Beethoven's Tempo Indications

A thesis submitted to the University of Manchester for the degree of

Doctor of Philosophy

in the Faculty of Humanities

2016

Marten A. Noorduin

School of Arts, Languages and Cultures

Table of Contents

Table of Contents	2
List of Tables	5
List of Music Examples	7
List of Abbreviations	8
Abstract	10
Declaration	11
Copyright Statement	12
Acknowledgements	13
Chapter 1: Aims, Context, and Methodology	14
1.1: Aims	14
1.2.1: Context: Intentions, Intuitions, and Evidence	15
1.2.2: Context: The State of the Field	22
1.3: Method	34
1.3.1: Karl Holz's Metronome Marks	35
1.3.2: Ignaz Moscheles's Metronome Marks	36
1.3.3: Czerny's Metronome Marks	39
1.3.4: Summary of the Method	46
1.3.5: Limitations of the Method	46
1.4: Summary	53
Chapter 2: General Principles of Beethoven's Tempo	54
2.1: Literature on Tempo in Beethoven's Possession	54
2.2: Beethoven's Writings on Tempo	60
2.3: Beethoven's Tempo Flexibility	72
2.4: Tempo Modifiers	74
2.5: Changes in Beethoven's tempo	77
2.6: Conclusion	84
Chapter 3: Beethoven's Slow Indications: Adagio, Largo, Andante, and Others	85
3.1: Adagio	85
3.1.1: Adagios in 3/8	88
3.1.2: Adagios in 6/8	90
3.1.3: Adagios in 9/8	95
3.1.4: Adagios in 2/4	97
3.1.5: Adagios in 3/4	105
3.1.6: Adagios in c	113
3.1.7: Adagios in ¢	117
3.1.8: Adagios in Other Time Signatures	121

3.1.9: Conclusion	124
3.2: Largo	125
3.2.1: Conclusion	132
3.3: Andante	133
3.3.1: Andantes in 3/8	134
3.3.2: Andantes in 6/8	140
3.3.3: Andantes in 9/8 and 12/8	143
3.3.4: Andantes in 2/4	145
3.3.5: Andantes in 3/4	152
3.3.6: Andantes in c	155
3.3.7: Andantes in ¢	157
3.3.8: Conclusion	160
3.4: Other Slow Tempo Indications: Sostenuto, Grave, and Maestoso	161
3.5: Summary and Conclusion	167
Chapter 4: Beethoven's Moderate Tempo Indications	169
4.1: Allegretto	170
4.1.1: Allegrettos in 3/8	172
4.1.2: Allegrettos in 6/8	178
4.1.3: Allegrettos in 2/4	179
4.1.4: Allegretto and Moderate Minuets in 3/4	184
4.1.5: Allegrettos in c	188
4.1.6: Allegrettos in ¢	191
4.1.7: Conclusion	192
Chapter 5: Beethoven's Fast Tempo Indications: Allegro	193
5.1: General Characteristics of Allegro	194
5.2: Allegros in 9/8, 6/8, and 3/8	196
5.3: Allegros in 2/4	209
5.4: Allegros in 3/4 and 6/4	219
5.5: Allegros in c and 12/8	232
5.6: Allegros in ¢	241
5.7: Conclusion	249
Chapter 6: Beethoven's Fast Tempo Indications: Vivace, Presto, and Prestissimo	252
6.1: Vivace	252
6.1.1: Vivaces in 6/8	252
6.1.2: Vivaces in 2/4	254
6.1.3: Vivaces in 3/4	255
6.1.4: Vivaces in c	257

6.2: Presto and Prestissimo	258
6.2.1: Presto and Prestissimo in 3/8 and 6/8	259
6.2.2: Presto and Prestissimo in 2/4	261
6.2.3: Presto and Prestissimo in 3/4.	264
6.2.4: Prestos and Prestissimos in c	269
6.2.5: Prestos and Prestissimos in &	270
Chapter 7: Conclusions and Recommendations	279
7.1: Where to go from here: Intuitions, Experiments, and Practice	283
Bibliography	287
Books and Articles	287
Editions	292
Manuscripts	294
Recordings	296
Appendix I: Beethoven's Metronome Marks	297
Appendix II: Karl Holz's Metronome Marks for the Late String Quartets	302
Appendix III: Czerny's and Moscheles's Metronome Marks for the Piano Works	304

Word count: 79 997

List of Tables

Table 3.1.2: Beethoven's speeds for <i>adagios</i> with their most common note values	88
Table 3.1.1.1: Beethoven's adagios in 3/8.	89
Table 3.1.2.1: Beethoven's adagios in 6/8.	90
Table 3.1.3.1: Estimated intended speeds for adagios in 3/8, 6/8, and 9/8	97
Table 3.1.4.1: Beethoven's adagios in 2/4 with metronome marks.	98
Table 3.1.4.3: Estimated intended speeds for adagios in 2/4.	105
Table 3.1.5.1: Beethoven's adagios in 3/4 with metronome marks.	106
Table 3.1.5.2: Estimated intended speeds for <i>adagios</i> in 3/4.	111
Table 3.1.6.1: Beethoven's metronome marks for adagios in c.	113
Table 3.1.6.2: Estimated intended speeds for <i>adagios</i> in c .	116
Table 3.1.7.1: Beethoven's adagios in & with metronome marks	117
Table 3.1.7.2: Estimated intended speeds for adagios in ¢	120
Table 3.1.8.1: Beethoven's <i>adagios</i> in other metres with metronome marks	122
Table 3.2.1: Beethoven's uses of <i>largo</i> .	126
Table 3.3.1: Beethoven's speeds for andantes with their most common note values	134
Table 3.3.1.1: Beethoven's andantes in 3/8 with metronome marks	135
Table 3.3.1.2: Estimated intended speeds for Beethoven's andantes in 3/8	139
Table 3.3.2.1: Beethoven's andantes in 6/8 with metronome marks	140
Table 3.3.2.2: Estimated intended speeds for Beethoven's andantes in 6/8	143
Table 3.3.4.1: Beethoven's andantes in 2/4 with metronome marks	145
Table 3.3.4.2: Estimated intended speeds for <i>andantes</i> in 2/4	152
Table 3.3.5.1: Beethoven's andantes in 3/4 with metronome marks	153
Table 3.3.5.2: Estimated intended speeds for Beethoven's andantes in 3/4	154
Table 3.3.6.1: Beethoven's <i>andantes</i> in c with metronome marks	155
Table 3.3.6.2: Estimated intended speeds for Beethoven's andantes in c	157
Table 3.3.7.1: Beethoven's andantes in & with metronome marks	158
Table 3.5.1: The relations between the different slow tempo indications	167
Table 4.1.1: Beethoven's metronome marks for allegrettos	171
Table 4.1.1.1: Beethoven's uses of allegretto in 3/8.	172
Table 4.1.1.3: Estimated intended speeds for <i>allegrettos</i> in 3/8	177
Table 4.1.2.1: Metronome marks for <i>allegrettos</i> in 6/8	178
Table 4.1.3.1: Metronome marks for Beethoven's allegrettos in 2/4	180
Table 4.1.3.2: Estimated intended speeds for <i>allegrettos</i> in 2/4	183
Table 4.1.4.1: Metronome marks for allegrettos and non-allegro minuets in 3/4	185
Table 4.1.4.2: Estimated intended speeds for moderate minuets and <i>allegrettos</i> in 3/4	188

Table 4.1.5.1: Beethoven's <i>allegrettos</i> in c .	.189
Table 4.1.6.1: Beethoven's allegrettos in ¢.	.191
Table 5.2.1: The metronome marks for <i>allegros</i> in 6/8.	.198
Table 5.2.3: Approximated speeds of allegros in 9/8, 6/8, and 3/8	.209
Table 5.3.1: The metronome marks for <i>allegros</i> in 2/4.	
Table 5.3.5: Estimated speeds for <i>allegros</i> in 2/4.	.218
Table 5.4.1: The metronome marks for <i>allegros</i> in 3/4.	.220
Table 5.4.3: Approximated speeds of <i>allegros</i> in 3/4	.231
Table 5.5.1: The metronome marks for <i>allegros</i> in c .	.233
Table 5.5.2: Approximated speeds for <i>allegros</i> in c	.239
Table 5.6.1: The metronome marks for <i>allegros</i> in ¢.	.242
Table 5.6.3: Approximated speeds for <i>allegros</i> in ¢	.249
Table 6.1.1.1: Beethoven's vivaces in 6/8.	.252
Table 6.1.2.1: Beethoven's vivaces in 2/4.	.254
Table 6.1.3.1: Beethoven's vivaces in 3/4.	.255
Table 6.1.4.1: Beethoven's vivaces in c.	.257
Table 6.2.1: Beethoven's <i>prestos</i> and <i>prestissimos</i> with metronome marks	.258
Table 6.2.1.1: Beethoven's prestos and prestissimos in 3/8 and 6/8.	.259
Table 6.2.1.2: Estimated speeds for <i>prestos</i> and <i>prestissimos</i> in 3/8 and 6/8	.261
Table 6.2.2.1: Metronome marks for <i>prestos</i> and <i>prestissimos</i> in 2/4	.262
Table 6.2.2.2: Estimated intended speeds for <i>prestos</i> and <i>prestissimos</i> in 2/4	.263
Table 6.2.3.1: Metronome marks for <i>prestos</i> and <i>prestissimos</i> in 3/4	.264
Table 6.2.3.3: Estimated speeds for <i>prestos</i> and <i>prestissimos</i> in 3/4	.269
Table 6.2.4.1: Metronome marks for <i>prestos</i> and <i>prestissimos</i> in c	.269
Table 6.2.5.1: Metronome marks for prestos and prestissimos in ¢	.270
Table 6.2.5.2: Estimated speeds for <i>prestos</i> and <i>prestissimos</i> in ¢	.278
Table I.1: Beethoven's metronome marks for his symphonies	.297
Table I.2: Beethoven's metronome marks for his string quartets.	.299
Table I.3: Beethoven's metronome marks for other works.	.301
Table II.1: Karl Holz's metronome marks for the late string quartets.	.302
Table III.1: Czerny's and Moscheles's metronome marks for Beethoven's piano sonatas	.306
Table III.2: Czerny's and Moscheles's metronome marks for Beethoven's piano pieces	.314
Table III.3: Czerny's and Moscheles's metronome marks for Beethoven's duos and trios.	.316
Table III.4: Czerny's and Moscheles's metronome marks for Beethoven's concertos	.321

List of Music Examples

Example 2.1.1: Two combinations of metres and note values
Example 2.1.2: Two more combinations of metres and note values
Example 2.1.3: The ninth stave of page 116 of Artaria 155 in the Berlin State Library59
Example 2.2.1: Two versions of <i>Klage</i> WoO 113.
Example 2.2.2: A passage in the sketches for the finale of the Piano Trio op. 1 no. 2, along with the published version
Example 3.1.1: Cadential adagios in the first movements of the Piano Sonata op. 31 no. 2 (a) and the Fifth Symphony (b)
Example 3.1.4.2a: Second movement of the String Quartet op. 18 no. 6, bars 1-4, Violin I, published version
Example 3.1.4.2b: Second movement of the String Quartet op. 18 no. 6, sketches104
Example 4.1.1.2: Sketches and the final version of the opening of the final movement of the String Quartet op. 18 no. 6
Example 4.1.5.2: <i>Pria ch'io l'impegno</i> in its original version (a) and in the third movement of Beethoven's op. 11 (b)
Example 5.2.2 a: Bar 662-672 of the Große Fuge op. 133. b: The beginning of the second movement of the String Quartet op. 131
Example 5.3.2: Part of the first page of the autograph score of op. 125211
Example 5.3.3: The first movements of (a) the Symphony op. 125 (Violins, bars 35-36) and (b) the String Quartet op. 18 no. 2 (bars 1-4)
Example 5.3.4: The melody and accompaniments of the third movement of the Piano Sonata op. 57 and the first movement of the Symphony op. 68
Example 5.4.2: Part of the third movements of a: String Quartet op. 18 no. 6, bar 48-52; b: String Quartet op. 18 no. 2, bar 18-25; c: bar 1-4 of the first movement of the String Quartet op. 18 no. 1
Example 5.6.2: The <i>Allegro moltos</i> from opp. 36, (a) 59 no. 3 (b), and op. 95 (c)246
Example 6.1.3.2: The scherzos of op. 106 and 127
Example 6.2.3.2: The <i>prestos</i> from the String Quartet op. 74 (Violin I) (a), the fourth movement of the Ninth Symphony (Flute) (b), and the same passage as Karl van Beethoven might have imagined it was notated (c)

List of Abbreviations

Brandenburg, Sieghard Brandenburg, ed., Ludwig van Beethoven: Briefwechsel Briefwechsel Gesamtausgabe, Munich (G. Henle Verlag) 1998, 7 vols. Brown, 'Metronome Clive Brown, 'Historical Performance, Metronome Marks and Tempo in Marks' Beethoven's Symphonies', Early Music, xix/2 (May 1991), 247-258. Brown, Performance Clive Brown, Classical and Romantic Performing Practice, 1750-1900, Practice New York (Oxford University Press) 1999. Carl Czerny, On the Proper Performance of All Beethoven's Works for Czerny, *On the Proper* Performance the Piano, ed. Paul Badura-Skoda, Universal Edition (Vienna) 1970. Facsimile of Chapter 2 and 3 of the fourth volume of the English translation published by R. Cocks & Co in London of Von dem Vortrage: Dritter Theil aus Vollständige theoretisch-practische Pianoforte-Schule, op. 500, Vienna (Diabelli) 1839. Otto Erich Deutsch, 'Beethovens Gesammelte Werke: Des Meisters Plan Deutsch, 'Werke' und Haslingers Ausgabe', Zeitschrift für Musikwissenschaft xiii/2 (1930), 60-79. Johann Philipp Kirnberger, Die Kunst des reinen Stazes in der Musik, Kirnberger, Kunst Berlin and Königsberg (Decker and Hartung) 1776, 2 vols. Translations adapted from The Art of Strict Musical Composition, tr. David Beach & Jurgen Thym, New Haven and London (Yale University Press) 1982. Koch, Lexikon Heinrich Christoph Koch, Musikalisches Lexikon, Frankfurt am Main (August Hermann jr.) 1802. Kunze, Spiegel Stefan Kunze, ed., Ludwig van Beethoven: Die Werke im Spiegel seiner Zeit, Laaber (Laaber) 1996. Lenz, Kunst-Studie Wilhelm von Lenz, Beethoven: Eine Kunst-Studie, Hamburg (Hofmann & Campe) 1860, 5 vols. Moscheles, Recent Music Charlotte Moscheles, ed., Recent Music and Musicians as Described in the Diaries and Correspondence of Ignaz Moscheles, trans. A.D. Coleridge, New York (Henry Holt) 1879. Platen, 'Holz' Emil Platen, 'Zeitgenössische Hinweise zur Aufführungspraxis der letzten Streichquartette Beethovens', in Beiträge '76-78, Beethoven-Kolloquium 1977: Dokumentation und Aufführungspraxis, ed. Rudolf Klein, Kassel (Bärenreiter) 1978, 100-107. Rosenblum, Performance Sandra P. Rosenblum, Performance Practices in Classic Piano Music: Their Principles and Applications, Bloomington and Indianapolis, IN **Practices** (Indiana University Press) 1988. Sandra Rosenblum, 'Two Sets of Unexplored Metronome Marks for Rosenblum, 'Two Sets'

Beethoven's Piano Sonatas', Early Music, xvi/1 (February 1988), 58-71.

Schindler, *Life of Beethoven*

Anton Schindler, *The Life of Beethoven, including his Correspondence with His Friends, Numerous Characteristic Traits, and Remarks on His Musical Works*, Ignaz Moscheles, ed. & trans., London (Henry Colburn) 1841, 2 vols.

Seifert, 'Metronomisierungen'

Herbert Seifert, 'Czernys und Moscheles' Metronomisierungen von Beethovens Werken für Klavier', *Studien zur Musikwissenschaft*, xxxiv (1983), 61-83.

Abstract

Beethoven's tempo indications have been the subject of much scholarly debate, but a coherent understanding of his intended tempos has not yet emerged. There are several reasons for this. Firstly, some of the discussion has been based on unreliable sources, or an unrepresentative sample of sources. Secondly, the substantial differences between tempo preferences in the early nineteenth century and now has made these tempo indications difficult to approach for musicians in the twentieth and twenty-first centuries. Thirdly, discussions of Beethoven's tempo have typically focussed on works in one particular genre.

This thesis overcomes these limitations by incorporating all of Beethoven's works, and rooting the whole research in a wide variety of sources from the eighteenth and nineteenth century that have a plausible relationship with Beethoven's practice. In particular the metronome marks by Beethoven, as well as those from his close contemporaries Carl Czerny, Ignaz Moscheles, and Karl Holz, provide great insight into the composer's sense of tempo.

By using as many sources on Beethoven's tempo as possible, this approach makes reasonable estimations of the actual speeds that Beethoven had in mind for his works.

Furthermore, it also allows an exploration of the musical intuitions that are the root cause of these speeds.

Declaration

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

Copyright Statement

- i. The author of this thesis (including any appendices and/or schedules to this thesis) owns certain copyright or related rights in it (the "Copyright") and s/he has given The University of Manchester certain rights to use such Copyright, including for administrative purposes.
- ii. Copies of this thesis, either in full or in extracts and whether in hard or electronic copy, may be made **only** in accordance with the Copyright, Designs and Patents Act 1988 (as amended) and regulations issued under it or, where appropriate, in accordance with licensing agreements which the University has from time to time. This page must form part of any such copies made.
- iii. The ownership of certain Copyright, patents, designs, trade marks and other intellectual property (the "Intellectual Property") and any reproductions of copyright works in the thesis, for example graphs and tables ("Reproductions"), which may be described in this thesis, may not be owned by the author and may be owned by third parties. Such Intellectual Property and Reproductions cannot and must not be made available for use without the prior written permission of the owner(s) of the relevant Intellectual Property and/or Reproductions.

 iv. Further information on the conditions under which disclosure, publication and
- commercialisation of this thesis, the Copyright and any Intellectual Property and/or Reproductions described in it may take place is available in the University IP Policy (see http://documents.manchester.ac.uk/DocuInfo.aspx?DocID=487), in any relevant Thesis restriction declarations deposited in the University Library, The University Library's regulations (see http://www.manchester.ac.uk/library/aboutus/regulations) and in The University's policy on Presentation of Theses.

Acknowledgements

During the course of this project, a great many individuals, both at the University of Manchester and elsewhere, provided me with help, advice, and support. While I can only thank the most prominent contributors here for reasons of space, I would like to assure those who have gone unmentioned that they have not been forgotten.

Firstly, I would like to thank my benefactors Victor Sayer and Harry Clough, who provided me with scholarships that have made this research possible. I would also like thank the Sint Christophorileen tot Oldehove foundation for providing me with funds for covering the final stages of this project.

I owe an enormous debt of gratitude to my supervisor Barry Cooper, who truly went above and beyond his duties in my development as an independent researcher. In particular, his commitment to supporting new approaches to well-researched topics has been inspiring, even if these contradicted a view that he had previously articulated. A better and more honest way of supervising a PhD-thesis is hardly imaginable, and I thoroughly enjoyed every single meeting we have had. I should also mention the two other members of my PhD panel, Thomas Schmidt and David Fanning, whose critical engagement with my work has always been constructive, and who alerted me to various sources and arguments that I would probably otherwise have overlooked. Furthermore, I would like to thank James Garrett and Clive Brown for being my examiners during my viva voce exam, and for the lively, interesting, and enjoyable conversation, both during the examination and afterwards.

In addition, this project was also supported in various direct and indirect ways by many of my friends and colleagues. I am particularly indebted to Stephan Schönlau, Dan Elphick, James Hulme, Richard Gillies, and Artur Pereira, for their help with music examples, proofreading, as well as asking helpful critical questions. I have also had a number of inspiring conversations on the topic of this thesis with some truly great musicians and conductors. In this context it would be rude note to not mention the members of the Quator Danel in particular, who were frequent and fruitful participants in these discussions, both in symposia at the university and in the pub after their many excellent concerts.

Perhaps most of all I have to thank my parents, who throughout this project supported and encouraged me in more ways than I can count, as well as during the approximately 25 preceding years. Many thanks also to my brothers Bauke Jan and Wim, not only for their encouragement and interest in my work, but also for helping me acquire some of the materials for this thesis, as well as for their toleration of my piano practice when we were younger.

Finally, I should mention my uncle Bauke van der Meer, a pianist and conductor who passed away during the earlier stages of this project but who lives on in my mind, and to whose memory this thesis is dedicated.

Chapter 1: Aims, Context, and Methodology

1.1: Aims

This study investigates Beethoven's tempo indications and the speeds that they were intended to communicate. The scope of this research includes the whole of his oeuvre, from his earliest compositions in Bonn to the works that he worked on before his death. This includes 138 opus numbers, some of which are used more than once, such as op. 72 (different versions of the opera *Fidelio*) and op. 81 (Piano Sonata and a Sextet for strings and horns), and more than 200 works without opus numbers. All in all, this research includes approximately 1000 individual movements, songs, and pieces, almost all of which contain words and signs that indicate a particular tempo. What these intended tempos are, however, has been the subject of fierce debates among both scholars and performers, but a clear understanding of the intended meanings of these indications has yet to emerge. This study, which explicitly only aims to define Beethoven's intended tempos but which is neutral about their applicability, will shed new light on the subject by systematically discussing Beethoven's tempo indications across his oeuvre, rather than focus on those in a particular genre.

This dissertation will use several other sources to build a framework through which to interpret Beethoven's tempo indications. The first and most important of these are the composer's own writings on the subject: published statements, letters, and written commentary on autograph scores and sketches. Together, these provide a good insight into how he thought about tempo in general and the tempo for certain specific works in particular. These primary sources will be supplemented by several secondary sources on particular aspects of Beethoven's tempo, such as his use of the modifiers *molto* and *assai*. Finally, the notion of tempo flexibility within a piece will be explored, drawing again on Beethoven's own writings, but also on eyewitness reports his performances, as well as statements by his closest associates. This working model will then be tested against a sample of Beethoven's

oeuvre to explore if there is any evidence that his sense of tempo changed significantly over time. Of special interest will be those works that he revisited after first composing them, to make a new and supposedly improved version, as happened in the case of *Fidelio*; to make or supervise an arrangement; or to provide metronome marks, such as the first eight symphonies. This will show to what extent more general observations can be applied to individual works, and whether any changes need to be made to the working model.

The following chapters will discuss Beethoven's individual tempo words, starting at the slow end of the spectrum, and placed in context by various treatises and descriptions by Beethoven's contemporaries. Special emphasis will be placed on how the individual works relate to the working model, and whether there are any cases in which Beethoven's indicated speed is significantly different from what the model predicts.

1.2.1: Context: Intentions, Intuitions, and Evidence

In his book *Authenticities: Philosophical Reflections of Musical Performance*, Peter Kivy offers three different definitions of what he calls historical authenticity: '(1) faithfulness to the composer's performance intentions; (2) faithfulness to the performance practice of the composer's lifetime; [and] (3) faithfulness to the sound of a performance during the composer's lifetime'. The distinction between these definitions requires close examination, as particularly the first two are often implicitly (and erroneously) conflated. The third definition is somewhat less relevant to this discussion, as it applies mainly to music that was recorded during the composer's lifetime, a technology that was not invented until decades after Beethoven's death.

The extent to which Beethoven's performance practice generally and his intended tempos in particular were similar to those of his contemporaries is complicated. On the one

15

¹ Peter Kivy, Authenticities: Philosophical Reflections on Musical Performance, New York (Cornell University Press) 1995, 6-7.

hand, it seems plausible that close associates of his would have had similar preferences, or at least would be aware what Beethoven's intentions were for pieces that they studied or discussed with him, as will be explored later in this chapter. On the other hand, there is evidence that there was a substantial difference between what Beethoven intended and what his contemporaries did. When his student Carl Czerny made significant departures from the score during a performance of the Quintet for Piano and Woodwinds op. 16 on 11 February 1816, Beethoven rebuked his pupil in front of the other musicians. The next day, he sent Czerny the following letter:

Dear [Czerny],

Today I will not be able to see you, but tomorrow I will come and talk to you. I burst yesterday, [and] I was very sorry once it had happened, but you will have to forgive an *author* who would rather hear the work as he had written it, regardless of how well you played it.²

Beethoven's reprimand seems to have had the desired effect: in an article published in the Wiener allgemeine Musik-Zeitung of 20 September 1845, Czerny quoted the above letter, writing that 'this letter more than anything else cured me of the desire to permit myself any change when performing his works.' In addition, in a chapter in the 1846 publication Complete Theoretical and Practical Piano Forte School op. 500 on Beethoven (later published independently as On the Proper Performance of all Beethoven's Works for the Piano), he writes that 'in the performance of [Beethoven's] works (and generally in all

² Brandenburg, *Briefwechsel*, Letter 902. 'lieber Z Heute kann ich sie nicht sehn, morgen werde ich selbst zu ihnen kommen, um mit ihnen zu sprechen—ich platzte gestern so heraus, Es was mir sehr leid, als es geschehen war, allein dies müßen sie einem *autor* verzeihen, der zein werk lieber gehört hätte gerade, wie er's geschrieben, so schön sie auch übrigens gespielt.'

³ Carl Czerny, 'Carl Czerny über sein Verhältnis zu Beethoven vom Jahre 1801 bis 1826', *Wiener allgemeine Musik-Zeitung*, v/113 (20 September 1845), 450-451.

classical authors) the player must by no means allow himself to alter the composition, nor to make any addition or abbreviation, '4 a statement that implies that some significant subset of his contemporaries were taking liberties of various kinds with the score, and presumably also with the tempo. Similarly, Beethoven's endorsement of the metronome, which will be discussed in more detail in Chapter 2, also points towards heterogeneity of performance practices.

So although there are some close associates of Beethoven who might be able to serve as reasonably reliable sources, it would be unwise to assume that all of his contemporaries would have intuitively understood Beethoven's intentions. The broader question here is to what extent Beethoven's intended tempos can be determined by an examination of or an appeal to the musical intuitions of performers of his music, and whether and in what circumstances the two map onto each other to any significant degree.

The psychologist Herbert Simon, who was awarded the Nobel Prize in economics in 1978 for his work on decision making, offered the following succinct definition of intuition:

The situation has provided a cue; this cue has given the expert access to information stored in memory, and the information provides the answer. Intuition is nothing more and nothing less than recognition.⁵

Simply put, intuition makes the link between previously observed patterns and the current situation, and, as Simon later states,⁶ it makes this connection unbeknownst to the person making the observations. Another Nobel laureate in the same field, Daniel Kahneman, has dubbed this 'fast thinking', as opposed to 'slow thinking', which is conscious, and deliberate.

⁴ Czerny, On the Proper Performance, 22.

⁵ Herbert A. Simon, 'What is an Explanation of Behavior?', *Psychological Science*, iii/3 (May 1992), 150-161, at 155.

⁶ Ibid.

As Kahneman has shown in considerable detail, these systems which govern the making of decisions—which presumably includes the choosing a tempo in music, and various other choices related to it—each have their own characteristics, and are each influenced by particular biases.⁷

With intuitions defined as a form of pattern recognition, three problems with using the musical intuitions of one or more musicians to try and determine the intentions of a composer come into view. Firstly, there is almost always a difference of lived experience—and therefore a difference in the patterns that are recognized—between these musicians and the composer, and therefore their intuitions will often not align, even if they are contemporaries. Evidence for this can be found in the widely varying definitions and uses of tempo indications in the late eighteenth and early nineteenth centuries. Presumably because of these different definitions, Beethoven's contemporaries often misunderstood what he had in mind, as both this and the subsequent chapters will show. Secondly, using these musicians' performance practices in order to approximate Beethoven's performance practice would obfuscate the difference between these musicians' opinions on how Beethoven's music should be performed and how Beethoven intended his music to be performed, issues which do not necessarily overlap. Thirdly, such a comparison would provide no further insight into how Beethoven actually thought about tempo; the best it can do is provide an estimation of his intended tempos without really understanding why he chose the tempos that he did. In other words, there are significant problems with using the intuitions of performers to approximate Beethoven's intended performance practice.

All of this is not to say that performers have nothing of substance to contribute: many have repositioned the debate by creatively engaging with the material and opening up new possibilities for research, and this thesis would not exist without them. The problem is an

⁷ Daniel Kahneman, *Thinking, Fast and Slow*, New York (Farrar, Straus and Giroux) 2013.

⁸ See Sandra P. Rosenblum, *Performance Practices in Classic Piano Music: Their Principles and Applications*, Bloomington and Indianapolis, IN: (Indiana University Press), 1988, 312-321.

epistemological one: there is no reliable way to tell whether these suggestions are accurate without a detailed study of the historical evidence for Beethoven's intentions. It is for this reason that this thesis largely leaves out discussions of this topic that do not explicitly engage with the historical evidence for Beethoven's intentions. Instead, this thesis will rely on the publications by three contemporaries of Beethoven—Karl Holz, Ignaz Moscheles, and Carl Czerny—who had knowledge of the intended speeds of some of Beethoven's works, and whose testimonials offer insight into Beethoven's tempos generally. The merits of these will be discussed in Sections 1.3.1, 1.3.2, and 1.3.3, respectively.

These testimonials, however, will in many cases give results that are deeply counterintuitive, as the tempos that this approach produces might be very different from what performers and audiences are accustomed to. There is evidence, however, that this discomfort is a normal reaction to a confrontation with a musical style of a long time ago, as indicated by the following 2001 interview with Nicholas Harnoncourt, in which he discusses the reaction of a modern audience to a 1906 recording of The Queen of the Night's aria by Maria Galvany:

'There were 2500 people in the hall and the [lecturer] said [referring to Harnoncourt], "I wonder what the maestro will have to say about *this*." And then the [Galvany recording] started' [...] Harnoncourt does a frenetic imitation [...] and then continues. 'The Vienna audience started to laugh. [...] And when it came to the coloratura section of the aria, she accelerated wildly. It was fantastic. It was so *perfect*. I was flabbergasted. I had NEVER heard anything like it before. And still the audience laughed, the whole hall, all 2500 of them! [...] So I rushed out the next day

and bought the record. I played it to my students in Salzburg, and the effect was exactly the same: they laughed. And that was my most abiding impression: laughter.'9

So in contrast to the members of the audience in Vienna and his students in Salzburg, who reacted to the early twentieth-century Galvany recording with laughter, ¹⁰ Harnoncourt considered it a valuable artefact that could inform his own performances. Since then, several scholars and performers have experimented with the counterintuitive evidence from early recordings to come to radically new interpretations of established repertoire. ¹¹ It should be noted that it is the counterintuitive qualities of these recordings—unusually fast or slow tempos, accelerandos where they would now not normally be expected, and other aspects of earlier performance practices that would seem out of place to most listeners nowadays ¹²—that are simultaneously alienating to many modern audiences but also of great value for the study of performance practice. These recordings profoundly change our understanding of performance practice in the late nineteenth and early twentieth centuries, and provide musicians with creative opportunities of which they would otherwise probably not have thought, or which they would not be able to justify.

If late nineteenth-century performance practices are so counterintuitive, it seems reasonable to assume that performance practices from the beginning of that century are at least so, if not more counterintuitive. It is therefore important to avoid dismissing evidence or drawing conclusions on the (often implicit) basis of musical intuition. This can occasionally

⁹ Rob Cowen, '[Interview with Nikolaus Harnoncourt]', *Gramophone*, lxxix (November 2001), 10-11.

¹⁰ For an examination of the psychological underpinnings of this phenomynon, see Daniel Leech-Wilkinson,

^{&#}x27;Listening and Responding to the Evidence of Early Twentieth-Century Performance', *Journal of the Royal Musical Association*, cxxv (2010), Special issue no. 1, 45-62.

¹¹ See for instance Anna Scott, *Romanticizing Brahms: Early Recordings and the Reconstruction of Brahmsian Identity*, PhD Thesis, Universiteit Leiden, 2014.

¹² See Clive Brown, 'Performing 19th-Century Chamber Music: the Yawning Chasm between Contemporary Practice and Historical Evidence', *Early Music*, xxxviii (2010), 476-480.

be difficult to detect, as Martin Hughes's discussion of tempo in Beethoven's piano sonatas will show.

How can we restore the original power of the text? An early step has to be an appreciation of the parameters of Beethoven's tempos. The relationship, or rather the lack of it, between the time signature and the tempo marking at the start of Beethoven's movements is now well established. The Prestissimo finale of [the Piano Sonata] op. 10 no. 1 and the Presto first movement of op. 10 no. 3 are examples—neither can be strictly applied to the minim, as indicated. Here, as often elsewhere, they are an indication of the spirit of the piece, the impression of haste, rather than a mathematical calculation of a precise tempo area. Performers of Beethoven on the fortepiano have done much to re-establish the supremacy of clarity and coherence over speed in faster movements, and the number of pianists ignoring the *ma non troppo* of the final movement of [the Piano Sonata] op. 57 in favour of a virtuoso presto is at last diminishing.¹³

Whether Hughes is correct about the parameters of Beethoven's tempos is of lesser importance here. (He is not, as the following chapters will show.) More interesting is the motivation behind his argument, which seems to be driven by a well-articulated desire for clarity and moderate tempos. Hughes does not supply any evidence that these are part of 'the original power of the text', nor for his statement that the last movement of op. 57 is often played too fast. This is course does not mean he is wrong about everything—early metronome marks by Carl Czerny and Ignaz Moscheles for the last movement range from

¹³ Martin Hughes, 'Beethoven's Piano Music: Contemporary Performance Issues', in *Performing Beethoven*, ed. Robin Stowell, Cambridge (Cambridge University Press), 228-239, at 229.

J=138 to 152, indeed slower than some pianists take it—but it makes it difficult to assess whether his statements are true or not. Furthermore, there is also the possibility that his own musical intuitions, which are probably at odds with 'the original power of the text', interfere with his view on what Beethoven really intended.

In order to avoid this problem, this thesis will adopt the following principles. Firstly, it will take as its starting point the historical evidence for Beethoven's intended tempos, which, as already indicated, includes Beethoven's own writings on the subject, as well as the testimonials of his close associates. Secondly, whenever an educated guess will have to be made to fill a gap in the evidence, this thesis will stick as close to the available evidence as possible, thereby avoiding the use of musical intuition as much as possible. As the following section will show, most of the other approaches to this topic have strayed quite far from the evidence available, and have often implicitly relied on the author's musical intuition.

1.2.2: Context: The State of the Field

In the debate surrounding the intended performance practice in Beethoven's music, the discussion has often (but not exclusively) focussed on the composer's performance intentions and the performance practice during the composer's lifetime for two main reasons. Firstly, several scholars have argued on the basis of documentary evidence that Beethoven did really have a narrow range of speed in mind for many of his works, and that he considered this an integral part of the musical work. Secondly, the invention of the metronome in the 1810s provides unprecedented insight into what this particular speed was that he had in mind: where earlier musicians could not describe speed directly other than with words—although there were systems that did so indirectly, ¹⁴ and there were less successful and less wide spread

¹⁴ For an detailed discussion of metre and tempo, particularly of the seventeenth and eighteenth century, see George Houle, *Meter in Music*, *1600-1800: Performance, Perception, and Notation*, Bloomington (Indiana University Press) 1987.

devices that tried to indicate musical speed¹⁵—the metronome allowed much more precise and reliable descriptions of the actual speed. A complete overview of Beethoven's metronome marks, along with the dates on which they were published or written down, can be found in Appendix I.

Among the earliest scholars who studied the issues relating to Beethoven's tempo indications was Gustav Nottebohm. In his 1872 book Beethoveniana, a collection of 29 short essays on various topics, all but one of which had been published in between 1868 and 1871 in a previous form, two essays relate directly to tempo. The first is a short report on Anton Schindler's claim that the second movement of the Seventh Symphony was originally performed and marked as Andante and that the Allegretto printed in the first edition is a mistake, 16 presumably in an attempt to discredit the metronome mark that Beethoven gave the work in 1817. Nottebohm undermines this claim by reference to the handwritten parts that were used in the first performance which clearly show *Allegretto*, ¹⁷ as well as an article by Louis Spohr who played in the orchestra at the first performance, which confirms that the speed taken at the first performance was comparable to the metronome mark of 1817. The second article concerns Beethoven's metronomic indications, and also disproves several of Schindler's claims. These include Schindler's assertion that Beethoven used different metronomes that all worked at different speeds even when it indicated the same number; significant confusion about the number of works for which Beethoven provided metronome marks; and Schindler's description of Beethoven's dismissal of the metronome, which Nottebohm suspects of being fictitious.¹⁹

¹⁵ Roger Mathew Grant, 'Epistemologies of Time and Metre in the Long Eighteenth Century', *Eighteenth Century Music*, vi/1 (March 2009), 59-75.

¹⁶ Gustav Nottebohm, 'Das Tempo des zweiten Satzes des siebten Symphonie (Eine Berichtigung)', in *Beethoveniana: Aufsätze und Mittheilungen*, Leipzig and Winterthur (J. Rieter-Biedermann), 1872, 21-22. ¹⁷ Ibid.. 22.

¹⁸ Louis Spohr, 'Das Schreiben des Hrn Schindler', Neue Zeitschrift für Musik, vii/45 (2 December 1840), 180.

¹⁹ Nottebohm, 'Metronomische Bezeichnungen', in *Beethoveniana*, 126-137.

Other contemporaries of Schindler also looked upon his claims with suspicion, and several of his descriptions of events in Beethoven's life have been shown to be inaccurate and some cases supported by evidence that Schindler manufactured himself. ²⁰ Despite this, Schindler nevertheless succeeded in significantly muddying the water: various nineteenthand twentieth-century publications seem to have taken Schindler's claims about Beethoven's performance practice at face value, although often without mentioning the source. ²¹ Furthermore, the full extent of Schindler's deception did not become known until the 1970s, when it was revealed that he had added a large amount of spurious entries in Beethoven's conversation books. 22 This discovery undermined Schindler's credibility as a source even further, which in turn has discredited much of the research that accepted his testimony uncritically.²³ It is perhaps the relatively late discovery of the full extent of Schindler's dishonesty that explains why there have been comparatively few reliable scholarly approaches to Beethoven's tempo.

Among the first to study Beethoven's tempo indications in a large-scale study was Rudolf Kolisch, whose two-part article on the subject appeared for the first time in English in 1943.²⁴ Kolisch observed that although Beethoven's metronome marks were generally ignored by performers, they still provide important information about the tempo that Beethoven had in mind. Arguing that the tempo is an essential part of the musical idea, Kolisch provided metronome marks for almost all of Beethoven's works with opus numbers, based on the character of the piece, which according to him 'manifests itself in musical

²⁰ See for instance Stanley Howell, 'Beethoven's Maelzel Canon: Another Schindler Forgery?' Musical Times, cxx/mdxlii (Dec. 1979), 978-990. ²¹ Adolf Marx, 'Tempo and Meter', in *Introduction to the interpretation of the Beethoven Piano Works*, trans.

Fanny Louise Gwinner, Chicago (Clayton F. Summy), 1895, 67-79, in particular 69.

²² Peter Stadlen, 'Schindler's Beethoven Forgeries', *The Musical Times*, cxviii (July 1977), 549-552.

²³ In particular Donald W. MacArdle, ed., Beethoven as I Knew Him: A Biography by Anton Schindler, trans. Constance S. Jolly, London (Faber and Faber), 1966.

²⁴ Rudolf Kolisch, 'Tempo and Character in Beethoven's Music', trans. Arthur Mendel, *The Musical Quarterly*, xxix (April 1943), 169-187 and (July 1943), 291-312.

configuration'. 25 Kolisch never defines what this is, but in practice he generally groups works with a similar range of note values, metre, and tempo indication together, and assigns them a particular range of speed. Later scholars would agree that these are indeed the parameters that determine Beethoven's speed, but closer examination of Kolisch's method reveals that it depends at least in part on his own musical preferences. Three examples will suffice to demonstrate this.

The second movement of the Piano Sonata op. 31 no. 3—a scherzo in 2/4 marked Allegro vivace with semiquavers as fastest note values—is given the speed of >=200 without any further explanation, and it seems that the source of this speed is Kolisch's own musical imagination.²⁶ A little context is provided for the first movement of op. 53, which is marked Allegro con brio in c and contains extensive semiquaver figuration, and which is therefore put in a category with other movements that supposedly have these characteristics, to which Kolisch applies the range of J=184-224. The upper range, however, is justified by reference to the first movement of the First Symphony, which although it is also marked Allegro con brio is in a different metre: ¢ instead of c. Furthermore, semiquavers—which Kolisch considers the 'distinguishing feature' of this kind of movement²⁷—hardly appear in the first movement of the First Symphony, which makes the inclusion of it in this category clearly inappropriate. In addition to that, the lower limit suggested for movements marked Allegro con brio in c is also not justified by reference to any speed by Beethoven, and probably also comes from Kolisch's own musical imagination. Finally, for the movements marked *Presto* and *Prestissimo* in & Kolisch suggests speeds ranging from $\beta = 176$ to 184, again without justifying his choices in any way.

In a number of other cases, Kolisch's suggested ranges for other movements are sometimes unhelpfully broad because of a failure to make a distinction between movements

²⁵ Ibid., 183.

²⁶ Ibid., 294. ²⁷ Ibid.

with different characteristics. The best example of this can be found in his discussion of scherzos, a category for which he recommends the range of J=156-300, and which groups together various movements in 3/4 with different ranges of note values and tempo indications, such as the third movement of op. 18 no. 2 (*Allegro*, with pairs of semiquavers) and the third movement of the String Quartet op. 74 (*Presto*, with quavers and crotchets only). In summary, Kolisch's discussion of Beethoven's tempo indications suffers from an overreliance on the author's own musical preferences, while in other cases his discussion fails to make the distinction between movements with very different characteristics. In addition, Kolisch makes no real attempt to explain Beethoven's thinking on the subject of tempo, and the reasoning behind the metronome marks that Kolisch supplies is not explained in sufficient detail.

Very similar criticism can be levelled at Yakov Gelfand, whose article on metronome marks for Beethoven's piano sonatas employs a comparable methodology to Kolisch's. ²⁹ In practice, Gelfand's approach consists of dividing Beethoven's metronome marks into different categories and matching piano sonata movements to the works in these categories. Gelfand's reasoning is not always particularly clear: the aforementioned first movement of the Piano Sonata op. 53 is given a speed of \$\delta = 76\$, without reference to any metronome mark by Beethoven. The closest Gelfand seems to be able to do is to put the movement in the same category as the *Allegro vivace* in \$\phi\$ of the second movement of the Cello Sonata op. 102 no. 1, which has a different metre, tempo indication, and range of note values compared to the first movement of op. 53, and for which Beethoven did not provide metronome marks. (Although Gelfand does mention the fact that the authenticity of the speeds that he provides for op. 102 no. 1 is doubtful, he does not provide a source for them. Furthermore, these speeds are all very different from Czerny's and Moscheles's speeds in their respective editions, making

²⁸ Ibid., 304.

²⁹ Yakov Gelfand,, 'On Tempo Indications: Based on Beethoven's Music', *College Music Symposium*, xxv (1985), 92-129.

their inclusion all the more suspect.) In many other cases, Gelfand's reasoning ignores important differences between works, which becomes especially clear in the case of movements with a rare combination of factors, such as the speed for the *Grave* of the opening of the Piano Sonata op. 13—which is put in the same category as several *Adagios* in 2/4.³⁰ Even with more common factors, such as the *Allegro* in ¢ with quavers and crotchets in the first movement of the Piano Sonata op. 2 no. 1, Gelfand's reasoning is suspect, as he presents no other movement with these characteristics to justify the speed he suggests, which seems to depend on several *Allegro con brio* movements for its validation.³¹ All of this is glossed over without any comment whatsoever, and one gets the suspicion that Gelfand is doing something akin to playing tennis without the net, covering up any potential problems by insufficiently articulating the steps that lead to his conclusions and ignoring several important objections.

The only other large scale study of the subject is a German dissertation by Hermann Beck, the core argument of which was published in the *Beethoven-Jahrbuch* of 1955-56.³² Taking the metronome marks as his starting point, Beck argued that it was the *Bewegung* that determined the intended speed: a combination of the prevailing note values and patterns, the tempo indications, and the metre and its traditionally associated speed. Beck's methodology still relies to a certain degree on modern musical intuition in estimating the speeds for works without metronome marks, but it seems a sound basis for further exploration.

While there have been no other large scale studies of Beethoven's tempo besides those by Kolisch, Gelfand, and Beck, the subject is discussed in many publications that take a more general approach to performance practice. These are far too numerous to discuss in detail, but the following should give an overview of the general development of the arguments surrounding Beethoven's tempo.

³⁰ Ibid., 119 and 123.

³¹ Ibid

³² Hermann Beck, 'Bemerkungen zu Beethoven's Tempi', in *Beethoven-Jahrbuch* (3d series), ii (1955-56), 24-54.

In the 1970s, renewed interest in Beethoven's performance practice resulted in a series of articles that relate to this topic, most of which appeared in two publications: *Beiträge '76-78, Beethoven-Kolloquium 1977: Dokumentation and Aufführungspraxis* and *Musik Konzepte 8: Das Problem der Interpretation.*³³ Of particular interest for the current discussion is Sieghard Brandenburg's article on Beethoven's changes of time signatures, which also identifies several cases in which the tempo indication was changed during the creative process, often along with other aspects of the composition. Whether Beethoven's intended speeds changed during this process or whether the altered time signature is merely a more accurate way to express something that he already had in mind is generally unclear. Other contributions in these volumes by Emil Platen, Peter Stadlen, and Herbert Seifert will be discussed in more detail in section 1.3 below.

William S. Newman's book *Beethoven on Beethoven: Playing His Piano Music His Way* contains a lengthy discussion of Beethoven's tempo. Although Newman's book is an admirable collection of evidence, some of his arguments are less robust than one might want them to be. For instance, after discussing the influence of time signatures on late eighteenthand early nineteenth-century tempos, he writes that

unfortunately, Beethoven's responses to these tendencies seem to have vacillated, thus providing only very tenuous aids to the determination of one tempo. When he changed the tempo in the Gloria of his Mass op. 86, he wrote explicitly, 'I have altered e to e, thus altering the tempo.... A bad performance at which the tempo was too fast influenced me to do this.' Yet, it was different when he wrote Ries ... asking him to drop the 'assai' from [the first movement of] the 'Hammerklavier' Sonata op.

³³ Rudolf Klein, ed., Beiträge '76-78, *Beethoven-Kolloquium 1977: Dokumentation und Aufführungspraxis*, Kassel (Bärenreiter), 1978.

³⁴ Sieghard Brandenburg, 'Über die Bedeutung der Änderungen von Taktvorschriften in einigen Werken Beethovens', in ibid., 37-51.

106 in order to communicate the faster tempo (and more fluent character) that he evidently wanted. Then he included no request to change the & to c. Clearly, the effect of cut time in Beethoven's music has to be decided from case to case and, of course, not only by the time signatures and note values or patterns, but by the tempo inscriptions and by still other factors that, as will be argued presently, are needed to reinforce [Hermann] Beck's three-part rhythmic character [consisting of note values, metre, and tempo indication.]³⁵

The presentation of the evidence on the influence of metre on the intended tempo of Beethoven's music is rather unfortunate, not in the least because this is one of the few times in this chapter that Newman actually cites the words of the composer whose intentions he claims to be uncovering. Beethoven's words on the Mass op. 86, which Newman gives in Emily Anderson's translation, are also slightly misrepresented in the discussion quoted above. A much better translation would be 'at the beginning of the *Gloria* I have written ¢ instead of c and changed the *tempo* from the original indications [from *Allegro con brio* to *Allegro*]. I was seduced into doing this because of a bad performance, during which the *tempo* was taken too fast.' The replacement of the word 'and' by 'thus' seems to be a particular problem in the translation that obscures what Beethoven tried to communicate.

For the most part, however, Newman seems to follow Beck's methodology, but he makes a curious departure from it when he argues that 'we should be taking note of the seldom mentioned but considerable influence of structure and dimension on tempo', ³⁷ by which Newman presumably means the form and possibly the instrumentation too, although

³⁵ William S. Newman, *Beethoven on Beethoven: Playing His Piano Music His Way*, London (Norton) 1988, 94-95.

³⁶ Brandenburg, *Briefwechsel*, Letter 586. 'ich habe beym Anfang des *Gloria* stat **c** ¢ und veränderung der *Tempo* geschrieben, so war es anfangs angezei[g]t, eine schlechte Aufführung, wobey man das *Tempo* zu geschwind nahm, verführte mich dazu.'

³⁷ Newman, *Beethoven on Beethoven*, 100.

this is never explicitly stated. At least when it comes to playing Beethoven's piano works—or any other works for that matter—his way, this last point has to be considered a surmise, as Newman presents no evidence to support it. In fact, he even draws attention to 'the effects on tempo of changing aesthetic attitudes over the two centuries' that are probably the root cause of that assumption.³⁸

Finally, Newman's conclusion does little to establish Beethoven's intentions regarding tempo. Relying on Nicholas Temperley's discussion of timings of a large number of concerts in London by Sir George Smart,³⁹ Newman states that 'perhaps Temperley's findings are the safest—that of no consistent differences in tempo then and now.⁴⁰ This seems an odd conclusion to draw, given the fact Temperley himself admits that 'with very few exceptions, Smart only timed the works that he "conducted" himself, but it may be that the violinist-leader had a greater influence on the tempo than Smart, who merely presided at the piano-forte. '⁴¹ Simply put, Beethoven was not involved at all, and there is no reason to assume that tempos in London in the early nineteenth century represented Beethoven's intentions, as Kivy has also pointed out. In fact, it is likely that it was because of performances like the ones by Smart that the metronome was considered to be a useful tool to begin with, in order to ensure that the conductor knew what the composer wanted. In short, although several reviewers have rightly praised Newman's book for its relevance for performers, ⁴² and despite the fact that he advocates building on Beck's methodology, his discussion of tempo falls far short of the goal as advertised in the title.

2

³⁸ Ibid.

³⁹ Nicholas Temperley, 'Tempo and Repeats in the Early Nineteenth Century', *Music & Letters*, xlvii (1966), 323-336

⁴⁰ Newman, Beethoven on Beethoven, 119.

⁴¹ Temperley, 'Tempo and Repeats', 324.

⁴² See for instance William Kinderman, 'Reviews', 19th-Century Music, xv/1 (Summer 1991), 64-68; and Barry Cooper, 'Beethoven on Beethoven: Playing Piano Music His Way [Review]', Performance Practice Review, iv/1 (Spring 1991), 101-105.

Also interesting in this context is George Barth's The Pianist as Orator: Beethoven and the Transformation of Keyboard Style, in which the author argues for a greater use of rhetoric in modern performance. 43 The core of the argument involves the juxtaposition of the contrasting testimonies by Czerny and Schindler, and Barth argues that although the former has been considered a more reliable source than the latter, an overreliance on Czerny comes at the cost of limiting the expressive devices available to the modern performer. Since Barth relies for a large part on his own musical intuition, it is difficult to argue that his interpretive solutions map on to what Beethoven had in mind, but it does seem that he is largely correct about Czerny's influence on the modern performer. Simply put, although his suggestions offer ways out of a certain modern performance style that might pay creative dividends in practice, his goal is to transform the modern style and particularly its tempos, into something more expressive, without necessarily defining an old style. It is therefore not surprising that Barth does not discuss Beethoven's tempo indications in much depth, and that the only metronome marks by Beethoven for a piano sonata—those for op. 106—are largely ignored. Similarly, Tilman Skowroneck's *Beethoven the Pianist*—a book that is part biography, part description of Beethoven's playing style—covers many aspects that could influence his performance style except tempo, including the theorists that he read, his teachers, the instruments available, and even detailed descriptions of his legato and his trills.⁴⁴

Perhaps the reason that Barth and Skowroneck were less inclined to discuss

Beethoven's tempo in their respective books is that Sandra Rosenblum had already done so in

Performance Practices in Classical Piano Music: Their Principles and Applications. 45

Rosenblum comes up with three different ways to determine the supposed intended tempo

when no metronome mark by the composer is available: consulting a metronome mark by

⁴³ George Barth, *The Pianist as Orator: Beethoven and the Transformation of Keyboard Style*, Ithica, New York (Cornell University Press) 1993.

⁴⁴ Tilman Skowoneck, *Beethoven the Pianist*, Cambridge (Cambridge University Press) 2010.

⁴⁵ Rosenblum, *Performance Practices*.

Czerny or Moscheles; 'borrowing' a metronome mark from another work with similar characteristics; or a combination of the above. Since this method relies solely on nineteenth-century sources, there is no significant danger that our modern intuitions interfere, and the resulting speed is probably representative of at least some performance practices of the first half of the nineteenth century. As Kivy pointed out in his definition of historical authenticity discussed in section 1.2.1, however, early nineteenth century performance practices are not synonymous with Beethoven's intended performance practice, and Rosenblum presents ample evidence that indicates a considerable inconsistency in interpretation among eighteenth- and nineteenth-century musicians, particularly concerning tempo terms. ⁴⁶ So although Rosenblum's method may suffice to paint a general picture of how Beethoven's music might have been performed in his lifetime, it is not necessarily an accurate reflection of how he wanted it to be performed.

Probably the most detailed discussion of Beethoven's intended tempo in recent years is provided by Clive Brown in an article on the metronome marks for the symphonies and string quartets, ⁴⁷ parts of which were elaborated upon in his later book *Classical and Romantic Performing Practice 1750-1900*. ⁴⁸ Primarily focussing on the metronome marks for Beethoven's fast movements, Brown persuasively showed that in symphony and string quartet movements in the same metre with the same tempo indication, the metronome marks are inversely proportional to the approximate percentage of bars with the fastest note values. In other words, if two movements are marked *Allegro* in c, it can be expected that the one with shorter note values than the other has a slower speed. Brown, however, also says that 'greater problems of reconciling apparent differences are found in other metres [than c]. Some of these may merely reveal that Beethoven did not always light upon the combination that most accurately reflected his wishes, that he changed his mind about the speed of a

⁴⁶ Ibid., 313-314.

⁴⁷ Brown, 'Metronome Marks'.

⁴⁸ Brown, Performance Practice.

movement between composing it and allotting it metronome marks, or that the metronome marks have been wrongly transmitted.'⁴⁹ These issues will be discussed in the chapters on individual tempo indications later in this thesis.

Finally, Charles Rosen's approach to the subject in Beethoven's Piano Sonatas: A Short Companion goes far beyond the modest subtitle of his book, as with 64 pages it is much longer than several of the previous contributions added together. ⁵⁰ Rosen's angle on the subject, however, seems to be that of the modern performer, but he is clearly conscious of the difference with early nineteenth-century musicians, and eloquently points out the benefits of being aware of both traditions. Rather than trying to attempt to pin down Beethoven's intentions, Rosen defines his goal as an attempt to 'determine a satisfactory range for the meaning of Beethoven's terms and avoid some absurdities.'51 Several of Rosen's assertions are therefore less rooted in evidence than those in some other studies. A case in point is his discussion of proportional tempos in Beethoven's piano sonatas: although a 2:1 tempo proportion seems perfectly reasonable in the case study that Rosen discusses—the opening Maestoso of the Piano Sonata op. 111 that transitions into the following Allegro con brio ed appassionato—there are plenty of examples in which Beethoven's metronome marks do not follow this proportion. An instance of this can be found in the first movement of the Fourth Symphony, in which the *Adagio* introduction is marked \rfloor =66 while the *Allegro vivace* it transitions into and with which it shares thematic material is marked o =80. Although useful for performers, Rosen's interpretation of Beethoven's tempo indications does not necessarily align with the composer's intentions.

In short, although several aspects of Beethoven's tempo indications have been discussed before, no author has presented a unified view of the matter, with most approaches

-

⁴⁹ Ibid., 302.

⁵⁰ Charles Rosen, 'Tempo', in *Beethoven's Piano Sonatas: A Short Introduction*, New Haven and London (Yale University Press) 2002, 43-106.

⁵¹ Ibid., 95.

focussing on just one particular aspect. In most literature, the implicit goal has been to offer a greater palette of expressive devices to modern musicians, which—although a perfectly understandable objective that can bear fruit in a modern performance context—might have accidentally obscured certain aspects of Beethoven's tempo indications. This thesis will seek to rectify this situation.

1.3: Method

Any reliable approach to determine Beethoven's intended tempos has to begin by studying the documentary evidence available. A good starting point is therefore the literature that was available to Beethoven during his education. His own library, copied sections in his hand, and reports from his contemporaries indicate that he was familiar with treatises by Johann Phillip Kirnberger, ⁵² Carl Phillip Emmanuel Bach, ⁵³ and probably several other others too. ⁵⁴ These sources will provide context to Beethoven's thinking on the subject as it is found in his own published statements, letters, sketches, and performance indications. These will be supplemented by documented observations of the composer's own performances in order to establish how the range of note values, time signature, and tempo indication generally influence the intended tempo in Beethoven's music. By discussing every combination of these elements, a clear picture of the intended tempo will emerge.

Nevertheless, due to the wide range of possible combinations of the elements that make up the tempo, the above documents are unlikely to offer unambiguous information in all cases. As the discussion of the scholarly literature of this subject has already indicated, filling the gaps with creative guesses that are inevitably informed by the author's own musical intuition is problematic, especially given the counterintuitive nature of some of the

5

⁵² Ludwig van Beethoven, Excerpts from Johann Philipp Kirnberger's *Die Kunst des reinen Satzes in der Musik*, Beethoven-Haus Bonn, Sammlung H. C. Bodmer, HCB Mh 46g and Beethoven-Haus Bonn, BH 81.

⁵³ Czerny, On the Proper Performance, 5

⁵⁴ See for instance the 'Description of Beethoven's estate', Beethoven-Haus Bonn, NE 79 11.

evidence. This thesis will therefore rely only on sources produced by Beethoven's contemporaries that describe the composer's practice. This will mean drawing on the metronome marks by three contemporaries of Beethoven who worked with him, heard him play his own works, studied with him, and/or rehearsed his works under his supervision: Carl Czerny, Ignaz Moscheles, and Karl Holz. The relationship between the metronome marks by these authors and Beethoven's intentions is not necessarily straightforward, and it is not always clear whether these metronome marks represent the author's impression of what Beethoven intended, or whether they represent how the author thought that Beethoven's music should be performed. The following sections will seek to shed light on the relationship between these metronome marks and Beethoven's intentions.

1.3.1: Karl Holz's Metronome Marks

Of the three collections of metronome marks, the origins Karl Holz's speeds are perhaps the most straightforward, as they seem to originate from the rehearsals of these works during which both Beethoven and Holz were present. They were first published in 1860 in the fifth volume of Wilhelm von Lenz's Beethoven: Eine Kunst-Studie. According to Lenz, Holz sent him a collection of notes in July 1857,⁵⁵ which were reportedly based on the musical diaries that he had kept during the time that he associated with Beethoven. 56 These notes included a set of metronome marks and other performance descriptions for the five late string quartets, including the Große Fuge op. 133,⁵⁷ which can be found in Appendix II. Holz's metronome marks seem to have gone largely unnoticed, and Emil Platen seems to have been the only one to discuss these instructions in any detail.⁵⁸

Lenz, *Kunst-Studie*, 216.Ibid., 224.

⁵⁷ Ibid., 224-228.

⁵⁸ Platen, 'Holz'.

It is difficult to say to what degree Holz's indications represent Beethoven's intentions, however, as that the transmission of these is not entirely clear, ⁵⁹ and his marks should be treated with some scepticism for this reason. In addition, Holz's metronome marks also contain several puzzling note values for fast sections in triple metre: as the list uses no dots, it uses minims and semibreves to indicate whether the number applies to a half or whole bar, respectively. It seems possible that this curiosity is simply based on a transcription error on the part of Lenz, and it highlights the problem of transmission of these speeds. Nevertheless, given Holz's close association with Beethoven and the supposed origins of these instructions, however, it seems likely that these metronome marks are a reasonable indication of the tempos that were taken during the rehearsals of the late quartets and perhaps also of Beethoven's intended tempos for these sections.

1.3.2: Ignaz Moscheles's Metronome Marks

Moscheles came to Vienna in late 1808, 60 and encountered Beethoven in 1810, 61 but it was not until 1814 that they became more intimately associated, when Moscheles was asked by the publisher Artaria to make a piano arrangement of *Fidelio*. ⁶² In the autumn of 1816, Moscheles left Vienna again and did not return until 1823, when Beethoven's deafness had increased so much that they could only communicate in writing. 63

Although Beethoven never seems to have directly instructed Moscheles, and seemed to have been reluctant to answer questions about his music, ⁶⁴ Moscheles's writing on Beethoven's music indicates that he heard Beethoven perform on several occasions. At the

60 Moscheles, Recent Music, 5-6.

⁵⁹ Lenz, Kunst-Studie, 228.

⁶¹ Schindler, *Life of Beethoven*, i, ix.

⁶² Moscheles, Recent Music, 10.

⁶³ Ibid., 59.

⁶⁴ Schindler, *Life of Beethoven*, i, xiii-xiv.

very least, he heard the Third Piano Concerto, 65 the Choral Fantasy op. 80, 66 the Piano Trio op. 97, 67 and most likely several other works too. For this reason, Moscheles probably had a reasonably good idea of the intended tempos of at least some of Beethoven's compositions. In his English translation of Schindler's *Life of Beethoven* of 1841, Moscheles articulated this as follows:

I hope I may be permitted to state, that in superintending for Messrs. Cramer & Co the new edition of his works, and in metronomizing the several compositions, I have not merely listened to my own musical feelings, but been guided by my recollections of what I gathered from Beethoven's own playing, and that of Baroness Ertmann, whom I have heard perform many of his works in his presence, and to his entire satisfaction, at the musical meetings [at Czerny's] ... and Mr. Zmeskall's. In some of the quick movements, I have purposely refrained from giving way to that rapidity of piano-forte execution, so largely developed at the present time. It is with satisfaction that I add, the tempi that I have ventured to give differ very slightly from those affixed to Haslinger's Vienna edition, by Carl Czerny, whom I consider a competent authority in the matter.⁶⁸

Besides his own musicality, Moscheles admits of two other sources of his metronome marks in the Cramer edition: his recollections of the performances by the composer, and those by Baroness Ertmann, which seem to have taken place during house concerts organized at Czerny's and at Zmeskall's lodgings. The musical meetings at Czerny's apartment took place

⁶⁵ Ibid., xi-xii.

⁶⁶ Ibid., xi.

⁶⁷ Moscheles, Recent Music, 8-9.

⁶⁸ Schindler, *Life of Beethoven*, ii, 106-107.

between 1816 until 1820, ⁶⁹ while those at Zmeskall's seemed to have started at least as early as 1808, with an unknown end date. Since Baroness Ertmann—a close friend and student of Beethoven, whose performances were according to Czerny 'utterly in [Beethoven's] spirit', ⁷⁰—left Vienna in February 1817, ⁷¹ Moscheles probably had several oppurtinities to hear her play between the beginning of 1809 (from just after he arrived in Vienna) to the autumn of 1816 (when he left). Finally, since Moscheles wrote the above words in 1841 when the Cramer edition was the only one that had been completed, it seems plausible his later metronome marks, which are generally very similar to the ones in his earlier editions, are based on the same principles.

The above-mentioned Cramer edition was the first to include metronome marks for all of the piano sonatas with opus numbers (there is no evidence that he ever provided speeds for the three WoO 47 sonatas), as well as many other important works, and was published between 1834 and 1838/9. Around the same time, various other publishers on the continent produced editions of individual works by Beethoven, with metronome marks that are mostly identical to the ones in the Cramer edition, and although they do list Moscheles as editor, he was not always involved. A good example of this is the unauthorized edition of the piano sonatas published by Ludwig Holle, which claimed—despite evidence to the contrary—to be based on Moscheles's judgement. Besides the Cramer edition, the only other major edition that Moscheles participated in was published by Eduard Hallberger between 1858 and 1867, and included only the piano sonatas.

-

⁶⁹ See Brandenburg, *Briefwechsel*, Letter 1093, and Czerny, *On the Proper Performance*, 16.

⁷⁰ Czerny, On the Proper Performance, 8.

⁷¹ Brandenburg, *Briefwechsel*, Letter 1093.

⁷² Alan Tyson, 'Moscheles and His "Complete Edition" of Beethoven', *The Music Review*, xxv (1964), 136-141.

⁷³ Ignaz Moscheles, 'An die Redaction des Signale für die musikal. Welt', *Signale für die musikalische Welt*, xii/8 (16 February 1854), 60.

The metronome marks in all of these editions are found in Herbert Seifert's 1983 article on the subject.⁷⁴ Unfortunately, Seifert makes no distinction between the editions that are definitely by Moscheles and those that are almost certainly not. The metronome marks for the piano sonatas as given in the Hallberger and Cramer editions are also found in Rosenblum's *Performance Practices in Classic Piano Music*.⁷⁵ All of Moscheles's metronome marks can be found in Appendix III.

1.3.3: Czerny's Metronome Marks

Czerny came into contact with Beethoven around the turn of the century, when he became Beethoven's pupil, ⁷⁶ and although the lessons were apparently not given regularly, Czerny did manage to study quite a few of Beethoven's works with the composer. Gustav Nottebohm reported that Czerny had told him that he studied the following Piano Sonatas with Beethoven: opp. 13, 14 nos. 1 and 2, 31 no. 2, 101, and the second movement of op. 28. In addition, he studied the Piano Trio op. 97; the Piano Concertos opp. 15, 37, 58, and 73, the Choral Fantasy op. 80, and 'several others'. ⁷⁷ As Paul Badura-Skoda has argued, this list should probably be supplemented by various other works, including the Piano Sonatas opp. 53, 57, 106, and probably opp. 26, 27 no. 2, 31 no. 3, 81a, the Diabelli Variations op. 120, and the Violin Sonata op. 47 too. ⁷⁸ This list is extensive enough to support the hypothesis that Czerny probably also received occasional instruction from Beethoven later in life too: the Diabelli Variations, for example, were not finished until 1823. Unlike Holz and Moscheles, who both only had relatively short periods of contact with Beethoven, Czerny seems to have

⁷⁴ Seifert, 'Metronomisierungen'.

⁷⁵ Sandra P. Rosenblum, *Performance Practices in Classic Piano Music: Their Principles and Applications* Bloomington and Indianapolis (Indiana University Press) 1988, 330.

⁷⁶ Czerny, On the Proper Performance.

⁷⁷ Gustav Nottebohm, *Beethoveniana: Aufsätze und Mittheilungen*, Leipzig and Winterthur (J. Rieter-Biedermann) 1872, 136.

⁷⁸ Czerny, On the Proper Performance, 3.

had a close relationship with Beethoven for more than two decades, which makes his metronome marks all the more important.

The first set of metronome marks that Czerny wrote was for the first attempt at a complete edition of Beethoven's works, an idea that Beethoven had attempted to realize as early as 1810.⁷⁹ Only in 1828 however, after Beethoven's death, did Tobias Haslinger manage to begin publication of said edition, starting with the piano sonatas.⁸⁰ The announcement for this 'complete' edition states that metronome marks and corrections were supplied by Carl Czerny, Ignaz Schuppanzigh, and Karl Holz,⁸¹ all close associates of the composer, which indicates the intent on the part of the publisher to have Beethoven's intended performance practices recorded by those who knew it best. Since Schuppanzigh and Holz were violinists it seems very likely that it was Czerny who prepared the metronome marks for the piano sonatas. Unfortunately, the edition would never be fully complete, as Haslinger was unable to obtain the rights to opp. 2 and 7, which were held by Artaria.⁸²

Haslinger's edition exists in two imprints, each of which contains a different set of metronome marks. ⁸³ As Sandra Rosenblum observed, Haslinger's first set has faster speeds for most of the movements, while the second set suggests slower tempos for almost all of these. ⁸⁴ Whether these changes were made by Czerny or by the other two editors is unknown, but it is conceivable that they were influenced by the critical reception of some of Czerny's own compositions with similarly fast metronome marks, which criticized the tendency of some composers to recommend overly fast speeds. ⁸⁵

⁷⁹ Brandenburg, *Briefwechsel*, Letter 465.

⁸⁰ Deutsch, 'Werke', 66-67.

⁸¹ Ibid., 66.

⁸² Ibid., 68-69.

⁸³ Rosenblum, 'Two Sets', 61.

⁸⁴ Ibid., 61-62.

⁸⁵ See Marten Noorduin, 'Czerny's "Impossible" Metronome Marks', *The Musical Times*, cliv/1925 (Winter 2013), 19-36, at 30-32.

The next set of metronome marks that is definitely by Czerny is found in the fourth volume of his 1846 *Complete Theoretical and Practical Piano Forte School*. The first chapter discusses the works for solo piano, the second covers works that also include one or more other instruments; both chapters include metronome marks for most works. ⁸⁶ Recent scholarship, however, has problematized this publication as a transmitter of Beethoven's intentions regarding tempo. George Barth in particular has pointed out several differences in the metronome marks between editions that suggest that Czerny, at least in this publication, was not beyond adapting Beethoven's speeds to the taste of his own time. A good example is Czerny's speed for the Grave of the first moment of the Piano Sonata op. 13, which he marked λ =58 in the Haslinger edition from before 1831, λ =92 (λ =46) in his *Pianoforte School* of 1846, and λ =62 in the Simrock edition published in 1856. ⁸⁷ In general, it appears that particularly the speeds in his *Pianoforte School* are often rather different from those in the other editions, which implies that they are probably also different from what Beethoven had in mind, ⁸⁸ something also hinted at in a description of Beethoven's playing by Czerny in the same publication:

[Beethoven's] performance depended on his constantly varying frame of mind, and even if it were possible exactly to describe his style of playing, it would not always serve us as a model (in regard to the present otherwise cultivated purity and clearness in difficulties); and even the mental conception acquires a different value through the altered taste of the time, and must occasionally be expressed by other means than were then demanded.⁸⁹

⁸⁶ Czerny, On the Proper Performance.

⁸⁷ See also George Barth, *The Pianist as Orator*, Ithica, New York (Cornell University Press) 1993, 94-96.

⁸⁸ Rosenblum, 'Two Sets', 66.

⁸⁹ Czerny, *On the Proper Performance*, 22. Original, 34: 'Indessen hinge er dabei von seinen stets wechselnden Launen ab, und wenn es auch möglich wäre, seine Spielweise ganz genau wiederzugeben, so könnte sie, (in Bezug auf die jetzt ganz anders ausgebildete Reinheit und Deutlichheit bei Schwierigkeiten) uns nicht immer als

It seems that various factors together—'the altered taste of the time', but probably also the development of the instrument as Czerny admits elsewhere ⁹⁰— over time changed the effect that Beethoven's original tempos had on the audience. In order to maintain their effect, Czerny seems to have reinterpreted Beethoven's tempo indications in his *Pianoforte School*, a change from his role as mere transmitter. It is therefore important to be careful with the indications from this publication, as several of them are presumably not representative of Beethoven's intentions, although some probably are.

Czerny's final metronome marks were published in an edition by Simrock in Bonn, which William S. Newman has dated as follows: 'Opp. 2-57 ... except 22 and 54, were published in 1856; all remaining sonatas through op. 101 in 1862, and the last 4 in 1868.'91 Since Czerny died in 1857, the last two sets were published posthumously. Nevertheless, Rosenblum and Seifert have implicitly assumed that these metronome marks are really by Czerny. This is an assumption that is worth exploring in some detail, and the fact that the Simrock edition uses many speeds close or identical to the Cramer and Hallberger editions warrants more investigation than it has been given in the literature so far.

In the set that Simrock published in 1856 containing opp. 2 until 14, opp. 26 until 53, and 57, almost every sonata contains a metronome mark that does not appear in any other edition, 93 while almost always still being in the same range as the Haslinger editions. The *Grave* section from op. 13, for example, is marked $\lambda = 63$ in Simrock, compared to $\lambda = 58$ in Haslinger, and the same is true for many other movements published in the first set. This is

1

Muster dienen; und selbst die geistige Auffassung erhällt durch den veränderten Zeitgeschmack eine and're Geltung, und muss bisweilen durch and're Mittel ausgedrückt werden, als damals erforderlich waren.'

⁹⁰ See for instance his comments on the performance of the Piano Concerto op. 15 in Czerny, *On the Proper Performance*, 93.

⁹¹ William S. Newman, 'A Chronological Checklist of Collected Editions of Beethoven's Solo Piano Sonatas Since His Own Day', *Notes* xxxiii/3 (1977), 503-530, at, 511.

⁹² Rosenblum, 'Two Sets', Seifert, 'Metronomisierungen'.

⁹³ Unique speeds are found in op. 2 no. 1/ii&iv, op. 2 no. 2/i&iii, op. 7/ii, op. 10 no. 1/iii, op. 13/i(Grave), op. 14 no. 1/iii, op. 14 no. 2/ii, op. 27 no. 1/ii(Allegro molto vivace), op. 28/ii, op. 31 no. 1/i, op. 31 no. 2/i, op. 31 no. 3/iv, op. 49 no. 1/i&ii, op. 53/ii.

not the case, however, in the second and third sets of the Simrock editon, which were published after Czerny's death: whereas almost all of the sonatas published in 1856 contain at least one unique metronome mark, none of the ones published 1862 or 1868 do. The marks in opp. 22, 54, 90, 101, 110, and 111 are in fact identical to those in Moscheles's Hallberger edition. Op. 79 is identical to the second state of Haslinger, and the first two movements of op. 81a are identical to the first state, with the finale presumably copying both the speed for the *Vivacissimamente* (\$\mathcal{L}\$=108 in all editions except Haslinger's first) and the *Poco Andante* (\$\mathcal{L}\$=69, for which until then Moscheles had been the only one to give metronome marks) from Cramer. Finally, Simrock's op. 109 uses the speeds in Hallberger for every movement except the second, for which it recommends the same speed that occurs in the other editions by Czerny.

So the metronome marks in the two later sets appear to be copied primarily from editions by Moscheles, and are not by Czerny at all. It seems possible, however, that Simrock was already copying some of Moscheles's marks when Czerny was still alive, as there are several cases in which the Simrock edition gives a speed identical to one found in an edition by Moscheles, despite the fact that earlier marks indicate a completely different speed. It seems likely that this happened in the case of the concluding *Presto* of op. 27 no. 1, for which Czerny's only other metronome mark is J = 120 in Haslinger, but for which the Simrock edition recommends J = 96, the same speed that is found in Cramer. Similarly, the *Largo* section in the first movement of op. 31 no. 2, which is marked J = 88 in Haslinger and which has no speed in *On the Proper Performance*, has J = 50 in Simrock, the same speed as the Cramer edition. A final example can be found in op. 49 no. 1, in which both movements have speeds identical to the Cramer edition (J = 60 and J = 60), which are completely different from Czerny's earlier marks in Haslinger (J = 88-92 and J = 100-108).

It is likely that the three examples given above are not isolated examples, but are simply the ones that are most easily detected due to the differences in speed between the earlier editions. In a number of individual movements, the similarities between Simrock on the one hand and Cramer on the other seem to suggest a certain degree of borrowing too: in op. 13, for instance, all speeds in Simrock are identical to the ones in Cramer, except the one for the opening *Grave*. Another example is op. 10 no. 2, which has J = 96 and 80 in the first Haslinger and *On the Proper Performance*, respectively, and J = 160 in Simrock, exactly the same way in which it is given in all of Moscheles's editions.

All in all, of the 87 metronome marks published in the first set of Simrock, 21 are identical to speeds published for the first time in Cramer. These similarities could be explained by a wide range of possible causes, including Czerny consciously or unconsciously being influenced by Moscheles's Cramer edition; Simrock copying from Moscheles to compensate for Czerny not providing a speed for certain sections, something which would happen more prominently in the two later Simrock sets; or simply because of pure chance. The evidence for these explanations is circumstantial, but they do undermine the notion that the Simrock edition was made independently from Moscheles's editions. This in turn weakens the support for the notion that the Simrock edition represents Beethoven's intended speeds.

Shortly after Czerny's death, Robert Cocks in London—who also published the English editions of Czerny's Piano School and various other works composed or edited by Czerny—published an edition of all of Beethoven's piano sonatas except the three WoO 47 Sonatas and op. 106. ⁹⁵ The title page claims that the editing was done by Czerny, but his

-

⁹⁴ The movements in which Simrock takes a speed that has appeared first in Cramer are op. 2 no. 1/i&iii, op. 2 no. 2/ii&iv, op. 2 no. 3/ii&iv, op. 7/iii, op. 10 no. 1/i, op. 10 no. 2/iii, op. 13/iv, op. 26/ii&iv, op. 27 no. 1/i&iv(Presto), op. 28/iii, op. 31 no. 2/i(Largo)&iii, op. 31 no. 3/iv, op. 49 no. 1/i&ii, op. 53/iii(Presto).
95 Carl Czerny, ed., *Beethoven's Masterpieces, being the entire of his Grand Sonatas for the Piano Forte*, (London, c1858-1859), 5 volumes. The edition, which also includes the Fantasy op. 77, was advertized in

input seems to have been limited to supplying the metronome marks, most of which are identical to those in the first Haslinger edition. Exceptions to this are opp. 31 no. 3, 101, 109, and 111, which are found in the second Haslinger edition, and opp. 2 and 7, for which this edition provides speeds that are all fairly similar to those found in the Simrock edition, except that some of them are on the fast side, much like several speeds in the first Haslinger. A particularly good example is the \$J=120\$ for the first movement of op. 2 no. 1. A possible explanation for this could be that Cocks obtained the metronome marks that were initially intended for the first Haslinger edition, which included the hitherto unpublished speeds for opp. 2 and 7. As such, these metronome marks—which have not been discussed in the literature so far—have been included in Appendix III, in the same column as the first Haslinger edition.

Around 1863, Tobias Haslinger's son Carl started publishing another series of Beethoven's piano sonatas. ⁹⁶ As this edition is entirely posthumous, it seems unlikely that the metronome marks in this edition were based on a re-evaluation by Czerny himself. Furthermore, all of the speeds in this edition are identical to the last edition that Tobias Haslinger published, with the exception of the last three movements of op. 26, which take their metronome marks from *On the Proper Performance*.

In summary, there are five different sets of metronome marks published under Czerny's name. There seems to be little doubt that those in the first Haslinger edition and *On the Proper Performance* were made by Czerny alone, but due to the differences between the first and second set by Haslinger, the degree of Czerny's involvement in the latter is open to question. In addition, part of the first Haslinger set may have been reprinted in London after Czerny's death by his long-time English publisher Cocks. Furthermore, the Simrock edition is largely not by Czerny, although he was probably responsible for the majority of the speeds

^{&#}x27;Music for Pianoforte ...', Leader. A Political, Literary, and Commercial Weekly Newspaper, and Record x/461 (22 January 1859), 127.

Anon., 'Verlag von Carl Haslinger in Wien', Allgemeine musikalische Zeitung, i/20 (13 May 1863), 348.

of the sonatas published in 1856. Finally, Carl Haslinger's edition contains only speeds copied from earlier editions, and is therefore without value for this thesis.

In short, besides various kinds of other documentary evidence discussed earlier, this thesis will draw on metronome marks by Czerny, Moscheles, and Holz. Special weight will be given to those marks for which there are good reasons to believe that its author discussed the work with Beethoven, attended a performance of either Beethoven or Baroness Ertmann, or was instructed by the composer. Since Czerny and Moscheles probably attended some of the same performances, a certain degree of overlap between these two editors is expected.

1.3.4: Summary of the Method

The method rests on two kinds of sources. The first includes Beethoven's own indications, including all of his compositions with all their tempo indications, metres, and ranges of note values, as well as his writings on performance practice, metronome marks, and other documents by his hand that indicate the tempo that he had in mind. This thesis will discuss Beethoven's tempos from slow to fast, using the second kind of sources—treatises that describe the contemporary practice, as well as Czerny's, Moscheles's, and Holz's metronome marks—to shed further light on the intended tempos for Beethoven's music, building a comprehensive picture in the process.

1.3.5: Limitations of the Method

Despite the fact that this thesis draws on a larger set of data than the other discussions of Beethoven's tempo so far, there are still a number of limitations or objections that can be raised against this method. Although the following discussion cannot exhaust all possible objections, it will explore some of the most commonly perceived limitations of this method.

The most all-encompassing objection against this method is probably the so-called intentional fallacy, first forwarded by William Wimsatt and Monroe Beardsley in 1946 in an article that focussed on meaning in poetry, and which argued that the intentions of authors are neither desirable nor available as a standard by which to judge the success of a work of literature. Their argument, however, changes somewhat when applied to music: the element of performance, not typically present in most literary works, adds a whole new layer of intentions, which of course can often at least partially be discovered. In the case of much twentieth-century and some late nineteenth-century music for which recordings are available, it can be relatively straightforward to find out what the composer had in mind in terms of performance practice. The question whether a composer's intended performance practice, if it is discovered and described in sufficient detail, should be held up as an ideal is therefore worth considering.

Historically, this question has often been answered in the negative, although not always openly. Among the earliest authors to discuss this topic unambiguously was Carl Czerny, a man who was in a better position than anyone else to know about Beethoven's performance practice, and who, as discussed in Section 1.3.3, advocated in *On the Proper Performance* changing some of Beethoven's intended performance practice in favour of an updated performance style. (Other publications by Czerny, as well as those by Moscheles and Holz, of course do seem to attempt to represent Beethoven's intentions.) And Czerny is far from the only one to explicitly favour a 'proper performance' over one that closely follows the composer's intentions, as the following words by Richard Wagner demonstrate:

Obviously it is the character of the performance which determines the right tempo of a piece. The decisive factor is whether sustained tone (song) or rhythmic motion

⁹⁷ William K. Wimsatt and Monroe C. Beardsley, 'The Intentional Fallacy', *Sewanee Review*, liv (1946), 468-488.

(figuration) should predominate. When he has made up his mind about this the conductor will know what kind of tempo to employ. ... None of our conductors pay[s] sufficient heed to this. ⁹⁸

There is of course no reason to believe that 'the right tempo' is also the one that the composer had in mind when composing the work in question; Wagner even says as much when discussing his own metronome marks, ⁹⁹ and presumably the same principle applied to his interpretations of Beethoven. Evidence for this can be found in Wagner's definition of *Adagio*, which 'cannot be taken too slowly' a description that seems at odds with at least some of Beethoven metronome marks for *adagios*.

To insist that the composer's intended performance practice is held up as an ideal is therefore to dismiss out of hand the artistic choices of Czerny, Wagner, and many others, without actually engaging with them; it reduces a complex critical opinion to a simple comparison. The purpose of finding out Beethoven's intended performance practice should not be to make every performer follow these findings, but simply to provide a clearer picture, which in turn might lead to artistic choices that would not otherwise be made.

An objection that applies more specifically to Beethoven's tempo is the simple observation that tempo preferences often change during a composer's lifetime, and since the metronome only became available in the mid-1810s, the overreliance on later data might distort the image of the tempos of works finished before that time. Typically, this is an objection backed up by reference to one of the many composers who abandoned their

100 Ibid., 66.

⁹⁸ Richard Wagner, 'On Conducting', in *Three Wagner Essays*, trans. Robert L. Jacobs, London (Eulenberg) 1979, 49-93, at 64.

⁹⁹ Ibid., 58.

¹⁰¹ See also Richard Taruskin, *Text & Act: Essays on Musical Performance*, Oxford & New York (Oxford University Press) 1995, 55 and 98.

metronome marks or the metronome itself later in life, ¹⁰² often with the suggestion that Beethoven might have changed his mind if he had lived longer.

There are several counter-objections available here. Firstly, if Beethoven's tempos early in his career were indeed very different from the ones that he indicated with the metronome, it should be possible to find evidence that supports this assertion. This evidence can take the form of written or reported statements by Beethoven that indicate a change, reports of early performances by Beethoven that explicitly contradict his later metronome marks, or some other documentary evidence that indicates a significant development. At the time of writing, no convincing evidence of this kind has surfaced, despite the efforts of scholars who would rather dismiss Beethoven's metronome marks. (In general, the eyewitness accounts of early nineteenth-century Beethoven concerts tend to be rather imprecise and usually only report the length of the whole event. In addition, no mention is made of whether repeats were played, and how long the pause between movements was, making these testimonials quite unreliable for this purpose.)

Secondly, even if there is an undiscovered significant difference between the tempos before the invention of the metronome and those after, this will only highlight what these indications really constitute: a *Fassung letzter Hand*. Sieghard Brandenburg's discussion of Beethoven's changes in metre during the creative process, discussed in more detail in section 1.2.2, has highlighted that Beethoven appears to have changed his mind about the tempo during the compositional process in at least a small number of works. The metronome marks, in many cases written down some time after the work was finished and the last time that Beethoven engaged with the tempo of a particular composition, are thus best seen as the terminus of this process of compositional change. Those who argue against Beethoven's indicated tempo on the sole ground that the intended speed might have been different during

¹⁰² Barth, The Pianist as Orator, 62-64.

¹⁰³ See Anon., 'Unter den musikalischen Akademieen', *Allgemeine musikalische Zeitung*, xi/17 (25 January 1809), 267-269.

an earlier stage of the compositional process therefore just seek refuge in an earlier state of the work, in which other aspects of the work are different too. A good example of this can be found in the Piano Sonata op. 106, for which the admittedly rather fast \$\delta = 138\$ for the first movement's \$Allegro\$ is occasionally dismissed on the grounds that Beethoven simultaneously deleted \$assai\$ from the tempo indication when he added the metronome mark.\frac{104}{}\$ Unfortunately, Beethoven simultaneously made several changes to the other movements, most notably adding a bar at the beginning of the third movement. The metronome marks, and their potential dismissal, are therefore tied to the final version of the work itself, and those who dismiss them because Beethoven's intended tempo might have been different earlier in the creative process should also do without the generally much more cherished first bar of the third movement of op. 106. A final point related to this is the notion that if Beethoven had revisited the work later on, he might have chosen different metronome marks, and changed other aspects of the composition. Although this is not completely impossible, speculations like these can usually be dismissed, as they are typically and almost by definition not based on any evidence.

The most common objections, however, against the method proposed in this chapter are focussed on the metronome itself. These typically boil down to a combination of three possibilities: Beethoven's metronome was either broken, misused, or his metronome marks have been incorrectly transmitted. Of these three objections, the last is by far the most probable, if only because of the fact that several incorrectly transmitted metronome marks have already been detected. Some of these are relatively obvious, especially in the cases in which the note value seems to have been misprinted. A clear example is the short concluding

¹⁰⁴ See for instance Life of Beethoven, ii, 252.

¹⁰⁵ Brown 'Metronome Marks', 249-250. The speed for the *Più Presto quasi Prestissimo* in the third movement of the String Quartet op. 74 is incorrectly identified as a misprint: the original source lists 0.=100, not 1.=100. See also Ludwig van Beethoven, *Bestimmung des musikalischen Zeitmasses nach Mälzel's Metronom, Zweite Lieferung. Sämmtliche Quartetten von dem Author selbst bezeichnet*, Vienna (S.A. Steiner), c1818. Copy available in New York Public Library, Drexel 3613.

Presto of the String Quartet op. 59 no. 1, which following on from an Allegro marked \rfloor =126 earlier in the same movement in the same metre and with the same range of note value should probably have had a speed of \rfloor =92, instead of the \rfloor =92 that is printed in the booklet published by Steiner, ¹⁰⁶ but performers generally have not had problems identifying this mistake. ¹⁰⁷ Misprints or errors in transmission of the number, however, are much more difficult to detect, as the errors are much more subtle.

The detection of any mechanical errors in Beethoven's metronome, or his possible misuse of the device, is similarly difficult to establish. In a 1978 article in German that was reprinted in English in 1982, Peter Stadlen compared the speeds of several recordings of works with Beethoven's metronome marks to the actual indications. In the cases in which there was a substantial difference, he postulated various explanations—mechanical errors, misuses of the metronome, reading errors—as explanations, all without any hard evidence, although Stadlen did manage to acquire a metronome similar to the one that Beethoven owned. As Clive Brown pointed out in 1991, however, this is of course the wrong way around, as Stadlen's methodology relied fully on the musical subjectivity of himself and other twentieth-century musicians, without giving any credence to historical evidence contemporary to Beethoven.

Fortunately, the method suggested in this thesis offers a more reliable way of detecting possible errors. Since earlier research has established that Beethoven's tempos are determined by a combination of the range of note values, metre, and tempo indication, it follows that metronome marks that depart from this principle significantly are likely to contain a misprint of the note value or the number. An example is the second movement of

¹⁰⁶ Beethoven, Bestimmung des musikalischen Zeitmasses.

¹⁰⁷ Ludwig van Beethoven, *The Razumovsky Quartets op. 59 & String Quartets opp. 74 & 95*, Emerson Quartet (0289 479 1432 7, 2013).

¹⁰⁸ Peter Stadlen, 'Beethoven und das Metronom', in *Beiträge '76-78, Beethoven-Kolloquium 1977: Dokumentation und Aufführungspraxis*, ed. Rudolf Klein, Kassel (Bärenreiter) 1978, 57-75; Peter Stadlen, 'Beethoven and the Metronome', *Soundings*, ix (1982), 38-73.

¹⁰⁹ Brown, 'Metronome Marks', 249.

the Fourth Symphony, marked Adagio in 3/4 with note values ranging from crotchets to demisemiquavers, and which is marked J=84 in the 1817 list. The three other Adagios in the same metre with metronome marks, however—the second movement of the String Quartet op. 18 no. 2, the introductions in the first movements of the Septet op. 20 and the Second Symphony—all contain the same range of note values, with speeds between J=72 and S=72 and

A final objection against this method is the charge that it does not take the affect or expression of the music into account. This seems to be a reasonable objection, and it seems at least possible that the affect of a work had some influence on Beethoven's performances of that particular work. This thesis will attempt to establish this influence whenever it can through the use of the proposed method, but it is worth mentioning that knowing the intended tempo does not necessarily constitute knowing the intended expression, or vice versa. This is particularly difficult in the case of vocal music: as Beethoven claimed in a letter to George Thomson regarding the settings of several folk tunes, 'it is necessary [to know the words of the songs] in order to give the right expression.' In order to make sure that the proposed method is effective at determining the intended tempo, this thesis will primarily (but not exclusively) focus on instrumental music. The folksong settings op. 108 and WoO 152-158, for which Beethoven generally received the tempo indications from other sources, will be excluded, as the issues surrounding the tempo of these works are different from Beethoven's other works.

.

¹¹⁰ Anon., 'Die Tempo's sämmtlicher Sätze aller Symphonien des Hrn L. v. Beethoven, vom Verf. selbst nach Maelzels Metronom bestimmt', in [Leipziger] Allgemeine Musikalische Zeitung, xix (1817), 873-4.

¹¹² Brandenburg *Briefwechsel*, Letter 409. 'Une autre fois je vous prie aussi de m'envoyer les paroles des chansons, comme il est bien necessaire, pour donner la vrai expression.'

1.4: Summary

Although Beethoven's tempo indications have been discussed in a wide range of publications, all current approaches have either been incomplete or implicitly reliant on a musical intuition that probably is very different to Beethoven's. This thesis will avoid this pitfall by relying only on documentary sources from the late-eighteenth and early nineteenth-century, including musical treatises, Beethoven's own writings, and metronome marks by his contemporaries and by himself.

Chapter 2: General Principles of Beethoven's Tempo

This chapter will build a model that describes Beethoven's general approach to tempo. First, it will discuss the literature on tempo that Beethoven probably read. Second, it will compare these theoretical principles to several comments in the sketches, which will shed light on the relationship between theory and practice. Thirdly, it will discuss tempo flexibility, and to what extent it affects the overall speed. Fourthly, it will discuss individual words which modify the tempo, such as *assai* and *molto*. Finally, the model that results from the above steps will be tested against two samples of metronome marks from different periods in Beethoven's life, to establish whether or not Beethoven's tempo changed over time.

2.1: Literature on Tempo in Beethoven's Possession

Beethoven's library contained various musical treatises by the time of his death, and his estate lists several 'books on music'. Several of these concern aspects of composition quite unrelated to the tempo, such as Heinrich Christoph Koch's *Handbuch bey dem Studium der Harmonie*, or do not discuss the subject in detail, such as Justin Heinrich Knecht's *Vollständige Orgelschule* and Daniel Gottlob Türk's *Von den wichtigsten Pflichten eines Organisten*. Organisten.

Carl Philipp Emanuel Bach's *Versuch über die wahre Art das Clavier zu spielen*, ¹¹⁶ which Beethoven used in teaching Czerny, ¹¹⁷ contains a relatively terse discussion of the matter in the chapter on performance, which the author summarizes in a single paragraph:

¹¹³ 'Description of Beethoven's estate'. See also Alexander Wheelock Thayer, *The Life of Ludwig van Beethoven*, London (Centaur) 1960, ii, 1070.

¹¹⁴ Heinrich Christoph Koch, *Handbuch bey dem Studium der Harmonie*, Leipzig, (Johann Friedrich Hartknoch) 1811.

¹¹⁵ Justin Heinrich Knecht, *Vollständige Orgelschule für Anfänger und Geübtere*, Leipzig (Breitkopf & Härtel) 1795; Daniel Gottlob Türk, *Von den wichtigsten Pflichten eines Organisten*, Halle (Schwickert) 1787.

¹¹⁶ Carl Philipp Emanuel Bach, *Essay on the True Art of Playing Keyboard Instruments*, trans. & ed. William J. Mitchell, London (Cassell) 1961.

¹¹⁷ Czerny, On the Proper Performance, 5.

The pace of a composition, which is usually indicated by several well-known Italian expressions, is based on its general content as well as on the fastest notes and passages contained in it. Due consideration of these factors will prevent an allegro from being rushed and an adagio from being dragged. 118

Although Bach does not go into detail beyond observing that the Italian expressions are interpreted differently in different places, ¹¹⁹ his observations largely align with those by Hermann Beck as discussed in section 1.2.2 in the previous chapter: increasing the amount of short notes constitutes a decrease in tempo, and vice versa. The only significant difference is that according to Bach the third factor—after the tempo indication and the range of note values—is the not further specified 'general content', while Beck has argued that it is specifically the time signature that affects the tempo.

The other relevant treatise in Beethoven's library is listed as 'Kirnberger's works in 6 volumes', 120 which presumably includes Die Kunst des reinen Satzes in der Musik out of which Beethoven copied several excerpts. 121 Kirnberger's discussion of tempo is much more specific than Bach's, and it is worth discussing the relevant passage sentence by sentence.

[1] Furthermore, [the aspiring composer] must have a correct feeling for the natural tempo of every metre, or for what is called *tempo giusto*. [...] [2] Regarding metre, those having larger values, like alla breve, 3/2, and 6/4 metre, have a heavier and slower tempo than those of smaller values, like 2/4, 3/4, and 6/8, and these in turn are less lively that 3/8 or 6/16 metre. [3] Thus, for example, a *loure* in 3/2 metre has a

¹¹⁸ Bach, *Essay*, 151.

¹¹⁹ Ibid., 414.

¹²⁰ Thayer, *The Life of Ludwig van Beethoven*, ii, 1070.
121 See Beethoven-Haus Bonn, BH 81 and HCB Mh 46g.

slower tempo than a minuet in 3/4 metre, and the latter is in turn slower than a passepied in 3/8 metre. 122

In the first sentence, Kirnberger states that there is a 'natural' tempo associated with every metre, which students of composition should make themselves familiar with. The second sentence establishes that, this 'natural tempo' or *tempo giusto* has a slow and heavy pulse in metres with large note values, such as 3/2, ¢, and 6/4, which gets progressively quicker in metres with shorter note values, such as 3/8 and 6/16. It should be noted that the word pulse here refers to minims in ¢ time, crotchets in c time, etc., and that therefore minims in ¢ are slower than crotchets in c, as the third sentence implies.

Example 2.1.1 demonstrates this clearly by showing the same melody (one that is found in Beethoven's Choral Fantasy op. 80) with two different time signatures and with two different note values. In A, the melody is written in minims and the time signature is ¢, which constitutes a minim pulse and two notes per bar. In B there are two crotchets in every bar, and the time signature is 2/4. Since a crotchet pulse is faster than a minim pulse, B has a faster *tempo giusto* than A.

Example 2.1.1: Two combinations of metres and note values.



¹²² Kirnberger *Kunst*, ii, 106-7. Original: 'Ferner muß er sich ein richtiges Gefühl von der natürlichen Bewegung jeder Taktart erworben haben, oder von dem was *Tempo giusto* ist. [...] In Ansuhung der Taktart sind die größeren Zeiten, als der Allabreve, der 3/2 und der 6/4 Takt von schwerer und langsamerer Bewegung, als die kürzerer Zeiten, als der 2/4, 3/4 und 6/8 Takt, und diese sind weniger Lebhaft, als der 3/8 und 6/16 Takt. So ist z.B. eine *loure* in dem 3/2 Takt von langsamerer Taktbewegung, als ein Menuet in dem 3/4 Takt, und diese ist wiederum langsamer als ein *Passepied* in dem 3/8 Takt.'

Kirnberger continues:

[4] Regarding note values, dance pieces involving semiquavers and demisemiquavers have a slower tempo than those that tolerate only quavers and at most semiquavers as the fastest note values in the same metre. [5] Thus, for example, a sarabande in 3/4 metre has a slower tempo than a minuet, even though both are written in the same metre. [6] Thus the *tempo giusto* is determined by the metre and the longer and shorter note values of a composition. [7] Once the young composer has a feeling for this, he will soon understand to what degree the adjectives *largo*, *adagio*, *andante*, *allegro*, and *presto*, and their modifications *larghetto*, *andantino*, *allegretto*, and *prestissimo* add or take away from the fast or slow motion of the natural tempo. 123

In the fourth and fifth sentences, Kirnberger argues that the shortest note value used also has an effect on the tempo. As an example of this, he compares sarabandes and minuets in the fifth sentence, implying that the former generally have shorter note values than the latter, which would result in a slower pulse. (There are of course some exceptions to this rule, such as the sarabande and the two minuets in Bach's French Suite no. 1, BWV 812: the sarabande contains no semiquavers but both minuets do, albeit only in suffixes to trills. In performance, however, this difference was presumably compensated for by added ornamentations.) The sixth sentence offers a summary, stating that both the long and the short values influence the

-

¹²³ Ibid., 107. Original: 'In Ansehung der Notengattungen haben die Tanzstücke, worin Sechzehnthel und Zweiunddreißigtheile vorkommen, eine langsamere Taktbewegung, als solche, die bey der Taktart nur Achtel, höchstens Sechzehntel, als die geschwindesten Notengattungen vertragen. So hat z.B. eine Sarabande in dem 3/4 Takt eine langsamere Taktbewegung, als eine Menuet, obgleich beyde ein einerley Taktart gesezt sind. Also wird das *Tempo giusto* durch die Taktart und durch die längeren und kurzeren Notengattungen eines Stücks bestimmt. Hat der junge Tonsetzer erst dieses ins Gefühl, den begreift er bald, wie viel die Beywörter *largo*, *adagio*, *andante*, *allegro*, *presto*, und ihre Modificationen als *larghetto*, *andantino*, *allegretto*, *prestissimo*, der naturlichen Taktbewegung an Geschwindigheit oder Langsamheit zusetzen oder abnehmen.'

tempo, along with the time signature, and the seventh sentence indicates that Italian tempo indications also affect the tempo.

Here too, an example might clarify matters somewhat. Example 2.1.2 contains the same material as Example 2.1.1, but with different note values. Much like A discussed above, C in Example 2.1.2 is written in ¢, but with note values half the size. Since C has shorter note values than A, the minim pulse in C is slower than in A. Despite the slower minim pulse, however, C will sound much faster in performance than A on account of the fact that C contains two notes per minim pulse, and A only one, which results in C occupying half as many bars as A. Between D and B there is a similar relationship, but in the opposite direction. D will have a faster crotchet pulse than B on account of the absence of crotchets, but it will sound slower in performance due to the fact that the pulse is indicated by the crotchet beat. In summary, despite the fact that it will have the slowest (minim) pulse of all four examples, C will sound the fastest in performance, followed by B, A, and finally D, in which relatively fast pulse is offset by the longer notes.

Example 2.1.2: Two more combinations of metres and note values.



Unfortunately, the relationship between Kirnberger's writings and Beethoven's practice is not always straightforward. Kirnberger's distinction between two kinds of metres in common time, ¹²⁴ for example—notated as 4/4 for very slow and weighty pieces such as his Fugue in

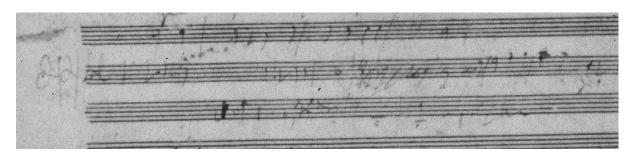
-

¹²⁴ Kirnberger, *Die Kunst des reinen Stazes*, 123.

D EngK 24,¹²⁵ and as c for livelier works, such as his prelude in C EngK 25/1¹²⁶—appears to have been ignored by other composers. None of Beethoven's published works contain 4/4, but Sieghard Brandenburg reported in 1977 that among the sketches for the Opferlied op.

121b there was a single occurrence of that time signature.¹²⁷ The relevant part of the sketch that he referred to is shown in Example 2.1.3 below.

Example 2.1.3: The ninth stave of page 116 of Artaria 155 in the Berlin State Library.



Although there are clearly two fours in the margin on the left, the two numbers appear next to each other instead of one above the other as one would expect in a time signature. In addition, early sketches hardly ever contain time signatures, and time signatures in general never appear this far into the margin. It is therefore implausible that the two fours on this sketch constitute Beethoven's only use of 4/4, and it seems more likely that they are a reference to something else, or that they are just doodles, much like several other symbols found in Beethoven's sketches. There is therefore no reason to believe that Beethoven ever used 4/4.

In addition to the publications in Beethoven's library, it seems probable that he was at least aware of some of the important musical treatises that were published during his lifetime.

Perhaps the most important of these is Heinrich Christoph Koch's *Musikalisches Lexikon*

¹²⁷ Sieghard Brandenburg, 'Über die Bedeutung der Änderungen von Taktvorschriften in einigen Werken Beethovens', in *Beethoven-Kolloquium 1977*, 37-51.

59

¹²⁵ See autograph in the Berlin State Library, 'Dreystimmige Fuge im 12/8 als auch im geraden 4/4 Takt. von Kirnberger', D-B/ Mus.ms.autogr. Kirnberger, J. P. 4.

¹²⁶ See the manuscript in the Yale University Music Library, 'Praeludium I', (US-NH/LM 4968, (Ma21.Y11.A34)).

from 1802,¹²⁸ a work that Beethoven was probably familiar with given the fact that he owned a copy of *Handbuch bey dem Studium der Harmonie* by the same author. This publication does not provide a detailed description of how composers indicate tempo in the same way as Kirnberger's treatise, but it provides many useful definitions of tempo indications that can provide insight into the interpretations of these terms during Beethoven's lifetime. The following section will explore to what degree Kirnberger's ideas are reflected in Beethoven's own writings on the subject.

2.2: Beethoven's Writings on Tempo

Among Beethoven's earliest compositions, the sketches for the song *Klage* WoO 113 contain the most extensive comments on tempo. The song exists in two different versions, with the first containing the following observations:

[1] What follows will be sung even slower, adagio or andante quasi adagio at the most. [2] Andante in a 2/4 metre has to be taken much faster than the tempo here in this song. [3] It seems that it is impossible that the [second section] remains in 2/4, because it is much too slow. [4] [It appears] best to set [this section] in ¢. [5] The first [part] in E has to remain in 2/4, because otherwise it will be sung too slowly. [6] One would sooner take a slow tempo in the case of long notes than with short ones. [7] For example, with crotchets slower than with quavers. [8] The shorter notes also determine the tempo, for instance semiquavers/demisemiquavers in 2/4 time make it very slow. [9] Perhaps the converse is also true. 129

¹²⁸ Heinrich Christoph Koch, *Musikalisches Lexikon*, Frankfurt am Main (August Hermann jr.) 1802.
129 Helga Lühning, ed., *Lieder und Gesänge mit Klavierbegeleitung* (Beethoven Werke, xii), München (G. Henle) 1990, i, kritischer Bericht, 79-80. Original: 'das was jetzt nachkömt wird noch einmal so langsam g:[esungen] *adagio* oder höchstens *andante quasi adagio*. *Andante* muβ im 2/4tel Takt viel geschwinder genommen werden wie hier im lied das *tempo* ist. wie es scheint kan das letzte ohnmöglich in 2/4tel takt bleiben, weil es viel zu langsam dafür ist. am besten scheint's beyde in ¢ takt zu sezen. das erste in *E dur* muβ

The relevant parts of both versions of the song to which these comments refer can be seen in Example 2.2.1. The first and second sentences indicate that Beethoven intended the minor section to be slower than the tempo at the beginning of the song, and much slower than Andante in 2/4 would normally be. As the third, fourth, and fifth sentence show, his solution to this problem was to write both sections in different time signatures, which resulted in the major section remaining in 2/4 and the minor section being changed into ¢. Both have two beats in every bar, but they are indicated by different note values: in 2/4 by crotchets, and in ¢ by minims. It seems likely that this is what the sixth and seventh sentences refer to, with time signatures with larger note values indicating the beat suggesting a slower tempo than those with smaller note values. The minim beat in ¢ can therefore be expected to be slower than the crotchet beat in 2/4, and if the same amount of notes per beat is maintained, the section in ¢ will sound slower than that in 2/4, which is what Beethoven evidently wanted to achieve. It is for this reason that the minor section, which in the first version contains two quavers in the voice part for every crotchet beat in 2/4, is written with two crotchets for every minim beat in \$\phi\$ in the second version. The last two sentences seem to allude not to the note values in the time signature, but to the range of note values that are used in a bar: an increase of smaller note values also implies a decrease in speed. It seems that the somewhat ambiguous last sentence is also best understood in this light: it implies that the chosen tempo also might determine the range of note values that the composer can use.

in 2/4tel T:[akt] bleiben, weil man es sonst zu langsam singen würde. man wird eher immer bey langen Noten das *tempo* langsam nehme[n] als bey kurzen z.B. bey vierteln langsamer als bey 8tel. Die kleinere Noten bestimmen auch das *tempo* z.B. die 16tel-32tel im 2/4tel Tackt machen diesen sehr langsam. Vielleicht ist auch das Gegentheil wahr.'

Example 2.2.1: Two versions of *Klage* WoO 113.



Overall, Beethoven's principles as outlined in these comments align with Kirnberger's as discussed above, as in both cases music in 2/4 is made slower by changing the time signature to ¢ and by doubling the note values. In the case of WoO 113, Beethoven even enhances this effect by adding a tempo indication that translates as 'very slow and sad'. Nevertheless, despite the fact that he had evidently found a better way to express the tempo that he had in mind, Beethoven never published *Klage*, which suggests that there was still some aspect of the song that he was not satisfied with.

The finale of the Piano Trio op. 1 no. 2 seems to have undergone a similar process. Example 2.2.2 shows a part of the sketches in the *Kafka Autograph Miscellany* for that movement, along with the corresponding passage in the published version. The note values in the edition are half the size of those in the sketch, and since the edition is written in 2/4 it seems plausible that although the sketch—which does not contain a time signature—was intended to be in ¢ at that point in time as Joseph Kerman has suggested. 130

¹³⁰ Joseph Kerman ed., Autograph Miscellany from circa 1786 to 1799, London (British Museum) 1970, ii, 5.

62

Example 2.2.2: A passage in the sketches for the finale of the Piano Trio op. 1 no. 2, along with the published version.



In 1838, Beethoven's lifelong friend Franz Wegeler described the origin of the Piano Trios op. 1 nos. 2 and 3 in the following way:

Once when I was there, for instance, Kraft, the famous cellist, pointed out to [Beethoven] that he should mark a passage in the finale of the third trio, *Opus 1*, with *sulla corda G* and that in the second of these trios the finale, which Beethoven had marked 4/4, should be changed to 2/4. ¹³¹

Wegeler is quite clearly correct about the fact that Beethoven changed the time signature to 2/4, but it seems implausible that the movement was originally written in 4/4 as there is no persuasive evidence that Beethoven used that time signature before or since, but it seems possible that 4/4 is used as a synonym for c. As Wegeler published this passage more than forty years after the Piano Trios op. 1 were published, it is not surprising he misremembers some of the details: the finale of the third trio, for instance, does not contain the indication *sulla corda G*, but it does contain *sulla corda C*. It therefore seems probable that although Wegeler seems to have reported the events mostly correctly, he mistook ϕ for 4/4 as the original time signature of the finale of the second trio.

63

¹³¹ Franz Wegeler and Ferdinand Ries, *Biografische Notizen über Ludwig van Beethoven*, Koblenz (Dädeker) 1838, 29. Translation adapted from Frederick Noonan, trans., *Remembering Beethoven: The Biographical Notes of Franz Wegeler and Ferdinand Ries*, London (Deutsch) 1988, 32.

The problem of Beethoven not using the right combination of note values, time signature, and tempo indication to express the speed he has in mind can also be seen in various other works, several of which will be discussed in later chapters. The difficulty that Beethoven had with Kirnberger's system, however, is understandable, as the system that he was working with could only indicate relative speeds. There had been some attempts made to tie tempo indications to certain speeds outside this system—Quantz, for instance, suggested using the heartbeat of a healthy adult as a means to establish a speed—but they seem to have been neither particularly reliable nor widely adopted. As Beethoven observed in a letter dated 17 July 1812, the transmission of his intended speeds was still largely dependent on chance. 132

All of this changed in 1813, when the chronometer appeared. Using this device—invented by the mechanic Dietrich Nikolaus Winkel, but marketed by Johann Nepomuk Mälzel as his own 133—composers could communicate precise speeds to performers in a way that was much more reliable than Kirnberger's method. Beethoven's first encounter with the device is described in an article in the *Wiener Allgemeine musikalische Zeitung* of 13 October 1813, which claims that

the first model [of the chronometer] was barely constructed when the first composers of Vienna, Salieri, Beethoven, Weigl, and others acknowledged that it met every challenge that one could reasonably put to a chronometer. ... As proof, how highly the above composers thought of the invention, they declared that they would use it

¹³² Brandenburg, *Briefwechsel*, Letter 586. 'Ich sah, daβ man so was den doch dem Zufalle leider überlaβen muß.'

¹³³ See 'Zur Geschichte des musical.Metronomen', *Allgemeine musikalische Zeitung*, xx/26 (1 July 1818), 468-472.

themselves, to shield their compositions against disfigurement through changes in their tempos. 134

The reported enthusiasm for the chronometer appears to be primarily caused by the fact that it was able to facilitate more accurate communication between composers and performers, as several other articles published around the same time also suggest. ¹³⁵ Nevertheless, despite the promises made by composers, it would take some time before the device would be put into practice. This is presumably because of the fact that Mälzel changed the design to include a numbered scale, before filing patents in various countries by the end of 1815 and naming the device the metronome. ¹³⁶ Beethoven's first metronome mark—an observation which previous publications on the subject of Beethoven's tempo seem to have ignored—also appears around this time, on a copy of the score of the Cantata *Meeresstille und glückliche Fahrt* op. 112 that was intended for Michael Umlauf, ¹³⁷ who seems to have been directing the choir at the premiere on 25 December 1815. ¹³⁸ Although it is unclear how and when Beethoven acquired his metronome, he seems to have fulfilled his promise to use it in his composition as soon as the device came widely available after it was patented. It is possible that Beethoven had access to either a metronome or chronometer some time before it was patented, but there was of course no point in using it until the performers also had one.

1

¹³⁴ Anon, 'Mälzel's Chronometer', *Wiener allgemeine musikalische Zeitung*, i/41 (13 October 1813), 625-28, at 626 and 628. 'Kaum war das erste Modell aufgestellt, so erkannten Wiens erste Componisten: Salieri, Beethoven, Weigl, u.a. das selbes seine Bestimmung vollkommen in allen Rücksichten erfülle, und das alle Forderungen, welche man eine musikalische Chronometer gemacht werden dürfen, ganz befriedige. ... Als einen Beweis, wie hoch die schon genannten hiesigen Componisten diese treffliche Erfindung schätzen, führen wir auβer ihrer Erklärung: daβ sie selbe als ein willkommenes Mittel Benützigen werden, ihre Compositionen aller Orten, und so lange sie (die Compositionen) existiren, vor alle Veranstaltung durch Verfehlung der Tempi zu sicheren.'

¹³⁵ See for instance Anon., 'Nachrichten', *Allgemeine musikalische Zeitung*, xv/48 (1 December 1813), 784-88, at 785. '*Nicht*, während der Ausführung den Takt anzugeben, sondern für den Director selbst, vor der Ausführung, vor der Probe, gleich bei der ersten Ansicht der Partitur, das Tempo jedes Satzes genau zu bestimmen.'

¹³⁶ Anon., 'Specification of the Patent granted to John Maelzel' in *The Repertory of Arts, Manufactures, and Agriculture...Volume xxxiii—Second Series*, London (J. Wyatt) 1818, 7-13.

¹³⁷ Corrected copy of the Cantata op. 112, Beethoven-Haus Bonn, BH 85.

¹³⁸ Anon. 'Wien' Wiener Zeitung, xciii/6 (6 January 1816), 21.

As 1816 seems to have been a year of declining compositional activity caused at least in part by several external factors, including the death of Beethoven's brother the previous year and the subsequent legal disputes with his sister-in-law, ¹³⁹ it is perhaps unsurprising that both Beethoven's advocacy and use of the metronome is virtually non-existent in that year. In 1817, however, the metronome makes a return to prominence, both in his compositions and in his other activities. At the beginning of the year, he published two vocal works that contain metronome marks: the song So oder so WoO 148, which was published on 15 February in the Wiener Moden-Zeitung; 140 and the vocal trio Gesang der Mönche WoO 104, which was written in commemoration of the death of Wenzel Krumpholz on 3 May. 141 The autograph of the former work, which is now lost, reportedly contained a comment of particular interest in this context: '100 according to Mälzel, but this can only apply to the first bars, because feeling has its own tempo; this is, however, not completely expressed in this figure (namely 100). 142 This comment was not included in the first edition, nor was the metronome mark: the 22-barlong song is only marked 'Ziemlich lebhaft und entschlossen', which seems to be more of a description of an affect than a speed, especially compared to the traditional Italian tempo indications. Nevertheless, the comment on the autograph score indicates that at least in some cases Beethoven expected a certain degree of tempo flexibility, a topic which will be covered in greater detail later in this chapter.

Around November 1817, Beethoven wrote a letter to Ignaz Franz Mosel that starts with the following passage:

I am pleased to find that you share my view of the tempo terms that stem from the primitive origins of music. What can be more absurd than for instance *Allegro*, which

¹³⁹ Barry Cooper, 'Declining Productivity (1815-1817)', in *Beethoven*, Oxford (Oxford University Press) 2007, 254-279.

¹⁴⁰ Ludwig van Beethoven, 'So oder so', Wiener Moden-Zeitung, ii/14 (15 February 1817).

¹⁴¹ Beethoven, 'Gesang der Mönche', Neue Zeitschrift für Musik, vi, 1839.

¹⁴² Lühning, ed., *Lieder und Gesänge*, kritischer Bericht, 74.

means cheerful, and how we are often removed from that understanding of the tempo, so that the piece [of music] often expresses the opposite from the indication. 143

Beethoven's complaint about *Allegro*, which probably extends to other Italian tempo indications as well, is the fact that the literal translation of the term suggests a particular affect which is often unrelated to its practical use. A good example of this contradiction can be found in the first movement of the Piano Sonata op. 57, which is marked *Allegro assai*, which literally translates as 'quite cheerful', rather at odds with the nickname 'appassionata' that the work acquired in the years after Beethoven's death. ¹⁴⁴ Beethoven's letter to Mosel further claimed that

it is different with those words that indicate the character of a piece. These we cannot do without, as the tempo is most like the body, while <u>these</u> [indications] relate to <u>the spirit of the piece</u>. As far as I am concerned, I have been thinking for a long time to give up these absurd terms *Allegro*, *Andante*, *Adagio*, *Presto*, and Mälzel's metronome gives us the best opportunity to do so. I give you my word here that I will use them no more in all my newer compositions. ¹⁴⁵

The distinction that Beethoven draws between words that indicate the character of the music and those that indicate the speed is also referred to in Koch's *Musikalisches Lexikon* of

¹⁴³ Brandenburg, *Briefwechsel*, Letter 1195. Original: 'Herzlich freut mich die selbe Ansicht, welche sie mit mir haben/theilen, in Ansehung der noch aus der *Barbarey* der Musick herrührenden Bezeichnungen des Zeitmaaβes, den nur z. B. was kann widersinniger seyn als *Allegro* welches ein für allemal <u>Lustig</u> heiβt, u. wie weit entfernt sind wir oft von diesem Begriffe dieses Zeitmaaβes, so daβ das Stück selbst das <u>Gegentheil der Bezeichnung</u> sagt.'

¹⁴⁴ Anon., *Sonata apassionata arrangée pour le pianoforte à quatre mains*, Hamburg (Cranz), 1838.

¹⁴⁵ Brandenburg, *Briefwechsel*, Letter 1195. Original: 'Ein anderes ist es mit den den Karakter des Stücks bezeichnenden Wörtern. Solche können wir nicht aufgeben, da der Takt eigentlich nur mehr Körper ist, <u>diese aber schon</u> selbst <u>Bezug auf den Geist des Stückes haben</u>. Was mich angeht, so habe ich schon lange drauf Gedacht, diese widersinnigen Benenungen *Allegro*, *Andante*, *Adagio*, *Presto* aufzugeben. Maelzel's metronom gibt unβ hierzu die Beste Gelegenheit. Ich geben ihnen Mein Wort hier, daβ ich sie in allen meinen enuern Komposizionen nicht mehr gebrauchen werde.'

approximately a decade and a half earlier, which states that composers can either use expressions that indicate the tempo such as Largo and Allegro, expressions that indicate the manner of performance, or both. 146 Despite the fact that expression and tempo were clearly considered to be separate but related by some, Beethoven never quite managed to phase out Italian tempo indications, although there are several vocal works that only have an indication of the character in addition to the metronome mark, such as the above mentioned Song So oder so WoO 147. Besides these relatively small scale experiments, Beethoven never completely gave up using Italian tempo indications, although he did briefly experiment with adding additional German translations in several works such as An die ferne Geliebte op. 98 and the Piano Sonata op. 101. However, the fact that Italian tempo words could potentially be replaced by a metronome mark shows that Beethoven agreed with Koch that the Italian tempo indications were primarily indicators of musical speed, and that other expressions were needed to indicate the character of the work. A clear example of this can be found in the third movement Piano Sonata op. 106—a work which Beethoven was working on around the time that he wrote to Mosel—which has 'Adagio sostenuto' as a tempo indication, ≥=92 as a metronome mark, and 'Appassionato e con molto sentimento' as an indication of expression for the opening passage. (Sostenuto, of course, might not strictly be a tempo indication in this context, a point which will be elaborated upon in Chapter 3.)

Although the metronome facilitates the communication of exact speeds between the composer and the performer, the fact that it also limited the interpretation of tempo indications to one particular speed would also be a source of problems. As already discussed in the first chapter, these overly specific indications risk falling out of favour over time, which is what happened to many of Beethoven's metronome marks. Beethoven, however, seems to have foreseen this, as the next part of the letter shows:

¹⁴⁶ Koch, Lexikon, 63.

A different question is whether by doing this we will aid the necessary availability of the *M[etronome]*. I hardly believe it. I do not doubt, however, that we shall be howled down as *tyrants*. If only the cause itself were thus served, it would still be better than to be accused of *feudalism*.¹⁴⁷

The metaphor that Beethoven employs here is somewhat unclear, but he seems to compare medieval feudalism with the transmission of the composer's intentions before the invention of the metronome. Like medieval feudalism, this musical system relies on different (but in this case often overlapping) groups: the composers who wrote the music; teachers who taught music; and performers who performed it. As was seen before, this method of transmission is not without the possibility of mistakes, and there is a danger for the composer that performers will misunderstand what he had mind. This possibility obviously worried Beethoven, and it seems to have been the primary reason for his endorsement of the metronome. His enthusiasm for the invention notwithstanding, he was clearly aware of the potential drawbacks, as the comparison of the metronome to a state of tyranny shows. This was a largely accurate prediction, as later performers and composers levelled considerable criticism at the metronome and its potential to limit the creativity of the performer. ¹⁴⁸ For this thesis, however, which only aims to define Beethoven's intended tempos but which is neutral about their applicability, this particular aspect of these indications is not a problem.

Shortly after writing this letter, Beethoven published two sets of metronome marks for works in the genres in which he had made particularly significant contributions. The first

 $^{^{147}}$ Brandenburg, *Briefwechsel*, Letter 1195. Original: 'Eine andere Frage ist ob wir hiedurch die so nöthige <u>Allgemeinheit</u> des *M*. bezwecken werden. Ich glaube kaum? Daβ man unβ aber als <u>ZwingHerren</u> ausschreyen wird, daran zweifle ich nicht, ware nur der sache selbst damit gedient. So ware es noch immer Beβer als unβ des *Feodalismus* zu beschuldigen.'

¹⁴⁸ See for instance George Henschel, *Personal Recollections of Johannes Brahms*, New York (A.M.S. Press) 1978, 78-79.

op. 20, which were published in a booklet by Steiner. ¹⁴⁹ The metronome marks for the symphonies were subsequently printed in the AMZ of 15 December 1817. ¹⁵⁰ The second set, which was published by Steiner soon after, included speeds for all but the late string quartets, which had not yet been written. ¹⁵¹ The third major genre—the piano sonata—did not receive such a comprehensive coverage of metronome marks, and op. 106, published in 1819, is the only sonata with speeds by Beethoven. With the exception of the Ninth Symphony, the other metronome marks are found in minor works.

Although the list of works with metronome marks seems rather small, especially given how many works Beethoven wrote, there is documentary evidence supporting the claim that he intended to write metronome marks for almost every work that he wrote after 1819: in a letter from 1825 to the publisher Schott Beethoven offered to send metronome marks for the *Opferlied* op. 121b, the *Missa Solemnis* op. 123, the *Overture Die Weihe des Hauses* op. 124, the Bagatelles op. 126, the String Quartet op. 127, and the Arietta *Der Kuβ* op. 128. ¹⁵² In fact, there are few works from this period for which Beethoven did not promise metronome marks, although by the end of his life he had sent the speeds for op. 121b mentioned above and the Ninth Symphony only. ¹⁵³ Beethoven's letters show that his metronome might have been broken at the time—perhaps even beyond repair and requiring replacing ¹⁵⁴—but there are probably also other factors that interfered with Beethoven's work, including his various illnesses, his legal problems with his sister-in-law, and his guardianship of his nephew Karl. Probably because of these factors, the composition of most works during this period took much longer than Beethoven initially promised, with the Diabelli variations even being

¹⁴⁹ Beethoven, Bestimmung des musikalischen Zeitmasses.

¹⁵⁰ 'Die Tempo's sämmtlicher Sätze aller Symphonien'.

¹⁵¹ Beethoven, Bestimmung des musikalischen Zeitmasses.

¹⁵² Brandenburg, *Breifwechesel*, Letter 1950.

¹⁵³ Ibid.

¹⁵⁴ See for instance Brandenburg, *Briefwechsel*, Letter 2057, 'den *Metronom* könntest du mitbringen, er ist nicht zu machen.'

delayed by several years.¹⁵⁵ Nevertheless, as late as December 1826, Beethoven was still promising metronome marks for the Missa Solemnis, a work he had finished three years before:

The *metronome marks* will follow soon. Wait for them. In our century these are surely needed. I also have letters from *Berlin*, which say that the first performance of the [Ninth] *Symphony* was received with enthusiastic applause, which I largely attribute to the metronome marks. We almost cannot have *Tempo ordinari* anymore, in which one has to rely on the ideas of the freer *Genius*. ¹⁵⁶

Here again, Beethoven defended the metronome as a more effective way to transmit his intentions, as the Kirnberger system—which is presumably what *Tempo ordinari* refers to—relied too much on the interpretation by an individual, which is less reliable than the metronome. Although the wording is different from the 1817 letter quoted above, the same principles still apply. In addition, perhaps in an effort to ensure that the *Missa Solemnis* was not published without metronome marks, Beethoven expressed great confidence in the speeds that he indicated for the Ninth Symphony, going even so far as to suggest that they may be partially responsible for the Berlin premiere's success.

In summary, until 1815 Beethoven had to use a system that transmitted the intended tempo by a combination of the range of note values, the time signature, and the tempo indication. This system was unreliable in two ways: composers could fail to use the appropriate combination for the speed that they had in mind, or the speed as thus indicated

-

¹⁵⁵ See William Kinderman, 'The Interrupted Genesis of the Variations', in *Beethoven's Diabelli Variations*, Oxford (Oxford University Press) 1999, 3-8.

¹⁵⁶ Brandenburg, *Briefwechsel*, Letter 2244. Original: 'Die *Metronomisirung* folgt nächstens. Warten Sie ja darauf. In unserm jahrhundert is dergleichen sicher nötig; auch have ich Briefe von *Berlin*, daβ die erste Aufführung der *Symphonie* mit enthusiastischem Beyfalle vor sich gegangen ist, welchens ich groβentheils der *Metronomisirung* zuschreibe. Wir können beynahe keine *Tempi ordinarij* mehr haben, indem man sich nach den Ideen des freyeren *Genius* richten muβ.'

could be misunderstood by the performers. It is for this probably reason that the metronome was so well received, as at least from Beethoven's perspective it offered a more reliable method of transmitting the tempo.

2.3: Beethoven's Tempo Flexibility

Although for Beethoven the metronome was an accurate tool to transmit a musical speed, it would be anachronistic to think that his intended tempo for a section reduces to a single metronome mark, as tempo flexibility clearly also plays a role. In an article authored together with Antonio Salieri and published on 14 February 1818, Beethoven recommended the use of the metronome specifically for students and beginners, about whom he wrote that

through [the metronome's] use they will be able to learn and practise the values of the notes with the greatest ease. Also within the shortest time they will arrive at the point of being able to perform without difficulty and with enthusiasm; for since the pupil having had the appropriate directions and explanations from his teacher is thus prevented even in the absence of the latter from straying arbitrarily from the tempo, in singing or playing, his feeling for time will in a short while become so developed and directed, that in this respect there will soon be no further difficulties for him. ¹⁵⁷

So although the metronome was primarily intended to help composers transmit their intended speeds, Beethoven recommended a second use of the device: to help learners better understand the length of the notes, and to prevent unintentional departures from the basic tempo, as his use of the word 'arbitrarily' indicates. This, of course, does not rule out intentional departures from the speed chosen at the beginning, and some of the evidence

72

¹⁵⁷ Ludwig van Beethoven and Antonio Salieri, 'Erklärung', *Allgemeine musikalische Zeitung mit besonderer Rücksicht auf den österreichischen Kaiserstaat*, ii/7 (14 February 1818), 58-59. Translation adapted from Kolisch, 'Tempo and Character', 172-173.

supporting this—such as the comment on the autograph score of WoO 148—has already been discussed above. In addition, there are various eyewitnesses to Beethoven's performances who have provided supporting evidence for the notion that his tempo was to a certain degree flexible.

In 1832, Ignaz von Seyfried, who was well acquainted with Beethoven, described Beethoven's approach to performances as being very nuanced, and containing an 'effective rubato'. Nevertheless, although Seyfried does not say so explicitly, he implies that there might have been differences between Beethoven's intended tempo flexibility and the actual practice of the time, in part because of the composer's supposed negligence during rehearsals. This in turn suggests that at least some of Beethoven's intended tempo flexibility—as well as the actual tempos themselves—were probably not always achieved in practice. 159

Ferdinand Ries, another long-time friend of Beethoven, remarked that Beethoven generally kept a strict tempo, with departures to create special effects, ¹⁶⁰ which seems very much in line with Beethoven's 1818 article above and Czerny's comments on *ritardando* in his Piano School. ¹⁶¹ Perhaps the most detailed discussion of Beethoven's tempo flexibility, however, is found in Schindler's biography of 1840, which actually suggests decreasing or increasing the tempo for a few bars before returning to the original tempo. Although Schindler's testimony is generally deeply problematic, in this case it might have some value: in Moscheles's English translation published the following year, he added a footnote that he generally agreed with Schindler, and that a certain amount of flexibility was indeed needed to enhance the expression. As a caveat, however, Moscheles added that the success of these tempo fluctuations 'can only be assured by intimate acquaintance on the part of the band with the manner of the conductor, and his mode of conveying his intentions, either from long

¹⁵⁸ Ignaz Ritter von Seyfried, *Ludwig van Beethoven's Studien*, Leipzig (Schuberth) 1853, Anhang, 18.

¹⁶⁰ Ries, Remembering Beethoven, 94.

¹⁶¹ Czerny, Von dem Vortrage: Dritter Theil aus Vollständige theoretisch-practische Pianoforte-Schule, op. 500, Vienna (Diabelli) 1839, iii, 25-26.

intercourse or careful rehearsals.' Much like Seyfried, Moscheles implies that although Beethoven might have desired a flexible tempo, this might not always have been possible in practice, especially in orchestral music.

In summary, it is difficult to say with any degree of certainty how flexible

Beethoven's intended tempos really were. Seyfried's and Moscheles's comments suggest that
there might have been practical problems with using too much flexibility in an orchestral
setting, but there also is much evidence that following the tempo too strictly throughout the
piece is not what Beethoven had in mind. Since there is no reliable literature by either

Beethoven himself or his contemporaries that describes the exact nature of the intended
flexibility, this thesis will focus on the underlying basic tempo, keeping in mind that these
tempos are generally to be treated with some degree of flexibility.

2.4: Tempo Modifiers

In order to explore other aspects of Beethoven's tempo further, it is necessary to consider briefly the role of tempo modifiers: words that are added to basic tempo indications such as *allegro* and *andante*, and which either diminish or increase speed. The meaning of most of these is straightforward, and for the most part their definitions can be obtained from musical treatises of the time. In general, these treatises suggest literal interpretations for most tempo modifiers: *molto* is almost always defined as 'very', ¹⁶³ *più* is defined as the equivalent of 'more', with *più presto* meaning faster and *più forte* meaning stronger or louder. ¹⁶⁴ About *poco*, often defined as 'a little', there exists a similar consensus, ¹⁶⁵ and *ma non troppo* is almost always literally translated as 'but not too much'. ¹⁶⁶

_

¹⁶² Moscheles, *Life of Beethoven*, ii, 141.

¹⁶³ See for instance Johann Daniel Andersch, *Musikalisches Wörterbuch*, Berlin (Natorff) 1829, 310 and Thomas Busby, *A Complete Dictionary of Music*, Philadelphia (Snider) 1827, 'Molto'.

¹⁶⁴ Andersch, Wörterbuch, 334, Busby, Dictionary 'Più'.

¹⁶⁵ See for instance J. F. Danneley, *Encyclopaedia or Dictionary of Music*, London (Danneley) 1825, 'Poco'. ¹⁶⁶ Ibid., 'ma non troppo'.

Despite these relatively straightforward definitions of most of these modifiers there are a number of potential problems that arise out of the practical application of these expressions, and several of these were diagnosed by Beethoven's contemporaries. Heinrich Koch's *Musikalisches Lexikon* of 1803, for instance, raises the issue that it is not clear whether *molto andante* is faster than plain *andante*. Despite this, in at least one case Beethoven must have forgotten this: in the second movement of the Piano Trio op. 1 no. 3 *Andante* is followed by *un poco più Andante*, which creates confusion about whether this is a faster or slower indication. It seems possible that someone pointed this out to him—the same happened with several other aspects of the other trios as discussed in section 2.1 above—as there is no evidence that Beethoven ever used these indications again in the same work without further explanation.

Additional problems occur in the definitions of *assai*, for which the treatises give definitions ranging from 'very', ¹⁶⁸ to 'enough', ¹⁶⁹ or even both. ¹⁷⁰ This is particularly the case in combination with *allegro*, to which *assai* is most often applied in Beethoven's oeuvre. According to Moscheles, *Allegro assai* is faster than plain *Allegro*, as he indicates in his discussion of the metronome mark of the first movement of the Piano Sonata op. 106:

Neither of these [J=138 or J=138] can, to my mind, be made to suit the character of the movement. The minim increases it to so fearful a *prestissimo* as Beethoven could have never intended, since he desired the *assai*, originally prefixed to the *allegro*, to be omitted.¹⁷¹

_

¹⁶⁷ Koch, *Lexikon*, 979.

¹⁶⁸ Busby, *Dictionary*, 'assai'; Danneley, *Dictionary*, 'assai'.

¹⁶⁹ John Jousse, *Compendious Dictionary of Italian and Other Terms Used in Music*, London (Clementi) 1829,

¹⁷⁰ Lexikon, 169. Andersch, *Wörterbuch*, 'assai'. Jean Jacques Rousseau, *Dictionaire de musique*, Paris (Duchesne) 1775, 35.

¹⁷¹ Schindler, *Life of Beethoven*, ii, 252.

Moscheles never had the opportunity to discuss the Piano Sonata op. 106 with Beethoven, and it seems that overall he had few opportunities to hear the composer's interpretation of *Allegro assai*. It is possible that Moscheles only ever heard a single *Allegro assai* conducted by Beethoven, found in the second part of the Concert Aria 'Ah! perfido' op. 65, which Moscheles might have heard at the benefit concert on 22 December 1808. ¹⁷² In addition, there is only one other section with *assai* for which there is evidence that Moscheles had some insider knowledge: the finale of the second act of *Fidelio*, which Moscheles arranged for piano under Beethoven's supervision. ¹⁷³ There is therefore no hard evidence that supports the proposition that Moscheles's interpretation of *Allegro assai* as an equivalent of *Allegro molto* is also Beethoven's. Donald Tovey, on the other hand, has argued for a return to the original meaning of the term: '*assai* originally meant the same as *assez*. Both in Italian and French the same ironical process has caused these equivalents of "pretty fast" to suggest extremes. ¹⁷⁴ Although there is evidence in the treatises that supports this, much like Moscheles's interpretation the link with Beethoven's practice is not made explicit enough in order to justify this definition of *Allegro assai*.

The first to study the occurrences of *Allegro assai* in Beethoven's oeuvre was Stewart Deas, who did so in a similar manner comparable to the method employed in this thesis, by discussing several instances in which the term occurs. The three most prominent cases that Deas discussed are found in the 'Freude' theme in the last movement of the Ninth Symphony, the second movement of the Piano Sonata op. 106, and in the song cycle *An die ferne Geliebte* op. 98. The sketches of the Ninth Symphony show that the theme was initially marked 'moderato', ¹⁷⁵ and even the metronome mark that Beethoven added later (J=80) does not indicate a very fast speed. A similar argument applies in the second movement of op. 106,

¹⁷² Ibid., i, xi.

Moscheles, *Recent Music*, 10.

¹⁷⁴ Stewart Deas, 'Beethoven's "Allegro assai", *Music & Letters*, xxxi/4 (October 1950), 333-336, at 333.

¹⁷⁵ Gustav Nottebohm, Zweite Beethoveniana: Nachgelassene Aufsätze, Leipzig (Peters) 1887, 184.

in which the sketches only show 'allegro' and 'geschwind', without there ever being a suggestion of a very fast speed. ¹⁷⁶ Finally, in the song cycle op. 98, an actual translation is provided in *Wo die Bergen so blau*, in which Beethoven translates 'assai allegro' as 'Ziemlich geschwind'. It is therefore very likely that for Beethoven *Allegro assai* was less fast than *Allegro*, with *assai* meaning something along the lines of 'quite' or 'rather'.

This meaning of *Allegro assai* offers two non-exclusive and relatively straightforward interpretations of the term of the first movement of the Piano Sonata op. 106. Either Beethoven initially planned for the speed to be much slower, or he only realized that the speed that he had in mind all along was better expressed by *Allegro* than *Allegro assai*. Especially the former explanation raises the issue of how much Beethoven's sense of tempo changed during his lifetime, which will be explored in the next section.

2.5: Changes in Beethoven's tempo

As was already suggested in the previous chapter, tempo preferences are tied to a specific person at a specific time, and it is as much possible for two people living at the same time to favour different speeds as it is for composer to change his mind on what the speed for a particular work should be. It is therefore important to not just discover whether Beethoven ever changed his mind on the tempo of a work after finishing it, but also to examine whether the general principles that determine his tempo are as valid for his late works as they are for his earliest compositions. A good way to achieve both of these goals is to examine some of the speeds for Beethoven's last work with metronome marks—the Ninth Symphony—and see whether these are compatible with the metronome marks that he produced earlier.

The first movement of the Ninth Symphony is marked *Allegro ma non troppo e un poco maestoso* in 2/4, and has note values ranging from crotchets to demisemiquavers. Of all

-

¹⁷⁶ Deas, 'Beethoven's "Allegro assai", 334.

works with metronome marks, the first movement of the String Quartet op. 18 no. 2 is most similar, as it has the same time signature and range of note values. The tempo indication, Allegro without the added ma non troppo, is a little faster than that of the Symphony, a difference that is reflected in the metronome marks for both movements: the Symphony is marked $\rfloor = 88$ and the String Quartet $\rfloor = 96$. The Adagio molto e cantabile in c in the third movement of the Symphony has note values ranging from minims to quavers, with semiquavers only appearing in later sections—in this case analogous to variations—of the same movement. The second movement of the String Quartet op. 59 no. 2 has the same time signature, a comparable tempo indication (Adagio molto. Si tratta questo pezzo con molto di sentimento), the same range of note values, and even a similar distribution: larger note values appear throughout the piece, with semiquavers only making prominent appearances in the first violin part. The metronome speeds for both movements are J=60, showing that despite the gap of nine years between these speeds, Beethoven still seems to be guided by the same principles. Finally, the 'Freude' theme in the last movement is marked Allegro assai and has a speed of =80, with note values ranging from crotchets and quavers in the beginning to some semiquavers later on. The first movement of the String Quartet op. 18 no. 4 has the same range and distribution of note values, Allegro ma non tanto as a tempo indication, and a metronome speed of \rfloor =84. The precise relationship between the distribution of note values and the intended tempo will be explored in later chapters.

As the three examples indicate, Beethoven's sense of tempo seems to have remained relatively stable between 1818, when the speeds for the string quartets were published, and when the speeds for the Ninth Symphony were produced in October 1826. Nevertheless, it is important to be aware of the differences between each of the pairs discussed: the affect, tonality, harmonic rhythm, and overall expression are all different, even if the indicated speed is identical. Although it is likely that these elements have some effect on the intended

performance—they could have an impact on the flexibility, or some other aspect—there is no evidence that these have any significant influence on the overall tempo. Nevertheless, it seems possible that the influence of these factors on the intended performance might have been variable throughout Beethoven's life, but there is no reliable evidence available that can substantiate or disprove that proposition.

Since there is no evidence that earlier metronome marks are determined by different factors than later metronome marks, the question arises whether the same can be said for arrangements and improved versions. Overall, these are relatively few in number: the only arrangement that Beethoven ever made of one of his piano sonatas was of op. 14 no. 1, which he arranged for string quartet after he was asked to do so. 177 Various changes were made in order to accommodate it to the instruments he was writing for, the most obvious of which being the fact that the version for strings is written a semitone higher, presumably in order to accommodate the range of the cello. Besides the key signature, several tempo indications also altered: Beethoven changed the tempo indication in the first movement from *Allegro* to *Allegro moderato* and in the third movement from *Allegro comodo* to just *Allegro*. The question is whether the modifications to the tempo indication constitute a change of heart on Beethoven's part, or simply a more accurate way to express the speed that he had in mind all along.

The latter interpretation is supported by the testimony of Carl Czerny, who claimed that he 'studied all [of Beethoven's] works with great predilection on their first appearance, and many of them under the Master's guidance'. ¹⁷⁸ In addition, he claimed that he studied both op. 14 sonatas with Beethoven. ¹⁷⁹ These works appeared in 1799, about two years

_

¹⁷⁷ Brandenburg, *Briefwechsel*, Letter 97; Beethoven, *Quatuor pour Deux Violons Alto*, et Violoncelle d'aprés une Sonate [op. 14 no. 1], Bonn (Simrock) 1802.

¹⁷⁸ Czerny, On the Proper Performance, 20.

¹⁷⁹ Nottebohm, *Beethoveniana*, 136.

before Czerny studied with the composer, ¹⁸⁰ and about three years before the arrangement for string quartet was published. Because these sonatas are among the easiest of Beethoven's oeuvre, it seems plausible that Czerny studied them at the beginning of his time with Beethoven, before the string quartet arrangement was made. In his instructions on how to perform Beethoven's works, Czerny described the first movement as '... of a serene and noble character, and must be performed lively, but agreeably.' ¹⁸¹ Especially because of the last three words, *Allegro moderato* seems to provide a more accurate description than just *Allegro*.

This leaves the question why Beethoven deleted *comodo* from the tempo indication of the last movement in the string quartet version. Although it is possible that the omission is due to a mistake by the publisher, it seems plausible that Beethoven left it out on purpose: *comodo* is only used four other times in Beethoven's oeuvre. Two of these are found in the National Airs with Variations for Piano and Flute op. 107, which Beethoven wrote about 15 years after the he made the string quartet arrangement, and a third is found in the final 6/8 section marked *Allegro comodo* in the fourth movement of the String Quartet op. 127. The fourth is found in the second solo of the *Terzetto i Groteschi* of the Ballet *Creatures of Prometheus*, op. 43, a work he must have finished before the first performance on 28 March 1801, ¹⁸² before the arrangement of op. 14 no. 1. In this case, there could be a simple reason for Beethoven's removal of *comodo*: most musicians might not have known what this Italian term meant, as well-known musical dictionaries published before 1802 such as Hoyle's and Rousseau's do not include the term. Only in Koch's *Musikalisches Lexikon*, which was published in the same year as the arrangement, does the term appear, ¹⁸³ and it seems probable

¹⁸⁰ Czerny, On the Proper Performance, 4.

¹⁸¹ Ibid., 34.

¹⁸² Kunze, *Spiegel*, 39-40.

¹⁸³ Koch, *Lexikon*, 348.

that Beethoven simply removed the word from his arrangement as its meaning was largely not understood anyway.

There are comparably few other works that Beethoven revisited after he had finished them: many of the arrangements of his compositions were really done by Czerny, Ferdinand Ries, and others, with Beethoven only taking up a supervisory role. Nevertheless, there is one major work that he revisited several times: his opera Fidelio. Although the three main versions in which the opera exists often do not share the same material, there is some music that appears in all three versions. Of particular interest here is the beginning of the finale of what is in all versions the penultimate act. This section, 'O welche Lust', is largely the same in all three versions, but the tempo indications are not: the 1805 version is marked Allegretto, the 1806 version Allegretto con moto, and the 1814 version Allegro ma non troppo. Although the transition from Allegretto to Allegro ma non troppo may seem to indicate a change of tempo, in practice there might not be much difference between the two. The third movement of the String Quartet op. 18 no. 4, for instance, is marked *Allegretto* and has a speed of J.=84 and crotchets and some quavers as note values, while—as will be argued in Chapter 5 sections marked *Allegro* with the same range of note values have speeds ranging between J.=69 and 84, depending on the amount of quavers in the movement. There is therefore no particular reason to believe that these changes of tempo indication actually constitute a change in intended speed, and it seems more likely that Beethoven made these changes in order to communicate his intended tempo in a more clear way.

There are also the arrangements which were made by an associate and only checked by Beethoven that need to be examined in order to see if they show any sign of a change of heart. The work that Beethoven revisited most often without changing the musical content is probably the Second Symphony. This work, composed in 1802, is the only symphony by

Beethoven of which a piano trio arrangement was published under the composer's name. ¹⁸⁴
Years later, in 1817, Beethoven came back to the symphony to give it metronome marks.
Czerny, however, wrote in his memoirs that it was actually Ferdinand Ries who made the arrangement, with Beethoven checking it after Ries had finished. According to Czerny,
Beethoven then gave it to him to change a few things that he was not satisfied with.

The published piano trio version, however, contains a different tempo indication for the second movement: *Larghetto quasi Andante* instead of only *Larghetto*. The 1817 list of metronome marks for the first eight symphonies only includes *Larghetto* for the second movement of this symphony, making the arrangement the only version that is marked *Larghetto quasi Andante*. Because at least three pairs of eyes—Czerny's, Ries's, and Beethoven's—looked at this arrangement before publication, it seems unlikely that this change, whoever might have suggested it, would have gone unnoticed. One would perhaps assume that *Larghetto quasi Andante* is faster than only *Larghetto*, and that therefore the piano trio suggests a slightly faster tempo than the orchestral version.

This, however, does not seem to be the case. In Jean Jacques Rousseau's *Dictionnaire de musique* from 1775 '*Larghetto* indicates a movement which is less slow than *Largo*, more like *Andante*, and similar to *Andantino*.' Similarly, in the *Musikalisches Lexikon* by Heinrich Christoph Koch, published only 3 years before the piano trio arrangement, Larghetto is defined as 'a little slow. The pieces with this indication for the most part have a calm and pleasant character. The tempo is usually the same as in *Andante*.' Since both theorists compare *Larghetto* to *Andante*, it would appear that *Larghetto quasi Andante* is simply a clarification of *Larghetto*. In fact, there is no other movement by Beethoven that has this tempo indication, which would lead one to believe that it might not have been his idea. It seems that Czerny did not use it either, but given the large body of works he wrote one

¹⁸⁴ Czerny, On the Proper Performance, 8.

¹⁸⁵ Rousseau, Dictionnaire de musique, 420.

¹⁸⁶ Koch, *Lexikon*, 889-90.

cannot be completely certain of this. What is certain, however, is that the first arranger, Ferdinand Ries, did use this indication quite often: in his *Cantata* op. 27, in his Introduction and Song op 33 no. 2, and in his second divertimento op. 117, to name just three examples. All three of these movements are either in 3/8 or metre, just like the second movement of the symphony, or in 6/8. It therefore seems likely that the change in tempo indication in the piano trio transcription was Ries's suggestion, which Beethoven accepted as a clarification of the same tempo. When the metronome mark was introduced, this clarification became obsolete. Also, given Czerny's testimony, it is doubtful if any of the changes made can be really attributed to Beethoven himself. There is therefore no reason to believe that these arrangements were intended to be played at a different speed from the original versions.

Finally, among the string quartets that Beethoven gave metronome marks in 1818, there is one particular movement—the last movement of the String Quartet op. 95—in which the metronome marks suggest a tempo relationship between two sections that was not explicitly indicated in the first edition. The last two sections of this movement are marked Allegretto agitato J.=92 in 6/8, and Allegro J=92 in ¢, so the number of bars per minute is actually the same in both sections. The third movement of the String Quartet op. 74, for which the metronome marks appear in the same booklet, contains a similarly linear tempo relationship between two sections. In this case, however, the relationship is already indicated in the first edition, which makes the similarity in speed between the last two sections of op. 95 seem like a change of heart between the first edition and 1818. Nevertheless, as will be shown in Chapters 4 and 5, the speeds for the Allegro agitato in 6/8 and Allegro in ¢ are consistent with other sections with similar characteristics. (See for instance Beethoven's speeds of J.=88 for the Allegretto quasi allegro in the final movement of the String Quartet op. 18 no. 6 and J=96 for the Allegro in the first movement of the Septet op. 20,

¹⁸⁷ See Ferdinand Ries, 'Catalogue Thematique of the Works of Ferdinand Ries', Berlin State Library, Mus.ms.theor. Kat. 741.

respectively.) This in turn strengthens the assertion that the tempo relationship was already part of the conception of these sections before the metronome marks were printed in 1818, which in turn suggests that Beethoven's sense of tempo did not change much over time.

In summary, there is actually no persuasive evidence that Beethoven's sense of tempo changed significantly over time. This conclusion, however, has to be issued with a number of caveats. Firstly, this conclusion is only as good as the historical record, and since there was no reliable way to document musical speed before 1815 it is possible that Beethoven's speeds were different before, but that no one noticed and/or discussed the difference in print.

Secondly, it is possible that the intended expression and execution changed even if the tempo did not, as these are not easily communicated via the score. These caveats notwithstanding, the following chapters will define the intended speed of Beethoven's tempo indications for all his works, both earlier and later, assuming that the metronome marks constitute a *Fassung letzter Hand*: a final iteration of his intended speeds that may or may not be different from previous versions.

2.6: Conclusion

The evidence indicates that Beethoven's intended tempos are determined by the time signature, the range of note values, and the tempo indications, and that Beethoven probably remained committed to these principles throughout his life. In addition, there is evidence that the tempo within a work was often intended to be flexible, even when this might have caused practical problems, and that departures from the underlying speed are generally followed by a return to that speed.

Chapter 3: Beethoven's Slow Indications: Adagio, Largo, Andante, and Others.

This chapter will be the first of four chapters to discuss individual tempo indications, and will discuss those words that are meant to convey a relatively slow speed. The boundaries of what constitutes a slow speed and what does not are always going to be arbitrary, and in this thesis the distinction is drawn between *andante* and *allegretto*: the former will be treated as a slow tempo, and the latter will be discussed in the next chapter as a moderate tempo. The final section of this chapter will discuss the rarer tempo indications *sostenuto*, *maestoso*, and *grave* that are both used independently as well as in combination with the more common *adagio*, *largo*, and *andante*, which will be discussed first.

3.1: Adagio

During Beethoven's lifetime, the term *adagio* was sometimes used as a synonym for slow movement, even when the music itself had a different tempo indication. In a letter discussing the Piano Trio op. 70 no. 1, for instance, Beethoven refers to the slow movement as *Adagio*, ¹⁸⁸ even though it is marked *Largo* in all sources. ¹⁸⁹ In addition to being shorthand for slow movement, the term *adagio* has another unique property: it is the only tempo indication that is frequently applied to very short sections of less than two bars. Example 3.1.1 below shows two of these *adagios*. The first is from the first movement of the Piano Sonata op. 31 no. 2, in which after a *Largo* opening and a brief *Allegro* a short *Adagio* occurs at the cadential point. In the editions by Czerny and Moscheles, the *Largo* and the *Allegro* are given metronomic speeds, but the *Adagio* is not, suggesting that this word indicates a departure from the tempo, rather than a specific tempo in itself. The second example, from the recapitulation of the first movement of the Fifth Symphony, shows a similar principle at work: at the cadential point, the oboe has a short solo marked *adagio*, which does not seem to

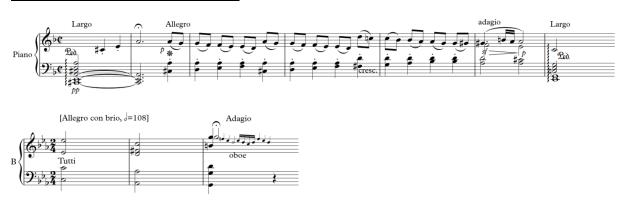
-

¹⁸⁸ Brandenburg, *Briefwechsel*, Letter 370.

¹⁸⁹ See for instance the corrected copy in the Beethoven-Haus Bonn, NE 183.

affect the overall tempo, which returns the next bar. This is further illustrated by the fact that although Beethoven provided six metronome marks for this symphony—one for every tempo indication—there is no metronome mark for this particular *adagio*. It is therefore probably more appropriate to consider these indications different from normal *adagios*, as these are merely brief departures of the overall tempo that are not so much new tempos as they are an indicated form of exaggerated tempo flexibility.

Example 3.1.1: Cadential adagios in the first movements of the Piano Sonata op. 31 no. 2 (a) and the Fifth Symphony (b).



Overall, most if not all of these *adagios* occur at cadences, and are one or two bars long, and it is therefore most appropriate to call these cadential *adagios*. There are, however, a number of non-obvious cases, such as the-five-bar long *adagio* in the last movement of the Violin Sonata op. 23, in which both the violin and the piano have a cadential figure. Another example can be found in the last movement of the Cello Sonata op. 5 no. 1, in which bar 9 and 10 of the principle theme are repeated *ritardando* and *calando*, which results in a two bar *adagio* section. Despite the fact that this section uses thematic material, neither Czerny nor Moscheles provided metronome marks for the *adagio* in their editions. It is therefore best to define cadential *adagios* as short sections with non-thematic material in which the tempo is quite flexible, but to simultaneously keep in mind that there might be exceptions to this rule.

Despite this, there are still more than 170 *adagios* in Beethoven's oeuvre that clearly indicate a tempo, and they are found in virtually every genre. In order to maintain an overview, this chapter will discuss these sorted by time signature, starting with those in which the beat is indicated by quavers (3/8, 6/8, 9/8), then crotchets (2/4, 3/4, c), and finally minims (¢ and 3/2), ending with a section on exceptional time signatures. Within each of these groups, time signatures with fewer beats will be discussed before those with more beats, so the influence of the number of beats in each bar is also made clear. The following chapters on faster tempos will have a similar set-up.

An overview of Beethoven's 22 metronome marks for *adagios* can be seen in Table 3.1.2 below. In cases in which the speed is expressed in a note value other than the one indicated by the time signature, that speed is given in brackets. The column on the right indicates the most common note values employed at the start of each section, with a dash indicating that the values appear in the same passage, and the word 'and' that the value appears in a subsequent passage. (The precise reasons for the distinction between note values at the start and those that occur later will become clear in the following discussion.) In those cases in which it is not immediately obvious which note value is the most common, more than one value has been included. Along with metronome marks by Beethoven's contemporaries, the information in this table (and others like it containing other tempo indications) will be used to assess to which degree the principles described in Chapter 2 align with the actual practice.

Table 3.1.2: Beethoven's speeds for *adagios* with their most common note values.

Metre	Work	Tempo indication	Metronome	Note
			<u>mark</u>	<u>values</u>
3/8	String Quartet op. 18 no. 6, v	Poco adagio	♪ =69	
	String Quartet op. 74, ii	Adagio ma non troppo	♪ =72	.).)
6/8	Piano Sonata op. 106, iii	Adagio sostenuto	\$ =92	1/1/1
9/8	String Quartet op. 18 no. 1, ii	Adagio affetuoso ed	> =138	.Y.A
		appassionato		
	Septet op. 20, ii	Adagio cantabile	 \$=132	.Y.A
2/4	String Quartet op. 18 no. 5, iii	Poco adagio	\$=88 (J =44)	JY_}
	String Quartet op. 18 no. 6, ii	Adagio ma non troppo	\$=80 (J =20)	.Y.A
	String Quartet op. 18 no. 6, iv	Adagio	 \$=58 (\$=29)	1/1
	Symphony op, 21, iv	Adagio	 \$=63 (\$=31.5)	.).h
	Symphony op. 55, ii	Adagio assai	♪=80 (J =40)	J/39
	String Quartet op. 59 no. 1, iii	Adagio molto e mesto	\$=88 (J =22)	Mand A
	String Quartet op. 59 no. 1, iv	Adagio ma non troppo	 \$=69 (\$=34.5)	J/_}
3/4	String Quartet op. 18 no. 2, ii	Adagio cantabile	 \$=72 (.Y.A
	Septet op. 20, i	Adagio	 \$=72 (\$=36)	.Y.A
	Symphony op. 36, i	Adagio	\$=84 (J =42)	.Y.A
	Symphony op. 60, ii	Adagio	\$=84 (J =42)	.Y.A
c	Symphony op. 21, i	Adagio molto	♪=88 (J=44)	J/_}
	String Quartet op. 59 no. 2, ii	Molto adagio	J=60]/]/3
	Symphony op. 125, iii	Adagio molto e cantabile	J=60]/]/)
¢	Symphony op. 60, i	Adagio	J=66 (J=33)	١٧٦
	String Quartet op. 74, i	Poco adagio	J=60 (J=30)	1/1
3/2	Symphony op. 125, iv	Adagio ma non troppo ma	J =60	J/ .
		divoto		

3.1.1: Adagios in 3/8

The two *adagios* in this metre in Table 3.1.2 have similar speeds (\$\sigma = 69\$ and 72) and fairly similar tempo indications, both suggesting a speed that is somewhat less slow than plain *adagio*. The third factor that determines the tempo—the range of note values—is quite different in both works: op. 18 no. 6 contains no note values faster than semiquavers, while op. 74 contains extensive demisemiquaver figuration, although mostly after 60 bars. It therefore seems plausible that it is primarily the note values at the beginning of slow sections that determine the tempo.

All seven *adagios* are listed in Table 3.1.1.1 below. Metronome marks given in brackets represent a suggested speed by a contemporary, rather than a speed by Beethoven

himself. As will become evident later in this discussion, the table is ordered from faster *adagios* at the top to slower ones at the bottom.

Table 3.1.1.1: Beethoven's adagios in 3/8.

<u>Work</u>	Tempo indication	Metronome Mark	Note values
Variations WoO 76, var. 7	Adagio molto e	[) =56]	S.A.
	espressivo		
Ballet op. 43 no. 14	Adagio	-	♪ triplets/♪
Variations WoO 65, var. 14	Adagio	-	.Y.Y.A
Aria WoO 92	Adagio	-	3 7.5
Folksong Variations op. 107 no.	Adagio sostenuto	-	1 /2)
3, var. 6.			
String Quartet op. 18 no. 6, v	Poco adagio	\$ =69	
String Quartet op. 74, ii	Adagio ma non troppo	♪ =72	3)3)

The only *adagio* in 3/8 with a metronome mark by a contemporary of Beethoven is found in the seventh variation of the Variations WoO 76. Since this variation contains a considerable number of demisemiquavers from the beginning, and since the tempo indication *Adagio molto e espressivo* indicates a relatively slow *adagio*, one would expect a speed that is considerably slower that the λ =69 and 72 that Beethoven indicated for the two string quartet movements. Moscheles's suggested speed of λ =56 seems therefore to be a reasonable estimation. Considering that this section has the slowest tempo indication and the smallest note values, and that the two string quartets have the fastest tempo indications and (at least in the beginning) the largest note values, it seems plausible that all the other *adagios* in 3/8 have intended speeds between λ =56 and λ =72, depending on the note values and tempo indications they employ.

The most probable order from slow to fast is therefore the following: WoO 76, due to the presence of demisemiquavers and a slow tempo indication; op. 43, as it also has demisemiquavers but is marked plain *adagio*; WoO 65, as it contains some larger note values too, and the small note values do not appear until the end of the section; and finally WoO 92 and op. 107 no. 3, as these two *adagios* have the largest note values. (As section 3.4 below

will argue, the term *Sostenuto* is primarily used as an indication of character, and when used on its own indicates the same speed as *Adagio*. There is thus probably no difference in speed between *Adagio* and *Adagio sostenuto*.) This order should allow some more precise educated guesses to be made about the intended speed of these five *adagios*, by dividing the range of \$\int_{=}\$56-72 into five equal parts, with the two string quartets in the top range, WoO 76, in the bottom, and the rest filled out according to the order described above.

3.1.2: Adagios in 6/8

Adagios in 6/8 are somewhat more numerous in Beethoven's oeuvre, and there are at least eleven cases which match this description, which can be found in Table 3.1.2.1 below. As before, the table is ordered approximately from slow to fast.

Table 3.1.2.1: Beethoven's adagios in 6/8.

<u>Work</u>	Tempo indication	Metronome	Note
		<u>Mark</u>	<u>values</u>
Piano Sonata op. 53/ii	Adagio molto	[\$=54-60]	J
Violin Sonata op. 96/iv	Adagio espressivo	[\$=63-72]	, A
Fantasy op. 80/ii	Adagio ma non	[\$=88]	. P.A
	troppo		
Oratorio op. 85/i	Adagio	-	JY_}
Adagio for Mandoline WoO 43 no. 1	Adagio	-	JY_}
String Quartet op. 131/iv	Adagio	[> =92]	JY_}
Variations op. 107 no. 4 var. 2	Poco adagio	-	١٧٦
Adagio for Mandoline WoO 43 no. 2	Adagio ma non	-	JY_5
	troppo		
Song WoO 134, fourth version	Assai adagio	-	JY_}
Piano Sonata op. 106/iii	Adagio sostenuto	<i>\$</i> =92	⅓ and ♪
Variations WoO 67, var. 8	Adagio	-	triplets الرارا

The only *adagio* in 6/8 for which Beethoven provided a metronome mark is found in the third movement of the Piano Sonata op. 106, which is marked *Adagio sostenuto*. (As said before, section 3.4 will show that the addition of *sostenuto* does not make a difference in terms of tempo.) Much like the second movement of the String Quartet op. 74 discussed above, this

sonata movement contains larger note values at the beginning—primarily crotchets and quavers—with demisemiquavers only appearing later in the movement. Despite this similarity, the Piano Sonata has a metronome mark of \searrow =92, much faster than the \searrow =72 for the String Quartet. It therefore seems that Beethoven's *adagios* in 6/8 are generally slightly faster than those in 3/8, but—as Table 3.1.2 shows—slower than those in 9/8, an observation that will be revisited at the end of this section.

There are only two plain adagios in 6/8 for which metronomic indications by a contemporary of the composer exist. The first is found in the fourth movement of the String Quartet op. 131, which contains almost exclusively quavers and semiquavers, and according to Karl Holz, the appropriate speed for this movement is $\lambda=92$, the same speed as Beethoven's for op. 106. This, however, seems a little too fast, considering the difference in note values between the two movements, and a slightly slower speed might be more plausible. The other adagio (marked Adagio espressivo in the score) is found in the fourth movement of the Violin Sonata op. 96, which contains demisemiquavers straight from the start, something which is reflected in the speeds that Czerny and Moscheles recommend: \triangleright =72 and \triangleright =63 respectively. Since there is no evidence that either of these speeds is based on instructions or a performance by the composer, it appears that these are just estimations. If Moscheles's speed of *>*=56 for the *Adagio molto e espressivo* in 3/8 in the Variations WoO 76 discussed above is correct, a speed of λ =63 for the Violin Sonata, which has a similar range and distribution of note values, is probably a little too slow: not only does WoO 76 have a much slower tempo indication, the time signature 3/8 also seems to suggest a slower speed than 6/8. Given the difference between these two adagios, one would expect op. 96 to have a much faster speed than WoO 76, which makes Moscheles's suggestion for the Violin Sonata somewhat implausible and Czerny's *▶*=72 more likely to be a better estimation.

Beethoven's only *Molto adagio* in 6/8 is found in the second movement of the Piano Sonata op. 53, with note values ranging from quavers in the beginning to demisemiquavers towards the end. As Ferdinand Ries claimed in 1838, the second movement of this work was initially a much longer movement that was later published separately as *Andante favori* WoO 57, but which Beethoven removed from the Sonata after a friend told him that it made the work too long. ¹⁹⁰ The autograph score of the movement confirms Ries's story, as it shows that the middle movement was removed and a new introduction sewed and glued in its place. ¹⁹¹ In his memoires, Czerny claimed that he sight-read the autograph of the Piano Sonata op. 53 in front of Beethoven sometime in 1804 or 1805, ¹⁹² but he also writes that he was sent the proofs and the autograph score of WoO 57 to correct in 1804, further indicating that he was aware of WoO 57's former status within op. 53. ¹⁹³ The question is therefore whether WoO 57 was still part of the autograph score of the Piano Sonata op. 53 when Czerny sight-read it, and whether he therefore had insider knowledge of the *Molto adagio* in the second movement. Unfortunately, conclusive evidence for either scenario seems to be in short supply.

Czerny's speeds for the *Molto adagio* that became the second movement of op. 53 are $\lambda=54$ (written as $\lambda=108$), $\lambda=56$, and $\lambda=60$, reasonably similar to Moscheles's suggestion of $\lambda=60$. Compared to the other *adagios* discussed so far, however, these speeds are all much too slow, and relying on the metre, range of note values, and tempo indication to determine the likely indicated tempo leads to a completely different speed. Since this *Molto adagio* is in 6/8, one would expect a faster speed than an *Adagio molto* with the same range of note values in 3/8, as well as a slower speed than an *Adagio* in 6/8 with similar properties. This would lead to an estimated speed between $\lambda=56$ (from WoO 76) and $\lambda=92$ (Beethoven's speed for

¹⁹⁰ Ries, Remembering Beethoven, 89.

¹⁹¹ Autograph score op. 53, Beethoven-Haus Bonn, Sammlung H. C. Bodmer, HCB Mh 7.

¹⁹² Czerny, On the Proper Performance, 5.

¹⁹³ Ibid., 12.

op. 106), although the latter speed is probably much closer due to the fact that op. 106 contains much larger note values than op. 53. Based purely on the time signature, the range of note values, and the tempo indication as they are printed in the first edition, a speed of perhaps around $\lambda=72$ might be expected, which leads to the conclusion that both Moscheles and Czerny must have significantly underestimated the speed of this section.

This, however, seems somewhat unsatisfactory, as it has to be assumed that neither Moscheles nor Czerny ever heard the piece in the proper tempo or discussed it with the composer during the more than 20 years between its composition and the composer's death. This seems implausible, considering that this is one of Beethoven's major sonatas, and it seems to have been popular among pianists. 194 Perhaps another explanation is more likely: it seems possible that Beethoven used an inconsistent metre for this short introduction, and that it should have been in 3/8. There is some supporting evidence for this: as seen in Section 3.1.1 above, adagios in 3/8 move at speeds between \$\int_{=}56\$ and 72, so a speed of approximately =60 is not completely unthinkable with quavers and semiquavers at the beginning. In addition, this explanation offers a possible account of the fact that the autograph score is marked only Adagio: 195 it seems possible that Czerny—or perhaps Ries, or some other associate of the composer—took a speed that was too fast during his sightreading, and that Beethoven subsequently added the *molto* for the first edition, perhaps not realizing that it was the time signature that was causing the problem instead of the tempo indication. This explanation, however, is not without its problems either, but it is important to keep in mind the possibility of an inconsistent time signature.

There is only one faster adagio with metronome marks by Czerny: the fifth variation of the Choral Fantasy op. 80, a work which he studied with Beethoven. This section is marked Adagio ma non troppo and contains semiquavers, demisemiquavers, and

 ¹⁹⁴ Kunze, *Spiegel*, 48-49.
 195 Op. 53 autograph.

hemidemisemiquavers from the start. Czerny's speed for this section is $\lambda=88$, which is comparable to *adagios* in 6/8 with only demisemiquavers such as the Piano Sonata op. 106. It seems likely that the addition of the hemidemisemiquavers balances out the effect of the *ma* non troppo, so there is no particular reason to doubt Czerny's speed for this section.

So far, the working model developed in Chapter 2 has proven to be reasonably accurate: all of Beethoven's metronome marks and the vast majority of suggested speeds by contemporaries discussed so far can be explained by the model. On the basis of this early success, it should be possible to make reasonable approximations of the intended speeds of the other adagios in 6/8. The opening Adagio in the Introduzione of Christ on the Mount of Olives op. 86, which contains quavers, semiquavers, and a few demisemiquavers, probably has an intended speed of around $\flat=92$, given its similarity in tempo indication and note values to those in the fourth movement of String Quartet op. 131 as well as the third movement of the Piano Sonata op. 106. The two works for mandolin and piano WoO 43 both contain mainly quavers and semiquavers and are marked Adagio and Adagio ma non troppo, which puts them in the same group with the latter, most likely being somewhat faster than the former due to its tempo indication: perhaps a speed of around \$\display=96\$ or 100 is plausible. The fourth version of the song Sehnsucht WoO 134, which is marked Assai adagio and contains primarily quavers and semiquavers, probably has the same speed as WoO 43 no. 2, and is also likely in the same range as the eighth variation marked *Poco adagio* of the Waldstein Variations WoO 67, which contains quaver triplets in addition to crotchets and quavers. Finally, the *Poco adagio* that follows the second variation of the Folksong variations op. 107 no. 4, which contains only quavers and crotchets, might very well be the fastest adagio in this metre, with a speed that is presumably significantly faster than the aforementioned *Introduzione*, perhaps around $\mathcal{I}=104$ or even faster than that.

Whereas the *adagios* in 3/8 have speeds between around λ =56 and 72, those in 6/8 seem to be generally somewhat faster. Not counting the unclear case of the second movement of the Piano Sonata op. 53, the rest of the *adagios* in 6/8 seem to be moving at speeds between around λ =72 and 92, or perhaps even faster as there are three fast *adagios* without estimated speeds. To some degree, this difference in speed is due to the fact that many sections in 6/8 contain larger note values than those in 3/8, but this cannot explain the overall difference: the *Adagio ma non troppo* in the Fantasy op. 80 in 6/8 with a suggested speed of λ =88 is much faster than the second movement of the String Quartet op. 74 in 3/8, which Beethoven marked only λ =69, despite the fact that the former contains much smaller note values than the latter. (This is of course assuming that Czerny did not overestimate the speed by approximately 20%, but that seems implausible given his history with this work.) The evidence therefore indicates that *adagios* with more quaver beats per bar are generally intended to move faster than those with fewer. The following section will explore if the same consistency can be found in *adagios* in 9/8.

3.1.3: Adagios in 9/8

Beethoven's oeuvre contains only four *adagios* in 9/8, which are found in the second movements of the String Quartet op. 18 no. 1, the Septet op. 20, and the Piano Sonatas opp. 22 and 31 no. 1. (In addition, the fourth variation of the third movement of the Piano Sonata op. 109 contains a section marked *Un poco meno andante ciò è un poco più adagio come il tema*, but since the term *adagio* is only used in the comparative sense here, it does not qualify as an actual *adagio*.) All four of these movements have metronome marks: the first two by the composer himself, and the last two by Czerny and Moscheles.

The second movement of the String Quartet op. 18 no. 1 is marked *Adagio affetuoso ed appassionato* and contains pulsing quavers in the lower strings, with primarily quavers and

semiquavers in the first violin part and smaller note values becoming increasingly prevalent as the movement progresses. The second movement of the Septet op. 20—Adagio cantabile—contains for the most part a similar range of note values, although note values smaller than semiquavers are somewhat more rare than in the String Quartet. Beethoven's metronome marks for both movements are very similar: $\lambda=138$ for the String Quartet and $\lambda=132$ for the Septet, showing again that the range of note values at the start of the movement matters much more than those later on.

There is no evidence that either Czerny or Moscheles had any insider knowledge regarding the Piano Sonatas opp. 22 and 31 no. 1, and both editors report considerably different speeds for both second movements. The *Adagio con molta espressione* of the Piano Sonata op. 22—which contains quavers, semiquavers, and three demisemiquaver flourishes primarily consisting of diatonic and chromatic scales—is marked λ =112, 104, 100, and 116 by Czerny and λ =132 and 116 by Moscheles. The range of note values used in this movement is comparable to those in op. 18 no. 1 and op. 20, and since the tempo indication shows no sign of being slower than *adagio*, it is most likely that Moscheles's speed of λ =132 is closest to what Beethoven had in mind. The second movement of op. 31 no. 1 is marked *Adagio grazioso* and contains mainly quavers and semiquavers, with occasional flourishes of demisemiquavers. Czerny and Moscheles are somewhat more in agreement when it comes to the speed of this movement: the former suggests λ =126 and 116, while the latter has λ =132 in all editions. Here again, Moscheles seems more consistent with Beethoven's speeds than Czerny, although the latter's fastest speed is arguably close enough.

In short, all four of Beethoven's *adagios* in 9/8, in which the note values at the beginning range from quavers to occasional demisemiquavers, were probably intended to move at a speed of around \$\int_{=}132\$. The fact that these *adagios* were intended to be played much faster than their counterparts in 3/8 and 6/8 with the same range of note values

indicates that at least as far as the *adagios* are concerned the more quaver beats a time signature has, the faster the intended tempo is expected to be.

The question remains, however, why there is a much larger difference between the *adagios* in 9/8 and 6/8 than between 6/8 and 3/8: the fastest *adagio* in 3/8 has a speed similar to the slowest in 6/8, but there is a substantial gap between those in 6/8 and 9/8. This, however, could be caused by a lack of metronome marks for the faster sections in 6/8, as well as the fact that there are only four *adagios* in 9/8, which also skews the image somewhat. It might therefore be prudent to correct for this, and widen the range of estimated speeds for both fast *adagios* in 6/8 and plain *adagios* in 9/8. The resulting estimated speeds for *adagios* in 3/8, 6/8, and 9/8 can be found in Table 3.1.3.1 below. Entries that are given between brackets are speeds that estimated by inference to other speeds in the table.

Table 3.1.3.1: Estimated intended speeds for adagios in 3/8, 6/8, and 9/8.

Metre	Common	Slow adagio	Adagio	Fast adagio
	note value			
3/8	. N. J.	♪ =56	*	*
		*	[) =60]	\$ =69-72
6/8		*	♪ =72	<i>\$</i> =88
	J) J)	[> =72]	♪ =92	<i>\$</i> =100-120?
9/8	JY.)\	*	\$ =120?-132	*

3.1.4: Adagios in 2/4

Adagios with the time signature 2/4 are more common than those in all the metres discussed so far put together: there are approximately 50 of these *adagios* in Beethoven's oeuvre. It is therefore impossible to discuss all of these, and this section will focus on the seven that include a metronome mark by the composer, which can be found in Table 3.1.4.1, along with the thirteen with speeds by a contemporary in order to establish a set of rules that presumably also applies to the *adagios* not discussed in this section.

Table 3.1.4.1: Beethoven's adagios in 2/4 with metronome marks.

<u>Work</u>	Tempo indication	Metronome Mark	Note values
String Quartet op. 18 no. 6, ii	Adagio ma non troppo	<i>\$</i> =80 (<i>J</i> =20)	.).A
String Quartet op. 59 no. 1, iii	Adagio molto e mesto	<i>\$</i> =88 (<i>J</i> =22)	Mand A
Piano Sonata op. 10 no. 1/ii	Adagio molto	[> =63-72]	1/1/1
Variations op. 34	Adagio molto	[\$=56-58]]/_}\
String Quartet op. 18 no. 6, iv	Adagio	<i>\$</i> =58 (<i>↓</i> =29)	1/3
Symphony op, 21, iv	Adagio	\$ =63 (\$ =31.5)	.).).
Piano Sonata op. 2 no. 3/ii	Adagio	[\$=50-60]	
Piano Sonata op. 13/ii	Adagio cantabile	[\$=54-60]	
Piano Sonata op. 101/iii	Adagio ma non troppo	[\$=54-60])
Violin Sonata op. 96	Adagio espressivo	[> =56-63]	. \(\)
Cello Sonata op. 102/ii	Adagio con molto sentiment	[\$=56-63]	J/.}\
	d'affetto		
Cello Sonata op. 69/iii	Adagio cantabile	[]=66-69]	
Fantasy op. 77	Adagio	[> =76]	3
Piano Sonata op. 78	Adagio cantabile	[> =72-76]	الرا
Piano Sonata op. 81a	Adagio	[> =63-76]	الإ
Violin Sonata op. 30 no. 1	Adagio molto espressivo	[> =63-76]	Isingle I
String Quartet op. 59 no. 1, iv	Adagio ma non troppo	\$ =69 (\$ =34.5)	7/3
Symphony op. 55, ii	Adagio assai	♪=80 (J=40)	J/39
String Quartet op. 18 no. 5, iii	Poco adagio	♪=88 (J=44)	JY_5
Horn Sonata op. 17/ii	Poco adagio quasi andante	[) =69-88])

Beethoven's two metronome marks for plain *adagios* are found in sections that are somewhat atypical. The first is found in the only early string quartet movement with a title: the penultimate movement of the String Quartet op. 18 no. 6, marked *La Malinconia*. The note values in this section range from crotchets and quavers to small groups of semiquavers and single demisemiquavers, an unusually diverse collection of which semiquavers are the smallest common note value. The six-bar *Adagio* introduction of the fourth movement of the First Symphony is also somewhat of an outlier, but for different reasons: besides its short length, it only consists of a *tutti* G at the start, followed by five scale figures in the first violin, each with smaller note values than the previous and a greater range, and it is difficult to tell what the most common note value is in this section. Regardless, Beethoven's speeds for both sections are fairly similar: $\mathfrak{d}=58$ for the String Quartet and $\mathfrak{d}=63$ for the Symphony.

There are eight other plain *adagios* with metronome marks by Beethoven's contemporaries, all in works that include a piano. Of all of these *adagios*, the most extensive

demisemiquaver figuration is found in the second movement of the Piano Sonata op. 2 no. 3, but it only occurs after ten bars of primarily semiquavers. Czerny's and Moscheles's speeds for this *adagio* range from J=50 to J=60, but given the prominence of the demisemiquavers it is possible that Beethoven's intended speed is found closer to the bottom than the top of that range. Slightly faster speeds are recommended for the second movement of the Piano Sonata op. 13, the only work with an *Adagio* in 2/4 that Czerny studied with Beethoven, and which contains semiquaver figuration from the start and a few demisemiquavers throughout the movement. Czerny's suggestions for this movement, J=54 and 60, seem reasonable given the range of note values in this movement, and are backed up by Moscheles's suggestion of J=60. It is perhaps worth briefly noting that despite the differences in the function of these semiquavers—in op. 2 no. 3 they change the harmony much faster than in op. 13—there is no evidence that this has any influence on the intended speed.

Two other works are given similar speeds by both editors: the *Adagio espressivo* in the second movement of the Violin Sonata op. 96—which starts out with quavers and semiquavers just as op. 13 does, but which includes much more elaborate demisemiquaver figuration later on—is given speeds between λ =56 and 63, the same speeds that are given to the second movement of the Cello Sonata op. 102 no. 2, which begins with only quavers and demisemiquavers. Not all of Czerny's and Moscheles's marks are consistent, however: the short *Adagio cantabile* at the beginning of the third movement of the Cello Sonata op. 69 contains as many semiquavers as op. 13 (and even a few demisemiquavers) but is given speeds of λ =66 and 69 instead of a speed around λ =60. All of this suggests that the speed of plain *adagios* in 2/4 that have semiquavers as their most common note value—or demisemiquavers which are offset by a similar number of quavers, such as in op. 102 no. 2—are most likely intended to move at a speed of around λ =60, and that those with many smaller note values move at a speed much slower than that, perhaps around λ =50.

It follows that plain *adagios* with larger note values were intended to move at speeds faster than *>*=60, and Czerny's and Moscheles's recommendations generally reflect this. For the short *Adagio* section in the Fantasy op. 77, which contains only quavers, Moscheles recommended λ =76. (Czerny has provided no metronome marks for that particular section, although there are speeds for the adjacent sections.) Similar speeds of *▶*=72 and 76 are suggested for the short opening Adagio cantabile of the Piano Sonata op. 78, which contains crotchets, quavers, and a few demisemiquavers in written out ornamentation. For the opening Adagio of the Piano Sonata op. 81a, which has a similar range and distribution of note values, Moscheles and Czerny also recommend *▶*=72 and 76, in addition to Czerny's slower recommendations of λ =66 and 63. It seems possible that in suggesting these slower speeds Czerny overestimated the influence of the semiquavers in this section, as these note values are far more common in some of the adagios discussed above that have metronome marks in that range. Finally, the second movement of the Violin Sonata op. 30 no. 1, which is marked Adagio molto espressivo (the first edition shows that the molto belongs to the espressivo), 196 and which contains dotted semiquavers and single demisemiquavers in the accompaniment and mainly crotchets and quavers in the melody, is marked $\lambda=76$ and 72 by Czerny and $\lambda=63$ by Moscheles. Given the presence of the semiquaver figuration in particular, it seems very likely that Czerny's speeds for this movement are much too fast. Moscheles's suggestion, which is much closer to other movements with a similar range of note values, is likely a much closer approximation of Beethoven's intentions.

The slow *adagios* in this metre are just three in number, and all of them have metronome marks, either by the composer or by a contemporary. The third movement of String Quartet op. 59 no. 1 is marked \$=88—\$=44 for easy comparison with the previously discussed *adagios*—which is the slowest speed of any *adagio* discussed thus far. The note

_

¹⁹⁶ Beethoven, *Trois Sonates pour le Pianoforte avec l'Accompagnement d'un Violin ... oeuvre. xxx*, Vienna (Bureau des Arts et d' industrie) 1803.

values in the movement can only partially explain this: although it contains extensive demisemiquaver figuration, the smaller note values do not appear in substantial numbers until after twenty bars, before which the movement contains almost only crotchets, quavers, and some semiquavers. It seems, however, that the tempo indication, Adagio molto e mesto, can explain the slow speed: according to Koch, the term mesto means sad, and 'when this term is used as a tempo indication, it also indicates a slow tempo'. 197 Given the fact that Adagio molto already indicates a tempo, mesto seems to primarily serve to indicate the right expression. A similar principle seems to apply in Beethoven's only other use of the term mesto occurs in the second movement of the Piano Sonata op. 10 no. 3, a movement that also contains anther tempo indication (Largo) in addition to the indicator of expression mesto, which will be discussed in Section 3.2.

The Adagio molto second movement of the Piano Sonata op. 10 no. 1 has a similar distribution of note values: crotchets, quavers, and semiquavers at the beginning, and much smaller note values later on. Two particular suggestions made both by Czerny and Moscheles—√=69 and 72—seem overly ambitious, since they are very similar to the speeds for plain adagios with the same range of note values as shown above. In addition, since this movement at least initially has the same range of note values as the Adagio molto e mesto in the String Quartet op. 59 no. 1, it seems implausible that the latter would be a third slower than the former simply due to the addition of the term *mesto*, even if that term would have an effect on the tempo. Instead, it seems more plausible that Czerny's slowest suggestion of \triangleright =63 is much closer to the actual intended speed than his fastest. In fact, for the last section of the Variations op. 34—which also contains far smaller note values that occur already after two bars into the Adagio molto section—both Czerny and Moscheles suggest speeds that seem much more plausible for sections with these characteristics: λ =56 and 58, respectively.

¹⁹⁷ Koch, *Lexikon*, 952.

It therefore seems a speed of between *>*=56 and 63 for op. 10 no. 1 is most likely a reasonable approximation of Beethoven's intended tempo.

This leaves only the relatively fast *adagios*, four of which have metronome marks by the composer. The first, marked *Poco adagio*, is found in the last ten bars of the third movement of the String Quartet op. 18 no. 5, which contain crotchets, quavers, and some semiquavers, a range comparable to the opening *adagio* of the Piano Sonata op. 78 discussed above for which Czerny and Moscheles gave speeds between $\mathcal{L}=72$ and 76. Beethoven's speed for the *Poco adagio* of the String Quartet op. 18 no. 5— $\mathcal{L}=88$ —is therefore consistent with and implicitly validates suggestions made for op. 78. Slightly slower than the String Quartet is the second movement of the Third Symphony, which is marked *Adagio assai* $\mathcal{L}=80$ and which contains demisemiquavers from the start, initially mainly in the bass but after the eighth bar in all string parts. (For a discussion of the term *assai*, see section 2.4.) The fact that the Symphony has more demisemiquaver figuration from the start seems a plausible explanation for the difference in speed with the *Poco adagio* of the String Quartet.

The two other relatively fast adagios—the $Adagio\ ma\ non\ troppo\ second\ movement$ of the String Quartet op. 18 no. 6 and the brief section before the end of the fourth movement of the String Quartet op. 59 no. 1 with the same tempo indications—are less consistent, and are marked $\lambda=80$ and $\lambda=69$, respectively. For the String Quartet op. 59 no. 1, a fairly straightforward explanation is available: the Steiner booklet in which the metronome marks are printed changes the tempo indication from $Adagio\ ma\ non\ troppo\$ to plain $Adagio\$. Since the most common note values in this section are quavers and semiquavers, Beethoven's metronome mark for this section is actually consistent with those for the plain $adagios\$ with the same range of note values. The case of the second movement of the String Quartet op. 18 no. 6 is somewhat more complicated: as can be seen in Example 3.1.4.2a, the movement has note values ranging from semiquavers to hemidemisemiquavers, and a speed that is slower

than the *Adagio molto e mesto* from the third movement of the String Quartet op. 59 no. 1 in spite of the tempo indication.

Example 3.1.4.2a: Second movement of the String Quartet op. 18 no. 6, bars 1-4, Violin I, published version.



The contradiction between the metronome mark and the tempo indication can be explained in various ways. Firstly, it seems possible that Beethoven simply added the wrong tempo indication, and that he meant to indicate a tempo that was much slower than *adagio*.

Implausible as this may seem, there is some evidence supporting this in the fact that the Steiner list only includes *Adagio* without *ma non troppo*, effectively providing a slower and presumably more accurate tempo indication, although it is still nowhere near consistent. Secondly, it seems possible that Beethoven simply used the wrong note values for this movement, and that he really should have doubled the note values, which would result in a metronome mark of *>*=80 and quavers as most common note value. This is more plausible than the first explanation, but is still somewhat unsatisfactory, as this combination of note values and tempo indications is so rare that it must have been deliberate. The earliest sketches for this movement show the same range of note values as can be seen in Example 3.1.4.2b, which supports the notion that the use of these short notes is not due to an oversight on Beethoven's part, but an essential part of the musical idea. It is therefore most likely that the real explanation is found in the time signature.

Example 3.1.4.2b: Second movement of the String Quartet op. 18 no. 6, sketches. 198



In all of Beethoven's works, there are no recorded uses of the time signature 4/8, although the concept was surely known to the composer, as Kirnberger discusses it in *The Art of Strict Musical Composition*, which also contains the phrase 'today's composers no longer designate pieces with 4/8, but always with 2/4 instead.' Whether or not Beethoven ever intended the first edition to be published with a different metre and that the publisher Mollo changed it to 2/4 is impossible to say due to the fact that the autograph score is lost, but as the above discussion has shown it seems implausible that this movement is really in 2/4. On the other hand, the hypothetical speed for fast *adagios* with semiquavers in 4/8 is expected to be somewhere between those for fast *adagios* with semiquavers in 3/8 (2=69-72) and those in 6/8 (faster than 3=88), which is about twice as fast as Beethoven's metronome mark for the String Quartet. It therefore seems likely that this movement was supposed to be written either in 8/16—another time signature which Beethoven never explicitly used—or that both the time signature and the note values are wrong, in which case 4/8 would be the best candidate.

There are only two further fast *adagios* with metronome marks by Czerny or Moscheles in 2/4: the second movement of the Horn Sonata op. 17, and the third movement of the Piano Sonata op. 101. The former is marked *Poco adagio quasi andante* and contains quavers as its most common note value, with single semiquavers and demisemiquavers also making an appearance, a range and distribution fairly similar to that in the second movement of the Third Symphony. Moscheles's suggestion for this 17-bar section, λ =69, is therefore almost certainly too slow, but Czerny's speeds of λ =80 and 88 are probably closer estimates. For the Piano Sonata op. 101—which is marked *Adagio ma non troppo* and contains quavers

¹⁹⁸ Richard Kramer, ed., A Sketchbook from the Summer of 1800, Bonn (Beethoven-Haus Bonn) 1996, ii, 28.

. .

¹⁹⁹ Kirnberger, Strict Musical Composition, 391.

as its most common note value, with smaller note values appearing later—Czerny and Moscheles suggest speeds between *>*=54 and 60, comparable to the speeds of plain *adagios* with the same range of note values. This seems far too slow for an *Adagio ma non troppo*, and it is therefore likely that the actual intended speed for the third movement of the Piano Sonata op. 101 is close to that of the Horn Sonata op. 17 discussed above, as both have similar tempo indications and ranges of note values. Finally, the approximated intended speeds for all *adagios* in 2/4 are shown in Table 3.1.4.3 below.

Table 3.1.4.3: Estimated intended speeds for adagios in 2/4.

Common	Slow adagio	Adagio	Fast
note value			adagio
7	> =44	<i>\$</i> =58-69	<i>\$</i> =80
)	<i>\$</i> =56-63	<i></i> \$=72-76	♪ =88

Two observations can be made from these estimations. Firstly, as slow *adagios* with quavers move at a similar speed as plain *adagios* with semiquavers, and plain *adagios* with quavers have a speed comparable to fast *adagios* with semiquavers, an increase in smaller note values can be offset by a faster tempo indication. Secondly, the slowest *adagio* in 2/4 is exactly twice as slow as the fastest, giving *adagios* in 2/4 a range from 3/4 to 3/4 =88.

3.1.5: Adagios in 3/4

Adagios in 3/4 occur with a comparable frequency to those in 2/4, with around 50 occurrences in Beethoven's oeuvre. Four of these have metronome marks by Beethoven and another sixteen by a contemporary, all of which are displayed along with their most common note values in Table 3.2.5.1 below.

Table 3.1.5.1: Beethoven's adagios in 3/4 with metronome marks.

<u>Work</u>	Tempo indication	Metronome	Note values
		<u>Mark</u>	
String Quartet op. 130/v	Adagio molto espressione	[> =66]	JY.]
Piano Sonata op. 27 no. 1/iii	Adagio con espresso	[\$=66-76]	17. 5
Piano Sonata op. 109/i	Adagio espressivo	[> =66-72]	
String Quartet op. 18 no. 2, ii	Adagio cantabile	♪ =72	Jand. ₹
Septet op. 20, i	Adagio	<i></i> >=72	Jand J.A
Symphony op. 36, i	Adagio	<i>\$</i> =84	♪and.}
Symphony op. 60, ii	Adagio	<i>\$</i> =84	J. Aand. A
Piano Sonata op. 31 no. 2/ii	Adagio	[> =84-92]	1/1/3
Violin Sonata op. 47/i	Adagio sostenuto	[> =72-80]	الد/د
Piano Trio op. 1 no. 1/ii	Adagio cantabile	[\$=88-108]	ال ال
Piano Sonata op. 2 no. 1/ii	Adagio	[\$=80-100]	Jy_\$
Cello Sonata op. 5 no. 1/i	Adagio sostenuto	[> =88-96]	\\\.\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Clarinet Trio op. 11/ii	Adagio	[\$=84-104])
Violin Sonata op. 12 no. 3/ii	Adagio con molt' espressione	[\$=80-84]	1/1/1
Piano Concerto op. 19/ii	Adagio	[> =84]	ال ال
Violin Sonata op. 24/ii	Adagio molto espressivo	[> =84-96]	_الإ
Piano Trio op. 1 no. 2/i	Adagio	[> =92-100]	J/J)
Variations WoO 76, var. 7	Adagio	[J=72]	J
String Quartet op. 130/i	Adagio ma non troppo	[> =84]	الرا
String Quartet op. 131/vi	Adagio quasi un poco Andante	[[]] =76]	1/3

Almost all of the movements in Table 3.1.5.1 are plain *adagios*, as are the vast majority of *adagios* in 3/4. In addition, all four of the *adagios* contain demisemiquavers and quavers: in the second movement of the String Quartet op. 18 no. 2 all voices have quavers as most common note value, with the exception of the first violin which contains demisemiquavers from the fifth bar onwards. In the opening *adagio* of the Septet op. 20, on the other hand, demisemiquavers do not appear until the twelfth bar, and from that point onwards they occur primarily in the first violin. For the most part, the other instruments have quavers and semiquavers as most common note values. In short, in both the String Quartet and the Septet demisemiquavers occur almost exclusively in the first violin parts: in the former from the beginning and somewhat later in the latter, which is presumably compensated for by the fact that the Septet includes more semiquaver figuration. In the end, both movements have a speed of λ =72.

The other two *adagios* in the table with speeds by Beethoven have a slightly faster speed of \$\infty\$=84. Their note values, however, do not seem to justify the difference: the beginning of the Second Symphony starts with crotchets and quavers, followed by demisemiquavers later, a similar distribution and range to the two Septet and String Quartet *adagios* discussed above. The second movement of the Symphony op. 60 has slightly larger note values in most parts at the beginning—generally crotchets and quavers—but the second violin part contains semiquavers and single demisemiquavers from the start. If the note values that occur later in these *adagios* are included in the consideration, the comparison becomes even more problematic, as the Fourth Symphony contains much more extensive demisemiquaver figuration than the Septet. In short, the ranges and distribution of note values in the two symphonic *adagios* are too similar to the two other *adagios* in Table 3.2.5.1 to offer a plausible explanation for the difference in speed. An alternative explanation for this difference must therefore be found.

One possible reason for the difference in speed is that some of the metronome marks could have been misprinted or somehow incorrectly transmitted—beyond the printing of the wrong note value for the Fourth Symphony in the 1817 list, which was printed as J=84, clearly a misprint of J=84. Although it seems possible that the J=72 for the two slower sections are both misprints of as J=92, the fact that this explanation relies on the same misprint happening twice in two different published lists of metronome marks makes this somewhat implausible. A more likely scenario concerns Beethoven's use of the term *adagio*: of the approximately 50 *adagios* in this metre, only 10 are fast *adagios*, and slow *adagios* occur only four times. Given the relative rarity of non-plain *adagios*, it seems possible that some of the plain *adagios* were really intended as fast or slow *adagios*, but that Beethoven neglected to indicate them as such. A third possibility is that Beethoven's *adagios* in 3/4 simply have a relatively wide variety of speeds, even if they have a very similar range and

distribution of note values. This seems the most plausible explanation, and one that is supported by further evidence.

Of all the *adagios* in 3/4 that Czerny gave metronome marks to, there are only two for which he probably had insider knowledge. The first is found in the second movement of the Piano Sonata op. 31 no. 2, which Czerny claimed he studied with the composer. The note values at the beginning of this movement are relatively large: the first six bars contain dotted minims, crotchets, and double-dotted quavers followed by demisemiquavers, in addition to a short flourish of demisemiquavers in small notes. Due to the presence of these large note values, it is no surprise that all but one of Czerny's publications list *▶*=92 as a recommended speed, and that all editions by Moscheles indicate the same speed. The only speed that is substantially lower—)=84—is found in *On the Proper Performance*, a publication in which, as previous chapters described, Czerny admits that he occasionally deliberately alters what Beethoven had in mind. It is therefore likely that $\flat = 92$ is the best approximation of Beethoven's intended speed of this movement. The only other adagio in 3/4 for which Czerny might have had insider knowledge is the Violin Sonata op. 47, which he arranged for piano duet during Beethoven's lifetime, which in turn makes it likely that he discussed the sonata with the composer. Czerny's speeds for the opening Adagio sostenuto—which contains crotchets and semiquavers as most common note values, with some quavers—range from \rightleftharpoons 72 to 80, speeds similar to Beethoven's for the movements discussed above.

The impression that one gets from the six *adagios* in 3/4 discussed so far is that those with quavers as their most common note value in the beginning move at a speed between \$\int_{=}72\$ and 84, and that it is likely that *adagios* with much larger note values (such as dotted minims) move somewhat faster. All of the other *adagios* with metronome marks by Czerny and/or Moscheles, which are presumably only based on the musicality of the editors, have at least one suggestion that fits in that range: the second movement of the Piano Trio op. 1 no. 1

marked Adagio cantabile, for instance, contains primarily crotchets and quavers in the beginning, with some smaller note values appearing later. Czerny's first speed for this movement is λ =84, consistent with the tempo range above, but in *On the Proper* Performance he suggests J=54. Similarly, Moscheles's suggestion is J=100, which is in the same high range and quite far from the speeds of other *adagios* in this metre discussed above. Other suggestions that support this are found in the second movement of the Piano Sonata op. 2 no. 1 (*Adagio*, quavers and semiquavers), which is marked *>*=84 and 80 by Czerny; the first movement of the Cello Sonata op. 5 no. 1 (Adagio sostenuto, quavers and semiquavers), which is marked $\searrow = 88$; the second movement of the Trio op. 11 (Adagio, mainly quavers), which is marked =84 and 88 by Czerny; the second movement of the Violin Sonata op. 12 no. 3 (Adagio con molt' espressione, crotchets, quavers, and some smaller note values), which has speeds of *\$\infty*=80 by Moscheles and *\$\infty*=80 and 84 by Czerny; the second movement of the Piano Concerto op. 19 (Adagio, crotchets and quavers), which is unanimously given ≥=84; the second movement of the Violin Sonata op. 24 (Adagio molto espressivo, semiquavers in the left hand of the piano, crotchets in the other parts), which is marked $\lambda=84$ and 88 by Czerny, which suggests that according to him the *molto* in the tempo indication belonged to espressivo and not adagio; the third movement of the Piano Sonata op. 27 no. 1 (Adagio con espressione quavers and semiquavers), which is given $\searrow = 72$ by Czerny and $\searrow = 76$ by Moscheles; and finally the Adagio espressivo section in the first movement of the Piano Sonata op. 109, which contains semiquavers as well as smaller notes, and which is marked ⇒=72 by Moscheles. Only two *adagios* with speeds by Czerny and Moscheles are not marked between $\triangleright = 72$ and 84. The first is the *Adagio* in the first movement of the Piano Trio op. 1 no. 2, which contains quavers, semiquavers, and some smaller note values, and for which Czerny suggests $\downarrow = 92$ and $\downarrow = 50$, and Moscheles $\downarrow = 100$. The second is found in the seventh variation of the Variations WoO 78 on *God save the King*, which is marked J=72 by

Moscheles. This six-bar *adagio* contains mainly crotchets, which seems to justify the faster speed.

In summary, all of Beethoven's plain *adagios* in 3/4 with metronome marks have speeds between \$\infty=72\$ and 84, as do those for which Czerny had insider knowledge, the one exception being the second movement of the Piano Sonata op. 31 no. 2, which is explained by the presence of larger note values at the beginning. Further evidence—albeit circumstantial—is found in the fact that all but two of the *adagios* in 3/4 for which Czerny and Moscheles provided speeds based on their own musical intuition have at least one editorial speed in the same range. It is therefore plausible that \$\infty=72-84\$ indicates the range of Beethoven's intended speeds for plain *adagios*, although those with many short or long note values at the beginning probably move at slower or faster speeds, respectively.

Coincidentally, whereas all of Czerny's and Moscheles's metronome marks for adagios in 2/4 are for plain adagios—with the exception of the above-mentioned Violin Sonata op. 24 which could also be a slow adagio but which nevertheless appears to be treated by both editors as plain—those with metronome marks by Karl Holz are either explicitly fast or slow. Nevertheless, two of the three speeds are similar to those for the plain adagios with a similar range of note values: the opening Adagio ma non troppo of the String Quartet op. 130 contains quavers and crotchets and is marked \$\infty=84\$, a speed comparable to two of Czerny's suggestions for the Adagio in the second movement of the Trio op. 11. The second adagio with metronome marks by Holz is found in the sixth piece of the String Quartet op. 131, which contains mainly minims and crotchets and is marked Adagio quasi un poco Andante.

According to all sources, Holz's speed for this section is \$\infty=76,^{200}\$ but it seems very likely that the note value (much like several other note values in this list) is incorrectly transmitted: both the tempo indication and the fact that crotchets constitute the most common note value

²⁰⁰ Lenz, Kunst-Studie, v, 228.

suggest that the intended speed is much faster, J=76, very similar to the speed that Moscheles gave to the short *Adagio* section with similar note values in the Variations WoO 78 discussed above. The third and final *adagio* in 3/4 with a metronome mark by Holz is found in the Cavatina in the fifth movement of the String Quartet op. 130, which contains quavers and crotchets as most common note values, and which is marked *Adagio molto espressione*. Holz's metronome mark is J=66, quite a bit slower than the above speeds for plain *adagios*, and this suggests that at least for him the *molto* in the tempo indication belongs to the *adagio* rather than the *espressivo*, an aspect which is unclear in both the first edition and the autograph score. ²⁰¹

The *adagios* with speeds by Karl Holz indicate that that there may be some overlap between the speeds of fast *adagios* and plain *adagios*. It is therefore plausible, as was hypothesised at the beginning of this section, that Beethoven's *adagios* in 3/4 are used in a less precise way than in other metres discussed so far, and that some of the plain *adagios* are really fast *adagios* with the identifying modifiers left out. The estimations for *adagios* in 3/4 are summarized in Table 3.1.5.2 below. As before, entries that are given between brackets are speeds that estimated by inference to other speeds in the table.

Table 3.1.5.2: Estimated intended speeds for *adagios* in 3/4.

Common note value	Slow adagio	Adagio	Fast adagio
. >>	<i>\$</i> =66	<i>\$</i> =72-84	<i>\$</i> =84
الإ	*	<i>\$</i> =92	[> =112?]
J	*	*	<i>\$</i> =144-152 (<i>↓</i> =72-76)

As there seems to be some overlap between plain and fast *adagios*, it should come as no surprise that the previously observed consistency of faster tempo indications compensating

²⁰¹ Autograph score of the String Quartet op. 130, Berlin State Library, Artaria 208.

for smaller note values is not so clearly found in the *adagios* in 3/4. Nevertheless, as in the *adagios* in 2/4, the slowest *adagios* in 3/4 are approximately half as fast as the fastest.

According to the literature discussed and the model developed in Chapter 2, time signatures with the beat indicated by larger note values have a slower beat than those in which the beat is indicated by a smaller value. After having discussed two time signatures with the same number of beats indicated by different note values—3/8 and 3/4—it should be possible to test to what degree the model describes Beethoven's practice. It is somewhat difficult to compare *adagios* in 3/8 to those in 3/4, as the former often have note values much smaller than the latter. There are, however, enough *adagios* with semiquavers as most common note value in both metres to be able to make a comparison.

As Table 3.1.3.1 shows, plain *adagios* in 3/8 with semiquavers as most common note values move at an estimated speed of around $\searrow = 60$. In 3/4, however, *adagios* containing the same range of note values move at a speed of $\searrow = 72$ to 84, but since the beat is indicated by crotchets in that metre, it is best to represent this as $\searrow = 36-42$. This shows that although *adagios* in 3/4 might have a faster quaver speed than those in 3/8, their crotchet beat is much slower than the quaver beat in 3/8. A comparison of the fast *adagios* with the same range of note values shows a similar difference: $\searrow = 69-72$ in 3/8 and $\searrow = 84$ ($\searrow = 42$) in 3/4.

There are of course problems with comparing music with mainly semiquavers in 3/8 to music with the same note values in 3/4, the most obvious being the fact that the same note values are grouped differently in these two metres: in 3/8 there are 2 semiquavers per beat and six per bar, whereas in 3/4 there are four and twelve respectively. As seen in Section 3.1.3, *adagios* with more beats in a bar—that is more of the same note value in each bar—move at a faster pace than those with fewer, so this could perhaps explain the difference.

It is therefore necessary to compare *adagios* in 3/8 with semiquavers to those in 3/4 with quavers, so that in each metre there is the same amount of notes per beat. Even with

these corrections, the pulse in 3/4 is still slower, as *adagios* in that metre with quavers move at a speed of around J=46 (J=92), a slower pulse than J=60 in 3/8. The same is observed in fast *adagios*: with semiquavers in 3/8 they move at J=69-72, while with quavers in 3/4 the estimated speed is around J=56 (J=112). These observations show that an *adagio* in 3/4 will have a slower speed than an *adagio* in 3/8 with the same number of notes per beat, as the model in Chapter 2 predicted.

3.1.6: Adagios in c

There are more than 40 *adagios* in **c**, but only three have metronome marks by the composer, which are displayed in Table 3.1.6.1 below along with their most common note values at the beginning of the sections. Also included are the sections with metronome marks by contemporaries which will be discussed in this section.

Table 3.1.6.1: Beethoven's metronome marks for adagios in c.

<u>Work</u>	Tempo indication	Metronome Mark	Note
			values
Piano Sonata op. 110/iii	Adagio ma non troppo	[\$=66-69 (\$\frac{1}{2}=33-35)]	1/1)
String Quartet op. 131/iii	Adagio	[J=76 (J=38)]	1/1)
Cello Sonata op. 5 no. 1/i	Adagio	[]=80(]=40)]	7
Symphony op. 21, i	Adagio molto	♪=88 (J=44)	77.8
String Quartet op. 132/iii	Molto adagio	[) =92 (] =46)]	J/ .
Cello Sonata op. 5 no 2/ii	Adagio sostenuto e espressivo	[]=84-100 (]=42-50)]	
Fantasy op. 77	Poco adagio	[]=60]	۵
String Quartet op. 59 no. 2/ii	Molto adagio	J=60	3/3/3
Symphony op. 125/iii	Adagio molto e cantabile	J=60]/]/)

All three *adagios* in **c** with metronome marks by Beethoven are clearly slow *adagios*, as the presence of *molto* indicates. The slowest is found in the opening of the first movement of the First Symphony. The first four bars of this section consist of chords, largely minims and crotchets, but after that quavers and semiquavers become the most common note values in most parts. In the second movement of the String Quartet op. 59 no. 2, by contrast, the note

values are generally much larger: the first eight bars consist primarily of minims and crotchets, and a substantial number of smaller note values only appear from the ninth bar onwards, and almost exclusively in the first violin. Similarly, in the third movement of the Ninth Symphony, minims and crotchets are the most common note values for approximately 16 bars, which presumably explains why it has the same speed as the String Quartet. The evidence therefore indicates that slow *adagios* with mainly crotchets and minims in the beginning move at a speed of around J = 60, and that those with significant quaver and semiquaver figuration move at approximately J = 44.

Unfortunately, there are no adagios in this metre that Czerny studied with Beethoven, but there are two metronome marks by Karl Holz for the late string quartets. The first is found in the third movement of op. 131, which is marked plain Adagio, and contains crotchets and quavers in the first two bars, after which the marking più vivace and the appearance of demisemiquavers in the first violin presumably indicate a slightly faster tempo. Given the fact that the tempo indication strictly speaking only really applies to a little more than a bar, this *adagio* can almost be considered as a cadential *adagio*. Holz's speed, $\lambda=76$, is much slower than one would expect on the basis of the note values of these two bars alone, but it seems possible that the demisemiquavers are primarily responsible for this slow speed. Holz's other metronome mark is found in the Heiliger Dankgesang eines Genesenen an die Gottheit, a recurring section in the third movement of the String Quartet op. 132. This section is marked *Molto adagio* and contains crotchets and minims exclusively in its first appearance, which would make one expect a speed of approximately J=60. Holz's suggestion of J=92, however, is again much slower than one would expect, and it seems possible that he either misremembered the speed, deliberately changed the speed, or that Beethoven wanted a slower tempo than *Molto adagio*, perhaps due to the programme of this movement.

Various other *adagios* have metronome marks by Czerny and Moscheles, although only a few have speeds by both editors. The short *Adagio* with quavers as most common note value in the second movement of the Cello Sonata op. 5 no. 1 only has a speed by Moscheles, which is $\lambda=80$. Given the fact that the opening *Adagio molto* of the First Symphony, which also has quavers as most common note value, is marked $\lambda=88$, it seems that Moscheles's suggestion is a little slow. It is telling that the opening *Adagio sostenuto e espressivo* of the first movement of the Cello Sonata op. 5 no. 2, which has semiquavers in the piano at the beginning and demisemiquavers later, is given $\lambda=84$, despite the different range of note values. Overall, it seems that Czerny's speed for this section of $\lambda=50$ is somewhat more likely given the speeds for other *adagios*, but it is difficult to say this with much certainty.

The short *Poco adagio* section in the Fantasy op. 77 is given J=60 by Moscheles, which seems a perfectly adequate speed given the fact that quavers are the most common note value, the influence of which can be offset by the faster tempo indication, resulting in a speed that is similar to slow *adagios* with crotchets. This leaves only one last *adagio* in this metre: the three-bar long *Adagio ma non troppo* that opens the third movement of the Piano Sonata op. 110. Czerny's and Moscheles's marks for this section are somewhat strange, ranging from J=66 to 69, which seems peculiar given the fact that this section has crotchets and quavers as most common note values. As there is no evidence that either editor had any inside knowledge of this work, and since these metronome marks presumably only apply to this three bar section, it seems possible that the intended speed was much faster than Czerny and Moscheles suggest, perhaps as fast as J=60. It is also possible that the speeds suggested by the editors were actually meant for the *più adagio* recitative that follows the *Adagio ma non troppo*, or perhaps the *adagio* section after that: both of these contain demisemiquavers, which would justify the speeds that Czerny and Moscheles suggest.

Clearly, the suggested speeds by Beethoven's contemporaries for *adagios* in e do not conform to the model to the same degree as those in time signatures discussed earlier. There are, however, various reasons why this is not unexpected. Firstly, unlike in the previous metres, neither Czerny nor Moscheles seem to have had any insider knowledge of any works with an *adagio* in e, so their suggestions are based only on their own musical instincts.

Secondly, the two sections for which Holz supplied metronome marks are highly unusual: with a length of a little over a bar the *adagio* in op. 131 is probably the shortest with a metronomic speed, while Holz's speed for the *Heiliger Dankgesang* could easily have been influenced by the programmatic content of the piece. This makes it hard to say whether these speeds are representative of Beethoven's intentions, which in these cases deviate from the principles described in Chapter 2, or that it was Holz himself who consciously or unconsciously altered the speeds to suit his own musical ideas. Either way, there is less reliable evidence for the intended speeds for *adagios* in e than there is for those in previous metres. The estimated speeds can be found in Table 3.1.6.2 below.

Table 3.1.6.2: Estimated intended speeds for *adagios* in c.

Common	Slow adagio	Adagio	Fast
note value			adagio
ردود	<i>\$</i> =88 (<i>↓</i> =44)	\$ =100 (↓ =50)	*
٦	[]=50?]	*	J=60
J /J	J =60	*	*

At this point, it is possible to step back and evaluate the differences between the three time signatures in which the beat is indicated by crotchets—2/4, 3/4, and c—by comparing the speeds in these metres for the same combination of note values and tempo indications. As Tables 3.1.4.2, 3.1.5.2, and 3.1.6.2 show, slow *adagios* with semiquavers and quavers move at a speed of around $\beta=44$, $\beta=66$, and $\beta=88$ in 2/4, 3/4, and c respectively. This results in the interesting observation that one bar of *molto adagio* with semiquavers and crotchets is

intended to last exactly the same amount of time in all three metres. The same consistency does not appear in plain and fast *adagios*, but there is still a clear difference between the metres. Speeds for plain *adagios* with the same range of note values also show that time signatures with more beats imply a faster speed, with these sections moving at $\lambda = 58-69$, $\lambda = 72-84$, and $\lambda = 100$, and the fast *adagios* with mainly quavers at $\lambda = 88$, $\lambda = 112$, and $\lambda = 120$. Just as in the metres with beats indicated by quavers, in metres with beats indicated by crotchets more beats in the bar correlates with a faster tempo.

3.1.7: Adagios in ¢

Overall, *adagios* in ¢ are about twice as rare as those in c, with fewer than 20 occurrences in Beethoven's oeuvre. The metronome marks for seven of these can be found in Table 3.1.7.1 below.

Table 3.1.7.1: Beethoven's adagios in & with metronome marks.

<u>Work</u>	Tempo indication	Metronome	<u>Note</u>
		<u>Mark</u>	<u>values</u>
String Quartet op. 127/ii	Adagio molto	[]=48]	١/١]
String Quartet op. 131/i	Adagio ma non troppo e molto espressivo	[3/] =84]	/.
Piano Sonata op. 27 no. 2/i	Adagio sostenuto	[]=54-60]	•)
Violin Sonata op. 30 no. 2/ii	Adagio cantabile	[]=60-63]	1/1/1
String Quartet op. 74, i	Poco Adagio	J=60	1/1
Symphony op. 60, i	Adagio	J=66	١/١]
Piano Concerto op. 73/ii	Adagio un poco moto	[= 60-69]	<i>/</i>

The most common note values in the *Adagio* introduction in the first movement of the Fourth Symphony are semibreves, minims, and crotchets, with quavers appearing only in isolation followed by a rest. Beethoven's speed for this particular section is J=66, a slightly faster crotchet speed than those for *adagios* in c with a similar range of note values. Similarly, the *Poco adagio* in the first movement of the String Quartet op. 74, which has the same range of note values in addition to some semiquaver figuration, is marked J=60, the same speed as the

fast *adagios* in **c** without semiquavers. The evidence therefore indicates that *adagios* in **c** have a slightly faster crotchet speed than equivalent *adagios* in **c**, but of course their minim pulse is much slower.

Of all *adagios* in this metre, there are two for which Czerny appears to have had insider knowledge. The first of these is found in the second movement of the Piano Concerto op. 73, which Czerny studied with Beethoven, who asked him to perform it in public. 202 The movement is marked Adagio un poco moto, and contains only minims and crotchets in the beginning; quavers and semiquavers do not appear until later in the movement, and only in the piano part. Czerny's suggestion for this movement is \downarrow =60, while Moscheles suggests a slightly faster speed of \downarrow =69. Although both seem feasible speeds for this movement, the fact that Czerny played it several times in public makes it likely that his speed is probably a better estimation. For the Adagio sostenuto containing quavers and crotchets in the first movement of the Piano Sonata op. 27 no. 2—one of Baroness Ertman's favourite pieces and therefore probably well known to both Czerny and Moscheles²⁰³—both editors suggest speeds around J=60, with the mark in *On the Proper Performance* a slightly lower J=54. Very similar speeds are suggested for the second movement of the Violin Sonata op. 30 no. 2, for which Czerny indicates \downarrow =60 and 66, and Moscheles \downarrow =63. This *Adagio cantabile* movement, however, contains some semiquavers in the theme, but the most common note values are still crotchets and quavers. It therefore is plausible that plain adagios in & with mainly crotchets and some smaller note values were intended to move at a speed between J=60 and 66.

There are five other plain *adagios* in this metre in Beethoven's oeuvre. The first is the thirteenth variation of the Variations for Piano Trio op. 44, which contains almost only quavers and has a tempo indication of *Adagio*, making it likely that the intended speed for this section is approximately \downarrow =60. Secondly, the Romanze op. 50 for violin and orchestra is

2

²⁰² Brandenburg, *Briefwechsel*, Letter 1838.

²⁰³ Peter Clive, *Beethoven and His World: A Biographical Dictionary*, Oxford (Oxford University Press) 2001, 103.

probably intended to be a little slower than that, as there are quite a few semiquavers in the melody from the start. A speed of around J=50—or perhaps slower still—might therefore be closer to what Beethoven had in mind. Thirdly, the Song *Das Liedchen von der Ruhe* op. 59 no. 3 contains quavers and crotchets at the beginning. Given the fact that the tempo indication is *Adagio* it is probable that the intended speed is also around J=60. Fourthly, the *Adagios* in the Fidelio Overture contain semibreves and crotchet triplets, which could justify taking a speed slightly faster than J=60. Lastly, the Agnus Dei from the Missa Solemnis contains primarily crotchets and quavers, and therefore presumably has an intended speed of around J=60.

The late string quartets contain two *adagios* in ϕ that Karl Holz supplied metronome marks for. The first is found in the second movement of the String Quartet op. 127, which contains primarily crotchets and quavers. Considering the fact that the tempo indication is *Adagio molto*, Holz's suggestion of J=48 seems plausible. Unfortunately, this section is the only slow *adagio* in ϕ , so further comparison is difficult. Finally, the opening *Adagio ma non troppo e molto espressivo* of the String Quartet op. 131, which contains only minims and crotchets at the beginning, is marked J=84. This seems unusually slow, and this speed would make it the slowest *adagio* in this metre discussed so far, despite the fact that the tempo indication and the range of note values suggest that it should be among the fastest. It is therefore likely that Holz's metronome mark is misprinted, and that he really meant to indicate J=84. The approximated intended speeds for *adagios* in this metre are summarized in Table 3.1.7.2.

Table 3.1.7.2: Estimated intended speeds for adagios in ¢.

Common	Slow adagio	Adagio	Fast
note value			adagio
1/1	*	*	J=60
١/١	J=48	J=60-66	[]=72-76]
J /J	[=60-66]	[]=72-76]	J=84

As in the previously discussed metres, it seems that a faster tempo indication can compensate for the inclusion of smaller note values. Furthermore, although the slowest *adagio* in the table is not quite half as slow as the fastest, it seems very likely that this is due to the fact that there is just a single slow *adagio* in this metre.

The previous chapter demonstrated in Section 2.2—by means of an examination of comments on a sketch for the Song *Klage* WoO 113—that Beethoven was under the impression that, with note values adjusted, ϕ would be slower than 2/4, a claim which can now be examined in context. As seen in Table 3.1.4.2, fast *adagios* in 2/4 with semiquavers and quavers move at a speed of around λ =80, and those with only quavers move at λ =88. If ϕ is indeed slower than 2/4, one would expect fast *adagios* with note values twice as large—that is with quavers and crotchets, and with crotchets—to move at speeds slower than λ =80 and 88. This is not really the case: as Table 3.1.7.2 shows, fast *adagios* with quavers and crotchets move at an estimated speed between λ =72 and 76, hardly significantly slower than λ =80. Similarly, the fastest *adagio* with crotchets (but which also includes minims) moves at a speed of λ =84, again not much slower than λ =88. In fact, closer examination shows that the bottom two rows of Table 3.1.7.2 are almost identical to Table 3.1.4.3 if all the note values are halved. Simply put, there is no evidence that 2/4 was faster than ϕ if the note values are adjusted, and it is necessary to adjust the working model of Beethoven's tempo to this conclusion.

Before moving on, however, it is worth examining what this means for the method employed in this thesis. There seem to be three ways in which the contradiction between

theory and practice can be explained. Firstly, the method employed in this thesis could have given a false impression of the speeds in either or both metres, or the comparison between the two tables could have given a skewed image due to small differences in note values in the two pieces. This latter point is certainly worth considering: the one fast *adagio* in ¢ discussed in this section—the opening *Adagio ma non troppo* of the String Quartet op. 131—contains minims and crotchets, and although the *Poco adagio* from the String Quartet op. 18 no. 5, with which it was implicitly compared to in the previous paragraph, contains some crotchets, they are nearly as common as the minims in op. 131. However, since the similarities between *adagios* in 2/4 and ¢ extend to virtually every *adagio* discussed in these metres, it seems somewhat improbable that these impurities in the method have a significant effect.

Secondly, it seems possible that Beethoven's sense of tempo changed between the time that he worked on WoO 113—around 1790—and later in life. The fact that the earliest *adagio* in ¢ with a metronome mark is from 1801 (the first movement of the Piano Sonata op. 27 no. 2) makes this claim impossible to check, but still an attractive explanation. A third alternative hypothesis is that Beethoven misconstrued the relationship between theory and practice, and that he was not aware that he was using both metres in a similar way. In other words, there may have been a difference between his musical intuition and his conscious knowledge of his own performance practice. It is hard to say with any certainty which of the last two explanations is more likely, and it is possible that both are true to varying degrees.

3.1.8: Adagios in Other Time Signatures.

In addition to *adagios* with the seven time signatures discussed above, there are a number of late works which use more experimental metres. As has been demonstrated above, *adagios* in time signatures in which the pulse is indicated by a larger note value tend to have a slower pulse than those with smaller ones, and metres with more beats in a bar tend to have faster

speeds than those with fewer beats. Using these two principles, it should be possible to ascertain whether the *adagios* in rare time signatures are part of the same system, or whether they are used for different reasons. The *adagios* that will be discussed in this section are found in Table 3.1.8.1.

Table 3.1.8.1: Beethoven's adagios in other metres with metronome marks.

Metre	<u>Work</u>	Tempo indication	Metronome	Note
			<u>mark</u>	<u>values</u>
12/8	String Quartet op. 127/ii	Adagio ma non troppo e molto	[]\].=84]	JY J
		cantabile		
12/16	Piano Sonata op. 110/iii	Adagio ma non troppo	[1=58-60]	77
9/16	Piano Sonata op. 111/ii	Adagio	[1=52-63]	7/7
9/4	String Quartet op. 131	Adagio ma non troppo e semplice	[J=96]	J
3/2	Symphony op. 125/iv	Adagio ma non troppo, ma divoto	J=60	0/0

There are two *adagios* with twelve beats in a bar, the first of which is found in the theme in 12/8 of the variations in the second movement of the String Quartet op. 127. It is marked *Adagio ma non troppo e molto cantabile*, and contains single quavers and crotchets as most common note values, with no semiquavers appearing until the first variation. Holz's suggested speed for this section is $\lambda=84$, which is suspiciously slow considering the tempo indication and the relatively large note values. As Table 3.1.3.1 has shown, plain *adagios* in 9/8 with quavers and semiquavers have intended speeds around $\lambda=132$, so fast *adagios* in 12/8 with crotchets and quavers should have a speed that is much faster than that. Considering the fact that Holz did not indicate dots in his list, it is plausible that the note value of Holz's metronome mark is misprinted, and that he intended to write $\lambda=84$, the equivalent of $\lambda=252$.

The other *adagio* with twelve beats in a bar is found in the third movement of the Piano Sonata op. 110, in a section with the title *Klagender Gesang* marked *Adagio ma non troppo* in 12/16, and which contains semiquavers and quavers as most common note values.

Given that time signatures in which the pulse is indicated by a smaller note value tend to have faster speeds than those with larger note values, one would expect the *adagio* in 12/16 in the Piano Sonata op. 110 to have a faster pulse than op. 127 in 12/8 discussed above. On the other hand, the note values in the sonata are much smaller than those in the string quartet, which would suggest that the sonata might be slower than one would expect on the basis of the time signature. Czerny's and Moscheles's metronome marks for this section range from

≥ =58 to 60, which results in a semiquaver pulse of around 180, significantly slower than the string quartet's quaver pulse of 252. It seems possible that the presence of the semiquavers explains the difference in speed, or that both editors significantly underestimated the intended speed of this section. Nevertheless, there is a third option: it could be that the time signature 12/16 is a way of avoiding the notational problems that would occur if it had been written in 2/4, which would make the right hand in particular very difficult to read rhythmically due to the triplet figuration. This possibility would mean that Czerny and Moscheles indicated the speed for an *Adagio* in 2/4, which as was shown in Section 3.1.4 is approximately ≥=60.

The last movement of the Piano Sonata op. 111 is marked *Adagio* in 9/16, and has dotted quavers and semiquavers as most common note value in the beginning, with smaller note values only appearing in larger quantities in later variations. Here, Czerny and Moscheles give speeds in the same range as those for op. 110 above: Czerny's range from №=60 to 63, and Moscheles's from №=52 to 63, which leads to a demisemiquaver pulse between 156 and 189. Since these suggestions are somewhat faster than the *adagios* in 9/8, which move at a speed of approximately №=132, it seems plausible that Czerny's and Moscheles's estimations are reasonably accurate. Holz's suggestion of №=96 for the 9/4 *Adagio ma non troppo e semplice* with almost only crotchets in the fourth movement of the String Quartet op. 131 seems trustworthy for similar reasons, as the crotchet pulse is somewhat slower than the quaver pulse in *adagios* in 9/8.

Finally, there is a single *Adagio ma non troppo, ma divoto* in 3/2 in the finale of the Ninth Symphony, which contains semibreves, minims, and a few crotchets. Beethoven's speed for this particular *adagio* is J=60. Curiously, halving all note values (thereby making the movement into 3/4, with minims, crotchets, and quavers) would have resulted in a speed of J=60 in performance. In other words, there is a parallel between *adagios* in 3/4 and 3/2, much like between 2/4 and ϕ . Evidence from the autograph score suggests that Beethoven was struggling to find the right way to express what he had in mind, as it shows various changes of the tempo indication as well as the time signature in this movement, J=100 which could perhaps explain why Beethoven used this somewhat unusual metre.

3.1.9: Conclusion

The intended tempo of Beethoven's *adagios* seems to be determined by the time signature, the modifiers added to the tempo indication, and the note values that occur at the beginning. In a number of *adagios*, there is a sharp distinction between the range of notes values at the start, which are often relatively large, and those that occur later on, which are often much smaller. In these cases, the former seem to determine the tempo, rather than the latter. This raises the question whether these smaller note values are intended to be played in the same tempo as before, or that Beethoven expected a slight decrease in tempo to allow for a little more time in the execution of these faster notes. As stated in Chapter 2, there does not seems to be enough evidence to make a plausible description of Beethoven's tempo flexibility, but since the range of note values used in a section partially determines the tempo, it seems likely (but by no means certain) that these faster notes have some influence on the intended tempo in these sections.

²⁰⁴ The autograph score shows that *Adagio ma non troppo ma divoto* was initially *Adagio tosto*. In addition, the following section, now marked *Allegro energico e sempre ben marcato* in 3/2, is in 6/4 in the autograph score. See Autograph score of the Ninth Symphony, Berlin State Library, Artaria. 204 and Mus.ms.autogr.Beethoven 2.

Another observation that can be drawn from the data concerns Karl Holz's metronome marks, which seem to be less consistent with the composer's than Czerny's and Moscheles's. This is probably at least in part due to the transmission of these speeds: since the original document has yet to resurface—according to Holz it was placed in a library in St. Petersburg—the only available source is Wilhelm von Lenz's book. 205 Since Lenz is the only one who appears to have seen the original document that Holz sent, it is plausible that at least some of the metronome marks are misprinted or incorrectly transmitted in another way. In addition, the way that Lenz chose to represent these speeds in the book, i.e. without any dots, makes it even more likely that the published speeds were not quite what Holz had in mind. Furthermore, although it is clear that most of Czerny's and Moscheles's metronome marks were written before the middle of the 1840s, it is unclear when Holz produced these speeds shortly before he sent them to Lenz, or that he wrote them down straight after the rehearsals of the late quartets. Nevertheless, despite the fact that his metronome marks often depart from the consensus—or perhaps even because of it—Holz's indications continue to raise questions about Beethoven's intended speeds, which necessitate the caveats mentioned at the end of Chapter 1.

3.2: Largo

The term *Largo* is fairly rare in Beethoven's compositional output, and it occurs in only 14 different works, which are given in Table 3.2.1 below along with their most common note values and metronome marks. With the exception of the Cantata WoO 87, in which the term occurs in no less than three movements, all of the pieces in which *largo* appears involve a piano. Only a single *Largo* has a metronome mark by the composer, and editorial speeds by Czerny and Moscheles are given in brackets.

_

²⁰⁵ Lenz, Kunst-Studie.

Table 3.2.1: Beethoven's uses of largo.

Metre	Work	Tempo indication	Metronome mark	Note
				values
3/8	Piano Concerto op. 37/ii	Largo	[\$=66, 72, 92]	.Y.A
3/8	Triple Concerto op. 56/ii	Largo	[<i>\int</i> =104]	.Y.A
6/8	Piano Sonata op. 10 no. 3, ii	Largo e mesto	[<i>\(\)</i> =66, 72, 76]	,)
6/8	Piano Trio op. 1 no. 2, ii	Largo con espressione	[\$=80]	\$5
6/8	Variations op. 35, var. 15	Largo	[> =96]	. B
6/8	Variations op. 44, var. 7	Largo	-	_ }/_
2/4	Piano Trio op. 70 no. 1/ii	Largo assai e espressivo	[\$=50,56]	.Y.A
3/4	Cantata WoO 87, i, & vii.	Largo	-	39.5
3/4	Piano Sonata op. 2 no. 2, ii	Largo appassionato	[\$=80, 88, 96]	_ }/_
3/4	Piano Sonata op. 7,ii	Largo con gran	[\$=80-84,]=50]	_}/_
		espressione		
c	Piano Sonata op. 106, iv	Largo	<i></i> \$=76	M,
c	Cantata WoO 87, v	Largo	-	J Y_
¢	Piano Sonata op. 31 no. 2, i	Largo	[\$=88, \$=50]]/]/_}
¢	Piano Concerto op 15/ii	Largo	[\$=108, \$=58, 56]]/_)

As Sandra Rosenblum and Clive Brown have shown, there was significant disagreement among the authors of musical treatises on the meaning of the term *Largo* in relation to *Adagio*. ²⁰⁶ Koch's *Musikalisches Lexikon*, the only major treatise contemporary to Beethoven, describes the term in the following way:

Largo actually means broad or stretched. One uses this word to indicate the most common slow tempo that is appropriate for feelings that express themselves with a solemn slowness. ... For the composers it is the rule that a piece this slow has to be short, as it is not possible to sustain the concentration that is required for a long time. ²⁰⁷

²⁰⁶ Brown, 'Performance Practice', 340-344, and Rosenblum, *Performance Practice*, 313-314.

²⁰⁷ Koch, *Lexikon*, 890. '*Largo*, heißt eigenlich weit oder gedehnt; man bezeichnet mit diesem Worte den gewohnlichsten langsamen Grad der Bewegung, der nur solchen Empfindungen angemessen ist, die sich mit einer feierlichen Langsamheit äuβern. Für die Tonsetzer giebt (sic) man in Ansehung eines Satzes von so langsamer Bewegung die Regel, daβ dieses Tonstück kurz sein müsse, weil es nicht wohl möglich ist, mit dem äußersten Grade der Aufmerksamheit, die hierzu gefordert wird, lange aufzuhalten.'

According to Koch's definition, *largos* are so slow that they have to be short, which implies that they are generally slower than *adagios*, a conclusion that Brown and Rosenblum also support. Nevertheless, this still leaves the possibility that the *largos* are only slow because they have shorter note values than the *adagios*, which slow down the speed. A more in depth look at these sections is required to see whether Brown and Rosenblum's conclusion is truly justified.

The two *largos* in 3/8 in the second movements of the Piano Concerto op. 37 and the Triple Concerto op. 56 both have semiquavers and demisemiquavers as most common note values. In both cases these note values appear quite near the beginning of the movement, although the figuration in op. 37 is much more extensive than in op. 56. The former is among the works that Czerny studied with Beethoven, which presumably makes his speeds of $\lambda=66$ and 72 reasonable indications of the speed that the composer had in mind for this movement. Moscheles, however, who claims that he heard Beethoven play this concerto, ²⁰⁹ gives a speed of $\lambda=92$. For the Triple Concerto, Czerny indicates $\lambda=104$, while there is no known speed by Moscheles. Despite the differences, the speeds suggested for these *largos* in 3/8 are still slower than Moscheles's suggestion for the only *adagio* in 3/8 with a similar range of note values: the seventh variation of the Variations WoO 76, for which Moscheles suggested $\lambda=56$. This, however, could be explained by the fact that the variations contain more extensive semiquaver figuration than either of the two concertos, so the evidence on *largos* in 3/8 is somewhat inconclusive.

None of the four *largos* in 6/8 are found in works that Moscheles or Czerny studied with Beethoven, but the editorial metronome marks for three of these could give some indication of the practical meaning of *largo*. The earliest published *largo* in 6/8 is found in the second movement of the Piano Trio op. 1 no. 2 marked *Largo con espressione*, which

. .

²⁰⁸ Brown, 'Performance Practice', 340-344, and Rosenblum, *Performance Practice*, 313-314.

²⁰⁹ Schindler, *Life of Beethoven*, i, xi-xii.

contains primarily quavers and semiquavers as most common note values in the beginning. Both editors assign the same speed to this movement, >=80. Compared to the adagios in the same metre, this raises an interesting issue, as there are no adagios with the same range of note values that have a metronome mark, either by the composer or by a contemporary. Beethoven's speed of \$\infty=92\$ for the third movement of the Piano Sonata op. 106 (Adagio sostenuto) may be a lot faster than the suggested speeds for the second movement of the Piano Trio, but the Sonata contains far less semiquaver figuration in the beginning than the Trio. Similarly, Czerny's and Moscheles's speeds of $\lambda=72$ and $\lambda=63$ for the fourth movement of the Violin Sonata op. 96 (Adagio espressivo) can be explained by the fact that this section contains demisemiquaver figuration from the start. The Largo e mesto in the second movement of the Piano Sonata op. 10 no. 3, which contains primarily quavers at the beginning, is another problematic case. Czerny's and Moscheles's speeds for this movement are slower than those for the other *largos* in 6/8, and range from 2=66 to 76. Since neither editor has claimed insider knowledge about this work, it seems possible that they have interpreted the presence of the term *mesto* as meaning *very slow*, which, as seen in the discussion of the third movement of the String Quartet op. 59 no. 1 in Section 3.1.4, is not necessarily how Beethoven interpreted the term. It is therefore difficult to say to what degree the slower speeds suggested for this movement can be considered representative of Beethoven's intentions.

Not all *largos*, however, have suggested speeds slower than their *adagio* equivalents. The fifteenth variation of the Variations op. 35 has a suggested speed by Moscheles of $\triangleright = 96$, fractionally faster than Beethoven's speed for the third movement of op. 106. This suggestion is particularly surprising considering the fact that this variation contains demisemiquaver figurations from the second bar onwards, which, in the eighth bar, transforms into semihemidemisemiquaver figuration. All of this would suggest quite a slow speed, which

makes Moscheles's suggestion all the more surprising. In summary, although editorial speeds for *largos* in 6/8 are probably only based on the musical intuition of the editors, the evidence does not indicate a significant difference between *adagio* and *largo*, as in each case the difference in speed can be explained by other factors.

There is only a single *largo* in 2/4, found in the second movement of the Piano Trio op. 70 no. 1, a movement which according to Czerny is primarily responsible for the nickname 'Ghost' that is often associated with this work, ²¹⁰ and which is marked *Largo assai* e espressivo. In the first bars, the note values in this movement range from crotchets in the strings to semiquavers in the piano, but demisemiquavers soon become the most common note value in the piano part. In general, the distribution and range of note values used is fairly similar to that in the Adagio espressivo second movement of the Violin Sonata op. 96 in the same metre, with some of the demisemiquaver figuration in the piano being nearly identical in both movements. The Piano Trio is marked *Largo assai*—presumably slightly faster than just Largo—and Czerny and Moscheles suggest >=50 and 56 respectively, slightly slower than their speeds of λ =56-58 and 63 for the Violin Sonata; it seems that in this case *largo* does indeed indicate a slightly slower tempo. This preliminary conclusion, however, needs to be presented with a substantial caveat: as with the other *largos* discussed so far neither editor has claimed any insider knowledge of the Violin Sonata op. 96 or the Piano Trio op. 70 no. 1, so the whole comparison is based on very flimsy evidence. A similar problem arises with the largos in 3/4 in the second movements of the Piano Sonatas opp. 2 no. 2 and 7. Both of these have crotchets and quavers at the beginning; in op. 2 no. 2 the quavers take the form of single staccato semiquavers followed by a rest, which in practice is the same as staccatissimo quavers. In addition, both editors give both movements similar speeds: Czerny gives >=80 and 88 to op. 2 no. 2 and λ =80 and 84 to op. 7, and Moscheles marks these movements λ =96

-

²¹⁰ Czerny, On the Proper Performance, 87.

and J=50, respectively. As seen in Table 3.1.5.2, *adagios* with quavers as most common note value move at a speed between J=72 and 84. This would mean that if Moscheles's estimate of the speed is correct, that *Largo* is actually a faster indication than *Adagio*, and if Czerny is correct there is no discernible difference in terms of speed between the two. Simply put, even in 2/4 there is no reliable evidence that *largo* is slower than *adagio*.

The only metronome mark by Beethoven for a *Largo* is found in the fourth movement of the Piano Sonata op. 106. Although the section is marked c, there is not a single bar marked *largo* (or Tempo I, which denotes the same) with four crotchet beats worth of note values in the whole movement. Instead, Beethoven writes 'Per la misura si conta nel Largo sempre Quattro semicrome, cio è AAA, which translates as 'for the beat count four semiquavers throughout the Largo'. This suggests that this section is really thought of as being in 4/16, or a multiple of that such as 8/16.

This of course makes comparison with *Adagios* somewhat difficult, as Beethoven never explicitly indicated this time signature before or since the publication of op. 106.

Nevertheless, as Section 3.1.4 above showed, the second movement of the String Quartet op. 18 no. 6 marked *Adagio ma non troppo* seems to be written either in 8/16 or 4/8. The comparison between the Sonata and the Quartet is intriguing: they have a fairly similar range of common note values—demisemiquavers in the former, and semiquavers and hemidemisemiquavers in the latter—and similar metronome marks, which are \$\delta=76\$ and 80, respectively. If anything, the comparison between these two movements suggests that *adagio* is slower than *largo*, as despite the fact that the Quartet is clearly a fast *adagio* and the Sonata is only a plain *largo*, both movements have a similar speed, which suggests that the *ma non troppo* is needed as compensation for the difference between *adagio* and *largo*. Given the uncertain and experimental nature of the time signatures in both pieces, however, it seems

²¹¹ Barry Cooper, ed., *Beethoven: The 35 Piano Sonatas*, London (ABRSM) 2007, 3 vols., iii, commentary 48.

unwise to give too much weight to that observation, and it seems safer to conclude that the evidence does not convincingly show that *largo* is slower than *adagio*.

The last two *largos* in Table 3.2.1 occur in works that Czerny studied with Beethoven. The first of these, found in the first movement of the Piano Sonata op. 31 no. 2, is somewhat problematic as initially it is rather short: the first two times *Largo* occurs, it applies to less than two bars and practically only to three minim beats, which seems hardly worth supplying a metronome mark for. It seems therefore more plausible that Czerny's suggested speed of ≥=88 applies to the two longer *largos* later in the movement, between the exposition and the development, and the development and the recapitulation. (The speed in the Simrock edition, J=50, is probably not by Czerny, as I argued in the first chapter.) The first longer *largo* contains several semiquaver flourishes that surely influence the tempo of these largos, and it seems plausible that Czerny's metronome mark is primarily influenced by the note values in this section. This makes comparisons with adagios very difficult, as there are none in ¢ with semiquavers as a common note value that have metronome marks by either the composer or one of his contemporaries. (Since adagios in & and 2/4 seem to move at the same speed in performance, an *adagio* in 2/4 with demisemiquavers would also serve as a good comparison. Unfortunately, there are no metronome marks for those either.) The one adagio that does have the same range of note values—the Romance op. 50 for Violin and Orchestra—seems to work just fine at or close to Czerny's speed: Joseph Joachim suggested a range of J=50-63, 212 the lower boundary of which is only a little faster than Czerny's suggestion, and identical to Moscheles's mark for the *largo* of op. 31 no 2. Finally, the second movement of the Piano Concerto op. 15 contains mainly crotchets and quavers as most common note values at the beginning, although some smaller note values also make an appearance, and they become gradually more and more common. Czerny's speeds range from J=54 (given as J=108) to

_

²¹² Joseph Joachim, ed., *Beethoven op. 50, Romanze*, Berlin (Simrock) 1905.

J=58, with Moscheles suggesting J=56. These speeds are similar to those for *adagios* in the same metre with the same range of note values, which, as Table 3.1.7.2 shows, move at an estimated speed of J=60-66 with crotchets and quavers, and presumably slightly slower if they had contained some of the smaller note values that are found in op. 15. In summary, the speeds for those *largos* that Czerny studied with Beethoven—which are presumably a more reliable indicator of Beethoven's intentions than those which are purely based on his own musicality—indicate no significant difference with Beethoven's speeds for *adagios* in the same metre with the same note values.

3.2.1: Conclusion

Although Beethoven's *largos* are often much slower than most of his *adagios*, this seems to be primarily due to the small note values that often accompany the term. As the above discussion has shown, *adagios* with the same range of note values and the same time signature as *largos* have very similar speeds. In other words, Beethoven uses *largo* in sections in which the slow speed can already be explained by other factors, most commonly relatively small notes. As these note values appear to have an almost identical effect in *adagios*, the question becomes why Beethoven used the term *largo* in the first place, if *adagio* indicates the same tempo.

One possible answer can perhaps be found in the description by Koch quoted at the beginning of this section. The solemn expression that the term *largo* indicated might have been what Beethoven was looking for, in cases in which he thought that *adagio* did not quite communicate what he had in mind. This theory is particularly plausible given Beethoven's first ever use of the term, in the Cantata for the Death of Joseph II WoO 87, a work which is quite clearly of solemn character. This effectively makes *Largo* not only a tempo indication,

but also an indicator of expression, a double function that some of the tempo words discussed later in this thesis will share.

3.3: Andante

Andante is about as common as adagio in Beethoven's oeuvre, with each appearing in around 170 movements. Koch describes the term as follows:

Going, or stepwise. With this expression a tempo is indicated that is between slow and fast. When this indication is not used for special character pieces that determine the manner of performance, such as overtures, marches, etc., the pieces that have this indication generally express serenity, tranquillity, and contentment. ... Everything is moderate.²¹³

According to Koch, the tempo of an *andante* occupies the threshold between fast and slow, and it is therefore expected that the speeds associated with these sections are much faster than those with *adagio* or *largo*. In addition, Koch indicates that there are two different kinds of *andante*. The first includes character pieces such as marches and overtures in which the title implies a certain 'manner of performance', which presumably includes the tempo, and the second implicitly includes all other uses of the term, which according to Koch typically express calmness. These two definitions will provide a lens through which Beethoven's use of the term can be examined. The composer's metronome marks for these sections can be found in Table 3.3.1.

²¹³ Koch, *Lexikon*, 142-3. Original: 'Gehend, oder schrittmäβig. Mit diesem Ausdrucke wird diejenige Bewegung des Zeitmaaβes angezeigt, die zwischen dem Geschwinden und Langsamen die Mitte hält. Wenn dieser Ueberschrift nicht bey besondern charakteristischen Stücken gebraucht wird, welche die Vortragsart bestimmen, wie z.B. bey Aufzügen, Märschen, u. dergl. so behaupten mehrentheils die Tonstücke, die mit diesem Ausdrucke überschieben sind, den Character der Gelassenheit, der Ruhe und Zufriedenheit. Alles ist hier gemäβigt.'

Table 3.3.1: Beethoven's speeds for *andantes* with their most common note values.

Metre	<u>Work</u>	Tempo indication	Metronome	<u>Note</u>
			<u>mark</u>	<u>values</u>
3/8	String Quartet op. 18 no. 4/ii	Andante scherzoso quasi	J.=56	*
		allegretto		
3/8	Symphony op. 21/ii	Andante cantabile con moto	<i>\$</i> =120	√single ♪
3/8	Symphony op. 67/ii	Andante con moto	> =92	Λ and Λ/Λ
6/8	String Quartet op. 59 no. 3/ii	Andante con moto quasi	J.=56	•
		Allegretto		
12/8	Symphony op. 68/ii	Andante molto moto	J.=50	JY_}
2/4	String Quartet op. 18 no. 3/ii	Andante con moto	<i>\$</i> =92	And A
2/4	String Quartet op. 18 no. 5/iii	Andante con moto	<i>\$</i> =88	JY_}
2/4	Septet op. 20/iv	Andante	<i>\$</i> =120	>
2/4	Septet op. 20/vi	Andante con moto alla marcia	♪ =76	♪/ single
				A
2/4	Symphony op. 55/iv	Poco Andante	♪ =108	J/J/And A
3/4	String Quartet op. 59 no. 3/i	Andante con moto	J =69	J/J/3
3/4	Symphony op. 125/iii	Andante moderato	J =63	JY_}
3/2	Symphony op. 125/iv	Andante maestoso	J =72	

Before proceeding, it is worth briefly examining the term *con moto*, which occurs almost exclusively in the context of the tempo indication under discussion here, and which is found in most movements in the table above. Koch defines it as 'with movement. This expression indicates that the piece in which it is used has to be performed lively and powerfully, and that the tempo should not drag.' Simply put, Koch's definition suggests that *Andante con moto* is somewhat faster than a plain *andante*. Given the rarity of plain *andantes* and the frequent occurrence of *andante con moto*, in essence this means that plain *andantes* are relatively slow *andantes*.

3.3.1: Andantes in 3/8

There are only eleven *andantes* in 3/8 by Beethoven, three of which have metronome marks that show a fairly wide range of speeds as can be seen in Table 3.3.1.1 below.

²¹⁴ Koch, *Lexikon*, 360. Original: 'Mit Bewegung. Dieser Ausdruck zeigt an, daβ das Tonstück den welchem er als Ueberschrift gebraucht wird, lebhaft und kräftig vorgetragen, und das Zeitmaβ nicht zu schleppend genommen werden soll.'

Table 3.3.1.1: Beethoven's andantes in 3/8 with metronome marks.

<u>Work</u>	Tempo indication	Metronome	<u>Note</u>
	_	<u>Mark</u>	<u>values</u>
String Quartet op. 132/iii	Andante	[> =69]	"
Duet op. 82 no. 5	Andante vivace	-	\$\J
Piano Sonata op. 26/i	Andante con variazioni	[> =76-80]	J.Y.J.
'Andante favori' WoO 57	Andante grazioso con moto	[> =84-92]	7.7.1
Symphony op. 67/ii	Andante con moto	<i>\$</i> =92	A∕single A
String Trio op. 3/ii	Andante	-	J/_}
Bagatelle op. 126 no. 3	Andante cantabile e grazioso	-	J/_}
Symphony op. 21/ii	Andante cantabile con moto	<i>\$</i> =120	J).]
Bagatelle op. 126 no. 6	Andante cantabile e con moto	-	J/_}
Variations WoO 76, theme	Andante quasi allegretto	[> =132]	JY_N
String Quartet op. 18 no. 4/ii	Andante scherzoso quasi allegretto	\$=168 (J.=56)	. Y.A

The slowest is found in the second movement of the Fifth Symphony, which contains single dotted semiquavers alternating with single demisemiquavers as most common note value in the beginning along with quavers, with semiquaver triplets being introduced shortly afterwards. Beethoven's speed for this *Andante con moto* is \$\infty\$=92, somewhat faster than the estimated speeds of *adagios* in the same metre with the same range of note values, which ranged between \$\infty\$=69 and 72. In addition, the general appearance of the second movement of the Fifth Symphony seems to match Koch's description, with the calm expression in this movement forming a clear contrast with the more frantic first movement. Slightly faster is the second movement of the First Symphony with a speed of \$\infty\$=120. This movement contains note values that are overall one degree larger than those in the Fifth Symphony, but which are generally similarly distributed to those in the Fifth Symphony: quavers are clearly the most common note value at the beginning, and although some single dotted semiquavers followed by demisemiquavers do show up, they are far less common in this movement. The difference between the metronome marks for these two movements can therefore be reasonably attributed to the note values used in both *andantes*.

Unlike the *andantes* in the two symphonies, the third *andante* with a metronome mark—the second movement of the String Quartet op. 18 no. 4—clearly falls into Koch's

first category, as the tempo indication explicitly identifies it as a scherzo by including the word *scherzoso*, which according to him determines 'the manner of performance'. In addition, the last two words of the tempo indication (*quasi allegretto*) also indicate that the tempo is on the threshold of *andante* and *allegretto*. These two additions to the tempo indication seem to be the best explanation for the metronome mark of $\lambda=168$ (given as $\lambda=56$), which would otherwise not be justifiable by the note values employed, which range from quavers to semiquavers.

Of the remaining *andantes* in this metre, the only one not for solo piano with a metronome mark is found in the third movement of the String Quartet op. 132, in which the *Andante* section in 3/8 includes demisemiquavers straight from the start. These relatively short notes warrant Karl Holz's suggestion of a speed of $\lambda=69$, which is the slowest speed for any *andante* in this metre but which is still much faster than the *adagios* with the same range of note values.

The 'Andante favori' WoO 57—which as mentioned earlier used to be part of the Piano Sonata op. 53 and which Czerny was therefore possibly familiar with—contains primarily quavers, semiquavers, and demisemiquavers as most common note values, and is marked *Andante grazioso con moto*. The distribution of these note values is fairly similar to the distribution in the second movement of the Fifth Symphony discussed above, with the most significant difference being that the Symphony has semiquaver triplets as its shortest common note value whereas WoO 57 contains demisemiquavers. Nevertheless, Czerny gives the *Andante favori* the same speed as the Symphony (\$\infty\$=92) whereas Moscheles gives a slower \$\infty\$=84, but given the note values it seems more likely that Beethoven's intended speed is closer to the former than the latter.

The Variations WoO 76 start out with a theme marked *Andante quasi Allegretto* with quavers and semiquavers as most common note values. Moscheles's speed of \$\infty\$=132—

Czerny does not seem to have supplied a metronome mark—is roughly halfway between the *andantes* in the First Symphony and the String Quartet op. 18 no. 4. Since the latter is also a fast *andante* with the same range of note values as WoO 76, it seems plausible that both movements were intended to move at a fairly similar speed. Unlike WoO 76, however, the String Quartet movement is also a scherzo, which could also increase the speed somewhat. It is therefore plausible that Beethoven's intended speed for WoO 76 is close to Moscheles's suggestion.

The final *andante* is found in the first movement of the Piano Sonata op. 26, which contains a theme and five variations, with plain *Andante* being the only tempo indication in the movement. The theme consists of quavers, semiquavers, and small groupings of demisemiquavers, a range of note values that on the whole seems to be comparable to that in the *Andante favori* WoO 57 discussed above. The principal difference between the first movement of the Sonata op. 26 and WoO 57 is found in the tempo indication: the former is marked *Andante*, and the latter is an *Andante grazioso con moto*. Czerny's and Moscheles's speeds for the theme, which range between $\mathcal{L}=76$ and 80, therefore seem to be justified, as they are faster than the *adagios* with this metre, but still slower than the *Andante con moto* sections discussed above.

In addition to a speed for the theme, however, both editors also supplied speeds for the following variations. Unlike some earlier variations sets in the sonatas in which the range of note values varies drastically with each variation (such as in the third movement of the Piano Sonata WoO 47 no. 3), there is relatively little difference between the note values that appear in each of the variations in op. 26. The first variation contains demisemiquavers and dotted crotchets at the beginning; the second variation contains only semiquavers and single demisemiquavers followed by rests; the third contains semiquavers and quavers; the fourth contains almost only quavers; and the fifth contains extensive semiquaver triplet and

demisemiquaver figuration. On the grounds of these note values, it is expected that the first variation is roughly the same speed as the theme; the second is faster (as seen in the beginning of the Fourth Symphony, single note followed by rests count as double the note values, so the single demisemiquavers really count as semiquavers); the third is faster still; the fourth is even faster; and the fifth is much slower.

To a degree, the suggested speeds by Czerny and Moscheles meet these expectations. Both Czerny's and Moscheles's first editions of this sonata do not give a metronome mark to the first variation, implying that the indicated speed at the theme still applies. Some of the later editions, however, give speeds that range between \$\displace\$=88 and 96. The second variation is unanimously marked faster than the theme, between $\flat=92$ and 104, as would be expected on the basis of its note values. The third variation in a-flat minor, which contained larger note values than the previous one, is marked slower than the second variation in all editions, which is contrary to what the note values would suggest. There might be a good reason for this: in many classical variation sets, there is either the minor variation, or an explicitly slow variation, and it seems plausible that both were often played at a slower tempo. ²¹⁵ This appears the most likely explanation for Czerny's and Moscheles's relatively slow speeds for this variation, especially compared to the faster fourth variation, which has a similar range of note values. The fifth and last variation, which sees the return of the smaller note values present in earlier variations, has the same speed as the theme in all editions but Moscheles's first. In summary, although it is uncertain whether either Czerny or Moscheles had any insider knowledge of the sonata, their speeds for the variations can largely be explained by the note values and the conventions established by earlier variation sets.

After having discussed all the *andantes* with metronome marks in 3/8, it should be possible to establish a speed for the four remaining sections. The Duet op. 82 no. 5 contains

-

²¹⁵ For example Beethoven's op. 44, Haydn's Variations in C Hob. XVII:5, and Mozart's KV 455. Thanks to Artur Pereira for pointing this out during his (as of yet unpublished) paper on Beethoven and the slow variation during a Beethoven symposium at the University of Manchester on 20 September 2013.

extensive demisemiquaver figuration, but the tempo indication *Andante vivace* suggests a speed somewhat faster than a plain *andante* with the same range of note values. A speed somewhere between the λ =69 (the speed for the third movement of the String Quartet op. 132) and λ =76-80 (the suggestions for the first movement of the Piano Sonata op. 26) is therefore likely to be what Beethoven had in mind. Similar reasoning can be applied to the second movement of the String Trio op. 3 and the Bagatelle op. 129 no. 3, both of which are plain *andantes* with semiquavers and quavers, and which probably have a speed in the same range as *Andante con moto* with some demisemiquaver figuration, as the shorter note values are presumably compensated for by a faster tempo indication. The expected speed for these two plain *andantes* is therefore around λ =92. Finally, the Bagatelle op. 129 no. 6 with semiquavers and quavers and a tempo indication of *Andante cantabile e con moto* probably moves at a speed around λ =120, close to the other *Andante con moto* with the same range of note values. Finally, the estimated intended speeds for all *andantes* in 3/8 are summarized in Table 3.3.1.2 below:

Table 3.3.1.2: Estimated intended speeds for Beethoven's andantes in 3/8.

Common	Andante	Andante con moto	Fast andante	Fast andante
note value				Scherzo?
. N.A.	♪ =69	*	*	*
3	♪ =76-92	<i>\$</i> =92	*	*
)	\$=92-104	<i>\$</i> =120	<i>\$</i> =132	J=168 (J.=56)

As before, smaller note values can be compensated for by a faster tempo indication, as the speeds for the plain *andantes* and *Andante con moto* sections show. In addition, similarly to the *adagios* discussed before, the slowest *andante* moves at about half the speed of the fast *andantes* with the largest range of note values.

3.3.2: Andantes in 6/8

There are more than 25 *andantes* in 6/8. As before when discussing large numbers of works, this section will only discuss those for which metronome marks are available. These can be found in Table 3.3.2.1.

Table 3.3.2.1: Beethoven's andantes in 6/8 with metronome marks.

Work	Tempo indication	Metronome	Note
		<u>Mark</u>	values
Cello Sonata op. 102 no. 1/i	Andante	[> =66-72]	JY_8
String Quartet op. 59 no. 3/ii	Andante con moto quasi allegretto	J.=56)
Variations WoO 66, var. 5	Andante con moto	[.=66]	٦٧٦
Bagatelle op. 33 no. 1	Andante grazioso quasi allegretto	[.=66]	JY_}
Piano Sonata op. 81a/iii	Poco andante	[.=69])

As can be seen in Table 3.3.2.1, there is only a single *andante* in this metre with a metronome mark by the composer: the second movement of the String Quartet op. 59 no. 3, for which the tempo indication is *Andante con moto quasi allegretto*. This movement contains only quavers at the beginning, with semiquavers appearing later. Nevertheless, Beethoven's speed is J=56, the same speed that he indicated for the second movement of the String Quartet op. 18 no. 4, which is marked *Andante scherzoso quasi allegretto* and which contains quavers and semiquavers from the start. This makes it seem that the *andantes* in 6/8 move at similar speeds to those in 3/8, but the differences between op. 18 no. 4 and op. 59 no. 3 should not be overlooked: the former is marked *scherzoso*, while the latter is not. In addition, there is also a possibility that Beethoven's use of 3/8 in the former is inconsistent, and that it have been more consistent in 6/8. Clearly, more evidence is needed to establish the relationship between *andantes* in 6/8 and in 3/8.

Among Beethoven's earliest compositions are the Variations on a theme by Dittersdorf WoO 66, for which Moscheles appears to be the only contemporary to have provided metronome marks. In the fifth variation, there is a short section in 6/8 marked

Andante con moto, which contains almost exclusively crotchets and quavers and for which Moscheles suggests a speed of J.=66. From this speed it does indeed seem that andantes in 6/8 are somewhat faster than those in 3/8, but since there are no andantes in 3/8 with the same range of note values it seems hard to be certain of this. Two other andantes in 6/8 are given very similar speeds: the Bagatelle op. 33 no. 1 marked Andante grazioso quasi allegretto, which contains mainly quavers and semiquavers in the beginning, is given a speed of J.=66 by Czerny, while the short Poco andante section in the third movement of the Piano Sonata op. 81a with mainly quavers is marked J.=69 by both Czerny and Moscheles.

Although neither editor has claimed any insider knowledge for any of these works, most of their suggestions seem generally along the right lines, which implies that andantes in 6/8 are indeed somewhat faster than their counterparts in 3/8. In addition, this also implies that the second movement of the String Quartet op. 18 no. 4 in 3/8 is probably misrepresented in the score, and that it should have been written in 6/8 in order to be more consistent.

A particularly strange case is the opening of the Cello Sonata op. 102 no. 1. This plain *andante* contains mainly quavers and semiquavers at the beginning, and has suggested speeds of \$\int_{=}66\$ and 72 by Czerny and Moscheles respectively, suggestions that are a third of the speeds for the other *andantes* in this metre discussed so far. Czerny writes the following in *On the Proper Performance*:

This, as well as the following sonata, belongs to the last period of Beethoven's career, in which he no longer embellished his ideas by the ordinary effects of the pianoforte ... but ordered the construction of the work in its simple grandeur, so that the player must the more endeavour to impart to each thought, as well as each note, its full

significance. The *Andante* must be performed throughout very legato and *cantabile*, with tender feeling and sadness.²¹⁶

Although there is no evidence that Czerny studied this work with the composer or heard an authorized performance of it, he does indicate that he is aware of Beethoven's aesthetic goals in this work, which implies some insider knowledge. However, a number of Czerny's claims about this work do not quite add up: elsewhere, he claims that the sonata was written after 1817 after the composer had gone deaf, which had 'a disturbing effect on [Beethoven's] compositions.'217 Since the sonata was completed in 1815, 218 Beethoven's deafness cannot have interfered with the composition in the way that Czerny claims, and it seems more likely that his comments are meant to explain away the qualities that one perplexed early reviewer of the work described as 'unusual' and 'strange'. 219 To Czerny's credit, he does try to make sense of the work, but he does so by adapting it to his own taste: the *Andante*, an indication which according to Koch usually expresses tranquillity, is described as tender and sad and given a speed of λ =66. These attributes would fit an *adagio* with the same range of note values better than an andante, although Czerny's suggested speed is slow even for an adagio in 6/8. The most plausible solution appears to be that the time signature 3/8 should have been used in this section instead of 6/8, and that both Czerny and Moscheles slightly underestimated the intended speed, which may be around $\lambda=76$.

In the absence of any further suggested speeds for *andantes* in 6/8, it is difficult to say much more about them beyond that it does seem that the *andantes* in 6/8 are generally faster than those in 3/8, but that at least some of those currently in this metre are probably mislabelled. Furthermore, many of the other *andantes* in this metre have fast tempo

_

²¹⁶ Czerny, On the Proper Performance, 79.

²¹⁷ Ibid., 10.

²¹⁸ Cooper, Beethoven, 260-263.

²¹⁹ Kunze, *Spiegel*, 341-345.

indications: the second movement of the String Trio op. 9 no. 2 is marked *Andante quasi*Allegretto, the Bagatelle op. 33 no. 1 is marked *Andante grazioso quasi Allegretto*, and the Song WoO 137 has *Andante vivace* as a tempo indication. It seems plausible that these andantes move at a speed of around J.=56-66, similar to the speeds of the other sections discussed so far, and that other andantes in 6/8 move at speeds somewhat faster than their counterparts in 3/8. The estimated speeds in Table 3.3.2.2 are therefore slightly faster than the ones in 3/8 in Table 3.3.1.2.

Table 3.3.2.2: Estimated intended speeds for Beethoven's andantes in 6/8.

Common note value	Andante	Andante con moto	Fast andante
JY_5	[].=33 (]=100)]	[].=40 (]=120)]	*
,)	[].=40 (]=120)]	[].=50 (]=150)]	J.=56-66 (J=168-207)

3.3.3: Andantes in 9/8 and 12/8

In total, there are just two *andantes* in 9/8, both found in the piano sonatas. The first is found in the second movement of the Piano Sonata op. 79, which contains primarily quavers at the beginning, with extensive semiquaver figurations appearing from the tenth bar onwards. The movement is only marked plain *Andante*, but Czerny's recommendation of J.=56 is nevertheless as fast as those for the fast *andantes* in 6/8, with Moscheles suggesting a slightly slower J.=44 (J=132). The only other *andante* in 9/8 is found in the fourth variation of the third movement of the Piano Sonata op. 109, which is marked *Un poco meno Andante ciò é un poco più adagio come il Tema (etwas langsamer als das Thema)*, which translates as 'a little less *andante*, that is slower than the theme', which also answers the question whether *meno andante* is faster or slower than *andante*. Semiquavers are the most common note values of this section, but Czerny's and Moscheles's speeds are still relatively fast, ranging

from J.=56 to 66. Assuming that the estimations for the two piano sonatas are reasonably accurate, it would indicate that *andantes* in 9/8 are indeed faster than those in 6/8, as despite the fact that the former are only plain *andantes* and the latter are explicitly fast ones they both have similar speeds, which indicates that the metre must be responsible.

There are only four *andantes* in 12/8, and only one of these contains a metronome mark by Beethoven: the 'Scene by the Brook' in the second movement of the Sixth Symphony, which is marked Andante molto moto, contains quavers and semiquavers, and has a speed of J.=50. These characteristics seem to break the established pattern somewhat: the tempo indication is clearly faster than in the two plain andantes in 9/8, but the speed is slower, despite the fact that the note values are generally larger or similar. Given the rarity of andantes in 12/8, however, it seems plausible that this is simply an exception that proves the rule, but it is also possible that this movement is also in the wrong metre, as the speed is exactly between that of an Andante con moto and a fast andante scherzo in 3/8. This makes it difficult to estimate the speed of the other three andantes, which are found in the Agnus dei of the Mass op. 86, in no. 8 of the Singspiel King Stephan, and in the *Benedictus* of the Missa Solemnis. The first two have quavers as only note value in the beginning and tempo indications that suggest a speed that is slightly faster than a plain and ante (Poco and ante and andante mosso, respectively), while the third contains larger note values (crotchets and quavers) which are offset by a slower tempo indication of Andante molto cantabile e non troppo mosso. It therefore seems possible that all four of these andantes in 12/8 have a speed of around \downarrow .=50.

3.3.4: Andantes in 2/4

There are more *andantes* in 2/4 than in any other metre, with approximately 66 sections having this combination. In total, there are 24 metronome marks available for sections with these characteristics, which can be found in Table 3.3.4.1 below.

Table 3.3.4.1: Beethoven's andantes in 2/4 with metronome marks.

Work	Tempo indication	Metronome	Note
		Mark	values
Quintet op. 16/ii	Andante cantabile	[> =63]	. Y.5
Cello Sonata op. 102 no. 1/i	Andante	[> =66-72]	J/_)
Horn Sonata op. 17/ii	Poco adagio quasi andante	[> =69-88]	,
Piano Sonata op. 81a/ii	Andante espressivo. In gehender	[> =72-76]	2
	Bewegung, doch mit viel Ausdruck		
Septet op. 20/vi	Andante con moto alla marcia	♪ =76	الإ
String Quartet op. 131/iv	Andante ma non troppo e molto	[\sigma =80]	
	cantabile		
Piano Concerto op. 58/ii	Andante con moto	[\$=84-144]	Ŋ/J/single/Ŋ
String Quartet op. 18 no. 5/iii	Andante cantabile	♪ =88	1/1
Violin Sonata op. 47 no. 1/ii	Andante con variazioni	[\$=88]	1/1/1
Piano Sonata op. 28/ii	Andante	[\$=88-104]	
String Quartet op. 18 no. 3/ii	Andante con moto	♪ =92	J.Y.B
Piano Trio op. 1 no. 3/ii	Andante cantabile con variazioni	[]=100-104]	J Y_
Violin Sonata op. 12 no. 1/ii	Andante con moto	[\$=104-108]	الرا
Bagatelle op. 33 no. 4	Andante	[> =104]	٨
Piano Sonata WoO 47 no. 2/ii	Andante	[\$=104]	
Symphony op. 55/iv	Poco andante	♪ =108	JYJY J
Piano Sonata WoO 47 no. 1/ii	Andante	[> =108]	
Piano Sonata op. 57/ii	Andante con moto	[> =92-120]	1/1)
Septet op. 20/iv	Andante	♪ =120	.)
Variations WoO 77	Andante quasi allegretto	[]=52-60]	7.7
Violin Sonata op. 12 no. 2/ii	Andante più tosto allegretto	[]=69-80]	7.7
Bagatelle op. 33 no.6	Allegretto quasi andante, con un	[]=72]	>
	certa espressione parlante		
Piano Sonata op. 48/i	Andante	[]=60-92])
Fantasy op. 80/ii	Allegretto ma non troppo quasi	[]=72]	J) J
	andante con moto		
Violin Sonata op. 23/ii	Andante scherzoso più allegretto	[]=84-92]	>

As the table shows, there are only five *andantes* in 2/4 with metronome marks by Beethoven. Of these, the first plain *andante* in the table is for the third movement of the String Quartet op. 18 no. 5, which has quavers and semiquavers as most common note values, and is marked \$\int\$=88. Two of the *andantes* in the table with similar tempo indications and ranges of note

values have suggested speeds close to this, which are implicitly validated: the second movement of the Violin Sonata op. 47, for which both Czerny and Moscheles suggest $\lambda=88$ and which Czerny probably discussed with Beethoven;²²⁰ and the second movement of the Piano Sonata op. 28, which Czerny studied with Beethoven and for which his speeds range from $\lambda=88$ to 104. Since in both cases Czerny had insider knowledge of the composer's intentions, the fact that his speeds for these sonatas correlate with Beethoven's for op. 18 no. 5 suggests that a $\lambda=88$ is a good indication for the composer's intentions for plain *andantes* in 2/4.

There are a number of plain *andantes* with semiquavers in the table above, however, for which the suggested speeds are quite far from $\searrow = 88$. Five of these occur in works for which there is no evidence that either editor heard an authorized performance or studied it with the composer, or in works for which the only speed was published in *On the Proper* Performance, which makes them somewhat suspect as Chapter 1 showed. The first is found in the second movement of the Horn Sonata op. 17, for which Moscheles recommends ≥=69 and Czerny $\lambda = 80$ and 88, and for which the latter's suggestions are much more plausible, as argued in Section 3.1.2. The next is in the second movement of the Quintet op. 16, which Czerny played for Beethoven albeit not to his satisfaction as was discussed in Chapter 1. In On the Proper Performance, Czerny suggests \$\sigma = 69\$ for this movement, the only metronome mark available for this section, and one that is more in line with adagios in this metre than andantes, as Table 3.1.4.3 shows. A faster speed is therefore much more plausible. The three other plain andantes with semiquavers and divergent recommended speeds are found in the second movements of the Piano Sonatas WoO 47 nos. 1 and 2, which Czerny marked *▶*=108 and 104, respectively; and the Bagatelle op. 33 no. 4, for which he recommended >=104. As Barry Cooper has claimed in the case of the Piano Sonata WoO 47 no. 1, a speed of *▶*=92 is

22

²²⁰ Czerny, On the Proper Performance, 3.

probably better at least in a modern context, ²²¹ but the most reliable metronome marks show that it is also more likely to be closer to what Beethoven had mind for the other plain andantes with the same range of note values.

Next, there are two *andantes* which have a different range of note values, but their tempo indications seem to compensate for this fact, and they move at the a similar speed to the plain *andantes* with semiquavers. The first is the fourth movement of the String Quartet op. 131, which contains crotchets and quavers that indicate a faster tempo, but also a rare instance of an explicitly slow and ante tempo indication—And ante ma non troppo e molto cantabile—that seems to suggest the opposite. Overall, these two factors make Holz's suggestion of $\lambda = 80$ a plausible estimation of the intended tempo. In the second movement of the Fourth Piano Concerto, the variables are reversed: the tempo indication is Andante con *moto*, but the note values at the beginning include semiquavers and single demisemiquavers. Czerny, who studied this concerto with Beethoven, recommends a speed of >=84, much slower than Moscheles's >=144. A significant caveat needs to be placed here, however: the smaller note values at the beginning occur mainly in the orchestra, and based on the crochets and quavers that are the most common in the piano part Moscheles's fast speed makes a lot more sense. In this case, the methodology employed in this thesis is not precise enough to be able to say with confidence which of the two speeds is the most likely, and it is possible that the problem that this distribution presents for this model is also the root cause of the disagreement between Czerny and Moscheles.

Besides the Fourth Piano Concerto, there are three sections in Table 3.3.4.1 marked Andante con moto. The first is the second movement of the String Quartet op. 18 no. 3, which contains crotchets, quavers, semiquavers, and some demisemiquavers at the beginning, along with a metronome mark of \searrow =92. The two other *Andante con motos* have larger note values:

²²¹ Cooper, *The 35 Piano Sonatas*, i, commentaries, 7.

the beginning of the second movement of the Violin Sonata op. 12 no. 1 contains primarily quavers and crotchets and some semiquavers later, and the second movement of the Piano Sonata op. 57 has primarily crotchets in the beginning, along with some different smaller note values. (Of course, both these movements have very different note values later on, but since the speed of slow sections seems to be at least in theory exclusively determined by the note values at the beginning the later note values are of no concern here.) Czerny, who claimed to have studied op. 57 with Beethoven, recommends speeds between $\triangleright = 108$ and 120, while Moscheles favours a much slower *▶*=92. Since Moscheles's recommendation is quite similar to the estimated speed for plain adagios with semiquavers or Andante con moto with some demisemiquavers, it seems an implausible suggestion for an Andante con moto with larger note values, and Czerny's range seems more likely. For the Violin Sonata both editors are much more in agreement, suggesting >=104 and 108, which seems a plausible range for Andante con moto with mainly crotchets, quavers and some semiquavers. Nevertheless, Czerny's fastest suggestion for op. 57 should not be discounted completely for other *Andante* con motos with these note values, which leaves a range of $\lambda=108-120$ ($\lambda=54-60$) as the most likely range in which the intended speeds for these *Andante con motos* can be found.

The *Poco andante* section found at the end of the fourth movement of the Third Symphony, which contains primarily crotchets, quavers, semiquavers, and single demisemiquavers at the beginning, is a little problematic, not least because of its ambiguous tempo indication. Overall, this section contains fewer demisemiquavers at the beginning than the *Andante con moto* third movement of the String Quartet op. 18 no. 3, but it also has a faster speed: $\lambda=108$ instead of $\lambda=92$. It therefore seems that in this context *Poco andante* is meant to indicate a speed similar to *Andante con moto*, and that the difference in speed between the Symphony and the String Quartet can be explained by the note values in each section. Beethoven's fastest metronome mark in Table 3.3.4.1, however, is for the plain

Andante in the fourth movement of the Septet op. 20, which moves at *>*=120. Between the speeds for the *Poco andante* of the Symphony and the plain *Andante* for the Septet— a fast one with small note values and a plain one with large note values—most of the remaining sections in the table can be explained.

The second movement of the Piano Trio op. 1 no. 3 is marked *Andante cantabile con variazioni*, and contains primarily crochets and quavers in the theme with only very few semiquavers. Czerny's and Moscheles's speeds for this section, which range from J=100 to J=104, therefore seem on the slow side, and a speed closer to J=120 is probably more likely to represent what Beethoven had in mind. A similar issue arises in the first movement of the Piano Sonata op. 48 no. 1, which shares the same theme as the *Andante* in the Septet, and which, in the first twelve bars, contains mainly crotchets and quavers, with semiquaver figuration appearing later. Moscheles's recommendation is J=60, the same speed as the Septet, while Czerny advises a much faster J=92, which would have probably been more appropriate if the movement had had an explicitly fast *andante* as a tempo indication.

The fastest *andante* tempo indications are those that occupy the threshold between *andante* and *allegretto*. One of these marked *Allegretto ma non troppo (quasi Andante con moto)* occurs in the Fantasy op. 80, which Czerny studied with Beethoven. Short note values—in this case anything shorter than quavers—are only found in the piano part, and the singers (and for the most part the orchestra too) only have quavers and larger note values in their parts. The speed that Czerny suggests, J = 72, is much faster than that for other *andantes* so far, but it seems to be justified by the relatively fast tempo indication and the large note values in this work. Smaller note values do indeed appear in the piano part, but it seems that they do not affect the tempo in this case.

There are three other explicitly fast *andantes* which Czerny did not study with Beethoven, but which he gave speeds nonetheless. The first is found in the Variations WoO 77, with the theme and all subsequent variations marked *Andante quasi allegretto*. The beginning of this set contains quavers and some semiquavers, and has suggested speeds of $\lambda=120~(\lambda=60)$ and $\lambda=104~(\lambda=52)$ by Czerny and Moscheles, respectively. The latter speed seems a little slow, but Czerny's speed can perhaps be justified by the fact that the faster tempo indication compensates for the presence of the semiquavers, and speed comparable to plain *andante* with quavers might therefore be justified. The second is found in the Bagatelle op. 33 no. 6 marked *Allegretto quasi andante* contains almost only quavers and a few semiquavers. Compared to WoO 77, Czerny's suggested $\lambda=72$ seems a little on the fast side. The third and final explicitly fast *andante* is found in the *Andante scherzoso più Allegretto* second movement of the Violin Sonata op. 23, and which contains only quavers in the beginning, with smaller note values appearing later on. Both Czerny and Moscheles give speeds that are substantially faster than those for the movements discussed above, ranging from $\lambda=84$ to 92, which seem justified considering the tempo indication and the note values.

The final group of *andantes* that need to be discussed are those that are explicitly linked to the act of marching or walking, which according to Koch determines the character and presumably also the tempo. There are two of these in Table 3.3.4.1, found in the sixth movement of the Septet and the second movement of the Piano Sonata op. 81a. The sixteenbar *Andante con moto alla marcia* that precedes the final *Presto* of the Septet contains only a small number of single demisemiquavers, with crotchets and quavers being the most common note values. Neither the tempo indication nor the note values give a justification for Beethoven's speed of λ =76—among the slowest speeds encountered so far for an *andante* in 2/4—as both seems to suggest a much faster speed, especially considering the other sections discussed bove. Nevertheless, the fact that this short section is identified as a march might set it apart from the others, and help to understand Beethoven's metronome mark for this movement. It is therefore worth briefly examining the subgroup of marches as a whole.

There are only nine marches with metronome marks either by Beethoven or a contemporary, and they occur with a variety of ranges of note values, tempo indications, and time signatures. The only three with speeds by the composer are found in the previously discussed second movement of the Third Symphony (2/4, *Adagio assai*, with crotchets and semiquavers and a speed of $\lambda=80$) the above mentioned *Andante con moto alla Marcia* in 2/4 in the Septet that moves at $\lambda=76$, and the Turkish march in the last movement of the Ninth Symphony marked *Allegro assai vivace* in 6/8 with mainly crotchets with few quavers and a speed of $\lambda=84$. (For a more detailed discussion of the issues surrounding the metronome marks for this Turkish march, see Chapter 5.)

It is notable that Beethoven's metronome marks for his marches are indicated with a variety of note values, but that the number is always 80 or a number close to it. The same can be said for many of Czerny's and Moscheles's speeds: the funeral march in the third movement of the Piano Sonata op. 26, which does not contain any further tempo indication, is given speeds ranging from J=60 to 80; the fifth variation of the Variations op. 34 has J=80and 104 as suggested speeds; the short *Vivace* march in the Fantasy op. 80 (which Czerny studied with Beethoven) is given a speed of J=80; the Vivace alla Marcia in the second movement of the Piano Sonata op. 101 has suggestions ranging from J = 76 to 84 and J = 132; and the sixth variation of the Variations WoO 78 has suggestions of \rfloor =72 and 66 (given as J=144 and 112, respectively). Only two suggestions for marches break the pattern: the 13th variation of the Variations WoO 66 has only a suggestion of J.=66 by Moscheles, and the *Marcia vivace* fifth movement of the String Quartet op. 132, which Karl Holz gives $\downarrow = 108$. Finally, there is the *Andante espressivo* in the second movement of the Piano Sonata op. 81a, which although not explicitly identified as a march is still marked *In gehender Bewegung*, doch mit viel Ausdruck ('at walking pace, but with much expression'), which might explain Czerny's and Moscheles fastest speeds of $\lambda=72$ and $\lambda=76$ for this movement. On balance, it

therefore appears that in marches the intended speed is around 80 bars, half bars, or quarter bars per minute, which explains the speed of the march in the Septet op. 20, as well as the second movement of the Piano Sonata op. 81a. The estimated speeds for *andantes* in 2/4 can be found in Table 3.3.4.2.

Table 3.3.4.2: Estimated intended speeds for *andantes* in 2/4.

Common	Andante March	Slow	Andante	Andante con	Fast Andante
note value		Andante		moto	
7771	*	*	*	\$ =88-92	*
JY_A	<i>\$</i> =76-80	♪ =80	> =88-104	> =108-120	J=54 - 60 (J=108-120)
,)	*	*	♪ =120	*	J=72 - 92 (<i>J</i> =144-184)

A number of conclusions can be drawn from the above table. Firstly, the *andantes* that are identified as marches seem to have an intended speed very similar to those *andantes* that are explicitly slow, and which in turn move at a similar speed to the slowest plain *andantes* with the same range of note values. Secondly, the fastest speeds for *andantes* are about 2.5 times the speed of the slowest *andantes*, showing that in this metre the term is used for a wider range of speeds than *adagio*. Thirdly, the *andantes* that refer explicitly to marching or walking speed are much slower than every other kind of *andante* except the explicitly slow ones. In order words, the term is to be taken literally in only a small minority of cases, and in the vast majority of pieces the term will actually indicate a speed that is much faster than walking speed.

3.3.5: Andantes in 3/4

There are about half as many *andantes* as *adagios* in 3/4, with only about 25 movements being marked as such, of which four have metronome marks, as can be seen in Table 3.3.5.1.

Table 3.3.5.1: Beethoven's *andantes* in 3/4 with metronome marks.

<u>Work</u>	Tempo indication	Metronome	Note
		<u>Mark</u>	<u>values</u>
Symphony op. 125/iii	Andante moderato	J=63	- }_}_
String Quartet op. 59 no. 3/i	Andante con moto	J=69	. Y./.]
Piano Trio op. 97/iii	Andante cantabile ma però con	[]=54-63]	الرا
	moto		
Piano Sonata op. 109/iii	Andante molto cantabile ed	[]=63-72]	J) J
	espressivo		

Only the short opening *Andante con moto* in the first movement of the String Quartet op. 59 no. 3 and the *Andante moderato* sections in the third movement of the Ninth Symphony have a speed by the composer. The former is a 29-bar section consisting primarily of block chords in dotted minims, with occasionally some moving crotchets and trills with semiquavers. Due to the unusual nature of this section, it is hard to say which note values are the most common, but it makes most sense to simply observe that semiquavers are the smallest note values, and leave it at that. The Symphony has semiquavers as smallest note value as well, but it also contains quavers and crotchets and a slower tempo indication. It is presumably the last that explains the difference in speed: the Symphony is marked J = 63, and the String Quartet J = 69.

There are only two *andantes* in 3/4 with metronome marks by Czerny and Moscheles. The first is found in the *Andante cantabile ma però con moto* third movement of the Piano Trio op. 97, another work which Czerny studied with Beethoven, and of which Moscheles attended a performance. The beginning of the movement contains almost exclusively crotchets and quavers, and smaller note values do not appear in significant quantities until the 29^{th} bar. Czerny's speeds range from 1=58 to 63, and Moscheles suggests an even slower 1=54, which seems inconsistent given the fact that the note values in this Trio are larger than those in the *andantes* in the String Quartet and Symphony discussed above. As the estimation in Table 3.1.5.2 above shows, the 1=56 (given as 1=12 in the table) is likely to be the intended speed for *adagios* with crotchets and quavers, and it seems therefore that the slowest

²²² Moscheles, *Recent Music*, 8-9.

suggested speeds correlate more with Beethoven's speeds for *adagios* than those for *andante con motos*. It therefore seems plausible that the highest speed that Czerny suggested for this movement is the closest to what Beethoven had in mind, but it also seems possible that a slightly faster speed, comparable to that for the *Andante con moto* of the String Quartet op. 59 no. 3, is perhaps more representative.

The second *andante* in 3/4 with editorial speeds is found in the third movement of the Piano Sonata op. 109, which contains a theme followed by a set of variations. The theme consists of crotchets, quavers, and a few semiquavers, and is marked *Andante molto cantabile ed espressivo* while Czerny's and Moscheles's speeds range from J=63 to J=72. (The *molto* of the tempo indication clearly belongs to *cantabile*, as Beethoven never seems to have used *Andante molto* in his oeuvre. These speeds, especially towards the top of the suggested range, are more consistent with Beethoven's than the suggestions for the Piano Trio above, as the note values in the theme are generally larger than those in the *andante* in the third movement of the Ninth Symphony, which warrants a somewhat faster speed. In addition, a speed of around J=72 would also implicitly validate Karl Holz's suggestion of J=76 (probably misprinted as J=76, as was argued in section 3.1.5 above) for the *Adagio quasi un poco andante* in no. 6 of the String Quartet op. 131, which contains primarily minims and quavers. In summary, the approximated intended speeds for *andantes* in 3/4 based on the movements discussed so far can be found in Table 3.3.5.2.

Table 3.3.5.2: Estimated intended speeds for Beethoven's andantes in 3/4.

Common	Slow Andante	Andante	Andante con moto
note value			
. > .)	*	J=63	J =69
١٧٦	*	J=72	[J=80?]
J	J =76	*	*

-

²²³ Cooper, *The 35 Piano Sonatas*, commentaries, 55.

Much like before, there is a clear consistency: slow *andantes* with only crotchets move at a similar pace as plain *andantes* with crotchets and quavers, which in turn move at a speed comparable to that of the *andante con moto* sections with quavers and semiquavers. Unlike before, however, the slowest *andante* is not approximately as twice as slow as the fastest, but this can be explained by the relative rarity of metronome marks for *andantes* in 3/4, and that the ones available are for sections with a relatively similar range of note values. In fact, as far as it has been possible to establish this, there appear to be no slow *andantes* in 3/4 besides the one mentioned above, and there appear to be no *andantes* with or without *con moto* with crotchets as their most common note value. There are some sections marked *Andante con moto* without semiquavers, however, such as the aria with choir in the fourth movement of the Cantata WoO 87, and these movements presumably move at a speed that is somewhat faster than J=69 and 72, perhaps around J=80. The speeds for other *andantes* in this metre can be deduced from the table above.

3.3.6: Andantes in c

There are slightly more *andantes* in **c** than in 3/4 but none of these have metronome marks by Beethoven, which makes establishing the intended tempos for these sections uniquely difficult. It should be possible, however, to shed some light on the relationship between *andantes* and *adagios* in this metre, as well as to explore any parallels between *andantes* in 2/4 and **c**. The metronome marks for the *andantes* in this metre can be found in Table 3.3.6.1.

Table 3.3.6.1: Beethoven's andantes in c with metronome marks.

<u>Work</u>	Tempo indication	Metronome	<u>Note</u>
		<u>Mark</u>	<u>values</u>
String Quartet op. 131/iv	Andante moderato e lusinghiero	[]=69]	.)))
String Quartet op. 127/ii	Andante con moto	[\$=80 (\$=40)]	.)\.\\
String Quartet op. 130/iii	Andante con moto ma non troppo	[\$=144(\$\display=36)]	- }'}'
Variations WoO 64, theme	Andante con moto	[]=138]	1/3

As there are only four metronome marks by a contemporary of the composer for *andantes* in this metre, the evidence is somewhat thin on the ground. There is, however, one particular case found in the third movement of the Piano Sonata op. 110 in which a short andante is embedded in an Adagio ma non troppo section with a speed by Czerny, but the andante does not have a metronome mark itself. As argued in section 3.1.6, it is likely that Czerny's and Moscheles's speed for the Adagio ma non troppo is probably not representative of what Beethoven had in mind, and that a speed of \downarrow =60 is perhaps more likely to be a closer approximation. This would also mean that since the *Andante* is preceded by *Adagio ma non* troppo that the Andante has an intended speed that is probably slightly faster than \downarrow =60. This seems especially plausible in light of Karl Holz's recommended speed of \downarrow =69 for a section with a similar range of note values and a similar tempo indication: the Andante moderato e lusinghiero in the fourth movement of the String Quartet op. 131. It seems therefore likely that sections in c marked Andante ma non troppo with mainly quavers and few semiquavers move at speed between J=60 and J=69, with the latter speed probably being a good guide for the plain andantes. This range, however, is quite similar to the speeds for andantes in 2/4 with a similar range of note values, and suggests that in some cases Andantes in c move at a speed similar to those in 2/4.

The three other metronome marks by contemporaries of the composer for *andantes* in this metre all have *con moto* added to their tempo indication. The first is found in the second movement of the String Quartet op. 127, and contains semiquavers and demisemiquavers as its shortest note values. Holz's speed for this section is J=40, comparable to the speeds for sections with the same tempo indication and range of note values in 2/4, which as seen before move at the equivalent of J=44-46. A slightly slower speed of J=36 (printed as J=144) is given to the third movement of the String Quartet op. 130, which contains primarily crotchets, quavers, and semiquavers at the beginning, with smaller note values appearing

later. The tempo indication of this movement is *Andante con moto ma non troppo*, a somewhat contradictory and experimental phrase that seem to suggest a tempo somewhere between plain and fast *Andante*, but which might explain the difference in speed between opp. 127 and 130. Finally, the theme of the Variations WoO 64 is marked *Andante con moto*, and contains almost only crotchets and minims, a larger range of note values than any other *andante* in this metre. Moscheles's speed for this movement, J = 138, is the fastest encountered in any *andante*, but his speed seems justified due to the large note values and the relatively fast tempo indication. The speeds for the five *andantes* in c discussed so far are summarized in Table 3.3.6.2.

Table 3.3.6.2: Estimated intended speeds for Beethoven's andantes in c.

Common	Slow Andante	Andante	Andante con moto
note value			
. N. A.	*	J=36	J=36-40
الرا	J=60	J =69	*
1/3	*	*	J=138

On the whole, it seems that *andantes* in e and 2/4 with the same tempo indication and range of note values move at the same speed: for plain *andantes* with quavers in 2/4 a speed of J=60 (given in Table 3.3.4.2 as J=120) is expected, while a comparable section with quavers and crotchets in e moves at a somewhat faster J=69. The most prominent difference between e and 2/4 appears to be primarily in the ranges of note values that Beethoven employs in these metres, as a comparison of Tables 3.3.6.2 and 3.3.4.2 shows.

3.3.7: Andantes in ¢

The final group of *andantes* are those in ¢, which occur only nine times in Beethoven's oeuvre. Much like those in c, none of these sections have metronome marks by the composer, and only three have speeds by a contemporary, which can be found in Table 3.3.7.1.

Table 3.3.7.1: Beethoven's andantes in ¢ with metronome marks.

<u>Work</u>	Tempo indication	Metronome	Note
		<u>Mark</u>	<u>values</u>
Piano Sonata op. 27 no. 1/i	Andante	[]=66-76]	JY_Y]
Ballet op. 43, no. 10	Andante	-	
Cantata op. 136, no. 2	Andante	-	. \\.\\.\
Ballet op. 43, no. 12	Andante	-	JY_8
King Stephen op. 117, no. 8	Andante	-)
Piano Sonata op. 14 no. 2/ii	Andante	[]=88-132]	J
Variations op. 44	Andante	-	J
Variations WoO 73	Andante con moto	[]=132-160]	.)/_
Equale WoO 30 no. 1	Andante	-	0/0

The first is appears in the second movement of the Piano Sonata op. 14 no. 2, a work which Czerny studied with Beethoven, and which contains primarily single quavers followed by quaver rests—the equivalent of crotchets, as seen earlier—as most common note values. Czerny's speeds for this movement are quite fast: $J = 66 \ (J = 132)$ in the Haslinger edition, and J = 116 and 112 in the later editions. Moscheles, on the other hand, recommends J = 84 and 96, which seems to be much more in line with the speeds for plain *andantes* in c, as table 3.3.6.1 above suggests. Czerny's speeds, as Table 3.3.4.2 shows, are largely the same as those in 2/4 with the note values halved, showing once again a parallel between the two metres.

The Andante con moto Variations WoO 73, which contain primarily crotchets and groups of four semiquavers at the start, are given faster speeds, with Czerny recommending \$\]=80 and Moscheles \$\]=132. It seems therefore that both editors have largely ignored the influence of the semiquavers, as Moscheles's speed (perhaps inadvertently) correlates with the speeds for movements with the same tempo indication and with crotchets in \$\cepc\$, much like in the case of the Piano Sonata op. 14 no. 2 above. Czerny's metronome mark, on the other hand, seems to indicate a distinction between \$\cap\$ and \$\cap\$, and his suggested speed is somewhat more plausible as a representation of Andante con moto with crochets in this metre, since it is faster than his suggestion for op. 14 no. 2 above. Nevertheless, it seems possible that Czerny somewhat overestimated the speed, and that a slightly slower tempo somewhere between

approximately $\int =66$ and 80 is more appropriate—again speeds that also occur in 2/4, indicated with half the note values.

Finally, the third *andante* with metronome marks by contemporaries is found at the beginning of the first movement of the Piano Sonata op. 27 no. 1, which contains mainly crotchets, quavers, and some semiquavers. Czerny's and Moscheles's recommended speeds for this section are surprisingly slow, ranging from J=66 to 76, less than half the speed the Variations WoO 73. This suggests one of several scenarios, the first being that both Czerny and Moscheles underestimated the speed that Beethoven had in mind by a very large degree, which always seems somewhat implausible. The second possibility is that the suggested speeds are representative of Beethoven's intended speed, but that the time signature is inconsistent. This seems more likely, since the suggested speeds are indeed similar to those for *Andantes* in c with the same range of note values, as Table 3.3.6.2 shows. Whether Beethoven or the editor was responsible for the time signature in the printed edition is hard to say, as the autograph score is lost, but it seems plausible that the printed ¢ in the first edition is either a misprint or an inconsistency on the part of the composer.²²⁴

Of the six other *andantes* in this metre, two are found in the Ballet op. 43. The first is found in the tenth number, and is an eight-bar-long section marked *pastorale* containing mainly quaver triplets, while the second is a section ten bars long in no. 12, which contains primarily quavers and some semiquavers. A third *andante* in this metre is found towards the end of no. 8 in the Singspiel *King Stephen*, which contains mainly quavers but which is only five bars long, and the fourth is found in no. 2 of the Cantata op. 136 and is only seven bars long. Besides the three (or rather two) *andantes* in & with editorial metronome marks discussed above, there are only two cases which include a substantial amount of material: the Equale WoO 30 no. 1 for four trombones (containing only semibreves, minims, and a few

_

²²⁴ Schenker seems to have suspected that the time signature is wrong, as his edition lists it as **c**. Heinrich Schenker, ed., *Beethoven: Complete Piano Sonatas*, Vienna (Universal edition), 1918, i, 232.

crotchets), and the Variations for Piano Trio op. 44, which contains only quavers followed by quaver rests in the beginning. Since the variations have a similar range of note values as the second movement of the Piano Sonata op. 14 no. 2, one would expect a similar speed, and although there is no metronome mark from a contemporary of Beethoven available, several modern ensembles play it at a speed of around \rfloor =66, Czerny's fastest speed for the Sonata.²²⁵

In summary, it seems plausible that Beethoven's plain *andantes* in ¢ with crotchets or single quavers followed by a quaver rest were intended to move at a speed of around J=66, and that *Andante con moto* indicates a speed that is at least somewhat faster than that. It is difficult to say much more about the intended tempos of *Andantes* in ¢ due to the lack of data, but Table 3.3.7.1 is an attempt to order them from slow to fast.

3.3.8: Conclusion

As with the *adagios*, the intended speeds for Beethoven's *andantes* are determined by the time signature, the most common note values at the beginning of the section, and various modifiers that are added to the tempo indication. In addition, the character as shown explicitly by the tempo indication (*scherzo*, *alla marcia*, etc.) also seems to have an influence on the intended speed. With the addition of this extra variable, however, also comes a greater degree of uncertainty: as in *adagios*, there are several *andantes* in which it seems that Beethoven used an inconsistent time signature, range of note values, or neglected to add a modifier to the tempo indications. It seems therefore quite likely that one or more *andantes* should have been identified as a particular character, but that Beethoven neglected to do so. For instance, in the hypothetical case that Beethoven neglected to identify the second movement of the Piano Sonata no. 14 no. 2 as a march, Moscheles's speed of J=84 (and to a lesser extent his second suggestion of J=96) would be a much better approximation than

_

²²⁵ See for instance Ludwig van Beethoven and Franz Schubert, *Beethoven Archduke Trio, Schubert E-flat Trio [and other works]*, The Castle Trio, (B00005RFSD, 2002).

Czerny's, who, as discussed in section 3.3.7 above, suggests speeds that are quite far from that of a march, but which are otherwise more consistent with the principles underlying Beethoven's tempo.

3.4: Other Slow Tempo Indications: Sostenuto, Grave, and Maestoso

Besides the three main slow tempo indications—Adagio, Largo, and Andante—there are a number of rarer expressions that also indicate a slow tempo. The most common of these are Sostenuto, Grave, and Maestoso, and although these expressions seem to indicate a particular character rather than a tempo, they are at least in some cases used to convey a tempo.

Sostenuto is defined by Koch as 'amusing, or with a carried and sustained tone', ²²⁶ allowing for two different interpretations of the term. The former is a description of character, while the latter relates more directly to aspects of performance, much like dynamics, legato slurs and perhaps most obviously the use of the sustain pedal on a piano. Nevertheless, there are instances in which the term clearly refers more to a particular tempo than an expression: in the second version of Fidelio from 1805, for instance, the aria 'In Leben's Frühlingstagen' contains the expression 'Il tempo poco più sostenuto', indicating that the word can have a direct effect on the tempo. According to Clive Brown, 'for Beethoven [Sostenuto] seems to have indicated a tempo somewhat, but not much, faster than he might have intended by "adagio". '227 A close examination of Beethoven's metronome marks will explore this observation further.

There are two cases in which Beethoven gave a metronome mark to a sostenuto: the first movement of the Seventh Symphony, and the first movement of the Cantata op. 112, both of which are marked *Poco sostenuto*. Whether the addition of *poco* makes the tempo faster or slower is hard to say: in adagios it increases the speed, while in andantes it reduces

²²⁶ Koch, *Lexikon*, 1422. Original: 'Unterhaltend, oder mit getragenem und fort slingendem Tone.' Brown, 'Performance Practice', 372.

it. Nevertheless, *Poco sostenuto* is much more common than plain *sostenuto*, which appears only in the second movement of the Piano Sonata WoO 47 no. 3. It might therefore be more prudent to focus directly on *Poco sostenuto*, as this is the most common manifestation of *sostenuto* in Beethoven's oeuvre. The Seventh Symphony, which starts in c, contains primarily minims in the first eight bars, with crotchets and quavers also making an appearance. From the ninth bar onwards, semiquaver figuration starts to fill out the gaps between the minims, which from that point onwards are the most common note value in this section. As seen, in previous sections, however, the note values at the beginning of a slow section determine the speed much more than those later, so it seems likely that the minims and crotchets determine the speed, and not the semiquavers. Therefore, in order to assess the relationship between *adagio* and *Poco sostenuto*, an *adagio* in c with metronome marks needs to be found that contains primarily minims, and crotchets at the beginning.

As seen in section 3.1.6, there are no less than two suitable candidates: the second movement of the String Quartet op. 59 no. 2, and the third movement of the Ninth Symphony. Both of these are clearly slow *adagios*: the Quartet is marked *Molto adagio*, and the Symphony *Adagio molto e cantabile*. In addition, both movements are marked \rfloor =60, and since these are slow *adagios*, it seems quite likely that a hypothetical plain *adagio*—or perhaps a fast *adagio*—with the same range of note values moves at around \rfloor =69, the speed that Beethoven gave to the opening of the Seventh Symphony. The same speed is also found in *andantes* in c with somewhat smaller note values than the Symphony—crotchets and quavers—which indicates that *Poco sostenuto* is somewhat slower than *andante*.

The other *Poco sostenuto* with a metronome mark by Beethoven, the first movement of the Cantata op. 112, has primarily semibreves, minims, and crotchets as its most common note values in the beginning. In this case, there is no *Adagio* with a metronome mark, but the opening *Adagio ma non troppo e molto espressivo* of the String Quartet op. 131 contains a

fairly similar range of note values, with minims and crotchets. Holz's speed of J=84 (misprinted as J=84, as discussed in section 3.1.7) is the same as Beethoven's for the Cantata, and therefore seems that in this case too *Poco sostenuto* is similar to a fast *adagio*.

Similar observations can be made in two *sostenutos* with metronome marks by contemporaries of Beethoven. (Czerny's speed for the third *sostenuto*, the second movement of the Piano Sonata WoO 47 no. 3, is almost certainly not based on a performance or instruction by the composer, and is therefore best excluded here. In addition, the movement is also marked *minuetto*, which makes it a moderate tempo.) The opening *Assai sostenuto* in ¢ of the String Quartet op. 132, which contains almost only minims, is given a speed of J=58 by Holz, which, assuming that the *assai* slows down the speed, is similar to the range for slow *adagios* in ¢ as estimated in Table 3.1.7. Similarly, the *Poco sostenuto* in c in the first movement of the Piano Trio op. 70 no. 2, which contains mainly crotchets and quavers at the beginning, is given speeds of J=80 and J=63 by Czerny and Moscheles, respectively. Since the speeds for *Poco sostento* have been similar to those for fast *adagios* so far, Moscheles's estimation seems more plausible, as his suggestion is closest to the estimated speeds for fast *adagios* in c in Table 3.1.6.2.

The fact that *Poco sostenuto* seems to indicate the same speed as a fast *adagio* raises questions about the role of the modifier *poco*: if *poco* has the same relationship with *sostenuto* as with *adagio*—that is, adding *poco* constitutes an increase in tempo—then it might even be possible that *sostenuto* indicates the same speed as *adagio*, and that the difference only relates to the expression, much like in the case of *Largo*. There is some circumstantial evidence for this, as the term is often found in programmatic music that deals with a pleasant subject or situation: in the Quartet 'Er sterbe' in the last act of Fidelio (in all three versions), when *Un poco sostenuto* appears, Fidelio is saved, and in the *Poco sostenuto* in the finale Fidelio's chains are removed, as well as in the Song 'An die Hoffnung', which is

all about hope. It could therefore well be that *Sostenuto* is more or less a counterpart to *Largo*: whereas the latter is mainly used for music that is solemn, serious, and perhaps even somewhat introvert, the former is used primarily for music that expresses hope, joy, and which seems much more extrovert. Despite these differences, both seem to move at speeds that run parallel to those of the *Adagios*.

Koch considers *Grave* similar to *Con gravità*, ²²⁸ which he describes as follows:

With dignity or seriousness, which in performance, especially on string instruments, requires a very marked tone, and a sustained and meaningful bowstroke. Although the tempo is more slow than fast with this character, the notes (unless they appear in fast figures) are not allowed to drag together, instead they must be separated, not too sharply and pointedly, but they have to be separated by bowing in an appropriate manner. ²²⁹

In addition, Koch claims that dotted rhythms are generally to be overpunctuated, and gives a short example in which dotted quavers are lengthened, and the following semiquavers shortened. In about half of Beethoven's *Grave* sections, double-dotted quavers or crotchets appear in one form or another, ²³⁰ and it seems that these sections explicitly indicate what Koch merely recommended as good practice for characterisation.

-

²²⁸ Koch, *Lexikon*, 683.

²²⁹ Ibid., 359-360. Original: 'Mit Würde, oder mit Ernst, erfordert im Vortrage, besonders auf Bogeninstrumente, einen sehr, markirten Ton, und einem unterhaltenden und bedeutenden Strich. Obgleich bey diesem Charakter sich das Zeitmaaβ mehr langsam, als geschwinde bewegt, so dürfen dennoch die Noten (es sei denn, daβ sie in geschwinden Figuren vorkommen) nicht zusammengeschleift, sondern sie müβen abgestoβen, aber nicht scharf und spiβig, sondern mit einem solchen Nachdrucke des Bogens abgestoβen werden, der sie unterhaltend macht.'

²³⁰ Op. 13/i, op. 16/i, op. 43 no. 7, op. 65/i, op. 117 no. 8, and op. 120 var. 14 all contain double-dotted rhythms. In the remaining sections (the opening of the final act of Fidelio, nos. 1 and 6 in op. 85, the credo in the Missa Solemnis, and Der schwer gefasste Entschluss from the String Quartet op. 135) the dotted rhythms are less prominent.

Whether *Grave* is actually slower than *Adagio* is difficult to say with certainty as the evidence is rather thin, but there are a number of metronome marks by Beethoven's contemporaries that illuminate this issue at least to some extent. The earliest *Grave* in Beethoven's oeuvre is found in the Piano Sonata op. 13, a work which Czerny claimed he studied with the composer, and which Moscheles also had great interest in. ²³¹ The eleven bar long opening section is written in c, and contains semiquavers as most common note values, in addition to longer note values in the first few bars and some demisemiquaver figurations later on. With the exception of Czerny's suggestion of \$=92 in On the Proper Performance, all other suggestions by the two editors are in the range of $\searrow =58-63$. The opening *Grave* of the Quintet for Winds and Piano op. 16, which contains a similar range of note values, is given a similar speed of >=63 by Czerny. Both of these ranges are slower than the slowest adagio in c in Table 3.1.7.2 (\$\rightarrow\$=88), but since the note values in the Piano Sonata are much smaller, it seems possible that *Grave* moves at about the same speed as the slowest *adagios*.

There is one final *Grave*: the 'Schwer gefasste Entschluß' of the last movement of the String Quartet op. 135, which is in 3/2 and marked Grave ma non troppo tratto, the equivalent of 'serious but not too drawn out'. The section is only eleven bars long, and consists mainly of quavers. The only other sections in 3/2 with a metronome mark by Beethoven are the *Andante maestoso* in the Ninth Symphony (=72, semibreves and minims) and the Adagio ma non troppo ma divoto that follows it (=60, semibreves, minims, and single crotchets). Holz's speed for the String Quartet, J=48, seems unusually slow, and results in a minim pulse of $\rfloor = 24$, but the relatively slow note values could explain this difference. Furthermore, a minim pulse of $\rfloor = 24$ is not unheard of, as the slowest *adagios* in ¢ have the same pulse.

²³¹ Moscheles, *Recent Music*, 3.

The final slow indication to be discussed in this chapter is *Maestoso*, which Koch compares to *con gravità*, and therefore by extension to *Grave*. There is only a single metronome mark by Beethoven available for a *Maestoso*, which is found before the final *Prestissimo* of the Ninth Symphony. This four bar section in 3/4 is marked J=60, and contains dotted and undotted crotchets, single semiquavers, and a few quavers in the voices, with the strings and the first flutes also having downward scales in demisemiquavers. The comparison with *Grave*, and by extension *Adagio*, goes a long way: as Table 3.1.5.2 has shown, there are *adagios* with crotchets and quavers that move at an estimated speed of around J=56 (J=112), but these are explicitly fast *adagios*.

There are only two other *maestosos* with metronome marks by a contemporary of the composer, found in the first movements of the Piano Sonata op. 111 and the String Quartet op. 127. The former contains primarily double-dotted quavers followed by single demisemiquavers, as well as some undotted crotchets and quavers and a time signature of c. Czerny's and Moscheles's speeds for this section range from \$\displays\$ = 54 to 60, which puts this *Maestoso* in the same range as fast *adagios*, as Table 3.1.6.2 indicates. Holz's speed for the String Quartet op. 127, however, is somewhat problematic: although the six bar section contains only minims, crotchets, and quavers, as well as a time signature of 2/4, Holz suggests a speed of \$\displays\$ = 54. As Table 3.1.4.3 shows, this is far below what one would expect for a fast *adagio* with these note values. It seems possible, however, that the note value has been incorrectly transmitted: a speed of \$\displays\$ = 54 makes more sense, especially since fast *adagios* with mainly quavers move at a speed of around \$\displays\$ = 44.

In summary, although the evidence is not overwhelming, it seems that sections marked *maestoso* are similar in character to those marked *grave*, but that they move much faster: the former seems to move at the speed of fast *adagios*, while the latter is comparable

-

²³² Koch, *Lexikon*, 922.

to a slow *adagio*. *Sostenuto*, on the other hand, seems to move at the same speed as plain *adagios*.

3.5: Summary and Conclusion

The indications discussed in this chapter can be divided into two groups: those which indicate purely a tempo, and those which also imply a particular kind of expression. The only indication discussed in this chapter that exclusively indicates speed is *adagio*. There are, however, four indications that imply a particular expression, but which move at a speed comparable to *adagio*.

Sostenuto, which moves parallel to plain adagio, often (but not always!) expresses generally pleasant feelings, and is also used as a modifier to adagio, presumably to indicate the same expression. Largo, however, moves at the same speed, but is much more severe and solemn, as are Maestoso and Grave, which move parallel to fast and slow adagio respectively. Finally, Andante for the most part expresses pleasant feelings, but the term is also used as a means to indicate a speed comparable to walking or marching. All of this is summarized in Table 3.5.1 below.

Table 3.5.1: The relations between the different slow tempo indications.

	Tempo	Tempo and expression		
st		Pleasant	Severe and solemn	
Fast	Fast Andant	e	*	
^	Andante		*	
1	Slow Andani	te	*	
_	Fast Adagio	*	Maestoso	
Slow	Adagio	Sostenuto	Largo	
S	Slow Adagio	*	Grave	

A great deal of Beethoven's use of slow tempos seems to boil down to his musical intuition, and there are several cases in which he seems to have been inconsistent, by indicating the wrong time signature, neglecting to add a modifier to the tempo indication, or in rare cases

using note values twice or half the size. As there are three different factors determining the tempo—range of note values at the beginning, metre, and tempo indication— about which only a limited amount of evidence is available, it seems quite plausible that the method employed in this dissertation has overlooked a number of Beethoven's inconsistencies.

Nevertheless, the consistencies that are found between Beethoven's own metronome marks indicate that this method is largely on the right track.

One final issue that remains is the notion of the distribution of note values. Since not all slow sections have the same range of note values all the way through, there are several cases in which there is a stark contrast between the ranges of note values at the beginning and later on. A good example of this is the third movement of the Piano Sonata op. 106, which begins with mainly crotchets and quavers, while later sections have semiquavers and even demisemiquavers as their most common note values. As the note values seem to have intuitively suggested a particular speed to Beethoven, the question then arises whether the tempo established at the beginning is maintained all the way through, or whether it is changed—probably to a fairly small degree—when different note values appear. There seems to be no reliable way to test either hypothesis, but since Beethoven's use of the slow tempos seems to have depended on his own musical intuition, it seems plausible that there are cases in which the tempo is to be maintained more strictly than in others. It seems unlikely, however, that any musicological study short of a time machine will provide a detailed description of the relationship between tempo flexibility and the range of note values.

Chapter 4: Beethoven's Moderate Tempo Indications

Since the previous chapter defined Beethoven's slow tempos as those slower than *allegretto*, the moderate tempos will have that term as a lower limit. As *allegro* is obviously a fast tempo, the moderate tempos are left with what seems to be a very narrow range of just a single indication. Beethoven's use of tempo indications, however, is not necessarily exclusively linear: as the previous chapter showed, different expressions can still indicate the same speed. It is therefore to be expected that there is at least overlap between *allegretto* and *moderato*, and the tempos of minuets and marches, as these—with some exceptions—occupy a middle ground between fast and slow.

than 40 times in his oeuvre. Unlike terms like *adagio*, *allegro*, or *andante*, however, *moderato* is almost never used as a tempo indication on its own. Instead, it appears paired with other terms, ranging from *andante* (op. 125), and *allegretto* (op. 53), to *vivace* (op. 119 no. 9). In only a small number of works *moderato* appears on its own: the fifth movement of the String Trio op. 3, the second movement of the Sonata for Piano Duet op. 6, the themes of the Folksong Variations op. 107 no. 1 and 5, the final variation of no. 4 of the same set, the opening section of the march and chorus 'Heil unserm Könige' from King Stephen op. 117, the 18th variation on the Diabelli Variations op. 120, the Minuet WoO 82, and the Song WoO 118. In almost all of these cases, however, there is another term provided that gives information on the intended tempo. The String Trio op. 3, for example, is marked *Moderato* but is also identified as a *Menuetto*, much like the Minuet WoO 82. Furthermore, the two *moderato* themes in the Folksong Variations op. 107 are identified as 'Air Tirolien', which presumably also gives some information about the intended tempo. ²³³ The only times that *moderato* is used as an independent indication is in the final variation of op. 107 no. 4 and in

_

²³³ In both cases, the *moderato* seems to have been Beethoven's own invention: in his settings of the same melodies in WoO 158/1 no. 5 and 6, the term does not appear. The term first appears in the autograph in London, British Library, Eg. MS 2327.

the eighteenth of the Diabelli variations op. 120. In both cases the *moderatos* are preceded by tempos that are obviously faster (*Allegro* in op. 120, *Allegretto* in op. 107 no. 4), providing the performer with a kind of framework for the interpretation of *moderato*: presumably, the intended speed of the term is more moderate and somewhat slower than the speed of the preceding variations.

Given the relative rarity of these independent *moderatos*, as well as the fact that they only ever seem to occur in places in which their context illuminates their meaning, it seems best to consider *moderato* as not an independent tempo indication, but one that primarily serves as a modifier to other terms. Koch's definition of the term, which is 'moderate, [and] used as a qualifier of the other five kinds of tempo', ²³⁴ supports this classification, and it seems likely that terms such as *mässig* have a similar function. This leaves only *allegretto* as a moderate tempo indication, along with expressions such as *Tempo di menuetto*.

4.1: Allegretto

Koch defines *allegretto* as follows:

A little fast or cheerful. Composers usually use this indication for compositions that are noticeably slower and that should be performed with less fire than an Allegro, because they commonly have a cheerful character. They must therefore not be performed with very short notes [as in an *Allegro*], but in a more amusing manner instead.²³⁵

²³⁴ Koch, *Lexikon*, 972.

²³⁵ Ibid., 130. Original: 'Ein wenig hurtig oder munter. Die Tonsetzer pflegen diese Unterschrift gewöhnlich solchen Tonstücken beizufüchen, die merklich langsamer, und mit weniger Feuer des Ausdrucks vorgetragen werden sollen, als das Allegro, weil sie gemeiniglich den Character einer angenehmen heiterkeit haben; sie müβen daher nicht mit so scharf abgestossenen Tönen, sondern mehr Unterhaltend vorgetragen worden.'

Rousseau's much shorter definition—'The diminutive *Allegretto* indicates a more moderated cheerfulness [than an *Allegro*], and a little less liveliness in the bar'²³⁶—is broadly speaking in line with Koch, despite the fact that the relationship between *Allegretto* and *Allegro* is defined as a moderation of 'cheerfulness' rather than 'fire'. Mozart's definition—'usually having something pleasant, charming, neat, and playful'—seems to on the whole agree with Koch.²³⁷ In summary, much like in the *andantes* discussed in the previous chapter, there is a clear emphasis in theoretical treatises on a the expression of pleasant feelings, as opposed to the solemn and fiery affects often found in slower and faster tempos, respectively. The metronome marks that Beethoven supplied for his *allegrettos* can be found in Table 4.1.1 below.

Table 4.1.1: Beethoven's metronome marks for allegrettos.

Metre	Work	Tempo indication	Metronome	Note
			<u>mark</u>	values
3/8	String Quartet op. 18 no. 4, i	Andante scherzoso quasi allegretto	J.=56	>
	String Quartet op. 18 no. 6, v	Allegretto quasi Allegro	J.=88	
	String Quartet op. 59 no. 1, ii	Allegretto vivace e sempre scherzando	J.=56) }
	Fugue op. 137	Allegretto	J.=63	. Y. N
6/8	String Quartet op. 59 no. 3, ii	Andante con moto quasi allegretto	J.=56	•
	Symphony op. 68, v	Allegretto	J.=60	7/7
	String Quartet op. 95, iv	Allegretto agitato	J.=92)
2/4	String Quartet op. 74, iv	Allegretto con variazioni	J=100	_ }/_
	Symphony op. 92, i	Allegretto	J=76	_ }/_
	Symphony op. 93, ii	Allegretto	≯ =88	. ! !
	String Quartet op. 95, ii	Allegretto ma non troppo	J=66)
3/4	String Quartet op. 18 no. 4,	Allegretto	J.=84	_
	iii			
	String Quartet op. 59 no. 2,	Allegretto	J.=69	\$
	iii			

As is clear from the top half of the table, there is a difference between the *allegrettos* on the one hand and the slow tempos from the previous chapter on the other. In the last chapter,

_

²³⁶ Rousseau, *Dictionaire*, 46. 'Le diminutive *Allegretto* indique une gaieté plus modérée, un peu moins de vivacité dans la Messure.'

²³⁷ Leopold Mozart, *A Treatise on the Fundamental Principles of Violin Playing*, trans Editha Knocker, Oxford and New York (Oxford University Press) 1985, 50.

adagios and andantes in 6/8 were clearly faster than those in 3/8, but this distinction seems to have disappeared, as the sections in both metres run largely parallel. Both contain an allegretto that borders on andante with quavers at a speed of J.=56; a plain allegretto with quavers and semiquavers marked J.=60 or 63; and a fast Allegretto with the same note values with a speed of J.=88 or 92. It therefore seems that there is no difference as far as tempo is concerned between allegretto in 3/8 and 6/8, which should make determining the intended tempos for these sections somewhat more straightforward due to the increased availability of evidence.

4.1.1: Allegrettos in 3/8

There are only 11 allegrettos in 3/8, which can be found in Table 4.1.1.1 below along with their metronome marks, with those in straight brackets indicating the suggested range of speeds by Czerny and Moscheles.

Table 4.1.1.1: Beethoven's uses of allegretto in 3/8.

<u>Work</u>	Tempo indication	Metronome	<u>Note</u>
		<u>mark</u>	<u>values</u>
Cantata op. 136/v	Allegretto	-	.)\.\\
Variations WoO 76	Andante quasi Allegretto	[\$=104-120])
String Quartet op. 18 no. 4/ii	Andante scherzoso quasi allegretto	J.=56	3/1
String Quartet op. 59 no. 1/ii	Allegretto vivace e sempre scherzando	J.=56	\$
Fugue op. 137	Allegretto	J.=63	3
Allegretto for String Quartet WoO 210	Allegretto	-	3/1
Rondo WoO 48	Allegretto	-	3/1
Piano Sonata op. 31 no. 2/iii	Allegretto	[].=76-88]	
Varations WoO 73	Allegretto alla austriaca	[].=80]	3/1
String Quartet op. 18 no. 6/vi	Allegretto quasi allegro	J.=88	
Ritterballet WoO 1/iii: Jagdlied	Allegretto	-	J Y_

As can be seen in Table 4.1.1.1, there are four *allegrettos* in 3/8 with metronome marks, which indicate speeds between J.=56 and 88. Of the eleven *allegrettos* in this metre, the *Allegro quasi allegretto* finale of the String Quartet op. 18 no. 6 is the only one for which the

creative process is extensively documented, with the sketches showing the various stages through which the movement went, which will be examined in the following discussion. Example 4.1.1.2a shows an early sketch for the *allegretto*, ²³⁸ at this time in 6/8 metre. With the time signature, the figuration, and the note values different from the published version, this sketch is hardly recognisable as an early version of the finale. Despite the differences, there are good reasons to identify this sketch as a proto version of the finale: on the opposite page of the sketchbook, a sketch with similar figuration shows that at this stage Beethoven was already experimenting with the inclusion of an early version of La Malinconia. Although the figuration of the sketch of the Adagio is also quite different from the final version, its metre, placement in the sketch between two sections of quaver figurations, and the presence of a motive that also occurs in the published version—three semiquaver appoggiaturas, followed by a longer note—clearly identify this section in 6/8 as a forerunner of the final version. On the same page on a separate stave, Beethoven sketched a new version of the La *Malinconia* theme, which can be seen in Example 4.1.1.2b. ²³⁹ This sketch is almost identical to the final form, with the exception of the lack of over-punctuated rhythms that characterises the theme in its published edition.

After another page of sketches in 6/8, which includes various attempts to make sense of the connection between the sections in 2/4 and 6/8, as well as sketches for the finale of the Piano Sonata op. 22, the first sketch explicitly marked *Allegretto* appears. It is in 3/8, and contains semiquaver figuration similar to the final version. In this version, Beethoven seems to struggle with how to include a section in 2/4, which is here identified as an *Adagio* for the first time. Example 4.1.1.2c shows one of several attempts in which Beethoven tried to make this connection.²⁴⁰

2

²³⁸ Richard Kramer, ed. A Sketchbook from the Summer of 1800, ii, 45.

²³⁹ Ibid., 47, 10r.

²⁴⁰ Ibid., 51-2, 12v.

As in the final version, the recapitulation of this *Adagio* is interspersed with what will later be short *Allegretto* sections, which as can be seen in the final line of the sketch have an odd number of bars. Notating this passage in 6/8 is therefore not possible without including half an empty bar, or changing the music. In fact, it is likely that this is the reason that Beethoven changed the metre when he changed the figuration from quavers to semiquavers, as the former time signature restricted him in ways that the latter did not. Simply put, in the same way that the metronome marks for *allegrettos* show no difference between 3/8 and 6/8, the sketches for the finale of the String Quartet op. 18 no. 6 also suggest that this is a distinction primarily based in notation.

Example 4.1.1.2: Sketches and the final version of the opening of the final movement of the String Quartet op. 18 no. 6.

a: Early sketch for the final movement of op. 18 no. 6.



b: A sketch produced shortly after a, of the *La Malinconia* section.



c: Later sketch for the same movement, including the first instance that the *La Malinconia* theme is incorporated into the *allegretto* section.



d: The final version.



As Example 4.1.1.2 shows, both in the sketches and the final version of the String Quartet, the range of note values is rather narrow, and it is quite clear in the published version that quavers and semiquavers are the most common note values throughout the *Allegretto quasi allegro* passages. The same is true for the other *allegrettos* in Table 4.1.1.1: the note values on the right side of the table therefore do not only represent the most common note values at the beginning, but are also the most common note values throughout the whole section. Admittedly, the beginning of the *Allegretto* section of the Cantata op. 136 contains fewer demisemiquavers than the rest of the section, but this seems to be the exception that proves the rule.

Beethoven's slowest metronome mark for an *allegretto* in 3/8 is for a section that occupies the threshold between *andante* and *allegretto* which is found in the second

movement of the String Quartet op. 59 no. 3. The tempo indication and the speed—Andante scherzoso quasi allegretto and J=56—have been discussed before in Section 3.3.1, but there it was classified as a 'fast andante scherzo', as it was much faster than any of the other andantes. The second movement of the String Quartet op. 59 no. 1, which with a tempo indication of Allegretto vivace e sempre scherzando is clearly in Allegretto territory, has the same range of note values and the same metronome mark. The third Allegretto with semiquavers and quavers, the Fugue op. 137, is only a little faster, with a speed of J=63. Two conclusions can be drawn from these sections. Firstly, as the fugue moves slightly faster than the two string quartets despite not being marked scherzoso, the term scherzoso does not seem to indicate an increase of speed. Secondly, it seems that allegrettos with quavers and semiquavers move at a speed around J=56 and 63. This last observation makes the range of speeds suggested by Czerny and Moscheles for the Variations WoO 76—the equivalent of J=35 and 40—seem much too slow, as the theme and first three variations also contain almost only quavers and semiquavers. Since WoO 76 is marked Andante quasi Allegretto, however, it is possible that the tempo indication explains the slow speed.

At the other end of the spectrum is *Allegretto quasi allegro* in the last movement of the String Quartet op. 18 no. 6 discussed at the start of this section, which occupies the border between *allegretto* and *allegro*. Here too, the note values range from semiquavers to quavers, but the tempo indication suggests a much faster speed, which justifies Beethoven's .=88. Although this String Quartet is the only one in this metre that explicitly occupies the threshold between *allegretto* and *allegro*, there could be other *allegrettos* in which the term is used in the same way.

A reasonable candidate for this is the third movement of the Piano Sonata op. 31 no. 2, another work which Czerny studied with Beethoven. Much like the last movement of op. 18 no. 6, it also contains quavers and semiquavers as most common note values, but unlike

the String Quartet its tempo indication is simply Allegretto. Czerny's and Moscheles's metronome marks for this section, which range from J.=74 to 88 therefore seem initially on the fast side compared to other *allegrettos* with the same range of note values. Although it is of course possible that Beethoven forgot to add *quasi allegro* to the tempo indication—the autograph score is lost, so it is not possible to check whether Allegretto quasi allegro was at some point a candidate—but it is not necessary in order to explain the speed. Unlike all previously discussed *allegrettos*, which are all in major keys, this movement is in d minor, and generally does not adhere to most definition of the term in the sense that it does not express cheerfulness. Instead, Czerny's describes the movement as 'impassioned' and the Sonata as a whole as 'tragic'. 241 It therefore seems plausible that the term *allegretto* is used in a different sense, and that it simply indicates a speed somewhat slower than allegro. The range of speeds suggested by Czerny and Moscheles therefore seem appropriate. Finally, the last variation of the Variations WoO 73 could also be a candidate for a fast allegretto: it contains mainly semiquavers and quavers, and has a tempo indication of Allegretto alla austriaca. Moscheles's metronome mark for this is J=80, which could be based on the speed of the Austrian dance alluded to in the tempo indication. The speeds for the other *allegrettos* without metronome marks can now be estimated by their place in Table 4.1.1.1, and the approximated intended speeds are summarized in Table 4.1.1.3 below.

Table 4.1.1.3: Estimated intended speeds for allegrettos in 3/8.

Common	Slow allegretto	Allegretto	Fast
note value			allegretto
\$).h	J.=40	J.=56-63	J.=76-88
)	[].=56-63]	[].=76-88]	*

²⁴¹ Czerny, On the Proper Performance, 43-44.

4.1.2: Allegrettos in 6/8

Allegrettos in 6/8 occur more than 30 times in Beethoven's oeuvre, and five have metronome marks either by the composer or a contemporary, which can be found in Table 4.1.2 below.

Table 4.1.2.1: Metronome marks for allegrettos in 6/8.

<u>Work</u>	Tempo indication	Metronome	Note
		<u>mark</u>	values
String Quartet op. 59 no. 3, ii	Andante con moto quasi allegretto	J.=56	٦
Symphony op. 68, v	Allegretto	J.=60	3))
Piano Sonata op. 101/i	Allegretto ma non troppo	[].=66-80]	١٧١
Bagetelle op. 33 no. 3	Allegretto	[].=84]	٦
String Quartet op. 95, iv	Allegretto agitato	J.=92	3)

Since *allegrettos* in 6/8 move at the same speed as those in 3/8, the estimated speeds for which Table 4.1.1.3 already indicates, all of these should fit into that table too, and upon further examination almost all of them do. There is only one exception: the first movement of the Piano Sonata op. 101, since Table 4.1.1.3 does not include any slow *allegrettos* with crotchets and quavers. The larger note values, however, seem to compensate for the slower tempo indication, and the recommended speeds appear generally consistent, particularly Czerny's speeds of J.=72 and 80 which are supposedly based on Beethoven's instructions.

The *allegrettos* in 6/8 move as expected at the same speed as those in 3/8, but it is worth briefly addressing Clive Brown's concerns regarding the metronome mark for the fourth movement of the String Quartet op. 95 marked *Allegretto agitato*. Brown described it as 'rather fast for a Beethoven *allegretto*', 242 and that 'it seems distinctly possible that ... 92 might be a mistake for 72. 243 As seen in Table 4.1.1.3, the former statement does not disqualify Beethoven's speed, as there are several other *allegrettos* that move at a very similar speed. These are either identified as explicitly fast *allegrettos*, such as the last movement of the String Quartet op. 18 no. 6, or have a particular character that sets them

_

²⁴² Brown 'Metronome Marks', 254.

²⁴³ Ibid., 257.

apart from the most common *allegrettos*, such as the third movement of the Piano Sonata op. 31 no. 2. The String Quartet op. 95, as the addition of *agitato* to the tempo indication suggests, is very much in the latter category, and Beethoven's metronome mark is therefore perfectly consistent, albeit inconveniently fast in performance. It is of course not completely unthinkable that J.=92 is indeed a mistake for 72, as that speed is close to Moscheles's slowest suggestion for the Piano Sonata op. 31 no.2, but it is not necessary to assume a misprint in order to explain this metronome mark.

There is only one *allegretto* in 9/8: 'Um in der Ehe' from the first two versions of Fidelio, the first of which is marked *Allegretto e grazioso* and the second *Allegretto*. In both versions, the text concerns marital fidelity, and the *allegretto* is followed by a presumably faster *allegro*, fulfilling both criteria (cheerfulness and slower than *allegro*) of Koch's definition of *allegretto*. The quavers and semiquavers are the most common note values, which makes it likely that the intended tempo for 'Um der Ehe' is close to other *allegrettos* with these note values in Table 4.1.1.3, resulting in a speed of approximately J.=56-63.

4.1.3: Allegrettos in 2/4

Allegrettos in 2/4 appear more than 50 times in Beethoven's oeuvre, more than in any other metre, and their metronome marks can be found in Table 4.1.3.1 below.

Table 4.1.3.1: Metronome marks for Beethoven's allegrettos in 2/4.

<u>Work</u>	Tempo indication	Metronome mark	Note values
Variations op. 34 var. 5	Allegretto, marcia	[]=40-52]	\$\frac{1}{2}
Symphony op. 93/ii	Allegretto scherzando	<i>\$</i> =88 (<i>↓</i> =44)	A.K.
Variations WoO 77	Andante quasi allegretto	[]=52-60]	7/2
Fantasy op. 77	Allegretto	[] =56]	♪triplets/♪
Piano Trio op. 70 no. 2/ii	Allegretto	[]=56-58]	7/2
String Quartet op. 135/i	Allegretto	[] =63]	Ŋ, single Ŋ
Bagatelle op. 33 no. 1	Allegretto quasi andante, con un	[] =66]	Ŋ, some Ŋ
	certa espressione parlante		
String Quartet op. 131/iv	Allegretto	[]=66]	.
String Quartet op. 95/ii	Allegretto ma non troppo	. =66	⅓ later ♪
Piano Sonata op. 22/iv	Allegretto	[]=69-76]	N. Ylater.
Piano Sonata op. 7/iv	Poco allegretto e grazioso	[]=60-69]	
Violin Sonata op. 12 no. 2/ii	Andante più tosto allegretto	[]=69-80]	37.)
Fantasy op. 80/ii	Allegretto ma non troppo quasi	[]=72]	JyJ and ♪
	andante con moto		
Symphony op. 92/ii	Allegretto	J =76	3 7.7.1
Fantasy op. 80/ii	Allegretto	[J=76]	3 5
Violin Sonata op. 23/ii	Andante scherzoso più allegretto	[]=84-92])
Piano Sonata op. 31 no. 3/ii	Allegretto vivace	[]=80-92]	J.)
Variations WoO 75, theme	Allegretto	[]=84]	♪, some ♪
Variations WoO 66, theme	Allegretto	[]=88]	>
Piano Sonata op. 53/iii	Allegretto moderato	[]=88-112]	.)\J
String Quartet op. 74/iv	Allegretto con variazioni	J=100	J Y J
Piano Sonata op. 54/ii	Allegretto	[]=108-172]	3 55
Variations WoO 65, theme	Allegretto	[]=108]	١٧٦
Violin Sonata op. 96/iv	Poco allegretto	[]=100-120]	3 4.7
Variations WoO 71, theme	Allegretto	[]=100-160]	الإ

As the table shows, there are only four metronome marks by Beethoven for *allegrettos* in this metre, but no less than 21 sections for which a contemporary provided a metronome mark. As expected, the slowest metronome marks are found in the two sections with the smallest note values: the fifth variation of Variations op. 34, and the second movement of the Eighth Symphony. The latter contains constant semiquavers and groups of demisemiquavers, and is marked $\lambda=88$, as well as *scherzoso*, which presumably reflects the 'amusing manner' of performance that Koch recommends. By comparison, op. 34 contains extensive demisemiquaver figuration in much of the fifth variation. Czerny's speed of $\lambda=104$ seems therefore excessively fast, and Moscheles's suggestion of $\lambda=80$ seems much more likely, also in part because it better represents the speed for marches as described in Section 3.3.4 in the

previous chapter. It therefore seems most likely that *allegrettos* in 2/4 with demisemiquaver figuration move at a speed between approximately J=40 and 44. For this reason, the recommended speeds for the last movement of the Piano Sonata op.7, which range between J=60 and 69, are probably on the fast side, even taking into account the tempo indication *Poco allegretto e grazioso*, which presumably indicates a speed that is somewhat (but probably not as much as 50%) faster than *allegretto*. A range of around J=54-60 might be more representative for Beethoven's intentions for fast *allegrettos* with demisemiquavers and semiquavers.

The next *allegretto* with a metronome mark by Beethoven is found in the second movement of the String Quartet op. 95. This movement, which is marked *Allegretto ma non troppo* and \$\displayse\$ =66, contains primarily crotchets and quavers at the beginning, with substantial semiquaver figuration only appearing later on. Several plain *allegrettos* with quavers and semiquavers as most common note value, however, have very similar editorial speeds: \$\displayse\$ =56 for the final *Allegetto* in the Fantasy op. 77, admittedly with semiquaver triplets instead of semiquavers; the second movement of the Piano Trio op. 70 no 2, for which Czerny recommends \$\displayse\$ =58 and Moscheles \$\displayse\$ =56; and the first movement of the String Quartet op. 135, which Holz marked \$\displayse\$ =63 despite a small amount of demisemiquavers in the movement. It seems therefore plausible that a speed of between approximately \$\displayse\$ =60 and 66 is what Beethoven had in mind for plain *allegrettos* with quavers and semiquavers.

The Bagatelle op. 33 no. 1, however, is marked *Allegretto quasi andante, con un certa espressione parlante*, and contains quavers and demisemiquavers as most common note value. Nevertheless, despite the fact that both the tempo indication and the range of note values employed suggest a slower tempo than the plain *allegrettos* with quavers and semiquavers, Czerny still recommends \downarrow =66. A somewhat slower tempo, perhaps between

J=50 and 56, seems likely to be closer to the composer's intentions. The Variations WoO 77, on the other hand, are probably slightly faster than op. 33 no. 1, as they have a similar tempo indication (*Andante quasi allegretto*) but semiquavers instead of demisemiquavers. For this reason, Czerny's speed of J=60 seems about right, while Moscheles's suggestion of J=52 seems a little further from what Beethoven probably had in mind. For the second movement of the Violin Sonata op. 12 no. 2, however, Czerny probably overestimated the speed, which because of the tempo indication (*Andante più tosto allegretto*) and the note values (semiquavers and quavers) should probably be around J=60-66, but which Czerny marked J=76 and 80. Moscheles's speed of J=66 seems much more plausible.

As seen in Section 3.3.4 in the previous chapter, it is likely that the fastest *andantes*—which occupy the threshold between *allegretto* and *andante*—with quavers and crochets as most common note values were intended to move at Czerny's and Moscheles's speeds for the second movement of the Violin Sonata op. 23, which range from J=84 to 92. Three suggestions in the same range back this up: the J=88 for the theme of the Variations WoO 66, the J=84 for the theme of the Variations WoO 75 (which admittedly includes some semiquavers, but not many), and the range of J=80-92 suggested for the second movement of the Piano Sonata op. 31 no. 3, in which the slightly faster tempo indication (*Allegretto vivace*) presumably compensates for the presence of semiquavers.

Beethoven's final metronome mark for an *allegretto* in 2/4, J=100, is found in the fourth movement of the String Quartet op. 74, which contains crotchets and quavers as the most common note values in the theme and first variation. Here too, there are suggested speeds in the same range for similar movements, as Czerny recommends J=108 and 100 for the themes of the variations sets WoO 65 and 71, respectively. In addition, particularly the lower part of the range J=100-120 that Czerny's and Moscheles's suggest for the *Poco allegretto* in the fourth movement of the Violin Sonata op. 96 seems consistent here, as the

semiquaver figuration is offset by the faster tempo indication. The image of Beethoven's intended speeds for *allegrettos* in 2/4 is summarized in Table 4.1.3.2 below.

Table 4.1.3.2: Estimated intended speeds for *allegrettos* in 2/4.

Common	Slow allegretto	Allegretto	Fast
note value			allegretto
	*	J=40-44	*
\$.h	[=40-44]	J=54-60	[]=60-76]
3).)	[]=54-60]	J=60-76	J=80-92
۵	J =60-66	J=80-100	*

There are still a few problematic *allegrettos* in 2/4, however, that have not been discussed yet, including the last movements of the Piano Sonatas opp. 22, 53, and 54, and the two *allegrettos* in the Fantasy op. 80. All five of these have significantly faster suggested speeds than those in the above table. Rather than assuming that Czerny and Moscheles overestimated the speed for all of these sections—a claim which becomes increasingly implausible with each use, especially for works like the Fantasy op. 80 which Czerny studied with Beethoven—it is best to find an alternative explanation for these sections.

One possibility is that these sections are really in 4/8. If one compares the quaver speeds for these movements to those in 3/8 in Table 4.1.1.3, this generally seems a reasonable proposition. The third movement of the Piano Sonata op. 53, for instance, has speeds ranging from $\lambda=186$ to 224, the lower range of which is close enough to the range of $\lambda=168-189$ for *allegrettos* in 3/8 with semiquavers. On the other hand, the second movement of the Piano Sonata op. 54, for which Czerny and Moscheles suggest a range of $\lambda=216-344$ and which also contains semiquavers, clearly falls outside of that range.

Another possible way of explaining these fast speeds is by looking back at the examples of *allegrettos* in 3/8 and 6/8 that moved much faster than the others, and which clearly expressed an affect different from the one usually found in *allegrettos*, which made

these *allegrettos* a kind of slow *allegro*. In several cases, such as the *Allegretto agitato* in the last movement of the String Quartet op. 95, this was reasonably easy to spot due to the explicit difference in expression with a most other *allegrettos*. It seems plausible that the speeds for the second movement of the Piano Sonata op. 54, and perhaps several other *allegrettos* too, can be explained this way.

The fact, however, that these *allegrettos* are always so clearly identifiable as the odd ones out need not always be the case, as there are also *allegros* of which the character is as cheerful and amusing as many of the *allegrettos* under discussion here but which simply have a faster speed, such as the first movement of the Piano Trio op. 1 no. 1. It is therefore quite possible that the there are more allegrettos that are a kind of fast *allegretto*, particularly those that have speeds widely different from those in Table 4.1.3.2.

4.1.4: Allegretto and Moderate Minuets in 3/4

Beethoven used *allegretto* in 3/4 approximately 30 times in his oeuvre. Many of these movements are also marked *Menuetto & Trio*, such as the third movement of the Piano Sonata op. 2 no. 1; *Alla polacca*, such as the fifth movement of the Serenade op. 8; or some other indication that suggests a particular kind of dance music. In general, these *allegrettos* are almost never modified by another Italian tempo word, which makes determining the intended tempo relatively straightforward as has been shown above. In fact, it appears that many *allegrettos* in 3/4 are marked as or were originally conceived as a 'minuet' or 'scherzo,' which may explain the relatively narrow range of tempo indications that are found in these pieces. The speeds for both *allegrettos* and minuets can be found in the table below.

²⁴⁴ See for instance Cooper, *The 35 Piano Sonatas*, i, commentary 42 and 55.

-

Table 4.1.4.1: Metronome marks for allegrettos and non-allegro minuets in 3/4.

<u>Work</u>	Tempo indication	Metronome mark	Note values
Piano Trio op. 70 no. 2/iii	Allegretto ma non troppo	[]=56-58]	C.K.K.
Variations WoO 80, theme	Allegretto	[]=88-96]	.\.
Piano Sonata op. 31 no. 3/iii	Moderato e grazioso, menuetto	[]=88-112]	الرا
Violin Sonata op. 30 no 3/ii	Tempo di menuetto ma molto	[]=92-112]	⅓/some♪
	moderato e grazioso		
Piano Sonata WoO 47 no. 3/ii	Sostenuto, menuetto	[]=108]	1/1
Piano Sonata op. 54/i	In tempo d'un menuetto	[]=108-126]	17.3
Variations op. 34, var. 4	Tempo di minuetto	[]=96-138]	17.3
String Quartet op. 59 no. 3/iii	Grazioso, menuetto	J=116	17.3
Piano Sonata op. 49 no. 2/ii	Tempo di menuetto	[]=112-126]	17.3
Septet op. 20/iii	Tempo di menuetto	J=120	YYA
Piano Sonata op. 22/iii	Minuetto	[]=120-132]	17.3
Symphony op. 93/iii	Tempo di menuetto	J=126	A, triplet A
Minuet WoO 82	Moderato	[]=138]	1/1
Piano Sonata op. 2 no. 2/iii	Allegretto, scherzo & trio	[].=60-66]	JYJY
Piano Sonata op. 14 no. 1/ii	Allegretto	[].=69-72]	1/1
Piano Sonata op. 2 no. 1/iii	Allegretto, minuet & trio	[].=69-72]	1/1
String Quartet op. 59 no. 2/iii	Allegretto	J.=69	1/1
Piano Sonata op. 10 no. 2/ii	Allegretto	[].=72-76]]/])
String Quartet op. 18 no. 5/ii	Minuet & trio	J.=76	1/1
Piano Sonata op. 27 no. 2/ii	Allegretto	[=76-84]] /J
String Quartet op. 18 no. 3/iii	Allegretto/allegro	J.=84	1/1

The *allegrettos* in 3/4 show the widest tempo range yet, from the suggested J=56-58 for the third movement of the Piano Trio op. 70 no. 2 to Beethoven's speed of J=252 (J=84) for the String Quartet op. 18 no. 4's third movement, a difference of more than a factor four. Part of this wide range, however, is caused by the fact that the *allegrettos* on each end are somewhat exceptional. The Piano Trio is one of only two slow *allegrettos* in this metre, the other being the Chorus 'Wir tragen empfänglische Herzen' from no. 7 in *The Ruins of Athens* op. 113 which contains primarily quavers and crotchets. The presence of demisemiquavers and semiquavers in the Piano Trio therefore understandably makes it somewhat of an outlier among *allegrettos*. On the other side of the spectrum, the String Quartet op. 18 no. 4 is probably a fast *allegretto*: not only does the score indicate that the repeat is to be played

faster, but the viola and cello parts of the first edition are actually marked *allegro*.²⁴⁵ It is therefore plausible that most *allegrettos* will have a speed that is more similar than these fringes suggest.

The Variations WoO 80 contain note values that are broadly speaking similar to the ones in the Piano Trio discussed above: the theme contains primarily crotchets and short demisemiquaver figurations, but the following 32 variations have note values ranging from quavers to demisemiquavers. Czerny's suggested speed of \$\mathbb{J}\$ =88 is a little slower than Moscheles's \$\mathbb{J}\$ =96, but both are still a lot faster than the speed for the Piano Trio. It seems plausible that this is explained by the difference in expression: the Piano Trio is described by Czerny as 'a strange combination of tenderness, capricious humour, and fervent energy', 246 while the Variations are described as 'a characteristic musical picture in an earnest and brilliant style, rising even to bravura, and belong[ing] to [Beethoven's] most energetic and genial works. 247

The minuets in Table 4.1.4.1 that are not explicitly identified as *allegretto* fall into two categories: *moderato* minuets, and those marked *Tempo di menuetto* (or menuetto, there appears to be no difference in terms of speed). No less than seven sections fall into the latter category, all of which have quavers and semiquavers (or in the case of the Eighth Symphony quaver triplets) as most common note value. Three of these have metronome marks by the composer: the third movements of the String Quartet op. 59 no. 3, Septet op. 20, and the Eighth Symphony, which Beethoven marked J=116, J=120, and J=126, respectively. The four others, the first movement of the Piano Sonata op. 54, the fourth variation of op. 34, the second movement of the Piano Sonata op. 49 no. 2, and the third movement of the Piano Sonata op. 22 all have at least one recommended speed in the same range. It is therefore likely that *Tempo di menuetto* with quavers and semiquavers indicates a speed between

²⁴⁵ Beethoven, Six Quators ... ouevre. 18, Vienna (Mollo) 1801.

²⁴⁶ Czerny, On the Proper Performance, 88.

²⁴⁷ Ibid., 60.

approximately J=116 and J=126. Czerny's speed of J=138 for WoO 82—the one plain minuet with crotchets and quavers in Table 4.1.4.1—could therefore be consistent, despite the somewhat faster speed.

This only leaves three minuets with a somewhat slower tempo: the third movement of the Piano Sonata op. 31 no. 3, and the second movements of the Violin Sonata op. 31 no. 3 and the Piano Sonata WoO 47 no. 3. The first two of these are marked *moderato*, and have a suggested range of speeds between J=88 and 112, the lower range of which seems a little on the slow side considering the fact that these section have quavers and crochets as most common note values. The third minuet, found in the second movement of the Piano Sonata WoO 47 no. 3, is somewhat of an unusual movement, as it is marked both *sostenuto*—a slow tempo indication that as shown in the previous chapter is in most ways the equivalent of *adagio*—as well as identified as a minuet. Czerny navigates this problem by giving it a speed similar to the *moderato* minuets. An alternative solution would be to play it at the speed of a *sostenuto* (and therefore fast *adagio*) in this metre with crotchets, which as Table 3.1.5.2 shows results in a speed of around J=76, which is coincidentally the same speed that Cooper recommends for the third and fourth variation. ²⁴⁸

There appears to be some overlap between the plain *allegrettos* and the minuets, as two sections have both indications. In general, the *allegrettos* with quavers and crotchets seem to move at a speed of approximately J.=69, the speed that Beethoven indicated for the third movement of the String Quartet op. 59 no. 2. The editorial speeds for the second movements of the Piano Sonatas opp. 10 no. 2 and 14 no. 2 and third movement of 2 no. 1 are very similar, despite the fact that the op. 2 no. 1 is also a minuet. The second movement of the String Quartet op. 18 no. 5 is also only identified as a minuet in all sources, but given the fact that the speed of J.=76 that Beethoven indicated for it is similar to that of the *allegrettos*,

 248 Cooper, The 35 Piano Sonatas, i, commentary, 14.

adding that tempo indication seems justified, especially since *allegretto* minuets seem to move at the same speed as regular *allegrettos*.

The final two *allegrettos* are remarkably fast, but both for good reasons. The second movement of the Piano Sonata op. 27 no. 2, for which Czerny and Moscheles suggest speeds between J.=76 and 84, contains only crotchets and minims, note values larger than any other *allegretto* discussed so far, which in turn justifies the fast speed. Finally, as mentioned earlier, the third movement of the String Quartet op. 18 no. 3 is really a fast *allegretto*, which explains the relatively fast speed of J.=84. The estimated speeds of all minuets and *allegrettos* can be found in Table 4.1.4.2.

Table 4.1.4.2: Estimated intended speeds for moderate minuets and allegrettos in 3/4.

Common	Moderato	Tempo di	Slow allegretto	Allegretto and allegretto	Fast
note value	minuet	menuetto		minuets	allegretto
£. K.	*	*	J=56-58	J=88-96	[].=60-66]
اداد	*	J=108-126	*	J.=60-66	[].=69-76]
الرا	J=112	J=126	*	J.=69-76	J.=84
1/3	[]=126]	*	*	J.=76-84	*

4.1.5: Allegrettos in c

There are only 12 *allegrettos* in **c**, and as can be seen in Table 4.1.5.1 below the vast majority of these are based on themes originally written by others, such as the Folksong settings op. 108. Only a small number of works, such as the Variations op. 34 and the Variations WoO 67, contain sections in which using **c** and *allegretto* appears to have been Beethoven's idea. In both cases, however, it seems that the combination is used for pragmatic reasons: op. 34 is precisely so designed that every variation is in a different metre and tempo, which requires a wide range of tempo indications, and the *allegretto* in WoO 67 is only four bars long. *Allegrettos* in **c** are therefore primarily foreign objects in Beethoven's oeuvre.

Table 4.1.5.1: Beethoven's allegrettos in c.

Work	Tempo indication	Metronome mark	Note values
Song op. 108 no. 5	Andantino un poco allegretto	-	~
Song op. 108 no. 19	Andante poco allegretto	-	J/J
Song op. 108 no. 17	Andantino quasi allegretto	-	1 /1
Song op. 108 no. 14	Andante poco allegretto	-)
Trio op. 11/iii	Allegretto con variazioni	[J = 120 - 172]	JY.3
Variations op. 34, var. 3	Allegretto	[]=88-112])
Variations WoO 68 Theme	Allegretto	[]=120])
Song op. 108 no. 23	Allegretto	-)
Variations op. 105 no. 2,	Allegretto scherzoso	-	الإ
theme			
Variations WoO 67 var. 8	Allegretto	-	الإ
Piano Piece WoO 61	Allegretto	-	J
Song op. 108 no. 1	Allegretto più tosto vivace	-)

The third movement of the Clarinet/Piano Trio op. 11 is an *Allegretto con variazioni* in e on the popular trio 'Pria ch'io l'impegno' from Joseph Weigl's comic opera *L'amor marinaro*, which fulfils the character requirement for Koch's definition of *allegretto*. In the original version, the theme was written in ¢ and in e-flat major, but Beethoven transposes it to b-flat. All first editions, however, show e instead of ¢, as can be seen in Example 4.1.5.2, but the tempo indication has remained *Allegretto*. As this was a very popular theme of an opera that premiered the same year in Vienna as this piano trio and which was still being played when the work was published, ²⁴⁹ and since both the Trio has the same tempo indication as the original theme, it seems unlikely that Beethoven had a different tempo in mind. Since the autograph score of the work is lost, it is possible that the publisher mistook ¢ for e, or that some other error in transmission occurred, and that the difference in metre between the original and Beethoven's version may not necessarily be intended. With the exception of the addition of some decorative semiquavers, the theme, which consists of quavers and crotchets,

²⁴⁹ Lisa Feurzeig & John Sienicki, ed., *Quodlibets of the Viennese Theatre*, Middleton, Wisconsin (A-R editions) 2008, 295.

has remained unchanged. Later on in both works, but mainly in Beethoven's variation set, semiquavers figuration becomes more prominent.

Example 4.1.5.2: *Pria ch'io l'impegno* in its original version (a) and in the third movement of Beethoven's op. 11 (b).





The intended speed of this movement is difficult to estimate, given the lack of other metronome marks in this metre, and the fact that that Beethoven's other *allegrettos* in **c**, as well as those in **c** discussed below, often borrow themes from other composers, which could include borrowing the tempo as well. One possible way of determining the tempo of this movement is by Czerny's recommendation, who unlike Moscheles was living in Vienna during the more than seven years that Weigl's opera was being performed there, and who could have heard it during that time, which could have been the source of his suggested speeds of J=72-76. The same problems—the diversity of the source material, and the lack of metronome marks by Beethoven—arise in the cases of the other *allegrettos* in **c**, which makes this category inherently problematic.

4.1.6: Allegrettos in ¢

The *allegrettos* in ¢ are even more rare than those in c, with only six cases occurring in Beethoven's oeuvre. All six of these have roughly the same range of note values, as can be seen in Table 4.1.6.1 below.

Table 4.1.6.1: Beethoven's allegrettos in ¢.

Work	Tempo indication	Metronome mark	Note values
Violin Sonata op. 30 no. 1/iii	Allegretto	[]=72-84])
Piano Sonata op. 31 no. 1/iii	Allegretto	[]=76-108]	,
Fidelio, Act I, 'Oh welche Lust'	Allegretto	-	الرا
Variations WoO 45	Allegretto	-	J /J/J
Aria WoO 89	Allegretto	-	الرا
Song WoO 109	Allegretto	-	الرا

Unlike the *allegrettos* in \mathbf{e} , which consist largely of material borrowed from other composers, the tempo in the sections in \mathbf{e} is determined by Beethoven, with the exception of the Variations WoO 45 on the theme 'See the conqu'ring hero comes' by Handel. There are only two sections for which there are metronome marks available: the third movement of the Violin Sonata op. 30 no. 1, for which Czerny and Moscheles suggest a range of $\mathbf{J} = 72-84$, and the third movement of the Piano Sonata op. 31 no. 1, for which a somewhat wider range of $\mathbf{J} = 76-108$ is suggested.

It should be possible, however, to narrow down the intended speeds for the sections above by comparing them to those in 2/4. As was seen in the previous chapter, *adagios* and *andantes* in ϕ move at the same speed as those in 2/4 with half the note values, and as the next chapters will show this same consistency also applies in fast movements. It should therefore be possible to estimate the speeds for *allegrettos* with quavers in by comparing them to those in 2/4 with semiquavers. As Table 4.1.3.2 shows, plain *allegrettos* with semiquavers move at around J=60-66, while fast ones move at J=80-92, which translates as

and Moscheles provided metronome marks were intended to be fast *allegrettos*, the speeds suggested for the Violin Sonata are reasonable approximations for the Piano Sonata and any other fast *allegretto* in ¢. The others—which may include the Aria WoO 'Prüfung des Küssens' on account of its subject matter—probably move at a speed of around $\rfloor = 60-66$.

4.1.7: Conclusion

Beethoven seems to have used the term *allegretto* in two different ways. On the one hand, it can have a speed slightly faster than *andante*, and an expression that is not dissimilar from it. On the other hand, it can also serve as an alternative to *allegro*, with a much faster speed and a large variety of possible kinds of expressions. The distinction between the two is not always obvious, and it is possible that even Czerny and Moscheles might have confused one with the other. It is therefore important to keep the possibility in mind that some of the *allegrettos* that Czerny seems to consider fast *allegrettos*, such as the last movement of the Piano Sonata op. 31 no. 1 discussed in the final section, might have been intended as slow *allegrettos*, and vice versa. The moderate minuets discussed in this chapter, on the other hand, are much less ambiguous, and all move at speeds between J = 108 and 126. Nevertheless, there are also faster minuets, which will be discussed in Chapter 5.

Chapter 5: Beethoven's Fast Tempo Indications: Allegro

Many of the movements that Beethoven wrote contain fast tempos, which are here defined as *allegro, vivace, presto*, and related indications that have not been covered in the previous chapters. There are over 580 sections with *allegros*, about 120 *vivaces*, and more than 110 *prestos*, which constitute between a third and half of Beethoven's music, depending on whether one counts only the individual tempo indications or larger sections at a time. This chapter discusses the intended speed of the sections marked *allegro*.

Several of the metronome marks for these fast tempos have been contested, with many scholars and musicians seeking for ways to explain these away, through postulating mechanical errors in Beethoven's metronome, errors in transmission, etcetera. In the slow and moderate movements, however, there have been relatively few misprints or other errors of this kind discovered, and as these errors occur at random, it seems unlikely that metronome marks for fast movements are unusually susceptible. Nevertheless, it is certain that some of the fast metronome marks can indeed be explained in this way: for instance, the J=92 for the *Presto* in the fourth movement of the String Quartet op. 59 no. 1 is probably a misprint of J=92, as the preceding *Allegro* in the same metre and with the same range of note values is marked J=126. Several more of these errors have been found, but there is no reason to think that they are particularly common for the fast tempos, or that they have a large impact on the speed of the metronome marks as a whole. Regardless, it is important to remain vigilant for metronome marks that are inconsistent with Beethoven's wider approach to tempo, as these could potentially be undiscovered errors.

It is important to notice two differences between the fast tempos on the one hand and the moderate and slow on the other. Firstly, there is a lot more crossover between the indications of the fast movements than in any of the slower ones, especially of *allegro* and

20

²⁵⁰ For a discussion of these issues, see my article 'Czerny's "Impossible" Metronome Marks', *The Musical Times*, exxy (winter 2013), 19-46, particularly 21-26.

vivace, a combination that appears more than 50 times. In fact, *vivace* on its own is quite rare: only 28 different movements include the term without any other tempo indication, which will be discussed in the next chapter. Many of these cases, however, are marches, scherzos, or contain another word influencing the tempo. Secondly, a new modifier has appeared that was not used before: *con brio*, which Koch translates as the equivalent of *brioso*, 'cheerful and manly'. This translation, as well as the fact that *con brio* never occurs in combination with slower tempo indications or slow modifiers such as *ma non troppo* or *assai*, shows the term's relation with faster speeds. The precise influence of *con brio* on the tempo, however, will be discussed in detail for each metre.

5.1: General Characteristics of Allegro

Beethoven's *allegros* constitute the most common tempo indication of his oeuvre, and it is used in every genre, and for a wide variety of affects and characters. Koch's definition of the term reflects this diverse application:

Allegro, fast, is a well known heading for those pieces that are supposed to be played in a moderately fast tempo. As there is a wide range of speeds available before the fastest speed is reached, which is usually indicated by *prestissimo*, additional indications are often added to further determine the speed, for instance *allegretto non tanto* (not too fast), *allegro di molto* (very fast), etc. Regardless of these further

²⁵¹ Koch, *Lexikon*, 272 and 349. Original: 'Fröhlich und männlich.'

²⁵² The only possible exception to this is found in the Kriegslied of the Ritterballet WoO 1. Most modern editions include *Allegro assai con brio* as a tempo indication. In the manuscript of Beethoven's piano reduction, of which a copy still exists in the Beethoven-Haus in Bonn, the indication is not present. See Beethoven-Haus Bonn, BH 74.

indications, however, the performer needs to discover the intended speed by considering the metre and even more so the contents of the piece. ²⁵³

The last sentence of the letter above is of interest, as it suggests that, as before, the metre and note values influence the tempo. As demonstrated in the previous chapters, Beethoven's metre is a factor determining the speed in sections with slow tempo indications, but less so in those with more moderate indications such as *allegretto*, which Koch seems to be considering a subset of *allegros* rather than an independent indication. Other definitions also stress the *allegro's* versatility: Rousseau states that despite the fact that it translates as *gai*, it is also used to express emotions such as anger and despair. So unlike the more moderate *allegretto*, which was generally used to express one particular kind of character, *allegro* was generally thought to be an indication that could be used for a much wider range of expressions. As his frequently quoted letter to Ignaz von Mosel of 1817 shows, Beethoven seems to have agreed with the theorists on the wide definition of *allegro*:

What can be more absurd than 'Allegro', which always means 'merry', and how very far removed we often are from this conception of tempo, so much so that the piece itself says the very opposite of the indication.²⁵⁵

-

²⁵³ Koch, *Lexikon*, 130-131. Original: 'Allegro, hurtig: ist eine bekannte Ueberschrift solcher Tonstücke, die in einem mäβig geschwinden Zeitmaaβe vorgetragen werden sollen. Weil die Geschwindigkeit dieser Bewegung merklich verschieden sein kann, ehe sie den höchsten Grad erreicht, den man gewöhnlich mit dem Ausdrucke *prestissimo* bezeichnet, so pflegt man oft den eigentlichen Grad der Geschwindigkeit des Zeitmaaβes durch hinzugefügte Beiwörter näher zu bestimmen, z.B. *allegretto non tanto* (nicht zu geschwind,) *allegro di molto* (sehr geschwind,) u.s.w. Ohngeachter dieser näheren Bestimmung muβ der Ausführer dennoch den genau bestimmten Grad dieser Geschwindigkeit der Bewegung theils aus der Taktart, in welche ein solcher Satz eingekleidet ist, theils und hauptsächlich aber auch aus dem Inhalte desselben zu bestimmen suchen.' ²⁵⁴ Rousseau, *Dictionaire*, 46. Original: *Allegro*, signifie *gai*; & c'est aussi l'indication d'un mouvement gai, le plus vif de tous après *presto*. Mais il faut pas croire pour cela que ce mouvement ne soit propre qu'à des sujets gais; il s'applique souvent à des transports de fureur, d'emportement, & de désespoir, qui n'ont rien moins que

de la gaieté.

255 Brandenburg, *Briefwechsel*, Letter 1196. Original: 'Was kann widersinniger seyn als *Allegro* welches ein für allemal <u>Lustig</u> heißt, u. wie weit entfernt sind wir oft von diesem Begriffe dieses Zeitmaaßes, so daß das Stück selbst das Gegentheil der Bezeichnung sagt.'

In general, affect does not seem to influence the intended speeds of *allegros*. This can be observed in the metronome marks that Beethoven gave, which show similar speeds for several movements that have the same metre, tempo indication, and a similar range of note values, but a very different affect. Examples of this are first movement of the Piano Sonata op. 106 in B-flat major and the last movement of the String Quartet op. 18 no. 4 in c minor, which are both marked *Allegro* in ¢, contain crotchets and quavers, and have metronome marks of J=138 and 132 respectively, and the *Allegro con brio* first movements of the Symphony op. 36 in D major and the String Quartet op. 95 in f minor, which contain quavers and semiquavers and have metronome marks of J=100 and 92, respectively. Unlike in *Allegretto*, in which the faster speeds tend to be found in the minor keys, there is no indication that the intended tempo for sections in *Allegro* is influenced by tonality, and by extension affect.

Despite the differences between *allegretto* and *allegro*, a comparison between the two terms can be useful, as they are adjacent terms on a linear tempo spectrum. The following section will discuss Beethoven's *allegros* in triple metre. Unlike before, however, the *allegros* in 12/8 will be discussed after the duple and quadruple metres, as there is evidence that in *allegros* these metres are more closely related.

5.2: Allegros in 9/8, 6/8, and 3/8

Much like the *allegrettos* in 9/8, *allegros* in 9/8 are rare, and only occur in two works. The first is the folk song setting 'Come Fill, Fill, my Good Fellow' op. 108 no. 13, for which Beethoven did not provide the theme or the tempo mark. The second is the duet 'Um in der Ehe froh zu leben' from the first two versions of Fidelio, which also includes an *allegretto* in the same metre discussed in the previous chapter. As shown in the previous chapter, it is likely that Beethoven's intended tempo for the *Allegretto* section in that duet is somewhere

around J.=60-63. It follows that the *Allegro* in the same duet probably moves at a slightly faster speed, perhaps around J.=72.

With 50 sections, *allegros* are the most common of all tempo indications in 6/8. Four of these, which can be seen in Table 5.2.1 have metronome marks by the composer: the Turkish march from the Ninth Symphony (*Allegro assai vivace alla Marcia*, J.=168, given as J.= 84),²⁵⁶ the first movements of the String Quartets opp. 18 no. 5 and 59 no. 2 (both *Allegro*, J.= 84 and J.=104, respectively), and 'Glückliche Fahrt' from the Cantata op. 112 (*Allegro vivace*, J.=138).

_

²⁵⁶ This metronome mark was initially misprinted as J=84. The conversation books only contain the number, not the note value, which seems to have been supplied by the editors of the first edition and *Cecilia, eine Zeitschrift für die musikalische Welt*, in which the metronome marks for this symphony first appeared. Several authors have since shown that the note value should have been a minim. See for instance Brown, 'Metronome Marks', in particular 253-256.

Table 5.2.1: The metronome marks for *allegros* in 6/8.

Work	Tempo indication	Metronome Mark	Note values
String Quartet op. 127/iv	Allegro commodo	[> =116]	Atriplets
Variations op. 34 var. 2	Allegro ma non troppo	[].=53-69]	
Variations WoO 66 var. 7	Allegro non molto	[].=80]	3 7.3
String Quartet op. 59 no. 2, i	Allegro	J.= 84	3 7.3
Piano Sonata op.14 no. 2/iii	Allegro assai	[].=80-88]	. }_}_
Quintet op. 16/iii	Allegro ma non troppo	[].=88]	. }_}_
Piano Trio op. 70 no. 2/i	Allegro ma non troppo	[].=84-88]	. }_}_
Fantasy op. 77	Allegro ma non troppo	[].=84-88]	١٧٦
Violin Sonata op. 30 no. 1/iii	Allegro ma non tanto	[].=88-92]	3
Piano Sonata op. 28/iv	Allegro ma non troppo	[].=84-96]	. Y. Y. J
Variations WoO 66 var. 12	Allegro ma non tanto con	[].=92]	3 7.)
	grazia		
Piano Concerto op. 73/iii	Allegro	[].= 96-100]	3
Piano Sonata op. 110/iv	Allegro ma non troppo	[].=76-100]	J Y_
String Quartet op. 18 no. 5, i	Allegro	J.= 104	J/J
Violin Sonata op. 12 no. 1/iii	Allegro	[].= 104-108]	3)
Piano Sonata op. 49 no. 1/ii	Allegro	[].=60-108]	JY.)
Piano Sonata op. 27 no. 1/i	Allegro	[]. = 104-116]	
Piano Concerto op. 19/iii	Allegro molto	[].= 112]	.
Cantata op. 112, ii	Allegro vivace	J.= 138	\
Symphony op. 125, iv	Allegro assai vivace alla	J.= 168 (J.= 84)	ارد ا
	Marcia		
Piano Sonata op. 2 no. 3/iv	Allegro assai	[].= 116-126]	3/3
Cello Sonata op. 5 no. 1/iii	Allegro vivace	[ا.= 104-108]	3/3
Violin Sonata op. 12 no. 3/i	Allegro vivace	[].= 108-116]	39.3
Piano Sonata op. 7/i	Allegro molto e con brio	[].= 116-126]	IJJ later ♪
Violin Sonata op. 30 no. 3/i	Allegro assai	[].=112]	39.3
String Quartet op. 131/ii	Allegro molto vivace	[].=116]	الا ا
Grosse Fuge op. 133	Allegro molto e con brio	[].=132]	1/3

The String Quartets opp. 18 no. 5 and 59 no. 2 are particularly interesting, as they have the same tempo indications and note values ranging from crotchets and quavers to semiquavers, but two quite different metronome marks. In op. 18 no. 5, however, the semiquavers are far less common, and only occur in the first violin with the exception of a few bars in the development section. In op. 59 no. 2, on the other hand, semiquavers occur in all four parts, and much more frequently, which seems a reasonable explanation for the much slower speed. The speed of 'Glückliche Fahrt' from Cantata op. 112 can also be explained in this way, as it contains far fewer semiquavers than the two string quartets, with running quavers making up the bulk of the note values in the movement. The inclusion of *vivace* in the tempo indication

of this section seems to work as a safeguard against giving to much credence to the few remaining semiquavers in this section. Finally, the fastest metronome mark for *allegros* in 6/8 is J.=168 for the *Allegro assai vivace alla Marcia* in the last movement of the Ninth Symphony, which diminishes the presence of semiquavers to a single pair in favour of quavers and prominent crotchet figuration. The *assai vivace*, which appears in a different ink in the autograph score and seems to have been added later, again seems to warn against slacking.²⁵⁷

On the basis of these findings, it is possible to estimate the intended speeds of other *Allegro* sections in 6/8. The rondo of the Piano Concerto op. 73 seems of particular interest, since Beethoven asked Czerny to perform the work several times, including the first public performance in Vienna premiere, which Moscheles may have attended. Czerny's speed for the rondo is J. =96, while Moscheles's is a practically indistinguishable J.=100. The tempo indication of the movement, however, is problematic: the autograph score of the movement is just marked *Allegro* with what looks like *ma non tanto* added later and crossed out again. By contrast, the piano part of the first continental edition of the concerto contains *Allegro ma non troppo*, with the last three words being placed awkwardly between the staves, suggesting a last minute addition. The English edition, which precedes the continental edition, has *Allegro ma non tanto*. The most common note values of this movement range from semiquavers to quavers, with the former primarily appearing in the piano part. Overall, the distribution of note values seems similar to that in the first movement of the String Quartet op. 18 no. 5 discussed above, as well as the editorial speeds for the third movement of the

_

²⁵⁷ Ninth Symphony autograph.

Autograph of the Piano Concerto op. 73, Berlin State library, autograph 15.

²⁵⁹ Beethoven, *Grand concerto pour le pianoforte avec accompagnement de l'orchestre*, Leipzich (Breitkopf & Härtel) 1811.

²⁶⁰ Hans-Werner Küthen, ed., *Beethoven Werke*, Munich (Henle) 1996, vol. iii/3 (Klavier Konzerte II), Kritischer Bericht, 53.

Violin Sonata op. 12 no. 1, which implicitly validates the speeds that Czerny's and Moscheles's recommend for the Concerto and the Violin Sonata.

In all of Beethoven's piano sonatas, there are just two that are marked plain Allegro in 6/8: a 25 bar long section in the first movement of the Sonata quasi una fantasia op. 27 no. 1, and the second movement of the Piano Sonata op. 49 no. 1. The former, for which Czerny and Moscheles suggest speeds ranging from \downarrow . =104 to 116, contains semiquavers in every bar but the final one, and often in both hands at the same time. Barry Cooper observed that 'Czerny's metronome mark for the Allegro seems ambitious, and the music will still sound fast even at a speed of only 80', 261 and on the basis of a comparison with op. 59 no. 2 it seems likely that Beethoven would have agreed. The rondo of the Piano Sonata op. 49 no. 1, on the other hand, contains a similar distribution of note values as the first movement of the String Quartet op. 18 no. 5 mentioned above, with semiquavers appearing almost exclusively in alberti bases in the left hand. Czerny's earliest two metronome marks for this movement, J. =100 and 108, are therefore more likely to be closer to what Beethoven had in mind than Moscheles's suggestion of J.=60. Finally, the *Allegro commodo* in the fourth movement of the String Quartet op. 127 is probably the slowest allegro in 6/8, as it contains semiquaver triplets throughout, the smallest note values found so far. Holz's speed of $\lambda=116$ (approximately J=39), however, seems a little on the slow side, much like the second variation of op. 34 discussed below.

There are only seven *Allegro ma non troppo* sections in 6/8 in Beethoven's oeuvre.

All of these involve the piano, and there are metronome marks available by either Moscheles, Czerny, or both for almost all of them. Although the degree to which these represent Beethoven's intended tempo is not always clear, as only one of these sections is from a work that Czerny studied with Beethoven, a comparison with *allegrettos* in the same metre on the

-

²⁶¹ Cooper, *The 35 Piano Sonatas*, ii, commentary, 16.

one hand and *allegros* on the other will establish if these metronome marks fit into the bigger picture.

The rondo of the Wind Quintet op. 16, a work which Czerny performed in Beethoven's presence in 1816 and for which he was rebuked by the composer for taking too many liberties, ²⁶² contains crotchets, quavers, and semiquavers as most common note values. The distribution of these is comparable to that of the rondo of the Piano Concert op. 73 discussed above, with the shorter note values primarily found in the piano part and the longer ones in the other instruments. (Even more similar is the rondo of the Piano Concerto KV 482 by Mozart, which has an almost identical theme and very similar figuration in the piano, and which Beethoven might have imitated or used as a model for this movement.) The rondos of the concerto and the quintet have a similar range of note values, but Czerny gives the *Allegro ma non troppo* rondo of the quintet a speed of J.=88, much slower than his J.=100 for the *Allegro* rondo of the concerto, presumably because of the difference in tempo indication. Incidentally, the speed that Czerny recommends for the quintet is identical to Beethoven's for the *Allegretto quasi allegro* last movement of the String Quartet op. 18 no. 6 discussed in the previous chapter, another movement in which the semiquavers are primarily concentrated in a single instrument.

Many of the other *Allegro ma non troppo* sections in 6/8 have a fairly similar distribution and a comparable range of note values, ranging from crotchets to quavers and semiquavers. Czerny's and Moscheles's metronome marks suggest a similar speed for all of these: J.=84-96 for the rondo of the Piano Sonata op. 28; J.=84-88 for the first movement of the Piano Trio op. 70 no. 2; and J.=84-88 for the first 6/8 section of the Fantasy op. 77, although this section only contains quavers and dotted crotchets, but faster note values do appear in the cadential section that immediately follows it. The third movement of the Violin

-

²⁶² Elliot Forbes, ed., *Thayer's Life of Beethoven*, Princeton (Princeton University Press) 1967, 2 vols., ii, 640-641.

Sonata op. 30 no. 3—marked *Allegro ma non tanto*, which presumably indicates the same tempo as *Allegro ma non troppo*—has editorial speeds ranging from J.=88 to 92. This seems appropriate, given the semiquavers and quavers that make up the bulk of the movement. Another potential *Allegro ma non troppo* under a different name is found in the seventh variation of the Variations WoO 66, which is marked *Allegro non molto* and which contains primarily quavers and semiquavers. Moscheles's speed of J.=80 also seems consistent, although perhaps a bit on the slow side; his suggestion of J.=92 for the twelfth variation of WoO 77 seems a better estimation.

There are just two *Allegro ma non troppo* sections that have a slightly different range of note values and also a different suggested speed. The first is the second variation of op. 34, which contains a greater ratio of semiquavers than other sections with the same metre and tempo indication, and for which Moscheles and Czerny suggest approximately J.=53 (given as $\lambda=160$) and $\lambda=69$, respectively. The latter seems more likely to be closer to Beethoven's intentions, as it is slightly faster than the *Allegretto* finale of the Symphony op. 68 (.=60), which contains a similar range of note values, with much similar semiquaver figuration in the string parts. The second Allegro ma non troppo with a different range of note values is found in the fugue of the last movement of the Piano Sonata op. 110, which—at least in its first appearance—contains only crotchets (both with and without dots) and quavers. Given this lack of semiquavers, Beethoven's intended tempo for this movement is probably faster than the other Allegro ma non troppo sections that do contain semiquavers, but slower than the Allegro vivace from the Cantata op. 112 discussed earlier, which has a similar range of note values but a faster tempo indication. Seen in this context, Moscheles's speed for the Cramer edition, J.=76, is probably much too slow, and his later J.=92 still seems very close to the range for Allegro ma non troppos in 6/8 with semiquavers. Czerny's suggestion of J.=100 is therefore probably a much better approximation.

In the context of Allegros in 6/8, the term assai proves to be problematic: not only are there no metronome marks by Beethoven available for these sections, but it also seems highly likely that Czerny and Moscheles interpreted the indication as the equivalent of molto. As discussed in Chapter 2, Stewart Deas has shown that this definition is almost certainly at odds with Beethoven's. ²⁶³ This misinterpretation of the term can be seen, amongst others, in the editorial speeds for the last movement of the Piano Sonata op. 2 no. 3 (Allegro assai, with quavers and semiquavers occurring in both hands) and the first movement of the Piano Sonata op. 7 (Allegro molto e con brio, only crotchets and quavers at the beginning, with semiquavers virtually only occurring in the right hand and in particular sections). In all editions by Czerny and Moscheles, these movements have similar metronome marks, ranging from J.=116 to 126, which suggests that both editors considered the assai the equivalent of molto. This is further supported by a comment by Moscheles in his edition of Life of Beethoven on the metronome mark of the first movement of the Piano Sonata op. 106, in which he argues that the tempo was lowered by removing assai from the tempo indication.²⁶⁴

Despite the fact that both Czerny and Moscheles seem to have a different interpretation of the term assai, there is one particular movement which Czerny studied with Beethoven that is marked *Allegro assai*, and for which his speeds are therefore probably better informed: the last movement of the Piano Sonata op. 14 no. 2. This movement—in 3/8, which one assumes moves at the same speed as in 6/8 as it did in the case of allegrettos in the previous chapter—consists of quavers, semiquavers, and semiquaver triplets. In terms of the distribution of note values, it holds the middle between the Allegro first movements of the String Quartets opp. 18 no. 5 and 59 no. 2 discussed above. If the Piano Sonata would have been a plain *Allegro*, this distribution would have probably resulted in a speed approximately halfway between the metronome marks of these Quartets, J.=84 and 104. Czerny's speeds,

²⁶³ Stewart Deas, 'Beethoven's "Allegro assai". ²⁶⁴ Schindler, *Life of Beethoven*, ii, 244.

however, which range between J.=80 and 88, are on the lower side of that range, and it seems probable that this is because of the influence of the *assai*. Although there is not as a lot evidence as to inspire much confidence, it seems therefore plausible that *Allegro assai* indicates a speed somewhere between *Allegro ma non troppo* and *Allegro*.

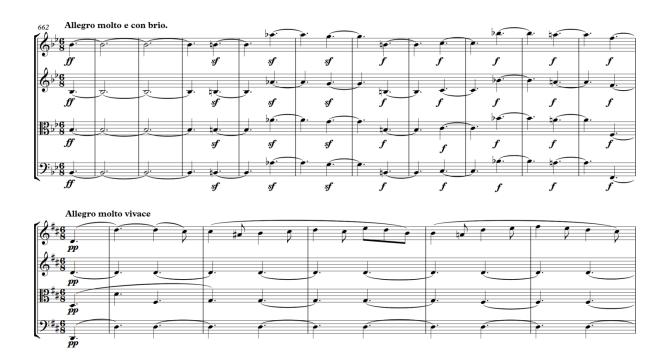
Of the fast allegros, the Molto allegros in 6/8 are just six in number, and none of them have metronome marks by Beethoven or have been studied by either Czerny or Moscheles. Nevertheless, a comparison with other *allegros* in the same metre might provide some information on the intended speed. The first movement of the Piano Sonata op. 7 consists primarily of crotchets, quavers, and semiquavers, and is marked *Allegro molto e con brio*. The semiquavers, however, only occur later in the movement, which as Barry Cooper observed has an unusual form, as it is is much larger than one would expect on the basis of its initial harmonic scheme. In fact, if one were to jump from bar 58 to bar 127, the exposition would still be structurally complete, with a first theme in E flat major and a second theme in B flat major. 265 The semiquavers do not appear until bar 97, after the movement has visited the distant and surprising key of C major. For the previous bars to sound Allegro molto e con brio, a speed needs to be chosen according to the note values in those bars, in this case all quavers and crotchets. It therefore seems likely that these semiquavers—which appear in chromatic scales, broken octaves, and broken chords—are meant to be as surprising to the listener as the structural anomalies in which they are found, and that they have little or no influence on the overall tempo. Although all suggestions by Czerny and Moscheles are still slower than the J.=138 for the *Allegro vivace* of the second movement of the Cantata op. 112, Moscheles's speed of J.=126 in the Hallberger edition seems to be more likely to be close to the intended speed than the other metronome marks (J.=112-116). A faster speed is perhaps also possible.

²⁶⁵ Cooper, *The 35 Piano Sonatas*, i, commentaries, 33.

The likely intended speed of the rondo in the Piano Concerto op. 19 can be estimated in a similar way. The movement contains crotchets, quavers, and semiquavers, with the fastest note values exclusively appearing in the piano. In this sense, the distribution of note values is fairly similar to that of the first movement of the String Quartet op. 18 no. 5, which has a speed of J.=104. It seems therefore plausible that Czerny's and Moscheles's speed of J.=112 is close to Beethoven's intended speed. Similar arguments can be made about the speed of the third movement of the String Trio op. 9 no. 3, the second movement of the String Quartet op. 131, and part of the finale of the Große Fuge marked Allegro molto e con brio from bar 662 until the end, both of the string quartet version and the piano version (opp. 133 and 134, respectively). This final section, part of which can be seen in Example 5.1a below, is particularly interesting, as Karl Holz has provided a metronome mark for it. 266 This last section of the *Große Fuge* consists of crotchets and some single quavers later on, with semiquavers only making an appearance in the context of trills. Holz's rather fast suggestion of J.=132 seems anomalous, but the fact that the note values are generally three times as large as those of the *Molto allegro* sections discussed before (dotted crotchets as most common note value instead of quavers) provides some justification for Holz's speed.²⁶⁷ Much like in the Allegros without molto discussed earlier, in which the most common note values of the Turkish march of the Symphony op. 125 are also about three times as large as those in the first movement of the String Quartet op. 18 no. 5, it seems that in the Allegro molto sections the speed doubles if the most common note values are three times as large.

²⁶⁶ Lenz, *Kunst-Studie*, v, 217. Platen, 'Holz', 106-7.

Example 5.2.2 a: Bar 662-672 of the Große Fuge op. 133. b: The beginning of the second movement of the String Quartet op. 131.



The second movement of the String Quartet op. 131, which is marked *Allegro molto vivace*, has a similar range of note values, with dotted crotchets and quavers being the most common note values, as can be seen in Example 5.1b. Compared to the *Groβe Fuge*, this section has more extensive quaver figuration: in the former the quavers almost always appear either on their own or as repeated notes, but in the String Quartet op. 131 they occur in groups of three in various configurations. It is therefore likely that the intended speed for this section is somewhat slower than that for the Fugue, and that Karl Holz's estimation of [.]=116 is a good approximate. Compared to Beethoven's speed of J.=84 for the *Allegro assai vivace* in the Symphony op. 125 mentioned earlier, this may seem a little fast, but since the Symphony contains both long successions of quavers and a slower tempo indication (with *assai* instead of *molto*), Holz's suggestion seems justified.

In conclusion, the range of intended speeds for the six sections marked *Allegro molto* in 6/8 is unusually wide: the slowest, the third movement of the Piano Concerto op. 19, was probably intended to move at a speed of about J.=112, while the *Allegro molto e con brio* of the Groβe Fuge is the fastest with an intended speed of circa J.=132. Although one suspects that the addition of *con brio* here is meant as a further emphasis that the speed is really quite fast, it is not really possible to check this objectively: within the *Allegros* in 6/8, the term only appears in the Groβe Fuge and the first movement of the Piano Sonata op. 7 discussed above. These are also the only works in which *con brio* appears in any metre in which the beat is indicated by quavers: the term does not occur at all in 3/8, 9/8, or 12/8, with or without *Allegro*.

This leaves only the *Allegro* sections that include *vivace*, a combination that appears only 8 times in Beethoven's works in 6/8. Three of these have already been discussed: the Glückliche Fahrt of the Cantata op. 112, with running quavers, crotchets, a few semiquavers, and a speed of J=138; the *Allegro assai vivace alla marcia* of the last movement of the Symphony op. 125, with crotchets and quavers and a speed of J=168; and the *Allegro molto vivace* second movement of the String Quartet op. 131, with the same range of note values and an estimated speed of J=232 (J=116). The five others are the *Allegro vivace* third movement of the Cello Sonata op. 5 no. 1, with extensive quavers and semiquavers in both instruments; the *Allegro molto vivace* third movement of the String Trio op. 9 no. 3 that contains crotchets, quavers, and pairs of semiquavers; the first movement of the Violin Sonata op. 12 no. 2, which is marked *Allegro vivace* and which contains quavers and semiquaver runs in both voices; the *Allegro assai vivace* section that makes up the most part of the 'Namensfeier' Overture op. 115, which contains quavers in all voices and some repeated semiquavers in the strings; and finally the WoO 90 Aria 'Mit Mädel sich vertragen'

for baritone and orchestra, which is marked *Allegro vivace animoso* and contains running quavers in all voices.

Czerny's and Moscheles's recommendations for the two string sonata movements are fairly similar, but they seem to take into account that the finale of the Cello Sonata op. 5 no. 1 contains far more extensive semiquaver figuration than the first movement of the Violin Sonata op. 12 no. 1: the former is marked J.=104 and 108, while the latter is given slightly faster speeds of J.=108 and J.=116. As Beethoven's plain *Allegros* with crotchets and quavers have metronome marks between J.=96 and J.=108 as was discussed earlier, these suggestions do seem to have some merit.

The speeds for the three other sections marked *Allegro vivace* can be deduced from the other sections discussed so far: the third movement of the String Trio op. 9 no. 3 is probably slightly slower than the second movement of the String Quartet op. 131, as both have the same tempo indication while only the String Trio contains pairs of semiquavers. Similarly, the *Allegro assai vivace* section of the Overture op. 115 is probably slightly slower than the *Allegro vivace* from 'Glückliche Fahrt' of Cantata op. 112 on account of the slight difference in tempo indication and the similarity in the range of note values. Lastly, the *Allegro vivace animoso* WoO 90 Aria probably has a similar or perhaps even slightly faster speed as 'Glückliche Fahrt': although both contain running quavers as the most common note value, the use of *animoso* might imply a slightly more fluid performance. All approximations for *allegro* sections in 9/8, 6/8, and 3/8 are summarized in Table 5.2.3.

Table 5.2.3: Approximated speeds of allegros in 9/8, 6/8, and 3/8.

Most common	Allegro ma non	Allegro	Allegro vivace	Allegro molto
note value	troppo			(vivace)
	J.=69	J.=80-88	J.=104-108	J.=112
3 Y 3)	J.=84-88	J.=96-108	J.=108-116	[].=126-138]
٨	J.=100	*	J.=126-138	[].=168]
الا	*	*	J.=168	J.=232 (J.=116)
	*	*	*	J.=264 (J.=132)

Table 5.2.3 shows again that an increase in faster note values creates a slower tempo, but it also shows another kind of consistency: every combination of note values and tempo indication in the table has a very similar estimated speed to the combination to the upper right in the table. For instance, sections which are marked *Allegro ma non troppo* containing only quavers and those marked *Allegro* containing quavers and semiquavers will both have an intended speed of around J.=100. This consistency also allows the making of a few educated guesses, such as the speeds for the *Allegro molto* sections with quavers and semiquavers, which probably move at the same speed as *Allegro vivace* sections with just quavers. In this way, the speed for *Allegro* sections in 6/8 for which there are no metronome marks or possible comparisons available (such as the third movement of the Serenade op. 25, *Allegro molto*, with quavers and semiquavers) can be estimated as being approximately J.=126-138.

5.3: Allegros in 2/4

The group of *Allegros* in 2/4 is relatively large, with 76 sections being marked as such. The metronome marks for these movements can be found in Table 5.3.1 below.

Table 5.3.1: The metronome marks for allegros in 2/4.

Work	Tempo indication	Metronome Mark	Note values
Piano Sonata op. 14 no. 2/i	Allegro	[J=80-88]	NA
Cello Sonata op. 5 no. 2/iii	Allegro	[]=76-80]	3,3,
Piano Trio op. 97/iv	Allegro moderato	[]=80-104]	* triplets
Symphony op. 125, i&iv	Allegro ma non troppo un	J=44 (J=88)	»»
Symphony op. 123, 181v	poco maestoso	<i>a</i> – 44 (<i>a</i> – 66)	•/•)
String Quartet op. 18 no. 2, i	Allegro	J =48 (J =96)	.Y.A
Piano Sonata op. 10 no. 2/i	Allegro	[]=48-56]	Y.Y.A
Piano Concerto op. 37/iii	Allegro	[]=56-58 (]=112-	37.3 7.37
Tiano Concerto op. 37/111	Allegio	116)]	•/•/
Piano Sonata op. 2 no. 2/i	Allegro vivace	[]=56-72]	* triplets
String Quartet op. 18 no. 1, iv	Allegro	J = 60 (J = 120)	»»
Piano Sonata op. 109/iii, var. 3	Allegro vivace	[]=60-76]	\frac{1}{2}
Piano Sonata op. 26/iv	Allegro	[]=60-76]	<i>y</i> , »
String Quartet op. 59 no. 1, iv	Allegro	J=63 (J=126)	3/3
Cello Sonata op. 102 no. 1/iii	Allegro vivace	[]=63-69]	3 7.5
Piano Trio op. 1 no. 2/i	Allegro vivace	[]=63-66]	Jy.3
Piano Sonata op. 27 no. 1/iv	Allegro vivace	[]=60-80]	Jy.)
Piano Sonata op. 27 no. 1/1v Piano Sonata op. 101/iv	Geschwinde, doch nicht zu	[]=60-66 (]=120-	3/3/ 3/3
Fiano Sonata op. 101/1v	sehr und mit	132)]	d/ d' '
	Entschlossenheit, Allegro	132)]	
Symphony op. 68, i	Allegro ma non troppo	J = 66	.)/_}
String Quartet op. 130/i	Allegro	[]=66 (]=132)]	.5
Piano Sonata op. 57/iii	Allegro ma non troppo	[]=66-69]	
Piano Sonata op. 78/ii	Allegro vivace	[]=66-72]	Y.A
String Quartet op. 18 no. 2, ii	Allegro] =69	\$
Variations op. 35, finale	Allegro con brio	[]=69 (]=138)]	3 7.5
Violin Sonata op. 12 no. 3	Allegro molto	[]=72-76]	.5
Symphony op. 92, iv	Allegro con brio	J=72-70j	3/3
Piano Trio op. 70 no. 2	Allegro	[]=72-84]	Jy.5
Piano Sonata op. 31 no. 1/i	Allegro vivace	[]=72-80]	<i>y</i> ,5
Symphony op. 55, iv	Allegro molto	J=76	Jy.5
Variations WoO 75, var. 7	Allegro molto	[]=76]	.5
Violin Sonata op. 96	Allegro vivace	[]=76]	. y.s
Piano Concerto op. 15/iii	Allegro	[]=76]	3 7.5
Fantasy op. 77	Allegro con brio	[J=76]	JY.)
Piano Sonata op. 79	Allegro vivace	[]=69-80]	JY.B
Violin Sonata op. 30 no. 3	Allegro vivace	[]=76-80]	JY.B
Symphony op. 60, iv	· · ·	J=80	.) .)
String Quartet op. 74, iv	Allegro ma non troppo Allegro	J =84	.8
Symphony op. 21, iv	Allegro molto e vivace	J=88)))
String Quartet op. 18 no. 2, iv	Allegro molto quasi presto	J=92	3/3 ⁵
		+ .	
Symphony op. 67, i	Allegro con brio	J=108	J Y J
Piano Sonata op. 110/ii	Allegro molto	[]=108-120]	ا لاد

Once again, it seems that the metronomic speed correlates with the tempo indication and note values. The slowest *allegro* in the table also has the fastest note values and the slowest tempo

indication. Furthermore, this is the only time that there is evidence that shows how Beethoven approached using the metronome: as can be seen in Example 5.3.2, in the top right corner of the first page of the first movement of the autograph score Beethoven writes '108 or 120 Maelzel' in pencil, ²⁶⁸ presumably referring to the speed in crotchets that he initially had in mind. Presumably these words were written at the same time as the original tempo indication, which was also written in pencil.

Example 5.3.2: Part of the first page of the autograph score of op. 125.



What the original tempo indication exactly says is hard to say with certainty, but the first word quite clearly is *Allegro*. It seems that at this stage Beethoven is still making up his mind what both the tempo indication and the metronome mark should be. His first two suggestions, equivalent to J=54 and 60, are indeed in the same range as other *allegros* in 2/4, as Table 5.9 shows, although sections with these speeds tend to not have the demisemiquavers found in the first movement of the Symphony op. 125. Since Beethoven presumably wrote these speeds before finalising the tempo indication by writing it down in ink, it seems understandable that they are less consistent than his final speed.

Beethoven's final tempo for the first movement of the Symphony op. 125 is perhaps best compared to that of the first movement of the String Quartet op 18 no. 2, which he wrote more than two decades earlier. This movement, which Beethoven gave a speed of \rfloor =96 in 1818, has a similar range of note values, with the demisemiquaver runs and the punctuated rhythms being particularly similar in both movements, as can be seen in Example 5.3.3.

_

²⁶⁸ Ninth Symphony autograph score.

Example 5.3.3: The first movements of (a) the Symphony op. 125 (Violins, bars 35-36) and (b) the String Quartet op. 18 no. 2 (bars 1-4).



The first movement of the Piano Sonata op. 14 no. 2, another work which Czerny studied with Beethoven, contains a similar range of note values and tempo indication as the first movement of the String Quartet op. 18 no. 2. Czerny's first speed (\$\frac{1}{2}\$=88) for this is movement is in fact identical to the one for the first movement of the Symphony op. 125, with other speeds both by him and Moscheles being slightly slower ($\sqrt{-80}$). Similarly, the last movement of the Piano Trio op. 97, which Czerny also studied with Beethoven, is given the same speed. This movement contains dotted rhythms with demisemiquavers and generally a similar range of note values, with the minor difference that semiquaver sextuplets take the place of the demisemiquaver runs and the movement is marked *Allegro moderato*. The final movement of the Cello Sonata op. 5 no. 2, which contains extensive demisemiquaver figuration in both instruments, is given a speeds of J=76 and 80 by Czerny and Moscheles. In this context these speeds seem appropriate suggestions, but they are slower than Beethoven's speeds for *Allegro ma non troppo* sections with the same range of note values. It is therefore probable that these Allegros in 2/4 with much demisemiquaver figuration have a slightly faster intended speed of perhaps approximately $\downarrow = 88$, with all *Allegro* sections with demisemiquaver figuration having speeds between 3 = 44 and 58.

The *allegros* without demisemiquavers as most common note values all move a little faster. This can be seen in the last movements of the String Quartets op. 18 no. 1 and 59 no.

1, which have semiquavers and semiquaver triplets as smallest common note value occurring in all four voices, and speeds of J=60 and 63, respectively. The second movement of the String Quartet op. 18 no. 2 also contains a short *Allegro* section, which contains virtually only semiquavers and a speed of J=69. Although this could be a case in which 69 is misprinted as 60 as there are no other metronome marks that confirm this speed, it seems also possible that it is the contrast with the *Adagio* that both precedes and follows the *Allegro* section that makes the speed slightly faster than the other two string quartets.

Similar speeds to the ones for the first movements of the String Quartets op. 18 no. 1 and 59 no. 1 are found in metronome marks by Czerny and Moscheles for other allegros, one of which, the last movement of the Piano Concerto op. 37, Czerny studied with Beethoven. Not counting the short cadences which have shorter note values that are found throughout the finale of this concerto, it contains semiquaver figuration in both piano and orchestra parts, with semiquaver triplets also occurring in the former. Czerny's speed of $\rfloor = 58$ ($\rfloor = 116$) seems close enough to that of the string quartets to be considered consistent, as is Moscheles's = 56 (J=112). Some of the metronome marks for Allegros in 2/4 that Czerny did not study with Beethoven show a similar relationship between note values and speed. The metronome marks for the first movement of the Piano Sonata op. 10 no. 2, which contains crotchets, quavers, semiquavers, semiquaver triplets, and some demisemiquavers are slightly slower, ranging from =48 to 56, presumably because of the inclusion of demisemiquavers. The fourth movement of the Piano Sonata op. 26, which contains quavers and semiquavers in both hands, is given slightly faster speeds. Czerny's mark in the Haslinger edition of $\sqrt{}=76$ seems almost certainly too fast, while his speed in On the Proper Performance of $\rfloor = 66 \ (\rfloor = 132)$ is probably much closer to what Beethoven had in mind, as is his final speed of =60. Finally, the last movement of the Piano Sonata op. 101, again with quavers and semiquavers, is marked Geschwinde, doch nicht zu sehr und mit Entschlossenheit, Allegro. The German part

of this tempo indication seems to be added later, as it is not present in the autograph score, and Czerny's and Moscheles's speeds are in the same range as those for other movements with a similar range of note values: J=60 and J=60 and

Slightly faster are those sections in which semiquavers primarily seem to appear in pairs. The best example of this is found in the first movement of the Symphony op. 68, which is presumably marked *Allegro ma non troppo* to avoid a tempo that is too fast. Beethoven's metronome mark for this movement, $\sqrt{}=66$, is definitely faster than many modern performances, but it is consistent with his other metronome marks. Similar speeds ranging from J=66 to 72 are given by Czerny to a work that he probably studied with Beethoven, ²⁷⁰ the last movement of the Piano Sonata op. 57, which is also marked *Allegro ma non troppo*. Although semiquavers are far more common in the Sonata than in the Symphony, suggesting a speed slower than the Symphony, it does seem possible that Czerny's speed is vindicated by the fact that these semiquaver almost exclusively appear in the accompaniment, not unlike the Symphony. As can be seen in Example 5.3.4, in both cases the melody consists of crotchets, quavers, and one or two semiquavers at the time, with larger groups of semiquavers appearing in most voices when they are accompanying the melody. This is particularly clear in the Symphony, in which almost every instrument has repeated semiquavers at some point in the first movement, but also in the Sonata, in which the semiquaver broken chords form a constant accompaniment to the main melody, which is often found in the left hand in that movement. Here too it is clear that at least during the compositional process affect plays little

_

²⁶⁹Autograph score of the Piano Sonata op. 101, Beethoven-Haus Bonn, NE 219.

or no role in determining the speed of a movement, given the difference in mood but similarity in speed between these two works.

Example 5.3.4: The melody and accompaniments of the third movement of the Piano

Sonata op. 57 and the first movement of the Symphony op. 68.



With *Allegro ma non troppo* sections with relatively few semiquavers in their melodies moving at around J=66, it follows that *Allegro* sections with the same range of note values move faster than that. Unfortunately, there are no *allegros* with metronome marks by the composer with these characteristics, but there is one movement that Czerny studied with Beethoven that does seem a good match: the rondo of the Piano Concerto op. 15, in which outside the piano part semiquavers appear almost only in pairs. Czerny's and Moscheles's speed of J=76 for this *Allegro* is a little faster and therefore implicitly validates the J=66-72 for the *Allegro ma non troppo* sections with the same range of note values.

Many *allegros*, however, have a wider distribution of semiquavers: the last movement of the Seventh Symphony op. 92 has far more extensive semiquaver figuration than the first movement of the Sixth Symphony op. 68. Despite the more prominent use of fast note values, Beethoven's metronome mark for that movement is J=76, a speed that presumably finds its justification in the addition of *con brio* to the tempo indication. *Allegro con brio* sections in 2/4 with semiquavers are comparatively rare, with the only two works for the piano: the

fugue of the Variations op. 35, and a section in the Fantasy op. 77. For the latter both Czerny (in the Cocks edition) and Moscheles give a speed of \rfloor =76 (as \rfloor =152), while for the former the only speed available is the slightly slower \rfloor =69 by Moscheles. Both of these speeds, however, are merely educated guesses, but they do support the notion that *Allegro con brio* in 2/4 is generally somewhat faster than mere *Allegro* in the same metre. Finally, there is only one *Allegro con brio* section in 2/4 without semiquavers: the first movement of the Symphony op. 67, which Beethoven gave a speed of \rfloor =108.

Allegro molto is about as common as Allegro con brio in 2/4, with the last movement of the Third Symphony op. 55 being the only movement with metronome marks by Beethoven in which the *Allegro* and *molto* appear without the influence of another term. This movement begins with a four bar semiquaver flourish in the strings, but later on running semiquavers appear in almost every instrument. The metronome mark for this movement, =76, is almost indistinguishable from the speed for the *Allegro con brio* last movement of the Symphony op. 92, suggesting that Beethoven used Allegro molto and Allegro con brio as equivalents in this metre. Czerny's and Moscheles's suggestions for other Allegro molto sections with extensive semiquaver figuration support this: =72-76 for the last movement of the Violin Sonata op. 12 no. 3, and =72 for the last variation of WoO 75. Much like in the case of the Allegro con brio sections, there are Allegro molto sections without semiquavers: the brief scherzo in the Serenade op. 8, and the second movement of the Piano Sonata op. 110. For the latter, Czerny and Moscheles suggest speeds ranging from J=108 to 120. These speeds are of course merely educated guesses, with the slowest speeds seeming perhaps a little more likely than the fastest, which in turn supports the notion that Allegro molto and Allegro con brio sections in 2/4 with the same range of note values have the similar speeds.

The next two allegros—the last 11 bars of the String Quartet op. 74 marked Allegro

J=84 and the *Allegro ma non troppo* J=80 last movement of the Symphony op. 60—are the odd ones out: both of these have almost constant semiquaver figuration but are a lot faster than other sections with the same tempo indication. For the String Quartet, this inconsistency can perhaps be excused, as this particular section is only eleven bars long and lasts less than eight seconds in performance, and because the preceding tempo indication is *Un poco vivace* [di Allegretto] J=76, which implies that the following Allegro is a little faster. The speed for the Symphony, however, is so anomalous that several authors have suggested that the metronome might be a misprint. This seems plausible, especially since based on a comparison with other Allegro ma non troppo sections J=60 could have been the speed that Beethoven had in mind, due to the fact that it contains semiquaver runs for almost every instrument. It seems therefore probable that the number of the metronome mark was either misread by the editor or misprinted, although this is not the only explanation. A further possibility is that Beethoven simply changed his mind in the decade between composition and the first publication of the metronome marks, and that he concluded that the finale might work better at the speed of a *Molto Allegro con brio*.

The fastest two *allegros* with semiquavers in Table 5.3.1—the last movements of the String Quartet op. 18 no. 2 and the Symphony op. 21—both combine several tempo indications. The String Quartet is marked *Allegro molto quasi presto* and \$\ \]=92, indicating that this is probably the fastest *allegro* with this range of note values, with the tempo indication occupying the threshold between *allegro* and *presto*. The Symphony, on the other hand, is marked *Allegro molto e vivace* and \$\ \]=88, and although the speed and range of note values is similar to that of the String Quartet, the tempo indication suggests something the Quartet does not: that the addition of *vivace* increases the tempo, much like in *Allegros* in 3/4. Although neither Czerny nor Moscheles claimed that they discussed any *Allegro vivace* in

²⁷¹ Brown, 'Metronome Marks', 249.

this metre with the composer, and despite the lack of metronome marks for *Allegro vivace* sections by Beethoven, the sheer number of suggestions by the editors that fall in the same range as the *Allegro con brio* and *Allegro molto* sections discussed above provides some support for the statement that *Allegro vivace* has a similar role in 2/4. For the *Allegro vivace* sections in the final movements of Piano Sonatas opp. 27 no. 1, 78, 79, 109, most of the suggestions range between J=66 and 80, as they do in the final movements of the Violin Sonatas opp. 30 no. 3 and 96, as well as the last movements of the Piano Trio op. 70 no. 2, the Cello Sonata op. 102 no. 1, and the first movement of the Piano Sonata op. 31 no. 1. Two movements with demisemiquaver triplets—the first movements of the Piano Trio op. 1 no. 2 and the Piano Sonata op. 2 no. 2—have slightly slower speeds ranging from J=56 to 72, as one would expect based on their note values. Overall, therefore it seems that within *Allegros* in 2/4, the addition of *molto*, *vivace*, and *con brio* all constitute a similar increase in speed, as is summarized in Table 5.3.5

Table 5.3.5: Estimated speeds for *allegros* in 2/4.

Most common note value	Allegro ma non troppo	Allegro	Allegro con brio/vivace/ molto	Allegro molto vivace
. N. N.	J =44	J =44-58	*	*
3 4.7	*	J=60-69	*	*
JY.\$	J=66-72	J=76	J=72-76	J=88-92
Ŋ	*	*	J=108-120	*

Much like in the previous tables, there is a certain consistency in at least part of the table, especially between the *Allegro ma non toppo* sections with pairs of semiquavers (here indicated by) and *Allegros* with more semiquavers (). There are, however, also a few instances in which the table is less consistent, such as the fact that the slowest *Allegro* has the

same speed as the slowest *Allegro ma non troppo*, which is presumably due to an inconsistency on Beethoven's part.

5.4: Allegros in 3/4 and 6/4

Beethoven's oeuvre contains over 80 *allegro* sections in 3/4, 17 of which have metronome marks that are displayed in Table 5.4.1 below. Not counting the somewhat ambiguous *Allegro assai vivace ma serioso* from the String Quartet op. 95, the table does not include any obviously 'slow' *allegro* sections, and there are only 5 *Allegro ma non troppo* and only one *Allegro assai* sections in 3/4 in Beethoven's oeuvre overall. It seems likely, however, that the minuets in 3/4 take the place of the 'slow' *allegro*: the minuets from the Symphonies opp. 21 and 60 are both marked *Allegro molto e vivace*—the fastest *allegro* indication that there is—but still have a similar speed as ordinary *allegro* of the Symphonies opp. 67 and 68, which in fact include shorter note values than the minuets which slow down the tempo. The relationship between minuets and 'slow' *allegros* will be discussed in more detail below. The scherzos, on the other hand, appear to move at the same rate as sections without that indication. The *allegro* sections can therefore be divided into three groups: those *allegros* that are also minuets, those which have an additional fast indication, and those without.

Table 5.4.1: The metronome marks for allegros in 3/4.

Work	Tempo indication	Metronome	Note
		<u>Mark</u>	<u>values</u>
WoO 78 Var. 7	Allegro	[]=104]	.)
Bagatelle op. 33 no. 5	Allegro ma non troppo	[].= 38]	A
Quintet op. 16/i	Allegro ma non troppo	[].=41]	.
String Quartet op. 132/v	Allegro appassionato	[].=43]	1/1)
Violin Sonata op. 96/i	Allegro moderato	[].=44-53]	33.
Violin Sonata op. 30 no. 1/i	Allegro	[].=48-53]	.)\ <u>)</u>
Piano Sonata op. 31 no. 3/i	Allegro	[].=48-60]	.
Piano Trio op. 70 no. 1/i	Allegro vivace e con brio	[].=50-66]	.y.s
Variations WoO 68 var. 12	Allegro	[].=51]	.y.s
String Quartet op. 18 no. 2, iii	Allegro, Scherzo & Trio	J.=52	.)))
String Quartet op. 18 no. 1, i	Allegro con brio	J.=54	3 7.1
String Quartet op. 132/ii	Allegro ma non tanto	[].=58]	.)
Piano Trio op. 1 no. 3/iii	Quasi allegro	[].=58-69])
String Quartet op. 127/i	Allegro	[].=60]	1/1)
Symphony op. 55, i	Allegro con brio	J.=60	1/1/1
String Quartet op. 18 no. 6, iii	Allegro, Scherzo & Trio	J.= 63	.y.)\
Cello Sonata op. 102 no. 2/iii	Allegro	[].=63]	1/1)
Piano Trio op. 1 no. 3/i	Allegro con brio	[].=60-66]	.)\)
Violin Sonata op. 12 no. 2/iii	Allegro piacévole	[].=66]	1/1)
Symphony op. 93, i	Allegro vivace e con brio	J.=69	. Y. N
String Quartet op. 95, iii	Allegro assai vivace ma serioso	J.=69	٦
Piano Sonata op. 10 no. 1/i	Allegro molto e con brio	[].=69-80])
Piano Sonata op. 28/i	Allegro	[].=69-76]	1/1)
Piano Sonata op. 7/iii	Allegro	[].=72-80]	1/1)
Piano Sonata op. 10 no. 3/iii	Allegro, Minuet	[].=72-84]	1/1)
Violin Sonata op. 30 no. 2/iii	Allegro	[].=76-84]	_}/_
Bagetelle op. 33 no. 2	Allegro	[].=76]	_}/_
String Quartet op. 95, iii	Più Allegro [di Allegro assai vivace]	J.=80	•)
Violin Sonata op. 96/iii	Allegro	[].=80]	. },
Cello Sonata op. 5 no. 2/ii	Allegro più tosto presto	[].=84]	_}
Piano Trio op. 97/ii	Allegro	[].=80-88]	1/1)
Piano Trio op. 1 no. 2/iii	Allegro, Minuet (in sketches)	[].=88-100]	1/1)
Symphony op. 60, iii	Un poco meno Allegro	J.=88	1/1)
Violin Sonata op. 24/iii	Allegro molto	[].=88-92]	_}/_
Symphony op. 67, iii	Allegro	J.=96	1/1)
Piano Sonata op. 26/ii	Allegro molto	[].=88-104]	_}/_
Piano Sonata op. 28/iii	Allegro vivace	[].=92-104]	_}/_
String Quartet op. 18 no. 3, iii	Allegro	J.=100	1/1)
Symphony op. 36, iii	Allegro, Scherzo & Trio	J.=100	1/1)
Symphony op. 60, iii	Allegro molto e vivace, Minuet	J.=100	J
Cello Sonata op. 69/ii	Allegro molto	[].=104-108]	١٧٦
Symphony op. 68, iii	Allegro	J.=108	1/1)
Symphony op. 21, iii	Allegro molto e vivace, Minuet	J.=108	J
String Quartet op. 18 no. 1, iii	Allegro molto	J.=108]/_)
Symphony op. 55, iii	Allegro vivace, Scherzo & Trio	J.=116	J
Septet op. 20, v	Allegro molto e vivace, Scherzo & Trio	J.=126	J
Piano Trio op. 1 no. 1/iii	Allegro assai, Minuet	[].=116-132]]/_)
Piano Sonata op. 27 no. 1/ii	Allegro molto e vivace	[].=112-138]	J

As minuets tend to move slower than normal allegros in 3/4, plain Allegro minuets should be amongst the slowest allegros of all. There are at most five of these in Beethoven's oeuvre, all written between 1794 and 1798: the third movements of all three Piano Trios op. 1 (although there is some confusion whether all of these are minuets), ²⁷² the third movement of the String Trio op. 9 no. 2, and the third movement of the Piano Sonata op. 10 no. 3. The Piano Sonata, the String Trio, and the second Piano Trio all have crotchets and quavers as note values and only Allegro as a tempo indication. Czerny's and Moscheles's suggestions for the sonata range from J.=72 to 84, which seems appropriate since several non-minuet *allegro* sections with the same range of note values move at approximately J.=100 as Table 5.4.1 shows. As both Czerny and Moscheles seem to identify the third movement of the Piano Trio op. 1 no. 2 as a scherzo, rather than a minuet, their speeds are probably incorrect. In On the Proper Performance, however, Czerny gives an indication that his previous suggestion of J.=96 might have been based on a misapprehension, as he suggests a speed of J.=88 while recommending a performance that is 'tranquil, not too quick, and more earnest than facetious, '273 qualities that he elsewhere attributes to the minuet. 274 Whether the third movement of the Piano Trio op. 1 no. 1 should move at a similar speed as the other movements mentioned in this context is hard to say due to problems with the identification of the movement, but the speeds that Czerny and Moscheles suggest, ranging from J.=116-132, are more consistent with Allegro molto than with the Allegro assai of op. 1 no. 1. Finally, the minuet of op. 1 no. 3, with semiquavers (only in the piano), quavers, and crotchets, and with a tempo indication of *Quasi Allegro* is given speeds of J.=58-69 by Czerny and Moscheles. The slowest of these suggestions is probably closer to Beethoven's intended speed than the

27

²⁷² The third movements of the first and second trios are both identified as scherzos in the piano and cello parts, and as minuets in the violin parts. Furthermore, sketches for the second trio clearly identify the movement as a minuet. See Douglas Porter Johnson, ed., *Beethoven's Early Sketches in the 'Fischhof Miscellany'*, Ann Arbor, Michigan (UMI Research Press) 1980, ii, 7. Every subsequent edition seems to have accepted the identifications in the piano and cello parts of the trios, including Johnson's discussion of the sketches for these movements.

²⁷³ Czerny, *On the Proper Performance*, 83.

²⁷⁴ Ibid., 81.

fastest, due to the relatively close proximity in speed to non-minuet *allegros* with the same range of note values of this range. Perhaps a speed of approximately J.=44, slightly faster than the *Tempo di minuetto* movements from Chapter 4 which have a similar range of note values, is therefore more likely to represent what Beethoven had in mind.

Sketches for the third movement of the String Quartet op 18 no. 6 show that at some point in the creative process Beethoven had thought of it as a minuet.²⁷⁵ and that he presumably had a slower tempo in mind. Some time before the printing of the first edition, however, Beethoven must have changed his opinion: the movement is marked scherzo both in the first edition and in the 1818 Steiner booklet. 276 As can be seen in Example 5.4.2a, its note values range from crotchets and quavers in the scherzo to pairs of semiquavers in the trio in the first violin only, giving it a not dissimilar distribution to the first movement of the Symphony op. 55, in which semiquavers only appear later on in the movement in the strings. The metronome marks for these two movements are comparable too: the String Quartet scherzo is marked J.=63, while the Symphony moves at J.=60. The scherzo from the String Quartet op. 18 no. 2, on the other hand, has a similar range of note values, but in reverse: the scherzo has pairs of semiquavers in every voice and in almost every bar as can be seen in Example 5.4.2b, while the trio consists of crotchets and quavers. The speed for this movement is noticeably slower than that for the or two movements: J.=54, which is presumably on account of the fact that the semiquavers in this section occur in all voices. The first movement of the String Quartet op. 18 no. 1 has similar characteristics, as can be seen in Example 5.4.2c, and a speed of J.=54, comparable to that of the scherzo of op. 18 no. 2.

_

²⁷⁵ Kramer, *A Sketchbook of the Summer of 1800*. Page 7r contains the word 'menuetto' in ink in Beethoven's hand between the staves among the sketches for the String Quartet op. 18 no. 6.

²⁷⁶ Beethoven, Bestimmung des musikalischen Zeitmasses.

Example 5.4.2: Part of the third movements of a: String Quartet op. 18 no. 6, bar 48-52; b: String Quartet op. 18 no. 2, bar 18-25; c: bar 1-4 of the first movement of the String Quartet op. 18 no. 1.



Czerny's and Moscheles's metronome marks for similar movements are mostly comparable: for the first movement of the Piano Trio op. 1 no. 3 (*Allegro con brio*, semiquavers only in the piano) the suggests speeds of J.=60-66, and the first movement of the Violin Sonata op. 30 no. 1 (*Allegro*, semiquavers in both instruments) is given a range of J.=48-53. Czerny's first mark of J.=60 for the first movement of the Piano Sonata op. 31 no. 1 (*Allegro*, semiquavers in both hands) is almost certainly inappropriate, but his later suggestions of J.=48 and 50 (given as J=144 and 152) are probably more consistent with Beethoven's intentions. This is further supported by Moscheles's suggestion of J=152 for the twelfth

variation of the Variations WoO 68, which contains a largely similar range of note values. Finally, the first movement of the Violin Sonata op. 96, which contains primarily quavers, quaver triplets, crotchets, a few semiquaver flourishes in both instruments at the end of the movement, and which is marked *Allegro moderato*, is given speeds of J.=44-46 by Czerny and J.=53 by Moscheles (J=132-138 and J=160, respectively). Although the note values do not provide justification for these speeds, the addition of the *moderato* might, which in this case presumably has a meaning comparable to *ma non troppo*. Given the consistency observed in the *allegros* in 6/8—in which *Allegro ma non troppos* with quavers move at a similar speed as *allegros* with semiquavers—it seems likely that the same is true in 3/4 for *Allegro ma non troppo* sections with crotchets and quavers and *Allegros* with quavers and semiquavers. Moscheles's suggestion, which is closer to the *Allegros* in Table 5.4.1 with semiquavers, is therefore more likely to be closer to Beethoven's intended speed than Czerny's.

The plain *allegros* without semiquavers move at a substantially faster speed than those with smaller note values: the third movements of the Second Symphony op. 36 and the String Quartet op. 18 no. 3 both have a speeds of J.=100. Two other *allegros* have a comparable speed: the third movements of the Fifth and Sixth Symphonies opp. 67 and 68, which are marked J.=96 and 108, respectively. All four of these movements have a similar range in note values, with crotchets being the most common. Quavers also appear, but only in relatively small amounts at once, and semiquavers do not appear at all except in a few grace notes, making these four movements the plain *allegro* sections with fewest semiquavers. There are, however, a number of movements with few or no semiquavers but with far more prominent quaver figuration than these four *allegros*. Significantly, the scherzo from the Piano Trio op. 97, one of the works which Czerny studied with Beethoven and which contains quavers and crotchets in about equal measure, is marked J=80. Several other plain

allegros with a similar range and distribution of note values have a similar suggested speed by either Czerny or Moscheles: the third movements of the Piano Sonata op. 7 and Violin Sonatas opp. 30 no. 2 and 96 have J.=72-80, J.=76-84, and J.=80 respectively;²⁷⁷ the Bagatelle op. 33 no. 2 is marked J.=76; the first movement of the Piano Sonata op. 28 has speeds between J.=69-76; and finally the second movement of the Piano Trio op. 97, which is marked J.=80-88. The only three exceptions are Karl Holz speeds of J=132 (J.=43) for the final *Allegro appassionato* in the String Quartet op. 132, J.=60 for the first movement of the String Quartet op. 127, and the J.=63 that Czerny and Moscheles recommend for the fugue in the third movement of the Cello Sonata op. 102 no. 2. Nevertheless, since the vast majority of these movements have a similar suggested speed despite their differences in character, it seems probable that Beethoven intended *Allegros* in 3/4 with crotchets and quavers as common note values to move at a speed of around J.=80.

There are only six 'slow' *allegros* in 3/4, all of which except one involve the piano, and three of which have metronome marks by a contemporary of the composer. For only a single *Allegro ma non troppo*, found in the first section of the Piano and Wind Quintet op. 16, there is a metronome mark that could possibly be traced back to the composer, as Czerny played the work in the composer's presence, albeit not to his satisfaction.²⁷⁸ The section consists of primarily crotchets and quavers, with triplets and semiquavers appearing exclusively in the piano. Czerny's speed of approximately J.=48 (J=144) seems consistent with the speeds for *Allegro minuets* with the same range of note values. The *Allegro ma non troppo* Bagatelle op. 33 no. 5 contains much faster note values, with semiquaver triplets making up the most of the piece, and Czerny's speed is much slower: J.=38 (J=112). It seems possible that the seventh variation of the Variations on the British National Anthem WoO 78, which contains the same range of note values as op. 33 no. 5 and for which Moscheles gave a

-

²⁷⁷ Czerny marks the first movement of the Violin Sonata op. 96 J.=96 in the first Haslinger edition, but this appears to be anomalous.

²⁷⁸ See Brandenburg, *Briefwechsel*, Letter 902.

speed of J=104, was considered to be a slow *allegro* by the editor. Whether or not this was also Beethoven's opinion is hard to say: the first edition is very sparse with tempo indications, and does not even provide one until the sixth variation. Finally, the second movement of the String Quartet op. 132 is marked [].]=58 by Holz, and contains mainly crotchets in the first few bars but extensive quaver figuration later in all four voices. The speed that Holz suggests is comparable to plain Allegros with some semiquavers, as can be seen in Table 5.4.1, and is therefore probably a good approximation of what Beethoven had in mind. The speed for two of the three other slow *Allegros*—the sixth variation of op. 120 with running semiquavers, and the Song WoO 141 with semiquavers as most common note value in the piano and the voice—are probably comparable to Czerny's speed for op. 33 no. 5, although the note values are sometimes a little different. The speed of the final Allegro ma non troppo in 3/4, the second movement of the Piano Trio WoO 38 with crotchets and quavers, is probably slower than the second movement of the Piano Trio op. 1 no. 2, which has a similar range of note values, a tempo indication of Allegro, and an estimated speed of about 1.=88, as discussed above. On the other hand, it is probably faster than the second movement of the String Quartet op. 132, as it contains less extensive quaver figuration. An estimated speed of approximately J.=66 or 69, similar to Czerny's speed for the somewhat ambiguous Allegro piacévole of the third movement of the Violin Sonata op. 12 no. 2, might therefore be close to Beethoven's intended speed.

There are only seven sections marked *Allegro molto* in 3/4 in all of Beethoven's oeuvre: the first movement of the Piano Duet Sonata op. 6, the first movement of the Piano Sonata op. 10 no. 1, the third movement of the String Quartet op. 18 no. 1, the third movement of the Violin Sonata op. 24, the second movement of the Piano Sonata op. 26, the second movement of the Cello Sonata op. 69, and a part of the finale of the second act of third version of Fidelio. The last section is somewhat of an outlier, as it is the only *Allegro*

molto in 3/4 that includes semiquaver figuration, and the only that does not include a piano in its instrumentation. The intended speed for the *Allegro molto* in *Fidelio* is therefore most likely much slower than the speeds for the other sections. Unfortunately, there is no reliable evidence that either Czerny or Moscheles studied any of these works with Beethoven, but some of their metronome marks might point in the right direction of Beethoven's tempo.

The scherzo of the String Quartet op. 18 no. 1 has crotchets as most common note values, and with constant quavers appearing in the first violin in the trio. Beethoven's metronome mark for this movement is 1.=112. The scherzo from the Cello Sonata op. 69 has a similar range of note values, although their distribution is a little more even: extensive quaver figuration appears in both the left hand of the piano and in the cello part. Czerny's speed for this movement, J.=108, seems close to that of op. 18 no. 1, while Moscheles's suggestion of J.=104 is similar, but closer to the speed for plain *allegros*. The first movement of the Piano Sonata op. 10 no. 1 is marked Allegro molto e con brio, and contains quavers and crotchets as most common note values, with semiquavers appearing exclusively in dotted rhythms, much like in the Allegro assai vivace ma serioso third movement of the String Quartet op. 95. As the String Quartet has a speed of J.=66, a tempo indication that is slower than the one for the Piano Sonata, and semiquavers in all four voices, it follows that the Sonata will have an intended speed that is quite a bit faster, as it has less extensive semiquaver figurations. The fastest speeds by Czerny and Moscheles—J.=76 and 80—seem therefore along the right lines, but it is also possible that Beethoven had a faster speed in mind for this movement. For the scherzo of the Violin Sonata op. 24—which contains a similar range of note values, but with hardly any semiquavers—Czerny and Moscheles suggest a wide range of speeds of J.=76-92. Since this movement has less extensive semiquaver figuration than the first movement of the Piano Sonata op. 10 no. 1 but smaller note values than the scherzo of op. 18 no. 1, this range seems perfectly consistent. The same

cannot be said for the suggestions for the scherzo and trio of the Piano Sonata op, 26, which contain quavers and crotchets, and minims and crotchets, respectively. Since this movement contains no semiquavers, Czerny's and Moscheles's suggestions are probably erroneous, as they are too similar to the speeds given for the scherzo of the Violin Sonata op. 24. It seems likely that the Piano Sonata was intended to move a little faster. It therefore seems plausible that the lower half of the range suggested for both movements— between approximately \$\dlots=88\$ and 96—is closer to the intended speeds for *Allegro molto* sections with some semiquavers, while the upper half—from about \$\dlots=100\$ to 104, or even faster— is probably closer to the intended speed of those movements with only crotchets and quavers. Finally, the second movement of the Cello Sonata op. 5 no. 2, marked *Allegro più tosto presto* and with crotchets and quaver triplets, has suggested speeds of \$\dlots=84\$ by both editors, which seems largely consistent considering the observations above.

The term *Allegro vivace* is used only eight times in 3/4 without *molto*: in the third movement of the Piano Sonata op. 28; the fourth movement of the Serenade op. 25; the third piece of the Ballet op. 43; the scherzo of the Symphony op. 55; the first movements of the Piano Trio op. 70 no. 1; Symphony op. 93; String Quartet op. 95; and in the fifth variation of the Diabelli Variations op. 120. The tempo indications for these movements, however, are often different, as are their ranges of note values. The first movement of the Symphony op. 93 is marked *Allegro vivace con brio*, J.=69, and has quavers, crotchets, and semiquavers as most common note values. The range of note values is similar to that of the first movement (*Allegro con brio*, J.=60) of the Third Symphony op. 55, although the distribution is not: semiquavers appear in the strings as long successions of repeated notes, and in the other instruments in punctuated rhythms. This is presumably compensated for by the addition of *vivace* to the tempo indication, which results in a faster speed (J.=69) than the first movement of the Symphony op. 55. The first movement of the Piano Trio op. 70 no. 1 has an identical

part a similar distribution of note values: with the exception of a short section in the development and the first two notes of the main theme, semiquavers exclusively appear in the piano. Czerny's speed for this movement is 1.=152, much slower than Beethoven's for the Symphony op. 93, but Moscheles suggests a much closer 1.=66. It seems therefore likely that much like in the *allegros* in 6/8, *Allegro vivace* seems to indicate the middle ground between *Allegro molto*.

The autograph score of the third movement of the String Quartet op. 95, of which the tempo indication is Allegro assai vivace ma serioso, shows that the assai clearly belongs to the vivace, 279 which therefore seems to indicate a speed between Allegro and Allegro vivace. Its note values range from quavers and single semiquavers in dotted rhythms in all voices in the first and third section to quavers in the first violin and dotted minims in the other voices in the middle section. Overall, there are fewer semiquavers in succession in the String Quartet op. 95 than in the first movement of the Symphony op. 93, but since the tempo indication of the former is a little slower than that of the latter, both movements are given the same speed of J.=69. The third movement of the Piano Sonata op. 28 is a scherzo and trio marked *Allegro* vivace, and has minims, crotchets, and quavers as its most common note values. Although the quavers appear much more often in the trio than in the scherzo, they do seem to affect the tempo: every pair of quavers in the scherzo is tied together, and followed by crotchets with a staccato mark. Czerny argues that this indicates that the quavers should be separated from the crotchet, 280 which indicates that the quavers are not merely 'passing' but that they should be taken into account as having an effect on the tempo. Czerny's and Moscheles's metronome marks, which range from J.=92 to 104, seem especially believable in the context of the scherzo of the Symphony op. 55, an Allegro vivace that has crotchets as most common note

_

Autograph Score of the String Quartet op. 95, Austrian National Library, Mus.Hs.16531 A/Beethoven/11.
 Czerny, On the Proper Performance, 41.

values, with quavers taking a subordinate role. Beethoven's speed for this movement is J.=116, so a movement with the same tempo indication but more quavers could indeed move at around J.=100.

This leaves only three Allegro vivaces for which no metronome marks exists, but for which the intended speed can be estimated based on previous findings. The fourth movement of the Serenade op. 25 is marked Allegro scherzando e vivace, and consists of two parts. The first part contains dotted quavers and single semiquavers as most common note values, while the second part contains quavers and crotchets, which gives this movement a range and distribution of note values that broadly aligns with that of the third movement of the String Quartet. Since that movement was only assai vivace, it is likely that the Serenade moves at a slightly quicker pace than the String Quartet's J.=69, perhaps approximately J.=76. The second Allegro vivace, the third piece of the Ballet op. 43, starts out not unlike the fourth movement of the Serenade, with dotted quavers and single semiquavers alternating, but soon introduces running semiquaver figuration. Since all of the Allegro vivaces discussed thus far have had a faster speed than their Allegro counterparts with the same range of note values, and since plain *Allegros* with running semiquavers move at speeds between J.=48 and 54, it seems probable that this *Allegro vivace* is a little faster than that. A speed of approximately J.=60, comparable to that for plain *Allegros* with only relatively few semiquavers, is likely to be close to the speed that Beethoven had in mind. Finally, the fifth variation of the Diabelli Variations op. 120 contains pairs of repeated quavers, crotchets, and minims, and therefore probably has an intended speed comparable to that of the scherzo of the Symphony op. 55, approximately J.=116.

The final group of sections constitutes those with a combination of *allegro*, *molto*, and *vivace*. There are only four of these, all marked *Allegro molto e vivace*, and three of them have metronome marks: the scherzo of the fifth movement of the Septet op. 20 (J.=126, with

minims, crotchets, and some quavers), the minuet of the Symphony op. 21 (J.=108, minims and crotchets, with some quavers in the trio), the second movement of the Piano Sonata op. 27 no. 1 (just crotchets), and the minuet from the Symphony op. 60 (J.=108, with crotchets and some quavers in the trio). As shown earlier, minuets have a similar speed as Allegros with a slow tempo indication or as plain Allegros with shorter note values. It follows therefore that minuets with a fast tempo indication should have a speed comparable to that of plain allegros with a similar range of note values, which can be seen in a comparison of the minuets of opp. 21 and 60 on the one hand with the third movement of the String Quartet op. 18 no. 1 on the other in Table 5.4.1. The speed for the fifth movement of the Septet op. 20, which has larger note values than the String Quartet op. 18 no. 1, is therefore justifiably faster. The Piano Sonata, however, has the largest note values of all, with quavers only appearing as a kind of shortened crotchets in the right hand. It follows that the Sonata should also have the fastest speed: the only speed by Czerny or Moscheles that is faster than the speed for the scherzo of the Septet is Czerny's first mark of J.=138, with their other speeds being J=126, 120, and 112. The estimated speeds for all allegros in 3/4 are displayed in Table 5.4.3.

Table 5.4.3: Approximated speeds of allegros in 3/4.

Most common	Allegro ma non	Allegro/ Molto	Allegro	Allegro molto	Allegro
note value	troppo/ Allegro	Allegro	vivace		molto
	minuets	minuets			vivace
3 7.5	J.=38-44	J.=48-54	*	*	*
. Y. B	J.=44-54	J.=60-66	J.=69	J.=76-80	*
•	J.=58	J.=69	[].=76-80]	J.=88-96	*
J Y.]	J.=69	J.=76-88	J.= 92-104	J.=100-112	J.=126
	J.=72-84	J.=96-108	J.=116	*	J.=138

Much like the *allegros* in 6/8, the *allegros* in 3/4 appear to be governed by the rule that the tempo is determined by the most common note values and the tempo indication, and that both

of these factors appear to have roughly the same amount of influence, as the influence of an increase in shorter note values can be offset by a faster tempo indication.

There are only two *allegros* in 6/4: a short *Un poco meno Allegro* from the March WoO 19, and the *Allegro energico e sempre ben marcato* 1.=84 from the fourth movement of the Ninth Symphony. The latter movement contains running quavers, crotchets, and minims, and the tempo indication seems to suggest a performance that is perhaps not faster than the normal *allegro*, but at least has more energy. Beethoven's speed for this section, however, is perfectly consistent with the speed for *Allegros* in 3/4 with the same range of note values in Table 5.4.3. It seems therefore probable that in contrast with the slow tempos, in which the amount of beats in the metre also determines the speed, that the tempo for Beethoven's two *Allegro* sections in 6/4 runs exactly parallel with those in 3/4, in the same way that there is no difference between 3/8, 6/8, and 9/8.

5.5: Allegros in c and 12/8

There are approximately 145 *allegros* in **c** in Beethoven's oeuvre, 10 of which have metronome marks, which are displayed in Table 5.5.1, along with the editorial metronome marks.

Table 5.5.1: The metronome marks for allegros in c.

Work	Tempo indication	Metronome Mark	Note values
String Quartet op. 132/i	Allegro	[]=46]	.)
String Quartet op. 131/iii	Allegro moderato	[]=48]	ا کرد کرد
Variations WoO 66 var. 12	Allegro ma non tanto, con	[]=54]	1/1
	grazia		
Violin Sonata op. 12 no. 3/i	Allegro con spirito	[]=56-63]	1/1
Piano Sonata op. 78/i	Allegro ma non troppo	[]=58-66]	1/1
Violin Concerto op. 61/i	Allegro ma non troppo	[=63]	1/1
Triple Concerto op. 56/i	Allegro	[=63]	1/1
Piano Sonata op. 111	Allegro con brio e	[]=63-66]	1/1
	appassionato		
Piano Concerto op. 15 no. 1/i	Allegro con brio	[]=66]	1/1
Piano Concerto op. 73/i	Allegro	[]=66-69]	1/1
Piano Trio op. 97/i	Allegro moderato	[]=66-72]	1/1
Piano Sonata WoO 47 no. 1/i	Allegro cantabile	[=69]	1/1
Fantasy op. 80/ii	Allegro	[=69]	1/1
String Quartet op. 130/i	Allegro	[=69]	
Grosse Fuge	Allegro	[=69]	1/1
Piano Sonata op. 14 no. 1/i	Allegro	[]=66-72]	١/١٨
Violin Sonata op. 24/i	Allegro	[]=66-76]	١/١٨
Piano Concerto op. 37/i	Allegro con brio	[]=69-76]	1/1
Horn Sonata op. 17/i	Allegro moderato	[]=69-76]	1/1
Variations WoO 78	Allegro, alla marcia	[]=56-72]	1/1
Piano Concerto op. 58/i	Allegro moderato	[]=56-72]	1/1
Piano Sonata op. 106, iv	Allegro risoluto	J=72 (J=144)	.8
Cello Sonata op. 69/i	Allegro ma non tanto	J=72	1/1
Piano Sonata op. 2 no. 3/i	Allegro con brio	[]=76-80]	1/1
Piano Sonata op. 10 no. 3/iv	Allegro	[]=76-80]	1/1
Piano Sonata WoO 47 no. 3/i	Allegro	[]=76]	1/1
Symphony op. 68, iv	Allegro	J=80	1/1
Symphony op. 125, iv	Allegro assai	J=80	۵۱/۵
Symphony op. 67, iv	Allegro	J =84	1/1
String Quartet op. 74, iv	Allegro	J=84	1/1
String Quartet op. 18 no. 4, i	Allegro ma non tanto	J=84	٦
String Quartet op. 59 no. 3, i	Allegro vivace	J=88	1/1
String Quartet op. 59 no. 1, i	Allegro	J=88	٨
Cello Sonata op. 102 no. 2/i	Allegro con brio	[]=66-84]	J/J
Violin Sonata op. 30 no. 2/i	Allegro con brio	[]=72-88]	1/1
Piano Sonata op. 53/i	Allegro con brio	[]=88]	1/1
String Quartet op. 95, i	Allegro con brio	J=92	1/1
Piano Concerto op. 22/i	Allegro con brio	[]=76-94]	1/1
Symphony op. 36, i	Allegro con brio	J=100	1/1
Piano Trio op. 1 no 1/i	Allegro	[]=84-88]	1/1
Piano Concerto op. 19/i	Allegro con brio	[]=76-100]	1/1
Cello Sonata op. 5 no. 1/ii	Allegro	[]=80]	1/3
Piano Sonata WoO 47 no. 2/i	Allegro assai	[]=80]	٨/٨
Trio op. 11/i	Allegro con brio	[]=88-100]	٨/٨
Violin Sonata op. 12 no 1/i	Allegro con brio	[]=88-92]	١/٨
, 101111 5011ata op. 12 110 1/1	1100gro con ono	[8 -00 72]	- / -

Perhaps the most notable aspect of these *allegros* with speeds by Beethoven is how similar they are, both in terms of the range of note values and metronome marks: six out of ten of these sections have quavers and semiquavers as their fastest note value, and the difference between the slowest and the fastest *allegro* (J=72 and 100) is smaller than in any of the other *allegros* discussed so far. Particularly noteworthy, however, is the fact that two movements marked *Allegro con brio* are the fastest of all, suggesting that perhaps the term *con brio*, which is found in more than 30 of the *allegros* in this metre, has taken the place of *Allegro vivace*, which in c occurs in only very few movements.²⁸¹

The sections in which allegro appears without vivace, con brio, molto, assai, or any other indication that would influence the tempo make up the largest group of allegros in this metre with more than 60 sections. Five of these appear in Table 5.5.1 with metronome marks by Beethoven: in the fugue from the Piano Sonata op. 106—in which the term *risoluto* is presumably meant to be taken literally, since it does not seem to appear in any of the musical dictionaries of the time—semiquavers appear in most bars, and the metronome mark is the slowest of all *allegros* in the table. In the fourth movement of the Symphony op. 68 in which semiquavers and quavers are the most common note values, semiquavers occur almost exclusively only in scales and repeated notes in the strings, and there are not nearly as many of them as in the Piano Sonata op. 106. The fourth movement of the Symphony op. 67 also includes crotchets, and a few semiquaver scales appear in most instruments, although overall there are fewer semiquavers than in op. 68. The first movement of the String Quartet op. 74 has very similar distribution of note values as the Symphony op. 67, with crotchets and quavers in the beginning and semiquavers later, mostly in scale figures and repeated notes. Finally, the first movement of the String Quartet op. 59 no. 1 contains hardly any semiquavers at all, with quavers and crotchets being the most common note values. Overall,

_

²⁸¹ Besides the String Quartet op. 59 no. 3, it occurs only in the third movement of the Cello Sonata op. 69, the first movement of the Piano Quartet WoO 36, an 8-bar section in the Geistlicher March of King Stephan, and in duet 'O namenlose Freude' and 'O welche Lust' from Fidelio.

Beethoven's metronome marks for these movements are inversely correlated with the presence of semiquaver figuration, with the speeds for these *allegros* ranging from J = 72 to 88.

As Czerny studied the Sonata op. 14 no. 1 with Beethoven, his metronome marks would seem reasonably trustworthy, and for the first movement his speeds range between J=66 and 72 (given as J=132 and 144). His suggestions for other works that he studied with Beethoven imply that many of these *allegros* have speeds on the lower end of that range: the first movement of the Piano Concerto op. 73, for instance, is given a speed of J=66 (as J=132), and the short *Allegro* in c that immediately follows the introduction of the Choral Fantasy op. 80 is marked J=69 (J=138). The fastest speeds that Czerny and Moscheles recommend for plain *allegros* are for the first movement of the Piano Trio op. 1 no. 1 (J=84-88, with crotchets and quavers in the strings and semiquavers in the piano) and the second movement of the Cello Sonata op. 5 no. 1 (J=80, with the same range of note values, with some semiquavers in the cello part), but there is no evidence that the speeds for either of these works go back to Beethoven. (As the discussion of *Allegros* in 3/4 showed, Beethoven's intentions are probably misrepresented in the early editions of the Trios op. 1, something of which Czerny and Moscheles were apparently not aware.) It seems therefore unlikely that there are any plain *Allegros* in c that were intended to move faster than J=88.

Several of Karl Holz's metronome marks for the late string quartets also indicate that the intended speed for *allegros* is often relatively slow: the *allegros* in the first movement of the String Quartet op. 130 and in the section of the fugue in c of Grosse Fuge are both marked J=132 in Holz's list. The former contains extensive semiquaver figuration for all instruments, while the speed of the latter seems justified by the fact that fugues are often a little slower than non-fugal sections. (For instance, the discussion in Section 5.3 of Czerny's and Moscheles's metronome marks for the fugue in the finale of the Cello Sonata op. 102 no.

2 are $J_{-}=63$, which are slower than one would expect for an *allegro* in 3/4 without semiquavers.) The slowest metronome mark for any *allegro* in c also comes from Holz: the $J_{-}=76$ ($J_{-}=38$) for the *Allegro moderato* in the third movement of the String Quartet op. 131, a movement that contains some semiquavers. The second slowest, the *Allegro* in the first movement of the String Quartet op. 132 contains semiquavers in all parts, and is marked $J_{-}=92$ ($J_{-}=46$). This, however, seems really very slow, especially as it contains similar figuration as the last movement of the Piano Sonata op. 106, which Beethoven marked $J_{-}=144$. Holz's speed is therefore anomalous, and suspected of being affected by a misprint or some other error. The same is presumably true for Holz's recommendation of $J_{-}=38$ the third movement of the String Quartet op. 131, containing crotchets, quavers, and some semiquavers.

A further anomaly is found in one of the three *Allegro ma non tantos* in this metre: the first movement of the String Quartet op. 18 no. 4. This movement has quavers as the most common note value, with several semiquaver flourishes appearing in the first violin, giving it a distribution and range of note values not dissimilar from the last movement of the Symphony op. 67. On account of the tempo indication of the String Quartet, one would expect its speed to be much slower than that of the Symphony, which is marked only *Allegro*, but both movements have a speed of J=84. In the 1818 Steiner booklet in which the metronome marks for this String Quartet were first published, however, *ma non tanto* does not appear, and it seems possible that Beethoven changed his mind on what he thought the tempo of the first movement should be.

The *allegro* sections in c with *con brio* in the tempo indication appear approximately 35 times in Beethoven's oeuvre. Two of these, the first movements of the String Quartet op. 95 and the Symphony op. 36, have metronome marks by Beethoven. Both movements have quavers and semiquavers as the most common note values, but the distribution of note values

is a little different: the String Quartet has semiquavers that are roughly equally distributed across the four instruments, with semiquavers often occurring in more than one instrument at the same time. In the Symphony, by contrast, semiquavers are primarily found in the strings, with the exception of a single short passage in the development section. It is therefore no surprise that the Symphony has a faster speed than the String Quartet: J=100 and 92, respectively.

The metronome marks that Czerny gives to the works that he studied with Beethoven also suggest that unlike in 3/4—in which con brio does not seem to have any particular effect on the speed as was seen above—in c Allegro con brio is a little faster than Allegro. The first movements of the Piano Concerto op. 15 and the Piano Sonata op. 53, which both contain extensive semiquaver figuration, are both given a speed of \rfloor =88. Since the only plain *Allegro* with that speed is a movement without any semiquavers at all, String Quartet op. 59 no. 1, it seems likely that within the context of c, the addition of con brio constitutes a faster tempo. Czerny's two metronome marks for the first movement of the Piano Concerto op. 37— \rfloor = 138 and 144, or \rfloor = 69 and 72—seem to be a little more in line with the speeds for Allegro, as is his speed ($\sqrt{=152}$, or $\sqrt{=76}$) for the first movement of the Piano Concerto op. 19. For the latter concerto—the only piano concerto which Czerny did not study with Beethoven— Moscheles suggests an almost improbably fast J=100, suggesting that this movement can be played at the same speed as the first movement of the Symphony op. 36. The metronome marks given to several other Allegro con brio movements—for instance Czerny's = 88 and Moscheles's $\downarrow = 100$ for the first movement of the Trio op. 11, which contains crotchets, quavers, and semiquavers—also support the hypothesis that *con brio* in c is an accelerant.

Sections marked *Allegro ma non troppo* are comparably rare, and occur only 18 times in **c**, almost all of which are found in large orchestral works such as Wellington's Victory, Fidelio, and The Ruins of Athens. The only metronome marks available are found in the first

movements of the Violin Concerto and the Piano Sonata op. 78, which both have crotchets, quavers, and semiquavers as their most common note values. Czerny recommends = =63 for the concerto, and $\rfloor = 58-66$ for the Sonata. These are a bit slower than the range of $\rfloor = 66-72$ for the plain *allegros* with the same range of note values, and therefore probably reasonable estimations. With only 10 sections, Allegro moderato is even rarer than Allegro ma non troppo, but it is easier to estimate the speed of these as Czerny studied two of them with Beethoven: the first movement of the Piano Concerto op. 58, and the first movement of the Piano Trio op. 97. For the Piano Concerto, which contains primarily quavers, semiquavers, and semiquaver sextuplets, Czerny suggests a speed of J=56 (J=116), comparable to his lowest speed for the first movement of the Piano Sonata op. 78. Moscheles's speed is much faster, J = 72 (J = 144), but since there is not much evidence that he ever heard Beethoven play this work—Moscheles might or might not have attended the premiere of the concerto during the 1808 Akademie; the evidence is not clear ²⁸²—Czerny's suggestion is probably more likely to be close to Beethoven's intended speed. The first movement of the Piano Trio op. 97 has crotchets and quavers as most common note values in the beginning, with semiquavers and quaver triplets appearing later in the movement, although more in the piano than in the strings. Czerny's two speeds for this *Allegro moderato* movement, J=66-69 (J=132-138), are consistent for two reasons. Firstly, they are a little faster than those for the Piano Concerto op. 58, which contains more extensive semiquaver figuration. Secondly, they are also in the same range as plain Allegros with more semiquavers, a consistency that was also observed in the Allegros in 3/4. Although there are relatively few sections marked Allegro ma non troppo and Allegro ma non tanto, and although the evidence is limited, it seems that these indications are synonymous with each other in this metre.

²⁸² Compare Moscheles, *Recent Music*, 5-6 to Schindler, *Life of Beethoven*, v-vi.

Allegro molto, the final form that Allegros in c take, is a comparatively unusual indication in c, appearing primarily in vocal works with orchestra such as Fidelio and the Oratorio op. 85. The fact that the only piano work in which Beethoven uses the indication is in the 22nd variation of Diabelli variations op. 120, which is a parody of the beginning of the first act of Mozart's Don Giovanni, from which Beethoven borrows both the opening theme and the tempo indication, shows that this was a highly unusual indication for Beethoven. (Allegro molto also appears in the Vocal Trio op. 116, and in a short section of the Song WoO 129.) The speed for these sections is presumably intended to be faster than those marked Allegro, but whether they are also faster than Allegro con brio seems impossible to say. The estimated speeds for allegros in c can be found in Table 5.5.2.

Table 5.5.2: Approximated speeds for allegros in c.

Most common	Allegro ma non	Allegro	Allegro con
note value	troppo/tanto/assai		brio/vivace
.)\J	J=58-66	J=66-72	J =88
J) J)	J=66-69	$J = 80 - 88^{283}$	J=92-100
٧	J=80	[]=92-100]	*

Table 5.5.2 is much smaller than Table 5.2.3, 5.3.5, and 5.4.3, which contained the estimated speeds for *Allegros* in 6/8, 2/4, and 3/4 respectively, but this can be explained by the fact that the range of note values in *Allegros* in c seems to be much less diverse. Nevertheless, the same consistency can be observed: *Allegro ma non troppo* movements with quavers and some semiquavers still move at a similar speed to *Allegros* with more semiquavers.

There is only a single *Allegro* in 12/8, found in the first movement of the Piano Sonata op. 57. Sketches for this work show that at some point Beethoven thought of the

_

²⁸³ The speed J=88 comes from the first movement of the String Quartet op. 59 no. 1, which contains fewer semiquavers than the other movements with which it is grouped together here. It does, however, contain much quaver triplet figuration, which justifies this categorisation to a degree.

movement as being in \mathbf{c} , ²⁸⁴ before deciding to change the metre to 12/8. There is some evidence, however, that suggests that this made no difference to the tempo that Beethoven had in mind. Since the movement is marked *Allegro assai* and contains many semiquavers, if it had been written in \mathbf{c} Table 5.5.2 would have predicted a speed in the range of \mathbf{J} =58-66. Czerny, who studied this piece with Beethoven, recommends \mathbf{J} .=120 and \mathbf{J} .=108 for this movement, which would be the equivalent of \mathbf{J} =60 and \mathbf{J} =54 in \mathbf{c} . It seems therefore likely that the reasons that Beethoven used 12/8 is not related to the tempo, but to the more convenient way in which triplet rhythms are notated in that metre.

In addition to the first movement of the Piano Sonata op. 57, in which Beethoven changed the metre but presumably not the tempo, there is another *Allegro* movement that underwent the same process: Gloria of the Mass op. 86. The first edition of this work has a complicated and somewhat confusing history, as is evident in the letter to the publisher Breitkopf & Härtel in which Beethoven suggests further corrections to the corrected copy of the Mass that he already sent:

You will have received the corrections for the Mass [in C, op. 86] ... at the beginning of the *gloria* I have written ¢ instead of c and changed the *tempo* from the original indications [from *Allegro con brio* to *Allegro*]. I was seduced into doing this because of a bad performance, during which the *tempo* was taken too fast.²⁸⁵

The rest of the letter contains several other changes which Beethoven quite clearly intended to be included in the first edition. What he had in mind for the Gloria, however, is less clear: in the autograph score it is indeed marked *Allegro con brio* and written in **c**, ²⁸⁶ unlike the first

²⁸⁴ See Martha Frohlich's transcription of the sketches for this sonata in *Beethoven's 'Appassionata' Sonata*, Oxford (Clarendon Press) 1991, 148-182.

²⁸⁵ Brandenburg, *Briefwechsel*, Letter 586. See the translation in footnote 36.

²⁸⁶ See the autograph in the Beethoven-Haus, BH 86.

edition, in which it is marked *Allegro* and ¢. As careful study of the first edition has shown, initially the first edition had the same tempo indication as the autograph, and probably also the same metre. The last sentence, however, seems to indicate that this change was based on a bad performance with a tempo that was too fast, and perhaps implies that this change should be undone in order to lower the tempo. This seems to be a likely explanation, as Beethoven had already sent the publisher a version marked *Allegro* in ¢, which removes the need to bring it up again. The following section will show which of the two versions, in ¢ with *Allegro* or in c with *Allegro con brio*, results in a faster tempo.

5.6: Allegros in ¢

With only about 65 sections, the *allegros* in ¢ are much more rare than those in c. 13 of these sections have metronome marks, which are displayed in Table 5.6.1. As can be seen in the table, the speed in minims for these sections is generally much faster than those in c, even when the note values are similar. It therefore seems likely that what Beethoven was unsuccessfully trying to communicate to the publisher of the Mass was that the change of metre was a mistake, and that he wanted the change that was published in the first edition to be undone.

²⁸⁷ Brandenburg, *Briefwechsel*, Letter 586, foot note 3.

Table 5.6.1: The metronome marks for allegros in ¢.

<u>Work</u>	Tempo indication	Metronome Mark	Note values
Horn Sonata op. 17/iii	Allegro moderato	[]=69-76]	7/2
Piano Sonata op. 109/iii	Allegro ma non troppo	[]=69-76]	الرا
Violin Sonata op. 24/iv	Allegro ma non troppo	[]=76-88])
Cello Sonata op. 102 no. 1/i	Allegro vivace	[]=76-84]	
Cello Sonata op. 69/iii	Allegro vivace	[]=80-88]	787
Piano Sonata op. 49 no. 2/i	Allegro ma non troppo	[]=80-104]	♪triplets/J
Piano Sonata op. 14 no. 1/iii	Allegro comodo	[]=80-100]	J/J)
Septet op. 20, i	Allegro con brio	J=96)
Symphony op. 21, i	Allegro con brio	J=112	√ some.
Symphony op. 125, iv	Allegro ma non tanto	J=120	الرا
String Quartet op. 18 no. 3, i	Allegro	J=120	>
String Quartet op. 131/vii	Allegro	[]=120]	الرا
Piano Sonata op. 2 no. 2/i	Allegro	[]=104-120]	الرا
String Quartet op. 135/iv	Allegro	[]=126]	•
Piano Sonata op. 81a/i	Allegro	[]=108-126]	ارد
Piano Sonata op. 13/iii	Allegro	[]=96-112]	triplets
Piano Sonata op. 31 no. 2/i	Allegro	[]=104-126]	triplets
String Quartet op. 18 no. 4, iv	Allegro	J=132 (o=66)	>
Piano Sonata op. 106, i	Allegro	J=138	•
Fantasy op. 80/ii	Allegro molto	[]=138]	الإ
Violin Sonata op. 30 no. 2/iv	Allegro	[]=132-144]	\ <u>\</u>
Piano Sonata op. 13/i	Allegro di molto e con brio	[]=144-152]	الإ
String Quartet op. 18 no. 5, iv	Allegro	J=152 (o=76)	J Y.]
Symphony op. 36, iv	Allegro molto	J=152)
Violin Sonata op. 23/iii	Allegro molto	[]=138-160]	J Y.]
String Quartet op. 18 no. 6, i	Allegro con brio	J=160 (o=80)	•
Symphony op. 60, i	Allegro vivace	J=160 (o=80)	J Y.]
Symphony op. 93, iv	Allegro vivace	J=168 (o=84)	J) J
String Quartet op. 59 no. 3, iv	Allegro molto	J=168 (o=84)	>
String Quartet op. 95, iv	Allegro molto	J=184 (o=92)	J Y J

Much like in the earlier metres, there generally appears to be a correlation between note values and tempo indication on the one hand and metronomic speed on the other: *allegros* with the slowest tempo indication and the smallest note values appear towards the top of the table, and those with larger note values and faster tempo indications towards the bottom. The *Allegro con brio* of the first movement of the Septet op. 20, however, seems anomalous, as it has quavers as most common note values, and a tempo indication that seems to suggest a speed faster than *allegro*. The autograph score, however, does not contain *con brio*, which

would indicate that it must have been a last minute addition, ²⁸⁸ which in turn suggests that Beethoven might have had difficulty deciding how to express the speed he had in mind. The speed that Beethoven gave to this movement, ¹=96, seems puzzlingly slow, especially compared to the other *Allegro con brio* sections in the table: the first movement of the Symphony op. 21 is much faster than the Septet despite the fact that it contains more semiquavers, and the first movement of the String Quartet op. 18 no. 6, which has a range of note values comparable to the Septet, is faster still. Further comparisons with the four plain *allegros* with metronome marks by Beethoven in Table 5.6.1—all with quavers as their most common note value, and with speeds between ¹=120 and 152—also indicate that the first movement of the Septet is the odd one out. It seems therefore likely that Beethoven is using an inconsistent time signature here, much like in the Gloria of the Mass op. 86 mentioned above. As Table 5.5.2 shows, sections marked *Allegro* in c with quavers have speeds of approximately ¹=92-100, so perhaps Beethoven should have marked the Septet *Allegro* and changed the time signature to c to express the speed he had in mind in a more consistent way.

Plain *allegros* appear in approximately 25 sections, with four having metronome marks by Beethoven. The speed in these movements seems to be primarily determined by the note values: the first movement of the String Quartet op. 18 no. 3 (J=120) has running quavers and quaver triplets, as well as some larger note values; the fourth movement of the String Quartet op. 18 no. 4 (J=132) contains primarily quavers and crotchets, as does the first movement of the Piano Sonata op. 106 (J=138); while in the fourth movement of the String Quartet op. 18 no. 5 (J=152) crotchets become more and more common. This last movement, however, seems sufficiently fast to suspect that the word *molto* should have been used here, especially since there is an *Allegro molto* with the same range of note values and speed in Table 5.6.1.

_

 $^{^{288}}$ Autograph score of the Septet op. 20, Biblioteka Jagiellońska, BJ Mus. ms. autogr. Beethoven, Mendelssohn-Stiftung 4.

The two *allegro* in & that appear in works that Czerny studied with Beethoven show a range that is consistent with the movements above. The first, the opening movement of the Piano Sonata op. 31 no. 2, contains quaver triplets and quavers as most common note values, and should therefore have a speed somewhat slower than most of the plain *Allegros* mentioned above, which, with the exception of the String Quartet op. 18 no 3, generally have larger note values. Czerny's earliest suggestion of \$J=112\$ is therefore probably close to the composer's intention, with his later suggestion of \$J=104\$ most likely being too slow.

Moscheles's speed of \$J=126\$, however, could also be close to the composer's intentions given the similarity with the String Quartet op. 18 no. 4. The second *andante* in this metre is found in the third movement of the Piano Sonata op. 14 no. 1, which contains crotchets, quaver triplets, and some semiquavers, making it the *Allegro* in \$\chi\$ thus far encountered with the most semiquaver figuration. Czerny's speeds range from \$J=96\$ to 100, quite similar to the first movement of the Septet, which is suspected of being a mislabelled *Allegro* in \$\chi\$. It might therefore be conceivable that the last movement of the Piano Sonata op. 14 no. 1 should have been written in \$\chi\$ as well.

For each of the other plain *allegros* in ϕ that Czerny gave metronome marks, there is at least one that approximates the speeds of similar movements with speeds by Beethoven. These are the J=120 in the Cocks edition for the first movement of the Piano Sonata op. 2 no. 1 (with crotchets and quavers), J=112 for the last movement of the Sonata op. 13 (quavers and triplet quavers), J=144 and 132 for the finale of the Violin Sonata op. 30 no. 2 (crotchets and quavers), and J=126 for the first movement of the Piano Sonata op. 81a. These are generally the fastest marks that Czerny provides, with his others often being much lower. Karl Holz's metronome marks for the late string quartets also show a similar range for plain *Allegros*: the seventh movement of op. 131 (with quavers and crotchets) is given J=120, and

-

 $^{^{289}}$ Czerny, ed. $\it Beethoven$'s Masterpieces. 290 Ibid.

the fourth movement of op. 135 (with mainly crotchets) $\rfloor = 126$. The intended speed for *Allegros* in ϕ is therefore generally between $\rfloor = 120$ and 152, depending on the range of note values.

Allegro molto appears in only 14 sections, three of which have metronome marks by Beethoven: the finale of the Symphony op. 36 and the last sections of the String Quartets opp. 59 no. 3 and 95, all of which have quavers in most bars, with some crotchets or even longer note values also appearing. Despite the similarity in note values, the speeds are quite different, especially for op. 95, which moves at \$J=184\$ as opposed to \$J=152\$ for the Symphony and \$J=168\$ for the String Quartet op. 59 no. 3. It seems possible, however, that the fast speed for the String Quartet op. 95 is justified by the fact that the musical material lends itself well for very fast playing, as only the first violin moves around, with the other voices just filling in the chords. In general, repeated quavers and scales make up the largest part of the figuration. Furthermore, the lack of articulation in this movement seems to 'streamline' it, perhaps also contributing to the speed. As can be seen in Example 5.6.2a, b, and c, the final movements of the String Quartet op. 59 no. 1 and the Symphony op. 36 contain much more complicated figuration and extensive articulation than op. 95, which is presumably the reason why they are somewhat slower.

Example 5.6.2: The *Allegro moltos* from opp. 36, (a) 59 no. 3 (b), and op. 95 (c).



Among Czerny's and Moscheles's metronome marks, there are three sections marked *Allegro molto*, all of which have quavers and crotchets as most common note values: the *Allegro di molto e con brio* in the first movement of the Piano Sonata op. 13 with speeds ranging from J=144 to 152; the *Allegro molto* from the last movement of the Violin Sonata op. 23 with speeds between J=138 and 160; and the *Allegro molto* of the Fantasy op. 80, for which the only speed available comes from Czerny's *On the Proper Performance* and is J=138. Since all of these sections contain complicated figuration in more than one part, with articulation also often used liberally, there is no reason to suspect that a speed more in line with that of the *Allego molto* of op. 95 was what Beethoven had in mind for these sections. Especially the earliest and fastest speeds by Czerny and Moscheles for these *Allegro moltos* are quite close

to those in opp. 36 and 59 no. 3, which makes it likely that these are a better representative of Beethoven's intentions than the later (and slower) speeds.

Allegro ma non troppo is an even more rare indication in ¢, as it is found in only 7 sections. Besides the Song op. 48 no. 5, the only sections not for orchestra are the fourth movement of the Violin Sonata op. 24, the first movement of the Piano Sonata op. 49 no. 2, the first movement of the Cello Sonata op. 69, and a short section in the third movement of the Piano Sonata op. 109. The Violin Sonata, which contains quavers in almost every bar in the beginning and quaver triplets and semiquavers later, is given speeds of $\sqrt{}=84$ and 88 by Czerny and Moscheles in the 1820s and 30s, with Czerny lowering his speed to 3 = 76 by the 1840s. For the Piano Sonata op. 49 no. 2, which contains primarily crotchets and quaver triplets, the two editors have more diverging speeds: Czerny suggests J=104, while Moscheles recommends $\downarrow = 80$ (given as $\downarrow = 160$). For the Piano Sonata op. 109, which also contains crotchets and quavers, the speeds range from $\rfloor = 69$ to $\rfloor = 76$. Although neither editor ever claimed that they studied any of these works with Beethoven, most of these speeds range from $\sqrt{100}$ = 76 to 88. Since the plain *allegros* with crotchets and quavers move at speeds between =120 and 152—so almost twice as fast as Czerny's and Moscheles's speeds for Allegro ma non troppo sections with crotchets and quavers—it seems likely that these speeds are far too slow. Czerny's =104 for the first movement of op. 49 no. 2 seems therefore a much better approximation.

Allegro con brio appears in only 10 sections, two of which have already been discussed: the first movement of the Piano Sonata op. 13, and the first movement of the Septet op. 20, which is probably in the wrong metre. The others occur in the Ballet op. 43, Wellington's Victory, the first movements of the Symphony op. 21 and the String Quartet op. 18 no. 6, and several minor works,. As can be seen in Table 5.6.1, the last two works have metronome marks by Beethoven: the first movement of the Symphony op. 21 has crotchets,

quavers, some semiquavers, and a speed of J=112, and the first movement of the String Quartet op. 18 no. 6 contains crotchets, quavers, generally fewer semiquavers than the Symphony, and a speed of J=160 (given as S=80). In this case, the String Quartet is so fast that its speed actually exceeds that of the *Allegro molto* finale of the Symphony op. 36, which has a similar range in note values. The Symphony op. 21, on the other hand, is slower than all plain *Allegros* in Table 5.6.1, and one would expect that the *con brio* would at least partially make up for the semiquavers, which are not very common in this movement anyway. This leaves just two options: either one of the metronome marks is based on an error, or Beethoven's use of *con brio* in *Allegros* in φ is similar to that in 3/4, in which the term does not seem to have an effect on the tempo. The latter seems slightly more plausible than the former, especially given the relative infrequency of the term in this metre, but due to the lack of data it is impossible to be more certain than that.

Allegro vivace only occurs in a handful of movements in ♠, two of which have metronome marks by Beethoven. Both of these suggest a very fast speed, despite the fact that both movements contain some short note values. The first movement of the Symphony op. 60 contains primarily quavers and crotchets and has a speed of \$\cup\$=160, but it contains short scale-like semiquaver figures in the strings and in the woodwinds. The last movement of the Symphony op. 93 has a similar speed of \$\cup\$=168 and contains quaver triplets in the strings from the beginning. It seems possible that there is a third Allegro vivace that was intended to move at a similar speed: the middle section in the sixth movement of the Cantata on the Accession of Emperor Leopold II, which contains minims and crotchets for the choir and crotchets and running quavers for the orchestra. The Allegro vivace in the first movement of the Cello Sonata op. 102 no. 1, however, is almost certainly slower, as it contains semiquavers for both instruments in dotted rhythms, as well as tremulos in the piano part. Czerny's and Moscheles's suggestions, \$\delta = 76\$ and 84 respectively, are also much slower, and

although there is no evidence that either editor studied this work with the composer, it seems unlikely that their estimations are off by a factor 2, especially since this movement contains smaller note values than the others. Furthermore, the third movement of the Cello Sonata op. 69 contains the same range of note values, and has very similar editorial speeds ranging from \rfloor =80 to 88. It is therefore possible that these sonatas constitute two more cases in which Beethoven used an inconsistent metre, because, as Table 5.5.2 shows, movements with the same tempo indication and range of note values in c have a speed very similar to the ones suggested.

The estimated intended speeds for *Allegros* in ¢ are summarized in Table 5.6.3.

Table 5.6.3: Approximated speeds for allegros in ¢.

Most common	Allegro ma non	Allegro	Allegro con	Allegro	Allegro
note value	troppo/tanto/assai		brio	vivace	molto
J).h	J =84-88	[]=104]	J=112	*	*
۵	J=104	J=112-120	J=152-160	J=160-168	J=152-168
الرا	J=120	J=132-138	*	*	J=184

As can be seen from Table 5.6.3, in & Allegro con brio, Allegro vivace, and Allegro molto all have a similar range of speeds for movements with quavers as their most common note values. The consistency that has been found in other metres seems to be present here too, as sections marked Allegro con brio with some semiquavers move at a similar speed as Allegros without semiquavers. On the basis of this consistency, it is possible to estimate the speeds for Allegros with semiquavers, which is presumably comparable to the speed for sections marked Allegro ma non troppo with quavers as most common note value.

5.7: Conclusion

Beethoven's sense of tempo is remarkably consistent in the sections that are marked *Allegro*. In each metre, sections containing same tempo indication (such as *Allegro con brio*) have

intended speeds that correlate with the duration and distribution of the most common note values, as can be seen in the five tables with approximated speeds in this chapter. For instance, plain *Allegros* with mainly quavers and some semiquavers have an approximated intended speed of $\rfloor = 76$ in 2/4, $\rfloor = 80-88$ in \mathbf{c} , and $\rfloor = 104$ in ϕ .

There are, however, a number of ways in which Beethoven departs from this system. Firstly, although Beethoven's use of tempo indications within metres is very consistent, some indications are used differently depending on the metre in which they occur. The best examples of this are *Allegro con brio* and *Allegro vivace*. In triple metres the former hardly appears at all, while the latter is used to indicate a speed that is faster than that for *Allegro*. In e and in 2/4, on the other hand, the two indications are used as equivalences, while in ¢ *Allegro con brio* appears to be a little slower than *Allegro vivace*, which is almost as fast as *Allegro molto*. The second way in which Beethoven is often inconsistent is his occasional use of incorrect metres. This happens most obviously in e and in ¢, with the *Allegro con brio* in ¢ in the first movement of the Septet op. 20 and the Gloria of the Mass op. 86 as notable examples.

Both of these characteristics suggest that although Beethoven's tempo was clearly based on certain underlying principles, the number of departures from these principles imply that Beethoven never articulated these in the way that they are in this chapter. It seems therefore likely that a great deal of the process of assigning a speed to a movement relied on aspects of Beethoven's musical intuition, rather than the kind of comparisons that have been made in this chapter. This can be seen quite clearly in the process which he went through when assigning a speed to the first movement of the Symphony op. 125: if Beethoven had looked at the only other *Allegro* with the same range of note values, he would probably not have first tried out two different, much faster speeds than the final $\frac{1}{2}$ =88. Furthermore, he

would also not have needed Karl to help him write down the speeds,²⁹¹ as he could have deduced them from his earlier metronome marks. It therefore is likely that Beethoven's metronome marks for these *Allegros* were the results of at least some practical experimentation.

-

²⁹¹ See Peter Stadlen, 'Beethoven and the Metronome,' *Music & Letters*, iil (1967), 330-357, at 332.

Chapter 6: Beethoven's Fast Tempo Indications: Vivace, Presto, and Prestissimo

6.1: Vivace

This indication—the only one to be used more often in combination with another indication, *allegro*, than on its own—is defined by Koch as 'lively, indicating both a fast tempo, as well as a lively and easily flowing performance.' This definition is rather more terse than the one of *allegro* discussed in the previous chapter, and the difference between the two terms is not entirely clear from the description. Koch's ambiguity here is also reflected in Beethoven's use of *vivace*, in the sense that it is both used as an accelerant to *allegro* and as an independent indication. Since the former has already been discussed in the previous chapter, this chapter will discuss only the cases in which *vivace* appears on its own. With the exception of 3/8, the 26 *Vivace* sections that Beethoven wrote appear in the same metres as *Allegro*, making comparisons relatively straightforward.

6.1.1: Vivaces in 6/8

There are five *vivaces* in 6/8, one of which has a metronome mark by Beethoven, as can be seen in Table 6.1.1.1.

Table 6.1.1.1: Beethoven's vivaces in 6/8.

<u>Work</u>	Tempo indication	Metronome Mark	Note values
Symphony op. 92, i	Vivace	J.=104	. \$2
Variations op. 107 no. 7, var. 6	Poco vivace	-	. > . \
Variations op. 107 no. 9, var. 5	Vivace	-	. > .)
King Stephen Op. 117: vi,	Vivace	-	. Y.)
Chorus			
Piano Sonata WoO 47 no. 1,	Vivace	[].=104]	. > .)
iii, Rondo			

²⁹² Koch, *Lexicon*, 1699, 'Lebhaft, bestimmt sowohl eine muntere Bewegung, als auch eine lebhaften, und leicht dahinflieβenden Vortrag.'

The metronome mark for the *Vivace* in the first movement of the Seventh Symphony op. 92 indicates exactly the same speed as the one for the first *Allegro* of the String Quartet op. 18 no. 5 discussed in the previous chapter. Both of these sections contain quavers and semiquavers, but the distribution of note values is quite different: the symphony has single semiquavers in almost every bar in punctuated rhythms in the woodwinds and running semiquavers in the strings, while in the String Quartet semiquavers are much rarer, and, with relatively few exceptions, they occur only in the first violin. So despite the fact that, compared to the string quartet, the symphony's note values suggest a slower speed, the speed that Beethoven indicated for both movements is identical. Since within any metre the speed is determined by the note values and the tempo indication, the implication is that the tempo indication of the symphony (*Vivace*) implies a faster speed than that of the string quartet (*Allegro*). As the *vivace* in the last movement of the Piano Sonata WoO 47 no. 1—for which Czerny recommended J=104—and the chorus of King Stephen have a similar range and distribution of note values as the first movement of the Symphony op. 92, it seems likely that they were intended to move at a similar speed.

In the Folk Song Variations op. 107, however, the meaning of *vivace* seems to be much more context sensitive in the two cases in 6/8 in which it occurs. The first is found at the end of no. 7, a set which, with the exception of two sections in 6/8, is entirely written in 2/4. Both sections in 6/8 contain similar musical material, the first time marked *Andante moderato*, and the second time *Poco vivace*. It therefore appears that the latter tempo indication is simply intended to be a slightly faster version of the *Andante moderato* tempo, rather than a form of *vivace*. A similar argument applies in the Folk Song Variations op. 107 no. 9, in which the theme is marked *Allegretto più tosto vivace*, supposedly indicating a speed somewhere between *Allegretto* and *vivace*, while the speed of the fifth variation marked *Vivace* is supposedly a little faster than the theme.

6.1.2: Vivaces in 2/4

The *vivaces* in 2/4 are more numerous than those in 6/8, and they contain a wider range of note values, as can be seen in Table 6.1.2.1.

Table 6.1.2.1: Beethoven's vivaces in 2/4.

Work	Tempo indication	Metronome mark	Note values
March op. 45 no. 2	Vivace	-	المرار single المرار single المرار
Piano Concerto op. 58, iii, Rondo	Vivace	[J=138]	\sh.
Egmont: op. 84, i, Song	Vivace	-	\sh.
Variations op. 107 no. 3: theme & var. 1, 3, 4,	Vivace	-	١٧٦
& 5			
Variations op. 107 no. 4, var. 2	Vivace	-	\sh.
Variations op. 107 no. 6, var. 4	Vivace	-	•
The Ruins of Athens op. 113, iv: Turkish	Vivace	-	. \(\)
march			
March for Military Band WoO 20	Vivace assai	-	J/J)
Chorus for 'The Consecration of the House'	Vivace	-	\$.)
WoO 98			

Unfortunately, none of the *vivaces* in 2/4 have metronome marks by Beethoven, but there are metronome marks by Czerny and Moscheles for the rondo of the Piano Concerto op. 58. Both suggest a speed of J=138, and it seems likely that both have a certain degree of authority: Czerny studied the work with Beethoven, and Moscheles may have been present at the premiere in 1808. The rondo contains extensive semiquaver figuration in the piano, but also in the orchestral parts, and the speed suggested by Czerny and Moscheles is comparable to the fastest *allegros* in the same metre with the same range of note values, which in the previous chapter were estimated around J=60-69.

The Piano Concerto is unique in the sense that it is the only *vivace* in 2/4 that is not explicitly connected with either marching or singing, although there is no evidence that these associations have any direct influence on the tempo of a *vivace*. (As seen in the previous chapter, the speed of the Turkish march in the Ninth Symphony, which includes both

marching and singing, can be explained by a combination of the metre, note values, and tempo indication alone, and there is no reason to believe that other marches are any different.) It is therefore likely that all the other *vivaces* with the same range of note values—the song from Egmont, the second variation of the Variatios op. 107 no. 4, the Turkish march from The Ruins of Athens op. 113, and the Chorus WoO 98—were all intended to move at a speed close to that of the Piano Concerto. The March for Military Band WoO 20, which contains much fewer semiquavers than the Piano Concerto, but also has a slightly slower tempo indication which presumably offsets that difference, probably also has a similar intended speed. The March op. 45 no. 2 is possibly a little slower, on account of its inclusion of single demisemiquavers, and the theme and *vivace* variations op. 107 no. 3 are probably a little faster due to the lack of semiquavers, as is the fourth variation of op. 107 no. 6.

6.1.3: Vivaces in 3/4

Vivaces in 3/4 are not as numerous as those in 2/4, but they contain a wider range of tempo indications, including fast, slow, and plain *vivaces*, which can be found in Table 6.1.3.1.

Table 6.1.3.1: Beethoven's vivaces in 3/4.

<u>Work</u>	Tempo indication	Metronome mark	Note values
String Quartet op. 127, iii: Scherzo	Vivace	[]=108]	Ŋ, single ♪
Piano Sonata op. 106, ii	Assai vivace	J. =80	Ŋ, single ♪
String Quartet op. 135, ii	Vivace	[].=88]	الإ
Diabelli Variations op. 120, Var. 13	Vivace	-	J, single A
Diabelli Variations op. 120, Theme	Vivace	-	الإ
Symphony op. 125, ii	Molto Vivace	J.=116	اً, single اً

All five works which contain *vivace* sections in 3/4 are late works, with many of these *vivace* sections explicitly identified as scherzos. With the exception of the Diabelli Variations, there are metronome marks for all of these works: the piano sonata and the symphony have speeds by Beethoven, and the two late string quartets have marks by Karl Holz. Holz's speed of

J = 108 for the scherzo in the String Quartet op. 127 seems anomalous, especially compared to the scherzo of the Piano Sonata op. 106. The range and distribution of note values in both pieces are very similar, as can be seen in Example 6.1.3.2: both contain single semiquavers in dotted rhythms, single quavers followed by rests, and crotchets. It seems likely that Holz's speed for the scherzo in the String Quartet op. 127—which is slower than the slowest minuets discussed in chapter 4 and slower than any Allegro in 3/4 discussed in chapter 5—is based on a misprint. Since the scherzo of op. 106 has a slower tempo indication, it is expected that it has a slower speed than the scherzo of op. 127, which in turn should have a slower speed than the Molto vivace scherzo from the Ninth Symphony for the same reason. It is therefore plausible that the note value for in Holz's metronome mark op. 127 is incorrect, and that it should probably have been J.=108. Holz's suggestion of J.=88 for the String Quartet op. 135 seems more plausible, as it is a little faster than the Assai vivace of the Piano Sonata op. 106, which has a similar range and distribution of note values. The intended speeds for the Diabelli Variations can be deduced from the other *vivaces*: the theme probably has a speed between J.=88 of op. 127 and J.=108 of op. 135, while the thirteenth variation probably has a speed that is slightly faster due to the larger note values and more rests.

Example 6.1.3.2: The scherzos of op. 106 and 127.



6.1.4: Vivaces in **c**

The final group of *vivaces* is in **c**, which much like the *vivaces* in 3/4, are almost exclusively found in vocal works with orchestral accompaniment, with the single exception of the fifth song of the cycle *An die ferne Geliebte* op. 98. As can be seen in Table 6.1.4.1, none of these have metronome marks.

Table 6.1.4.1: Beethoven's vivaces in c.

<u>Work</u>	Tempo indication	Note values
March op. 45 no. 3	Vivace	\shi
Fidelio, Act I (1814), no. 6: March	Vivace	Ŋ single ♪
Fidelio, Act III no. 17 (1805) /II no. 17	Vivace	Ŋ single ♪
(1806): Recitative		
Mass op. 86, Credo	Vivace	\ <u>\</u>
An die ferne Geliebte, op. 98, v	Vivace	Ŋ, few ♪
The Ruins of Athens op. 113, no. 6:	Vivace	الإ
Melodrama		
King Stephan op. 117, no. 5: Melodrama	Vivace	J) J
Cantata op. 136, no. 5: Recitative	Vivace	. \(\)
Joseph Cantata WoO 88, no. 1: Recitative	Vivace	.

Five out of these eight *vivaces* are found in melodramas and recitatives, where the tempo is often not restricted by an underlying beat and in which the performers usually have more rhythmic and metric freedom. It therefore seems inappropriate to try and determine an intended speed for these sections, as it seems improbable that Beethoven had one in mind. The March in Fidelio, the *vivace* at the end of the Credo in the Mass op. 86, and the fifth song of op. 98, however, probably do have an intended speed. Since the speeds of the *Vivaces* were all on the fast side of *Allegros* with the same metre and an equivalent range of note values, the speed of these two sections can be estimated by reference to Table 5.5.2. It therefore seems likely that all three have an approximate speed of J=100. Finally, the March op. 45 no. 3—which is the only *vivace* to be marked ¢ in the first edition, but for which no manuscript evidence exists, and which is likely a misprint of c—is probably intended to be played around J=80, a little faster than the *allegros* with the same range of note values.

6.2: Presto and Prestissimo

The fastest indications used in Beethoven's oeuvre are *Presto* and *Prestissimo*. There are approximately one hundred sections that contain these indications, and metronome marks for some of these have been controversial due to the fact that several of them indicate a seemingly unrealistic speed. Beethoven's metronome marks for these sections are displayed in Table 6.2.1.

Table 6.2.1: Beethoven's prestos and prestissimos with metronome marks.

Metre	<u>Work</u>	Tempo indication	Metronome mark	Note
				values
3/8	String Quartet op. 18 no. 6/v	Prestissimo	J.=112	
6/8	String Quartet op. 18 no. 3/iv	Presto	J.=96)
2/4	String Quartet op. 18 no. 2/iv	Allegro molto quasi presto	J=92	37.77.
	Symphony op. 55/iv	Presto	J=116	. N
	String Quartet op. 59 no. 1/iv	Presto	J=92	787
3/4	Symphony op. 92/iii	Assai meno presto	J.=84	١٧٦
	Symphony op. 125/iv	Presto	J.=66 (Disputed))
	String Quartet op. 74/iii	Presto	J.=100	.)/_
	Symphony op. 92/iii	Presto	J.=132	•
	String Quartet op. 74/iii	Presto quasi prestissimo, Si ha	o.=100	J
		s'immaginar la battuta di 6/8		
¢	String Quartet op. 18 no. 4/iv	Prestissimo	o =84	١٧٦
	Septet op. 20/vi	Presto	J=112	_الإ_
	String Quartet op. 59 no. 2/iv	Presto	o =88	١٧٦
	String Quartet op. 59 no. 2/iv	Più presto	o=112	١٧٦
	Symphony op. 67/iv	Presto	o=112	
	Symphony op. 125/ii	Presto	J=116 (Disputed)	
	Symphony op. 125/iv	Prestissimo	J=132	الرا

Of the seventeen metronome marks in the table, five use semibreves to indicate the speed, the largest note value used for metronome marks by Beethoven and his contemporaries. The reason for this large note value appears to be that the scale on early metronomes only ran from 50 to 160,²⁹³ and that there is therefore no other way to indicate these speeds. With these extreme velocities, it is no surprise that these metronome marks are among the most controversial. There are nevertheless only two cases in which there is evidence that the

258

²⁹³ Johann Nepomuk Mälzel, *Notice sur le métronome de J. Maelzel*, Paris (Carpentier-Méricourt) 1818.

metronome mark is entirely wrong—the opening of the final movement of the Ninth Symphony op. 125 in 3/4, and in the second movement of the same symphony in &—which will be discussed below in the context of all other fast tempos in the same metre.

6.2.1: Presto and Prestissimo in 3/8 and 6/8

There are 14 *Presto* or *Prestissimos* in 6/8 or 3/8, all of which involve either piano and/or strings. The metronome marks for these can be found in Table 6.2.1.1.

Table 6.2.1.1: Beethoven's prestos and prestissimos in 3/8 and 6/8.

Metre	<u>Work</u>	Tempo indication	Metronome	Note
			<u>mark</u>	<u>values</u>
3/8	String Quartet op. 18 no. 6/v	Prestissimo	J.=112	٨
6/8	Piano Sonata op. 28/iv	Più allegro quasi presto	[].=112]	٨
	Piano Concerto op. 37/iii	Presto	[].=100-112])
	Variation for Piano Trio op. 121a, var. 10	Presto	-	3/1)
	String Quintet op. 29/iv	Presto	-))
	Variations WoO 67 var.8	Presto	-))
	Violin Sonata op. 23/i	Presto	[].=132-138]	۵
	Piano Sonata op. 109/ii	Prestissimo	[].=138-160]	٥
	Violin Sonata op. 47/iii	Presto	[].=88-92]	٥
	Piano Trio op. 97/iv	Presto	[].=92-96]	۵
	Fantasy op. 77	Più presto	[].=88-126]	٥
	String Quartet op. 18 no. 3/iv	Presto	J.=96	٥
	Rondo for Piano and orchestra WoO 6	Presto	-	۵
	Piano Sonata op. 31 no. 3/iv	Presto con molto fuoco	[].= 96-116]	٥

The table contains two sections with metronome marks by Beethoven: the last movement of the String Quartet op. 18 no. 3 in 6/8, which is marked *Presto* J.=96 and contains running quavers as most common note value, and a short *Prestissimo* section that concludes the last movement of the String Quartet op. 18 no. 4, which contains running semiquavers and has a speed of J.=112. In addition eight sections have metronome marks by Czerny and/or Moscheles. For three of these works, these speeds seem particularly valuable: the Presto with quavers that concludes the Piano Trio op. 97—another work that Czerny studied with

Beethoven—is given J.=96 by Czerny and J.=92 by Moscheles, who heard the work performed by the composer. Another section with the same metre, tempo indication, and range of note values, the final presto of the Violins Sonata op. 47 is given a very similar speed by Czerny: J.=92 and 88. Since Czerny arranged the Violin Sonata op. 47 for piano during Beethoven's lifetime, ²⁹⁴ it seems plausible that his speeds are based at least in part on an instruction by the composer. Finally, the last presto of the Piano Concert op. 37—which, much like op. 97, Czerny and Moscheles were familiar with—is given a much slower range of J.=100-112, presumably on account of its extensive semiquaver figuration in the piano.

Several other movements have been given speeds in the same range: firstly,

Moscheles gives the concluding *Più Allegro quasi Presto* in the last movement of the Piano

Sonata op. 28 a speed of J.=112, which seems appropriate given the semiquaver figuration
throughout this section. Secondly, the final movement of the Piano Sonata op. 31 no. 3,
which contains constant quaver figuration and is marked *Presto con molto fuoco*, is given
speeds between J.=96 and 116 by Czerny and J.=96 by Moscheles. Although Czerny's fastest
speed for this movement seems overly ambitious, it can perhaps be explained by the addition
of *con molto fuoco* to the tempo indication. Thirdly, Czerny's suggestion of J.=88 for the *Più Presto* section in op. 77 seems reasonable, but since it is preceded by a *Presto* in 2/4 with
quavers, Moscheles's suggestions of J.=126 is understandable. (As Section 6.2.2 below will
show, *Presto* with quavers in 2/4 probably moves around J=152.) In two other cases,
however, Czerny and Moscheles are probably mistaken about the speed: the editorial speeds
of J.=132-138 for the first movement of the Violin Sonata op. 23 (*Presto* with quaver
figurations) are almost certainly too slow, as are their speeds for the *Prestissimo* of the
second movement of the Piano Sonata op. 109, which earlier in the creative process was

_

²⁹⁴ Carl Czerny, ed., *Grand Duo Brilliant pour le Pianoforte à quatre mains, arrange d'apres la Sonate de L van Beethoven Oeuv 47*, Vienna (Diabelli) 1827.

marked Presto.²⁹⁵ The latter section is given speeds of J.=138 and J.=152 in the Haslinger editions, J.=160 in all editions by Moscheles, and J.=80 in *On the Proper Performance*. As the editorial speeds for these two sections are much slower than the others, it seems likely that a much faster tempo was intended than is indicated by Czerny and Moscheles, ²⁹⁶ especially since the most reliable sources indicate that prestos and prestissimos in 6/8 with quavers as their smallest values were intended to move at around J.=88-96, while those with semiquavers move at a speed of approximately J.=100-112. The approximated speeds for these sections are given in Table 6.2.1.2.

Table 6.2.1.2: Estimated speeds for *prestos* and *prestissimos* in 3/8 and 6/8.

Most	Presto/Prestissimo
common note	
value	
	J.=112
)	J.=88-96

6.2.2: Presto and Prestissimo in 2/4

Prestos in 2/4 are 25 in number, with three sections having metronome marks by Beethoven, and another nine have metronome marks by a contemporary, which are displayed in Table 6.2.2.1.

²⁹⁵ Cooper, *The 35 Piano Sonatas*, iii, commentaries, 54. ²⁹⁶ See ibid.

Table 6.2.2.1: Metronome marks for prestos and prestissimos in 2/4.

<u>Work</u>	Tempo indication	Metronome Mark	Note values
Symphony op. 55/iv	Presto	J=116	"
Violin Sonata op. 96/iv	Presto	[]=80]	3)
String Quartet op. 18 no. 2/iv	Allegro molto quasi presto	J=92	JY_Y _
String Quartet op. 59 no. 1/iv	Presto	J=92	\$).)
Piano Trio op. 1 no. 2/iv	Presto	[]=80-96]	\$).)
Piano Sonata op. 10 no. 2/iii	Presto	[]=80-96]	\$).)
Piano Sonata WoO 47 no. 2/iii	Presto	[]=92]	%
Piano Sonata op. 57/iii	Presto	[]=92-100]	3
Piano Concerto op. 58/iii	Presto	[]=100]	♪triplets
Piano Trio op. 1 no. 1/iv	Presto	[]=88-100]	%
Piano Sonata op. 27 no. 1/iv	Presto	[]=88-126]	3))
Piano Sonata op. 106/ii	Presto	[]=152]	1/1)

Two of the sections with metronome marks by Beethoven indicate the speed of J=92, both of which contain semiquavers and quavers: the *Allegro molto quasi presto* in the last movement of the String Quartet op. 18 no. 2 and the short *Presto* at the end of the last movement String Quartet op. 59 no. 1. (The latter was misprinted as J=92, but this seems to be have fooled no one since the bulk of the movement is an *Allegro* marked J=126 with the same note values.) The third *Presto* is found at the end of the last movement of the Third Symphony op. 55, and is printed in the 1817 list as J=116. This section, which contains demisemiquavers in the strings, is preceded by a *Poco andante* J=108 in the same metre with semiquaver sextuplets. As the difference in both metronome mark and note values between these two sections is rather small despite the fact that the tempo indications are on opposite sides of the tempo scale, it seems likely that the note value of the metronome mark for the *Presto* is misprinted, and that it should have been J=116.

There are two *Prestos* in 2/4 that occur in works that Czerny studied with Beethoven, found in the final sections of the last movements of the Piano Sonata op. 57 and the Piano Concerto op. 58. The former contains crotchets, quavers, and semiquavers, and is marked \rfloor =96 and 92 by Czerny as well as \rfloor =100 by Moscheles, and the latter contains primarily triplet quavers and is marked \rfloor =100 by Czerny. (There does not seems to be a speed by

Moscheles available for this section.) The speeds for both of these movements seem reasonably consistent with Beethoven's speed of \rfloor =92 for the two *prestos* with semiquavers mentioned above. The only metronome mark for a *presto* in 2/4 without any semiquavers at all is found in Czerny's discussion of the second movement of the Piano Sonata op. 106 in *On the Proper Performance*, for a section that does not have a speed by Beethoven. Czerny's speed of \rfloor =152 seems feasible, as this section contains primarily single quavers followed by rests in the beginning, with a little more extensive quaver figuration in the left hand towards the end of the section.

Czerny's and Moscheles's metronome marks for other *Prestos* in 2/4 are mostly in the same range: the final *presto* of the Piano Trio op. 1 no. 1 is estimated at \$\] = 92 -100 and \$\] = 88, while the finale of no. 2 is a slightly slower \$\] = 80-96 and \$\] = 80, respectively. The speeds that Czerny and Moscheles recommend for the *prestos* in the piano sonatas op. 10 no. 2 and WoO 47 no. 2, and the Violin Sonata op. 96—all of which contain quavers and semiquavers,—all range from \$\] = 80 to about \$\] = 100. The only *presto* that does not fall in this range is found at the end of the Piano Sonata op. 27 no. 1, which is given \$\] = 120 by Czerny in the Haslinger edition. There is, however, no evidence that this speed is based on either an instruction by Beethoven or an authorized performance, but it seems possible that it is based on the fact that the semiquavers only appear in the last eight bars. Nevertheless, Moscheles recommends a much slower \$\] = 88 and 96. It is therefore likely that *prestos* in 2/4 with semiquavers move at a speed between \$\] = 92 and 100.

Table 6.2.2.2: Estimated intended speeds for prestos and prestissimos in 2/4.

Most	Presto/Prestissimo
common note	
value	
.)\.)	J=92-100
•)	J=152

6.2.3: Presto and Prestissimo in 3/4.

Prestos in 3/4 occur at a similar frequency to those in 6/8, with only 16 occurring in Beethoven's oeuvre, and five having metronome marks by the composer and six by a contemporary, as Table 6.2.3.1 shows.

Table 6.2.3.1: Metronome marks for prestos and prestissimos in 3/4.

<u>Work</u>	Tempo indication	Metronome Mark	Note values
String Quartet op. 132/iv	Presto	[]=160 (].=53)]	الأل
Cello Sonata op. 5 no. 2/ii	Allegro più tosto presto	[].=84]	♪ triplets
Bagatelle op. 33 no. 7	Presto	[].=116]	JyJ
Symphony op. 92/iii	Assai meno presto	J.=84	\
Symphony op. 125/iv	Presto	J.= 66 (Disputed)	>
String Quartet op. 74/iii	Presto	J.=100	الرا
Symphony op. 92/iii	Presto	J.=132	J
String Quartet op. 74/iii	Presto quasi prestissimo, Si ha	o.= 100	J
	s'immaginar la battuta di 6/8		
Variations op. 76, var. 6	Presto	[]=160]	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Piano Sonata op. 79/i	Presto alla tendensca	[].=84-88]	_ }/_
String Quartet op. 127/iii	Presto	[].=132]	1/3

Two of Beethoven's metronome marks occur in the third movement of the String Quartet op. 74, which consists of two sections. The first has crotchets and quavers as note values, with the quavers mostly appearing in groups of three, and is marked *Presto* J.=100. The second is marked *Più Presto quasi Prestissimo* o.=100, and consists of running crotchets and dotted minims. In addition, Beethoven writes 'Si ha s'immaginar la battuta di 6/8', implying a speed similar to a *presto* in 6/8. This statement goes a long way to explaining the otherwise suspiciously fast speed: as shown in Section 6.2.1, a *presto* in 6/8 with quavers usually have speeds of around J.=88-96, which is very similar to what a performance of the same music with crotchets instead of quavers and in 3/4 instead of 6/8 will sound like at a speed of o.=100. The third movement of the Seventh Symphony op. 92 also contains two metronome marks for *prestos*, although it is debatable whether the second qualifies as a *presto*. The first section is marked *Presto* J.=132 and mainly consists of running crotchets, the second is

marked *assai meno presto* J.=84 and contains pairs of quavers and minims in addition to crotchets, but since the tempo indication literally translates as 'rather less fast', this last section does not necessarily qualify as a *presto*.

Karl Holz recommends J.=132 (misprinted as \circ =132) for the *Presto* in the third movement of the String Quartet op. 127, in which exclusively crotchets and dotted minims appear. As the note values, tempo indication, metre, and Holz's metronomic speed for this quartet are the same as those for the third movement of op. 92, it seems likely that Holz's speed is a good representation. It seems also plausible that the *Presto* at the end of the second movement of the Sixth Symphony op. 68, which Beethoven apparently forgot to give a metronome mark in the 1817 list, is intended at a similar speed: not only does it contain the same range of note values as the two *Prestos* mentioned above, but it also is preceded by an *Allegro* with the same musical material and a speed of J.=108. It therefore seems plausible that *prestos* with crotchets move at a speed of around J.=132, which seems to be the overall maximum speed for *prestos* in 3/4.

As already seen in the example of the first section of the third movement of the String Quartet op. 74, *prestos* with crotchets and quavers are somewhat slower than those with only crotchets. The only other *presto* with these characteristics for which metronome marks by Czerny and Moscheles exist is found in the first movement of the Piano Sonata op. 78. Their speeds for this movement are a little slower, J.=84-88, possibly because of the fact that the work is titled 'Sonata facile'. (On the other hand, neither editor seems to have specialist knowledge about this work, so it is possible that the intended tempo is closer to J.=100, the speed of the third movement of the String Quartet op. 74.) The Bagatelle op. 37 no. 7 has much fewer quavers than the Piano Sonata op. 78, but more than the Symphony op. 92, which is reflected in Czerny's speed of J.=116. The Presto in 3/4 with the smallest note values of all, the *Allegro molto più tosto presto* first movement of the Cello Sonata op. 5 no. 2, which

contains extensive quaver triplet figuration in the piano part, is given a speed of J.=84 by both Czerny and Moscheles. Finally, Holz's speed of J=160 (J.=53) for the *Presto* at the end of the String Quartet op. 132 is almost certainly too slow for three reasons. Firstly, that section contains only quavers and crotchets, which in all other cases results in a speed between J.=84 and J.=116. Secondly, Moscheles recommends the same speed for the seventh variation of the Variations op. 76, which contains extensive semiquaver figurations. Thirdly, a speed of J=160 for a section with quavers and crotchets is too slow even for *allegro*: it is in fact consistent with a tempo indication between *Allegretto* and *Tempo di minuetto*, as Table 4.1.4.2 shows. Perhaps a speed comparable to the 'slow Presto' in the Seventh Symphony, which has slightly larger note values but a slower tempo indication, is more representative for Beethoven's intended speed for this section.

It is now time to return to the last metronome mark by Beethoven for a *presto* in 3/4, found in the opening of the fourth movement of the Ninth Symphony op. 125. This particular speed appears in several different sources: the conversation books, in which the speed is represented as J.=66; a letter from Beethoven in Karl's hand to the publisher Schott dated 13 October 1826, which contains the same speed;²⁹⁷ an advertisement by Schott in Caecillia, in which the speed is J.=96;²⁹⁸ and a letter dated 18 March 1827 to Moscheles written in Schindler's hand and signed by Beethoven, in which the speed is again given as J.=96. Otto Baensch argued in 1925 that the advertisement by Schott contained a misprint, which was subsequently copied by Beethoven into the letter to Moscheles, and that the original J.=66 corresponds to the speed that the composer had in mind.²⁹⁹

Although many authors have accepted this account of events, the metronome mark itself makes this explanation somewhat unlikely. Firstly, if compared to other sections with a

²⁹⁷ Brandenburg, *Briefwechsel*, Letter 2223.

²⁹⁸ 'Metronomische Bezeichnung der Tempi der neuesten Beethovenschen Symphonie, op. 125. Mitgetheilt von Componisten', *Caecilia: Eine Zeitschrift für die musikalische Welt*, vii (1827), 158.

²⁹⁹ Otto Baensch, 'Zur neunten Symphonie: einige Feststellungen', *Neues Beethoven-Jahrbuch*, ii (1925) 137-166, at 144-145.

speed of about J.=66 in 3/4 with quavers as most common note value, *Allegro* is a much more appropriate tempo indication than *Presto*, as was shown in Section 5.4 in the previous chapter. Secondly, compared to other *Prestos*, this metronome marks is highly anomalous: as shown above, there are several *prestos* with a comparable range of note values that have an estimated speed of around J.=100, and there are even *Prestos* with smaller note values that have an estimated speed that is still significantly faster than J.=66, such as the J.=84 for the Cello Sonata op. 5 no. 2. Example 6.2.3.2 a and b show the *prestos* from the String Quartet op. 74 discussed above and the fourth movement of the Ninth Symphony, respectively, which shows that J.=96 is a much more consistent reading than J.=66.

Example 6.2.3.2: The *prestos* from the String Quartet op. 74 (Violin I) (a), the fourth movement of the Ninth Symphony (Flute) (b), and the same passage as Karl van Beethoven might have imagined it was notated (c).



In fact, compared to other sections with the same range of note values, metre, and tempo indication, J.=66 for the opening Presto of the fourth movement of the Ninth Symphony is much more of an outlier than the metronome mark for the last movement of the Fourth Symphony op. 60 discussed in the previous chapter, in which it was shown that the printed speed of J=80 is probably a misprint of J=60. Thirdly, it should be noticed that this section is

particularly difficult to provide a metronome mark for in dotted minims, as can be seen in Example 6.2.2: the syncopated rhythms and the offbeat leaps in the melody distort the sense of a 3/4 metre filled with quavers. In fact, Beethoven's nephew Karl, who presumably operated the metronome—more on that later—could have easily heard a 3/4 bar filled with triplets, as indicated in Example 6.2.3.2c.

It therefore seems plausible that the initial J.=66 was based on an error, and that Beethoven sent Schott the number 96 as a correction, presumably in one of the letters between them—letter 2254 is an example, 300 but there could have been several others—that are now lost. Several letters between Schott and Beethoven are indeed missing, and it seems possible for a short letter with corrections to disappear. Although this is admittedly not an entirely satisfying explanation, it seems somewhat more likely than Baensch's, in which Beethoven first gives an uncharacteristically slow speed to a *presto*, which is subsequently misprinted in such a way that it resembles the other *prestos* more closely.

Given the scrutiny that other metronome marks in the Ninth Symphony have been subjected to, the fact that Baensch's explanation has gone unchallenged is remarkable, especially as it relies on either a random misprint, or on what Peter Stadlen has called a 'Freudian slip'³⁰¹, the typesetter supposedly printing the page number by accident. There appear to be two mutually compatible explanations for this. Firstly, unlike the other misprinted metronome mark in this movement, the J.=84 for *Allegro assai vivace alla marcia* which was misprinted as J.=84,³⁰² the mistake here is not so big that a misprint is immediately suspected. Secondly, the interpretation that this particular error offers is on some level more attractive than what Beethoven presumably intended, as the slower speed makes the passage easier to play. From the point of view of a conductor in particular, there is therefore no reason to even want to believe that J.=96 was what Beethoven had in mind. As far as performance

³⁰⁰ Brandenburg, *Briefwechsel*, Letter, 2254.

Baensch, 'Zur neunten Symphonie' 145, Stadlen, 'Beethoven and the Metornome', 331.

³⁰² Brown, 'Metornome Marks', 254.

practice is concerned, challenging this speed, which is probably among the most engrained in the collective musical psyche than any other in Western classical music, is going to require a great deal of musical conviction. The estimated speeds for *Prestos* and *Prestissimos* in 3/4 can be found in Table 6.2.3.3.

Table 6.2.3.3: Estimated speeds for prestos and prestissimos in 3/4.

Most	Slow Presto	Presto/Prestissimo
common note		
value		
37.)	*	J.=80?
١٧٦	J.=84	J.=100-116
J	*	J.=132

6.2.4: Prestos and Prestissimos in c

There are only three instances of *Prestos* in **c** with metronome marks by a contemporary given in Table 6.2.4.1, but none with speeds by the composer. Due to the lack of metronome marks by Beethoven, it is difficult to say anything about these metronome marks with certainty. By comparing them to the estimated speeds for *Allegros* in the same metre, however, it should be possible to assess whether the suggested speeds are plausible.

Table 6.2.4.1: Metronome marks for prestos and prestissimos in c.

<u>Work</u>	Tempo indication	Metronome Mark	Note values
Cello Sonata op. 5 no. 2/ii	Presto	[]=80]	♪triplets
Piano Sonata op. 27 no. 2/iii	Presto	[]=80-92]	•
String Quartet op. 130/ii	Presto	[]=144]	J Y.J

At J=80, the Cello Sonata (for which Moscheles was the only editor to provide metronome marks) seems a little slow, especially compared to the *Allegro* first movement of the String Quartet op. 59 no. 1, which Beethoven marked J=88 and which contains the same range of note values. A slightly faster speed is therefore more likely. The suggestions for the third movement of the Piano Sonata op. 27 no. 2, however, seem about right, as the fastest *allegros*

in Table 5.5.2 generally have far less extensive semiquaver figuration. The speed for the second movement of the String Quartet op. 130 seems justified for similar reasons.

6.2.5: Prestos and Prestissimos in ¢

There are more than 30 *prestos* and *prestissimos* in ¢, more than in any other metre, the speeds for which can be found in Table 6.2.5.1.

Table 6.2.5.1: Metronome marks for prestos and prestissimos in ¢.

Work	Tempo indication	Metronome Mark	Note values
Piano Sonata op. 2 no. 1/iv	Prestissimo	[]=104-112]	♪triplets/J
Piano Sonata op. 10 no. 1/iii	Prestissimo	[]=100-108]	.y.)
Septet op. 20/vi	Presto	J=112	الإ
Symphony op. 125/ii	Presto	J=116 (Disputed)	J
Symphony op. 125/iv	Prestissimo	J=132	الرا
Piano Sonata op. 10 no. 3/i	Presto	[]=126-152]	١٧١
String Quartet op. 131/v	Presto	[]=160]	J
Violin Sonata op. 47/i	Presto	[0=72-80]	الإ
Piano Trio op. 70 no. 1/iii	Presto	[0=72-80]	الإ
Fantasy op. 80/ii	Presto	[\circ =72 (misprinted as \downarrow =72)]	الإ
Piano Sonata op. 53/iii	Prestissimo	[0 =80-88]	الإ
Violin Sonata op. 30 no. 2/iv	Presto	[0 =88]	7
Piano Trio op. 1 no. 3/iv	Prestissimo	[0=76]	7
String Quartet op. 18 no. 4/iv	Prestissimo	o =84	الرا
String Quartet op. 59 no. 2/iv	Presto	o =88	الرا
String Quartet op. 59 no. 2/iv	Più presto	o=112	الإ
Symphony op. 67/iv	Presto	o =112	J

Seven of these have been given metronome marks by Beethoven, and they reveal an unusually wide range of speeds: the slowest two are marked \$\]=112 and \$\]=132 for the final sections of the Septet op. 20 and the Ninth Symphony op. 125 respectively, while four others have speeds ranging from \$\[\infty = 84\$ to 112. This difference cannot be explained by the range of note values used in these sections, as all except for the fastest contain crotchets and quavers. It therefore seems plausible that the metronome mark, the metre, or some other element that communicates tempo has been the victim of a mistake in transmission, or that some other error has taken place. This is especially likely in the case of the most controversial

metronome mark of all, the J=116 for the Trio of the second movement of the Symphony op. 125. Due to the controversial and anomalous nature of these metronome marks, it is important to first establish which *Prestos* were correctly and consistently intended to be in ϕ , and which ones should have been in another metre.

The *prestos* in the last movements of the String Quartets opp. 18 no. 4 and 59 no. 2 contain crotchets and quavers as note values in all four instruments, and Beethoven's speed for these movements is rather fast: o =84 and 88, respectively. Op. 59 no. 2 is concluded by a brief Più Presto section with the same range of note values but with only single quavers and an even faster speed of o =112. Although this speed may be extreme, it is far from unique: the *Presto* in the fourth movement of the Fifth Symphony op. 67 is given the same speed, which contains crotchets in all voices and some repeated quavers in the strings. Comparable speeds are given by Czerny and Moscheles to similar movements: the *Presto* in the first movement of the Violin Sonata op. 47, which also contains primarily crotchets and quavers, is given speeds of o =72 to 80, and since Czerny published a piano transcription of this work during the composer's lifetime, it seems plausible that he discussed this work with Beethoven. The Prestissimo in last movement of the Piano Trio op. 1 no. 3, which contains almost constant quaver figuration, has speeds ranging from o =76 to 80; Presto section at the end of the last movement of the Violin Sonata op. 30 no. 2 is given o =88 by Moscheles (Czerny gives no speed, but gives the preceding Allegro o =72 and 66, so his Presto would presumably also be around o =80); the final *Prestissimo* of the Piano Sonata op. 53, which Czerny sight-read for Beethoven, is given speeds ranging from $_{\circ}$ =80-88; the final *Presto* of the Fantasy op. 80 is given $\circ = 72$ by Czerny in On the Proper Performance (misprinted as $\downarrow = 72$); and the first movement of the Piano Sonata op. 10 no. 3 is given speeds between o =63 and 76; and the *Presto* in the fifth movement of the String Quartet op. 131 has a recommended speed of

_o =80, perhaps somewhat slower than would be expected with only crotchets. Finally, the last movement of the Piano Trio op. 70 no. 1, which is marked c in the first edition but for which the corrected copy in the Beethoven-Haus clearly indicates ϕ , 303 is given speeds of ϕ =72 and 80 by Czerny and Moscheles respectively. Overall, it seems that *Prestos* in ¢ with quavers and crotchets as their most common note values move at a speed around o =80, as do Prestissimos with extensive quaver figuration. The two Prestissimos with shorter note values—the last movements of the Piano Sonatas opp. 2 no. 1 and 10 no. 1—have slower suggested speeds, ranging from J=104 to J=112. These, however, seem a little on the slow side considering the fact that Allegro and Allegro con brio with the same range of note values move at a similar pace. A slightly faster speed, perhaps around $\beta = 120$, might therefore be closer to Beethoven's intentions.

This leaves just three *Prestos* in ¢ that do not fall into the ranges described above. The first of these, and also the earliest in terms of composition, is the final *Presto* of the Septet op. 20, which contains crotchets, quavers, and quaver triplets, and is marked = 112. Compared to the other *prestos* in this metre discussed above, this is exceptionally slow, but it seems possible that the presence of the quaver triplet figuration is responsible for the large difference in speed. However, as the discussion of the suggested speeds for the Piano Sonatas opp. 2 no. 1 and 10 no. 1 indicated, $\rfloor = 112$ is much more in the range of Allegro than Presto. The autograph score of the Septet also shows *Allegro* instead of *Presto*, ³⁰⁴ suggesting that the latter must have been an afterthought, perhaps to avoid a tempo that is too slow. As both the metronomic speed and the autograph relate more to Allegro than Presto, it is perhaps best to consider the change to *Presto* an inconsistency on the part of the composer.

The second outlier is the *Prestissimo* at the end of the last movement of the Ninth Symphony op. 125, which contains crotchets and quavers, and has a speed of $\rfloor = 132$. As the

 $^{^{303}}$ Corrected copy of the piano part of the Piano Trio op. 70 no. 1. 304 Autograph score of the Septet op. 20.

tempo indication seems to indicate a speed at the top of the range, it seems plausible that the metre that Beethoven indicated is inconsistent. The most likely candidate for the correct metre is e, and although there are no *prestos* or *prestissimos* in that metre with metronome marks by Beethoven to compare, the fact that the fastest *Allegros* in that metre move at around $\int =100$ —as was shown in Chapter 5.3—makes a hypothetical speed of $\int =132$ for *Prestissimo* in the same metre probable. Furthermore, Holz's metronome mark for the *Presto* in the String Quartet op. 130 also provides some support for the notion that the final *Prestissimo* of the Ninth Symphony should have been written in e.

The third *Presto* that is much slower than others is also the most controversial: the J=116 for the Trio in the second movement of the Ninth Symphony, a section which contains primarily crotchets and a few quavers. Virtually all sources list the metronome mark as J=116, and the only instance of o=116 is found in the 1863 Breitkopf & Härtel edition of the score, presumably derived from an incorrect reading of a late printing of the 1827 edition published by Schott. All other sources indicate the metronome mark with a minim. As Clive Brown has pointed out, however, it is not impossible that the note value has been wrong from the start, as there are several other cases in which this appears to have happened, such as the J=60 instead of J=60 for the second movement of the Fourth Symphony op. 60, and the J=92 instead of J=92 for the final Presto of the String Quartet op. 59 no. 1.

The arguments in favour of J=116 are the following: firstly, all of the original sources contain this speed. Secondly, the sketches and the autograph score show that Beethoven initially notated the section that would become the *Presto* not in ϕ but in 2/4, and that this was changed only relatively late in the creative process. The sketches show the material also appearing with a variety of note values, and in one particular instance the note values are

³⁰⁵ See Erica Buurman, 'New Evidence in an Old Argument', *The Musical Times*, clii/1917 (Winter 2011), 15-30, at 15.

³⁰⁶ Brown, 'Metronome Marks', 256-258.

twice as large.³⁰⁷ Thirdly, the alternative of $_{\circ}$ =116 is so fast that it seems unlikely that Beethoven intended that speed. The arguments in favour of $_{\circ}$ =116 include the already mentioned possibility that the note value was incorrect, the fact that the word *Prestissimo* appears in pencil on the autograph of the trio, as well as the notion that this speed might be more appropriate for a *Presto*. Furthermore, the Trio is preceded by a *stringendo*, so it is seems likely that the Trio has a faster speed than the Scherzo. Based on the last observation, several authors have suggested a speed of J =160 for the Trio, which has been put into practice in several recorded performances.³⁰⁸

All three of these explanations assume that a particular inconsistency or error has taken place during the creative process, examining the likelihood of each of these hypothetical occurrences will also show which speed the best reflection of Beethoven's intentions. Those advocating the fastest speed of o =116 have to assume that the note value of the metronome mark has been misprinted from the start in all sources, while those arguing for J=160 have to assume that Beethoven was operating the metronome and dictating to Karl, and that the latter mistook misheard Beethoven, mistaking *einhundertsechzig* (160) for *einhundertsechzehn* (116). Furthermore, both of these explanations rely on the fact that this mistake went completely unnoticed by both Beethoven and Karl. This seems somewhat unlikely, as the latter was able to spot relatively small discrepancies between speeds with comparative ease, as is indicated in an entry in the conversation books referring to the final *Prestissimo* of the fourth movement: 'you take it faster than 120. 132. That is how we had it in the morning.' It therefore seems unlikely that Karl would have missed a mistake of this magnitude in a passage in which the rhythmic pattern is fairly straightforward, although it is of course not completely unthinkable. Karl's comment makes it especially implausible that

2

³⁰⁷ Buurman, 'New Evidence', 27.

³⁰⁸ Ludwig van Beethoven, *Beethoven: The Symphonies*, The Leipzig Gewandhaus Orchestra, cond. Riccardo Chailly (478 2721, 2009).

³⁰⁹ Buurman, 'New Evidence', 22.

Beethoven intended J=160, as it is quite clear that Beethoven was behind the piano and Karl was establishing the speeds with the metronome when this entry was made. So unless the setup was different when Karl wrote down J=116, Beethoven would not be calling out numbers to his nephew, which in turn makes it unlikely that the metronome mark is based on a mishearing on Karl's part. Finally, the speed that Karl wrote down, J=116, seems unusually slow for a *Presto* with these note values, especially compared to the final section of the Symphony op. 67, which has a similar range of note values and is marked $\sigma=112$. Erica Buurman, however, has observed that the Trio was initially notated in 2/4, and argued that the transition into ϕ might not have changed the basic pulse. Buurman argues that

It is significant that Beethoven here apparently alludes to the *Allegro molto* of op.110, since the rhythmic motion of the main part of this movement strongly resembles that of the finished version of the symphony's Trio. In both movements the rhythm is predominantly running crotchets, although in the case of op. 110 the metre is 2/4 (as the symphony's Trio was also originally notated). Czerny's suggested metronome mark for op.110/II is J=112-120, putting the speed of the running crotchets roughly in line with those in the Ninth Symphony Trio if a tempo of J rather than s=116 is observed. This would suggest that a tempo of J=116 would be suitable for the type of fast movement envisioned by Beethoven at this early stage in the compositional process, since he evidently had in mind a particular rhythm and metre ... similar to that in op.110. And since Czerny's recommended tempo for op. no/II has never been contested as being 'much too slow', this surely suggests that a tempo of J=116 for a Presto passage like the Ninth Symphony Trio is not necessarily a 'complete aberration' as Clive Brown has argued. J=110

³¹⁰ Ibid., 24.

Whether Czerny's metronome mark for the second movement of op. 110 is representative of what Beethoven had in mind is of course debatable, but Buurman's observation of the link between the two fast movements is insightful. There are, however, two caveats that need to be added here, the first being that none of the tempo indications discussed in this thesis have shown that the intended speed in 2/4 remains the same if written in ¢ with the same range of note values. Instead, as Buurman also suggests, 311 music in 2/4 and ¢ have the same intended speed as long as the number of notes per bar remains the same. The connection between these the Piano Sonata op. 110 and the Symphony might therefore not be all that persuasive.

The second caveat is that the comparison between the *Presto* Trio and the *Allegro molto* Piano Sonata only goes so far, and there are sharp differences between the two in terms of note values. The first 40 bars of the Piano Sonata indeed consist of almost only crotchets, but from then on extensive quaver figuration starts to appear. This quaver figuration suggests a slower speed than the *Presto* of the Symphony, and also explains why Czerny's recommended tempo for that section has never been considered too slow. If anything, the comparison with op. 110 suggests that the *Presto* in the second movement of the Ninth Symphony would have been faster even if the metre had remained in 2/4, and it seems likely that changing the metre into \$\phi\$ has increased the speed even further.

In short, J=116 for a *Presto* in ϕ with mainly crotchets is rather inconsistent with Beethoven's other speeds in the same metre and therefore seems somewhat implausible, and although its connection with the Piano Sonata op. 110 is a worthwhile piece of evidence, it does not necessarily mean that the same speed was intended later. $\phi=116$, on the other hand, requires one to make assumptions about the transmission of the metronome mark that are difficult to substantiate with facts.

-

³¹¹ Ibid., 27.

There is, however, another possibility that has not been discussed before and which may explain the existence of the metronome mark in a way that is consistent with all the evidence. Hypothetically, it is possible that, when Beethoven changed the time signature from 2/4 to ¢, he should have used ¢ instead. Since the fastest *Allegro con brios* and *Allegro vivaces* with quavers and semiquavers in ¢ move at a speed between \$\frac{1}{2} = 92-100\$ as was shown in Chapter 5.3, it is plausible that *Presto* in that metre could move at around \$\frac{1}{2} = 116\$. (This would also mean that Holz's speed for the second movement of the String Quartet op. 130 discussed in Section 6.2.4 above is probably somewhat too fast.) This explanation becomes even more likely if one considers that in several other cases in which Beethoven changed the metre from 2/4 to ¢ at a relatively late stage—such as the Piano Trio op. 1 no. 2—the note values are also doubled. Since that did not happen in the case of the Trio, the most plausible explanation is that ¢ should have been notated as ¢ in order to be consistent.

Admittedly, J=116 is not without its problems either, as it does not explain the *stringendo* before the Trio, nor the *Prestissimo* that Beethoven wrote at the bottom of the autograph score, which suggests the fastest speed possible. Nevertheless, it is useful to point out these possibilities, if only to show that it is possible to make a reasonably respectable argument for several speeds. So J=116, J=160, and o=116 can all be considered viable candidates, with J=160 being the least likely, as it is least in line with other metronome marks by Beethoven, and J=116 and o=116 the most plausible, as these only require the assumption that the time signature is inconsistent, or that Karl wrote down the wrong note value in the conversation books leading to this metronome mark being copied in all subsequent sources, respectively.

Prestos and *Prestissimos* in ¢ with note values smaller than quavers are rare, and there seem to be only three: the fourth movements of the String Trio op. 9 no. 3 and the Piano

-

³¹² Autograph score of the Ninth Symphony.

Sonata op. 2 no. 1 contain quaver triplets, and the *Prestissimo* final movement of the Piano Sonata op. 10 no. 1 contains semiquaver figuration. The speed for the sonatas is estimated by Czerny and Moscheles as J=104-112 and J=96-108, respectively, much slower than those sections with larger note values. The speeds for *Prestos* and *Prestissimos* in ¢ can be found in the table below.

Table 6.2.5.2: Estimated speeds for prestos and prestissimos in ¢.

Most	Presto/Prestissimo
common note	
value	
الـ الأـــ	J=120
الا	J=160
J	o=112

Chapter 7: Conclusions and Recommendations

This study has offered a framework within which Beethoven's approach to tempo can be explained and which can be used to make plausible and historically grounded predictions regarding the intended speed for movements for which it is not explicitly indicated. This framework, which is supported by most of the important evidence available on this topic, also implicitly invites performers interested in historical performance to rethink their approach to this repertoire by offering a counterintuitive but historically grounded description of Beethoven's tempos.

Despite this, however, it is important to offer a number of caveats, as the model is only an approximation of the intended overall speed of a particular section. Firstly, since the model only describes the intended tempo, it does not mean that these were also the tempos chosen in every performance by Beethoven, and there were probably (small) differences between theory and practice in this regard. Secondly, although there has been some discussion of tempo flexibility, the evidence discussed in this thesis simply does not stretch far enough to be able to reach any conclusions. Nevertheless, it is worth repeating the observation in Chapter 3 that many slow sections tend to have different ranges of note values in different parts of the same movement, which might indicate a degree of tempo flexibility. More research, however, is required before any definitive conclusion can be drawn. Thirdly, it should be stressed again that no one is required to follow Beethoven's intentions, except of course those musicians who claim that they are doing so.

In general, the most reliable results were achieved for combinations of time signatures, note values, and tempo indications that are relatively common in Beethoven's compositional output. A good example can be found in the discussion of *allegros* in **c**, for which no fewer than 45 metronome marks are available, which provide a plausible and

consistent image of the tempo that the composer had mind. This in turn allows the making of educated guesses for music that falls in other categories for which there is less data available, such as the *Prestos* in the same metre.

Before discussing how these may be used to fuel future research and practice, it is worth briefly highlighting some of the most important findings, starting with the general relationship between two elements: tempo and expression. As the preceding chapters have shown, it is possible to divide Beethoven's tempo indications into three groups, each with a different relationship between tempo and expression. The first group includes those words that purely indicate a speed regardless of the affect of the music. These are generally found at both ends of the tempo range, with *Adagio*, *Allegro* and *Presto* being the most common examples. With these indications, as long as two pieces of music have the same tempo indication, range of note values, and time signature, the intended speed will be very similar, regardless of any perceived differences in expression, tonality, instrumentation, or any other factor that one would perhaps expect to be an influence on the tempo. It is of course possible that in practice these factors were of some influence on the speeds, but at least in theory an *Allegro* movement of a Piano Sonata in B-flat major moves at virtually the same speed as an *Allegro* from a String Quartet in c-minor, as a comparison of the first movement of op. 106 with the last movement of op. 18 no. 4 shows, respectively.

The second group of indications includes those that consistently imply a particular kind of expression. These are generally found among the slower tempos, with *Largo* and *Sostenuto* as most common examples. As Chapter 3 showed, these indications typically have speeds similar to various configurations of *adagio*, as long as the range of note values and time signature are also similar. As such, determining their intended tempo is in fact relatively straightforward, and can be done in a similar way as those indications in the first group.

Much more difficult, however, is the third group of indications, which are those that have a different speed depending on the expression of the piece in which they are used. These kinds of tempo indications are mainly found in the moderately slow and moderately fast sections, with andante and allegretto being the two most common examples. These, unfortunately, are also the most problematic for this method: as argued in Chapter 1, it is not really possible to ascertain reliably what expression or tempo was intended in the early nineteenth century from a twenty-first-century perspective by just playing the music or studying the score. Since it is quite plausible that the intended expression is not always explicitly indicated in these movements, it is easy to misidentify the intended expression, and thereby also the intended tempo. It could therefore be possible that an andante discussed in Chapter 3.3, for instance, was intended to be played at marching speed despite not being indicated as such, and that the model therefore predicts the wrong intended speed if all that is taken into account is what is in the score. Fortunately, each of the different possible expressions within these indications, of which there are typically a relatively small number, are subjected to the same rules as before, with the range of note values and time signature determining the intended tempo. In other words, within the group of fast allegrettos or march-like *andantes*, the same rules apply as in *allegro* and *presto*, which ensures that even in cases in which the intended expression is ambiguous, the intended speed for each of these expressions can at least be predicted. Although there is still much room for research on the intended expressions within each movement—for instance on the role of more local indications such dolce and espressivo—the influence of the overall expression on the overall tempo is fairly clear, at least in theory.

Some of the more counterintuitive results, however, have involved the influence of time signatures on the tempo. Despite Beethoven's statement on the autograph of WoO 113, in which he indicated that music in & with crotchets is slower than in 2/4 with quavers, his

own metronome marks show that both move at similar speed as long as they have the same tempo indications. In addition, in all but the slow tempos there appears to be no significant difference between music with few beats in the bar and those with many: *allegro* in 2/4 move at speeds very similar to their counterparts with the same range of note values in **c**.

The most surprising results of this method, however, are found in what is probably Beethoven's most famous work, the Ninth Symphony. Two of the metronome marks for this work have either been misrepresented (the *Presto* opening of the final movement) or misunderstood (the *Presto* in the second movement). Considering the large amount of scholarly literature on the Ninth Symphony, this only reconfirms the notion that Beethoven's sense of tempo is to a large part counterintuitive to twentieth and twenty-first century musicians. Nevertheless, the difference between Beethoven's tempos and modern preferences cannot be explained by the two centuries that separate these alone. Although the earliest metronome marks by Czerny and Moscheles are typically quite consistent with the model of Beethoven's tempo, especially for works that Czerny studied with the composer, there are a number of cases in which these editors suggest speeds that are probably faster or slower than the composer had in mind.

The above observations point to three general conclusions regarding this research. Firstly, Beethoven's sense of tempo was clearly highly personal, and probably somewhat different from that of his contemporaries, as his enthusiasm for the metronome suggests. Secondly, due to several inconsistencies—the relationship between 3/8 and 6/8, for instance, which changes between *adagios* and *allegros* for no practical reason—it seems plausible that Beethoven's sense of tempo was largely intuitive. Furthermore, there is no evidence that Beethoven ever tried to define his own tempo preferences in a systematic way similar to how this thesis has discussed them. This might also explain some of the differences between

Beethoven's writings on tempo and the speeds of his metronome marks, as these contradictions are less easily detected when his sense of tempo is not clearly defined.

This leads to the third conclusion. If the model in this thesis is to have any predictive capabilities, it is important to be aware of Beethoven's inconsistencies regarding the three variables that the model generally depends on. The time signature seems to be the most unreliable variable, but also the one with the largest impact on the intended tempo, as the discussion of the metronome mark for the *Presto* in the second movement of the Ninth Symphony has shown. Any attempt to establish Beethoven's intended speeds for an unknown work will have to take into account the possibility of the inconsistent use of metres, especially in c and ¢, which seem to be the ones most often confused. A short example will demonstrate how this works. The first movement of the String Trio op. 3 no. 1 is marked *Allegro con brio* in c, and contains quavers and some semiquavers as most common note values. According to Table 5.5.2, a movement with these characteristics would have an intended speed between J=92 and 100, but if the time signature should have been ¢ in order to be consistent, the intended speed is more likely to have been be around J=112, as Table 5.6.3 shows.

In summary, although the model described in this thesis can be used to make predictions about the speed that Beethoven had in mind for his music, it is important to keep in mind that these will only be as accurate as the reliability of the variables that determine it. In many cases, it might therefore be better to identify several possible (ranges of) intended speeds depending on various permutations of these variables, rather than just a single one.

7.1: Where to go from here: Intuitions, Experiments, and Practice

Although it would be inappropriate to hold up Beethoven's own sense of tempo as the interpretive ideal, for reasons explained in Chapter 1, one immediate use for a model that

describes it is to see how it compares to modern practices. Of particular interest in this respect are performances by historically informed ensembles of works by Beethoven for which no or little information on the intended tempo is available outside the note values, metre, and tempo indication in the score. Doing so with a representative sample of recordings would be far beyond the purposes of this thesis, and a full evaluation on this point will have to wait until another time, but the results would probably indicate a significant difference between evidence and practice in most cases.

It seems worth exploring the roots of this further by focusing on the underlying principles that animate the tempo preferences of both Beethoven and modern musicians, especially if Beethoven's intended tempo is indeed largely intuitive as postulated above. In recent years, the concepts of anchors and primes have been studied several times in psychological experiments that explore the influence of outside factors on human behaviour and decision making. Typically, the influence of these will be measured by asking the same question in two different ways to two different groups of people. One example of this is an experiment performed by Robyn A. LeBouf and Eldar Shafir, in which the first group of participants was asked to extent a short line on a piece of paper to a particular length, while the second was asked to shorten a much longer line to the same length. 313 The results show that on average the estimations of the first group were significantly lower than those of the second, although the average estimations by both groups were both shorter than the goal. The conclusions that the authors drew from this experiment, which were also found in comparable experiments using numerical estimates, ³¹⁴ is that the length of the line given to the participants likely acts as a starting point for the estimations, and that the conscious mind attempts to correct for this. The length of the line on paper is therefore an anchor that influences the participants' estimations.

3

³¹³ Robyn A. LeBouf and Eldar Shafir, 'The Long and Short of It: Physical Anchoring Effects', *Journal of Behavioural Decision Making*, xix (2006), 393-406, at 395-397.

³¹⁴ See Kahneman, *Thinking Fast and Slow*, 120-128.

It seems plausible that a similar principle underpins the metronome marks as described in this thesis, and that this is the reason that Beethoven's intuitive sense of tempo is as consistent as it is. Simply put, it seems plausible that the note values and (often implicit) time signatures that are used in the early sketches of a work also act as anchors, which influence any future decisions on tempo that Beethoven might make. Of course, much can change between the first sketch and a completed piece, but it seems likely that the very way in which Beethoven goes through the creative process is a two way street: it is not only him influencing the composition, on some level the composition is also unconsciously influencing him.

This hypothesis explains two important observations. Firstly, as mentioned above, it explains the consistency among Beethoven's metronome marks, and why movements that share certain characteristics have a similar speed. Secondly, it at least partially explains the fact that the time signatures are relatively often used inconsistently, especially \mathbf{c} and $\mathbf{\phi}$. Since the time signature is often added at a relatively late stage in the creative process and usually does not appear in the sketches, it is generally difficult to tell $\mathbf{\phi}$ from \mathbf{c} if they are not explicitly indicated, which could interfere with the anchoring properties of these time signatures.

Although this hypothesis cannot be tested directly for reasons that should be obvious, it should be possible to see if the same principles still apply to modern musicians. A hypothetical experiment for this would involve different groups of highly skilled musicians playing relatively simple music notated with a different combination of time signature and note values, and observing the speed that each musician intuitively takes. It would be particularly interesting to compare musicians from a historically informed background who have focussed on Beethoven in particular, to those with a more general focus, and to do a three way comparison between Beethoven's documented intuitions and the intuitions by the

two groups of modern musicians. The results will not only show to what degree historically informed performers actually have different intuitions from modern performers, it will also explore to what extent Beethoven's sense of tempo has already been approximated by both groups, and whether note values and time signature also act as anchors for decisions on tempo for musicians in the twenty-first century. My expectation is that they probably still do, although not necessarily in the same way as for Beethoven.

As the above discussion has indicated, the model presented by this thesis is as much the answer to a number of questions on the intended speeds of Beethoven's works as it is a starting point for further research and practice. By exploring, playing with, and building on this model, this research offers the possibility for new discussions on tempo, performances that are more historically grounded than before, and a greater understanding of Beethoven's creative process.

Bibliography

Books and Articles

Andersch, Johann Daniel, Musikalisches Wörterbuch, Berlin (Natorff) 1829.

Anon. 'Mälzel's Chronometer', Wiener allgemeine musikalische Zeitung, i/41 (13 October 1813), 625-28.

- -----'Wien' Wiener Zeitung, xciii/6 (6 January 1816), 21.
- ------ 'Zur Geschichte des musical.Metronomen', *Allgemeine musikalische Zeitung*, xx/26 (1 July 1818), 468-472.
- -----'Nachrichten', Allgemeine musikalische Zeitung, xv/48 (1 December 1813), 784-88.
- ------ 'Unter den musikalischen Akademieen', *Allgemeine musikalische Zeitung*, xi/17 (25 January 1809), 267-269.
- "Verlag von Carl Haslinger in Wien', *Allgemeine musikalische Zeitung*, i/20 (13 May 1863), 348.
- Bach, Carl Philipp Emanuel, *Essay on the True Art of Playing Keyboard Instruments*, trans. & ed. William J. Mitchell, London (Cassell) 1961.
- Baensch, Otto, 'Zur neunten Symphonie: einige Feststellungen', *Neues Beethoven-Jahrbuch*, ii (1925), 137-166.
- Barth, George, 'Czerny and Musical Authority: Locating the "Primary Vessel" of the Musical Tradition', in *Beyond the Art of Finger Desterity: Reassessing Carl Czerny*, ed. David Gramit, Rochester, New York (University of Rochester Press), 125-138.
- ———The Pianist as Orator: Beethoven and the Transformation of Keyboard Style, Ithica, New York (Cornell University Press) 1993.
- Beck, Hermann, 'Bemerkungen zu Beethoven's Tempi', in *Beethoven-Jahrbuch* (3d series), ii (1955-56), 24-54.
- Beethoven, Ludwig van & Antonio Salieri, 'Erklärung Mälzels Metronom', [Wiener] AMZ, ii/7 (14 February 1818), 58-9.
- Beethoven, Ludwig van, 'Metronomische Bezeichnung der Tempi der neuesten Beethovenschen Symphonie, op. 125. Mitgetheilt von Componisten', *Caecilia: Eine Zeitschrift für die musikalische Welt*, vii (1827), 158.

- Bowen, José, 'The Origins of the Ideology of Authenticity in Interpretation: Mendelssohn, Berlioz and Wagner as Conductors', in *Classical and Romantic Music*, ed. David Milsom, Franham, England (Ashgate) 2011, 237-252.
- Brandenburg, Sieghard, ed., *Ludwig van Beethoven: Briefwechsel Gesamtausgabe*, Munich (G. Henle Verlag) 1998, 7 vols.
- Brown, Clive, 'Historical Performance, Metronome Marks and Tempo in Beethoven's Symphonies', *Early Music*, xix/2 (May 1991), 247-258.

- Busby, Thomas, A Complete Dictionary of Music, Philadelphia (Snider), 1827.
- Buurman, Erica, 'New Evidence in an Old Argument', *The Musical Times*, clii/1917 (Winter 2011), 15-30.
- Clive, Peter, *Beethoven and His World: A Biographical Dictionary*, Oxford (Oxford University Press), 2001.
- Cooper, Barry, 'Beethoven on Beethoven: Playing Piano Music His Way [Review]', *Preformance Practice Review*, iv/1 (Spring 1991), 101-105.
- ———Beethoven, Oxford (Oxford University Press) 2007.
- Cowen, Rob, '[Interview with Nikolaus Harnoncourt]', *Gramophone*, lxxix (November 2001), 10-11.
- Czerny, Carl, 'Carl Czerny über sein Verhältnis zu Beethoven vom Jahre 1801 bis 1826', Wiener allgemeine Musik-Zeitung, v/113 (20 September 1845), 450-451.
- On the Proper Performance of All Beethoven's Works for the Piano, ed. Paul Badura-Skoda, Universal Edition (Vienna) 1970. Facsimile of Chapter 2 and 3 of the fourth volume of the English translation published by R. Cocks & Co in London of Von dem Vortrage: Dritter Theil aus Vollständige theoretisch-practische Pianoforte-Schule, op. 500, Vienna (Diabelli) 1839.
- Deas, Stewart, 'Beethoven's "Allegro assai", *Music & Letters*, xxxi/4 (October 1950), 333-336.

- Deutsch, Otto Erich, 'Beethovens Gesammelte Werke: Des Meisters Plan und Haslingers Ausgabe', Zeitschrift für Musikwissenschaft xiii/2 (1930): 60-79.
- Forbes, Elliot, ed., *Thayer's Life of Beethoven*, Princeton (Princeton University Press) 1967, 2 vols. [See also the 1960 edition by Thayer below.]
- Gelfand, Yakov, 'On Tempo Indications: Based on Beethoven's Music', *College Music Symposium*, xxv (1985), 92-129.
- Grant, Roger Mathew, 'Epistemologies of Time and Metre in the Long Eighteenth Century', *Eighteenth Century Music*, vi/1 (March 2009), 59-75.
- Henschel, George, *Personal Recollections of Johannes Brahms*, New York (A.M.S. Press) 1978.
- Houle, George, *Meter in Music, 1600-1800: Performance, Perception, and Notation*, Bloomington (Indiana University Press) 1987.
- Howell, Stanley, 'Beethoven's Maelzel Canon: Another Schindler Forgery?' *Musical Times*, cxx/mdxlii (Dec. 1979), 978-990.
- Hughes, Martin, 'Beethoven's Piano Music: Contemporary Performance Issues', in *Performing Beethoven*, ed. Robin Stowell, Cambridge (Cambridge University Press), 228-239.
- Jousse, John, Compendious Dictionary of Italian and Other Terms Used in Music, London (Clementi) 1829.
- Kahneman, Daniel, *Thinking, Fast and Slow*, New York (Farrar, Straus and Giroux) 2013.
- Kinderman, William, 'Reviews', 19th-Century Music, xv/1 (Summer 1991), 64-68.
- ——Beethoven's Diabelli Variations, Oxford (Oxford University Press) 1999.
- Kirnberger, Johann Philipp, *Die Kunst des reinen Stazes in der Musik*, *Zweiter Theil*, Berlin and Königsberg (Decker and Hartung) 1776.
- ———The Art of Strict Musical Composition, tr. David Beach & Jurgen Thym, ed. David Beach, New Haven and London (Yale University Press), 1982.
- Kivy, Peter, *Authenticities: Philosophical Reflections on Musical Performance*, New York (Cornell University Press) 1995.
- Klein, Rudolf, ed., Beiträge '76-78, Beethoven-Kolloquium 1977: Dokumentation und Aufführungspraxis, Kassel (Bärenreiter) 1978.
- Knecht, Justin Heinrich, *Vollständige Orgelschule für Anfänger und Geübtere*, Leipzig (Breitkopf & Härtel) 1795.
- Koch, Heinrich Christoph, *Handbuch bey dem Studium der Harmonie*, Leipzig (Johann Friedrich Hartknoch) 1811.

- ——Musikalisches Lexikon, Frankfurt am Main (August Hermann jr.) 1802.
- Kolisch, Rudolf, 'Tempo and Character in Beethoven's Music, part I', trans. Arthur Mendel, *The Musical Quarterly*, xxix (April 1943), 169-187.
- Kunze, Stefan, ed., *Ludwig van Beethoven: Die Werke im Spiegel seiner Zeit*, Laaber (Laaber) 1996.
- LeBouf, Robyn A., and Eldar Shafir, 'The Long and Short of It: Physical Anchoring Effects', *Journal of Behavioural Decision Making*, xix (2006), 393-406.
- Leech-Wilkinson, Daniel, 'Listening and Responding to the Evidence of Early Twentieth-Century Performance', *Journal of the Royal Musical Association*, cxxv (2010), Special issue no. 1, 45-62.
- Lenz, Wilhelm von, *Beethoven: Eine Kunst-Studie*, Hamburg (Hofmann & Campe) 1860, 5 vols.
- MacArdle, Donald W., ed., *Beethoven as I Knew Him: A Biography by Anton Schindler*, trans. Constance S. Jolly, London (Faber and Faber) 1966.
- Mälzel, Johann Nepomuk, *Notice sur le métronome de J. Maelzel*, Paris (Carpentier-Méricourt) 1818.
- Martha Frohlich, Beethoven's 'Appassionata' Sonata, Oxford (Clarendon Press) 1991.
- Marx, Adolf, *Introduction to the interpretation of the Beethoven Piano Works*, trans. Fanny Louise Gwinner, Chicago (Clayton F. Summy) 1895.
- Moscheles, Charlotte, ed., *Recent Music and Musicians as Described in the Diaries and Correspondence of Ignaz Moscheles*, trans. A.D. Coleridge, New York (Henry Holt) 1879.
- Moscheles, Ignaz, 'An die Redaction des Signale für die musikal. Welt', Signale für die musikalische Welt, xii/8 (16 February 1854), 60.
- Mozart, Leopold, *A Treatise on the Fundamental Principles of Violin Playing*, trans. Editha Knocker, Oxford and New York (Oxford University Press) 1985.
- Newman, William S., 'A Chronological Checklist of Collected Editions of Beethoven's Solo Piano Sonatas Since His Own Day', *Notes* xxxiii/3 (1977), 503-530.
- ——Beethoven on Beethoven: Playing His Piano Music His Way, London (Norton) 1988.
- Noonan, Frederick, trans., Remembering Beethoven: The Biographical Notes of Franz Wegeler and Ferdinand Ries, London (Deutsch) 1988.
- Noorduin, Marten, 'Czerny's "Impossible" Metronome Marks', *The Musical Times*, cliv/1925 (Winter 2013), 19-36.

- Nottebohm, Gustav, *Beethoveniana: Aufsätze und Mittheilungen*, Leipzig and Winterthur (J. Rieter-Biedermann) 1872.
- ——Zweite Beethoveniana: Nachgelassene Aufsätze, Leipzig (Peters) 1887.
- Parrott, Andrew, 'Composer's Intentions, Performer's Responsibilities', *Early Music*, xli/1 (February 2003), 37-43.
- Platen, Emil, 'Zeitgenössische Hinweise zur Aufführungspraxis der letzten Streichquartette Beethovens', in *Beiträge '76-78, Beethoven-Kolloquium 1977: Doukumentation und Aufführungspraxis*, ed. Rudolf Klein, Kassel (Bärenreiter) 1978, 100-107.
- Rosen, Charles, 'Tempo', in *Beethoven's Piano Sonatas: A Short Introduction*, New Haven and London (Yale University Press) 2002.
- Rosenblum, Sandra P., *Performance Practices in Classic Piano Music: Their Principles and Applications*, Bloomington and Indianapolis, IN (Indiana University Press) 1988.
- Rousseau, Jean Jacques, Dictionaire de musique, Paris (Duchesne), 1775.
- Schindler, Anton, *The Life of Beethoven, including his Correspondence with His Friends, Numerous Characteristic Traits, and Remarks on His Musical Works*, Ignaz Moscheles, ed. & trans., London (Henry Colburn) 1841, 2 vols.
- Scott, Anna, Romanticizing Brahms: Early Recordings and the Reconstruction of Brahmsian *Identity*, PhD Thesis, Universiteit Leiden, 2014.
- Seyfried, Ignaz Ritter von, Ludwig van Beethoven's Studien, Leipzig (Schuberth) 1853.
- Simon, Herbert A., 'What is an Explanation of Behavior?', *Psychological Science*, iii/3 (May 1992), 150-161.
- Skowroneck, Tillman, Beethoven the Pianist, Cambridge (Cambridge University Press) 2010.
- Spohr, Louis, 'Das Schreiben des Hrn Schindler', *Neue Zeitschrift für Musik*, vii/45 (2 December 1840), 180.
- Stadlen, Peter, 'Beethoven and the Metronome,' Music & Letters, iil (1967), 330-357.
- "Beethoven und das Metronom', in *Beiträge '76-78, Beethoven-Kolloquium 1977: Dokumentation und Aufführungspraxis*, ed. Rudolf Klein, Kassel (Bärenreiter) 1978, 57-75; translated in 'Beethoven and the Metronome', *Soundings*, ix (1982), 38-73.
- ----- 'Schindler's Beethoven Forgeries', *The Musical Times*, cxviii (July 1977), 549-552.
- Taruskin, Richard, *Text & Act: Essays on Musical Performance*, Oxford & New York (Oxford University Press) 1995.

- Temperley, Nicholas, 'Tempo and Repeats in the Early Nineteenth Century', *Music & Letters*, xlvii (1966), 323-336.
- Thayer, Alexander Wheelock, *The Life of Ludwig van Beethoven*, London (Centaur) 1960, 3 vols. [See also the 1967 edition edited by Elliot Forbes above.]
- Türk, Daniel Gottlob, Von den wichtigsten Pflichten eines Organisten, Halle (Schwickert) 1787.
- Tyson, Alan, 'Moscheles and His "Complete Edition" of Beethoven', *The Music Review*, xxv (1964), 136-141.
- Wagner, Richard, 'On Conducting', in *Three Wagner Essays*, trans. Robert L. Jacobs, London (Eulenberg), 1979, 49-93.
- Wegeler, Franz and Ferdinand Ries, *Biographische Notizen über Ludwig van Beethoven*, Koblenz (Dädeker) 1838. Translated as Frederick Noonan, trans., *Remembering Beethoven: The Biographical Notes of Franz Wegeler and Ferdinand Ries*, London (Deutsch) 1988.
- Wimsatt, William K. and Monroe C. Beardsley, 'The Intentional Fallacy', *Sewanee Review*, liv (1946), 468-488.

Editions

Anon., Sonata apassionata arrangée pour le pianoforte à quatre mains, Hamburg (Cranz) 1838.

Beethoven, Ludwig van, 'Abendlied unterm gestirnten Himmel', Wiener Zeitschrift für Kunst, Literatur, Theater und Mode, v/28 (28 March 1820).

'Gesang der Mönche', Neue Zeitschrift für Musik, vi (1839).

'Septett op. 20', in Ludwig van Beethoven's Werke, (v, Kammermusik für fünf und mehrere Instrumente, 32) Leipzig (Breitkopf & Härtel) 1862-1890.

'So oder so', Wiener Moden-Zeitung, ii/14 (15 February 1817).

Bestimmung des musikalischen Zeitmasses nach Mälzel's Metronom, Zweite Lieferung. Sämmtliche Quartetten von dem Author selbst bezeichnet., Vienna (S.A. Steiner), c1818. [Copy available in New York Public Library, Drexel 3613.]

Fuge für 2 Violinen, 2 Violen, und Violoncell. ... 137tes Werk, Vienna (Haslinger) 1827.

Grand concerto pour le pianoforte avec accompagnement de l'orchestre, Leipzich (Breitkopf & Härtel) 1811.

Grand sonate pour le piano-forte ... oeuvre 106, Vienna (Artaria) 1819.

Quatuor pour Deux Violons Alto, et Violoncelle d'aprés une Sonate [op. 14 no. 1], Bonn (Simrock) 1802. Trois Sonates pour le Pianoforte avec l'Accompagnement d'un Violin ... oeuvre. xxx, Vienna (Bureau des Arts et d'industrie) 1803. Cooper, Barry, ed., Beethoven: The 35 Piano Sonatas, London (ABRSM) 2007, 3 vols. Czerny Carl, ed., Beethoven's Masterpieces, being the entire of his Grand Sonatas for the Piano Forte, London (Robert Cocks) c1858-1859. -Clavier-Sonaten von Ludwig van Beethoven. Neueste, genau revidirte, wohlfeile Original-Ausgabe / L. van Beethoven's Clavier-Sonaten zu 2 Händen. Neue wohlfeile Original-Ausgabe, Vienna (Carl Haslinger q[uonda]m Tobias) c1863. Grand Duo Brilliant pour le Pianoforte à quatre mains, arrange d'apres la Sonate de L van Beethoven Oeuv 47, Vienna (Diabelli) 1827. -Sonate ... für das Pianoforte von L. van Beethoven, Vienna (Tobias Haslinger) 183?— 1842. -Sonate pour le Piano–Forte par L. van Beethoven. Noevelle Édition exacte, / Sonate ... für das Pianoforte von L. van Beethoven, Vienna (Tobias Haslinger), 1828–1832. -Sonates pour le Piano, composes ... par Louis van Beethoven. Edition revue, corrigée, metronomisée et doigtée par Ch. Czerny, Bonn (Simrock) 1856–1868. Feurzeig Lisa & John Sienicki, ed., Quodlibets of the Viennese Theatre, Middleton, Wisconsin (A-R editions) 2008. Joachim, Joseph, ed., Beethoven op. 50, Romanze, Berlin (Simrock) 1905. Johnson, Douglas Porter, ed., Beethoven's Early Sketches in the 'Fischhof Miscellany', Ann Arbor, Michigan (UMI Research Press) 1980, 2 vols. Kerman, Joseph, ed., Autograph Miscellany from circa 1786 to 1799, London (British Museum) 1970, 2 vols. Küthen, Hans-Werner, ed., Beethoven Werke, Munich (Henle) 1996, vol. iii/3 (Klavier Konzerte II). Lühning, Helga, ed., Lieder und Gesänge mit Klavierbegeleitung (Beethoven Werke, xii), München (G. Henle) 1990, 2 vols. Moscheles, Ignaz, ed., Beethoven's Works. Complete Edition, London (J.B.Cramer, Addison & Beale) 1834–1838/39. Ludwig van Beethoven's sämmtliche Sonaten für Pianoforte. Neu herausgegeben mit Bezeichnung des Zeitmasses und Fingersatzes van J. Moscheles, Professor am

(Eduard Hallberger) c1858–1867 by the latest.

Conservatorium zu Leipzig/Hallberger's Pracht-Ausgabe der Classiker..., Stuttgart

———Sonate pour le Pianoforte, composée par L. van Beethoven. / Sonates pour le Pianoforte seul, composes par Louis van Beethoven. Nouvelle édition très correcte, Hamburg (A. Cranz) c1828–1841.
——Sonaten für das Pianoforte von L. van Beethoven, Braunschweig (C. Weinholtz) 1867–1869.
———Sonates pour le Piano seul, composées par Louis van Beethoven. (Metronomisées par I. Moscheles.) Edition à meilleur marché, brillante et correcte, Braunschweig (Johann Peter Spehr) 1839–1844.
———Sonates pour le piano, composées par Louis van Beethoven. Nouvelle édition très correcte, Braunschweig (G. M. Meyer jr.) c1828–1843.
———Sonates pour le Pianoforte seul composées par Louis van Beethoven. (Nouvelle Edition, revue et metronomisée par I. Moscheles.)/Stereotyp–Ausgave classischer Musikstücke Nr. 11–42, Wolfenbüttel (Ludwig Holle) 1853–before 1858.
———Sonates pour le Pianoforte seul composées par Louis van Beethoven, metronomisées par I. Moscheles. Deuxième Edition stereotype et revue (par H. W. Stolze)./ Stereotyp–Ausgabe classischer Musikstücke/ Wolfenbüttel (Ludwig Holle) 1858–1868.
Richard Kramer, ed., <i>A Sketchbook from the Summer of 1800</i> , Bonn (Beethoven-Haus Bonn), 1996, 2 vols.
Schenker, Heinrich, ed., <i>Beethoven: Complete Piano Sonatas</i> , Vienna (Universal edition), 1918, 2 vols.
Manuscripts
Anon., 'Description of Beethoven's estate', Beethoven-Haus Bonn, NE 79 11.
Beethoven, Ludwig van, Autograph of score of the Mass op. 86, Beethoven-Haus, BH 86
———Autograph of score of the Piano Sonata op. 53, Beethoven-Haus Bonn, Sammlung H. C. Bodmer, HCB Mh 7.
———Autograph of the Piano Concerto op. 73, Berlin State Library, autograph 15.
——Autograph score of the Folk Song Variations op. 107, London, British Library, Eg. MS 2327.
———Autograph score of the Ninth Symphony, Berlin State Library, Artaria. 204 and Mus.ms.autogr.Beethoven 2.
——Autograph score of the Piano Sonata op. 101, Beethoven-Haus Bonn, NE 219.
———Autograph score of the Septet op. 20, Biblioteka Jagiellońska, BJ Mus. ms. autogr. Beethoven, Mendelssohn-Stiftung 4.

Autog	graph score of the String Quartet op. 130, Berlin State Library, Artaria 208.
•	graph score of the String Quartet op. 95, Austrian National Library, Hs.16531 A/Beethoven/11.
——Corre	ected copy of the Cantata op. 112, Beethoven-Haus Bonn, BH 85.
	ected copy of the piano part of the Piano Trio op. 70 no. 1, Beethoven-Haus , NE 183.
	rpts from Johann Philipp Kirnberger's <i>Die Kunst des reinen Satzes in der Musik</i> , noven-Haus Bonn, Sammlung H. C. Bodmer, HCB Mh 46g.
	rpts from Johann Philipp Kirnberger's <i>Die Kunst des reinen Satzes in der Musik</i> , noven-Haus Bonn, BH 81.
Piano	transcription of the Ritterballet WoO 1, Beethoven-Haus Bonn, BH 74.
•	Johann Philipp, 'Dreystimmige Fuge im 12/8 als auch im geraden 4/4 Takt. von berger', Berlin State Library, D-B/ Mus.ms.autogr. Kirnberger, J. P. 4.
	ludium I', Yale University Music Library (US-NH/ LM 4968, 1 Y11 A34))

Ries, Ferdinand, 'Catalogue Thematique of the Works of Ferdinand Ries', Berlin State Library, Mus.ms.theor. Kat. 741.

Recordings

- Beethoven, Ludwig van, and Franz Schubert, *Beethoven Archduke Trio, Schubert E-flat Trio [and other works]*, The Castle Trio, (B00005RFSD, 2002).
- Beethoven, Ludwig van, *Beethoven: The Symphonies*, The Leipzig Gewandhaus Orchestra, cond. Riccardo Chailly (478 2721, 2009).
- Beethoven, Ludwig van, *Symphonies 1-9, Overtures*, London Classical Players, cond. Roger Norrington (EMI 0724356194328, 1999; reissue of recordings between 1987 and 1989).
- Beethoven, Ludwig van, *The Razumovsky Quartets op. 59 & String Quartets opp. 74 & 95*, Emerson Quartet (0289 479 1432 7, 2013).

Appendix I: Beethoven's Metronome Marks

Table I.1: Beethoven's metronome marks for his symphonies.

Work		Metre	Tempo indication	Metronome Mark
Symphony op.	i	c	Adagio molto	<i>\$</i> =88
21 ³¹⁵		¢	Allegro con brio	J=112
	ii	3/8	Andante cantabile con moto	<i>\$</i> =120
	iii	3/4	Allegro molto e vivace	J.=108
	iv	2/4	Adagio	\$ =63
			Allegro molto e vivace	J=88
Symphony op. 36	i	3/4	Adagio	<i>\$</i> =84
		c	Allegro con brio	J=100
	ii	3/8	Larghetto	<i>\$</i> =92
	iii	3/4	Allegro	J.=100
	iv	¢	Allegro molto	J=152
Symphony op. 55	i	3/4	Allegro con brio	J.=60
	ii	2/4	Adagio assai	<i>\$</i> =80
	iii	3/4	Allegro vivace	J.=116
		¢	Alla breve	o=116
	iv	2/4	Allegro molto	J=76
			Poco Andante	<i>\$</i> =108
			Presto	J=116
Symphony op. 60	i	¢	Adagio	J =66
			Allegro vivace	o =80
	ii	3/4	Adagio	\$ =84
	iii	3/4	Allegro molto e vivace	J.=100
			Un poco meno allegro	J.=88
	iv	2/4	Allegro ma non troppo	=80 (Misprint of 60?)
Symphony op. 67	i	2/4	Allegro con brio	J=108
	ii	3/8	Andante con moto	♪ =92
			Più moto	> =116
	iii	3/4	Allegro	J.=96
	iv	c	Allegro	J =84
		3/4	Tempo I	J.=96
		c	Allegro	J =84
		¢	Presto	o=112
Symphony op. 68	i	2/4	Allegro ma non troppo	J=66
	ii	12/8	Andante molto moto	J.=50
	iii	3/4	Allegro	J.=108
		2/4	A tempo allegro	J=132
	iv	c	Allegro	J=80
	V	6/8	Allegretto	J .=60

³¹⁵ Metronome marks for the first eight Symphonies were published in 'Die Tempo's sämmtlicher Sätze aller Symphonien des Hrn L. v. Beethoven, vom Verf. selbst nach Maelzels Metronom bestimmt', [Leipziger] Allgemeine Musikalische Zeitung, xix (1817), 873-4.

Work		Metre	Tempo indication	Metronome Mark
Symphony op. 92	i	c	Poco sostenuto	J=69
		6/8	Vivace	J.=104
	ii	2/4	Allegretto	J=76
	iii	3/4	Presto	J.=132
			Assai meno presto	J.=84
	iv	2/4	Allegro con brio	J=72
Symphony op. 93	i	3/4	Allegro vivace e con brio	J.=69
	ii	2/4	Allegretto scherzando	<i>\$</i> =88
	iii	3/4	Tempo di Menuetto	J=126
	iv	¢	Allegro vivace	o =84
Symphony op.	i	2/4	Allegro ma non troppo e un	J=88
$125^{3\hat{1}6}$			poco maestoso	
	ii	3/4	Molto vivace	J.=116
		¢	Presto	J=116 (Disputed)
	iii	c	Adagio molto e cantabile	J=60
		3/4	Andante moderato	J=63
	iv	3/4	Presto	J.=66 / 96
		2/4	Allegro ma non troppo	J=88
		c	Allegro assai	J=80
		6/8	Alla marcia	J.=84 (Misprinted as J.)
		3/2	Andante maestoso	J=72
			Adagio ma non troppo ma	J=60
			divoto	
		6/4	Allegro energico e sempre	J.=84
			ben marcato	
		¢	Allegro ma non tanto	J=120
		¢	Prestissimo	J=132
		3/4	Maestoso	J=60

_

³¹⁶ 'Metronomische Bezeichnung der Tempi der neuesten Beethovenschen Symphonie, op. 125. Mitgetheilt von Componisten', *Caecilia: Eine Zeitschrift für die musikalische Welt*, vii (1827), 158.

Table I.2: Beethoven's metronome marks for his string quartets.

<u>Work</u>		Metre	Tempo indication	Metronome Mark
String Quartet op.	i	3/4	Allegro con brio	J.=54
18 no. 1 ³¹⁷	ii	9/8	Adagio affetuoso ed	> =138
			appasionato	
	iii	3/4	Allegro molto	J.=112
	iv	2/4	Allegro	J=120
String Quartet op.	i	2/4	Allegro	J =96
18 no. 2	ii	3/4	Adagio cantabile	> =72
		2/4	Allegro	J=69
	iii	3/4	Allegro	J.=52
	iv	2/4	Allegro molto quasi presto	J=92
String Quartet op.	i	¢	Allegro	J=120
18 no. 3	ii	2/4	Andante con moto	<i>\$</i> =92
	iii	3/4	Allegro	J.=100
	iv	6/8	Presto	J.=96
String Quartet op.	i	c	Allegro ma non tanto	J=84
18 no. 4	ii	3/8	Andante scherzoso quasi	J.=56
			allegretto	
	iii	3/4	Allegretto	J.=84
	iv	¢	Allegro	o =66
			Prestissimo	o =84
String Quartet op.	i	6/8	Allegro	J.=104
18 no. 5	ii	3/4	Menuetto	J.=76
	iii	2/4	Andante cantabile	<i>></i> =100
			Poco adagio	<i>\$</i> =88
	iv	¢	Allegro	o =76
String Quartet op.	i	¢	Allegro con brio	o =80
18 no. 6	ii	2/4	Adagio ma non troppo	<i>\$</i> =80
	iii	3/4	Allegro	J.=63
	iv	2/4	Adagio	> =58
	V	3/8	Allegretto quasi Allegro	J.=88
			Poco adagio	> =69
			Prestissimo	J.=112
String Quartet op.	i	c	Allegro	J =88
59 no. 1	ii	3/8	Allegretto vivace e sempre	J.=56
			scherzando	
	iii	2/4	Adagio molto e mesto	<i>\$</i> =88
	iv	2/4	Allegro	J=126
			Adagio ma non troppo	♪ =69
			Presto	J=92 (Misprinted as J)
String Quartet op.	i	6/8	Allegro	J .=92
59 no. 2	ii	c	Molto adagio	J=60
	iii	3/4	Allegretto	J.=69
	iv	¢	Presto	o =88
			Più presto	o=112

³¹⁷ Bestimmung des musikalischen Zeitmasses nach Mälzel's Metronom, Zweite Lieferung. Sämmtliche Quartetten von dem Author selbst bezeichnet., Vienna (S.A. Steiner), c1818.

<u>Work</u>		Metre	Tempo indication	Metronome Mark
String Quartet op.	i	3/4	Andante con moto	J=69
59 no. 3		c	Allegro vivace	J=88
	ii	6/8	Andante con moto quasi allegretto	J.=56
	iii	3/4	Grazioso	J=116
	iv	¢	Allegro molto	o =84
String Quartet op.	i	¢	Poco adagio	J=60
74		c	Allegro	J=84
	ii	3/8	Adagio ma non troppo	♪ =72
	iii	3/4	Presto	J.=100
			Più presto quasi prestissimo	o =100
	iv	2/4	Allegretto con variazioni	J=100
			Un poco vivace	J =76
			Allegro	J =84
String Quartet op.	i	c	Allegro con brio	J =92
95	ii	2/4	Allegretto ma non troppo	J =66
	iii	3/4	Allegro assai vivace ma	J.=69
			serioso	
			Più allegro	J.=80
	iv	2/4	Larghetto	<i>\$</i> =56
		6/8	Allegretto agitato	J.=92
		¢	Allegro molto	o =92

Table I.3: Beethoven's metronome marks for other works.

Work		Metre	Tempo indication	Metronome Mark
Septet op. 20 ³¹⁸	i	3/4	Adagio	♪ =72
		¢	Allegro con brio	J=96
	ii	9/8	Adagio cantabile	<i>\$</i> =132
	iii	3/4	Tempo di menuetto	J=120
	iv	2/4	Andante	> =120
	V	3/4	Allegro molto e vivace	J.=126
	vi	2/4	Andante con moto alla	<i>\$</i> =76
			marcia	
		¢	Presto	J=112
Piano Sonata op.	i	¢	Allegro	J=138
106 ³¹⁹	ii	3/4	Assai vivace	J.=80
	iii	6/8	Adagio sostenuto	<i>\$</i> =92
	iv	c	Largo	<i></i> \$=76
			Allegro risoluto	J=144
Cantata op. 112 ³²⁰	i	¢	Poco sostenuto	J=84
	ii	6/8	Allegro vivace	J=138
Fugue ³²¹		3/8	Allegretto	J.=63
Song WoO 104 Gest	ang	c	Ziemlich langsam	\$ =126
der Mönche ³²²				
Song WoO 148 So o	der	6/8	Ziemlich lebhaft und	J.=100
so ³²³			entschlossen	
Song WoO 149	·	3/8	In gehender Bewegung. Mit	♪ =76
Resignation ³²⁴			Empfindung	
Song WoO 150	·	c	Ziemlich anhaltend	J =76
Abendlied unterm	_			
gestirnten Himmel ^{32.}	5			

³¹⁸ 'Septett op. 20', in *Ludwig van Beethoven's Werke*, (v, Kammermusik für fünf und mehrere Instrumente, 32) Leipzig (Breitkopf & Härtel) 1862-1890. Originally published along with the symphonies in a booklet by Steiner that is now lost.

³¹⁹ Grand sonate pour le piano-forte ... oeuvre 106, Vienna (Artaria) 1819.

³²⁰ Corrected copy of the Cantata op. 112, Beethoven-Haus Bonn, BH 85.

Corrected copy of the Cantata op. 112, Beethoven-Haus Bohn, BH 83.

321 Fuge für 2 Violinen, 2 Violen, und Violoncell. ... 137tes Werk, Vienna (Haslinger) 1827.

322 'Gesang der Mönche', Neue Zeitschrift für Musik, vi, (1839).

323 'So oder so', Wiener Moden-Zeitung, ii/14 (15 February 1817).

324 'Resignation', Wiener Moden-Zeitung, iii/39 (31 March 1818).

^{325 &#}x27;Abendlied unterm gestirnten Himmel', Wiener Zeitschrift für Kunst, Literatur, Theater und Mode, v/28 (28 March 1820).

Appendix II: Karl Holz's Metronome Marks for the Late String Quartets

Table II.1: Karl Holz's metronome marks for the late string quartets.

Work		Metre	Tempo indication	Metronome Mark
	i	2/4	Maestoso	> =54
String Quartet op. 127 ³²⁶		3/4	Allegro	J.=60 (Misprinted as 6)
	ii	12/8	Adagio ma non troppo	♪ =84
		c	Andante con moto	♪ =80
		¢	Adagio molto espressivo	J=48
	iii	3/4	Vivace	<i>\$</i> =108
			Presto	J.=132 (Misprinted as _o)
	iv	¢	Finale	J=116
		6/8	Allegro commodo	♪ =116
String Quartet op.	i	3/4	Adagio ma non troppo	<i>\$</i> =84
130		c	Allegro	J=132
	ii	¢	Presto	J=144
	iii	c	Andante con moto, ma non	<i>\$</i> =144
			troppo	
	iv	3/8	Alla danza tedesca	
	V	3/4	Adagio molto espressivo	♪ =66
	vi	2/4	Allegro	J=126
String Quartet op.	i	¢	Adagio ma non troppo	J=76
131	ii	6/8	Allegro molto vivace	J.=116 (Misprinted as J)
	iii	c	Allegro moderato	J =76
			Adagio	<i>\$</i> =76
			Più vivace	<i>\$</i> =88
	iv	2/4	Andante ma non troppo	<i>\$</i> =80
		c	Più mosso	J=108
			Andante moderato e	J =69
			lusinghiero	
		6/8	Adagio	<i>\$</i> =92
		2/4	Allegretto	<i>\$</i> =132
		9/4	Adagio ma non troppo e	J =96
			semplice	
		2/4	Allegretto	J=96
			In tempo [Andante ma non	<i>\$</i> =80
			troppo}	
	v	¢	Presto	J=120
	vi	3/4	Adagio quasi un poco	<i>\$</i> =76
	<u> </u>		andante	120
	vii	¢	Allegro	J=120
			Poco adagio semplice	J =66

_

³²⁶ Lenz *Kunst-Studie*, v, 216.

Work		Metre	Tempo indication	Metronome Mark				
String Quartet op.	i	¢	Assai sostenuto	J=58				
132	-	c	Allegro	J =92				
			Adagio	<i>\$=92 \$=92</i>				
	ii	3/4	Allegro ma non tanto	J.=58 (Misprinted as _o)				
		¢	L'istesso timpo	o =58				
	iii	c	Molto adagio	\$ =58				
		3/8	Andante	♪ =69				
	iv	c	Marcia assai vivace	> =108				
	V	3/4	Allegro appassionato	J=132				
			Presto	J=160				
Grosse Fuge op. 133	L	6/8	Allegro	J.=126 (Misprinted as J)				
		2/4	Meno mosso	J=72				
		c	Allegro	J=132				
		6/8	Allegro molto	J.=132 (Misprinted as J)				
String Quartet op.	i	2/4	Allegretto	<i>\$</i> =126				
135	ii	3/4	Vivace	J.=88 (Misprinted as 6)				
	iii	6/8	Lento assai e cantabile	♪ =72				
			tranquillo					
			Più lento	\$ =48				
	iv	3/2	Grave ma non troppo tratto	J=48				
		¢	Allegro	J=126				

Appendix III: Czerny's and Moscheles's Metronome Marks for the Piano Works

Editions that contain metronome marks by Czerny:

C1: Sonate pour le Piano-Forte par L. van Beethoven. Noevelle Édition exacte, / Sonate ... für das Pianoforte von L. van Beethoven, Vienna (Tobias Haslinger), 1828–1832. The presumed intended metronome marks for opp. 2 and 7 are found in Beethoven's Masterpieces, being the entire of his Grand Sonatas for the Piano Forte, London (Robert Cocks) c1858-1859.

C2: Sonate ... für das Pianoforte von L. van Beethoven, Vienna (Tobias Haslinger) 183?–1842.

C3: Czerny, Carl, Von dem Vortrage: Dritter Theil aus Vollständige theoretisch-practische Pianoforte-Schule, op. 500, Vienna (Diabelli) 1839.

C4: Sonates pour le Piano, composes ... par Louis van Beethoven. Edition revue, corrigée, metronomisée et doigtée par Ch. Czerny, Bonn (Simrock) 1856–1868.

C5: Clavier–Sonaten von Ludwig van Beethoven. Neueste, genau revidirte, wohlfeile Original–Ausgabe / L. van Beethoven's Clavier–Sonaten zu 2 Händen. Neue wohlfeile Original–Ausgabe, Vienna (Carl Haslinger q[uonda]m Tobias) c1863. 327

Moscheles's metronome marks can be found in the following editions:

M1: Sonate pour le Pianoforte, composée par L. van Beethoven. / Sonates pour le Pianoforte seul, composes par Louis van Beethoven. Nouvelle édition très correcte, Hamburg (A. Cranz) c1828–1841.

M2: Sonates pour le piano, composées par Louis van Beethoven. Nouvelle édition très correcte, Braunschweig (G. M. Meyer jr.) c1828–1843.

M3: Beethoven's Works. Complete Edition, London (J.B.Cramer, Addison & Beale) 1834–1838/39.

M4: Sonates pour le Piano seul, composées par Louis van Beethoven. (Metronomisées par I. Moscheles.) Edition à meilleur marché, brillante et correcte, Braunschweig (Johann Peter Spehr) 1839–1844.

M5: Ludwig van Beethoven's sämmtliche Sonaten für Pianoforte. Neu herausgegeben mit Bezeichnung des Zeitmasses und Fingersatzes van J. Moscheles, Professor am Conservatorium zu Leipzig/Hallberger's Pracht—Ausgabe der Classiker..., Stuttgart (Eduard Hallberger) c1858–1867 by the latest.

M6: Sonates pour le Pianoforte seul composées par Louis van Beethoven. (Nouvelle Edition, revue et metronomisée par I. Moscheles.)/Stereotyp-Ausgave classischer Musikstücke Nr. 11–42, Wolfenbüttel (Ludwig Holle) 1853-before 1858.

_

With the exception of the metronome marks obtained from the Cocks edition, C1–4 are also found in Rosenblum, 'Two Sets' and Seifert, 'Czernys und Moscheles' Metronomisierungen', C5 is only in Seifert.

M7: Sonates pour le Pianoforte seul composées par Louis van Beethoven, metronomisées par I. Moscheles. Deuxième Edition stereotype et revue (par H. W. Stolze)./ Stereotyp–Ausgabe classischer Musikstücke/ Wolfenbüttel (Ludwig Holle) 1858–1868.

M8: *Sonaten für das Pianoforte von L. van Beethoven*, Braunschweig (C. Weinholtz) 1867–1869. ³²⁸

³²⁸ All found in Seifert, 'Czernys und Moscheles' Metronomisierungen'. Rosenblum, *Performance Practices* lists only Cramer and Hallberger. The speeds in the Cramer editions in the Sibley Music Library at the Eastman School of Music and the Bodleian Libraries in Oxford confirm Seifert's and Rosenblum's findings.

<u>Table III.1: Czerny's and Moscheles's metronome marks for Beethoven's piano sonatas.</u>

Opus		Tempo Indication	Metre	C1	C2	C3	C4	C5	M1	M2	M3	M4	M5	M6	M7	M8
WoO	i	Allegro cantabile	c	= 69	o= 69	*	*	o= 69	*	*	*	*	*	*	*	*
47,1	ii	Andante	2/4	= 108	J= 108	*	*	= 108	*	*	*	*	*	*	*	*
	iii	Vivace	6/8	= 104	= 104	*	*	= 104	*	*	*	*	*	*	*	*
WoO 47,2	i	Larghetto maestoso	¢	= 72	J = 72	*	*	= 72	*	*	*	*	*	*	*	*
		Allegro assai	c	*	J= 80	*	*	o= 80	*	*	*	*	*	*	*	*
	ii	Andante	2/4	= 104	J= 104	*	*	= 104	*	*	*	*	*	*	*	*
	iii	Presto	2/4	= 92	J= 92	*	*	J= 92	*	*	*	*	*	*	*	*
WoO	i	Allegro	c	= 152	= 152	*	*	= 152	*	*	*	*	*	*	*	*
47,3	ii	Sostenuto	3/4	= 108	= 108	*	*	= 108	*	*	*	*	*	*	*	*
	iii	Scherzando	2/4	= 80	J= 80	*	*	e= 80	*	*	*	*	*	*	*	*
2,1	i	Allegro	¢	= 120	*	J= 104	o= 108	*	*	= 108	J= 108	*	J= 108	= 108	J= 108	*
	ii	Adagio	3/4	= 84	*) = 80	J= 84	*	*	= 50	= 50	*	= 50	= 50	= 50	*
	iii	Menuetto. Allegretto	3/4	J= 72	*	J= 69	J= 72	*	*	J= 72	J= 72	*	J= 72	J= 72	J.= 72	*
	iv	Prestissimo	¢	J= 112	*	J= 104	J= 108	*	*	J= 112	= 112	*	J= 112	= 112	J= 112	*
2,2	i	Allegro vivace	2/4	= 126	*	= 132	= 138	*	*	= 112	= 144	*	= 144	= 144	= 144	*
	ii	Largo appassionato	3/4	= 88	*	= 80	= 88	*	*) = 96) = 88	*	= 88) = 88) = 88	*
	iii	Scherzo. Allegretto	3/4	o≔ 69	*	o= 63	J= 66	*	*	= 144	J= 60	*	o= 60	∂= 60	o.= 60	*
	iv	Grazioso	c	= 144	*	= 132	= 144	*	*	= 120	= 144	*	= 144	= 132	= 132	*
2,3	i	Allegro con brio	c	= 84	*	J= 80	J= 80	*	*	*	J= 76	*	J= 76	= 76	J= 76	*
	ii	Adagio	2/4) = 60	*) = 50) = 56	*	*	*) = 56	*) = 56) = 56	J= 56	*
	iii	Scherzo. Allegro	3/4	J= 84	*	J= 80	J= 76	*	*	*	J= 88	*	J= 76	J= 76	J.= 76	*
	iv	Allegro assai	6/8	=120	*	J =116	- =116	*	*	*	= 116	*	- =116	J =116	=116	*

Opus		Tempo Indication	Metre	C1	C2	C3	C4	C5	M1	M2	М3	M4	M5	M6	M7	M8
7	i	Allegro molto e con brio	6/8	= 126	*	J= 116	= 126	*	*	*	= 116	*	J= 126	J= 126	J= 112	J= 116
	ii	Largo con gran espressione	3/4	= 84	*	J= 80	J= 84	*	*	*	= 50	*	= 50	= 50	= 50	= 50
	iii	Allegro	3/4	J= 80	*	J= 72	J= 80	*	*	*	J= 80	*	J= 80	J= 80	J.= 72	J= 80
	iv	Poco Allegretto e grazioso	2/4	J= 132	*	= 60	= 132	*	*	*	= 138	*	= 138	= 138	= 126	J= 138
10,1	i	Allegro molto e con brio	3/4	J= 80	∂.= 69	J= 72	J= 76	*	*	*	J= 76	*	J= 76	J= 76	*	J= 76
	ii	Adagio molto	2/4	√ = 63	= 72	√ = 69	= 72	*	*	*	= 72	*	= 72	= 72	*) = 72
	iii	Prestissimo	¢	o= 112	o= 96	J= 96	J= 100	*	*	*	J= 108	*	= 108	= 108	*	o= 108
10,2	i	Allegro	2/4	= 108	*	= 104	= 108	*	= 96	= 96	= 96	= 96	= 112	= 112	*	= 96
	ii	Allegretto	3/4	J= 76	*	J= 72	J= 76	*	J= 72	J= 72	J= 72	J= 72	J= 72	J= 72	*	J= 72
	iii	Presto	2/4	o= 96	*	J= 80	= 160	*	= 160	= 160	= 160	= 160	= 160	= 160	*	= 160
10,3	i	Presto	¢	o= 152	o= 132	J= 126	o= 132	J= 132	*	*	o= 132	o= 132	= 132	= 132	*	J= 132
	ii	Largo e mesto	6/8	√ = 66	= 76	J= 72	= 76	J = 76	*	*	= 72	♪ = 72	= 72	J= 72	*) = 72
	iii	Menuetto. Allegro	3/4	o= 84	o≔ 80	J= 76	o≔ 84	∂.= 80	*	*	o≔ 72	o.= 72	o= 72	J= 72	*	∂.= 72
	iv	Allegro	c	= 160	= 152	= 152	= 152	= 152	*	*	= 152	= 152	= 152	= 152	*	= 152
13	i	Grave	c	√ = 58	= 58	-92	= 63	*	*	*	= 60	J= 60	J= 60	√ = 60	*	= 60
		Allegro molto e con brio	¢	o= 152	e= 152	d= 144	o= 144	*	*	*	J= 144	J= 144	J= 144	o= 144	*	d= 144
	ii	Adagio cantabile	2/4	J= 54	= 60	J= 54	= 60	*	*	*	= 60	√ = 60	J= 60	√ = 60	*	√ = 60
	iii	Allegro	¢	o= 112	J= 100	J= 96	o= 104	*	*	*	J= 104	o= 104	= 104	o= 104	*	o= 104
14,1	i	Allegro	c	= 144	= 132	= 132	= 144	*	*	*	= 152	*	= 152	= 152	*	*
	ii	Allegretto	3/4	J= 72	J.= 72	J= 69	J= 72	*	*	*	J= 72	*	J= 72	J= 72	*	*
	iii	Allegro commodo	¢	= 100	J= 100	*	J= 96	*	*	*	J= 80	*	= 160	= 80	*	*

Opus		Tempo Indication	Metre	C1	C2	С3	C4	C5	M1	M2	M3	M4	M5	M6	M7	M8
14,2	i	Allegro	2/4	= 88	= 80	= 80	= 160	*	*	*	= 80	*	= 160	= 80	*	*
	ii	Andante	¢	= 66	= 66	= 116	= 112	*	*	*	= 84	*	= 96	= 96	*	*
	iii	Scherzo. Allegro assai	3/8	= 88	= 88	J= 80	J= 88	*	*	*	= 88	*	J= 88	J= 88	*	*
22	i	Allegro con brio	c	J= 84	J= 80	J= 76	J= 84	*	*	*	J= 94	*	J= 84	J= 84	*	*
	ii	Adagio con molta espressione	9/8	= 112	= 104	= 100	= 116	妆	*	*	= 132	*	= 116	= 116	*	*
	iii	Menuetto	3/4	= 126	= 120	= 120	= 126	*	*	*	= 132	*	= 126	= 126	*	*
	iv	Allegretto	2/4	= 76	= 69	= 69	J = 76	*	*	*	= 76	*	= 76	J = 76	*	*
26	i	Andante	3/8	J= 80	√ = 80	= 76	♪ = 80	J = 80	√ = 80	*	J= 80	*	J= 80	♪ = 80	*	J= 80
		1. Variation		*) = 96) = 76	J= 88	*	*	*	*	*	J= 88	♪ = 88	*	*
		2. Variation		= 92	J= 92	= 92	= 100	= 92	= 104	*	J= 104	*	= 104	J= 104	*	J= 104
		3. Variation		J= 84	= 84) = 76	= 92	*	*	*	*	*	= 92	J= 92	*	*
		4. Variation		= 100	= 100	= 92	= 100	= 100	*	*	*	*	= 100	J= 100	*	*
		5. Variation		√ = 80	♪ = 80	J = 76	♪ = 80) = 80) = 92	*	= 92	*	J= 80	♪ = 80	*) = 92
	ii	Scherzo. Allegro molto	3/4	J= 104	J= 104	J= 92	J= 88	J= 92	J= 88	*	J= 88	*	J= 88	J= 88	*	J.= 88
	iii	Marcia funebre	c	= 72	= 72	= 72	- = 66	- = 72	= 80	*	= 60	*	= 60	= 60	*	J = 80
	iv	Allegro	2/4	J= 76	o= 76	= 132	= 120	= 132	= 120	*	= 120	*	= 108	= 120	*	= 120
27,1	i	Andante	¢	= 72	= 72	= 66	- = 69	*	*	*	= 69	= 69	= 76	= 69	*	= 69
		Allegro	6/8	= 116	= 108	J= 104	= 104	*	*	*	= 104	= 104	= 104	= 104	*	J= 104
	ii	Allegro molto vivace	3/4	J= 138	J= 126	J= 112	J= 120	**	*	*	J= 126	J= 126	J= 126	J= 126	*	J= 126
	iii	Adagio con espressione	3/4	√ = 69	> = 66	♪ = 66) = 72	*	*	*	♪ = 76	> = 76) = 76) = 76	*	♪ = 76
	iv	Allegro vivace	2/4	= 160	= 138	= 132	= 132	*	*	*	= 132	= 132	= 120	= 132	*	= 132
		Presto	2/4	= 120	o= 120	*	J= 96	*	*	*	J= 96	J= 96	J= 88	J= 96	*	J= 96

Opus		Tempo Indication	Metre	C1	C2	C3	C4	C5	M1	M2	М3	M4	M5	M6	M7	M8
27,2	i	Adagio	¢	= 60	= 63	= 54	= 60	*	= 60	*	= 60	= 60	= 60	= 60	*	= 60
	ii	Allegretto	3/4	.= 84	J= 80	J= 76	J= 80	*	∂.= 76	*	J= 76	J= 76	J≔ 76	J= 76	*	J= 76
	iii	Presto agitato	c	= 92	J= 84	J= 80	J= 92	*	o= 92	*	J= 92	J= 92	J= 92	J= 92	*	J= 92
28	i	Allegro	3/4	J= 76	J= 72	J= 72	J= 72	*	J.= 69	*	J= 69	*	J= 69	J= 69	*	J= 69
	ii	Andante	2/4	= 92	= 92) = 84	J= 88	*	= 104	*	= 104	*	= 104	= 104	*	= 104
	iii	Scherzo Allegro vivace	3/4	J= 104	J= 92	J= 96	J= 100	*	∂.=100	*	J= 100	*	J= 100	J= 100	*	J= 100
	iv	Allegro ma non troppo	6/8	= 96	.= 84	= 88	J= 88	*	= 92	*	= 92	*	= 92	= 92	*	J= 92
		Più Allegro quasi Presto	6/8	*	*	*	*	*	= 112	*	= 112	*	= 112	= 112	*	= 112
31,1	i	Allegro vivace	2/4	J= 80	J= 80	J= 72	= 152	*	*	*	= 160	*	= 160	= 160	*	= 160
	ii	Adagio grazioso	9/8	= 126) = 116	= 116	= 126	*	*	*	= 132	*	= 132	= 132	*	= 132
	iii	Allegretto	¢	= 108	= 100	= 96	o= 100	*	*	*	J= 76	*	= 84	= 84	*	= 84
		Adagio		*	*	*	*	*	*	*	*	*	*	= 69	*	= 69
		Presto		*	*	*	*	*	*	*	*	*	*	*	*	*
31,2	i	Largo	¢	√ = 88	♪ = 88	*	= 50	*	*	*	J = 50	*	= 50	= 50	*	= 50
		Allegro	¢	J= 112	J= 104	J= 104	J= 108	*	*	*	o= 126	*	= 126	= 126	*	= 126
	ii	Adagio	3/4	= 92	= 92	J= 84	= 92	*	*	*	= 92	*	= 92	= 92	*	= 92
	iii	Allegretto	3/8	= 84	. = 76	= 76	= 88	*	*	*	= 88	*	= 88	= 88	*	J= 88
31,3	i	Allegro	3/4	J= 60	= 152	= 144	= 152	= 152	*	*	= 160	*	= 160	= 160	*	= 160
	ii	Scherzo. Allegretto vivace	2/4	= 88	= 80	= 80	= 88	= 80	*	*	= 92	*	= 92	= 92	*	= 92
	iii	Menuetto.Moderato e grazioso	3/4	= 96	= 96	J = 88	= 96	= 96	*	*	= 112	*	= 112	= 112	*	= 112
	iv	Presto con fuoco	6/8	J= 116	J= 104	J= 100	J= 96	J= 104	*	*	J= 96	*	J= 96	J= 96	*	J= 96

Opus		Tempo Indication	Metre	C1	C2	C3	C4	C5	M1	M2	М3	M4	M5	M6	M7	M8
49,1	i	Andante	2/4	= 92	= 88	*	= 60	*	= 60	*	= 60	*	= 69	= 60	*	= 60
	ii	Allegro	6/8	= 108	J= 100	*	- = 60	*	- = 60	*	= 60	*	= 100	= 60	*	J = 60
49,2	i	Allegro ma non troppo	¢	J= 104	J= 104	*	J= 104	*	*	*	= 160	*	= 160	= 104	*	= 160
	ii	Tempo di Menuetto	3/4	= 112	= 112	*	= 112	*	*	*	= 126	*	= 126	= 112	*	= 126
53	i	Allegro con brio	c	= 88	J= 88	J= 88	J= 88	*	*	*	o= 88	*	J= 88	J= 88	*	J= 88
	ii	Adagio molto	6/8	= 108	<i>▶</i> = 108	= 56	= 60	*	*	*	= 60	*	= 60	= 60	*	= 60
	iii	Allegretto moderato	2/4	= 100	J = 92	J = 88	= 100	*	*	*	= 112	*	= 112	= 112	*	= 112
		Prestissimo	¢	o= 88	o= 80	o= 88	o= 84	*	*	*	o= 84	*	o= 80	o= 84	*	o= 84
54	i	In tempo di Menuetto	3/4	= 120	= 120	= 108	= 120	*	= 126	*	= 126	*	= 120	= 126	*	= 126
	ii	Allegretto	2/4	J= 76	J= 76	= 144	= 108	*	= 108	*	= 108	*	= 108	= 108	*	= 108
		Più Allegro	2/4	*	*	*	*	*	= 116	*	*	*	*	*	*	*
57	i	Allegro assai	12/8	= 120	= 108	= 108	= 120	*	= 138	*	= 138	*	= 126	= 138	*	= 138
		Più Allegro	12/8	*	*	*	*	*	-= 160	*	= 160	*	= 160	= 160	*	= 160
	ii	Andante con moto	2/4	= 120	J= 108	= 108	= 112	*	J= 92	*	J= 92	*	J= 92	√ = 92	*	J= 92
	iii	Allegro ma non troppo	2/4	= 138	= 138	= 132	= 144	*	J= 152	*	= 152	*	= 132	= 152	*	= 152
		Presto	2/4	*	J= 92	J= 92	J= 96	*	J= 100	*	o= 100	*	J= 100	= 100	*	J= 100
78	i	Adagio cantabile	2/4) = 76) = 76	= 72) = 76	*	*	*	= 76	*) = 76) = 76	*) = 76
	ii	Allegro ma non troppo	c	= 132	= 132	= 116	= 138	*	*	*	= 138	*	= 138	= 138	*	= 138
	iii	Allegro vivace	2/4	= 144	= 138	= 132	= 132	*	*	*	= 132	*	= 132	= 132	*	= 132

Opus		Tempo Indication	Metre	C1	C2	С3	C4	C5	M1	M2	М3	M4	M5	M6	M7	M8
79	i	Presto alla tedesca	3/4	J= 88	J.= 84	*	J= 84	*	*	*	J= 84	*	J= 84	J= 88	*	*
	ii	Andante	9/8	= 56	= 56	*	= 56	*	*	*	= 138	*	= 138	= 56	*	*
	iii	Allegro Vivace	2/4	= 152	= 138	*	= 138	*	*	*	= 160	*	= 138	= 152	*	*
81a	i	Adagio	2/4	J= 72) = 66	J = 63	J = 72	*	*	*	♪ = 76	*	♪ = 72	♪ = 76	*	♪ = 76
		Allegro	¢	= 126	= 116	J= 112	J= 126	*	*	*	J= 108	*	= 108	J= 108	*	J= 108
	ii	Andante espressivo	2/4	= 72	= 66	J= 72	J= 72	*	*	*) = 76	*	= 72) = 76	*	J = 76
	iii	Vivacissimamente	6/8	= 116	= 108	= 108	= 108	*	*	*	= 108	*	= 108	= 108	*	= 108
		Poco Andante	6/8	*	*	*	= 69	*	*	*	= 69	*	= 69	= 69	*	-= 69
90	i	Mit Lebhaftigkeit, und durchaus mit Empfindung und Ausdruck	3/4	= 160	*	= 160	J= 66	*	J = 60	*	J= 60	*	J= 66	J= 60	*	J= 60
	ii	Nicht zu geschwind und sehr singbar	2/4	= 92	*	= 88	= 96	*	= 96	*	= 96	*	= 96	= 96	*	= 96
101	i	Etwas lebhaft und mit der innigsten Empfindung. Allegro ma non troppo	6/8	= 80	= 80	J= 72	J .= 72	*	*	*	= 66	*	J= 72	J= 66	*	*
	ii	Zimlich lebhaft. Marschmässig. Vivace alla marcia	c	J= 84	d= 72	J= 76	= 132	*	*	*	J = 132	*	= 132	*	*	*
	iii	Langsam und sehnsuchtsvoll. Adagio ma non troppo, con affetto	2/4	= 54	♪ = 58) = 60) = 60	*	*	*) = 60	*) = 60) = 60	*	*
	iv	Geschwinde, doch nicht zu sehr und mit Entschlossenheit. Allegro	2/4	J = 132	J= 120	= 132	J = 132	*	*	*	J= 132	*	J = 132	J= 138	*	*

Opus		Tempo Indication	Metre	C1	C2	C3	C4	C5	M1	M2	M3	M4	M5	M6	M7	M8
109	i	Vivace ma non troppo	2/4	= 100	= 100	= 100	= 112	*	*	*	= 112	*	= 112	J = 112	*	*
		Adagio espressivo	3/4	= 66	= 66	= 66	= 66	*	*	*	= 72	*	J= 72) = 72	*	*
	ii	Prestissimo	6/8	= 152	= 138	J.= 80	= 160	*	*	*	= 160	*	= 160	= 160	*	*
	iii	Gesangvoll, mit innigster Empfindung. Andante molto cantabile ed espressivo	3/4	J = 72	J= 72	= 63	J = 66	*	*	*	- = 66	*	= 66	J = 66	*	*
		Variation. Leggieramente	3/4	*	*	*	J = 84	*	*	*	J = 84	*	= 84		*	*
		3. Variation. Allegro vivace	2/4	= 152	= 152	= 132	= 138	*	*	*	= 120	*	= 138	= 120	*	*
		4. Variation. Etwas langsamer als das Thema	9/8	= 66 (sic)	= 66 (sic)	*	= 56	*	*	*	= 56	*	. = 56	. = 56	*	*
		5. Variation. Allegro ma non troppo	¢	J= 69	e= 69	*	J= 76	*	*	*	J= 76	*	J= 76	J= 76	*	*
110	i	Moderato cantabile, molto espressivo	3/4	= 80	J = 80	= 76	= 63	*	*	*	= 63	*	= 63	= 80	*	*
	ii	Allegro molto	2/4	J= 120	J= 120	J= 120	= 112	*	*	*	o= 108	*	o= 112	= 120	*	*
	iii	Adagio	c	√ = 66	= 66	√ = 66	= 69	*	*	*	= 69	*	J= 69	= 66	*	*
		Adagio ma non troppo	12/16	√ = 58	♪ = 58	*	♪ = 60	*	*	*	} ≔ 60	*	<i>\$</i> ≔ 60	♪ = 58	*	*
		Allegro ma non troppo	6/8	= 100	J= 100	J= 100	. = 92	*	*	*	J = 76	*	J= 92	= 100	*	*

Opus		Tempo Indication	Metre	C1	C2	С3	C4	C5	M1	M2	M3	M4	M5	M6	M7	M8
111	i	Maestoso	c	= 108	= 120	= 108	= 56	*	*	*	= 56	*	= 56	= 120	*	*
		Allegro con brio ed appassionato	c	*	= 132	= 132	= 126	*	*	*	= 126	*	= 126	= 132	*	*
	ii	Adagio molto semplice e cantabile	9/16	. = 63	√ = 63) ≔ 63	= 60	*	*	*	♪ = 52	*	. = 60	= 63	*	*

<u>Table III.2: Czerny's and Moscheles's metronome marks for Beethoven's piano</u>
<u>pieces.</u>

WoO	Tempo Indication	Metre	C1	C3	M3
55	Tempo giusto	3/4	J =96	*	*
57	Andante grazioso con moto	3/8	♪ =92	♪ =92	♪ =84
64	Andante con moto	c	*	*	J =138
65	Allegretto	2/4	*	J =108	*
66	Allegretto	2/4	*	*	J =88
	Var. 7: Allegro non molto	6/8	*	*	J. =80
	Var. 9: Con spirito	2/4	*	*	J =100
	Var. 11: Allegro	6/8	*	*	84 ــاـ
	Var. 12: Allegro ma non tanto, con grazia	c	*	*	J =108
	Andante	6/8	*	*	J. =66
	Var. 13: Marcia vivace	c	*	*	J =132
68	Allegretto	c	*	*	J =120
	Var 12. Allegro	3/4	*	*	J =152
70	*	6/8	*	*	♪ =144
	6. var.		*	*	J. =100
71	Allegretto	2/4	*	J =100	J =160
		6/8	*	*	J. =92
72	Allegretto	3/4	*	*	J =144
	Var 8. Allegro	2/4	*	*	J =144
73	Andante con moto	¢	*	Ј =80	J =132
	Var. 1.		*	*	J =144
	Var. 10. Allegretto	3/8	*	*	J. =80
75	Allegretto	2/4	*	*	J =84
	Var. 8. Allegro molto	2/4	*	*	J =144
76	Andante, quasi allegretto	3/8	*	*	♪ =132
	Var. 7. Adagio molto ed espressivo	3/8	*	*	♪ =56
	Var. 8. Allegro vivace	2/4	*	*	J =126
	Adagio	3/8	*	*	♪ =72
77	Andante quasi allegretto	2/4	*	♪ =120	<i>></i> =104

WoO	Tempo Indication	Metre	C1	C2	C3	M3
78	*	3/4	J =88	*	*	J =80
	Var. 6. Alla marcia. Allegro	c	J =144	*	*	J =112
	Var. 7	c	*	*	*	J =120
	Adagio	3/4	*	*	*	J =72
	Allegro	3/4	*	*	*	J =104
79	Tempo moderato	2/4	J =96	*	*	♪ =144
	Var. 5	2/4	*	*	*	J =104
80	Allegretto	3/4	*	J =88	J =88	J =96
82	Moderato	3/4	J =138	*	*	*

Opus	Tempo Indication	Metre	C1	C2	C3	M3
33,1	Andante grazioso quasi	6/8	*	J =66	*	*
	allegretto					
33,2	Scherzo. Allegro	3/4	*	∂. - 76	*	*
33,3	Allegretto	6/8	*	J.=84	*	*
33,4	Andante	2/4	*	♪ =108	*	*
33,5	Allegro ma non troppo	3/4	*	J =112	*	*
33,6	Allegretto quasi andante	2/4	*	J =72	*	*
33,7	Presto	3/4	*	∂.=116	*	*
34	Adagio cantabile	2/4	♪ =63	*	♪ =63	♪ =69
	Var. 2. Allegro ma non troppo	6/8	J.=69	*	*	♪ =160
	Var.3. Allegretto	c	J =88	*	*	J =112
	Var. 4. Tempo di menuetto	3/4	J =96	*	*	J =138
	Var. 5. Marcia Allegretto	c	<i>></i> =104	*	*	♪ =80
	Var. 6. Allegretto	6/8	J.= 66	*	*	♪ =160
	Adagio molto	2/4	♪ =56	*	*	♪ =58
35	Allegretto vivace	2/4	*	*	*	J =66
	Var. 15. Largo	6/8	*	*	*	♪ =96
	Allegro con brio	2/4	*	*	*	J =138
76	Allegro risoluto	2/4	J =112	*	*	J =108
	Var. 6. Presto	3/4	*	*	*	J =160
77	Poco adagio	c	*	*	*	J =58
	Allegro ma non troppo	6/8	*	*	*	J= 88
	Allegro con brio	2/4	*	*	*	J =152
	Adagio	2/4	*	*	*	♪ =76
	Presto	2/4	*	*	*	J =160
	Più presto	6/8	*	*	*	J.=126
	Allegretto	2/4	*	*	*	J =84

<u>Table III.3: Czerny's and Moscheles's metronome marks for Beethoven's duos</u>

and trios.

Violin Sonatas

Opus		Tempo	Metre	C1	C3	C4	M2	M3
		Indication						
12,1	i	Allegro con brio	c	*	J=88	J=88	*	J=92
	ii	Andante con	2/4	*	♪ =108	♪ =104	*	♪ =108
		moto						
	iii	Allegro	6/8	*	J.=112	J.=104	*	J.=108
12,2	i	Allegro vivace	6/8	*	J.=108	J.=108	*	J.=116
	ii	Andante più	2/4	*	J =76	J=80	*	♪ =138
		tosto allegretto						
	iii	Allegro	6/8	*	J.=112	ا.=104	*	J.= 108
		piacevole						
12,3	i	Allegro con	c	*	J=116	J=120	*	J=126
		spirito						
	ii	Adagio con	3/4	*	♪ =80	♪ =92	*	♪ =80
		molt'						
		espressione						
	iii	Allegro molto	2/4	*	ן =72	J=144	*	J=152
23	i	Presto	6/8	J.=138	J.=132	*	J.=138	J .=138
	ii	Andante	2/4	J=92	J=92	*	J=92	J=84
		scherzo, più						
		allegretto						
	iii	Allegro molto	¢	o =76	J=138	*	o =76	J=160
24	i	Allegro	c	ן =76	ੁ=66	=132	*	=144
	ii	Adagio molto	3/4	♪ =92	<i>\$</i> =84	≯ =88	*	♪ =96
		espressivo						
	iii	Scherzo.	3/4	J.=80	J.=80	J.=76	*	J.=92
		Allegro molto						
	iv	Allegro ma non	¢	ا =84	J =76	J=76	*	J=92
		troppo						
30,1	i	Allegro	3/4	=144	J=144	*	*	=160
	ii	Adagio	2/4	♪ =76	♪ =72	*	*	\$ =63
	iii	Allegretto	¢	J=84	J =84	*	*	J=144
		Allegro ma non	6/8	J.=92	J.=88	*	*	J.=92
		tanto						

Opus		Tempo	Metre	C1	C3	M3
		Indication				
30,2	i	Allegro con brio	c	J=152	J=144	J=88
	ii	Adagio	¢	J =66	J=60	J =63
		cantabile				
	iii	Scherzo.	3/4	J.=76	J.=76	J.=84
		Allegro				
	iv	Allegro	¢	J=144	J=132	J=152
		Presto	¢	*	*	o =88
30,3	i	Allegro assai	6/8	J.=112	J.=112	J.=112
	ii	Tempo di	3/4	J=92	*	J=112
		Menuetto				
	iii	Allegro vivace	2/4	J=76	J=76	J=160
47	i	Adagio	3/4	♪ =80	♪ =72	<i>\$</i> =84
		sostenuto				
		Presto	¢	J=160	J=144	o =80
	ii	Andante	2/4	♪ =88	> =88	<i>\$</i> =88
	iii	Presto	6/8	J.=92	J.=88	J.=88
96	i	Allegro	3/4	J=138	J=132	J=160
		moderato				
	ii	Adagio	2/4	♪ =56	♪ =58	<i>\$</i> =63
		espressivo				
	iii	Allegro	3/4	J.=96	J.=80	J.=80
	iv	Poco allegretto	2/4	J=120	J=100	J=116
		Adagio	6/8	♪ =72	*	<i>\$</i> =63
		espressivo				
		Allegro	2/4	J=152	*	J=76
		Presto	2/4	*	*	J=160

Horn Sonata

Opus		Tempo	Metre	C1	C3	M3
		Indication				
17	i	Allegro	c	J=138	J=138	J=152
		moderato				
	ii	Poco adagio,	2/4	♪ =88	♪ =80	<i>\$</i> =69
		quasi andante				
	iii	Allegro	¢	J=152	J=152	J=76
		moderato				

Cello Sonatas

Opus		Tempo	Metre	C3	M3
		Indication			
5,1	i	Adagio	3/4	♪ =88	<i>\$</i> =96
		sostenuto			
	ii	Allegro	c	=160	J =160
		Adagio	c	*	♪ =80
		Presto	c	*	J=96
	iii	Allegro vivace	6/8	J .=104	J.=108
5,2	i	Adagio	c	J =50	<i>\$</i> =84
		sostenuto e			
		espressivo			
	ii	Allegro molto	3/4	J.=84	J.=84
		quasi presto			
	iii	Allegro	2/4	J=72	<i>\$</i> =160
69	i	Allegro ma non	¢	J =72	J=144
		tanto			
	ii	Scherzo.	3/4	J.=108	J.=104
		Allegro molto			
	iii	Adagio	2/4	♪ =66	<i>\$</i> =69
		cantabile			
	iv	Allegro vivace		J=88	J=160
102,1	i	Andante	6/8	♪ =66	<i>\$</i> =72
		Allegro vivace	¢	J=76	J=88
	ii	Adagio	c	<i>\$</i> =56	<i>\$</i> =56
	iii	Allegro vivace	2/4	J =126	J =138
102,2	i	Allegro con brio	c	J=152	J=84
	ii	Adagio con	2/4	♪ =60	<i>\$</i> =66
		molto			
		sentimento			
	iii	Allegro	3/4	J.=63	J.=63

Piano Trios

Opus		Tempo	Metre	C1	C3	M3
		Indication				
1,1	i	Allegro	c	J=88	J=84	J=88
	ii	Adagio	3/4	♪ =88	J=54	<i>\$</i> =100
		cantabile				
	iii	Scherzo.	3/4	J.=132	J.=126	J.=116
		Allegro assai				
	iv	Presto	2/4	J=100	J=92	J=88
1,2	i	Adagio	3/4	♪ =92	J=50	<i>\$</i> =100
		Allegro vivace	2/4	J=132	J=132	J=126
	ii	Largo con	6/8	♪ =80	♪ =80	♪ =80
		espressione				
	iii	Scherzo.	3/4	J.=96	J.=88	J.=100
		Allegro				
	iv	Presto	2/4	J=96	J=80	J=160
1,3	i	Allegro con brio	3/4	J.=63	J.=60	J.=66
	ii	Andante	2/4	♪ =104	> =104	<i>\$</i> =100
		cantabile				
	iii	Menuetto.	3/4	J.=60	J.=58	J.=69
		Quasi Allegro				
	iv	Prestissimo	¢	J=160	J=152	J=152
11	i	Allegro con brio	c	ש=88	J=88	J=100
	ii	Adagio	3/4	♪ =84) =88	J=52
	iii	Allegretto	c	J=76	J=72	J=120
70,1	i	Allegro vivace e	3/4	*	J=152	J.=66
		con brio				
	ii	Largo assai ed	2/4	*	♪ =50	<i>\$</i> =56
		espressivo				
	iii	Presto	¢	*	J=144	J=160
70,2	i	Poco sostenuto	c	*	J=80	J =63
		Allegro ma non	6/8	*	80=.ا	J.=88
		troppo				
	ii	Allegretto	2/4	*	♪ =116	<i>\$</i> =112
	iii	Allegretto ma	3/4	*	J=126	J=160
		non troppo				
	iv	Allegro	3/4	*	J=144	J=84

Opus		Tempo	Metre	C1	C3	M3
		Indication				
97	i	Allegro	c	J=138	J=132	J=152
		moderato				
	ii	Scherzo.	3/4	J.=80	J.=80	J.=88
		Allegro				
	iii	Andante	3/4	J =63	J=58	J =54
		cantabile				
		Poco più adagio	3/4	J=52	J=52	*
	iv	Allegro	2/4	J=88	J=88	J=104
		moderato				
		Presto	6/8	J. =96	J . =96	J. =92

<u>Table III.4: Czerny's and Moscheles's metronome marks for Beethoven's concertos.</u>

Opus		Tempo	Metre	C1	C2	C3	M3
		Indication					
15	i	Allegro con brio	c	J=88	J =88	J=88	J=152
	ii	Largo	¢	♪ =108	♪ =108	J=58	J=56
	iii	Allegro	2/4	*	*	J=72	J=152
		scherzando					
19	i	Allegro con brio	c	*	*	J=152	J=100
	ii	Adagio	3/4	*	*	♪ =84	<i>\$</i> =84
	iii	Allegro molto	6/8	*	*	J.=112	J.=112
37	i	Allegro con brio	c	*	J=138	J=144	J =152
	ii	Largo	3/8	*	<i></i> \$=72	<i></i> \$=66	<i>\$</i> =92
	iii	Allegro	2/4	*	J=116	*	J=112
		Presto	6/8	*	*	J.=112	J.=100
58	i	Allegro	c	*	*	J=116	J=144
		moderato					
	ii	Andante con	2/4	*	*	♪ =84	♪ =144
		moto					
	iii	Vivace	2/4	*	*	J=138	J=138
		Presto	¢	*	*	J=100	*
73	i	Allegro	c	*	*	J=132	J=138
	ii	Adagio un poco	¢	*	*	J=60	J =69
		moto					_
	iii	Adagio ma non	6/8	*	*	J.=96	ا_ا=100
		troppo					