...is never an act of unmediated perception. Rather it is perception informed with knowledge, and hence a skill.'[99] And more specifically 'To be at all knowledgeable about Western music is to carry in the mind a lexicon of basic categories of musical structure, such as harmony, rhythm and melody.'[100] Similarly, the core metaphors used assume there can be a shared understanding as to what they mean, which is often called 'intersubjectivity', which 'arises when at least two individuals experience the same thing in similar ways.'[101] Having said that, it is acknowledged that the interpretation of performance choices made here are still contingent on this author's own experiences and knowledge,[102] and therefore are open both to influencing the way others listen to these recordings as well being open to critique about how they may be heard in other ways. For instance, influential writers such as Joseph Kerman undoubtedly affect how subsequent generations hear (as well as analyse) the late quartets, and there is emerging

[99] Spitzer, *Metaphor,* pp. 8 - 9.
[100] Spitzer, *Metaphor,* p. 10.
[101] Philip Tagg, *Music's Meanings: a modern musicology for non-musos* (New York and Huddersfield: The Mass Media Music scholar's Press, 2013), p. 196. Tagg devotes a whole chapter to the concept of 'Intersubjectivty'.
[102] Spitzer, going against Roger Scruton, believes that there are multiple listening choices available in Spitzer, *Metaphor,* p. 10.

evidence that it goes both ways with influential recordings similarly influencing analysis.[103]

Choice of Recordings

The selection of recordings was limited to eight so that detailed analysis of each was possible. See table 0.1 for complete list of recordings with dates, and discography for more recording details. Whilst the integrity of studies of general performance style often rests on having numerous recordings to provide the widest possible data, this study is focused on specific interpretational issues rather than general historical trends. The recordings were chosen for their widespread availability (and thus ability to facilitate the results of this research), the importance of the groups and for creating a relatively wide historical time span, but one that has broadly similar stylistic performance characteristics as discussed below.

The historical time span was chosen because it covers a particular historical era of performance practice that is broadly post-romantic, but pre-Historically Informed Performance (the latter came later to string quartet playing than many other musical genres). By post-Romantic and pre-HIP I mean at a time when, in particular, expressive tempo change, pervasive portamento and sparing use of vibrato were fading (or had faded), but before the interest in original instrument construction. Rubato and portamento are more present in the earliest three recordings chosen, but not to the extent of a group like the Rosé Quartet which also used vibrato more sparingly.[104][105] This is

[103] Peter Johnson has given a paper at a CHARM conference in 2007 suggesting that a 1935 recording of Beethoven Op .135 by the Busch Quartet may have strongly influenced critical commentary on the work. The abstract is available online: http://www.charm.rhul.ac.uk/about/symposia/p7_7_3.html#johnson. Accessed on 16/07/15.

[104] Three of their recordings of Beethoven quartets can be heard here at the National Sound Archive website: http://sounds.bl.uk/Classical-music/Beethoven. Accessed on 20/02/17.

[105] For an article that discusses Nineteenth Century performance practices see David Milsom and Neil Da Costa, 'Expressiveness in historical perspective: nineteenth-century ideals and practices', *in Expressiveness in music performance: Empirical approaches across styles and cultures* (Oxford: Oxford

also a historical time span that covers the explosion of recordings post-Second World War, but before the age of the internet streaming which has made the process of recording easier, but widespread popularisation of particular recordings more difficult, due to the accessibility of so many.

Because of this, the study does not focus on seeking appropriate interpretations or fidelity to the composer, but instead on the numerous subtle variations that occur in specific passages within a broadly stable range of performance practice traditions. Cook states, 'The key point does not have to do with playing this way or that way. It is that music affords an apparently unlimited variety of performance options…'.[106] As Peter Walls echoes, 'The expression 'definitive version' can only ever be rhetorical', as he outlines ways for using historical research to inform performance practice by outlining 'horizons of expectations'.[107] Similarly, for this period of recordings, the horizon of expectations limiting certain stylistic elements is broadly static, but this allows space for a greater focus on localised details and quite specific expressive characteristics.

One further benefit of this approach is that it avoids a confrontation with the research of Poli and Kim and discussions of false interpretation. As already noted, these writers have interrogated the interpretation of hairpins as dynamics and would no doubt be critical of the interpretations which appear to see them as such. However, the recordings chosen were made at a time when a more literalist performance style and a modernist faithfulness to the score (though a mistaken literalism in light of Poli and Kim's research) may have mitigated against a rubato interpretation. The question is

University Press, 2014), pp. 80-97. This article discusses performance practices nineteenth-century expressivity, many of which had disappeared by the time of the recordings in question here. They include 'the use of vibrato and portamento as essential constituents of a vocally inspired violin expressivity', (p. 86), which involved a more sparse approach to vibrato in particular, and 'agogic accentuation', (p.83) from the influence of oratory styles on musicians of the time.

[106] Nicholas Cook, *Beyond the Score: Music as Performance* (Oxford: Oxford University Press, 2014), p. 3.

[107] Peter Walls, *History, Imagination and the Performance of Music* (Woodbridge: Boydell, 2003), p. 26.

therefore the varieties of interpretation within this style, rather than notions of 'correctness', but interestingly, whether consciously or not, many of the interpretations overlap with theories of hairpins as intensity and rubato.

The Léner Quartet from Hungary was the first to record a complete Beethoven cycle in the late 1920s and along with an early recording of the Budapest Quartet, is amongst the first recordings of Op. 130. There are both available freely through the British Library's online Beethoven archive.[108] The importance of early recordings of these two groups and the Busch quartet, whose recordings became highly influential, is noted by Christina Bashford in her survey of the string quartet and society.[109] Tully Potter concurs that the Léner 'was the first quartet to record extensively...and by the mid-1930s had sold more than a million 78rpm discs.'[110] The Budapest morphed from a Hungarian-dominated to a Russian-dominated group that continued for many years, but the version studied here is an early one. Potter, a leading music critic with a focus on string quartets, outlines the importance of the Busch quartet which 'was recognised as the first in the German-speaking lands to rehearse exhaustively and democratically', and goes on with a large degree of journalistic hyperbole: 'It is almost as important that Busch's recordings of Beethoven's late quartets exist as that the music itself exists, as Busch alone plumbed their full depths.'[111]

The post-war quartets have also been chosen for their importance and influence as well as the widespread dissemination of their recordings. The Amadeus Quartet, consisting of three Austrian refugees and an English cellist, was the most important quartet in post-war London and 'garnered international acclaim, fuelled by its numerous

[108] These can be accessed at http://sounds.bl.uk/classical-music/beethoven.
[109] Christina Bashford, 'The string quartet and society', in ed. Robin Stowell, *The Cambridge Companion to the String Quartet* (Cambridge: Cambridge University Press, 2003), p. 12.
[110] Tully Potter, 'The concert explosion and the age of recording' in ed. Robin Stowell, *The Cambridge Companion to the String Quartet* (Cambridge: Cambridge University Press, 2003), p. 66.
[111] Potter, 'The concert explosion', p.70.

tours and recordings, while at home its members...became national figures.'[112] The Quartetto Italiano (known in this study as the Italiano Quartet), was the most famous group to emerge from Italy: 'Beauty of tone, matching of vibrato, precise ensemble and cultivated musicianship put the Quartetto Italiano among the greatest of string quartets.'[113]

The remaining three recordings all hark from the early 1980s, and are from similarly influential groups. The Lindsay Quartet, which had relatively stable personnel, and which was based in the north of England in Sheffield and at Manchester University, recorded the complete Beethoven cycle twice. It was the first that garnered an American Gramophone Award. They are another favourite of the influential and hyperbolic critic Potter who states, 'Its first recording of Beethoven's Op. 130 alone would entitle it to immortality.'[114] Arguably the most influential string quartet of the late twentieth century in continental Europe was the Alban Berg Quartet from Vienna, whose members have also taught many of the top groups playing today including the Artemis Quartet.[115] The final group, the Vermeer Quartet, represents the USA and has similarly had an important influence on younger generations.[116]

[112] Potter, 'The concert explosion', p. 83. The quartet also spawned at least three books about them: Daniel Snowman, *The Amadeus Quartet: the Men and the Music* (London: Robson books, 1981); Suzanne Rozsa-Lovett, *The Amadeus: Forty Years in Pictures and Words* (London, 1988); and M. Nissel, *Married to the Amadeus: Life with a String Quartet* (London: Giles de la Mere Publishers, 1998).
[113] Potter, 'The concert explosion', p. 81.
[114] Potter, 'The concert explosion', p. 84.
[115] There is a video of the former teaching the latter in *Franz Schubert: "Death and the Maiden"* directed by Bruno Monsaingeon, (EMI Records, 2001). They also coached the Belcea, Schumann and Amaryllis Quartet amongst others.
[116] The author of this study was a student of the first violinist Shmuel Ashkenasi from 2003-2006. The Vermeer also coached the Shanghai, Enso and Pacifica quartets.

Léner Quartet (c. 1927)

Budapest Quartet (c. 1927/29)

Busch Quartet (1941)

Amadeus Quartet (1962)

Italiano Quartet (1969)

Lindsay Quartet (1982)

Vermeer Quartet (1983)

Alban Berg Quartet (1984)

Table 0.1: **List of recordings with recording dates**

The choice to end the selection of recordings at this chronological juncture was both to limit the focus of the study, but also because of the explosion of recordings of Beethoven quartets in the 80s and 90s which renders many of the newer ensembles less influential than these groups, as earlier ones enjoyed a greater monopoly on the recording-buying audience.[117] The chosen groups also had lengthy careers that have worn well, which is impossible yet to ascertain for more recent recordings. There is also no inclusion of a period ensemble; this is due to the scarcity of recordings by such groups of late Beethoven, and there is certainly no recording with widespread influence.[118]

[117] For example, in two examples of Nancy November's sample of Beethoven quartet recordings, ten out of fifteen, and fourteen out of twenty-two are from the 80s and 90s. See Nancy November, 'Performance History and Beethoven's String Quartets: Setting the Record Crooked' in *Journal of Musicological Research,* Vol. 30, No. 1 (2011), pp. 9 - 10.

[118] The author has seen Quatuor Mosaiques perform Op. 130 live in 2013, but the group has only recorded the Op. 18 set of Beethoven quartets.

It should be noted here that recordings are just one sort of performance, and not 'live' performance. They form only a snapshot of a group's interpretation since most musicians are rarely completely fixed in their approach. Recordings represent a performance image that the groups are happy to present to the public, and have incurred multiple listenings, and so in this way are influential.[119] Because recordings are constructions by not only players, but recording engineers, producers and a whole host of technical equipment, they should not be mistaken for replicating a live performance. In the post-war recordings especially, it is likely that multiple takes were made. In this sense the interpretations may be even more representative of what the performers wanted, because they had the ability to manipulate the performance in a way that is impossible to do live.

Although it is true that the recording technology changed quite significantly over the period of these recordings it is not considered an issue for this study.[120] The number of frequencies that the contemporary technology could pick up, especially for the three earliest recordings, was more limited, however, the issues that are pertinent to this study can still be heard well enough. Dynamic change is considered as a relative difference and with regard to its relationship with the characterisation of the music, rather than in terms of a qualitative analysis, and this is possible to hear on both the early and more recent recordings. Also, the issues become much wider than dynamics, encompassing, in particular, vibrato, portamento, rubato and articulation which can be clearly heard on all recordings.

[119] Anecdotally, most performers will listen to their favourite quartet recordings many times when they are preparing a piece, and for some more than they will analyse the score.

[120] For information on the technological developments see 'Making Recordings', in Timothy Day, *A Century of Recorded Music: Listening to Musical History* (New Haven and London: Yale University Press, 2000), pp. 1 – 58.

Editions

Whilst it is likely that the performers in these recordings were playing from different editions, this study does not go into any detail about the differences between them. The consequences of different editions for performance practice is an area which has been explored, but since the focus here is on quite specific dynamic markings which appear to be consistent over different editions, it is not being considered as an issue. The dynamics under consideration here are consistent between the following editions: ed. Rainer Cadenbach, *Beethoven Streichquartett Opus 130, Gross Fugue, Opus 133, Urtext* (Munich: Henle Verlag, 2007); *Ludwig van Beethovens Werke, Serie 6: Quartette für 2 Violinen, Bratsche und Violoncell, Band 2, Nr.49* (Leipzig: Breitkopf und Härtel, 1869);[121] ed. Wilhelm Altmann, *Beethoven Op. 130: String Quartet in B Flat Major* (London: Eulenberg, 1911); First Edition, *Quatuor Pour 2 Violins, Alte & Violincelle, Louis Van Beethoven, Oeuvre 130* (Vienna: Artaria, 1827);[122] ed. Andreas Moser, *Beethoven: String Quartets, Op 127, 130, 131, 132, 133, 135* (Frankfurt am Main: Edition Peters, 1901).[123] It is known that the Lindsay Quartet used the Peters' edition parts,[124] whilst the Vermeer used Breitkopf and Härtel[125] and it is likely that the other quartets used something similar as the current Henle Verlag edition was completed only in 2007. The dynamic markings are consistent between editions; the only inconsistencies are occasionally the peak of hairpin swells in the third and fifth movements. This will be highlighted in the study where relevant, but as is seen here,

[121] Can be accessed at: http://imslp.nl/imglnks/usimg/4/4d/IMSLP04767-Beethoven_-_String_Quartet_No.13_Dover.pdf . Accessed on 22/11/15.
[122] Can be accessed at: http://burrito.whatbox.ca:15263/imglnks/usimg/2/2b/IMSLP51355-PMLP05119-Op.130.pdf. Accessed on 06/12/15.
[123] Some details can be found at: http://chase.leeds.ac.uk/article/andreas-moser/. This notes that Moser was aided by Joseph Joachim and Hugo Dechert. Accessed on 22/11/2015.
[124] Through personal e-mail correspondence with Robin Ireland of the Lindsay Quartet who thinks that the Peter's edition was the only one widely available at the time. 30/08/2015.
[125] Through personal e-mail correspondence with Shmuel Ashkenasi of the Vermeer Quartet. 28/08.2015.

performers seem to make their own judgements about where they feel hairpins should peak, which does not necessarily seem to correlate with the edition they were most likely to use. The main difference is in Henle, which none of the groups would have used because it was produced too recently.

Different editions can be fascinating for the different bowings, fingerings, phrasings, articulation and even dynamics added by performers and editors over the years, but at issue here is what those specific dynamics have caused these performers to do that is audible on record; not the relationship between their performances and the editions that they used, which is another question entirely. Quartet editions also tend to be more consistent than editions of solo works or concertos, for example, where well-known soloists tend to put their own individual stamp on the edition.[126]

Core metaphors and outline of the thesis

The metaphorical concepts that come up repeatedly in the analytical literature about Op. 130 are high levels of contrast, discontinuity and dissociation; particularly in the first movement. These will form the core metaphors for the study and the groups' interpretation of the dynamics will be considered against these metaphors in the conclusion. Kofi Agawu has made note of the first movement's 'extreme contrast that dominates the musical surface.'[127] Kerman echoes that it 'is one of those late Beethoven movements that work to maximise contrast – as is proclaimed at once by the intimate confrontation of its *adagio* and *allegro* sections.'[128] In his analysis Hatten talks

[126] For examples of differences in editions of the Violin Concerto see Robin Stowell, *Beethoven: Violin Concerto* (Cambridge: Cambridge University Press, 1998), pp. 42 – 47. Also Clive Brown, 'Ferdinand David's editions of Beethoven', in ed. Robin Stowell, *Performing Beethoven: Cambridge Studies in Performance Practice* (Cambridge: Cambridge University Press, 2005), pp. 117 - 149.
[127] Kofi Agawu, *Playing with Signs* (Princeton: Princeton University Press, 1991), p. 112. Agawu is referring specifically to Op. 132, but notes that it is also characteristic of the first movements of Op. 127 and Op. 130.
[128] Kerman, *Beethoven Quartets*, p. 304.

of how 'Initially, contrasts seem to be carried to an extreme.'[129] For Kerman, in the whole quartet, 'the play of contrast is pushed even further…to a point at which the sense of continuity becomes, if not a matter of doubt, at least a recurrent subject of ironic inquiry.'[130]

Famously Kerman used 'dissociation' and 'integration' to characterise Op. 130 and Op. 131 respectively[131] and Adorno described Beethoven as a 'dissociative force' in the late style.[132] Much analytical discussion about the structure of the first movement of Op. 130 centres on whether integration is possible in this movement. Whilst Kerman defers this to Op.131, others believe the latter is also possible for this fragmented movement. For Brodbeck and Platoff the 'great formal and dramatic achievement of the movement is the ultimate transcendence of its many discontinuities.'[133] Chua's interpretation deploys quite graphic metaphors: 'If the quartets are critiques, then [the first movement] is one of direct assault: the audience is simply thrown into confusion by a disarticulated syntax, by a language so violent and contradictory that to analyse the disunity is to be more obvious than 'post-structuralist'.'[134] Kerman clearly feels less attacked describing the 'assault' merely as 'whimsy',[135] but complains that 'to get behind the whimsy…is sometimes extremely difficult.'[136]

[129] Hatten, *Musical Meaning,* p. 134.
[130] Kerman, *Beethoven Quartets*, p. 304.
[131] Kerman, *Beethoven Quartets,* p. 303. The influence of Kerman's terms are widespread; note the use of the term in the title of David L. Brodbeck and John Platoff, 'Dissociation and Integration: The First Movement of Beethoven's Op. 130', in *19th-Century Music*, vol. 7 no. 2 (Autumn, 1983), pp. 149 - 162. As well as the writers on the quartets widely discussed here, the reference also appears in Nicholas Marston, '"The sense of an ending": goal-directedness in Beethoven's music' in ed. Glenn Stanley, *The Cambridge Companion to Beethoven* (Cambridge: Cambridge University Press, 2000), p. 95.
[132] Adorno, *Beethoven*, p. 126.
[133] Brodbeck and Platoff, 'Dissociation and Integration', p. 150.
[134] Chua, *The "Galitzin" Quartets,* p. 201. Chua's use of 'disunity' offers an alternative to dissociation with its implication of a lack of coherence.
[135] Kerman, *The Beethoven Quartets*, p. 304.
[136] Kerman, *The Beethoven Quartets*, p. 304.

The discontinuity, dissociation and contrasts that these writers talk about are a response to the 'abrupt juxtapositions or disruptions'[137] found in Op. 130, most particularly in the opening movement, but also with its relationship to the rest of the piece, its unusual six-movement form and debate over competing finales. Whilst generally used to characterise issues of large-scale structure and use of material, they provide an appropriate description of the much more localised dynamics, which are under discussion here.

These core metaphors obviously have the potential to mean different things to different people in different contexts, and so a loose definition is offered here to provide some limiting factors and a framework in which to discuss them throughout the study. Contrast deals with the nature of elements rather than how they are connected; with respect to dynamics this becomes clear with the abrupt changes in dynamic, particularly between *forte* and *piano*. Discontinuity deals with how successive parts connect; the disruptions created by the dynamics often throw into question the continuity of components of the musical discourse, whether this is the melodic line, harmonic direction or rhythmic impetus for example. Dissociation deals with the overall coherence of parts; the dynamics often throw the coherence of musical phrases into question, and whereas discontinuity may refer to a particular line or element, dissociation implies overall coherence. These three metaphors are not mutually exclusive; they often throw a slightly different light onto similar phenomena, especially with respect to the dynamics. It is the potential disruption, a fourth core metaphor, offered by the dynamics that causes the effect of the other three. Ultimately the performances on record offer a spectrum of variations as to how much and in what ways these disruptions are emphasised by the groups. At one end of the spectrum is the more

[137] Hatten, *Interpreting Musical Gestures*, p. 267. Hatten is referring to late Beethoven in general, but it is an appropriate description of many of the dynamics in Op. 130.

radical approach; highly contrasting, discontinuous and dissociating. At the other is a more conservative approach; de-emphasising the contrasts, highlighting the continuity and coherence of phrases. The study looks in detail at how these differing characterisations are achieved.

Chapter 1 focuses on two dynamic quirks that recur throughout the first movement; the hairpin c*rescendo* to *piano* and rapidly alternating *fortes* and *pianos*. They provide unusual dynamic contrasts on a localised level and the awkward nature of them suggests potential contrasts and the discontinuity of lines. The dynamics also often throw the coherence of musical phrases into question, and groups who emphasise this lack of coherence are implying dissociation. Chapter 2 focuses on another localised dynamic marking: the hairpin swell. It discusses wider possible meanings of hairpins, and these dynamics appear as potential disruptions to both lyrical (in the third movement) and dance-like phrases (in the second and fourth), as well adding lyrical inflections to the vocality of the Cavatina. In contrast to the disruptions of the first movement, the potential disruptions of the hairpins are downplayed, but many subtle approaches suggesting different characterisations emerge.

Chapter 3 moves from localised dynamic markings to longer passages of music which are characterised by unusual dynamic stasis. The development of the first movement and opening sections of the Grosse Fuge provide extreme examples of both dynamic suppression and maintaining loud dynamics; some of the groups respond by taking the music to an alternate world. Descriptive expressive terms in the Cavatina are also explored for expressive nuances beyond simple dynamic volume.

Chapter 1: *Crescendo* to *Piano* and *Forte* versus *Piano*: Recurring Dynamic Gestures in the First Movement of Op. 130

This chapter considers two dynamic gestures that recur throughout the first movement; the hairpin c*rescendo* to *piano* and rapid alternation of *forte* and *piano*. These are encountered from the outset of the piece and provide an immediate interpretational problem for the performers. The disruptions and ambiguities of these dynamics will be considered not only for their relationship to the core metaphors outlined in introduction, but also for the specific localised metaphors and the range of characterisations produced by the recordings studied here. Before the performance choices are outlined, the melodic, harmonic and rhythmic components of the overall musical gesture where the dynamics occur are discussed. The unpacking of these gestures often points to conflicting components which highlight the awkward and unusual nature of these dynamics.

The chapter considers instances of the dynamic gestures in the following order: the hairpin *crescendo* to *piano* in the opening four bars and then subsequent examples in the second subject. This is in order to highlight the same dynamic gesture in a new context resulting in different characterisations; the first instance is disruptive and unusual, the second more nuanced and lyrical. This is followed by the alternations between *forte* and *piano* in the opening *Allegro* section and finally a similar alternation in the coda. Again this sees a similar dynamic gesture move from its first disruptive instance to a new and striking context, where the added alternation of *Adagio* and *Allegro* provides a moment of particular crisis or resolution in the form of the movement. By highlighting the interpretation of these four different areas of the movement with detailed analysis, the chapter gives an idea of the range of approaches

available for these dynamic gestures, and how these can produce divergent metaphorical characterisations.

The intended meaning of Beethoven's dynamics is not as much the focus of this study as to what was actually done in practice during a particular period of performance history. However, a brief consideration of interpretative possibilities is outlined in each chapter. This chapter focuses on the apparent quick alternation between different dynamics, primarily *forte* and *piano* and open hairpins to *piano*. Whilst Beethoven's contemporaries such as Cherubini and Clementi also used an increased number of dynamics in comparison with their predecessors,[1] it was much rarer to have the intense chop and change that occurs in this movement in particular. It indicates that Beethoven had a much more nuanced and complex style than these contemporaries and in this movement in particular, wanted to emphasise the disjunctions between various elements of it, in particular the tempos, but also clearly the dynamics.

There are clear possibilities for the rapid change of character and dynamic within short phrases, and Beethoven seemed to want to create disjointed phrase structures. It is possible that he wanted constant surprises and the feeling of being unsettled. Certainly the regular resort to pianos, either when a phrase is either growing, or after a *forte*, frequently undercuts what might be a climax through other factors such as melody and harmony.

[1] Works by Cherubini and Clementi use quite frequent dynamics including the use of hairpins. See Luigi Cherubini, *String Quartet No. 1* (Leipzig: Ernst Eulenberg, 1886, composed 1814) and Muzio Clementi, *3 Piano Sonatas, Op. 9* (Braunschweig: Henry Litolff's Verlag, 1783) available online: https://imslp.org/wiki/String_Quartet_No.1_(Cherubini,_Luigi) and http://imslp.org/wiki/3_Piano_Sonatas,_Op.9_(Clementi,_Muzio). Accessed on 18/11/2016.

Crescendo to piano – p < p

The *crescendo* to *piano* dynamic gesture had already appeared in Beethoven's earlier string quartets and was often used as a way of undercutting the expected peak of a phrase as a special effect. There are numerous examples, but rarely did the gesture appear more than twice in a movement. It appears in Op. 18/1/ii in bars 14 and 54 undercutting moments of great drama, and in wittier guise in the finale of the same quartet into bars 43 and 51.[2] Other examples occur in Op. 18: as a surprise in a recapitulation full of surprises in bar 155 of Op. 18/2/i; as an unexpected soft beginning to a new phrase in bars 98 and 229 in Op. 18/3/i, bar 17 in the second movement and bar 56 in the finale. Examples in a more serious context include several in Op. 59/2/ii at bars 27, 33 and 37, where the music builds harmonic tension only to be regularly undercut dynamically at the moment of climax, and taken to softer and more lyrical music. Op. 59/3/ii provides more examples: at bar 17 where it delays the climax of the phrase for a further two bars, at bars 36 and 75 where the music builds only to be surprised by the *piano* and taken elsewhere, and most poignantly at bar 50 where the *piano* appears at the very top of the first violin register. Amongst the late quartets, Op. 127/i has a long passage that seems destined to reach *forte* but is undercut three times by the dynamic gesture in bars 41, 47 and 56. Up to this point the dynamic marking had always taken the form of a written *crescendo*, but in the late quartets this is sometimes nuanced with a small closing hairpin before the *piano* suggesting a preparation of the latter dynamic as in bar 57 in Op. 127/ii.

Although not an original effect for Beethoven by this point, the gesture takes on a new importance in the first movement of Op 130. It appears already in the opening bars of the music, returns over twenty times in the movement and the fact that it is

[2] Bar numbers given indicate the moment of *subito piano*; the *crescendo* always precedes this.

wedded to the thematic material marks a new level of intensity. For most appearances here, Beethoven used a hairpin symbol rather than the word *crescendo* and this usage continues in Op. 131/i for example in bars 20 - 24. This may have simply been an increase in the use of a hairpin as shorthand for *crescendo/diminuendo* and many commentators maintain its straightforward dynamic implications.[3] However, there is a question of why he would use both versions in this movement and scholars have recently begun to interrogate the meaning of hairpins.

Poli and Kim's research shows that it may indicate rubato, agogic inflection or some form of intensity rather than dynamic volume. Poli has become convinced that the open hairpin actually indicates a taking of time.[4] A more open interpretation is the 'becoming more/becoming less' description of hairpins by Kim, which is necessarily context-dependent.[5] He notes that the most common type in the music of Brahms is the 'agogic inflection',[6] of which there are various types including the extending of time at the top of the hairpin. Kim also notes that a hairpin may also have implications for the use of vibrato and portamento.[7]

Bearing this recent research in mind, it opens up another set of possibilities for interpretation beyond simple dynamic change. The open hairpins may indicate a broadening gesture of some sort through bars 1 and 3. This could be achieved through rubato, most obviously a taking of time, and suggest a lyrical expansion of the phrase rather than just a *crescendo*. Aspects of these wider interpretations can sometimes be heard in these recordings.

---

[3] Sandra Rosenblum, *Performance Practices in Classical Piano Music* (Bloomington: Indiana University Press, 1988), pp. 59 – 60.
[4] Roberto Poli, *The Secret Life of Musical Notation* (Milwaukee: Amadeus Press, 2010), p. 9.
[5] David Hyun-Su Kim, 'The Brahmsian Hairpin', in *19th-Century Music*, vol. 36, vo. 1 (Summer 2012), p. 48.
[6] Kim, 'Brahmsian Hairpin', p. 48.
[7] Kim, 'Brahmsian Hairpin', p. 48.

Ex 1.1 shows the first instance of the dynamic gesture which reoccurs every time the *Adagio* theme returns and is integral to the identity of the theme. In subsequent examples Beethoven could have altered the dynamics to transform, develop or reinterpret the theme, but instead chose to insist on this formulation each time.

Ex. 1.1: Op. 130/i, bars 1 - 4

Unpacking the various harmonic, melodic and rhythmic components of the opening four-bar gesture helps to see how the shape, nuance and intensity of each component varies in slightly different ways, and that the dynamic component of the gesture complicates the rest of it.

There are multiple and conflicting harmonic components:

a) the broad tonic – dominant - tonic shape of the opening four bars, with the dominant, and therefore the dissonance, occurring in bar 2 and resolving to the tonic in bar 4;

b) the cadential appoggiaturas of bars 2 and 4, one a weak imperfect cadence, the second a stronger, root-position perfect cadence;

c) the harmonisation of the melodic line; absent for the first four notes which are played in unison octaves, but harmonised with a particular richness in bar

3 with each note a new harmony including movement through an expressive diminished 7^{th} chord.

The melodic component:

a) is quite contained due to its chromatic slithering descent, but is broader in bars 1 - 2 than 3 – 4, due to the rising interval of the sixth,

b) is then raised an octave in bars 3 – 4 to a brighter and clearer register and ends rising rather than falling as it did in bar 2.

Rhythmically:

a) it is the same for all instruments which move together (except for the cello in bar 2);

b) the impetus grows with its quickening of note values in the second halves of bars 1 and 3 leading into the rhythmic relaxation of bars 2 and 4.

Although the shaping of the intensity of the melody and harmony are more ambiguous than are those of the rhythm, there is a gathering of momentum to the downbeats of bars 2 and 4, characterised most strongly by the appoggiaturas and rhythmic climaxes. The second phrase unit in bars 3 - 4 is richer harmonically, and peaks melodically. Adding the dynamic component serves both to complement and undercut these components. The hairpin *crescendo* adds to the growth in intensity toward the downbeats of bars 2 and 4, whilst the *subito piano* throws the emphasis of the appoggiatura, the metrical downbeat, and the height of the hairpin into a strikingly different light. It is this element that provides both a surprising contrast and an abrupt break in the continuity of the line.

The harmonic elements have led one commentator, Steinberg, to note the ‘strange’ nature of this opening; that a slow introduction would begin unharmonised, ‘but [that] the switch in mid-phrase from austere octaves to rich chords is surprising and

also somehow very touching.'[8] It is also the dynamic surprise on the appoggiaturas that adds to the potentially touching nature of bars 2 and 4 in particular. In an analysis of the same dynamic marking in another late Beethoven work, Hatten suggests, 'these dynamic jolts occasionally suggest another level of discourse.'[9] Similarly, Adorno has called this marking a 'dynamic interrupted cadence', an analogy that suggests the music taking an unexpected side step.[10] This opens up the possibility that the dynamic change can create two separate discourses within the first phrase. Adorno has alluded to the multiple discourses by suggesting that Beethoven is meddling in his own music, 'It is as if the composer's hand were intervening with a certain violence in his composition.' With respect to Op. 130, '[The c*rescendo*] is not so much derived from the line of the music as inserted into it, as meanings are inserted into allegories.' [11]

Lyrical coherence to timbral contrast; varying the gesture through volume, rubato and vibrato in bars 1 – 4

The recordings produce a range of interpretations that form a spectrum of different variations from lyrical coherence to timbral contrast primarily through manipulations in volume, rubato and vibrato. The following analysis leads through the

[8] Michael Steinberg, 'String Quartet in B-Flat Major, Op. 130', in eds. Robert Winter and Robert Martin, *The Beethoven Quartet Companion* (Berkeley and Los Angeles: University of California Press, 1994), p. 229.
[9] Robert Hatten, *Interpreting Musical Gestures, Topics and Tropes: Mozart, Beethoven, Schubert* (Bloomington: Indiana University Press, 2004), p. 216. This is an analysis of the Sonata for Piano and Cello in C, Op. 102, no. 1 and the dynamic marking in bar 38 also places the *subito piano* on an appoggiatura.
[10] Theodor W. Adorno, ed. Rolf Tiedemann, *Beethoven: Philosophie der Musik. Fragmente und Texte* (Frankfurt am Main: Suhrkamp, 1993), pp. 87 – 88. The translation here is by Thomas Schmidt-Beste from 'dynamischer Trugshluss' cited in Thomas Schmidt-Beste, 'Preventive and Cautionary Dynamics in the Symphonies of Mendelssohn and his Time', in *The Journal of Musicology,* vol. 31, no. 1 (Winter, 2014), p. 54, fn 16.
[11] Theodor W. Adorno, ed. Rolf Tiedemann, trans. Edmund Jephcott, *Beethoven: The Philosophy of Music* (Cambridge: Polity Press, 1998), pp. 188 - 189.

groups' performance choices, outlining how these decisions point to one characterisation or another.

Some of the groups create striking timbral contrast through a distinctive drop in volume on the *subito pianos*. Most emblematic of this strategy is the Italiano Quartet which achieves the biggest drop in dynamic by all players at this moment, creating rupture in the melodic line and softening the appoggiaturas in bars 2 and 4 to the most radical levels. The Vermeer Quartet and the Lindsay Quartet also drop in dynamic at this moment but not to the same degree and have more nuanced approaches. The first violinist of the Lindsay maintains the volume of the melodic line whilst the lower three instruments drop in dynamic; this approach has it both ways, maintaining the continuity of the melodic line, whilst creating timbral contrast in the lower instruments. The Vermeer features the second violin part in bar 2, such that the drop in volume is also accompanied by a focus on the richness of the harmony, and therefore a special timbre, rather than the continuity of the melodic line.

The Alban Berg Quartet does not hush its *subito piano* in the same manner providing less timbral contrast and the Amadeus Quartet does not appear to change volume at all. What both groups do, however, is create a small gap between the top of the hairpin and the *piano,* creating a break in the continuity of the melodic line and the placing of the appoggiaturas. The Amadeus even creates one overarching dynamic shape to the four bars, but this shape is ruptured by the breaks.

Two more groups, the Léner Quartet and the Busch Quartet, make a similar dynamic shaping over the four bars with a limited drop in volume on the *pianos,* though the Busch restarts bar 3 at a lower dynamic level whereas the Léner starts this bar at the same volume as bar 2. For these groups the melodic line and harmonic intensifications are more important and so there is more lyrical coherence to the phrases, suggesting a

downplaying of the dynamic component of the gestures. They also create clear legato lines from bars 1 – 2 and bars 3 – 4.

The shaping of the gesture is also affected by the use of rubato for some of the groups. The Léner creates an agogic lingering over the final quaver of bar 3 at the height of the second hairpin such that this becomes the pinnacle of the four-bar phrase. The Budapest Quartet stretches out the three quavers of bars 1 and 3 which combined with a *crescendo* creates a broadening gesture, whereas the Busch takes the opposite tack by pushing forward through the quavers. Both build rhythmic intensity through the hairpins, correlating the rhythmic and dynamic components of the gesture and adding to the lyrical coherence. The Lindsay stretches out the final quavers of both bars 1 and 3 more than any other group, and because of the added drop in volume for bars 2 and 4, this ends up emphasising the timbral contrast of the *subito piano* because it is teasingly postponed.

The third key performance choice that has a role in shaping the gesture is vibrato which is not only important for the lyricism of the gesture, but also to create the timbral contrast on the *subito pianos*. For both the Vermeer and the Lindsay, subtle changes in vibrato signal a development of intensity through the hairpin and then a special timbral contrast for the *subito piano*. They both begin without vibrato on the Bb and increase speed and width of it through the hairpins followed by a slower vibrato on the *piano* chords. This works in conjunction with volume change to create the timbral contrast. A similar contrast is created by the Amadeus, but in the opposite direction; in bars 2 and 4 the speed of the vibrato increases, creating a shimmer effect rather than the increased warmth of the other two groups. All create timbral contrast but with different effects.

The Italiano keeps the vibrato at bay, so that lyricism is not the central point of the gesture and the dynamic ruptures are most clear. A more limited vibrato means that

the warmth of the general sound takes precedence over the oscilliations of any one player's vibrato and this makes the distinctive drop in volume and limited vibrato key for the timbral contrast of the *subito piano*. Much more lyrical are the Busch and Budapest which both feature an intense narrow and fast vibrato of their first violinists. The Busch's first violinist starts with such a vibrato, that widens suddenly for the *subito piano* creating the timbral contrast, but is then used in one coherent lyrical shape for bars 3 – 4 with a similar vibrato speed linking the bars. The Budapest's first violinist does create some timbral contrast in bars 2 and 4 with wider vibrato in the former and narrower in the latter. This is done with subtlety to the extent that there is a combination of lyrical coherence with a hint of timbral contrast. Finally, the Léner's first violinist produces the slowest and widest vibrato of all the groups, and uses it to maintain a four-bar gesture of lyrical coherence with the vibrato contained in bars 1 and 4 but allowed to flourish in between. This approach downplays the ruptures of the *subito pianos.*

A detailed micro-analysis of this short four-bar passage shows how, in performance, it can become quite different gestures. The spectrum of interpretations can be characterised as being between a gesture of lyrical coherence, which emphasises the continuity of the melodic line and the harmonic progressions, and a gesture of timbral contrast which highlights the moment of *subito piano* and the alternative discourse to which the writers above referred. The former is demonstrated most clearly by the Léner, prioritising the lyricism of the melodic line and overall harmonic direction over the dynamics. This lyricism is highlighted through a consistent vibrato that follows this arch shape and rubato that highlights the climax of the phrase. In other contexts and to different degrees, the vibrato change at the key moment of separation on the *subito piano* by the Lindsay, Vermeer, Amadeus, Busch and Budapest creates a special colour. Rubato in conjunction with a drop in dynamic, such as with the Lindsay

and Alban Berg, also contributes to the timbral contrast metaphor by highlighting the difference between the hairpin bars and the *piano* bars. The Italiano is the one group which highlights the dynamic gesture most above the melodic line and harmonic direction and creates the most striking dynamic contrast. The Amadeus err more towards lyrical coherence in its overall dynamic, but the slight gap and placement of the *subito piano* add an element of separation. Whilst the Léner and Italiano are at the most extreme ends of the spectrum, most groups have elements of both metaphors. But it is the timbral contrast that contributes to the core metaphors of contrast, discontinuity and dissociation that frame this study; the contrast created in dynamic and sound quality, the discontinuity of the melodic line and the dissociation that throws into doubt the coherence of the phrase.

Lyrical nuances through portamento, volume, agogic inflection and vibrato: the second subject group in bars 53-80

The second subject area shares the same dynamic gesture as the opening and the new context has echoes of this as well as differences. There are thematic links with the opening and a *subito piano* in the middle of a melodic line, but the overall context is more obviously lyrical, and the lyricism apparent in the opening gesture is built upon here more than the timbral contrast. The key performance choice of portamento is added to manipulation of volume and agogic inflection as a way to effect the dynamic nuance.

Ex. 1.2: Op. 130/i, bars 53 – 65

The passage at the outset of the second subject (see Ex. 1.2) has elicited different responses: 'this opens with a short phrase of great beauty'[12] to 'a caricature of a lyric phrase, complete with trite-sounding harmonies.'[13] Whichever it is, the strangeness of the key relationship to the rest of the movement has been noted: Gb major, the flattened submediant,[14] as has Beethoven's abrupt side-stepping to this key area without preparation. 'The secondary theme begins tentatively, as though Beethoven himself can scarcely believe the key.'[15] Gb major is a particularly rich sounding key for stringed instruments, far away from the open strings, and it seems to signal certain moods for Beethoven in this piece.[16] It shares similar characteristics with the passage from bar 159 in the Grosse Fuge, also in Gb major: they both provide relief after passages of intense activity and vigour; both provide striking contrast to those sections with a more

[12] Philip Radcliffe, *Beethoven's String Quartets* (Cambridge: Cambridge University Press, 1978), pp. 124 – 125.
[13] Joseph Kerman, *The Beethoven Quartets* (New York: Norton, 1967), p. 309.
[14] Chua discusses the complexities of the tonal relationships in this movement in Daniel Chua, *The "Galitzin" Quartets of Beethoven: Opp. 127, 132, 130* (Princeton: Princeton University Press, 1995), pp. 206 - 210.
[15] David L. Brodbeck and John Platoff, 'Dissociation and Integration: The First Movement of Beethoven's Op. 130', in *19th-Century Music*, vol. 7, no. 2 (Autumn, 1983), p.155.
[16] The remote and unusual nature of Gb major is discussed in Hugh MacDonald, '[G-Flat Major Key Signature]', in *19th-Century Music*, vol. 11, no. 3 (Spring, 1998), pp. 221 – 237.

transparent texture; both focus on soft dynamics and create a more lyrical and calming character. (The equivalent section in the Grosse Fuge will be discussed in chapter 3).

The thematic connections of this melodic line to the *Adagio* theme have been noted by Chua and Hatten with the rising interval of a minor 6th and melodic step-wise movement common to both.[17] The dynamic marking occurs in both bars 55 and 56, though without a *subito piano* in bar 57, and the second hairpin only is in the first violin part. This is then repeated in a similar phrase in bars 59 – 61, but with all parts given the hairpins and a further *subito piano* at bar 61 which leads the music into another harmonic direction. So here the concentration of the hairpins is greater (one per bar), and the melodic, harmonic and rhythmic components rather different. Whereas at the opening the *subito piano* cuts the phrase in half, the dynamic here seems to add subtle nuances to melodic and harmonic components of the gesture.

The melodic component:

a) is much more obviously lyrical than the opening with its expansive opening interval of a 6th and tonal rather than chromatic step-wise movement. The first hairpin intensifies the large interval in bar 55, and descending melodic line in bar 56.

The harmonic component:

a) is more static due to the tonic pedal in the bass in bars 56 - 57;
b) contains a diminished 7th over the tonic pedal in the second half of bars 55 and 59 at the height of the hairpin. This chord sounds primarily colouristic rather than functional because it comes from nowhere and has the *subito piano* on its resolution to the dominant in bar 56;

[17] Robert Hatten, *Musical Meaning in Beethoven: Markedness, Correlation, and Interpretation* (Bloomington: Indiana University Press, 1994), p. 134 and Chua, *The "Galitzin" Quartets,* p. 216.

c) involves harmonic direction and surprise into bar 61 in contrast to bars 56 – 57 with a secondary dominant on the final crotchet of bar 56 leading to a surprise dominant 7th chord in bar 57. The latter is highlighted by the *subito piano* creating another chance for timbral contrast.

The rhythmic component:

a) is dominated by longer note values than before, minims and crotchets, though there is some rhythmic impetus into the *subito piano* of bar 61;
b) contains simply moving minims and its homophonic nature in bars 61 – 62 correlates the most with a hymnlike texture.

Although they are accompanied by the same dynamic marking as in the comparable earlier passage, these elements appear in a strikingly different context. The *subito piano* undercuts less the coherence of the phrase, as had happened at the opening. Because the harmony is more static, and the melodic line more lyrical, the markings suggest possibilities for lyrical nuance rather than a chance to undercut the phrase structures.

The context of this section already suggests a lyrical approach in contrast to the frenetic *Allegro* material that precedes it. There is also contrast with what Adorno described as the 'extreme seriousness'[18] of the opening, and more charm and sentimentality seem possible here. Hatten links the two themes with their 'legato, hymnlike texture'[19] but the evidence from recordings here points away from a sacred interpretation. In particular the hairpins correlating with the large interval encourage the use of portamento, which reflects a lyrical rather than hymnlike approach. The recordings also bear out subtler nuances and less disruption to the overall character of the passage, generally without the timbral contrast creating the discontinuity at the

[18] Adorno, *Beethoven*, p. 188.
[19] Hatten, *Musical Meaning,* p. 134.

opening of the movement (except for some in bar 61). Along with portamento and dynamic change some of the groups use an agogic inflection that correlates with the hairpin, and the groups have a varied approach to the final *subito piano* in bar 61, with some creating a hymnlike approach here.

Portamentos are more commonplace in the three earliest recordings anyway, but it is interesting to see that even the more recent recordings use them here.[20] The Budapest, Busch and Léner all produce heavy portamentos in bars 55 and 59 which highlights the lyricism of the melodic line and creates a sentimental gesture. The lighter slides of the Vermeer and the Lindsay create a more subtle and therefore more charming effect, again emphasising the lyricism of the melody, but also highlighting the colouristic harmony at the top of the hairpin. Another approach that creates a lyrical broadening gesture by expanding time is produced by the Italiano. The second minim beat comes later than expected in both bars 55 and 59 and creates an agogic inflection.[21] This has the effect of taking bars 55 and 59 out of the continuous flow of music with a brief gesture of broadening or expansion. The Alban Berg produces a similar effect but with a distinctive *crescendo* as well which highlights the colouristic harmony. In the hairpin in bar 60 both the Alban Berg and Lindsay use agogic inflection to extend the final crotchet of the bar into the *subito piano*, highlighting the harmonic surprise and using a technique they both deployed in the opening hairpins.

The *subito piano* in bar 61 has the potential for a timbral contrast like the opening, and because of its simply moving minims, homophonic texture and soft dynamics has the greatest potential for a hymnlike interpretation. Only the Vermeer and

[20] For a discussion of portamento and its frequency in solo violin playing see Daniel Leech-Wilkinson, *The Changing Sound of Music: Approaches to Studying Recorded Musical Performances* (London: CHARM, 2009), chapter 5, paragraphs 35 – 46, http://www.charm.rhul.ac.uk/studies/chapters/chap5.html.
[21] Kim might call this a 'lingering' agogic inflection. See Kim, 'Brahmsian Hairpins', p. 48.

Italiano really achieve this, with the former maintaining a hushed and whispered sound with limited vibrato, whilst the Italiano plays softly but with a wider vibrato signalling a suppressed expressivity. The Lindsay, Amadeus, Alban Berg and Busch all lack the hushed moment on the *subito piano* and grow healthily in the subsequent bars, contrary to the dynamic markings. The Léner already plays softly from the height of the hairpin in bar 59 to prepare the *subito piano* in bar 60 so that the dynamic follows the melodic shape rather than a literal version of the dynamic markings.

Rather than a spectrum between metaphors here, there are a number of variations that highlight lyrical nuances through portamento, creating lyrical charm or sentimentality. There are also broadening gestures through agogic inflection and elements of timbral contrast and a hymnlike texture at the end of the passage. Rather less problematic than the dynamic gestures at the opening, they still provoke different nuances here, but within a broadly lyrical framework. The final examples of *crescendo* to *piano* here look at them in the context of the second half of the second subject where there is a more continuous flow of music.

The dynamic gesture re-appears for one final passage of the exposition (see Ex. 1.3). After the fragmentary nature of the opening of the second subject group, from bar 71 the music finally gains some continuous momentum with the transformed semi-quaver theme from the *Allegro* section infused into a lyrical tapestry of ideas. There are *crescendos* to *piano* in this section but they are notated as such and *not* with hairpins. This seems to mark a crucial difference, and along with the context of the musical texture being more continuous, reduces the multiplicity of approaches. For instance, rubato and agogic inflection are less of a clear option as this would disrupt the musical flow and there is little time or space to produce noticeable inflections with vibrato. As a consequence most groups treat the *crescendo* primarily for its dynamic implications. It seems that for all groups this passage is one of continuity, without disruption or unusual

timbral contrasts. Perhaps unsurprisingly in a movement of such constant change and disruption of momentum, this passage is allowed to flow freely with just hints and nods to the dynamics that have gone before.

Ex. 1.3: Op. 130/i, bars 70 - 79

Dynamic dissociation with rapid alternations between *forte* and *piano*: *Allegro* in bars 14 – 20

A dynamic quirk of the movement related to the *crescendo* to *piano* is the constant alternation between *forte* and *piano* in the *Allegro* sections, first signalled in bars 14 - 20. Hatten notes how these dynamic gestures connect the two themes: 'In spite of their apparently extreme oppositional characteristics, the Adagio and Allegro

themes in Op, 130 share subtle features that will support further integration. These features include a *subito piano* undercutting of the goals of small gestures…'.[22]

Sudden alternations of dynamics had been used before by Beethoven, but as with the *crescendo* to *piano*, take on greater intensity and importance to the thematic discourse here. For example bars 9 - 16 in Op 18/2/i alternate between *forte* and *piano*, but operate as distinct thematic units with rests in between. More closely entwined and with a greater surprise element are bars 66 – 70 in Op 18/1/ii, but here the two dynamics are still characterised differently by the inner parts and it occurs as a special effect at the climax of the movement. In Op. 74/i, bars 43 – 46 alternate between *forte* and *piano* in consecutive bars, but are still characterised by two distinct ideas; short and loud chords versus long and soft chords. In Op. 130/i, the alternation of dynamics moves beyond momentary special effect and takes on greater significance reappearing throughout the movement in subsequent examples as an integral part of the theme. There are also no obvious character differences that correlate with the sudden dynamic change, and it is another example where dynamics are seemingly imposed on the music by Beethoven from the outside against other musical gestural components.

The dynamics are unusual enough to warrant attention from the analysts. Kerman notes how 'we certainly do *not* expect the weird disturbance that actually flashes across the screen at this point.'[23] Then 'the theme astonishes by the perverse dynamics on alternate bars (*forte*, *piano*, *forte*, *piano*)'.[24] Steinberg notes the 'curious contradiction' of how the dynamics correlate with the second violinist's fanfare[25] theme: 'the upbeat is loud but the downbeat to which it leads is soft.'[26]

[22] Hatten, *Musical Meaning*, p. 136.
[23] Kerman, *Beethoven Quartets,* p. 307.
[24] Kerman, *Beethoven Quartets,* p. 308.
[25] This theme is described by both Hatten and Ratner, as well as Steinberg, as being a 'fanfare' topic. See Hatten, *Musical Meaning*, p. 134 and Leonard Ratner, *Classic Music: Expression, Form and Style* (New York: Schirmer, 1980), p. 236.
[26] Steinberg, 'String Quartet in B-Flat Major', p. 229.

The core metaphor from those highlighted at the end of the introduction that applies here is dissociation. Whilst other elements of the passage are apparently consistent, the dynamics indicate a splitting up or uncoupling of the gesture and on the surface the dynamics seem to dissociate the thematic material from itself (see Ex. 1.4).

The melodic and thematic components are two-fold:

a) the fanfare figure in the second violin which would be a coherent melodic gesture without the dynamic; two rising gestures of a perfect 4^{th};
b) the other main thematic unit is the running semi-quaver theme initially in the first violin; a topically 'brilliant' figuration.[27] Such a flowing run of semiquavers also seems inappropriate for sudden dynamic change mid-flow. However, there is some correlation with the *pianos* occurring at the bottom of the wave of semiquavers, with the *fortes* occurring at the beginning of the figures at a higher register.

The harmonic components are more ambiguous:

a) the fanfare leads to a dominant 7^{th} chord in root position in bar 16 and then a first-inversion tonic chord in bar 18. The relative weakness of these harmonic progressions serves to undercut the fanfare, which would be expected to emphasise a heavily rooted chord rather than lead to two chords in need of resolution (the former) and more stability (the latter).

[27] The semiquaver figure is characterised topically as "brilliant" in Hatten, *Musical Meaning,* p. 134.

Ex. 1.4: Op. 130, i, bars 13 - 19

Rhythmically:

a) the fanfare motif generates tension with two crotchets, followed by two quavers leading to the downbeat *subito piano*;

b) the brilliant semi-quavers confuse the downbeats by starting each run *forte* on upbeats.

The *subito piano* clearly undercuts many components of the gesture cutting in half the thematic units. But perhaps there are ways in which it illuminates other less obvious gestural components such as the weaker harmonic resolutions and the bottom of the registral run in the semi-quavers, which makes the material less coherent than it might appear on the surface.

The groups use different tempos, volume, rubato and articulation to create a gesture which is dissociating for some and more coherent for others. As well as this spectrum there are a number of more nuanced characterisations of this gesture influenced by the dynamics, including a brilliant character, bustling excitement, and a muscular and powerful character. The choice of tempo is critical, and dictates some of

the practical possibilities for effecting sudden dynamic change; the faster the tempo, the more difficult it is to suddenly change dynamic. It is worthwhile to discuss first the relationship between the tempo and volume change before moving on to the way articulation and rubato affect the characterisation of the dynamics.

Table 1.1 outlines the tempos taken by each group for the *Allegro*.[28]

Léner Quartet (c. 1927):	C = 130
Budapest Quartet (c. 1927/29):	C = 133
Busch Quartet (1941):	C = 132+
Amadeus Quartet (1962):	C = 144
Italiano Quartet (1969):	C = 144
Lindsay Quartet (1982):	C = 130
Vermeer Quartet (1983):	C = 122
Alban Berg Quartet (1984):	C = 124

Table 1.1: **Average Tempo in bars 14-20, C = Crotchet, organised chronologically**

In the case of the Busch, when the tempo is stable it is c = 132, but there is also considerable pushing forward, giving the impression of a faster tempo. There are considerable differences in the groups' choices, and this quite clearly affects both the dynamics and the character. The chronological listing of the table also shows, that although there is no general trajectory for speeding up or slowing down over the time span of the recordings, the groups that were relative contemporaries have similar tempos, and these clusters can be separated into three groups: the earliest recordings

[28] Tempos are not uniform and consistent and so this table provides an average or range for the first *Allegro* section, and are meant primarily as a relative guidance between the recordings.

(Budapest, Léner and Busch), the post-war (Italiano and Amadeus) and the more recent (Vermeer, Alban Berg). The Lindsay is an outlier, but still not far away from the latter. The tempo does affect *how* the *subito piano* is achieved, particularly at the faster and slower ends of the spectrum, and the nature of the contrast and the character of the whole passage are intimately bound up with this choice.

The rapid tempos of the Italiano and Amadeus create a very virtuosic and brilliant character, full of vigour, and whilst they still have a dynamic contrast, it is under-emphasised because it passes by so quickly. The more striking contrast is the new exuberant character after the *Adagio.* The tempo also affects how they achieve the *subito piano*: the technique that the Italiano uses is that the lower three voices make a soft subito *piano* whilst the running semiquavers of the first violinist reduces the volume only minimally. This gives the corporate effect of a *subito piano* without affecting the technical difficulties of the semiquaver runs. In contrast the Amadeus softens already at the end of the *forte* bar in order to smooth the transition, and the first violinist emphasises the beginning of every *forte* gesture, so that *this* moment becomes the sudden change in dynamic. In this way they reduce the dissociating effects to create a more coherent brilliant character with a brief, almost comedic, nod to the softer dynamic. In contrast to these brilliant characterisations, the Alban Berg is muscular and powerful in its *fortes* aided by the slower tempo, and with strong dynamic contrast, creates some dissociation in the gesture.

For the Vermeer and the Lindsay the *subito piano* moment has more emphasis because the steadier tempos allow space to create this. The Vermeer creates a small gap between the *forte* and *piano* so that a dual-track musical discourse takes place, and here the thematic elements are dissociated from themselves by creating block dynamics. The Lindsay, whilst also creating a significant *subito piano,* prepares it by taking time and

already softening on the last beat of bars 15 and 17. The dynamic dissociation is less sudden and the dynamic rupture is softened by a smoother transition.

The Léner, Budapest and Busch all create little dynamic change, but use other factors such as rubato to characterise the dynamics differently. Rubato is mainly pertinent to the semi-quaver runs, and the momentum of these is subtly manipulated to generate excitement, particularly in the *piano* dynamic.

The Busch provides the most striking example of this. The first violinist plays steadily and metronomically in the *forte,* only to push forward, by scrambling up the register and creating an excitable contrasting character in the *piano* bars. When more of the players are in involved in the semi-quaver *pianos* in the subsequent *Allegro*, the pushing forward is less clear, but the first violinist does likewise in bars 35 and 36. Both the Léner and Budapest also push forward slightly in the *piano,* and whilst the Budapest plays metronomically in the *forte,* the Léner hesitates before the *piano* bar, both adding a sense of excitement and anticipation to the *forte* bars. These gestures are more in the direction of coherence than dissociation, but provide subtle nuances of characterisation nonetheless.

The Amadeus and Alban Berg take time at the beginning of the *forte* semiquavers to emphasise the dramatic nature of these moments and emphasise rhythmic confusion about the first beat of the bar. This is disorientating rather than dissociating to the rhythmic precision.

As well as using rubato, groups articulate both the semi-quavers and the fanfare differently to effect the characterisation of the dynamics, with varying on and off-the-string strokes for the semiquavers and different kinds of accent in the fanfare, particularly at the moment of *subito piano*.

The semiquavers are marked *non ligato,* and variations in bow stroke have different implications for the character, particularly in the *pianos*. Whilst the meaning

of the term *non ligato* does not have a universally-accepted meaning, most groups begin the semi-quavers clearly on the string, whilst still articulate and energetic, displaying something of a unity of interpretation in this instance.[29] The difference comes in the *piano* bars where some groups change to an off-the-string stroke. The Alban Berg does this in the *pianos* creating a striking character difference with the muscular and powerful on-the-string stroke of its *forte* bars. Even more bustling with its rapid tempo is the Amadeus which becomes distinctively off the string in the *piano* bars of the subsequent *Allegro* from bar 24, and especially in bars 32 and 34. The Busch similarly develops this off-the-string articulation in the second *Allegro* in particular, but also signals this in bar 18 where the first violinist starts to come off the string during the first beat. Combined with the pushing forward mentioned earlier, this creates bustling excitement in the *piano* anticipating the *crescendo* into bar 20. The change of articulation by all instruments between bars 31 and 32 is also very striking; the noise and exuberance of long articulation in bar 31 is suddenly replaced by clear and short articulation, creating soft bustling excitement in bar 32.

The articulation and characterisation of the fanfare have implications for its re-appearance in the development section (to be discussed in chapter 3), but here it is the nature of the articulation on the downbeat of the fanfare in the *subito piano* that either disrupts the rhythmic tension generated, or continues it within a *piano* dynamic. The Alban Berg and Vermeer maintain an accented articulation. They use fast bows with release through the fanfare even onto the *piano* downbeat, which is soft but still articulated clearly. In contrast, the Lindsay`s second violinist is barely perceptible on the *piano* as though the fanfare disappears. In this way the Vermeer and Alban Berg

[29] Whilst noting the ambiguity of the usage of the term, Clive Brown notes, 'It is probable that Beethoven wanted a more connected bowstroke in the non ligato passage' contrasting it with the *Ben Marcato* shorter articulation in bar 64. See Clive Brown, *Classical and Romantic Performing Practice 1750 - 1900* (Oxford: Oxford University Press, 1999), p. 192.

maintain some coherence to the fanfare whilst the Lindsay`s becomes dissociated. Similarly the Busch`s second violinist plays the downbeat of the fanfare with softer articulation and dissociates the character in mid-flow. Both the Budapest and Léner articulate the fanfare with longer and more sustained bow strokes creating a more stately version, and because there is barely any perceptible dynamic difference from the latter, the fanfare theme is particularly coherent.

There are two distinct ways of highlighting the differences between the *forte* and *piano*; through change in dynamic volume and change in characterisation. The two groups that highlight the dynamic change more than anything, the Vermeer and Lindsay, produce the most unusual and dissociating gesture. The coherence of the brilliant and fanfare topics is thrown into doubt. This is emphasised by the gaps in the Vermeer's version and the disappearance of the fanfare theme in the Lindsay's. The Alban Berg also highlights dynamic change, but the fanfare retains so much energy that there is still some coherence. For the quickest groups, the Italiano and Amadeus, the overall character of brilliance survives, and the nod towards *piano* is more of a surprise, even comedic, special effect rather than a dissociating one. The change in characterisation does not cause such a dissociating rupture, but adds nuances to the gesture and is mostly achieved through alterations in articulation and rubato. The Busch uses both elements to highlight the character of excitement, which becomes bustling, emphasised in the *pianos* through shorter articulation and pushing forward. With their lack of emphasis on dynamic difference, the Budapest and Léner produce coherent gestures, but use rubato to show difference between the *pianos* and *fortes*, with excitement created in the pushing forward of the *pianos*. These latter groups have the least dissociating approach.

Coda: a final chance to dissociate or integrate?

The constant alternation between *forte* and *piano* recurs throughout the movement and comes to an apotheosis in the coda when put in conjunction with *Adagio a*nd *Allegro*, which also alternate every bar between bars 217 and 222 (see Ex. 1.5). The music becomes an altercation between the two with the partnership of *Allegro* and *forte* versus *Adagio* and *piano*. Kerman uses particularly colourful language to describe this passage as 'the extraordinary forced wedding of the *adagio* and *allegro* themes, which places the disruptive underlying contrast of the movement in maximum relief.'[30]

In many ways this passage is an apotheosis of the core metaphors identified in the introduction: the extreme contrasts of tempo, dynamic and thematic material are thrown into sharp relief against each other; the discontinuity is particularly vivid since neither tempo, dynamic nor theme is allowed to continue for more than a bar; the surface lack of coherence of this passage suggests further dissociation.

[30] Kerman, *Beethoven Quartets*, p. 312.

Ex. 1.5: Op. 130/i, bars 214 - 226

However, there is an alternative interpretation that this passage, and the coda overall, provide a way of integrating various elements of the movement. For Brodbeck and Platoff: 'the coda stands as a kind of corrective or compensation for Beethoven's many dissociating procedures earlier in the work,'[31] though they do, however, also note the 'unsettling' nature of this passage. Hatten remarks how the 'motivic linkage is...explicit; the downbeat of m. 218 is at once a realization of implied downbeats for both the Adagio's cadential gesture...and the Allegro's sixteenth-note initiation.'[32] He also notes that in the following passage there is a 'remarkable melding of thematic affects in mm. 223 – 28.'[33] In contrast, Kerman feels that 'the movement ends on a characteristic

[31] Brodbeck and Platoff, 'Dissociation and Integration', p. 162.
[32] Hatten, *Musical Meaning*, p. 140.
[33] Hatten, *Musical Meaning*, p. 144.

note of dissociation: normality sharply placed against a conception of startling novelty and imagination.'[34]

The melodic and thematic components of the two opposing gestures are:

a) the brilliant descending figuration from the opening *Allegro* theme supported by the two quavers from the fanfare theme in bars 218, 220 and 222;
b) interspersed with a rising semitone in bars 219 and 221 taken from the *Adagio* as an inversion of the opening two notes of the movement, which are initially developed in bars 5 – 7.

Articulation plays a role as:

a) a primary contrast between the thematic material; the shorter articulation of the *non ligato* and quavers from the fanfare versus the legato of the *Adagio* rising slur.

Harmonically:

a) the passage provides a divergent side-step from the tonal goal of the tonic, Bb major, which could have been reached in bar 217. However, the music side-steps through weak harmonic progressions hinting at G minor, Eb major, A minor, F major before reaching a weak second inversion tonic in bar 222;
b) the height of the register of the first violin line spells out a rising chromatic scale from Bb, B, C, C sharp, D;
c) the *subito piano c*orrelates with rising appoggiaturas on unusual harmonies; augmented chords that resolve to weak chords.

Rhythmically:

[34] Kerman, *Beethoven Quartets,* p. 313.

a) in a similar fashion to the articulation, there is a conflict between the short rhythmic values of the *Allegro* of semiquavers and quavers and the slower crotchet movement of the *Adagio*.

In contrast to the dynamic gestures discussed so far in this movement, here the dynamic alternations do not undercut otherwise coherent gestures. Instead the overall passage lacks obvious coherence and the dynamics side with the two opposing gestures of the *Allegro* and *Adagio*. In terms of interpretation, it is less about how to reconcile the dynamic with other, potentially opposing, musical elements of the gesture, than how the contrasting themes, tempos, articulations and dynamics are placed against one another.

The performers here take a very active decision as to whether to highlight and emphasise the disruptive contrast between themes, or take the opportunity to show that the 'forced wedding' and integration is possible. The performers also make a decision whether to maintain the character of both themes from the opening, or change it to mediate between the two themes. In most cases, the characters from the opening are maintained, but there is an exceptional case in which the Busch manages to mediate between the themes.

The Italiano maintains a version with extreme contrasts; the two tempos are the furthest apart from each other of any of the groups, and the character and dynamic of each also work to maximise this difference. The *forte Allegros* are an explosion of sound with strongly articulated semiquavers cascading down the runs. The *piano Adagios* are played with a hushed, and intimate sound, but still with the warmth of vibrato. The *pp* on the final beats of bars 217, 219 and 221 is a new dynamic element to provide even more contrast with the subsequent *fortes* and the Italiano achieve this special moment by not only playing even more quietly, but also without vibrato to produce a transparent sound that is then shattered by the *forte.*

The Amadeus' interpretation emphasises the discontinuity of the passage by adding clear gaps before each *piano* in bars 219 and 221. The group creates a stark contrast of tempos relating back to the speed of the opening *Allegro,* but then also articulates the *piano* rising legato figure at a stronger dynamic than the Italiano. This has the effect on the one hand of disrupting the momentum and causing discontinuity, but the dynamic and character contrast is less striking as the softness and legato aspects of the *piano* theme are downplayed. This is consistent with how the quartet played the *subito pianos* at the opening, using gaps rather than an intimate sound quality.

For the groups which initially chose a slower tempo in the *Allegro* anyway, the contrasts in tempo at this juncture are already lessened, and so it is left to dynamics and character to highlight the differences. The Lindsay deploys gaps between the bars and uses a slow tempo for *Adagio* making the whole passage feel stretched. Because of this there is time to dwell on each character separately, creating a memory of what has gone before rather than highlighting the continued conflict of themes. This is a form of integration as the shock of the contrasts has been taken away by space and time. The Vermeer is similarly reflective in its approach.

The Alban Berg and Budapest make gaps before the *piano* bars breaking up the continuity and separating the dynamics. The former maintains an intensity of vibrato in the *pianos*, much like the opening, which means that both themes display an intensity of character, lessening the contrast. A feature of the Budapest's version is that although there is a gap before the *piano,* the *pp* at the end of these bars very slightly c*rescendos* into the *forte* outbursts as though the latter cannot be contained.

As the most striking example of integration, the Busch makes the passage hang together by playing down the volume implications of the *subito pianos* in bars 219 and 221 and making sure that there is no hesitation between the bars. In other words the *Adagio* theme emerges out of the *Allegro* semiquavers, and though they are played with

contrast, lyrically with vibrato and warmth of sound, they have become an offshoot of the semiquaver runs. The two themes are now literally connected as Hatten's analysis above claims.[35] The *pp* crotchet at the end of the bars is played very softly, so that the *forte* is still a sudden outburst, but a much greater feeling of momentum is created nonetheless with two-bar phrases rather than the one-bar phrases created by most of the groups. This is also a way to link the two tempos within a single phrase. Just before this passage in bars 214 - 17 it is also striking that the s*ubito pianos* here are played very expressively, without a drop in dynamic or even change in vibrato colour, signalling that the dynamic constraints of earlier have been overthrown. Unsurprisingly the Léner takes a similar course by connecting the *forte* into the *piano* without any distinctive change in dynamic.

The Busch interpretation is the only one that seems to transform the dynamic ideas through the movement even at the expense of properties of the dynamic itself. The other groups largely maintain the characters of the dynamic that they established at the outset, whereas these characters have been transformed by the Busch into something that unites in the final coda. With their reflective approaches the Lindsay and Vermeer also provide a kind of integration; the contrast is still there, but with time and space it is presented as less shocking, and the Léner's limited dynamic change also suggests integration. At the other end of the spectrum the Italiano maintains the extreme contrasts that result from its interpretations at the beginning of the movement, whilst the Amadeus, Alban Berg and Budapest create some discontinuity, but with less contrast than the Italiano.

Hatten states: 'Of the many elements of Beethoven's late style that have been interpreted as anticipations of twentieth-century musical approaches, perhaps the most

[35] See fn. 31.

often noted is Beethoven's extensive use of abrupt juxtapositions or disruptions. The resulting discontinuity in the musical fabric has been interpreted in radically different ways, which suggests that meanings may be undetermined, or else highly dependent on context.'[36]

This analysis of dynamic gestures of the first movement of Op. 130 shows how the disruptions caused by these have been interpreted in different ways by performers, sometimes radically as Hatten suggests, and sometimes more subtly. The recordings often provide a spectrum of metaphorical characterisations; the degree to which performers manipulate volume, tempo, rubato, articulation and vibrato, to name the key performance choices discussed here, points the interpretation in one direction or the other. The metaphorical characterisations here, such as lyrical coherence, timbral contrast, dissociation and integration, are the result of a combination of those performance choices that highlight certain aspects of the gesture over others. Often an emphasis on a literal reading of the dynamic, i.e. the volume implications, leads to a more radical and disruptive interpretation, whereas subtle manipulations of the other performance choices provides a more nuanced approach that may contain elements of both ends of metaphorical spectrum. The Italiano emphasises the dynamic change in the opening *crescendo* to *piano* and highlights the contrasts in the coda providing one of the more radical sounding interpretations. The Léner is at the other end of the spectrum, usually maintaining the coherence of melodic lines and harmonic direction over the disruptions that the dynamics may indicate. Quite radical, but more often in terms of factors other than dynamic change, is the Busch which creatively manipulates many performance choices in order to produce quite different and nuanced interpretations.

The difference between the Italiano and Léner quartets may also be due to differing interpretations of the hairpins in particular. If, as Poli and Kim have outlined,

[36] Hatten, *Interpreting Musical Gestures*, p. 267.

they are related to intensity rather than dynamics, then the Léner and Budapest quartets, (and possibly the Busch), may have been the last remnants of a performance tradition that understood them in this way. From the Italiano quartet onwards there seems to be more emphasis on a dynamic interpretation of the dynamic marks, suggesting that by the 1960s the hairpins were primarily considered a dynamic marking.

Chapter 2: Localised Dynamics: Hairpin Swell Markings

Whilst chapter 1 focused on dynamic markings featuring sudden shifts from loud to soft which dominated the first movement, this chapter discusses a dynamic marking that appears regularly throughout the inner four movements of Op. 130. Causing different kinds of disruptions, the hairpin swells (< >) in these movements serve to complicate, energise, and expand phrases in unusual ways. This chapter describes the different uses of it throughout these movements, whilst continuing to explore the multiplicity of performance choices of the recordings in relation to the dynamic. It also considers the effect on the character of the music and discusses new metaphors; from the radical seasickness in the fourth movement and comedic breathlessness of the second, to the more lyrical playfulness of the third and the operatic lyricism of the fifth. It also considers their relationship to the core metaphors highlighted at the end of the introduction.

The hairpin swell had limited use as a performance indication in the most well-known quartets preceding those of Beethoven. Not one appears in Mozart's ten 'celebrated' quartets from K. 387 onwards. Haydn had begun to use hairpins sparingly in his Op. 50 quartets and late piano sonatas,[1] but in his last great set of string quartets, Op. 76, swells only appear over single chords in slow movements: the penultimate bar of the second movement of Op. 76/3 and perhaps for greater thematic importance over a number of chords in the second movement of Op. 76/4, where it serves to highlight these unusual harmonic moments. According to Brown, this kind of swell on a single chord was likely derived from a *messa di voce*, and 'came increasingly to imply a vibrato when placed over a single note.'[2] Later on hairpin swells become commonplace

[1] Roberto Poli, *The Secret Life of Musical Notation* (Milwaukee: Amadeus Press, 2010), p. 11.
[2] Clive Brown, *Classical and Romantic Performing Practice 1750 - 1900* (Oxford: Oxford University Press, 1999), p. 552.

as a performance indication in the era of Schubert, Mendelssohn, Schumann and Brahms. For the romantic generation this correlates with the greater fluidity in phrase construction, ebb and flow, and an increase in the individuality of self-expression,[3] and it is likely that Beethoven set the trend for this greater use of performance indications. Their use, however, is often more problematic in Beethoven's Op. 130. Rather than emphasising clear melodic or harmonic gestures as is usual for the romantic composers above, Beethoven often seems to add swells to complicate or go against the grain of other aspects of the gesture, much as the dynamics acted in the first movement.

In his early and middle quartets, Beethoven already used the hairpin swell more extensively than did his predecessors. Sometimes it creates an unusual nuance in a single bar: in Op 18/1/i, bars 14 and 16, and Op 95/i, bars 10 and 12, where the harmony is static. This is similar to Haydn's use in his late quartets, though it appears in fast movements as well as slow. Quite often he deploys them in slow movements to follow the rise and fall of slow melodic lines as in Op. 18/3/ii, bars 1 - 3 in the second violin part. Sometimes it is used to confirm harmonic dissonances and nuances as in Op. 18/6/i, bars 48 and 52, Op 59/1/i, bars 54 and 56 (second violin) and the first movement of Op. 59/3/i, bars 66 and 68. Occasionally it is used to create a breathless fluid effect as in Op. 59/2/i, bars 13 and 14, which is more akin to the ebb and flow nuances of the Romantic generation. Before the late quartets, Op 95 has the largest concentration of swells; unsurprisingly this is one of his most breathless and animated quartets. Swells become more common in the late quartets, but it is the consistency and insistence of them in Op. 130, as well as the problematic nature of where they occur for performers, that make them such an important object for study here.

[3] See Sandra Rosenblum, *Performance Practices in Classical Piano Music* (Bloomington: Indiana University Press: Bloomington, 1988), p. 10. 'By the end of the century [eighteenth], when Koch reiterated that the goal of music was "the expression of passionate feeling," the idea seems to have implied a turning from the universal affectations to more individual, pre-Romantic self-expression.'

As already noted in the introduction and chapter 1, hairpin swells have sparked a renewed debate as to their usage and meaning. Kim states that 'Hairpins...are today universally accepted as equivalent to the markings *crescendo a*nd *decrescendo,* calling for an increase or decrease in volume. But this view is irreconcilable with the evidence of many scores of the nineteenth and early twentieth centuries.' Instead, 'hairpins are not dynamic markings, but rather connotative expressive indications that are frequently associated with rhythmic inflection.'[4] Though his study focuses on Brahms, he notes that this problem is associated with scores 'from Beethoven to Schoenberg'. This notion that it might indicate something other than dynamics in Beethoven is seconded by Poli, 'In his late years, Beethoven's...hairpins were meant to suggest interpretative nuances in more melodic contexts, not dynamic variations within a passage or phrase.'[5]

These ideas are persuasive for the hairpin swells in the slow and lyrical Cavatina, and the evidence of the recordings seems to bear out evidence of these alternative interpretations as will be seen towards the end of this chapter. However, for the swells that appear in the faster second and fourth movements, and even to a certain extent those in the moderate third movement, this theory has less obvious plausibility. At rapid tempos and in the contexts seen here, rubato and agogic inflection seem impossible; but perhaps that is also a sign of the difference in performance practices between the twentieth and the nineteenth centuries.

The hairpin swells will be studied in chronological order; this is because their importance increases with each movement. In the second, they energise the main theme and disrupt the main beat of the bar, whilst in the third they expand short lyrical

[4] David Hyun-Su Kim, 'The Brahmsian Hairpin', in *19th-Century Music*, vol. 36, no. 1 (Summer, 2012), p. 46.

[5] Poli, *Secret Life of Notation,* p. 18. Poli also suggests that some hairpins may relate to voicing in piano music, but in Op. 130 most of the time, each player gets the same swell marking, and so does not seem to apply in this context.

gestures in unusual ways. In the next two movements, they take on increasing importance; in the Alla Danza Tedesca they are an integral part of the opening theme, causing maximal disruption to an otherwise simple melody, and in the Cavatina they are an important feature of the highly lyrical and expressive language, this time largely complementary rather than disruptive. The multiplicity of contexts produces many different interpretations and manipulations of performance choices.

There is a link between the hairpin swells in the second, third and fourth movements; they all occur in the middle of a bar, and through the middle of a short thematic unit. As a point of comparison, there is hairpin swell in the opening bars of Cherubini's String Quartet no. 1 (into bar 5), but this is more clearly the height of a phrase, whether interpreted through dynamics, or through rubato. However, the placement of the swells here often occurs at an unnatural point in the phrase, especially in the second and fourth movements. They are in very short thematic units, which do not correlate with the height of a melodic phrase or a harmonic climax. Therefore what are the possible interpretations of this? A strong possibility is that Beethoven meant to disrupt the phrase structures: in all three movements moving an emphasis from the first beat of the bar to the second, which is normally weak. This causes disruptions and unusual phrasing strategies. The fact that it is a hairpin swell and not either an accent or a *sf* though suggests a different kind of emphasis; intensity or momentary nuance rather than a shock, and so opens up to more lyrical interpretations as well as surprisingly sudden ones.

Presto: whispered, breathless, mad and comical

The second movement is most striking for its extreme brevity after the lengthy opening movement. Both Kerman and Steinberg describe it as a 'Bagatelle', alluding to

its throw-away nature; the former describing it as 'short-breathed, crusty, astute',[6] with the latter as a 'mad whisper'.[7] The whisper metaphor is used by both critics and alludes to the prevalence of unusually soft dynamics in the outer sections, whilst short-breathed, or breathless, describes the frenetic tempo and activity, even within this soft dynamic. Chua refers to: 'The discontinuities between the intellectual opacity of the initial movement and the comic escapades of the Presto' returning to one of the core metaphors from the introduction.[8] The comic elements are echoed by Steinberg's 'delightful detail' and 'whimsical' coda,[9] and Chua goes into great detail about rhythmic contradictions in this movement which provide much of the musical comedy, and points to the hairpin swells as an example. The 'rhythms...[have] a habit of dislodging themselves from the metrical structure.'[10] If the localised metaphors of whispering and breathlessness refer primarily to the soft dynamics and tempo respectively, the swells add a madness to the whisper or a wheeze to the breathlessness and provide one of the comic escapades to which Chua refers.

[6] Joseph Kerman, *The Beethoven Quartets* (New York: Norton, 1967), p. 313.
[7] Michael Steinberg, 'String Quartet in B-Flat Major, Op. 130', in eds. Robert Winter and Robert Martin, *The Beethoven Quartet Companion* (Berkeley: University of California Press, 1994), p. 232.
[8] Daniel K. L. Chua, *The "Galitzin" Quartets* of Beethoven: Opp. 127, 132, 130 (Princeton: Princeton University Press, 1995), p. 164.
[9] Steinberg, 'String Quartet in B-Flat Major', p. 232.
[10] Chua, *The "Galitzin Quartets",* p. 169 - 70.

Ex. 2.1: Op. 130/ii, bars 1 - 16

Unlike the fourth movement, where the swells are present in the opening thematic material, here they appear only in the second half of the opening A section, rendering them more special effect than thematically integral (see Ex. 2.1).[11]

Harmonically:

a) whilst the opening nine bars creates a closed harmonic phrase in Bb minor, bar 9 jumps straight to the relative major Db, and is harmonically static for four bars, before returning immediately to Bb minor in bar 13;

[11] The form of the movement is a straightforward scherzo ABA: A – bars 1 – 16, B – 47 (retransition to A), A bars 64 – end.

b) bars 1 – 8 are harmonically dynamic with cycles of fifths every half bar to the dominant in bar 4, then the tonic in bar 8, creating a constant sense of harmonic direction. The new key of Db major in bar 9 is then harmonically static for four bars alternating between chords I and V on the half bar on a dominant pedal. It is *these* harmonically static bars that have the hairpin swell, as though the music wants to move in another direction, but is constantly pulled back by it;

c) once the music returns to Bb minor and is permitted to cadence in this key with a standard IV – V – I in bars 15 – 16, Beethoven makes this a dynamic outburst with the *crescendo* up to *f*, as though the pent up energy is finally released.

Melodically:

a) the first violin and second violin lines rise to the middle of each bar from 9 – 13, correlating with the contour of the swell.

Rhythmically:

a) the passage from bars 9 – 16 is similar to bars 1 – 8, but the swell moves the rhythmic emphasis to the second, weaker beat.

These aspects raise the possibility of both emphasising the second beat of the bar in different ways, whilst also creating an intensified rising melodic gesture. In addition, the repeated marking and static nature of the harmony suggest four repeated units rather than a four-bar phrase, so that the harmonic direction only comes in the final bars after the swells with the c*rescendo* in bars 13 - 16.

There is little or no time for rubato or agogic freedom in these swells, and the recordings bear this out. Instead, it is interpreted as a dynamic indication of varying

degrees, but there are also contrasting uses of vibrato for the inner voices creating unusual effects in some cases.

Of the three earliest recordings, the Léner is the most breathless in terms of its rapid tempo on the edge of what seems possible. The Budapest and Busch are both steadier, but have less precise ensemble, giving a sense of breathlessness through a lack of control rather than extreme tempo (whether deliberate or not). The swells are acknowledged to the extent that the emphasis subtly shifts to the second beat from bars 9 – 16, providing the metrical contradiction, but they also continue this for the full eight bars, rather than stopping when the swells cease in bar 13. The swells are not so extreme that they cause great madness or comedy; the overall character is quite consistent. The Busch's *crescendo* to the *forte* in bars 13 - 16 is the most extreme providing dynamic excitement to conclude the section.

The Alban Berg, Lindsay, Amadeus and Vermeer are very controlled in their rapid tempos with tight ensemble and clarity of textural detail. They also produce four equally swelling bars, which provide a clear contrast between bars 1 - 8 and 13 - 16. The Amadeus is particularly articulate, so that every short note is heard, and the swells are a sudden explosion of sound creating accents on the half bars of 9 – 12. The Alban Berg's swells are more gradual, even within the limited time frame, so that it is more of a surge, almost as if a vinyl recording was being pushed backwards four times over the four bars. Both groups produce the swell primarily from the inner voices, with a hint of increasing vibrato from the Alban Berg. The Lindsay produces the swell primarily from the second violinist which is distinctive because of a lack of vibrato. This creates a special bulging effect and is quite comedic sounding. In contrast the Vermeer uses increased vibrato which helps to effect the swell, and so its seriousness conveys more madness than comedy.

The Italiano Quartet has the most distinctly comedic approach; much steadier than the rapid tempo most groups use, with softer articulation and a warmer sound in which vibrato plays more of a role in the opening nine bars. It then creates a complete contrast with the swells in bars 9 – 12. The time given by the slow tempo gives it considerable space to craft these; it creates an effect by swelling with the bow in the inner voices without vibrato, making something like an accordion effect. It becomes quite raucous in comparison to the warmer playing of the sections either side.

If the first eight bars are a whisper for most groups, then the following eight bars add either a kind of madness (emphasising the 'wrong' beat), or comedic interlude most evident in the Italiano's version. Breathless applies mainly to the older groups, the Léner because of the tempo that is at the fastest end of what is possible, and the Budapest and Busch because of the feeling of being almost out of control. The more recent fast recordings maintain control so that breathless is a less apt description, but instead create the effect of an efficient and rapid whisper.

Andante con moto ma non troppo; poco scherzoso – ways to expand

Hatten has noted the third movement as one that 'creatively fuses the playfulness and rhythmic drive of a scherzo with the tunefulness of an Andante.'[12] This is a reference to the unusual hybrid nature of the movement as a slow movement with 'scherzoso' elements. Bathia Churgin similarly remarks that 'it holds a special place in Beethoven's slow movements with its juxtapositions of the serious and comic styles.'[13] She goes on that its 'humour' often goes unmentioned, but that its 'humour is not

[12] Robert Hatten, 'Plenitude as Fulfillment: The Third Movement of Beethoven's String Quartet in Bb, Op. 130', in ed. William Kinderman, *The String Quartets of Beethoven* (Champaign: University of Illinois Press, 2006), p. 216.

[13] Bathia Churgin, 'The Andante con moto in Beethoven's String Quartet Op. 130: The Final Version and Changes on the Autograph' in *The Journal of Musicology,* vol. 16, no. 2 (Spring, 1998), p. 228.

unalloyed...but is mixed with serious and deep emotions.'[14] Kerman notes the 'freshness and grace' of the movement,[15] offering metaphors which may contain attributes of comedy and seriousness respectively, without implying the extremes of either case. Interpretations of the movement overall diverge quite contrastingly, reflecting these contradictions, but here the focus will be on the hairpin swells' contribution to these characterisations.[16]

The hairpin swells are relatively fleeting, but do provide examples of the dynamic in a context mid-way between the rapid versions in the second and fourth movements and the slow expansive lyrical gestures of the Cavatina. They appear within relatively slow and lyrical music, but unlike the Cavatina, do not follow such obvious melodic or harmonic gestural components. Instead the swells in bars 7, 14 and 15 mark unusual phrasing strategies which emphasise the weaker second and fourth beats of the bar. Hatten notes that the music 'reaches an expressive crux in m. 7, and luxuriates in its *subito piano* yet expansive arrival in the dominant, Ab major, by treating a half-bar idea to two varied repetitions.'[17] Here, the possibility of the swells indicating a moment of intensity through rubato, vibrato or portamento, rather than a dynamic, seems quite appropriate and many of the groups use the latter two if not the former. Beethoven could have intended these as a lyrical intensification, though their placement is still somewhat unusual.

The metaphor of expansion is appropriate for the swell, and lyrical expansion or luxuriating expansiveness (a more extreme version of the former) indicates an interpretation relating to the more serious, lyrical and tuneful aspects of the movement.

[14] Churgin, 'The Andante con moto', p. 229.
[15] Kerman, *Beethoven Quartets,* p. 314.
[16] For the most divergent interpretations listen to the Busch and the Italiano. The former emphasises the humour and the latter the seriousness, both to the exclusion of the opposite characteristic. Most other groups share elements of both.
[17] Hatten, 'Plenitude as Fulfillment', p. 226.

An alternative is more of a bulge or swell that disrupts the flow or lyricism more playfully, adding a humorous twist.

Ex. 2.2: Op. 130/iii, bars 5 - 7

Bar 7

The most critical component of this musical gesture in bar 7 is melodic:[18]

a) as the top F in the first violin is an appoggiatura to the Eb, which would suggest more stress on the former note. This is swapped to the second violin line in the second half of the bar. Beethoven's dynamics serve to undercut these other factors with the *subito piano* on the F and swell focused more toward the Eb;

b) as the second violin and viola lines rise in the first half of bar 7 and so have a more correlative relationship with the rising intensity of the swell. The viola repeats in the second half of the bar whereas the first violin takes over the second violin line.

Rhythmically:

[18] This is one of the few inconsistencies highlighted in the introduction. The exact placement of the swells is slightly different in editions: Henle places the centre of the swell quite clearly on the second quaver for all instruments, whereas other editions (Artaria, Breitkopf – Ex. 2.2 - and Peters) indicate it closer to the second crotchet. For reasons outlined in the introduction most groups likely had parts indicating the latter, but executed their dynamics more like the former, hence possibly why Henle placed it there.

a) the swell correlates with the initial syncopation of the viola and second violin line in bar 7, but in the middle of the dotted quaver in the first violin, creating a bulge, rather than as the moment of rhythmic intensification to the second beat of the bar.[19]

Harmonically:

a) the music is moving between II and a first inversion I in Ab major, quite a weak harmonic progression. The swell intensifies the passing notes of the inner parts, the G and Bb, creating a moment of richer harmony.

It is the correlative aspects between these components and the swell that most groups focus on: highlighting the rising line, the harmonic richness and syncopation of the inner parts initially (with the first and second violin swapping half-way through the bar). This is rather than emphasising the disruptive nature to the primary melodic line. The groups focus on a dynamic interpretation of the swell, rather than rubato or agogic inflection, but this is complemented by vibrato inflections and portamento for some of the older recordings.

The Busch, Amadeus and Alban Berg all leave it to those instruments playing the rising line to effect the swell. This is achieved through increasing the depth of sound with greater bow weight, and also the widening and therefore intensifying the vibrato. The Alban Berg and Busch luxuriate on the expansive warmth of the G in the second violin (then first violin) in particular, whilst the Amadeus also slightly accent it. This latter approach makes the swell less gradual and organic with more of a sudden impact puncturing the musical texture and creates a playful element as well as the lyrical warmth added by the vibrato.

[19] Depending on edition; see fn. 18.

At steadier tempos, the Italiano, Lindsay and Vermeer create somewhat different effects. The Italiano has the most voluminous and perceptible swell, which comes close to a bulge and hint of strange disruption to the atmosphere. Because of the slow tempo and the general seriousness of the interpretation it does not feel comedic and lacks the warmth of the lyrical expansion of others. This is also because the height of the dynamic swell is exactly the second and fourth crotchet beats and therefore in the middle of the G for both second violin and first violin, creating a bulge in the middle of this note.[20] The Vermeer makes more of an attempt to effect the swell in the primary melodic theme as well as the rising figure, through dynamic volume as well as increasing vibrato warmth. This makes it not only lyrically expansive because of the vibrato, but also bulging because of the distinct dynamic nuance on the main theme. This sounds unusual because the dynamic goes against other components of the gesture. To a lesser extent the Lindsay does something similar.

In the two oldest recordings the swells are focused on the rising figure and use portamento as well as dynamic to bring this out. The Budapest produces portamento between the F and G in both the second and first violin rising figures; a significant slide, but executed quite late so it remains subtle. The second violinist of the Léner produces a very heavy slide, starting the portamento immediately so that it features prominently and comes across as a playful bulge.

Most groups acknowledge the swell as an intensifier of volume correlating with vibrato warmth or portamento, but often only with the rising accompanimental gesture rather than the main theme. Although there are hints of the seriousness and playfulness, most interpretations fall somewhere in between with a strong element of lyricism and warmth that correlates more with Kerman's 'grace'.

[20] The Italiano follow a literal interpretation of the swell going to the second crotchet.

Swells in bars 14 and 15; playful or lyrical

Ex. 2.3: Op. 130/iii, bars 14 - 15

This short melodic fragment offers another case study of the dynamics' influence over the character of a theme (see Ex. 2.3).

Texturally:

a) unlike bar 7, it has thinned out, and there are no longer continuous semi-quavers in the bassline.

Harmonically:

a) although the theme is in the second subject group and in the dominant key of Ab major, there is little harmonic grounding.

Melodically:

a) it is an awkward motif with wide leaps of fourths and a fifth. This contrasts with the theme in bar 7 which was more linear in construction.

Rhythmically:

a) characterised by dotted rhythms, the theme has the potential to be either playful or lyrical.

The spectrum of variations for this theme similarly ranges between a lyrical expansion and lively playfulness. Due to the awkwardness of the intervals the latter seems particularly possible here and the rhythmic elements also suggest this. The groups again use vibrato and portamento as well as dynamic nuance to effect the swell.

The first violinist of the Léner creates a striking portamento through the opening hairpin to the Bb in bar 15, drawing attention to both the interval and the dynamic growth. Also with a portamento, the first violinist of the Busch creates something similar but with even sharper dynamic increase so that it is a sudden playful lunge. In the previous bar the cellist slides up to the Ab semi-quaver at the end of the motif and the end of the swell, but with a lightness that is very playful, almost cheeky. As a consequence, they create opposite effects, the cellist throwing away the end of the swell, whilst the first violinist surges up to the centre of the swell in a playful dialogue with each other of throwaway gestures. This character is also aided by the fast tempo chosen.

With subtler elements of the playfulness are the Budapest and the Amadeus. The former chooses a quick tempo similar to the Léner and Busch, but there is less dynamic swell and no portamento. The first violinist slightly clips the Bb and Ab at the end of each dotted rhythm creating a suggestion of playfulness. Also without portamento and at a steadier tempo is the Amadeus. The playfulness is created more by the first violinist accenting the Bb at the top of the swell and creating a similarly clipped gesture.

All at steadier tempos, the Alban Berg, Lindsay and Vermeer create a hint of dynamic phrasing, rather than a significant bulge. They also play the motif legato, despite the large intervals, maintaining a warmly vibrated sound. This creates a much more lyrical version which emphasises a smooth arching shape to the gesture, rather

than the playful versions which highlighted the wide leaps with portamento or accents. The Italiano creates a particularly warm and expansive version; their slow tempo allows time to craft a highly lyrical version with space to *crescendo* and *decrescendo* gradually, vibrate warmly and create a legato line.

There are different strategies at work here. Highlighting the angularity of the melodic component of the gesture with the use of portamento in quicker tempos and using more extreme dynamic change, distinguishes the theme as playful, almost comic. Approaches that interpret the swell as an insinuation of phrasing with steadier tempos and legato, tend toward a more serious and lyrical characterisation. The swell seems to suggest either is possible and is arguably an integral part of this brief theme's identity, much as the dynamics were in the first movement. This idea of dynamics forming part of a theme's identity comes to the fore again in the fourth movement where hairpins take on increased prominence as part of the main theme.

Alla Danza Tedesca, *Allegro Assai:* an ode to seasickness?

Much as an unusual dynamic marking appeared at the outset of the first movement, the opening eight bars of the fourth movement are dominated by its dynamics (see Ex.2.4). Both hairpin swells and hairpin *crescendos* occur on every odd-numbered bar alternating with repeated markings of *piano* on every other bar.

Ex. 2.4: Op. 130/iv, bars 1 - 8

Due to the saturation of dynamics in such a short passage, they do attract the attention of the analysts, and appear to form a crucial part of the characterisation for these writers. Kerman states: 'The fascination of this movement lies not in the melody, shape, or texture…but in details of rhythmic figuration and the dynamics'.[21] He goes on to give advice to performers: 'The dynamics…should be performed scrupulously, and if anything, with exaggeration (though D'Indy cautioned the exact opposite). The piece will begin to sound surreal. One has the sudden idea that if Beethoven had conceived of serial organization, he certainly would have thought of serializing dynamics'.[22] Steinberg complains that 'quartets often play it too slowly for an *Allegro Assai* in 3/8' and that it should 'produce something close to seasickness, the kind you induce with delicious deliberateness on a merry-go-round at the fair.'[23] Kerman echoes the seasick metaphor, whilst Steinberg also refers to a 'Hurdy-Gurdy' and describes it as 'not uncrazy' and a kind of 'proto-Mahler'.[24]

Due to the simplicity of form, melody and diatonicism of the movement, without the dynamics it might be thought of as simply an amiable German dance to which the title refers. But with the unusual markings, is Beethoven being playful and having fun as you would on the merry-go-round, or is it about the surrealist interpretation, combined with an unpleasant feeling of seasickness? It is the interpretation of the hairpins as dynamics that make it seem so unusual, but in light of the research of Poli and Kim, shades of intensity or emphasis offer different possibilities. For instance, the colouring of vibrato or in some cases portamento add an intensification, whilst rubato and agogic lingering once again seem to be an unlikely proposition as was the case in the second movement.

[21] Kerman, *Beethoven Quartets*, p. 318.
[22] Kerman, *Beethoven Quartets*, p. 318.
[23] Steinberg, 'String Quartet in B-Flat Major', p. 234.
[24] Steinberg, 'String Quartet in B-Flat Major', p. 234.

The different quartets portray a variety of characterisations ranging from a distinct playfulness to more graceful and charming versions. Whilst some groups can be heard as imitations of hurdy-gurdys, with a drone-like quality and circular gestures, the seasickness is generally more of a subtle suggestion; most likely there is a line beyond which most performers will not go to indicate an unpleasant feeling.

Whilst the dynamics can appear awkward, there are correlations with other components of the musical gesture.[25]

Melodically:

a) take the moderate-sized intervals of a third which dominate the theme and hurdy-gurdy accompaniment in bar 1; as the pitch moves away the swell opens, and as it returns it closes. The open hairpin in bars 3 and 7 similarly opens out as the first violinist pitch rises in the former, and leaps down in the latter. This may go some way to lessening the apparent awkwardness of the markings, and the interpretations not seeming as radical as the commentators above may expect.

Rhythmically:

a) the dynamics correlate to a degree with rhythmic activity in the first violin, with hairpins indicating movement, and the *piano* bars being more rhythmically static. Kerman points out the possibility of hemiola rhythms in the inner parts but this does not correlate with the articulation of the bowings nor the dynamics;[26]

[25] For a description of a performer's difficulties in deciding how to interpret these dynamics see the blog of the first violinist, Sara Bittloch, of the Elias Quartet: http://thebeethovenproject.com/making-friends-with-op-130-a-diary/. Accessed on 29/11/15.

[26] 'During the first doublet, the accompanying instruments rock in hemiola...in this way they dreamily undercut half of the strong beats and spice half of the weak ones', in Kerman, *Beethoven Quartets*, p. 318.

b) the swells de-emphasise the usual strong first beat of the bar, shifting this to the second quaver beat in the swell bars of 1 and 3, and potentially the third quaver beat in bars 3 and 7.

Harmonically:

a) the opening phrase spells out a simple chord progression with the harmony changing for each bar: I – VI – II –V – I – VI – V – I. A longer phrasing strategy that fits with the harmony would be to go towards bars 3 and 7 creating two similar phrases; however the dynamics break this into two-bar segments, without obvious correlation with the harmonic progression.

The swells here have the potential to create a graceful undulation of intensity on the one hand, by gently varying with the movement of the melodic line, and highlighting gentle rhythmic movement. However, a more seasick interpretation of the markings would create a more disruptive emphasis on the weak beats of the bar, highlighting the rhythmic oddities and cutting any sense of long term harmonic movement over the phrase.

Tempo, vibrato and portamento: other means of achieving a swell effect

The critical performance decision for the characterisation and effecting of the swell is the choice of tempo. Then how the swell and other hairpins are effected through making a shape or accenting is important, whilst vibrato and portamento also play their part. All of the groups treat the hairpins as dynamics and there is no clear evidence of rubato or agogic inflection here.

Starting with tempo, there is quite a selection of different speeds creating something close to a historical trend; the more recent recordings tend to be steady, and the historic ones tend to be quick, ranging from the Lindsay back to the Busch. There

are two significant exceptions; the Budapest is exceptionally slow and the Alban Berg tends toward the quickest tempo. (See table 2.1 for complete list of tempos).

The choice of tempo gives the clearest indication of character; the faster ones tend to be more playful, such as the Léner, Busch, Amadeus and Alban Berg, whereas the others tend to be more lyrical and graceful such as the Vermeer and Lindsay. As well as steady tempos the Lindsay and Vermeer have a clear *ritardando* at the end of the eight-bar phrase adding to a sense of grace.

Lener Quartet: DC = 68 - 70

Budapest Quartet: DC = 54 - 56

Busch Quartet: DC = 70-72

Amadeus Quartet: DC = 66

Quartetto Italiano: DC = 57 - 58

Lindsay Quartet: DC = 52 – 54

Vermeer Quartet: DC = 58

Alban Berg Quartet: DC = 67

Table 2.1, Tempo Range in bars 1-8, DC = Dotted Crotchet[27]

Other factors nuance this interpretation. Whilst all groups create dynamic inflection on the swells to varying degrees, they do differ as to whether they create a shape or an accent. In general, quicker recordings produce an accent on the second quaver beat rather than a gradated shape (Busch and Alban Berg), and the Amadeus do this particularly in bar 5. To this category can be added the Léner (though they have a

[27] Tempos rarely correlate with an exact metronome mark and so in many cases a narrow range is given. More important is to note the relative tempos of the groups.

limited swell), and the Italiano, though steady, does still make an accent with a sharp *diminuendo*. The Budapest treads more of a middle ground between accent and shape.

The quartets which avoid the accent and make more of a shape are the Vermeer and the Lindsay. For the Vermeer it is the warmth of vibrato on the second beat of bar 1 that creates the shape, whereas for the Lindsay it stems from the slow tempo, which gives time for the semiquaver at the end of bar 1 in the first violin not to feel clipped, and even time to gradate a gentle c*rescendo* and *diminuendo.* The effect is that the accented version is more playful, with its sudden motion and emphasis on the 'wrong' beats, whereas the more crafted shape creates graceful movement.

The approach to the *piano* markings in bars 2 and 4 is also important to the perception of the swells. A literal reading of the score implies that bar 2 should be as quiet as the opening, but there is often some kind of swell created here also, albeit always less than bar 1. The Busch achieves the most hushed *piano* in bars 2 and 4, which creates an intimate atmosphere, highly contrasting with bars 1 and 3, with the maximum contrast contributing to a 'not uncrazy' version. However, it is less effective in the equivalent at bars 6 and 8, in large part because of the high register of the first violin line. The Amadeus produces accents with the bow at the beginning of bars 2 and 4, meaning every bar has an emphasis with less contrast between hairpins and *piano*. The others make an attempt to soften them, sometimes by balancing the first violin under the other voices, especially in bar 4, where in the case of the Alban Berg, Vermeer and Lindsay we distinctly hear the second violin hurdy-gurdy line coming out of the texture.

One aspect of the score that is not always audible is the contrast in dynamic markings between bars 1 and 3; the swell and the single hairpin. The Busch makes it very clear and distinctive, primarily because the first violinist accents the final beats of bars 3 and 7, both by increasing the bow speed and clipping the note. The Amadeus,

with its articulate playing, produces a similar result, as does the Vermeer in bar 7, but less in bar 3. The Alban Berg, Italiano and the Lindsay sound like swells rather than continuous *crescendos.* Those that do acknowledge the contrast more strongly, manage to create a hiccupping and uneven effect which adds to the sense of play, and this is clearest with the Busch.

Though less noticeable here than in slower movements, vibrato still has an influence in effecting the dynamic nuance for some groups. The Busch has an approach that does appear to be affected by the dynamics: there is no perceptible vibrato in bars 1 and 3, but there is quite wide and distinctive vibrato in bars 2 and 4 even with the soft dynamic. This creates very contrasting moods between the warmth and tenderness of bars 2 and 4, and the playful, hurdy-gurdy nature of bars 1 and 3. The Italiano's vibrato is perceptible, but not distinctive, and there is a definite sense of greater intensity on particular notes and more limited intensity on *piano* bars. A good example is the intensity in the middle of bar 5.

The Lindsay creates the warmest rendition; characterised by a slow tempo, limited swelling and consistent vibrato from the lower instruments as well as the first violinist. Every note is given space to vibrate with moderate speed and width, helping to create a warmly lyrical sound and long phrase structures. However, there is limited variation in the use of vibrato, and the coherence of the longer phrase structures adds to the sense of grace and suppresses any sense of playfulness that greater contrasts create. The Vermeer produces a very warm sound by vibrating clearly on all notes. It is generally faster and more intense than the Lindsay's version and there is variation, most pertinently at the height of the swell in the middle of bars 1 and 5. The vibrato here is more intense through narrowing and an increase of speed, adding to the graceful lyricism of the phrasing.

The Alban Berg produces a distinctive feature: the lower instruments (in particular the hurdy-gurdy of the inner parts) play without vibrato, whereas the melodic line in the first violin does. The first violinist has a fast and narrow vibrato anyway, but it is only distinctive on the swell note in the middle of bars 1 and 5 and then the long notes in bars 2 and 4. The contrast emphasises the drone-like nature of the middle voices; the hurdy-gurdy against the playful first violinist.

For many of the recordings portamento is not a factor; from the Amadeus Quartet onwards there are no discernible slides or heavy shifts in the opening eight bars. If this study were extended beyond the opening eight bars, the first violinist of the Vermeer produces a significant glissando, whilst also taking time, between bars 12 and 13.

However, the earliest three recordings do use portamento to varying degrees, and in ways that appear to be related to the dynamic markings. The second violinist of the Busch employs one from the B to D in bar 5 creating a slide into a harmonic, and both violinists glissando into the final beat of bar 7. The earlier instance in the second violin line helps accentuate the swell, with the 'throw-away' slide to the harmonic, which is a softer note than a stopped note. The latter is also logical; it is a large interval and from a dynamic point of view it helps reflect the continued *crescendo*.

The Léner produces the most distinctive glissandos at the same junctures as the Busch in bars 5 and 7, but just to a heavier and slower degree. They are not perceptible on the repeat, showing the deliberateness the first time round. The Budapest reserves the slide only for bar 7, but it is a soupy, heavy slide. Especially in the Busch and Léner recordings, the glissandos help to give the music a more playful feeling than the later, steadier and more charming renditions, in particular the Lindsay and the Vermeer.

Returning to the commentator's demands for a 'seasick' and 'not uncrazy' version, the Busch comes the closest with its idiosyncratic interpretation in this regard

with its bar-by-bar contrasts, portamento and emphasis on the hairpins. It is the induced seasickness of the merry-go-round, rather than anything more pernicious. The Italiano's version with its sharp accented swells and lack of warmth perhaps comes closer to the surrealists version because of its slower tempo. It is not quick enough to be playful, not warm enough to be graceful, but somewhere uncomfortably in the middle. In contrast, the Lindsay's version with its warmth and grace is an interpretation which suppresses the radical and potentially disruptive elements of the dynamics, and is one of gentle undulation rather than rapid bulging. Perhaps more so than for any passage yet discussed, the interpretation of the dynamics here largely defines the character, rather than merely contributing to it. We now move on to the final example of hairpin swells in the fifth movement. Though appearing regularly, they are no longer linked so closely to thematic identity, but occur as symptomatic of the lyrical and expressive language of this slow movement.

Cavatina, *Adagio molto espressivo*: the contribution of swells to vocality and lyricism

Both Lockwood and Kerman emphasise the vocal nature of the Cavatina movement and by metaphorical extension its lyricism. The former states that it is '…commonly regarded as the most concentrated example of Beethoven's lyricism in the instrumental domain…'[28], whilst Kerman notes, 'The *cavatina* assumes a thoroughly operatic stance. Vocality is more than evoked. It is practically transcribed.'[29] From Beethoven's title it is impossible to escape the importance of vocality as a key metaphor in any discussion of this music. Lockwood goes further to

[28] Lewis Lockwood, 'On the Cavatina of Beethoven's String Quartet in B-flat Major, Opus 130' in eds. Martin Just and Reinhard Wiesend, *Liedstudien:Wolfgang Osthoff zum 60. Geburtstag* (Tutzing: Hans Schneider, 1989), p. 209.
[29] Kerman, *Beethoven Quartets,* p. 196.

suggest an analogy between the operatic context of a Cavatina and its place in the string quartet: 'the Cavatina in many contemporary German operas often provide[s] a serious, deeply felt lyrical utterance…and thus deepens the emotional seriousness of the dramatic action as it moves toward crisis and resolution.'[30] Both discuss the song-inspired simplicity of form of the movement, and Kerman develops the metaphor describing the first violin's melody as a 'hymn'[31]. Hatten engages in the most detailed analysis and goes even further in attempting to probe the expressive depths of this movement. With his analyses of Classical topics and expressive genres, his discussion is replete with metaphorical associations; from 'Chorale-like harmonic progressions and hymnic textures' to discussions of 'serene' genres and '*Empfindsamkeit*' (sentimentality).[32] Rosenblum defines the latter style 'in which the intimate and very moving – sometimes sentimental – expression was the goal', an apt description for the Cavatina.

Initially the vocality and lyricism are largely defined by Beethoven's own title, but also by the melodic nature of much of the material (including accompanimental parts), the slow tempo, the form and *molto espressivo* marking. The swells have a strong relationship with this lyricism, appearing as emotional intensifiers to short lyrical phrases; expanding, broadening or surging for brief passages, characterising the moments where the music seeks to break out from its solemn undertaking. They are often interpreted through rubato in particular, with either forward motion or holding back connoting an intensification at the centre of the swells.

The opening nine-bar phrase (Ex 2.5) contains many hairpin swells, but unlike their application in other movements they often correlate with other components of the musical gestures of the opening phrase.

[30] Lockwood, 'On the Cavatina', p. 210.
[31] Kerman, *Beethoven Quartets*, p. 196.
[32] Hatten, *Musical Meaning*, pp. 207 – 211.

Melodically:

a) there are many repeated instances of lines gently rising and falling in every bar of the opening; the second violin interjections in bars 1 and 3, the first violin melody in bars 2 and 4, a two-bar extended version in bars 5 – 6 and in bars 8 and 9 a rising leap to the Bb before falling eventually to the Eb. Athough not every bar has a swell, these have an explicit correlation with the undulating melodic lines.

b) the bassline also rises and falls in a similarly lyrical fashion, with the circularity of it in bars 8 and 9 typifying the lack of grounding, which is also implied by the repeated swells.

Harmonically:

a) there are often intensifications that correlate with the swells; for instance already in bar 1 the harmony sidesteps through chord VI^7 immediately from the tonic creating a chromatic bassline. A chromatic sidestep occurs at the end of the swell in bar 3 and the two-bar swell in bars 5 – 6 peaks on the diminished 7^{th} chord.

b) In bars 8 - 9 the circularity of the bass line correlates with the swells and Lockwood notes that '...the avoidance of direct V-I motions in the bass at intermediate points of closure is one of the most striking features of this movement'.[33]

Texturally:

a) there is a mixture of slow-moving chords that Hatten describes as hymnic. This is clear in the three lower parts in bars 2, 4 and all parts in bars 5 and 6. Otherwise there is subtle movement in all lines providing a rich lyricism typical of later composers such as Schumann and Mendelssohn.

[33] Lockwood, *On the Cavatina*, p.211.

Rhythmically:

a) the pulse is slow-moving crotchets, but there is frequent quaver movement and, depending on tempo, a sense of flow. The quaver movement of the second violin in bars 1 and 3 correlates with the swells.[34]

Unlike many other dynamic markings in the piece, the possibilities for disruption seem minimal, but the question points more toward how to intensify these phrases, with what expressive techniques and to what degree. The harmonic inflections and melodic shapes are open to subtle nuances of vibrato, dynamic and rubato, or more extreme types of intensification. The observations on texture also open the possibility of integrating all the voices into a homogenous texture, or highlighting the melodic line as distinct the chordal texture.

There is one further swell on the first violin's entry on the final beat of bar 1; an emphasis on a crotchet rather than an entire bar. Here, it suggests a lingering or more unusually the emphasis of an upbeat rather than the downbeat of the melody in bar 2.

[34] Similarly to the swells in bar 7 of the third movement, the placement of the swells varies in editions. Again, Henle is the most precise with the swells in bars 1, 3, 8 and 9 always peaking on the third crotchet beat. In other editions it is more ambiguous; in Peters and Breitkopf (Ex. 2.5) the first bar swell appears to be more symmetrical peaking somewhere between the third and fourth quavers.

Ex. 2.5: Op. 130/v, bars 1 - 15

Between operatic and hymnic: the use of rubato, vibrato and portamento to inflect nuances of vocality

If we are to use Hatten's characterisation of hymnic textures, bars 2 and 4 provide an example of these with their chorale-like crotchet movement in the lower three parts subdued by the *piano* dynamic. In contrast, bars 1 and 3 contain more melismatic lyrical lines, which along with the hairpin swells indicate an expressive operatic opening out. An alternative analogy for the opening four bars is another operatic one; the first violinist carries the vocal line of the aria in bars 2 and 4, whilst bars 1 and 3 are the orchestral accompaniment or introduction.

All of the recordings do acknowledge the swells in terms of dynamic volume to varying degrees, but it is the 'connotative expressive indications'[35] that are of more interest here. Even though all groups play with lyricism and expression there is still a certain amount of variety in what form this takes. As well as the choice of tempo, how rubato, vibrato and portamento are used to manipulate these inflections creates different kinds of lyricism and varying vocal qualities. Within the vocal metaphor are the genre implications of hymnic and operatic, which have quite different connotations and provide a spectrum of the interpretations on offer.[36] An operatic interpretation suggests a degree of freedom, in particular with rubato, expressive and distinctive vibrato use and for the earlier groups more liberal use of portamento. A hymnic interpretation implies a more solemn undertaking and it is the groups with slower tempos, less obvious freedom of rubato and general warmth of vibrato rather than intense expression, that lean towards this.

[35] See fn. 4 in this chapter.

[36] See chapter 3 for discussion of the *sotto voce* marking where the vocal metaphor is also explicit.

Tempo and rubato are closely linked and the former has a significant effect on how the latter is perceived. The Léner and Budapest play with the quickest tempos of any of the groups, and their rubato is quite extreme and feels very free and fluid. This also creates a certain amount of motion rather than stasis or calm, and so rather than solemnity there are operatic surges of emotion. The swells in bars 1 and 3 are played with a very distinctive pushing forward and then holding back of emotion; rather more of a surge than a feeling of expansion. Both groups stretch the last beat of these bars to equal the first two beats in length, showing just how elastic their pulse is. The Léner's rubato is the most extreme, and both do rubato to a lesser extent on the non-swell bars also.

The Busch, Amadeus and Vermeer use distinctive rubato but within a more regular pulse, and to a less radical degree. The rubato, or agogic lingering in some cases here, has a very clear relationship with the swells. They take a slower tempo and have a similar strategy of a pushing forward to the middle of the swell in bars 1 and 3. This creates a more serious and ponderous atmosphere than the sweeping freedom of the Budapest and Léner; shades of operatic freedom in the swell bars, but otherwise with elements of hymnic solemnity in the first violin melody. The Amadeus has opposing strategies for bars 1 and 3, then 8 and 9: in the first two the second violinist pushes forward then pulls back, but the swells in the latter bars are interpreted to take more time in the middle of the bar. This creates forward moving gestures at the opening of the phrase, and relaxed gestures at the end, and shows how hairpin swells could be interpreted as rubato in either direction. Albeit at a slower tempo, the Vermeer has a similar strategy, with bar 3 distinctively moving forward up through the open hairpin and relaxing at the end of the bar. The agogic lingering in the swells at 8 and 9 becomes progressively more indulged in the second bar, and there is a clear lingering at the

centre of the longer swell in bars 5 - 6 also on the F and Ab of the first violin line in bar 6.

The Alban Berg produces very minor inflections, but rather than pushing and pulling, the opening bar feels subtly slower overall than the tempo from bar 2. The Italiano and Lindsay choose very slow tempos, so that the music becomes more meditation than song; the Lindsay almost comes to a complete stop at the end of the first nine bars. Both take different tempos in bar 2 than bar 1; the Italiano has an extreme version of the Alban Berg, with a slower introductory bar, whereas the Lindsay does the opposite by having a slower basic tempo from bar 2. Both take considerable time over the first violinist's mini swell on the first Bb into bar 2. Though there is rubato in these groups, it is less noticeable as a pushing and pulling effect because the basic pulse is so slow, making the music feel almost timeless; motion is kept to a minimum. These slower versions emphasise the hymnic and solemn nature of the music with less space for operatic surges.

Whilst the groups all deploy some rubato, it is that of the Busch, Amadeus and Vermeer which most seems to correlate with a push and pull of the swells in bars 1 and 3 and agogic lingering in bars 8 and 9. The freedom of rubato of the Budapest and Léner's approach can be seen as operatic, a genre in which more freedom of flexible pulse is generally permitted than in pure instrumental music; the melodic line is allowed to surge or hold back depending on expressive factors. The Busch, Amadeus and Vermeer's approach similarly has some freedom, but to a more regulated and limited extent. By contrast, the Alban Berg, Italiano and Lindsay, especially the latter two with their extremely slow tempos, have a more meditative, even sacred approach that correlates more with the hymnic readings rather than the operatic.

Vibrato is a vital component of vocal technique as it is with string playing and it is important to the lyric identity of each group. One feature that pushes certain aspects

of most groups' interpretation into a more operatic rather than hymnic context is their use of vibrato. Hymnic suggests a purity of tone in chordal textures implying more limited and less overtly expressive vibrato. The latter is more of a sign of individualistic identity, much as an operatic diva would have. There are groups which have particular vibrato identities which are quite specific, normally dominated by the first violinist, and the opening of the Cavatina also provides a clear comparison between the first and second violinists with their alternating primacy in the first four bars. The relationship between vibrato intensity and swells is more important for some groups than others.

Both violinists of the Léner produce a consistently wide and slow vibrato. In contrast, the Budapest uses a very narrow and fast style of vibrato, fairly consistent on each note and similar between the violins. For both quartets, the expressive work of shaping the swells and phrases, however, is not achieved through variation in vibrato, but more by rubato as discussed earlier. Instead their vibrato styles establish their type of lyricism; both expressive but the Léner broader and richer and the Budapest more intense.

The Busch is like a combination between the Budapest and the Léner; the first violinist has a narrow, fast and intense sounding vibrato in contrast to the second violinist's slower, wider and sometimes more limited vibrato. The former creates a shimmer effect in comparison to the latter which sounds much less overtly expressive. There are subtle variations in vibrato use in the swells for both players; for example the second violinist quickens the vibrato, intensifying it, on the third quaver of bar 1, before it slows down on the fourth quaver, helping to create some shape through the swell. The first violinist also signifies the mini swell on the final beat of bar 1 with a wider vibrato than that which commences in bar 2 and continues through the melodic line. The difference in vibrato speeds is most striking in bars 8 and 9 where the violins

imitate each other with their very different styles; the first violinist sounding passionate, emotional and operatic, to mirror the second violinist's limited vibrato creating a more solemn, hymnic impression.

In a similar vein, but with the styles reversed, the first violinist of the Amadeus produces a slow and wide vibrato compared to the fast and narrow vibrato of the second violinist. The second violinist also subtly varies the vibrato to shape a phrase, whereas the first violinist's is generally consistent; for example in bars 1 and 3, each quaver has a burst of narrow and quick vibrato in the middle of each note, until the climax of the swell, which they choose as the fifth quaver rather than the third or fourth.[37] On this note the vibrato is both wider and more continuous, creating a moment of greater expressivity. This difference in vibrato styles makes the second violin interjections more overtly intense (and these are the bars that contain the swells), and the first violin line calmer but with a broad sound. Here there are two opera singers with different characteristics.

The other recordings all exhibit vibratos that could be considered warm: a medium version between the very fast and narrow, and slow and wide vibratos of the Budapest and Léner. Because these uses of vibrato are at less extreme ends of the spectrum they do not draw attention to the oscillations so readily, but instead create general warmth of sound. These groups also vary the vibrato to greater or lesser degrees, but generally do so to support phrasing and sometimes in a correlative relationship with the swells. For example the first violinist in the Italiano slightly intensifies the vibrato (by speeding it up and widening very slightly) on the Ab and Bb in bar 2 as the melodic line rises. This creates a feeling of utterance; that these two notes (or words) are more important than the previous, and thereby invoking the vocal metaphor. The second violin interjections focus on increasing and decreasing volume,

[37] See fn. 34 in this chapter about editions.

but are consistent in warmth of sound by maintaining width and speed of vibrato up and down its swells. All this takes place within a warm, but solemn character, and the dynamics provide just a hint of expansion beyond this, that quickly returns.

The second violinist of the Alban Berg begins the opening G with no audible vibrato and gradually increases it to the point of having the widest and fastest vibrato on the Ab in the first bar, thereby displaying a clear correlation with the swell. The first violinist has a more distinctive fast and narrow vibrato, which gives a breathy intensity due to the connection of a softer sound with the bow, but an intense vibrato. In a vocal analogy, it is as if the protagonist were saying something intensely profound, but in a whisper. The first violinist also widens the vibrato whilst maintaining the speed through the larger swell in bars 5 – 6. This use of vibrato is more operatic than the Italiano despite taking place within soft dynamics.

The Lindsay chooses a vibrato that is on the slower and wider half of the spectrum, producing a particularly rich sound. Partly due to the slow tempo the vibrato tends to bloom on each note, especially in the second violinist's opening interjections, whilst the first violinist produces a more continuous vibrato; this helps to create a longer line for the first violinist whilst the second violinist's swells have less of a sense of forward momentum. The first violinist creates a very subtle effect on the long G in bar 2 where the vibrato changes from slow and wide to marginally faster and narrower, whilst simultaneously making a slight diminuendo. As with the correlation between the first violinist of the Alban Berg's soft dynamic and intense vibrato, the moment of profundity is created here by decrease in volume with increase in vibrato intensity; two gestures going in opposite directions. The voice falters as it gets to the most intense moment of expression; again some operatic drama, but within the slow and solemn hymnic atmosphere.

The Vermeer tells a great deal of the musical narrative through its varied use of vibrato, with barely two notes having exactly the same type in conjunction. For example, the first G in bar 2 for the first violin has a varied vibrato speed in itself going from slow and wide to narrow and fast throughout the phrase (like the Lindsay), a strategy also repeated in bar 4 on the F, with the smaller length notes having faster and narrower vibrato. The second violin interjections have a generally more intense and fast vibrato than the first violin, making these bars more overtly expressive, whilst emphasising the calm in the first violin line; this suggests a conflict between the operatic and the hymnic. Then over the longer swell the first violinist widens the vibrato when climbing the melodic line, and especially onto the Ab which gives a sobbing effect to this diminished harmony.

The focus has been on the two violin lines which are the most clearly audible as they are at the top of the texture, so it is possible to describe the nature of the oscillations. The lower instruments provide primarily harmonic accompaniment, and so the vibrato is perceived more through the general warmth of sound, rather than being able to discern particular speeds or widths. If they were more distinctive, they would protrude from the texture. Although there are almost limitless observations that could be made about vibrato in such a movement, it will suffice to say that groups use vibrato for different expressive ends. In some groups (in particular the Léner and Budapest) the vibrato is a distinctive element of the players' identities and does not vary with specific musical phrasing. For others, and most clearly the Vermeer, vibrato is an expressive tool that is an essential part of the dynamics and phrasing. Rather than placing a higher value on either approach, it can be said that the former retains the distinctive identity of the players, whilst the latter approach is more malleable to the constantly varying

musical elements.[38] Vibrato's relationship to the swells is clearer for some groups than for others, but most often the vibrato widens and broadens through the height of the swells. For the second violinists of the Vermeer and Amadeus, the expressive use of vibrato which develops intensity through the swells in bars 1 and 3, adds to the sense that these bars are operatic. It also provides contrast to the calm of the first violinist's initial utterances in bars 2 and 4. In this context more intense vibrato of the faster variety, wide or narrow, often creates a more operatic impression, whilst the warmer, less distinctive vibrato adds to the solemn, more hymnic approach.

Portamento is a crucial part of the lyrical playing style for some of the groups. With the exception of the Vermeer, it is used sparingly in all quartets from the Amadeus to the present. However, in the three earliest recordings portamento is used extensively and at times has a correlative relationship with the swells. Use of portamento points to a more operatic style of vocality, emphasising the relationship between special pitches in a melodic line and heightening expressivity as well as being a signifier for sentimentality; again further from the solemn hymnic metaphor.

The Léner produces the most distinctively heavy slides through a technique where the bow maintains pressure during the slowed-down shift. The players of this group also usually *crescendo* through the slide drawing attention to itself. It is the special emphasis on the shift that highlights the relationship between two notes and forms a lyrical bond. The Budapest and Busch also use slides that are distinctive, less heavy, but similarly operatic nonetheless. The Vermeer, the only recent group which occasionally employs glissandos, use them much more subtly; for instance in bar 4 between the Ab and G in the first violin there is just enough to create an expressive tear.

[38] See Daniel Leech-Wilkinson, *Changing Sound of Music: Approaches to Studying Recorded Musical Performances* (London: Charm, 2009), chapter 5, paragraphs 19 – 34, http://www.charm.rhul.ac.uk/studies/chapters/chap5.html. This provides a good summary of the discussions surrounding violinists' vibrato in the recording era.

The first violinist produces a heavier glissando from the Bb to the G in bar 8, which then becomes a particularly sentimental moment, and helps to intensify the centre of the swell. Its usage is less overtly operatic due to its subtle nature; more lieder than opera.

The Léner's glissandos often correlate with the middle of a swell; the second violinist slides to a harmonic between the B and D in bar 3 in a throwaway gesture of charm, rather than soulful intensification that most of the groups show. Similarly, the second violinist slides through the perfect fifth on the first beat of bar 6 very heavily, briefly taking attention away from the first violin and again at the height of a swell. The Budapest's glissandos are mostly dictated by large intervals, with clear slides between the first two beats of bar 5 in the first violin, and between the first two quavers of bar 6 in the second violin, all intervals of a major third or more. With a clearer relationship to a swell is the slide between the Bb and G at the end of bar 1 in the first violin line. This has the effect of drawing attention to the large leap on this beat, and in combination with the lengthy agogic lingering creates a moment of heightened expressivity. The first violinist of the Lindsay, though not using slides elsewhere, also produces a heavy shift over this swell, but comes away in dynamic before the shift, creating a very tender moment.

The Busch Quartet produces some similar glissandos to the Budapest, but tends to do so on intervals of a third or less, with the first violinist often engaging in slides between semitones. The first violinist slides from the G into the Ab in bar 2, such that it emerges out of the intense vibrato rather than constituting a separate note, and emphasises the closeness of this semitone. The second violinist slides down the major third in bar 3 from C down to Ab, and the first violinist slides between the Bb and D in bar 5, but there are no glissandos on intervals larger than a third, and this shows that the heavy slides on larger intervals are more common in the earliest two recordings.

Clearly groups that use portamento invoke an operatic metaphor much more than a hymnic one with an emphasis on overt expression and sentimentality rather than solemnity. Here though, it appears to have more of a relationship to historic performance style than a specific interpretation of this movement, as most of the portamentos are restricted to the three earliest recordings, with only the Vermeer providing some subtle exceptions.

The parameters focussed on here; tempo, rubato, vibrato and portamento are an important part of any lyrical movement's interpretation, and they are elements largely unnotated in the score, and so are highly dependent on a group's identity and performance style. Their correlation with performance indications, specifically with the hairpin swells, is more obvious for some groups than others, and there appears to be a historical dimension to this. The post-war recordings tend to have a clearer relationship between rubato, vibrato and swell markings, whilst the earlier recordings have a freer relationship with rubato and a more distinctive vibrato identity. They also have the added expressive parameter of portamento. This is not to say that expressive freedom is lost with the post-war recordings, but that it does seem to be regulated more by performance indications including the swells, and there is less freedom to react to other gestural components of the melody, harmony or rhythm without specific performance indications.

The framing metaphors of operatic and hymnic provide a way to parse the different nuances between the groups' lyrical performance styles. The swells often point toward more operatic gestures such as intensification of rubato, vibrato and occasional portamento in correlation with the swells, whereas less overtly expressive rubato and vibrato and the absence of portamentos often highlights the more solemn hymnic aspects.

This chapter has surveyed more subtle and nuanced reactions to unusual dynamic markings than those in chapter 1; though having the potential for significant disruption, most groups seek ways to effect the hairpin swells that have either playful, comedic or lyrical connotations. Rather than emphasising extreme disruptions that might lead to discontinuities of material or dissociating phrases, the disruptions are usually hinted at, producing the more playful and subtle versions seen here. The Italiano's highly comedic approach in the second movement does produce striking contrast on the bars with swells to the material surrounding it, and its surreal approach to the swells in the fourth movement does suggest a more disruptive approach. Similarly the Busch's interpretation of the fourth movement highlights the contrasts created by the dynamics. The fact that the other groups find subtler ways to nuance the dynamics perhaps also suggests the lesser seriousness of the second, third and forth movements in contrast to the first, whilst the swells in the fifth are used to emphasise the deeply held emotional content of the fifth.

As in the previous chapter, the question of the interpretation of the hairpin swells arises, and once again the earlier quartets, especially the Léner, approach it less as a dynamic and more as nuance through other means. However, the Busch do clearly interpret them with dynamic changes. This suggests that the interpretation of a hairpin as intensity and often rubato began to change to a dynamic at some point during the 1930s. The post-war quartets tend to universally interpret it as *some* kind of dynamic change whilst also manipulating other expressive elements, especially vibrato, meaning that they may have interpreted hairpins also as intensity, but that by this point dynamics were the most obvious element of that.

Chapter 3 turns the focus to longer passages of music, where prolonged dynamic stasis is the unusual factor rather than localised disruptions.

Chapter 3: Expressive Characterisations of Longer Passages: Suppression and Stasis, Descriptive Terms and Extremes

Whilst chapters 2 and 3 looked at the issues of specific and localised dynamic markings, this chapter considers more general expressive terms and dynamics that affect longer passages of music. This also moves from a detailed micro-analysis that focused in detail on specific bars or short phrases, to discussions of the characterisations of longer sections. These sections are still strongly influenced by unusual dynamic or expressive markings. Due to the length of the sections, important musical aspects of the entire passages are considered in general terms, rather than the specificity of the gestural components used in chapters 1 and 2.

Suppression and stasis as modes of expression: *sempre piano* in the first movement's development

This section considers the development section of the first movement from the upbeat of bar 94 to bar 132 (see Ex. 3.1).[1] The section draws together some elements from chapter 1 and looks at how the groups' interpretations of dynamics at the beginning of the movement affect their interpretative decisions here. In this way there is a correlation with how analysts see the transformation of themes in a development section of sonata form. For example, Brodbeck and Platoff state, 'If the motivic materials of the development are all familiar, their character is significantly different.'[2] This kind of statement is ripe for an analysis of performance choices.

[1] The problematic issue of the moment of recapitulation is highlighted in David L. Brodbeck and J. Platoff, 'Dissociation and Integration: The First Movement of Beethoven's Op. 130', in *19th Century Music*, vol. 7 no. 2 (Autumn, 1983), p. 158. Hatten also notes how 'Development…spills across the putative boundary of the recapitulation' in Robert Hatten, *Musical Meaning in Beethoven: Markedness, Correlation, and Interpretation* (Bloomington: Indiana University Press, 1994), p. 138.

[2] Brodbeck and Platoff, 'Dissociation and Integration', p. 158.

The development begins with the opening theme in the cello, harmonised by the second violin and viola. Dynamically it uses exactly the same strategy as the opening, with a hairpin *crescendo* to *piano*. Rather than continuing as the opening, however, the music quickly reverts to one bar of the *Allegro* fanfare and running semi-quavers. Here the roles are reversed (the fanfare in the first violin and the semi-quavers in the second violin), which pre-figures the instrumentation from bar 104, but the dynamic of the entire fanfare is now *pp* rather than split as earlier. This process is repeated in order to modulate to D major, 'a tonal dissociation' described as 'violent' by Kerman.[3] There is another brief *Adagio* in bars 101 – 103 which establishes the sighing motif (derived from the opening two notes of the movement), which becomes the engine for the subsequent twenty-eight bar passage. The alternation of *Adagio* and *Allegro* is still present - the fragments have not yet been thematically integrated – but the dynamics have all been reduced to the softest expression. The process of integration is strikingly apparent in the next section.

[3] Kerman, *Beethoven Quartets*, p. 311.

Ex. 3.1: Op. 130/i, bars 92 - 132

This passage has warranted a great deal of attention from the analysts: 'it contains the most relaxed music in the movement and has almost the air of being a kind of lyrical interlude…[and] wanders delightfully.'[4] Hatten illuminates further:

> In the remarkable integrative passage that follows, fragments from each theme are woven into a tapestry that, for all its hypnotic consistency of texture, remains highly unstable….Throughout this section traditional developmental procedures (fragmentation, modulation) meet stylistic expectations, but only extraordinary integrative strategies meet the challenge of the thematic premise.[5]

After the fragmentary and interruptive nature of the exposition, these twenty-eight bars are the most dynamically and texturally stable in the movement, although under the surface there remains instability as Hatten notes. Brodbeck and Platoff state: 'For this reason it sounds strange, at once dreamy and remote: our inner sense of style tells us that the development should be more, not less, dynamic than the exposition.'[6] Kerman goes further, 'this development remains the most eccentric Beethoven ever wrote, and doubtless the most disruptive contrast he ever used in a sonata-allegro movement…the entire development exists in a trance, as though somehow another movement has got going without our quite noticing how.'[7] With metaphors like 'hypnotic', 'dreamy, 'remote' and 'trancelike' these writers are all tapping into a notion of the music side-stepping into another world, in stark contrast to the usually more dramatic struggle that accompanies Beethovenian development sections.

Karol Berger has explored the shifting of musical discourse to different ontological levels in Beethoven's music between the 'real' and the 'imaginary', and

---

[4] Philip Radcliffe, *Beethoven's String Quartets* (Cambridge: Cambridge University Press, 1978), p. 125.
[5] Hatten, *Musical Meaning,* pp. 137 - 138.
[6] Brodbeck and Platoff, 'Dissociation and Integration', p. 158.
[7] Kerman, *Beethoven Quartets*, p. 312.

finds numerous examples in the early and late style.[8] Though he does not specifically write about this section, much of what he writes could apply: 'The most fundamental feature of the "other world" is that in it the normal laws governing musical time and space, the sense of directed motion, and the concomitant sense of change are suspended.' The unusual stability of texture and dynamics correlates with this suspension.[9] He goes further: 'The alternate world is not one of action and change, but of contemplation of the eternal and timeless...the contrast between the two worlds depends on the contrast between two sharply differentiated but familiar kinds of music.'[10] The familiarity here comes from the thematic integration that Hatten notes, but the contextual elements that provide the stability create the sharp differentiation.[11] The core metaphor of alternate world suggests different possibilities; on the one hand the trancelike, dreamy and hypnotic versions, but on the other a more lyrical human world in contrast to the frenetic activity of the rest of the movement. The interpretations of the groups suggest both are possible.

Melodically and thematically:

a) the passage uses the fanfare theme subsumed into the *sempre piano* dynamic, initially in the first violin, but also in the cello from bar 113;
b) the other material is a new lyrical fragment, first heard in the cello in bar 106, possibly derived from the lyrical second subject and, with the hairpin swells, contains the only other dynamic indication of the section. This is the theme that seems to want to break out of the s*empre p*.

[8] Karol Berger, 'Beethoven and the Aesthetic State', in *Beethoven Forum 7,* (1999), p. 17 – 44.
[9] Berger, 'Aesthetic State', p. 31.
[10] Berger, 'Aesthetic State', p. 32.
[11] See quote in fn. 2.

Texturally:

a) it is very stable as noted by Hatten. The inner voices provide a rhythmic ostinato derived from the *Adagio* theme, whilst the first violin and cello have a dialogue using the themes above. This is consistent throughout the passage;
b) there are snippets of the *Allegro* theme that puncture the texture, first appearing in bar 105, with a last appearance in bar 115 before it disappears.

Harmonically:

a) the passage starts in D major and hovers between this and G major before a surprising turn to C minor in bar 123, then via Eb major as IV to Bb in bar 130, leading to a return to the tonic in bar 132. There are subtle surprising nuances such as the move to C minor and Eb, but for a development this is still not particularly radical.

Rhythmically:

a) the ostinato in the inner voices provides consistent but not agitated movement on every crotchet;
b) the fanfare retains its subtle rhythmic momentum to the downbeat, though in the soft dynamic. The new lyrical theme builds tension through its minims before releasing into a flow of quavers.

The nature of the articulation:

a) is an area open to interpretation by the performers. The fanfare has articulate elements from its use in the opening, whilst the new lyrical theme is very legato with its long slurs. The ostinato is open to being articulate or smooth, though the second and fourth beats are always shorter notes (only a quaver).

All this activity is subsumed into *sempre p,* a marking that Beethoven had used many times before, but rarely for such a long passage, and in a way that appears to characterise an entire section. The marking here seems to go far beyond a simple dynamic choice for performers. It strongly influences the characterisation of the passage and affects whether it takes the music to another world that the writers above would expect. The question is whether to change the character of the thematic material, so that it loses the energy of earlier renditions and has a softer articulation (in particular the fanfare). In addition, should there be any change in the intensity when the music moves through different keys, or should the s*empre p* suggest the suppression of any reaction to the harmonic movement?

There are a range of interpretations, only some of which correlate with this musical shift. Those that do so take the dynamic to radically soft levels and in addition, transform the character of the fanfare motif. Others retain earlier characterisations, and so the familiarity retains primacy over the differentiation, therefore remaining in the world already established.

Sempre p has unusual implications here. It is for such a long passage of music, and was a marking rarely used for such long stretches of music by Beethoven or his contemporaries. The likelihood is that Beethoven meant this whole passage to be treated in a *piano* character, and that any variations within this would have to be less significant than the subsequent *dimuendo* and *crescendo* between bars 128 and 132. Without it he might have expected performers otherwise to either grow, or vary the dynamics through the nature of the material (for instance when the harmony changes), and that he was specifically legislating against this. This kind of uniformity unites a whole section in a movement that is otherwise so fragmentary. It also transforms the nature of the themes that in their previous iterations had a different dynamic context.

The interpretation that most strikingly steps into another world is the Lindsay's account. The quartet takes the implications *sempre p* to the most radical levels. Although the *Adagio* tempo in bar 94 is similar to the opening, it makes more of the *crescendo* to *piano*, and in particular much more of the latter than it did in bar 2, so as to signal the accentuation of soft dynamics approaching. The subsequent *Allegro* is still rapid, particularly in the semi-quavers, but the articulation of the fanfare is much softer and more legato, which signals how it will be played from bar 104. This is a distinct character change, and shows it transformed from the initial renditions, which were significantly more articulate. The *espressivo* in bars 101 – 103 is acknowledged with warm sound and vibrato from all instruments. This serves to make the soft dynamic level in bar 104 more contrasting and distinct. In addition, the second violin and viola play their undulating figure very serenely: soft, legato and without vibrato. This latter performance choice is an especially bold and unusual decision and creates a tone colour distinct from the rest of the movement. In a performance style characterised by continuous use of vibrato, which most of the groups have, a clear absence of vibrato signals this shift of musical discourse.

Along with a steadier tempo (average of crotchet = 114 rather than 128 of the opening *Allegro*), this all contributes to a distinctive otherworldly feeling. Certainly this is a new place not visited before in this movement, and the mood is sustained by a suppression of dynamic in the cello swells (so that it sounds distant), as well as the much gentler articulation and dynamic in the first violin's fanfare themes. Topically it has been transformed from a fanfare to something much more intimate and softly lyrical. The *non ligato* semi-quavers that appear in the second violin and once in the viola are also very much suppressed, so that they barely puncture the texture. The spell is only broken with a slight, but noticeable, *ritardando* in bar 122 which signals the

change of tonality, the first violin taking over the cello's lyrical theme, and the approach of the outburst into a *forte* dynamic again.

The closest interpretation to this is the Vermeer's, which takes a similar approach in many respects, but whose rendition errs more towards the lyrical and human rather than the otherworldly. In the preparatory passage from bar 94 the dynamics are subdued with less *crescendo* than the Lindsay's. Likewise, the *Allegro* in bar 96 is more subdued in tempo and the first violinist softens the articulation of the fanfare theme significantly, marking a similar transition from a fanfare to lyricsim. The dynamic here is slightly louder than the Lindsay's version of *pp*. The *espressivo* in bars 100 – 103 is softer and more subdued than the Lindsay's, so that bar 104 feels like a continuation rather than a contrast. Furthermore, a significant difference is that the inner voices characterise their sighing figure much more lyrically than the Lindsay does, in particular with the use of expressive vibrato. This is the central reason why this sounds less ethereal, but more lyrical and human, but still constitutes an alternate world. Whilst there is a transformation of the fanfare into a lyrical fragment in the first violin, there is still some energy in the articulation as a remnant of the fanfare character. The cello line is also played more in the manner of a soloist, projecting out of the texture and giving more of a sense of presence rather than distance. A brief moment of intensification occurs when the second violin line becomes particularly warm and expressive in bars 119 – 121, lengthening the quaver on the second and fourth beats, and briefly coming out of the texture. This premeditates the change in harmony in bar 122 and there are also significant *ritardandos* into bars 123 and 129 signalling the harmonic twists initially, and then the re-transition back into *forte* and the semiquaver runs.

The Alban Berg recording is further away from both the Lindsay and Vermeer; it retains a distinct sense of energy throughout the section from bar 104. This energy

keeps the character closer to the world of the rest of the movement, and also connects the themes in the development more clearly to their earlier renditions. The *Allegro* sections in bar 96 and 100 are more subdued with softer articulation than with the Vermeer and Lindsay. However, the fanfare returns to its energetic roots in the first violin line from bar 105 and retains more of the articulation of this character. The inner voices create a great deal of momentum and articulation by gently accenting the chord changes to give them clarity. This feels much more like a soft celebration of the thematic material than the lyrical departure and otherworldly renditions of the first two groups. The cello line creates contrast with its legato, soaring melody, but does not try to suppress the dynamic, and once the violin takes over this line in bar 123, the volume is certainly not restrained.

All three of these interpretations respect the dynamics, (perhaps the Alban Berg leaves the *sempre p* earlier than the others), but come to quite different conclusions. The Lindsay is the most distinct and emphasises the extraordinariness of this passage by taking the dynamics to the extremes in terms of character as well as volume. The Vermeer successfully brings out a touching lyricism, whilst the Alban Berg's decision to retain the character of the themes from the exposition downplays the potential to go to an alternate world.

The Italiano's realisation has many similarities with the Alban Berg's; the initial *Allegros* are still quite spirited, and from bar 104, the tempos are similar, the energy displayed in the inner parts alike (slight accents to provide momentum), and the fanfare retains the articulate character of the opening. The group sustains the *sempre p* character more clearly, partly because the inner parts are warmer with vibrato than the Alban Berg's, and because the first violinist restrains the downbeat of the fanfare theme. The Alban Berg's first violinist plays with intense vibrato on the downbeats, puncturing through the *sempre p* atmosphere. The Italiano's interpretation contains a clear

emphasis on the hushed nature of the *sempre p*, but because the fanfare retains the energy and articulation from the opening, and maintains energy in the inner parts, this very much veers toward the human and earthly and lacks the otherworldly quality that the Lindsay achieves.

The Amadeus can be categorised likewise, even though it lacks much of the warmth that the Italiano achieves. Bar 94 largely reflects their strategy at the opening, with slight gaps to prepare the *subito pianos* with speed and energy in the *pp Allegros.* Bar 104 is played quickly, correlating with its opening *Allegro* tempo, and whilst the inner parts are very soft, they have distinctive accents and urgency, adding to the sense of forward momentum. The first violin and cello lines are played in the manner of a soloist, and the character of the fanfare retains much of the energy of the opening. There is a similar accent to the Alban Berg's on the downbeat of the fanfares, where the first violinist plays with characteristically wide vibrato. Overall, this version is far away from the otherworldly nature of the Lindsay's, and is a good example of where the dynamics are observed in terms of volume levels, but not interpreted to change the character.

The Busch's interpretation takes quite a nuanced approach. In bar 94, it plays similarly to the opening, but marks less timbral contrast on the *subito pianos.* The *Allegros* in *pp* are comparable to the Vermeer and the Lindsay's versions with their relaxed tempo and character, and there are clear *ritardandos*, making them seem like an utterance that almost immediately falters. The *espressivo* in bar 100 is played exceedingly so, with a significant level of volume, warm sound, and portamentos in both violins from their respective intervals of a fifth. Bar 104 is played steadily (similar to their opening *Allegro*) and the inner parts are characterised by warmth, rather than by the articulation and accents that create the momentum in the three previous recordings discussed. The fanfare theme at bar 105 is much more subdued than the opening, but

the quavers in it are still short, and there is definitely something of a transformation of character. The cello line is played as a solo, and when the first violin takes this over in bar 123, the effect is very expressive with an audible shift and expressive vibrato, showing that they believe this to be the primary voice. What is most striking about the passage from bar 104 is that the character is largely more subdued, and this is how they interpret the *sempre p*, but the actual dynamic levels vary quite a lot within the section, so there is not the feeling of suppression of dynamics apparent in many of the other recordings. This is treating the dynamics from the opposite perspective to the Amadeus, realising them as largely character rather than volume-related.

The two earliest recordings share one very distinctive characteristic; they both push forward in the passage from bar 104, especially the Léner, which ends up at an extraordinarily fast tempo. In both cases the inner voices appear to be leading the tempo and pushing it forward. Both ensembles give a breathless account of the passage, which is a world away from the steadier and more ethereal account given by the Lindsay. In terms of character, both recordings are lively and bouncy, creating energy and drama rather than subduing it. The volume levels are quite contained, but the players do not interpret the s*empre p* to mean a more subdued character; in fact quite the opposite.

The alternate world metaphor is most clearly characterised by the Lindsay and Vermeer versions; they have taken the music away from the frenetic nature of the exposition primarily through the characterisation of the inner voices and the transformation of the fanfare motif. Other versions create a more human vision like the Vermeer, but maintain a closer connection to the world of the rest of the movement despite softer dynamics, such as the Alban Berg, Italiano and Amadeus. The Busch provides a subdued character change rather than a dynamic alteration, whilst the

Budapest and Léner take the opposite approach and let the section speed along in a similar vein to the *Allegros* in the exposition.

Descriptive expressive terms: *Sotto Voce* and *Beklemmt* in the Cavatina

As noted by Treitler in the introduction, descriptive markings become very important in Beethoven's late quartets, along with other more nuanced dynamic markings.[12] It is as if by this point, Beethoven had decided that *fortes* and *pianos* of various degrees were not enough to notate the increasing palette of expressive markings that he wished to convey. Because of its rarity, and the distinctive characteristics of the section to which it applies, the *Beklemmt* marking receives more attention from the analysts than the *sotto voce* does, but the markings are potentially connected.

The vocality of this movement was discussed in chapter 2, and these markings can emphasise different aspects of this metaphor. Hatten describes how the *sotto voce* marking contributes to an 'interpretation of reassurance' at the opening of the movement.[13] He then devotes a separate section to 'The *Beklemmt* Interlude' which is in stark contrast: 'The agitated vocal recitative' is 'almost a baring of the soul…with its gasping bits of melodic utterance.'[14] In a similar vein to descriptions above of the development of the first movement, Chua uses language to describe the separateness of the *Beklemmt* section: '…the Cavatina, which has at its core an excursion into a different world…This emotional and melodic contrast points to a structural dislocation in which the centre does not connect up with the rest of the song.'[15] Again, this applies to Berger's notion of changing to a different ontological level, whilst retaining thematic

[12] See fn. 9 in the Introduction.
[13] Hatten, *Musical Meaning*, p. 217.
[14] Hatten, *Musical Meaning*, p. 219.
[15] Chua, *The "Galitzin" Quartets*, p. 193.

links to the rest of the movement.[16] Unsurprisingly these analysts are engaged primarily with how the *Beklemmt* section fits into the formal structure of the movement, but their translations of the word give clues to their idealised performances: 'constricted, uneasy, anguish'.[17] These writers all draw attention to the separateness of the *Beklemmt* section.

Moments of *sotto voce* appear quite regularly through the late quartets, and since Beethoven had a range of dynamics available (from *pp* through to *ff* including *mezzo* dynamics), a strong possible interpretation is of a tone colour rather than a specific dynamic. They usually appear at intimate moments of particular pathos, and so a change in timbre, for example a softer timbre, seems a likely interpretation here.

Sotto voce

Sotto voce appears in all the slow movements of the late quartets, though only in the Cavatina does it re-occur multiple times, at bars 1 (Ex. 2.5), 23 and 50 (Ex. 3.2). It is not clear whether this means that the marking lapses at various points, as there is no *ma sempre* to explicitly define it as continuous, or whether Beethoven wanted the whole movement to be subject to this marking. The groups have differing interpretations on this point, with some groups emphasising something at these specific moments, with others just taking it as a general characteristic for the movement.

Ex. 3.2: Op. 130/v, bars 47 - 53

[16] How the first violin part in the *Beklemmt* is related to thematic material in the rest of the movement is discussed in Hatten, *Musical Meaning*, p. 220.

[17] Chua, *The "Galitzin" Quartets*, p. 193. 'Anguished' is echoed in Hatten, *Musical Meaning,* p. 207.

Literally speaking, *sotto voce* means 'under the voice', and as noted by Frederick Neumann was used by Classical composers meaning 'less than average loudness.'[18] He also notes that the term is 'vague', but that Mozart and Haydn used it to mean louder than *piano* when in an ensemble piece; the principal voice would have the marking with the accompanimental voices being *p* or *pp*. However, here the marking is for all voices and since *p* appears in the following bar seems to indicate something more than simply a prosaic dynamic volume. With the title Cavatina and the marking of *Adagio molto espressivo*, there is an implication of something made more profound by the utterance being *under the voice*, and that the term contributes to the seriousness and emotional character of the movement. Miriam Sheer also notes that in the late period, 'Beethoven resorts more to the use of verbal characterisations related to moods associated with soft dynamics.'[19] The analogy of being under the voice suggests more than just being soft, but of a hushed or even whispered quality. Certainly, this is borne out by many of the groups' interpretations which often create a greater profundity of lyrical language as suggested by the marking. In some cases there is even a literal faltering of the voice.

The Busch gives one of the most overtly expressive performances of the Cavatina, both ravishing and sentimental, and is particularly striking for the first violinist's intense vibrato and emotional playing. This might imply that the *sotto voce* is largely ignored (and certainly the dynamics often become louder than a literal interpretation of them might warrant), but they do clearly acknowledge something at the critical junctures where *sotto voce* appears. For example, the opening is played very *espressivo* with extremely narrow, fast and intense vibrato in the first violin, but

[18] Frederick Neumann, *Performance Practices of the Seventeenth and Eighteenth Centuries* (New York: Schirmer, 1993), p. 171.
[19] Miriam Sheer, 'Dynamics in Beethoven's Late Works: A New Profile', in *The Journal of Musicology,* vol. 16, no. 3 (Summer, 1998), p. 363.

simultaneously in a very hushed manner. As if to confirm this, the second rendition of the opening melody from the upbeat to bar 11 is played at a greater volume and up the G-string in the first violin, implying that here it is no longer *sotto voce.* Bars 23 and 50 where the marking returns are both very hushed, but still *espressivo* nevertheless. The expressive language at these moments is characterised by the seemingly contradictory elements of great emotion and soft dynamics, but it is precisely the combination of these attributes that make these moments more profound.

By contrast, the Amadeus gives a rendition that is always beautiful and singing, but a sense of profundity implied by the *sotto voce* is largely absent. The metaphors of being hushed or whispered are negated by the consistently wide vibrato of the first violinist, which suggests an open and clear voice, rather than being under the voice. The first violinist of the Léner is similarly dominated by a wide vibrato and clear and present sound. However, for the second instance of s*otto voce* in bar 23 the dynamic level is reduced more than at any previous point and the vibrato restrained. Likewise, when the first violin re-enters in bar 25, there is a rare moment when it plays very softly with much more limited width of vibrato. With a similarly clear presence in the first violin, but a narrower and more shimmering vibrato the Budapest takes a similar approach, with the quietest moments occurring at bars 23 and 25.

The Italiano has a different approach for creating a *sotto voce* atmosphere based on the sound quality. It produces warm vibratos that blend well together, but is not distinctive in contrast to the intense vibrato of the first violinist of the Busch, and the wide vibrato of that of the Amadeus. The first violin line is very well integrated into the chordal texture of the other parts; for other groups the line is more distinct from the other instruments, as with a solo voice and accompaniment. Other features are the hushed nature of the first beat of bar 2 in the first violin (integrating the solo note into the chord) and a general sense of de-emphasising the beginnings and ends of bars. The

sotto voce effect is more generalised than the Busch, as bar 11 is similar to the opening, as is bar 23 to bar 32, perhaps suggesting they take the marking to mean the whole of the movement.

In contrast to the choral nature of the Italiano, the Lindsay emphasises the first violin melody's distinction from the lower voices. This recording feels noble and stately because of the extremely slow tempo, and the singing nature of the first violin line. The hushed quality is mainly achieved by the second violinist, particularly effectively in bars 23 and 32, which are prepared by a *ritardando* (a common trait of the Lindsay's approach to *subito pianos*). It seems that the hushed quality of a *sotto voce* is the concern of the lower three voices, which allows the more operatic first violin to sing above the texture.

Both the Vermeer and the Alban Berg take the metaphor of 'under the voice' and attempt to make it explicit. This is particularly effective in the first violin line of the Vermeer, where it often backs away from the top of a phrase. It is as though the voice is articulating something very beautiful, but almost cracks under the profundity of the expression. For example, the first violin backs away at the ends of bars 2 and 4 (as if it is barely uttered), and again in bar 7 for the leap of the fifth. By contrast, the second violin line is always clear and present, perhaps setting up the contrast with the first violin. The general atmosphere is also not so hushed, but leaves this character to those moments highlighted by the first violin. The Alban Berg produces a similar approach in which the first violinist uses a floated sound and soft portato in the bow, whereas the second violin sounds clear and stable. This effect is also apparent at bars 23 and 50 where the marking returns.

***Beklemmt* (only 1st violin marked so): constricted, uneasy, anguished**

Hatten's interpretation of the Cavatina contrasts the opening *sotto voce,* which provides 'reassurance', with the 'gasping' nature of the *Beklemmt* (see Ex. 3.3). *Beklemmt* is a very unusual musical marking, not seen (to my knowledge) in other scores. Because of this, Beethoven must have intended an interpretation not possible to describe through standard markings. As with *Sotto Voce,* a strong possible interpretation is to do with the timbre of the sound, and perhaps is a signal that Beethoven's markings wanted to push markings into this sort of territory. The marking suggests the timbre of the sound should in some way convey the anguish or constrictedness.

Once again the expression is created in a very soft dynamic. It is interesting to note how the groups provide contrast here, and they mostly do it through a change in vibrato, either eliminating it at the outset of the section, or in one case creating an extraordinarily shrill vibrato. Contrast is also created through different ways of articulating the lower three voices.

Ex. 3.3: Op. 130/v, bars 37 - 46

In spite of the implications of the marking, harmonically:

a) the passage is in a major key, albeit an extraordinary one: Cb major. The flattened submediant of Eb is a remote key, and is effected by all instruments reaching Eb in bar 40 and simply dropping down two tones; a very unusual harmonic side step and invoking the separate or alternate world metaphor.

Rhythmically:

a) the writing in the first violin is striking for its unusual properties and note lengths. This is very difficult to perform literally due to the unusual rhythms set against the monotonous triplets; the implication is of an unstable first violin line against a steady and regular accompaniment.

Melodically:

a) although there is logic line to the first violin line, the rhythmic fracturing of it renders it quite unmelodic. Instead it appears as a series of fragmented gasps.

Despite the brightness of the key, the other elements, in particular the fragmentary melodic and rhythmic writing suggest interpretations that are unusual and lack coherence. This probably also helps to explain the unusual sounds, particularly with respect to vibrato, that are used to interpret the first violin part.

Chua's metaphors above can lead to quite different accounts; for instance, constricting and anguish could imply opposite ends of the spectrum. The Vermeer is an example that begins as if constricted, but ends with anguish. The first violinist starts with a very subdued sound, barely speaking, against a rhythmic and articulate background in the lower three voices, which is initially louder than the first violinist. The latter begins with no vibrato and very little audible bow speed; these two elements are reversed with the *crescendo* to a fast and intense vibrato and faster bow speed reflecting the anguish. There is also a stark contrast between the consistent and

inevitable triplets in the lower three voices and the erratic nature of the first violin line at the end of the passage.

The Busch also takes the constricted path; the first violinist reduces the sound below the accompanying voices and again there is an absence of vibrato. This is particularly striking as the first violinist produces an intensely fast and narrow vibrato for much of the movement. With the *crescendo*, the first violinist becomes more lyrical rather than anguished, returning to the use of vibrato, but producing phrased gestures rather than the erratic gestures of the first violinist of the Vermeer.

The first violinist of the Alban Berg also uses a non-vibrato strategy, but this time plays markedly louder than the accompanying figure. There is a quasi-religious feeling here; far from constricted or anguished, the first violinist produces a beautifully pure sound that reaches for something in the heavens (quite literally with its registral gestures moving upwards). Intense vibrato reappears with the *crescendo* bringing the first violinist back to earth. This creates an otherworldly effect initially, and emphasises the separateness of this section.

A very different vibrato strategy is employed by the first violinist of the Lindsay in one of the most unusual interpretations. Extremely narrow and fast vibrato is used in combination with fast bow speeds creating shrill outbursts. This is against a very calming backdrop where the lower three instruments play lengthy and warm sounding triplets, less articulate than the previous two recordings. This creates the impression of a kind of madness in the first violin, especially by contrast with the triplets, and takes this interpretation into a parallel world; one that is certainly anguished. The approach of the first violinist of the Budapest is comparable. The first violinist has a fast and narrow vibrato anyway, but it becomes even narrower at the beginning of the *Beklemmt se*ction, before returning to its more usual speed as the passage moves into the c*rescendo*. There

is less contrast than the Lindsay's version which produces slower vibrato in other sections, but the taut nature of the sound produced here is distinctive.

Another quartet that has a different effect from Chua's translation of *Beklemmt* is the Amadeus. It takes this passage slightly quicker than the rest of the movement, and the accompaniment is very articulate, short and virtually without vibrato which draws attention to the first two elements. The first violinist then uses minimal vibrato, but also plays his gestures in a very articulate fashion. These interpretational decisions serve to create something quite jolly and positive sounding.

The Italiano's version is unusually less distinctive than the others. The first violinist uses similar vibrato to the rest of the movement, and the quartet maintains a beautiful warm sound without creating anything extraordinary. The quality of sound is similar to that discussed for the *sotto voce*, and so for the Italiano, this section is in the same world as the rest of the Cavatina. The Léner similarly remains in the world of the rest of the movement; the first violinist continues to vibrate, although with a faster, but still wide, vibrato to show some sense of anguish. The lower voices take the section somewhat faster than the rest of the movement.

In a slow and lyrical movement, it is perhaps unsurprising that it is the subtle variations of vibrato that seems to have a primary effect on the character, alongside the restriction of dynamic volume. For most of the groups' *sotto voce*, a limiting of the vibrato helps to create a softer hushed character, whilst for the Busch the intense expressiveness of the vibrato coupled with a hushed dynamic make the profundity even clearer. The choice of whether to blend the melodic line with accompanying voices also affects the character created, with the Italiano in particular bringing a chordal quality. This is distinct from most groups which bring out the primary lyrical voice. The Vermeer and Alban Berg on the other hand seem to create profound utterances imitating the voice cracking at special moments.

These aspects are generally quite subtle, whereas the unusual nature of the music at the *Beklemmt* spurs quite radical vibrato choices, from the complete absence for the Vermeer, Bush and Alban Berg, to the intentionally shrill effect produced by the Lindsay. Most unusual is the sacred effect produced by the Alban Berg. Most groups prefer the anguished or constricted versions, helped by the absence of vibrato, but another unusual version is by the Amadeus, which sounds almost positive rather than dampened. In their different ways most groups point to a degree of separateness in this section, by altering the use of vibrato in particular from the rest of the movement.

Grosse Fuge (Op. 133): violent and sparing dynamics

Much has been written about the Grosse Fuge and the competing finales of Op. 130. For the first 100 years after its composition the replacement finale, included in Op. 130, was preferred. The Fuge, published separately as Op. 133, was largely ignored as being 'impracticable for the performers…unintelligible for the listeners.'[20] In one of the first strong defences of the Fuge in 1931, Sydney Grew refers to the 'harshness' and harmonic 'restlessness' with which his contemporaries viewed the work. He states that the Léner's recording was the first that, 'understanding its spirit, the players learned how to play it so that it does not sound hard.'[21] This is an illuminating comment, because the implication is that the problems with the reception and performance of the Fuge were to do with a technical mastery of the difficult musical content. But should the Fuge *not* 'sound hard'? Chua does not mince his words when he says that the purpose of the process of the Fuge is to wear down the fugal subject through 'contrapuntal friction', and that 'every possible means of motivic, fugal, and thematic

[20] Sidney Grew, 'Beethoven's "Grosse Fuge"', in *The Musical Quarterly*, vol. 17, no. 4 (Oct., 1931), p. 498.
[21] Sidney Grew, 'Beethoven's "Grosse Fuge"', p. 502.

cohesion is pressed into its opposite – incoherence, disorder, violence.'[22] As seen in the following analysis, one of the central interpretational choices is how much of a struggle, how violent, and how incoherent the music should be made to sound.

Whether the Fuge should be performed instead of the replacement finale has been widely discussed.[23] Whether one is more correct than the other is less of an issue than how that choice affects the rest of the piece. Chua notes the relationship between the Fuge and the first movement, and specifically that the Fuge 'is not so much an imitation of that movement as an *exaggeration,* in which the initial paradoxes are pushed to the point of collapse [Chua's italics]'.[24] Whilst Chua is mostly preoccupied by issues of structure, this idea can appropriately be applied to the dynamics. Whilst the first movement saw the rapid alternations of *forte* and *piano* dynamics and *crescendos* to *piano*, the Fuge is characterised by the constant use of extremities (primarily *ff* and *pp*), but for inordinately long stretches of music. For example, the 'Fuga' begins in bar 30 marked *ff* and continues until bar 158 with only *f, ff* and *sf* indications. At the opposite end of the dynamic spectrum, until a *crescendo* in bar 220, there are sixty-two bars marked *sempre pp*, with constant reminders notated. If this is seen in the light of the constant dynamic contrasts of the first movement, here it has been blown out of all proportion, and indeed in the *ff* passage regularly feels like it is on the point of collapse.

To encounter other music with such large stretches of unnuanced dynamics, one has to look to the twentieth century and the music of Shostakovich, Stravinsky and Bartok in particular, who similarly maintain long stretches at the limits of the dynamic range.[25] Most music of the late eighteenth and early nineteenth centuries was

[22] Chua, *The "Galitzin" Quartets,* p. 238.
[23] For a summary, see Barbara R. Barry, 'Recycling the End of the "Leibquartett": Models, Meaning and Propriety in Beethoven's Quartet in B-Flat Major, Opus 130', in *The Journal of Musicology*, vol. 13, no. 3 (Summer, 1995), pp. 355 - 376.
[24] Chua, *The "Galitzin Quartets"*, p. 227.
[25] With this is mind it is no surprise that Stravinsky thought that the Fuge was a particularly 'contemporary' piece. He is quoted in Warren Kirkendale, 'The "Great Fugue" Op.133: Beethoven's "Art of Fugue"', in *Acta Musicologica*, vol. 35, fasc. 1 (Jan. - Mar., 1963), pp. 14 - 15.

characterised by plenty of short term dynamic contrasts such as in the Classical period, and greater sweeps, but still plenty of such risings and fallings, evident in the Romantic period. For a listener to be faced with something so insistent and constant, makes this music almost as shocking today as it must have been to its contemporaries. The choice for the performer is whether to maintain such insistence, taking the music to the point of collapse and making it sound hard, or to find other ways to create coherence out of such extreme requirements.

Ex. 3.4: Op. 133, bars 28 - 40

This section, marked 'Fuga', follows the 'Overtura', and is the first major section of the Grosse Fuge. (For excerpts, see Ex. 3.4 – 3.7.) It consists of a double fugue in Bb major (though it rarely sounds like a major key), using the main fugal theme from the opening, initially in the viola, and a vigorously rhythmic countersubject

started in the first violin.[26] Both are marked *ff* and the fugal subject, which is characterised by crotchet rests between each pitch, is regularly marked with repeated *f*s or *sf*s. Described by Kerman as 'laconic exposition', he characterises the countersubject as 'these harsh staggering accents slashing across the galvanic driving rhythm of the main subject [which] constitute the chief topic of the Bb fugue.'[27]

Ex. 3.5: Op. 133, bars 57 – 64: introduction of triplets

The visceral interest throughout this extended section is provided mainly through rhythmic changes:

a) dominated initially by the insistent dotted rhythms of the countersubject against the off-beat accents of the subject beginning in bar 31;

b) triplets are introduced in bar 58 (Ex. 3.5) in the first violin providing something more even than the off beats and dotted rhythms;

c) in bar 111 a figure with quaver + two semiquavers (Ex. 3.6) is introduced against the subject which is now syncopated on half beats.

[26] The difficulties of writing countersubjects for the fugal theme are documented in William Caplin, 'The Genesis of the countersubjects for the Grosse Fugue', in ed. William Kinderman, *The String Quartets of Beethoven* (Champaign: University of Illinois Press, 2005), pp. 234 – 261.
[27] Kerman, *Beethoven Quartets*, p. 283.

Ex. 3.6: Op. 133, bars 109 – 112: introduction of new rhythmic figure

Harmonically:

a) the chromatic nature of the subject, the wide intervals of the countersubject, the constant pitch clashes and the unrelenting counterpoint make harmonic direction difficult to comprehend for the listener.

b) there are brief moments of clarity, where the rhythm changes or the texture thins. For example a weak cadence into Eb major in bar 58, into D minor in bar 109 and a return to the tonic in bars 138 – 139 (Ex. 3.7). These are perfectly logical keys to visit, but the frenetic nature of the other musical components renders the harmonic narrative quite obscure.

Texturally:

a) there are occasional moments when the texture clears and new fugal entries begin that serve to provide the only clear moments of respite, such as in bars 109 and 138.

Ex. 3.7: Op. 133, bars 137 – 140: return to the tonic

This all results in a large degree of relentlessness: of dotted explosive rhythms, thick complicated textures, dissonant chords and loud dynamics, demanding a great deal

of energy from the performers. The question is whether to add nuances to these seemingly relentless elements, or whether to take opportunities, such as the moments of clearer texture, or harmonic clarity, or rhythmic change, to create moments of respite.

The dynamic interest is primarily about power and shock. Steinberg states that it is 'unrelieved in its ferocious vigor.'[28] It is about this section that the words 'uncouth', 'rugged', and 'outlandish' have been attached according to Philip Radcliffe, who believes that this section has clouded the judgement of the 'wonderful beauty and serenity of the music that follows it'.[29]

Of those under consideration, all the post-war recordings contain the Grosse Fuge as well as the replacement finale, whereas the Busch just contains the replacement. The Budapest and Léner also recorded the Grosse Fugue at a similar time to their recording of the rest of Op. 130 and are likewise available on the British Library website.

The groups all do achieve a sense of overwhelming force in this section, but how they achieve this and the attributes of that force are quite different. There are groups which seem to emphasise the incoherence and violence; by pounding out the dynamics continuously, not allowing any respite or nuance to be felt, not allowing new fugal entries to be clearly heard, but making the voices fight against one another. At the opposite end of the spectrum are those groups who attempt to make more nuance, light and shade, and bring out the fugal nature by refining the balance to feature the subject entries. They also structure the sections so that there are moments of more and less intensity, even within the broad dynamic framework. And there are more specific

[28] Michael Steinberg, 'String Quartet in B-Flat Major, Op. 130', in eds. Robert Winter and Robert Martin, *The Beethoven Quartet Companion* (Berkeley and Los Angeles: University of California Press, 1994), p. 240.
[29] Philip Radcliffe, *Beethoven's String Quartets* (Cambridge: Cambridge University Press, 1978), p. 142.

characterisations that result from this, varying between power, struggle and violence, whether imploring, frenetic, grotesque or monumental.

The analysis below begins with the Italiano, an especially powerful rendition, and then proceeds to draw comparisons with the others through a number of different performance choices.

The Italiano chooses a steady tempo; the effects of this are to emphasise the heaviness of the rhythmic gestures, making each note a struggle. Whilst there is no doubt of their technical mastery of playing, this serves to make the music sound challenging and a great effort. The listening experience gives rise to an impression of a physical exhaustion. Every note is played with a full and forcefully pressed sound, and therefore the countersubject is more clearly heard than the subject, with its distinctive rhythm and accent on every note.

There is a slight drop in intensity at bar 75, a passage that has no reiterations of the strong dynamics, but this is brief respite before *ff*s return in bars 78 – 79. There is again a drop in intensity in bar 94; the texture thins out, dynamic reminders are absent. Both violin entries in bar 99 are more imploring than aggressive (longer articulation with more vibrato). With the entry of the new rhythmic idea in bar 111, the quartet makes no effort to lift this above the other themes, and instead a battle ensues between rhythmic ideas. The quartet also uses time at bars 109 and 139 to signal a new section; so that even though the pain continues unabated, there are brief breaths taken. There is also a big *ritardando* into the closing of the section; more of an exhaustion and relief than a cataclysmic ending.

The Amadeus is marginally quicker than the Italiano, and consequently lacks the same weight and gravitas. Though still strong and powerful it also uses a short and relatively light articulation, which gives a feeling more akin to the ‘leaping figure of

ungainly and captivating energy.'[30] This is a description given of the countersubject given by Steinberg which suggests a less serious and weightier character than the version that is usually encountered, certainly by the Italiano. This has something slightly more grotesque, like a caricature of a goblin-type creature.[31] For instance, the dotted figures in bar 109 sound light enough to be characterised as jolly, whereas the Italiano takes time here to really emphasise new fugal entries. When the triplets arrive in bar 62 they are played long and on the string, and in the balance of voices, do not protrude above other lines. By contrast, the Italiano heavily accents each triplet so that again they sound like a struggle. For the Amadeus the triplets serve to fill in, but not dominate, the texture. In terms of creating a structure to the section, there is new energy, especially from the first violin, where the subject is shifted to an offbeat in bar 129. The resumption of triplets in bar 139 is very much on the string, and so again does not dominate the texture quite so much.

In terms of articulation the Alban Berg uses very heavy accents with the bow, but also very fast and intense vibrato that is distinctive, almost wild. Although the Italiano uses vibrato it is less distinctive than this. It actually makes the sound resonate more for the Alban Berg and so makes it sound less of a struggle. The tempo is similar to the Amadeus, though because of the combination of articulation and vibrato it sounds more driven. The triplets are really dug out and accented, like the Italiano, but swifter.

The Alban Berg takes more care to balance the voices with a clearer texture than the other two groups; it makes the countersubject the primary voice so that its entries are clear. A good example is the slight lessening of volume in bars 85 and 86 in preparation for strong entries in the violins in 88 and 89. The two semi-quaver-quaver

[30] Steinberg, 'String Quartet in B-Flat Major', p. 240.
[31] For the famous reference to Beethoven's music and goblins see the beginning of chapter 5 in E. M. Forster, *Howards End* (First published 1910). Can be accessed online at http://www.gutenberg.org/files/2891/2891-h/2891-h.htm. Accessed on 03.01.2016.

figures that appear in bar 111 are made subservient to the subject and countersubject. Another good example is the clearing of the texture in bar 138, where the first violinist of the Alban Berg plays slightly less, whereas the Italiano continues at full pelt.

The key difference is the explosiveness of the sound with the combination of heavy accent and wild and fast vibrato. Because of this resonance it does not sound difficult and a struggle. In other words the Alban Berg find a way of mastering the technical difficulties by overcoming them, but that in turn suppresses the musical aspect of struggle.

The Lindsay takes the slowest tempo, a shade slower than the Italiano, and then has a very distinctive approach to the countersubject. This is most clearly defined by very lengthy articulation of the quavers. This means the insistence of the rhythmic theme is not defined by heavy accent or vibrato (though those two aspects are present), but by the sheer length of the quavers; all other groups play them shorter. When all instruments have entered, this gives the music a grand and broad feeling. There is less aggression about it, and it feels monumental. The group does also have clear periods of relaxation, for example in bar 47 to prepare the way for the re-entry of the theme in bar 49 in the first violin. The triplets contrast strongly with the countersubject by being very short and off the string; this is a way to enable both aspects to be heard through differentiation of articulation. There is an audible climax in bars 105 - 106, with a slight *crescendo* and broadening out. Extra heaviness and dynamics are applied at 139, as though this passage is even more intense. The triplets are also now on the string and lengthened, again making them more monumental and transforming them from their earlier appearance. What is striking in this version is that there is some structure imposed on the seemingly endless pounding, particularly with regard to what happens at bar 139. The quartet achieves power through length, so again it does not have the struggle of the Italiano's version.

The Vermeer creates a similar sound to the Alban Berg's; big accents with a lot of bow, and supplemented with a ferociously fast and intense vibrato which helps the sound to resonate, as well as containing a certain amount of violence. Like the Alban Berg, it tends to feature the countersubject as the primary voice, and with those performance choices outlined above, it generally protrudes above the texture. The quartet often uses a split second of time to structure sections, and produces slight breaths; in bars 89, 108, 110 and 138. Rather than give respite however, it serves to launch the music into the next onslaught. Notably, the triplet articulation becomes more on the string from bar 139, whereas it had been off the string before; here it takes over the texture in a way that it did not previously.

The Léner and Budapest recordings are amongst the earliest of the Grosse Fuge, and as Grew claims above, the former was the first to be able to play it so that it does not sound 'hard'. Both groups clearly managed to master it technically, which was undoubtedly an issue up to this point. Perhaps echoing Grew's comments, neither interpretation sounds like an intense struggle or particularly violent. Both groups play the entire passage at high volume, but it does not feel at the extreme of dynamic intensity. Instead, the Léner produces an imploring character with long articulation, particularly on the countersubject, and wide enough vibrato to produce some warmth despite the jumping nature of the articulation. The Budapest's approach uses a slightly shorter articulation, less distinctive vibrato and keeps the tempo flowing, such that it feels more frenetic than imploring, as the constant articulation of the dotted rhythms is apparent. Both play the triplets on the string, and for the Budapest especially, this and the two semiquaver-quaver idea are very much subservient to the countersubject. Both groups have to stop in the middle of the section for a disc change, and lose steam with the tempo after this.

There are a number of different elements that are important to the interpretation of this section, in particular, dynamic tension, articulation, tempo, vibrato, balancing and structuring of the section, which all lead to somewhat differently nuanced characterisations. For instance, intense struggle is characterised by each note being heavily articulated, a slower tempo and voices competing against each other as in the Italiano's version. The monumentalism of the Lindsay version depicts grandness by its very lengthy articulations, slow tempo and thick textures. The variations in character for this section could all come under the umbrella of power and struggle, but the different nuances bring out slightly different aspects resulting in the characterisations encountered here.

To another world yet again: *sempre pp* in bars 159 – 232

After the freneticism of the passage above comes an equally unusual stretch of *sempre pp* for sixty-two bars until bar 221 (see Ex. 3.8). Beethoven puts in constant reminders of the dynamic, fully aware that it is uncommon for a performer to have to sustain a dynamic for so long. The mood and character could not be more different here, whilst the section is still very much linked to the previous through the main fugue subject. However, the extreme contrasts of other factors, especially dynamics, seem to indicate it being of another world. There are analogies with the effect in the first movement of the development being an alternate world after the struggle and stress of the exposition. Kerman states, 'After the strenuousness of the Bb Fugue, the effect is of an almost blinding innocence.'[32] Radcliffe notes that 'it brings with it a sense of blissful relaxation….[and] weaves a texture of the most ethereal kind.'[33] There are two main themes in this section; a semiquaver countersubject which was first heard in bars

[32] Kerman, *Beethoven Quartets*, p. 287.
[33] Radcliffe, *Beethoven's String Quartets,* p. 142.

21 - 22 and the main fugal theme in crotchets which re-enters at bar 167. Up to this point the music has found a 'serene'[34] and 'softer' Gb major,[35] before the chromatic pull of the fugal theme with its diminished 7th intervals drags the music back to a darker minor mood. Both themes are subsumed into the *sempre pp* dynamic and character, but the groups come up with very different ways of interpreting this.

Ex. 3.8: Op. 133, bars 157 - 175

[34] Kerman, *Beethoven Quartets*, p. 287.

[35] Steinberg, 'String Quartet in B-Flat Major', p. 241. He also suggests that this refers to the secondary key area in the first movement, which also has a softer and more lyrical theme.

The section is rhythmically:

a) much more static. The subject is in slow-moving crotchets with a countersubject of continuous semi-quavers first heralded in the Overtura.

The texture:

a) is much more transparent, with the counterpoint restricted to the subject and countersubject and other instruments sometimes providing simple harmonic accompaniment as in bar 161.

The articulation:

a) is dominated by legato slurs in both the subject and countersubject. The main exceptions are the repeated semiquavers in bar 161.

Harmonically:

a) the section is in Gb major, referencing the second subject in the first movement;
b) there is also more harmonic stability and clarity at times; for example the repeated semiquavers in bars 161 – 164 and 177 – 180 provide more of a sense of harmonic stability than anywhere in the previous section;
c) the entrance of the subject in bar 167 takes the music to darker minor harmonies.

A key decision is whether to interpret the countersubject as a lyrical and emotional or more static and remote as the greater rhythmic and harmonic stability might suggest. The unusual key of Gb major can be interpreted through a rich beauty of sound, or equally as a distant and remote key in conjunction with a distant dynamic.

The most striking difference in interpretation here is choice of tempo which diverges much more radically than the previous section. There is also great variety in the amount of phrasing deployed, with more distinctive nuances and lyricism leading away from the simplicity that is suggested by blinding innocence or blissful relaxation.

There is one recording that really stands out as strikingly different to the others; the Italiano. This is because the tempo chosen is half the speed of the fastest version by the Lindsay, which shows a far greater diversity of choice than the relatively similar tempos chosen in the previous section. This completely defines the character of the passage; the semiquaver theme is slow enough to become a lyrical lament, songlike in its shaping of the melodic contours, with vibrato on most pitches, and rubato at the ends of phrases. Though the dynamic is still soft, this lyricism means that it is not heard as hushed, distant or 'blindingly innocent', but rather a very present lament. There is also a very noticeable climax that develops from bar 194. As the texture and harmony of the passage intensify, the quartet does not attempt to keep the dynamic suppressed, but returns to a softer dynamic at bar 207. This interpretation takes the *sempre pp* as a lyrical characteristic, and a drastic contrast to the preceding passage. This character is maintained for the passage, but the dynamic volume varies with the rise and fall of phrases.

The one group that does maintain the *sempre pp* in terms of volume especially is the Vermeer. The slowest of the other four post-war recordings, but nowhere near as slow as the Italiano, the group chooses a sound that is hushed, simple and even thin (in timbral terms with very little resonance) in the semiquaver theme. It is however minimally vibrated, creating a touch of warmth, particularly in the inner parts, but there is little phrasing of the contours of the melody; this aspect is very much suppressed. The crotchet fugal theme is subordinated to the semiquaver theme, and is likewise only minimally vibrated, especially coming from the first violinist who plays with a very soft, pure sound as if in the distance. Any inclination to *crescendo* in the passage from bar 203 is also suppressed, containing the level of sound and intensity right up until the marked *crescendo* at the upbeat to bar 221. There is also no rubato, such that the entire passage seems to float along continuously without pause or disruption. This kind of

interpretation more readily takes the music to another world, far away from the overwhelming present world of the previous passage.

The Alban Berg likewise finds a hushed quality. At the opening of the section a flautando technique is used with the bow; the bow is far away from the bridge of the instrument creating a more whispered timbre. In contrast, but still at a low dynamic, the crotchet theme is played with a more focused sound and some vibrato, such that it has more intensity and contrasts with the semiquaver figure. There is also clearer phrasing than the Vermeer following the contours of both themes. For example, in bars 187 – 191 in the first violin. This is such that the first violin line in particular creates a mini-climax as the line rises in bars 205 – 207. Because of the flautando quality of the semiquavers, the interpretation here tends toward otherworldly in the semiquavers, but more present in the crotchet theme, perhaps signalling that both worlds are present.

Similarly present is the Amadeus version, which creates a lot of phrasing in the semiquaver theme and distinctly vibrates each note. This is songlike and lyrical, like the Italiano, but at a much more rapid tempo such that it does not lament in the same way. There are similarly more ups and downs in the general dynamic, making the phrasing of the shapes more important than suppressing the dynamic. The sound is also more present, without the flautando quality of the Alban Berg, but rather a more focused sound.

The Lindsay takes this passage at the fastest tempo of the post-war groups, so that it is not so different to the preceding section. The emphasis is on the *meno mosso* rather than the *moderato,* which the Italiano take to mean a radically different tempo. The rapid speed gives a much more flowing character to the semiquavers than other groups create, emphasising the continuous nature of the theme rather than the contours of the shape, as there is no time for distinctive phrasing. The sound quality, however, is clear rather than hushed. The crotchet fugal theme stands out in the foreground as more

melodic, which they play with warm vibrato and some melodic phrasing, but the general soft dynamic is maintained throughout.

Even faster is the Léner, which takes such a rapid pace that there is still a tremendous energy in the character, despite the lower dynamic. This energy is also heightened by the short and off-the-string repeated semiquavers from bar 161. The subject is played with significant vibrato and depth of sound, so that most aspects of the music transcend the character of a *sempre pp* even if the dynamic remains relatively quiet. The hustle and bustle of the contrapuntal textures is highlighted, and it is far from the serenity of the Vermeer and Alban Berg, but also too fast for the songlike nature of the Amadeus or Italiano.

By contrast the Budapest is slower, has enough time to vibrate on the semiquavers and contains a songlike lyricism as seen in others, though with less distinctive phrasing than the Italiano and Amadeus. The subject is played with a narrow vibrato and there is contrast between the tension of this and the more open sounding semi-quavers. The dynamic, though not hushed is kept at a low level until the c*rescendo.*

If the *sempre pp* helps to define a character as well as a dynamic level, then the groups come to quite different conclusions. The Vermeer and the Alban Berg, through sound as well as dynamic level, achieve something more distant, whereas the Amadeus and Italiano turn the passage into something songlike, and in terms of the latter seem to go against the dynamic reminders. To compare extremes, the Léner brings out the complexity of the counterpoint with its energy and bustle, whereas the Vermeer goes for the simplicity of a continually hushed s*empre pp* without any feature protruding from the texture. At another extreme the Italiano, with such a slow tempo, great lyricism and phrasing, and regular nuances of dynamic even within the general low dynamic, create a completely distinctive mood.

In this chapter the analysis moved to more general characterisations of longer passages in contrast to the detailed microanalysis of chapters 1 and 2. Long passages of dynamic stasis and the verbal descriptive terms in the Cavatina afford the groups opportunities to create alternate worlds to the music surrounding it. Similar performance choices arise as in the previous chapters, such as tempo, vibrato, articulation and phrasing, and these are sometimes used in extreme ways to create these alternate worlds. An example of this would be the prominent *absence* of vibrato by the Lindsay in the first movement development and by many groups in the *Beklemmt* section, which helps to create a clearly different timbre from the surrounding music. Likewise, the radically different tempos in the *sempre pp* of the Grosse Fuge, and the choice of whether to phrase lyrically or produce a consistent sound and volume create very different worlds. Whilst the extreme dynamics of the loud section of the Fuge provoke a similar general character of power and struggle, a closer analysis suggests many different nuances within this, from violence to monumental.

The disruptions and contrasts in this chapter are on a much larger scale; the alternate worlds frequently produced are sustained for long periods, but provide a striking contrast with, and disruption from, the surrounding music. Dissociation and discontinuity are likewise on a much larger scale; it is the coherence of the large-scale structure which is now questioned, as the development of the first movement seems to provide just the opposite; a place of rest and calm rather than drama and conflict. The continuity of the lyrical Cavatina is thrown into doubt by the groups' unusual reactions to the *Beklemmt* section. Once again, some groups take these contrasts to further extremes than others; in particular the Lindsay in the first movement development and *Beklemmt*, the Italiano in the s*empre pp* of the Fuge, whilst the Léner and Budapest more frequently retain similar characteristics to the surrounding music.

Conclusion

The primary stimulus for this study were the unusual dynamic markings of Beethoven's String Quartet in Bb major, Op.130, and how performers have approached the interpretation of these. This sparked wider issues as to the contribution of such dynamic markings to the character of the music, and how the metaphors used to describe the character might relate to particular performance choices. In attempting to bring these strands together, the conclusion profiles the performers' approach to dynamics and follows up with a discussion of their relationships to the core metaphors set out in the introduction. This is expanded upon in order to discuss the most common performance choices encountered in this study and how they contribute to common metaphors that arise in performance discussions; in particular, how multiple performance techniques in conjunction with one another create certain characterisations. It then discusses the issue of dynamics, with reference to their importance in the context of performance freedom and the multiplicity of approaches shown in this study. Finally, the conclusion considers the context of this study within both performance studies and analysis, with suggestions for further research and advice for performers.

Two approaches to dynamics: literal and characteristic

The introduction noted that the literature on dynamics in performance practice tends to focus on varying dynamic levels, rather than referring to wider issues of character or other performance techniques other than volume manipulation. More recent research into hairpins has suggested wider possible interpretations of dynamics, and much of this study suggests that a great deal of the creative response to performance indications resides in those aspects, in addition to volume change. Here the discussion

focuses on which groups have a more literalistic approach to dynamics based on volume change, and those groups which also (or instead) take into account character change.

The Italiano Quartet is the most literal in its approach to dynamics; they are, by and large, scrupulously observed often with big dynamic change, most strikingly at the beginning of the first movement but almost always with some acknowledgement.[1] At times, this gives rise to unusual sounding gestures, such as at the opening of the piece and during the swells in the second and fourth movements. The Vermeer and Lindsay Quartets also observe the dynamics always with some kind of change in volume. However, it is rarely to the Italiano's radical levels, and the dynamics are frequently subsumed or softened to fit into a more coherent whole. The Alban Berg Quartet similarly pursues this approach, following the dynamics, but rarely in a disruptive manner. These three groups perhaps display the symptoms of an era in which reverence to literal reading of the score characterised music-making, as it probably still does.[2] The Amadeus Quartet observes most of the dynamics, but usually in an understated manner. Other musical factors seem preeminent and rarely does the group use the dynamics as a spur to make radical change to the dynamic flow.

The Busch Quartet provides an unusual case; the dynamics always seem to provoke some sort of reaction, but often not in terms of dynamic levels. For this group it is usually a matter of character. At the opposite end of the spectrum are the Budapest and Léner Quartets, which more frequently downplay dynamics in service to other aspects of the musical discourse. The Budapest sometimes hints at dynamic volume change, whilst the Léner does not even usually produce this change. The consistency of markings in the score suggests that this would not have been because of discrepancies in

[1] The rising out of *sempre pp* in the Grosse Fuge is an exception.
[2] The 1980s were a time when more and more Urtext editions were being produced. The 'authentic' performance movement (now widely known as the Historically-Informed Performance movement, and now very mainstream), were attempting to re-create historic performance styles and the observation of more 'accurate' editions was a part of this.

the parts. Rather, the dynamic indications were just one factor in a complex mixture of gestural components. For example, when the Léner appears to provide little or no dynamic change, there are usually other musical factors which suggest this to be a logical approach. Both of these groups are more radical and free in other ways – with rubato, for instance.

Hearing when the groups interpret dynamics as character change rather than volume change, there are some similarities with the conclusions above and this is where the manipulations of other performance techniques come to the fore. For instance, the Italiano deploys subtle variations in vibrato, rubato, articulation and other factors as well as dynamic change, meaning that volume and characterisation often work in close partnership. The Busch is the one group where the primary focus is character change rather than dynamic change; it constantly uses factors such as vibrato, rubato, articulation and portamento to make sometimes abrupt character changes in the musical discourse.

The Lindsay and Vermeer sometimes use dynamics to alter the character significantly, as in the s*empre p* in the first movement's development, but at other times they modify only the dynamics. Once again, the Alban Berg echoes this approach, but is subject to less distinct character variation. The Budapest, showing similarities with the Busch, tends to hint at character variation more than dynamic change, with subtle manipulations of vibrato and rubato. The Amadeus, whilst producing dynamic variation, rarely induces character alteration in its dynamic strategy. And similar to its approach to dynamic level, the Léner produces neither much volume or character change; again other musical factors seem to override the importance of the dynamic indications.

Core metaphors

Returning to the core metaphors highlighted at the end of the introduction, we now consider their relationship to the groups' interpretations of the dynamics highlighted above. Dissociation, discontinuity and contrast, which should be considered with their obverses, coherence, continuity and similarity, are all terms that appear regularly in discussions of late Beethoven in general, and Op. 130 in particular. Many of the other metaphors that critics use to discuss both local and large-scale temporal organisation are grounded upon them. In addition to these, discussions of disruptions and abrupt juxtapositions abound, which seem particularly applicable to the unusual dynamic markings. The question arises as to the degree to which the groups emphasise these aspects; for analysts there seems to be a wide acceptance that these are part of the musical language of late Beethoven, but whether they are shown as such is in large part down to the interpretation of the performers.

The Italiano is the group which perhaps cultivates the greatest contrast; dynamics and character contrast with a great emphasis on producing different timbral colours. In particular, it highlights the disruptive elements of the dynamics. The change is usually sudden and the group finds ways of effecting the dynamics that do not sound awkward or clumsy, but change the meaning of the musical discourse significantly in mid-flow. This approach also adds to the feeling of discontinuity and dissociation. For example, the striking drop in dynamic of the opening phrase, and the unusual interpretation of the swells in the second and fourth movements, bring a lack of coherence to the musical flow and highlight the unusual-sounding nature of these moments.

The Léner takes a different approach, tending towards continuity, integration and minimal contrast, especially when the dynamic indications are at stake. The group downplays the dynamics and chooses to emphasise the melodic trajectories, harmonic

direction and rhythmic impetus, rather than featuring the dynamics which so often disrupt these. For example, the hairpin *crescendos* to *pianos* in the first movement are very much ignored for the continuity of the melodic line, and the free and radical rubato in the Cavatina seem to bear little correlation with the swells. Instead they are a reaction to other components of the music. This creates a Beethoven quite distinct from the Italiano's version; generally more coherent and beautiful, but without the complications, ambiguities and strangeness that so many writers talk about. The Budapest shares many characteristics with the Léner; the downplaying of dynamics, freedom of portamento and rubato and consistent vibrato identity of the first violinist, though the group does hint more at disruptions than the Léner.

The other groups inhabit the central areas of the spectrum and bring out some of these metaphors more at some points and less at others. For example, the Busch is closer to the Italiano; there is plenty of contrast in their versions, using different articulation, vibrato, rubato to effect the dynamics. Sometimes this is disruptive, as in the fourth movement swells, but there are times in which it integrates rather than dissociates, for instance in the coda of the first movement. And because the quartet does not always highlight the dynamic change, it is not always as abrupt in its changes as the Italiano can be.

The Vermeer and the Lindsay create a variety of contrast with their dynamic difference as well as manipulations of vibrato and rubato, especially in the first movement, but the music is less often discontinuous or dissociative, though the Vermeer hint at the latter in the *Allegro* of the first movement. They soften the disruptive aspects to an extent, whilst still showing the contrasts indicated by the dynamics. They also create quite distinct alternate worlds in the longer passages discussed in chapter 3, through the variety of use of vibrato in particular. The Alban Berg highlights dynamic difference, but less of other elements, and so the contrast is

often restricted to dynamics, whilst disruptions are not overemphasised. Because the first violinist also has a consistent vibrato speed, this lessens the possibility for sudden timbral contrast in the short lyrical gestures with unusual dynamics. The Amadeus similarly lacks potential for contrast because of the first violinist's frequently wide vibrato. Localised disruptions are also kept to a minimum, and except for the gaps before the *subito pianos* in the first movement, which causes some discontinuity, it mostly creates coherent phrases rather than dissociative ones. There is also less focus on special contrasts in the longer passages discussed in chapter 3; again consistent vibrato is a factor, but also a reluctance to push to dynamic extremes.

The analysts quoted throughout this study would probably favour the interpretations that highlight the disruptive elements; the Italiano especially, and also perhaps the Busch, Vermeer and Lindsay. However, this may also be to do with the nature of the discipline; analysts are looking for those unusual aspects of the material that make the music distinctive or unusual. Performers are usually most concerned with giving renditions that are coherent for an audience. As Sidney Grew, a contemporary of the Léner noted, this quartet was one of the first that could master the Grosse Fuge, and the first that could make it sound *not* hard.[3] This was the era when these Beethoven quartets were just beginning to be recorded and disseminated to a wider audience in this way, and so perhaps coherence for the listeners was more important than highlighting the unusual aspects of Beethoven's late style. By the time of the Italiano, these works were better known to an audience, had experienced a number of recordings, and so were ripe for interpretations that highlighted these more unusual elements.

Although this study does not primarily focus on the historical dimensions of performance style, there do appear to be interpretational links between groups of certain

[3] See fn. 21 in chapter 3.

eras. The historic recordings of the Léner and Budapest are the most coherent in many ways; dynamic disruptions often downplayed, and there are more limited contrasts in localised passages. The Busch shares some characteristics with these groups – in particular the non-literalism of dynamics– but offers a much more idiosyncratic approach to late Beethoven after earlier groups had made it more intelligible. The Italiano and Amadeus Quartets are less similar. Although their tempo choices in the first movement correlate, the dynamic and character differences of the latter are much less obvious and extreme. The Lindsay, Alban Berg and Vermeer on the other hand share a version of the literalist approach to the dynamics, but usually in a way that retains some coherence, and does not maximise the contrasts or disruptions to extreme levels.

Metaphor mapping

Following on from the summary above, this section maps out the metaphors used in the analysis against the core metaphors highlighted in the introduction of dissociation, discontinuity and contrast and their obverses coherence, continuity and similarity. This will be done chapter by chapter for ease of use and will also consider the relationship to dynamics and tempo.

Chapter 1

The first passage analysed focused on the opening four bars of the piece and the metaphorical characterisations lyrical coherence and timbral contrast. The former emphasises more consistent dynamics, without surprises, and relates to the core metpahors thus: less contrast, a sense of continuity and coherence rather than dissociation. At the opposite end of the spectrum, timbral contrast highlighted a stronger degree of contrast, the abrupt change mid-phrase showed a degree of discontinuity and the phrase dissociating from itself. This phrase constituted a clear

choice for the performers between emphasising the core metaphors or underplaying those disruptive elements.

The analysis of similar dynamic nuances in the second subject had a different relationship to the core metaphors locally. The groups' interpretations brought out lyrical nuances that were sometimes charming or sentimental, but played a role in making the music on a localised level more continuous and coherent. However, the nuances provide contrast with the frenetic nature of the rest of the exposition, and the continuousness of the section certainly contrasted with the constantly changing speeds and dynamics of other sections. This section is also quite alien to much of the rest of the movement, and the warm timbres deployed provide a stark contrast.

The chapter then moved onto the alternating of *forte* and *piano* in the *Allegro* sections of the first movement. Groups that emphasised the different dynamics emphasised the core metaphors. In particular, this led to dissociation within the phrase, and a sense of discontinuity within the semiquaver passages. On a localised level there was also great contrast. The groups which underemphasised the dynamics, pointed more toward the obverse core metaphors applied.

The final analysis of the chapter looked at the coda of the first movement and the main metaphorical possibility here was integration. Strong emphasis on dynamic and tempo contrast drew the groups further away from integration, but closer to the core metaphors with high levels of contrast, highlighting the discontinuity and a dissociated phrase once again. Groups coming closer to integration de-emphasised the contrasting dynamics and tempo in particular and took the interpretation further from the core metaphors.

Chapter 2

Chapter 2 began by analysing the hairpin swells in the second movement, which led to the localised metaphors breathless, whispered, mad and comical. Whispered and

breathless related more to timbral issues, with a strong relationship to soft dynamics and rapid tempos. However, approaches that were mad or comical emphasised the disruptive elements of rapid contrasts, discontinuous flow and the dissociating effect of big swelling dynamics.

The swells in the third movement were described as lyrical expansions, or bulges and swells which were playful. A playful approach of creating a notable dynamic bulge or swell added to a greater sense of contrast, dissociation of the phrase and less continuity of line. The more lyrical approaches on the other hand were closer to the obverses; more continuous, coherent and similar.

The metaphors in the analysis of the fourth movement's swells were seasickness and gracefulness. Most groups opted for the latter, which underplayed the core metaphors and the dynamic aspect of the hairpins, with more subtle nuances. Those groups closer to a seasick version emphasised the core metaphors with discontinuity of line, and dissociating phrase structures and by providing much dynamic contrast.

The framing metaphors for the Cavatina movement's analysis have a limited connection to the core metaphors, though a hymnic approach could be said to be very continuous, coherent, and with limited contrast. The more operatic versions which emphasises dynamic nuances brought about more contrast and occasionally discontinuous moments.

Chapter 3

Chapter 3 began with an analysis of the development of the first movement which produced metaphors such as alternate world, trancelike, dreamy, hypnotic and remote. These all have a relationship to the core metaphors but on a much larger scale. The contrast of this section's constantly subdued dynamics with the rest of the movement is stark. The dissociation of having a development section which seems

apart from the rest of the movement and the discontinuity (rather than intensification) of this section's character from the rest of the movement is also stark.

The analysis of the descriptive terms *sotto voce* in the Cavatina, brought about the metaphors of hushed and whispered, and the *Beklemmt* section as anguished and constricted. Taken discreetly they have a limited relationship to the core metaphors, but when taken in context with each other, they have a much stronger relationship. The contrast of the character of the *Beklemmt se*ction, particularly the most anguished versions, is stark, and again the discontinuity of character and dissociation from the rest of the movement is clear, as in many ways they seem unrelated.

Finally, the analysis of the endlessly loud section of the Grosse Fugue brought a number of metaphors to the fore: incoherence, violence, power, struggle, imploring, frenetic, grotesque and monumental. Obviously, approaches that emphasised incoherence were dissociating as well as emphasising the struggle. The following extended soft passage which warranted metaphors such as hushed, alternate world and distant also provided stark contrast with the previous section, more sense of discontinuity as the loud section ended suddenly with little preparation and a structural dislocation, in which dynamics played an enormous part. Even the more lyrical and songlike versions of this section provided stark contrast with what went on before.

It is clear from this that the interpretations which emphasises the dynamics in more extreme ways highlighted the core metaphors outlined at the outset of the study, whereas others suggested more their obverses.

Key performance choices

The performance choices that appear again and again throughout this study are the manipulations of dynamics, vibrato, rubato, articulation, portamento and tempo. Tempo acts as a framing device and frequently affects what is possible with respect to

other performance choices. Indeed, it usually offers a general guide to the characterisation of a passage. The Italiano chooses more extreme tempos than other groups, allowing for greater contrast, and the slower tempos give time for effecting quite radical dynamic changes. The earliest three recordings choose quick tempos in slow music, meaning that there is less time to craft sudden dynamic or character changes.

Vibrato is a vitally important tool for developing both contrast in timbre and also for varying the intensity of phrases. Its limiting and sometimes complete absence becomes important to some of the unusual contrasts and colours created by the dynamics; for example the absence of vibrato for the Italiano's swells in the fourth movement, the absence in the inner parts of the Lindsay's first movement development, and the Vermeer's subtle manipulations of vibrato in all the dynamic nuances. There are groups for which there is a consistency of vibrato width and speed, particular of the first violinist, which limits subtle nuances or changes to character. The Léner, Budapest, Amadeus and Alban Berg fall into this category, whereas the others exploit this tool for its variety much more extensively.

Rubato is a very important performance parameter for many of the groups and is perhaps a surprising element in some of the dynamic nuances. Most obviously in lyrical passages it helps to vary the intensity of the phrase, often highlighting rhythmic momentum and being used as a tool for hairpins, as Poli and Kim have suggested. More surprising is its use in faster passages, most strikingly by the Busch, Léner and Budapest in the first movement *Allegro*. Subtle variations in this can alter the perception of the dynamic and character. Articulation in this passage is also used as a tool to differentiate between the *forte* and *piano* dynamics.

Portamento is a performance technique primarily used by the earlier groups. It draws attention to the relationship between two pitches, and particularly in conjunction

with hairpins adds intensity to this relationship. Depending on the context it can produce many characters: charm, sentimentality, even playfulness, and in the case of the Alla Danza Tedesca, it is playfully disruptive.

This study highlights a number of examples in which these interpretive devices were used in conjunction with dynamic change in particular. A change in dynamic volume can work with the intensity of vibrato in such a way that each reinforces the other. An example of this is a widening or quickening of vibrato in conjunction with rising volume. Portamento plus dynamic change can also create a symbiotic relationship; the glissando correlating with a rise in dynamic as the performer arrives at the goal note. Rubato similarly can reinforce the relationship; slowing down with a drop in dynamic at the end of a phrase. Rubato can work in two different directions with obvious correlation as well; a rise in dynamic level could attend either a slowing down or pushing forward as both can signal a rise in intensity. And to take a last example, changes in articulation and dynamics can reinforce one another, as for instance, with the change to lighter articulation in a softer dynamic in the first movement's *Allegro*. These relationships show how interpretive devices can highlight and reinforce one another. Changes from loud to soft or vice-versa may accompany a change in timbre, intensity or articulation as well as volume. The combination of performance techniques works in a similar fashion to the way that gestural components, such as melodic trajectory, harmonic direction and rhythmic momentum, can reinforce each other towards similar goals.

Of particular interest in late Beethoven is the way that melody, harmony and rhythm sometimes work *against* each other. Likewise, performance choices that appear to go against one another can often create unusual or special moments. The Busch provides two examples: the rising intensity of vibrato in the *subito piano* of the opening, and the intensity of vibrato in the hushed opening of the Cavatina. Similarly, the

absence of vibrato within a varying dynamic draws attention to the dynamic change and timbre created by the bow speed and pressure, in a way that is different to the dynamic being reinforced by vibrato. Vibrato is particularly malleable to such changes, as discussed with respect to the Cavatina in chapter 2. Another example of seemingly contradictory performance choices that create a special moment is a portamento that goes to a soft dynamic. For example, on the first violinist's mini swell at the outset of the Cavatina, the Lindsay and the Budapest *diminuendo* up the slide creating a particularly tender moment.

The special timbral contrast that some groups achieved in the opening *crescendo* to *piano* gesture, gives perhaps the clearest example of contradictory gestural components providing opportunity for a special moment. It is precisely because other components of the musical gesture lead to this *piano* moment that a special timbre is possible. It is created in the conflict between those gestural components and apparently opposite performance choices; the tenderness of a soft sound at an otherwise climactic moment of the phrase.

Varying bow speeds is another particularly important performance technique for string players and should ultimately be added to this list of expressive tools. A soft dynamic can be combined with a fast bow speed, for instance, so that the intensity of the bow speed conflicts with the lesser intensity of the volume. However, listening to recordings (rather than watching performances) does not afford the opportunity to identify bow speeds accurately, and for this reason it has not been considered as a central part of this study. It is likely that the Alban Berg Quartet cultivated this in the *Beklemmt* section of the Cavatina, with the added absence of vibrato producing the pure and unusual sound quality.

Common metaphors and core metaphors

The following discussion identifies four key general metaphorical characterisations that are regularly associated with performance and arise in this study. After a discussion of common performance choices made to effect these, they are then put into the context of some of the core metaphors highlighted with reference to late Beethoven's musical style; contrast and disruption particularly. In this way we can see how general performance characterisations fit into specific contexts.

Lyrical – lyrical playing is usually associated with a warm and beautiful timbre. One performance choice associated with this is vibrato, usually not too intense (too fast or too wide). Lyricism is also mostly involves finely-graded manipulations of phrasing, using subtle increases and releases of intensity, usually in dynamic volume, but also possible with rubato – where such increases or decreases in speed affect the intensity – and vibrato, where these delicate changes in speed and width can increase or decrease intensity. A good example is the s*empre pp* section of the Grosse Fuge where some groups play with lyricism (Italiano and Alban Berg) – vibrato, variations in volume and rubato – whereas the Vermeer play without vibrato and with a more monotone sound. Portamento can also contribute to lyricism by linking important pitches and emphasising the shapes of the phrases.

In the context of the core metaphors, lyricism usually appears as a striking contrast to surrounding music or an approach distinct from the core metaphors. For example, the Vermeer's lyrical approach to the first movement development takes the music to an alternate world and provided a stark contrast to earlier material. The lyrical coherence of the Léner at the outset of the first movement, however, is an approach that downplays the disruptions and discontinuity. The lyrical expansions of the swells seen

in the third and fifth movements also play down the core metaphors, by finding a way to manage continuity rather than breaking it.

Hushed – more subtle than simply soft playing, it describes a quality of sound; something warm and vibrated, but still expressive and at a lower volume. Rather than simply quiet, the word implies some intensity, possibly through vibrato, or a special quality of timbre, for example a flautando bow stroke or a very fast but light bow.

The Busch's version of the opening of the Cavatina is a good example of hushed playing; a profundity created by intense expression in a soft dynamic. Contrast is the core metaphor most associated with it when put in the context of the more open or lyrical playing surrounding it. Another example is the *subito piano* of the opening, and the hushed effect that the Italiano creates. When used suddenly it can contribute to striking contrast and discontinuity, when pitted against lyricism or another character just beforehand.

Graceful – indicates motion, a key metaphor in music, and a certain kind which is aesthetically pleasing motion. It implies that nothing is hurried or sudden, but that there is some beauty in the movement. Vibrato is key to the beauty of this motion (again, probably not of the intense kind), and allied to this is beauty of timbre with no sudden movements in the bow, accents or distinct articulation. Taking time at the ends of phrases (as with the Vermeer and Lindsay at the end of the opening phrase of the Alla Danza Tedesca) is associated with the care taken to end the motion involved. Portamento of a subtle nature can also be associated with a beautifying of the motion.

Like certain kinds of lyricism, gracefulness normally arises in the interpretations that play down the core metaphors. For example, the Lindsay's interpretation of the

Alla Danza Tedesca turns the potentially disruptive swells into something graceful instead with a slower tempo and warmly vibrated phrasing.

Playful – as a possible antonym to graceful, again suggests motion, but of a more exuberant nature. This indicates more articulation; fast use of bow, more accents, more unusual movements and possibly on unexpected beats. In an older performance style portamento comes into play, with slides to harmonics (as in the early recordings of the Alla Danza Tedesca) or between bigger intervals.

This has more relevance to the core metaphors than 'graceful'. Particularly the swells offer opportunities for playful exploitation, with the Busch's interpretation of those in the Alla Danza Tedesca a prime example. The use of more extreme dynamic change in the swells, along with portamento, adds a disruptive element that also contrasts with surrounding material. The swells in the second movement also offer a related metaphor with similar characteristics, that of the 'comedic'. The disruptions are unexpected and play with the sense of metre, and in combination with the absence of vibrato in the Italiano's version add to the sense of fun.

From this brief attempt to create typologies aligning metaphorical characterisations with performance choices, it is clear that the discussion immediately leads to other key metaphors, such as types of motion and measurements of intensity. This shows how music in performance is intimately bound up with movement, shape, gesture and intensity. Whether in live performance or through recordings, music is experienced as existing in some form of space (whether imaginary or real) and so metaphors related to this are crucial.

Arising from the discussion relating to core metaphors, it is interesting that frequently a performers' own coherent characterisation, such as lyrical coherence or

gracefulness, downplays the core metaphors. It is when these characterisations are placed in close proximity to each other that the contrasts, disruptions and discontinuity occur more often, indicating the complexity and ambiguity of expression in late Beethoven. Most other music in the Western Canon up to the twentieth century is concerned with more coherent musical characterisations, and this shows why late Beethoven's musical style is often compared to that of the twentieth-century.[4]

Dynamics and performance freedom

In the introduction, the issue of composers using increasing performance indications was raised, and the question posed as to whether this restricted the freedom of performers. This study shows clearly that the complexity of Beethoven's dynamics actually seems to do the opposite; the ambiguity produces a creative space for the performers to do a number of different things with the dynamics, from largely ignoring to maximising, and to effecting in ever more subtle ways than simple volume change. This in turn means that the possibilities for creating different characterisations are greater, and numerous versions of the piece are possible. This actually correlates well with some analysts' view of the meaning of Beethoven's late quartets. For example Chua notes:

> Many people have wrought out of the riddle-like nature of the quartet meanings that are diverse and contradictory, from the cynical to the spiritual, from the catastrophic to the Utopian. They are all possible, not simply because of the plurality inherent in the interpretive act but because of the vast yet directionless search that Beethoven engages in. This also means that there is no stability in any of the readings – just possibilities and tensions between them.[5]

[4] See Hatten in fn. 35 in chapter 1. Also Stravinsky in fn. 25 in chapter 3.
[5] Chua, *The "Galitzin" Quartets,* p. 248.

The dynamics sometimes appear as confusing as riddles, and many of the sustained passages of dynamic stasis discussed in chapter 3 can feel vast and directionless. But it is in the 'possibilities and tensions between them' that the expressive characters are produced; the special moments of timbral difference in *subito piano*, idiosyncratic swells in the Alla Danza Tedesca and unusual vibrato strategies in the *Beklemmt s*ection of the Cavatina. Part of the reason that late Beethoven holds a fascination is because of the seemingly endless possibilities for meaning afforded; a vast but potentially fruitful search.

This study shows that a good way to approach dynamics, particularly in Beethoven, is to start with an open mind for experimentation and knowledge of performance tools available. The dynamics and performance indications then become a prime stimulus for creative interpretation and the opening up of expressive possibilities. A *crescendo* to *piano*, rapid alternation of dynamics, hairpin swell, or long stretch of dynamic stasis all offer rich opportunities for such experimentation: different vibratos, rubato and agogic lingering, different bow speeds, alternative articulations, portamento and any other tools available to the performer. These are often the moments when special characters or moments can be created.

Further directions for researchers

So what is the message of this study? For analysts it is to note both the importance of dynamics, and performance indications in general, as a component in the discussion of how music works and expresses character. Whilst inevitably subservient to aspects such as structure, pitch and harmony, it can still have a striking effect on these elements that are often overlooked. The importance of performance to affect the analysts' view should also be noted; performers interpret the score to create potentially radically divergent characters and this should have an impact on how the music is

analysed. Equally the embrace of metaphor as a way to open up potential meaning, and its relationship to the technical details of analysis, helps to make analysis more relevant to both performers and listeners who are surely the primary audience for this music. An illuminating analysis is much the same as an illuminating performance; it reveals the music to its audience in a way that enriches the experience rather than simply executing a pre-conceived ideal of the piece.

This study takes place within the burgeoning area of performance studies, which is becoming an increasingly important part of academic life. The importance of performance as an aspect of study no longer needs to be fought for as perhaps it once was, and using recordings as tools for study has also become mainstream. The question is, in which direction this could be developed. Clearly in this study the focus has been on interpretation, and whilst most work on recordings (starting with that of Robert Philip) has been on performance style, there is a lot of space to consider interpretation specifically, rather than performance style generally. Whereas there are now plenty of sophisticated observations, data and theories about performance style throughout the twentieth century, there is as yet relatively little work on the specific details of interpretation; namely how the subtle differences in performance choices affect the expressive qualities of the music. Much in the same way that sophisticated analysis has drawn attention both to musical style – the elements that a body of music shares – as well as the individual idiosyncrasies of certain composers, so performance style also needs to be complemented by discussions of performance that make specific interpretations notable, and how they do so.[6] There should also be a move away from

[6] Julian Hellaby has developed an 'interpretational tower' as a framework to analyse an interpretation with various sub-headings and categories. Notable in this approach is the 'emphasising and de-emphasising' of certain categories, elements of which have taken part in this study. See Michael Murphy, 'Review: Julian Hellaby, *Reading Musical Interpretation: Case Studies in Solo Piano Performance',* in *Journal of the Society for Musicology in Ireland 6*, (2010 – 11), pp. 113 – 119. Can be accessed online: http://www.music.ucc.ie/jsmi/index.php/jsmi/article/viewFile/85/94. Accessed on 07.01.2016.

framing interpretational issues as being 'problems' to describing them as 'opportunities'. This study was stimulated by an interpretational problem – how to interpret these dynamics - but has resulted in an opening up of many opportunities. This idea is to be celebrated and should open up a plurality of performance possibilities, encouraging performers to find new and different ways to make this often played music still extraordinary to experience.

There is also much further work to be done on the connections between metaphors and performance choices. These are issues that performers grapple with on a daily basis, but where scholarship offers greater scrutiny and ways of framing and analysing. There is surely much room for development here. If done more rigorously, perhaps a more sophisticated vocabulary can be developed by both performers and academics, one which not only draws on the rich metaphorical language already used most extensively by record reviewers,[7] but could explicate in more detail what these metaphors refer to in terms of detailed performance technique.

And what of a message for performers? Today's musical profession is probably the most well trained with extremely high technical standards, with entry to the country's top musical conservatories and ultimately a job in one of its symphony orchestras becoming increasingly competitive.[8] However, the time spent on technical development and skills is rarely matched by time taken to discuss the intimate details of interpretation. Issues for string players such as bow speed, vibrato speed, rubato, the possibility for portamento, different articulation, and the closer analytical attention to gestural components of the music often take a back seat to technical training and

[7] Daniel Leech-Wilkinson, *The Changing Sound of Music: Approaches to Studying Recorded Musical Performance* (London: CHARM, 2009), chapter 1.2.2. http://www.charm.rhul.ac.uk/studies/chapters/chap1.html.

[8] Jobs in string sections of symphony orchestras attract 100s of applications. David Cutler claims that most jobs in US orchestras attract 150 – 300 applications. See http://www.savvymusician.com/blog/2009/12/the-working-musician-full-time-orchestra-member/. Accessed on 07.01.2016.

accuracy in performance. This is unsurprising as in a highly competitive profession, the most tangible way to judge performance is on technical efficiency, but this ultimately downplays the creative side of musical performance.

However, now that academia and performance are striving to connect with each other more than ever before, there is even more opportunity to find time and space for greater appreciation of the creative study of interpretation.

Bibliography of Literature Consulted

Theodor W. Adorno, ed. Rolf Tiedemann, trans. Edmund Jephcott, *Beethoven: The Philosophy of Music* (Cambridge: Polity Press, 1998).

Kofi Agawu, *Playing with Signs* (Princeton: Princeton University Press, 1991).

Daniel Barenboim and Edward Said, *Parallels and Paradoxes: Explorations in Music and Society* (London: Bloomsbury, 2003).

Barbara R. Barry, 'Recycling the End of the "Leibquartett": Models, Meaning and Propriety in Beethoven's Quartet in B-Flat Major, Opus 130', in *The Journal of Musicology*, vol. 13, no. 3 (Summer, 1995), pp. 355 - 376.

Christina Bashford, 'The string quartet and society', in ed. Robin Stowell, *The Cambridge Companion to the String Quartet* (Cambridge: Cambridge University Press, 2003), pp. 3 – 18.

Karol Berger, 'Beethoven and the Aesthetic State', in *Beethoven Forum 7* (1999), p. 17 – 44.

José A. Bowen, 'Finding the Music in Musicology: Performance History and Musical Works', in eds. Nicholas Cook and Mark Everist, *Rethinking Music* (Oxford: Oxford University Press, 1999), pp. 424 – 451.

- 'The history of remembered tradition: tradition and its role in the relationship between musical works and their performances', *Journal of Musicology*, vol. 11, no. 2 (Spring, 1993), pp. 139 - 73.

David L. Brodbeck and John Platoff, 'Dissociation and Integration: The First Movement of Beethoven's Op. 130', in *19th Century Music,* vol. 7, no. 2 (Autumn, 1983), pp. 149 – 162.

Clive Brown, *Classical and Romantic Performing Practice 1750 – 1900* (Oxford: Oxford University Press, 2000).

- 'Ferdinand David's editions of Beethoven', in ed. Robin Stowell, *Performing Beethoven: Cambridge Studies in Performance Practice* (Cambridge: Cambridge University Press, 2005), pp. 117 – 149.

Scott Burnham, *Beethoven Hero* (Princeton: Princeton University Press, 1995).

- 'The four ages of Beethoven: critical reception and the canonic composer', in ed. Glenn Stanley, *The Cambridge Companion to Beethoven* (Cambridge: Cambridge University Press, 2000), pp. 272 – 291.

- *Mozart's Grace* (Princeton: Princeton University Press, 2012).

John Butt, *Playing With History* (Cambridge: Cambridge University Press, 2002).

William Caplin, 'The Genesis of the countersubjects for the grosse Fugue', in ed. William Kinderman, *The String Quartets of Beethoven* (Champaign: University of Illinois Press, 2005), pp. 234 – 261.

Daniel K. L. Chua, *The "Galitzin" Quartets of Beethoven: Opp. 127, 132, 130* (Princeton: Princeton University Press, 1995).

Bathia Churgin, 'The Andante con moto in Beethoven's String Quartet Op. 130: The Final Version and Changes on the Autograph', in *The Journal of Musicology*, vol. 16, no. 2 (Spring, 1998), pp. 227 – 253.

Eric Clarke, *Ways of Listening: an Ecological Approach to the Perception of Musical Meaning* (Oxford: Oxford University Press, 2005).

Eds. Nicholas Cook, Eric Clarke, Daniel Leech-Wilkinson and John Rink, *The Cambridge Companion to Recorded Music* (Cambridge: Cambridge University Press, 2009).

Nicholas Cook, Peter Johnson & Hans Zender, *Theory into Practice: Composition, Performance and the Listening Experience* (Leuven: Leuven University Press, 1999).

Nicholas Cook, *Beethoven's Ninth* (Cambridge: Cambridge University Press, 1993).

- 'The Conductor and the Theorist: Furtwangler, Schenker and the first movement of Beethoven's Ninth Symphony', in ed. John Rink, *The Practice of Performance: Studies in Musical Interpretation*, (Cambridge: Cambridge University Press, 1995), pp. 105 – 125.

- *A Very Short Introduction to Music* (Oxford: Oxford University Press, 1998).

- *Analysing Musical Multimedia* (Oxford: Oxford University Press, 1998).

- 'Analysing Performance and Performing Analysis', in eds. Nicholas Cook and Mark Everist, *Rethinking Music* (Oxford: Oxford University Press, 1999), pp. 239 – 261.

- 'Theorizing Musical Meaning', in *Music Theory Spectrum*, vol. 23, no. 2 (Fall, 2001), pp. 170 – 195.

- 'Squaring the Circle: Phrase arching in Recordings of Chopin Mazurkas', in *Musica Humana*, vol. 1, no. 1 (2009), pp. 5 – 28.

- 'Methods for Analysing Recordings' in eds. Nicholas Cook, Eric Clarke, Daniel Leech-Wilkinson and John Rink, *The Cambridge Companion to Recorded Music* (Cambridge University Press, 2009), pp. 221 – 245.

- *Beyond the Score: Music as Performance* (Oxford: Oxford University Press, 2014).

Timothy Day, *A Century of Recorded Music: Listening to Musical History* (New Haven: Yale University Press, 2000).

Laurence Dreyfus, 'Early Music Defended Against its Devotees: A Theory of Historical Performance in the Twentieth Century', in *Musical Quarterly,* vol. 69, no. 3 (Summer, 1983), pp. 297 – 322.

- 'Mozart as Early Music: A Romantic Antidote', in *Early Music*, vol. 20, no. 2 (1992), pp. 297 – 309.

Dorrotya Fabian, *Bach Performance Practice, 1945 – 1975: A Comprehensive Review of Sound Recordings and Literature* (Aldershot: Ashgate, 2003).

Jon W. Finson, 'Performance Practice in the Late Nineteenth Century, with Special Reference to the Music of Brahms', in *The Musical Quarterly,* vol. 70 no. 4 (Autumn, 1984), pp. 457 – 475.

John M. Gingerich, 'Ignaz Schuppanzigh and Beethoven's Late Quartets' in *Musical Quarterly,* vol. 93, no. 3/4 (Fall/Winter, 2010), pp. 450 – 513.

Sidney Grew, 'Beethoven's "Grosse Fuge"', in *The Musical Quarterly*, vol. 17, no. 4 (Oct., 1931), pp. 497 – 508.

Kenneth Hamilton, *After the Golden Age: Romantic Pianism and Modern Performance* (Oxford: Oxford University Press, 2007).

Robert Hatten, *Musical Meaning in Beethoven: Markedness, Correlation, and Interpretation* (Bloomington: Indiana University Press, 1994).

- *Interpreting Musical Gestures, Topics and Tropes: Mozart, Beethoven, Schubert* (Bloomington: Indiana University Press, 2004).

- 'Plenitude as Fulfillment: The Third Movement of Beethoven's String Quartet in Bb, Op. 130', in ed. William Kinderman, *The String Quartets of Beethoven* (Champaign: University of Illinois, 2005), pp. 214 – 233.

Julian Hellaby, *Reading Musical Interpretation: Case Studies in Solo Piano Performance* (Aldershot: Ashgate, 2009).

Neil Hyde, ''Period' String Quartets', in *Early Music*, vol. 29, no. 4 (Nov., 2001), pp. 664 – 666.

Richard Hudson, *Stolen Time: The History of Tempo Rubato* (Clarendon Press, 1994)

Peter Johnson, 'The Legacy of Recordings', in ed. John Rink, *Musical Performance: A Guide to Understanding* (Cambridge: Cambridge University Press, 2002), pp. 197 – 212.

- '"Expressive Intonation" in String Performance: Problems of Analysis and Interpretation', in ed. Jane Davidson, *The Music Practitioner* (Aldershot: Ashgate, 2004), pp. 79 – 90.

Mark Katz, 'Beethoven in the Age of Mechanical Reproduction: The Violin Concerto on Record', in *Beethoven Forum*, vol. 10, no. 1 (Spring, 2003), pp. 39 – 54.

- *Capturing sound: How Technology has Changed Music* (London: University of California Press, 2005).

Nicholas Kenyon, 'Performance Today' in eds. Colin Lawson and Robin Stowell, *The Cambridge History of Musical Performance* (Cambridge: Cambridge University Press, 2012, pp. 3 – 34.

Joseph Kerman, Laurence Dreyfus, Joshua Kosman, John Rockwell, Ellen Rosand, Richard Taruskin and Nicholas McGegan, 'The Early Music Debate: Ancients, Moderns, Postmoderns' in *The Journal of Musicology*, vol. 10, no. 1 (Winter, 1992), pp. 113 – 130.

Joseph Kerman, *The Beethoven Quartets* (New York: Norton, 1967).

- 'How We Got into Music Analysis, and How to Get Out' in *Critical Inquiry*, vol. 7, no. 2 (Winter, 1980), pp. 311 – 331.

- *Musicology* (London: Fontana, 1985).

- 'Beethoven Quartet Audiences: Actual, Potential, Ideal', in eds. Robert Winter and Robert Martin, *The Beethoven Quartet Companion* (Berkeley: University of California Press, 1994), pp. 7 – 28.

- *The Art of Fugue* (Berkeley: University of California Press, 2005).

David Hyun-Sum Kim, 'The Brahmsian Hairpin', in *19th Century Music*, vol. 36, no. 1 (Summer, 2012), pp. 46 – 57.

Ed. William Kinderman, *The String Quartets of Beethoven* (Champaign: University of Illinois Press, 2005).

Warren Kirkendale, 'The "Great Fugue" Op.133: Beethoven's "Art of Fugue"', in *Acta Musicologica*, vol. 35, fasc. 1 (Jan. - Mar., 1963), pp. 14 – 24.

Rudolph Kolisch, trans., Thomas Y. Levin and David Satz, 'Tempo and Character in Beethoven's Music', *The Musical Quarterly*, vol. 77, no. 1 (Spring, 1993), pp. 90 – 131. English version of the original 1943 German article.

Lawrence Kramer, 'Music, Metaphor and Metaphysics', in *The Musical Times*, vol. 145, no. 1888 (Autumn, 2004), pp. 5 – 18.

Richard Kramer, 'Between Cavatina and Ouverture: Opus 130 and the Voices of Narrative', in *Beethoven Forum 1* (1992), pp. 165 – 190.

George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: Chicago University Press, 1980).

Colin Lawson and Robin Stowell, *The Historical Performance of Music: An Introduction* (Cambridge: Cambridge University Press, 1999).

Daniel Leech-Wilkinson, 'What we are doing with early music is genuinely authentic to such a small degree that the word loses most of its intended meaning', in *Early Music*, vol. 12, no. 1 (Feb, 1984), pp. 13 – 16.

- ''Playing and Thinking', Book review: *Inside Early Music: Conversations with Performers* by Bernard D. Sherman', in *Early Music*, vol. 27, no. 2 (May, 1999), p. 319 – 320.

- *The Changing Sound of Music: Approaches to Studying Recorded Musical Performances* (London: CHARM, 2009).

Joel Lester, 'Performance and Analysis: Interaction and Interpretation', in ed. John Rink, *The Practice of Performance: Studies in Musical Interpretation* (Cambridge: Cambridge University Press, 1995), pp. 197 – 216.

Janet Levy, 'Beginning-ending ambiguity: consequences of performance choices', in ed. John Rink, *The Practice of Performance: Studies in Musical Interpretation* (Cambridge: Cambridge University Press, 1995), pp. 150 – 169.

- 'The Power of the Performer: Interpreting Beethoven', in *The Journal of Musicology*, vol. 18, no. 1 (Winter, 2001), pp. 31 – 55.

Lewis Lockwood, 'On the Cavatina of Beethoven's String Quartet in B-flat Major, Opus 130' in eds. Martin Just and Reinhard Wiesend, *Liedstudien:Wolfgang Osthoff zum 60. Geburtstag* (Tutzing: Hans Schneider, 1989).

- *Beethoven: Studies in the Creative Process* (Cambridge: Harvard University Press, 1992).

- 'Recent Writings on Beethoven's Late Quartets', in *Beethoven Forum 9* (2002), pp. 84 – 97.

- *Inside Beethoven's Quartets: History, Performance, Interpretation* (Cambridge: Harvard University Press, 2008). Co-written by the Juilliard String Quartet.

Hugh MacDonald, '[G-Flat Major Key Signature]', in *19th-Century Music*, vol. 11, no. 3 (Spring, 1998), pp. 221 – 237.

Nicholas Marston, '"The sense of an ending": goal-directedness in Beethoven's music' in ed. Glenn Stanley, *The Cambridge Companion to Beethoven* (Cambridge: Cambridge University Press, 2000), pp. 84 – 104.

Susan McClary, ‘A Musical Dialectic from the Enlightenment: Mozart's "Piano Concerto in G Major, K. 453", Movement 2’, in *Cultural Critique*, no. 4 (Autumn, 1986), p. 130.

David Milsom, *Theory and Practice in Late Nineteenth-Century Violin Performance* (Aldershot: Ashgate, 2003).

- David Milsom and Neil Da Costa, ‘Expressiveness in historical perspective: nineteenth-century ideals and practices’, *in Expressiveness in music performance: Empirical approaches across styles and cultures* (Oxford: Oxford University Press, 2014).

Michael Murphy, ‘Review: Julian Hellaby, *Reading Musical Interpretation: Case Studies in Solo Piano Performance’*, in *Journal of the Society for Musicology in Ireland 6*, (2010 – 11), pp. 113 – 119.

Frederick Neumann, *Performance Practices of the Seventeenth and Eighteenth Centuries*, (New York: Schirmer, 1993).

William S. Newman, *Beethoven on Beethoven: Playing His Piano Music His Way* (New York: Norton, 1988).

Nancy November, ‘The emperor’s new clothes? ‘Period’ Beethoven and performance traditions’, in *Early Music*, vol. 35, no. 3 (Aug., 2007), pp. 486 – 488.

- ‘Performance History and Beethoven’s String Quartets: Setting the Record Crooked’, in *Journal of Musicological Research*, vol. 30, no. 1 (Jan., 2011), pp. 1 – 22.

- *Beethoven’s Theatrical Quartets: Opp. 59, 74 and 95* (Cambridge: Cambridge University Press, 2013).

Robert Philip, *Early Recordings and Musical Style: Changing Tastes in Instrumental Performance 1900 – 1950* (Cambridge: Cambridge University Press, 1992).

- *Performing Music in the Age of Recording* (New Haven: Yale University Press, 2004).

Roberto Poli, *The Secret Life of Musical Notation: Defying Interpretive Traditions* (Milwaukee: Amadeus Press, 2010).

Tully Potter, ‘The concert explosion and the age of recording’ in ed. Robin Stowell, *The Cambridge Companion to the String Quartet* (Cambridge: Cambridge University Press, 2003), pp. 60 – 96.

Philip Radcliffe, *Beethoven’s String Quartets* (Cambridge: Cambridge University Press, 1978).

Leonard Ratner, *Classic Music: Expression, Form and Style* (New York: Schirmer, 1980).

Ed. John Rink, *The Practice of Performance: Studies in Musical Interpretation* (Cambridge: Cambridge University Press, 1995).

- 'Translating Musical Meaning: The Nineteenth Century Performer as Narrator' in eds. Nicholas Cook and Mark Everist, *Rethinking Music* (Oxford: Oxford University Press, 1999), pp. 217 – 238.

Charles Rosen, *The Classical Style* (New York: Norton, 1972).

Sandra Rosenblum, *Performance Practice in Classical Piano Music* (Bloomington: Indiana University Press, 1988).

Fritz Rothschild, *Musical Performance in the Times of Mozart and Beethoven* (London: A&C Black, 1961).

Stephen Rumph, *Beethoven After Napoleon: Political Romanticism in the Late Works* (Berkeley: University of California Press, 2004).

Thomas Schmidte-Beste, 'Preventive and Cautionary Dynamics in the Symphonies of Mendelssohn and his Time', in *The Journal of Musicology*, vol. 31, no. 1 (Winter, 2014), pp. 43 - 90.

Miriam Sheer, 'Patterns of Dynamic Organization in Beethoven's Eroica Symphony', in *The Journal of Musicology,* vol. 10, no. 4 (Autumn, 1992), pp. 483 – 504.

- 'Dynamics in Beethoven's Late instrumental works: A New Profile', in *The Jounal of Musicology*, vol. 16, no. 3 (Summer, 1998), pp. 358 – 378.

Bernard Sherman, *Inside Early Music: Conversations with Performers* (Oxford: Oxford University Press, 1997).

Maynard Solomon, 'Beyond Classicism' in in eds. Robert Winter and Robert Martin, *The Beethoven Quartet Companion* (Berkeley: University of California Press, 1994), pp. 59 – 75.

Michael Spitzer, *Metaphor and Musical Thought* (Chicago: University of Chicago Press, 2004).

- *Music as Philosophy: Adorno and Beethoven's Late Style* (Bloomington: Indiana University Press, 2006).

Michael Steinberg, 'String Quartet in B-Flat Major, Op. 130', in eds. Robert Winter and Robert Martin, *The Beethoven Quartet Companion* (Berkeley: University of California Press, 1994), pp. 227 – 244.

Ed. Robin Stowell, *Performing Beethoven* (Cambridge: Cambridge University Press, 1994).

- *Beethoven: Violin Concerto* (Cambridge: Cambridge University Press, 1998).

- Ed. *The Cambridge Companion to the String Quartet* (Cambridge: Cambridge University Press, 2003).

Rose Rosengard Subotnik, 'Adorno's Diagnosis of Beethoven's Late Style: Early Symptom of a Fatal Condition', in *Journal of the American Musicological Society*, vol. 29, no. 2 (Summer, 1976), pp. 242 – 275.

Philip Tagg, *Music's Meanings: a modern musicology for non-musos* (New York and Huddersfield: The Mass Media Music scholar's Press, 2013).

Richard Taruskin, *Text and Act: Essays on Music and Performance* (Oxford: Oxford University Press, 1995).

Leo Treitler, 'Beethoven's "Expressive" Markings' in *Beethoven Forum 7* (1999), pp. 89 – 111.

Peter Walls, *History, Imagination and the Performance of Music* (Woodbridge: Boydell, 2003).

Robert Winter and Robert Martin, *The Beethoven Quartet Companion* (Berkeley: University of California Press, 1994).

Discography

(in chronological order by recording date)

All recordings are of Beethoven String Quartet in Bb major, Op. 130 and include the 'Grosse Fuge', Op. 133 unless otherwise stated.

Format: name of quartet (members: vln 1, vln 2, vla, cello), recording date, place of recording (where known), record label, matrix numbers (if applicable)/CD number, reissue/availability details.

Léner Quartet (Jeno Léner, Joszef Smilovits, Sándor Roth, Imre Hartmann), c. 1927, Wigmore Hall: London, UK, Columbia Records, AX2255-61, AX2401-03. Accessible online: http://sounds.bl.uk/classical-music/Beethoven/026M-1CL0051446XX-0000V0. Grosse Fuge, rec. 1930, 5392-35. Accessible online: http://sounds.bl.uk/classical-music/Beethoven/026M-1CL0054094XX-0000V0.

Budapest Quartet (Emil Hauser, Josef Roismann, István Ipolyi, Harry Son), 1927/29, (location unknown), Gramophone/HMV, 08321-23, 08374-78. Accessible online: http://sounds.bl.uk/classical-music/Beethoven/026M-1CL0033727XX-0000V0. Grosse Fuge, rec. unknown, 08324-27. Accessible online: http://sounds.bl.uk/classical-music/Beethoven/026M-1CL0033747XX-0000V0.

Busch Quartet (Adolf Busch, Gösta Andreasson, Karl Doktor, Herman Busch), 1941, Liederkranz Hall: New York, USA, Columbia Records, XCO30695-704. Reissued by Dutton Records, 2009, 'The Busch Quartet Play Beethoven, vol. 4'. No Grosse Fuge, Op. 133.

Amadeus Quartet (Norbert Brainin, Siegmund Nissel, Peter Schidlof, Martin Lovett), 1962, Jesus-Christus-Kirche: Berlin, Germany, Deutsche Grammophon, 463 149-2, (Grosse Fuge, 463 148-2).

Quartetto Italiano (Paolo Borciani, Elisa Pegreffi, Piero Farulli, Franco Rossi), 1969, Switzerland, Decca, 454 070-2.

Alban Berg Quartet (Günther Pichler, Gerhard Schulz, Thomas Kakuska, Valentin Erben), 1982, Evangelische Kirche: Seon, Switzerland, EMI Classics, 7243 5 73610 2 6.

Vermeer Quartet (Shmuel Ashkenasi, Pierre Menard, Bernhard Zaslav, Marc Johnson), 1983, Teldec Studio, Berlin, Germany, Teldec, 8.42982 ZK. Reissued by Warner Classics, 2004.

Lindsay Quartet (Peter Cropper, Ronald Birks, Roger Bigley, Bernard Gregor-Smith), 1984, ASV Records, DCA 117. Reissued by Sanctuary Records, 2003.