THE ROLE OF THE PICCOLO IN BEETHOVEN'S ORCHESTRATION

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This dissertation discusses the role of the piccolo in Beethoven's orchestration in his symphonic works. These include the Fifth Symphony, the Sixth Symphony, the *Egmont Overture* and the Ninth Symphony. The document includes the history of piccolo's development since the ninth century B.C. until the modern Boehm piccolo.

The author provides comparative observation through Beethoven's orchestration techniques such as the range covered, instrumental pairing, balance, and melodic organization of each symphony works. In addition to discussing development of the piccolo in orchestration, this study compares the piccolo's usage through motives (e.g. the "Ode to Joy" theme), harmonic analysis; range; balance; and melodic organization. Appendix A provides of tables that summarize piccolo's harmonic function of works discussed to help the reader comprehend the piccolo function at a glance.

This dissertation includes observations of performers, theorists and musicians; and these guides provide the reader with better understanding of the piccolo's place in Beethoven's orchestration. By following the observations, piccolo players will bring a deeper musical and technical understanding to individual performances.

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CHAPTER I

INTRODUCTION

The Concise History of Piccolo and Its Development

The history of the piccolo can be traced back to ancient times when archaeologists discovered that people made various transverse flutes out of bones; for example, the Greco-Roman artifacts in Egypt; the Neolithic site of Jiahu, located in Henan province, China; and the Etruscan tomb from about 200 B.C. Eight inch side-blown flutes long existed in Asia as early as the ninth century B.C.

The modern piccolo has a brief two hundred year history, but its modern ancestry can be traced back to the fife,³ a petite cylindrical flute, found commonly in one piece and consisting of six finger holes.⁴ Swiss troops first documented the use of a fife in the battle of Marignano (1515) to direct the soldiers on the battle field.⁵ Thoinot Arbeau, in his 1589 treatise *Orchesographie*, describes the fife as:

A small transverse flute with six holes, which is used by the Germans and Swiss, and which as it has a very narrow bore no bigger than a pistol bullet, gives a piercing sound...Those who perform on this instrument play according to their own pleasure, and it is enough for them to keep time with the sound of the drum.⁶

¹ Curt Sachs, The History of Musical Instruments (New York: W. W. Norton and Co., 1940), 141-2.

² Ibid. 178-79.

³ Cecil Forsyth, *Orchestration*, 2nd edition (NY: The MacMillan Company, 1937),180.

⁴ Therese Wacker, "The History of the Piccolo, from Fifes to Intricate Keys," *Flute Talk* 20:9 (May/June 2001), 8.

⁵ H. Macaulay Fitzgibbon, *The Story of the Flute* (London: William Reeves Bookseller, Ltd., New York: Charles Scribner's Sons, 1928), 73.

⁶ Richard Shepherd Rockstro, *The Flute* (London: Rudall, Carte and Co., 1928), 213.

Arbeau's description fits the sound of the modern piccolo in that it penetrates through the texture of an orchestra or a band, and the function of the fife in the military was to sound an alarm through various special signals and to facilitate a call to the army regarding potential attacks or threats.

In his opera *Almira*, Handel used fifes, cymbals and drums as Consalvo, the guardian of Almira and a military man, enters. Handel's indication for *flauto piccolo* still referred at that time to a descant recorder, but from Christoph Willibald Glück's time forward *flauto piccolo* referred to the orchestral piccolo. The fife kept the features of its ancestor's – a one-piece cylindrical bore with no key--until the early 18th-century. The German scholar, Lenz Meierott discusses the seventeenth- and eighteenth-century history of the piccolo and distinguishes the small transverse flute (Baroque piccolo) from the recorder, fife, and other instruments of the flute family. The Baroque piccolo is distinguished by its bore shape (cylindrical versus conical) and by the addition of the E^b key.

During the eighteenth and nineteenth centuries, orchestral use of the piccolo increased dramatically. The rise in quality of wind instrument construction allowed the expansion of the piccolo's chromatic capability, enhancing its viability as a member of the orchestra, and as technical innovations improved the quality of the instrument, the technical capability of the players increased, with added flexibility in performance.

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⁷ Fitzgibbon, 79.

⁸ Anthony Baines, *Woodwind Instruments and their History* (New York: W. W. Norton and Co., 1962), 294-5.

⁹ Ibid.

¹⁰ Zartouhi Dombourian-Eby, "A History of the Piccolo." Flute Quarterly 16:1 (Winter 1991), 13.

¹¹ Adam Carse, *Musical Wind Instruments* (London: MacMillan and Co., Ltd.,1939), 702.

During Beethoven's time the piccolo developed from an open hole instrument to a one-keyed instrument (see Figure A.1); the piccolo later evolve to the six-keyed in 1825, and modern Boehm piccolo after 1850s (see Figure A.2 and A.3). ¹² To understand the differences between the one-keyed Baroque piccolo and the modern Boehm piccolo, one must consider various factors. The embouchure hole and tone holes are smaller than those of the modern piccolo; the entirely conical bore of the one-keyed piccolo contrasts with the modern piccolo's conical bore combined with a cylindrical head; and the onekeyed piccolo is made of wood with one key rather than with metal keys. ¹³ During Beethoven's early period, he experimented with the one-keyed piccolo in various combinations of ensembles before using it in a symphony (see Table A.1 and Example A.1). ¹⁴ His Menuetten – Number 12, Trio is a chamber work for piccolo, pairs of flutes, oboes, clarinets, bassoons, horns, and trumpets; timpani; first and second violins; cellos and basses. The piccolo has an independent, ornamental part, and this successful use of the piccolo must have encouraged him to explore other possibilities. Beethoven was the first composer to include the piccolo in symphonic works; his distinctive style of orchestration is idiomatic for each instrument of the orchestra.

Prior to Beethoven's time, the piccolo appeared in sacred choral and opera scores, such as J.S. Bach's "Cantata BWV 103, Ihr werdet weinen und heulen" (1725) and Georg Friedrich Handel's opera Rinaldo (1711), ¹⁵ and by the mid-18th century the piccolo is a regular member of the orchestra. Mozart used piccolo in his Sech Menuetten (Six

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¹² Dombourian-Eby, 13.

¹³ Jan Gippo, ed. *The Complete Piccolo: A Comprehensive Guide to Fingerings, Repertoire and History* (PA: Theodore Presser, 1996), 8.

¹⁴ Dombourian-Eby, 13.

¹⁵ Wacker, 12.

German Dances), K. 104, and in the overture to The Abduction from the Seraglio; ¹⁶ however, these composers limited the use of piccolo in their orchestral works. Due to the lack of piccolo in Beethoven's early period (1776-1804), which he did not include in his early symphonies (first to fourth). Beethoven, however, used the piccolo in his Fifth, Sixth, Ninth Symphonies and in *Egmont Overture*, and these masterpieces use the piccolo skillfully, favorably exploiting the instrument's qualities.

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¹⁶ Jan Gippo, "Let's Talk Picc: The Piccolo, Then and Now," *Flute Talk* 18:4 (December 1998), 32.

CHAPTER II

MIDDLE PERIOD

Symphony No. 5, Op. 67, Fourth Movement (1805)

Beethoven's first sketches of the Fifth Symphony date from 1804, however he was distracted to work on several other compositions. ¹⁷ He returned to the Fifth Symphony by 1807-1808 and he conducted the premiere of his Fifth Symphony as a conductor on December 22, 1808 at the *Theater an der Wien* in Vienna. ¹⁸ Beethoven added piccolo and three trombones in the *finale* movement symbolizing a triumphant march through a wider pitch range both at the top and bottom of the orchestra.

In letter to his patron, Count Oppersdorff, dated March 1808, Beethoven mentions that "your symphony has long been ready," with his specification of the expanded instrumentation in the last movement of the Fifth Symphony: it "is with three trombones and *flautino* [piccolo] – though not with three kettledrums." To judge from these observations, it appears that the significant extension of orchestration used in the last movement of the Fifth Symphony (Beethoven had not formerly used piccolo in his symphonies) was proposed by Oppersdorff himself.²⁰

¹⁷ Antony Hopkins, *The Nine Symphonies of Beethoven* (Seattle: University of Washington Press, 1981).

¹⁸ William Kinderman, *Beethoven* (Berkeley: University of California Press, 1995), 122.

¹⁹ Peter Clive, *Beethoven and His World: A Biographical Dictionary* (New York: Oxford Univ

¹⁹ Peter Clive, *Beethoven and His World: A Biographical Dictionary* (New York: Oxford University Press, 2001), 252-53.

²⁰ Ludvig van Beethoven, *9 Symphonies*, Luba Orgonasova, soprano; Anne Sofie von Otter, mezzosoprano; Anthony Rolfe Johnson, tenor; Gilles Cachemaille, bass; The Monteverdi Choir; Orchestre Révolutionnaire et Romantique sur instruments originaux, cond. John Eliot Gardiner; digital disc (Deutsche Grammophon Archiv Producktion, 439 900-2, 1994).

The opening theme with its ascending major triad contrasts with the first movement's fate themes immense. Beethoven allows the piccolo to display the short accented major triad, sounding in unison together with the flutes and violins; the use of C major with this orchestration technique also brings out the brilliant sound of the sixteenth and grace notes at the highest point of the range, the non-chromaticism passage also provide clarity to the sound of the piccolo. At measure 6B, the piccolo sounds an octave above the first violin and the woodwind scale passage, highlighting the importance of the piccolo as a soloistic instrument by enlarging the scope of the orchestra. The following examples show Beethoven's first use of the piccolo:

Example 1: Measures 1-22 from Symphony No. 5, Op. 67, fourth movement.









At measure 25, Beethoven again expands the range by using the piccolo in its third octave together with the contra bassoon and bass in their lower registers before passing the melody to the horns (the famous horn call, refer to example 2, measure 26-32).

Example 2: Measures 25-33 from Symphony No. 5, Op. 67, fourth movement.





Beethoven suggests the dominant (D major) before presenting the G major motif at measure 44, first in the violins and later in the woodwinds. The piccolo plays in unison with the flute, and both sound an octave higher than the preceding violins statement. At measure 86, the piccolo sustains the high E together with the flute for four measures of an E dominant seventh, and the piccolo finally leaps up an octave to resolve to the tonic of A major at measure 90.

Example 3: Measures 44-50 from Symphony No. 5, Op. 67, fourth movement.





The key center modulates at measure 65 to D major, and at measure 68 to A minor. The first violin carries out the minor scale and immediately at measure 70 modulates from A minor to G dominant seventh (serves as a pivot chord, i/ii-V⁷). The violin harmonic function includes the major and minor mode but the piccolo only emphasizes the dominant (or seventh) scale(s) of G major, before the tutti modulates into F minor at measure 77; one might observe that Beethoven considers the piccolo a joyous instrument, fragmentally creates a joyous resolution towards stability to return to tonic. The texture from measures 65-72 allows the first violin to easily project its scale passages, while the piccolo player will need to play a strong *forte* to project above the tutti orchestra.

Example 4: Measures 65-76 from Symphony No. 5, Op. 67, fourth movement.







The piccolo repeats the reduced motive at measures 89-91 in A major; however, the piccolo is paired with the first violin, but sounding an octave higher, and later the same motive reoccurs in the woodwinds and violins in F major (Example 6).

乖 œ Ħ ₽́ Fg. Tbni. Timp.

Example 5: Measures 85-91 from Symphony No. 5, Op. 67, fourth movement.



Example 6: Measures 95-98 from Symphony No. 5, Op. 67, fourth movement.



The rhythmic motive (F#-G-G-—) at measure 244 recalls the short motif at the beginning of the first movement – the fate motive (Example 8).

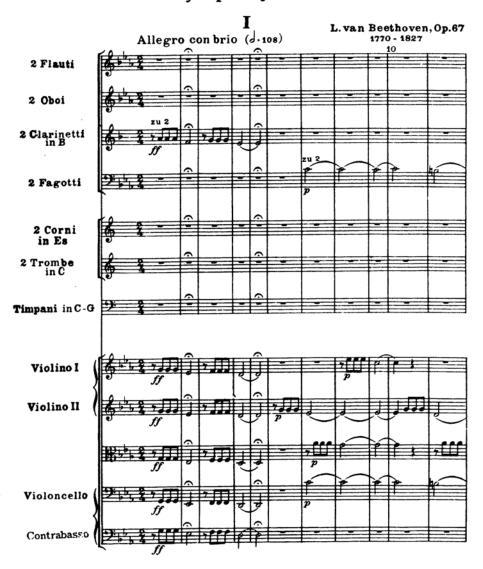
Example 7: Measures 244-250 from Symphony No. 5, Op. 67, fourth movement.





Example 8: Measures 1-11 from Symphony No. 5, Op. 67, first movement.

Symphony No.5



The same rhythmic gesture appears in the double bass at measures 240-243 and in the cello at measures 33-38, and Beethoven uses this melodic figure to fill the harmony and further provide a chromatic modulation for the new key center of G major. The following table shows the function of the piccolo:

Table 1: Piccolo harmonic function comparison from measure 33-38 and 244-250 from Symphony No. 5, Op. 67, fourth movement.

Piccolo Harmonic Function		
Measures	Instruments	Details
33-38	Cello	C major – G dominant seventh \rightarrow D major (with F \rightarrow F# and C \rightarrow C# key signature shift)
244-250	Piccolo	F major – C dominant seventh \rightarrow G major (with B ^b \rightarrow B natural and F \rightarrow F [#] key shift)

Example 10 shows the cello part at measures 33-38, C major – G dominant seventh \rightarrow D major with the F \rightarrow F# and C \rightarrow C# key signature shift slowly indicating the modulation to D major; while at measures 244-250, F major – C dominant seventh \rightarrow G major with the B^b \rightarrow B natural and F \rightarrow F# modulation. The piccolo player should be aware of the tonal clash between F# and F natural, and perform the half-step motif with the thought of leading tone that predicts a key-center shift.

Example 9: Measures 33-38 (cello) and measures 244-250 (piccolo) from Symphony No. 5, Op. 67, fourth movement.





The Allegro section (measures 253-259) is an exact repeats of measures 44-50 ²¹ except this time it is in C major, the tonic of this movement, and because the piccolo (measures 257-259) sounds an octave above the flute, Beethoven creates a new height and adds brilliance at this dramatic moment in the movement.

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²¹ Refer back to Example 3, pp. 11-12.

Example 10: Measures 253-259 from Symphony No. 5, Op. 67, fourth **m**ovement.





In example 11, the 16th-note scales are articulated, and the ascending scale pattern arrives on C2 on beat three from measures 330-333, while the entire orchestra sounds tutti chords on beat fourth.

Example 11: Measures 330-333 from Symphony No. 5, Op. 67, fourth movement.



In the following example (12), the piccolo plays in unison with the oboe and horns, and the weaker register lacks projection in this passage. The piccolo blends with the color of the oboe and horn, but only projects clearly in the G trill. As Forsyth states, ²² "A fine phrase like this, with its thin twitter at the end, only sounds poor. In this case it performs a purely mechanical function successfully while in the other, it fails to add anything." The scale and arpeggio passages (before and after this example) serve as harmonic filler while doubling other instruments.

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²² Cecil Forsyth, *Orchestration* (New York: McMillan and Co., 1942), 200.

Example 12: Measures 336-339 from Symphony No. 5, Op. 67, fourth movement.



From measure 385-389, Beethoven creates a unique orchestral voicing with the piccolo (G suspension to F) doubled in the tenor trombone and joined by the trombone trio, forming a suspended cadence to an augmented 6th progression, V – I cadential figure before joining the tutti recapitulation at measure 390.

Beethoven uses the piccolo from this point onto the end of the movement, with the piccolo in unison or sounding an octave higher than the flute on main thematic material. Beethoven paced the orchestration carefully throughout, and in homophonic chord progressions, the piccolo plays in unison with the flute and in rapid passages when Beethoven typically places the piccolo to sound an octave above the flute.

At measures 432-436, Beethoven scored the C major chord inversion by doubling the piccolo together with the strings, alongside the Grand Pauses to build for the dramatic intensity. Beethoven illustrated the piccolo's exciting color brilliantly in its high register.

Example 13: Measures 385-390 from Symphony No. 5, Op. 67, fourth movement.



Example 14: Measures 432-444 from Symphony No. 5, Op. 67, fourth movement.



Symphony No.6, "Sinfonia Pastorale" Op. 68, Fourth Movement (1808)

"Like the 'Waldstein' and 'Appassionata' sonatas, the Fifth and Sixth
Symphonies represent disparate musical worlds that complement one another..." and
"...relate to aspects of the narrative design, as well as to style and character." The Sixth
Symphony reflects Beethoven's strong feeling for nature, with its musical reference to
fields, streams, trees and birds, and in one of his favorite books, *Reflections on the Works*of God in the Realm of Nature and Providence, he noted his love for the countryside and
that he enjoyed excursions into the woods and fields. His final words, found in an early
violin part "Sinfonia Pastorella/ Pastoral-Sinfonia/ oder/ Erinnerung an das Landleben/
Mehr Ausdruck der Empfindung als Mahlerei" that is, "Pastoral Symphony or Memories
of Country Life/ More the Expression of Feeling than Tone-Painting," Beethoven
demonstrates his intent to elevate the literature of contemporary "programmatic"
compositions of his time. Levaluation of the Sixth Sixt

Beethoven wrote for a full complement of woodwinds (piccolo, 2 flutes, 2 oboes, 2 clarinets in B flat, 2 bassoons); brass (2 horns in F and B flat, 2 trumpets in C and E flat, 2 trombones [alto and tenor]); timpani; and strings in the Sixth Symphony. Trumpets and trombones are utilized in the Sturm (Fourth Movement) and Finale (Fifth Movement) only, and he scores for piccolo only in the Sturm. As Berlioz writes, "Thus, the piccolo flute figures incomparably in the fourth movement of Beethoven's 'Pastoral Symphony' – now alone and displayed, above the low tremolo of violins and basses,

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²³ William Kindermann, *Beethoven* (Berkeley: Calif., 1995), 123.

²⁴ Maynard Solomon, "The Quest for Faith" in *Beethoven Essays* (Cambridge, 1988), 216-32.

²⁵ Dagmer Weise, Ein Skizzenbuch zurPastoralsymphonie Op. 68 und zu den Trios Op. 70, 1 und 2 (Bonn, 1961), vols. 2 and 5, and N. II, 378.

imitating the whistling of a tempest whose full force is not yet unchained – now on the higher notes still, together with the entire mass of the orchestra."²⁶

Beethoven's distinctive usage of piccolo in the Sixth Symphony demonstrates his expansion of the instrument's color; furthermore, he prepares listeners for the pre- and post-storm scene in the music. In this movement the piccolo depicts the thunder storm, and the timpani join the strings and woodwinds on a pedal tone to illustrate the blowing wind. After the storm scene, Beethoven omits piccolo, brass, and timpani from a prominent role in the remainder of the movement.

The piccolo functions in a different way in the Sixth Symphony as compared to the Fifth Symphony, with neither low register nor melodic passages. The piccolo predominantly plays a separate part from the flute, although prolonged doublings with the flute at the unison or an octave higher appear in the movement. As shown in table A.3, analyzing the harmonic progression demonstrates Beethoven's use of the piccolo as a bridge linking modulations with harmonic functions. Quoting Cecil Forsyth, "In the storm of the 'Pastoral Symphony' the piccolo has a part, but is mainly used to perform its least effective function, the holding of high notes." This dissertation will discuss Beethoven's four approaches in regard to piccolo usage in this programmatic movement:

- 1. Long doubled pedal tones create the intensity of the storm.
- 2. Chromatic modulations demonstrate the storm.
- 3. Modal mixture chord tones interchange.

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²⁶ Berlioz, 121.

²⁷ Forsyth, 199.

4. Dynamic range expands the structure.

The piccolo enters at measure 82, and mimics the vision of pre-storm lightning. An ascending line from A^b-B^b-C-D^b at measures 82-90 contrasts with a descending bass line. The extended bass line in the Cello and Double Bass moves from G-B^b (measures 78-85), recurs at measure 86 from B^b-G^b, and later moves to a chromatic passage at measure 95. The piccolo's ascending line A^b-B^b-C-D^b (measures 82-90) harmonically pairs well with the descending bass line from measures 78-94; and even through the piccolo's ascending line is separated into short motives. The lightning effect "flashes" harmonically like the thunder in the ear of the audience.

The harmonic progressions from measures 82-90 (see Table A.3) provide clear harmonic progression through the circles of fifths towards the piccolo and bass lines (noted that the highlighted notes in the chord progressions indicate the piccolo's presence).

The following examples illustrate Beethoven's use of piccolo in Symphony No. 6:

Example 15: Measures 78-92 from Symphony No.6, Op. 68, fourth movement.







Example 16 at measure 93, the piccolo moves from a G^b2 (tonic of G^b Major) into a G2. The G2 forms as the third note of an E diminished seventh chord. The piccolo sustains G1 beginning at measure 97, and recurring on and off through the entire chromatic passage. Although the chromatic figures in the strings and woodwinds illustrate the loud blowing wind, the full E diminished seventh chord appears only when the piccolo and the second bassoon complete the harmonic structures from measures 95-101. Beethoven uses the lack of both the pedal E (second bassoon) and the G2 (piccolo doubling on the flutes) to evoke the unstable whistling effect of the howling winds during the thunderstorm. This E diminished seventh chord normally hints to the arrival of F major; but instead Beethoven introduces the F[#] diminished seventh chord that lasts from measure 106-112 (see Example 17). The piccolo enters at measure 106 with a high B natural, and moves to a C2 that is sustained for another 7 measures.

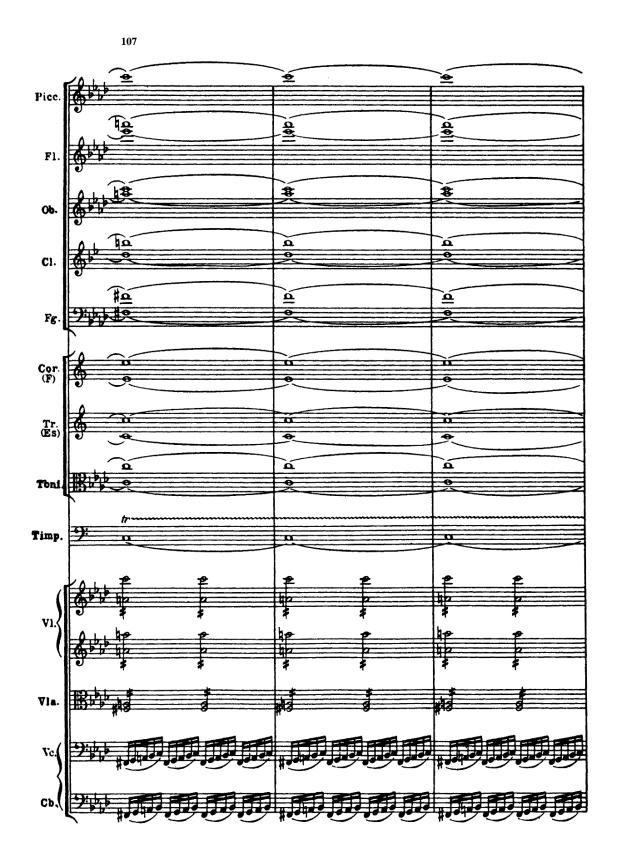
In Example 17, the piccolo entrance on C2 serves as the fifth of an F# diminished seventh chord with the introduction of E^b at measure 106, creating a diminished seventh chord. An F diminished ninth chord sustains at measure 111-112, before moving into A diminished seventh (the piccolo's C2 serving as the third note of the chord that leads to B^b minor). From measures 117-119, where the piccolo reenters going from F (the root of F dominant seventh) – F (the fifth of B^b minor) – G (the third of E diminished seventh on a pedal F) and finally arrives at F (the root of F dominant, leading back into B^b minor).

Example 16: Measures 95-103 from Symphony No.6, Op. 68, fourth movement.



Example 17: Measures 106-119 from Symphony No.6, Op. 68, fourth movement.









The piccolo fades away together with the passing thunderstorm and the flute replaces the role of the piccolo as the top voice in the last section from measures 120-156. All the descriptions mentioned above will allow piccolo players to comprehend Beethoven's harmonization approach rather than just performing long notes. This harmonic analysis will also help the piccolo player to understand the highlight of the moments of where to carry out the important dynamic level in the pre, during and post storm scene, consecutively to enhance the structural dramatic effect.

Egmont Overture, Op. 84 (1810)

Egmont Overture, Op. 84 (from the incidental music for Goethe's tragedy) was composed during 1809-10 in Vienna and first performed on 15 June 1810 in the Court Theatre in the Hofburg, Vienna. 28 Egmont, a Dutch nobleman who lived loyal to Philip II of Spain (he pled Philip's faithfulness before Mary I of England) was also a keen rival of the oppressive rule visited on the Netherlands by the Spanish establishment.²⁹

Egmont Overture, a one-movement work in F minor, is an extended sonata form with a clear recapitulation and an extensive final coda that strengthens and defines the overture. Modulation to F Major, with additional piccolo and brass evokes a rousing military triumph, and the coda is often compared to that of Beethoven's Fifth Symphony. Two writers comment on the end of the *Egmont Overture* includes: Kern Holoman, who states in his Norton Companion, "From these there breaks forth a coda in F major of rousing military triumph, with piccolos and heroic brass – quite the equal of the memorable coda that concludes the Fifth Symphony,"³⁰ and Cecil Forsyth who writes, "In the Allegro con brio, at the end of his Egmont Overture, there is quite a showy part made up of little flourishes with the Horns, Trumpets, and Bassoons."³¹

The piccolo trill measure 293 on C2, creates a dominant pedal that resolves to the third of an F major chord, triumphantly emphasizing the A2-G2-F2, repeating the figure six times in unison with the woodwinds and 1st horn. This orchestration encourages the

²⁸ Joseph Kerman, Alan Tyson, and Scott G. Burnham, "Beethoven, Ludwig van: Middle period Works," Grove Music Online, ed. L. Macy, http://www.grovemusic.com (Accessed 29 May 2011).

³⁰ Kern Holoman, Evenings with the orchestra: a Norton companion for concertgoers (New York: W. W. Norton, 1992), 104. ³¹ Forsyth, 199.

piccolo to a bright, lively, color because of the technical ease and projection of this register. The following examples illustrate Beethoven's piccolo usage in *Egmont Overture*:

Example 18: Measures 293-307 from Egmont Overture, Op. 84.



^{*}Noted that the piccolo is placed under the flute part.



The piccolo takes up the ostinato figures, from the violin measures 313-316, filling in the half notes to extend the effect, and from measures 313-320, the piccolo takes over the solo melodic line from the violin. Violin figures in sixteenth-notes and triplets drive to the cadence of I-V-vii°-I (measures 318-319), with a short modulation (Circle of Fifths) from F⁷-D-G-B^bm-C-F at measures 315-317.

Example 19: Measures 311-329 from Egmont Overture, Op. 84.





In the following example, Beethoven places the melodic line in the piccolo to articulate the ascending arpeggios, and this new technique contracts with previous examples in where the piccolo is scored in the middle range. At measure 340, the piccolo sustains a dominant pedal tone while the timpani rolls on the tonic pedal for two measures, creating an open fifth sound. Repeated triplet figures in the piccolo drive *Egmont Overture* to a triumphant ending, with ascending dominant to tonic scale that arrive at the final F major cadence.

Example 20: Measures 339-347 from Egmont Overture, Op. 84.



CHAPTER III

LATE PERIOD

Symphony No. 9, Op. 125, Fourth Movement (1824)

The Choral Symphony is the largest orchestral work from Beethoven's time. The Philharmonic Society of London commissioned Beethoven to write the Ninth Symphony, however the premiere performance was in Vienna, May 7, 1824. 32 Premiering the work was in Vienna, Beethoven's intent was to attract the operatic audience and creates interest in orchestral music. During the 1820s, the Italian Opera was the center of attention as popular arts in Vienna. As Anton Schindler states, "What was left of appreciation of German vocal music disappeared entirely. From this year dates the deplorable state of all music." Schindler states that the audience's passion "grew from performance to performance until it degenerated into a general intoxication of the senses whose sole inspiration was the virtuosity of the singers."

Beethoven's Ninth Symphony received its first London performance in 1825 and later premiered in America in 1846 by the recently founded New York Philharmonic Society in New York.³⁵ Barry Cooper explains the influential Choral Symphony in his introduction to the 1999 *Bärenreiter* edition:

³² Pamela Willetts, *Beethoven and England and Account of Sources in the British Museum* (London: British Museum, 1970), 44.

³³ Anton Schindler, *Beethoven as I Knew Him* (New York: W. W. Norton, Inc., 1972), 269.

³⁴ Ibid.

³⁵ Ora F. Saloman, *Beethoven's Symphonies and J. S. Dwight* (Boston: Northeastern University Press, 1995), 162-71.

Even today it remains a colossus among symphonies, with its great size and incredible inventiveness, complexity and power; yet these features are combined with a finale theme possessing such universal appeal that even the musically uninitiated can sense the joy it conveys.³⁶

The symphony calls four vocal soloists (soprano, contralto, tenor, and bass); a grand chorus; and a large orchestra, including piccolo, two flutes, two oboes, two clarinets, two bassoons, contrabassoon, four horns, two trumpets, three trombones, timpani, percussion, and strings.

In describing the military elements in the Alla Marcia, Hector Berlioz states, "It is now the farewell song of a hero, departing for battle and confident of victory; you can almost see his armor flashing and hear the rhythmic sound of his step."³⁷ Beethoven chose to emphasize thoughts of triumph in battle through a victorious text sung by the tenor soloist in the Turkish march beginning at measure 375:

Froh, wie seine Sonnen fliegen Laufet, Brüder, eure Bahn, Freudig, wie ein Held zum Siegen.

Glad as suns thro' ether wending Durch des Himmels prächt'gen Plan, Their flaming course with might pursue, Speed ye brothers glad and true. Conquest in your train attending.³⁸

George Grove in his book *Beethoven and His Nine Symphonies* states,

For these stanzas we seem to come down from heaven to earth; but a splendid earth, full of the pomp and circumstance and also the grieve of war. This is a showy military march-movement with big drum, piccolo, flute, triangle, cymbals, and all other apparatus of warlike parade.³⁹

Every aspect of the music serves the test; therefore the character of the march is "Turkish."

³⁹ Ibid, 382.

³⁶ Ludwig van Beethoven, Symphony No. 9 in D Minor, Op. 125, ed. Jonathan Del Mar with an introduction by Barry Cooper (NY: Bärenreiter, 1995), iv.

³⁷ Hector Berlioz, *The Art of Music and Other Essays*, transl. and ed. Elizabeth Csicsery-Rónay (Bloomington: Indiana University Press, 1994), 35.

³⁸ George Grove, *Beethoven and His Nine Symphonies*, 3rd edition (NY: Dover, 1962), 381.

In this symphony, one clearly observes Beethoven's development of his orchestration by progressively adding instruments and voices; the element of dynamic control is obvious, starting with a dynamic of *pianissimo* that gradually grows to *sempre fortissimo* over the hundred measures of the military parade. In the score he used for a Hamburg performance of the Ninth Symphony, the conductor Gustav Mahler suggested that the *Alla Marcia* be played off-stage. ⁴⁰

Example 21 shows the first prominent piccolo solo (the variation in B^b major – originally from the "Ode to Joy" theme – refer to example 22) in the Ninth Symphony, and although D major has been the primary tonal center since the entrance of the chorus at the *Allegro assai* in measure 331, the *Alla Marcia* establishes B^b major as the new key. ⁴¹ The B^b major was selected as a new key of the fourth variation, achieving the advantage of refreshing the ear before the return to the main key (D major) in the last variation, representing a feeling of recapitulation while creating a mood of closure. This is probably the most distant key shift in Beethoven's symphonic compositions, and the new key of B^b prepares for the entrance of the piccolo in measure 343, extending the "Ode to Joy" theme and leading the march to a new height.

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⁴⁰ David Pickett, "A Comparative Survey of Rescorings in Beethoven's Symphonies," in *Performing Beethoven*, ed. Robin Stowell (NY: Cambridge University Press, 1994), 213.

⁴¹ Beethoven used similar modulations in other works, for example, in the find movement rondo of his B^b major Piano Trio [Op. 97], A major appears suddenly to add interest to the subdominant key of E^b major; and in the final rondo of his Piano Sonata Op. 7 (refer to Appendix A, Score 2, p. 87) E major appears before the movement cadence in E^b major.

Example 21: Measures 343-431 from Symphony No. 9, Op. 125, fourth movement.



Example 22: the original "Ode to Joy" theme on cello and double bass.



Example 23 demonstrates Beethoven's first attempt at combining piccolo with the voice, and the piccolo cuts through the thick orchestral texture of the *prestissimo* and reinforces the soprano line of the chorus. Beethoven embellishes the top voices with long and short trills in the piccolo, and he also pairs the piccolo with winds, brass, percussion and strings to broaden the dynamic range and maximize instrumental color.

In the *prestissimo*, the piccolo states the first motive (Example 22) in the highest register, doubling the flutes, and the motive is repeated in measures 855-858. The final two measures (measures 859-860) repeat, for the purpose of reinforcing the dominant. The dominant remains in measures 861-868, with a new motive stated four times in the winds and, subsequently four times in the chorus, until D major returns at the next cadence in measures 875.

Example 24 is similar to the previous example 23 in that the first and second part motives are sequential in character and alternate between winds and strings; however after four measures (measures 876-879), the second part goes its own way. The piccolo is the highest instrument leading the harmonic progression, based on the modal mixture of D major and D minor.

Example 23: Measures 851-875 from Symphony No. 9, Op. 125, fourth movement.

851 Flauto piccolo. Flauti. Oboi. Clarinetti. Fagotti. Contrafagotto. Corni. Corni. Trombe. Timpani. Tromboni. Triangolo. Cinelli, e Gran Tamburo Violino I. Violino II. Vicla. Soprano. ċ Alto. Milli - onen 0 Tenore. Basso.

Violoncello e Basso.







Example 24: Measures 876-902 from Symphony No. 9, Op. 125, fourth movement.





In the Maestoso section (Example 25), Beethoven writes a typical passage for piccolo, with a separate part from the winds that joins the strings. Beethoven intensifies the *Maestoso* section by introducing a group of 32nd subdivisions, which delay the emotional climax of the *Prestissimo*.

The *Prestissimo* section (Example 26) marks the end of the chorus and the orchestra takes over from the chorus, while the piccolo leads the strings and winds and signals the meter change from 3/4 to 4/4. The piccolo melody states the original version of the "Ode to Joy" theme, while the strings play a contracted version, and Beethoven brilliantly weaves the counterpoint between the voices and builds to a triumphant finale.

Example 25: (Maestoso) Measures 916-919 from Symphony No. 9, Op. 125, fourth movement.





Example 26: (Prestissimo) Measures 920-940 from Symphony No. 9, Op. 125, fourth movement.







CHAPTER IV

COMPARATIVE OBSERVATION

Range Covered

Table 2: The range covered by Piccolo.

	Symphony No. 5 Finale	Symphony No. 6 4th mvt.	Egmont Overture	Symphony No. 9 Finale
Range Covered	D1-G3	F2-G3	A1-G3	F#1-A3

While the range used in Fifth Symphony appears to be wide, the actual playing range is just C2-E3. The E1 and G3 only occur once, showing that Beethoven is still in an experimental stage of writing for piccolo within a large scale symphonic work.

Beethoven does not use the lower register of the piccolo in Sixth Symphony, and the high register appears more often (in reference to the limited piccolo use in the movement), and sustained long notes reinforce the thunderstorm effect. In *Egmont Overture*, Beethoven increases both the use of the piccolo and the written range.⁴²

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 $^{^{42}}$ This expansion is fully discussed in the "Melodic Organization," with an explanation the instrument's use and its significance within the composition.

Throughout the final movement of Ninth Symphony's melodic writing for the piccolo is more than 70% in the upper register through A3. There are only three sections (measures 375-390, 858, and 918) where the range clips into the lower register.

Instrumental Pairing

In the table below, one observes Beethoven's use of the piccolo in his major symphonic works, with division into five categories: orchestral tutti; solo or solo with other instruments; unison with flute; an octave higher than flute; and total measures using piccolo.

Table 3: The statistic of the comparison of Piccolo's usage.

Piccolo Usage	Symphony No. 5 Finale		Symphony No. 6 4th mvt.		Egmont Overture		Symphony No. 9 Finale	
	Meas ures	%	Meas ures	%	Meas ures	%	Meas ures	%
Orchestral Tutti	60	26	17	65	27	43	92	51
Solo or soli with other instruments	2	1	_	0	19	30	90	49
Unison with Flute	65	28	7	28	4	6		0
Octave higher than Flute	104	45	3	7	13	21		0
Total measures using Piccolo	231	100	27	100	63	100	182	100
Total Measures in the Movement	444		155		347		733	

In Fifth Symphony, the piccolo pairs with the flute but sounding an octave higher 45 percent of its total playing time; in unison with the flute 28 percent; orchestral tutti 26 percent; and solo or solo with other instruments 1 percent. This analysis shows that Beethoven depended on the color of the piccolo more than the flute in this symphony. In Sixth Symphony, the piccolo plays with the orchestral tutti 65 percent of the total time, followed by 28 percent in unison with the flute, and 7 percent an octave higher than flute. The piccolo does not have any melodic passages, and its sole function is to reinforce the orchestra tutti passages during the "storm" scene.

In the *Egmont Overture*, a clear increase of piccolo usage is shown in the table with the piccolo joining the orchestral tutti for 43 percent of the movement, Beethoven increases the solo or solo with other instruments usage from 0 percent to 30 percent; to 21 percent for an octave higher than flute; and to 6 percent in unison with flute. This analysis shows that Beethoven has transformed the piccolo into a more soloistic instrument.

In Ninth Symphony, a majority of 51 percent of piccolo's usage is with the orchestra tutti, while 49 percent is as a solo or solo with other instruments. The general approach to piccolo in this symphony is to utilize the piccolo's color an octave higher to add brilliance to the timbre of the work.

The table shows the development of the piccolo's usage from Beethoven's earliest use of piccolo through Ninth Symphony; the piccolo is primarily paired an octave higher than the flute in Fifth Symphony (45 percent); orchestra tutti in Sixth Symphony (65 percent); a restricted use in the orchestra tutti in *Egmont Overture* (43 percent); and an

almost equal usage between orchestral tutti in Ninth Symphony (51 percent) and solo or solo with other instruments (49 percent). In this last symphony, Beethoven separates the piccolo from the flute and allows the piccolo a more independent, colorful soloistic path.

Balance

Symphony No. 5, Op. 67, Fourth Movement (1805)

As stated by Forsyth⁴³ in describing "its thin twitter at the end" (measures 336-339), the piccolo joins the oboe and horns in unison, and the choice of the piccolo's weakest register lacks projection in this passage. The piccolo color is masked by the oboe and horns, and clearly projects only in the G trill. The probable reason that Beethoven included a piccolo part would be to add for tone color to the orchestral texture. The second example with an issue of balance is at measure132 and is a result of the accumulation of the over-all sound of the orchestral tutti. The remaining of the piccolo parts in the Fifth Symphony are well written and project clearly through the orchestral texture.

Symphony No.6, "Sinfonia Pastorale" Op. 68, Fourth Movement (1808)

The piccolo does not have exceptional parts in this symphony; rather, it provides a prominent effect through long sustained high notes. As described by Berlioz, "the piccolo flute in Beethoven's 'Pastoral Symphony'…imitating the whistlings of a tempest whose

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⁴³ Forsyth, 200.

full force is not yet unchained...,"⁴⁴ One can visualize the "full force" that Beethoven would have maintained to balance the orchestra while he conducted this symphony.

It can be argued by many orchestrators that this instrumentation does not present the piccolo in a strong light; however piccoloists will be comfortable with the range that stops at G3.

To compare measures 101-102 with measures 106-111, the register of the piccolo (G2) in measures 101-102 does not project strongly. As a result, the flutes completely dominate the texture, although Beethoven's original intention was to build sound of the harmonic structure. At measures 101-102, the piccolo plays a C3 while the flutes play other chord tones (E & A), which do not double each other; suggesting both a better register and orchestration technique by the composer.

Egmont Overture, Op. 84 (1810)

The development of Beethoven's skill in writing for the piccolo is obvious in the *Egmont Overture*. Beethoven displays a mature approach to orchestration technique by never allowing a balance issue between with the piccolo and the orchestra; for example in measures 311-315 the brilliant scoring for the piccolo adds sparkle to the entire overture.

Symphony No. 9, Op. 125 Fourth Movement (1824)

Beethoven's orchestration technique attains a new height with the piccolo's role in the Ninth Symphony with the use of the piccolo to reach a fabulous climax to the

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⁴⁴ Berlioz, 121.

moment. The clear projecting quality in the piccolo's high register provides an overall clearer and dazzling sound in the *finale*, even though the tutti orchestra and chorus are scored simultaneously at a *fortissimo* dynamic.

Beethoven writes a piccolo trill on A2 above the *forte* pedal A roll on the timpani at measures 865-868, allowing the overtones of the timpani to combine and support the piccolo trill. This prominent effect is intensified by a *forte* orchestra texture, and the piccolo's trill reinforces the harmonic overtones of the chord.

Melodic Organization

The melodic organization can also be placed into four categories as shown in the instrumental paring table: orchestra tutti; solo or solo with other instruments; unison with flute; and an octave higher than flute. In this section, we will focus on the solo or solo with other instruments including flute.

Symphony No. 5, Op. 67, Fourth Movement (1805)

At measures 73-76, Beethoven writes several melodic passages for the piccolo, and here the function is to echo the violins beginning at measure 65. The difference between the passages is the setting; the violin is scored in a chamber setting (with clarinets, bassoons, violas and cellos), while the piccolo joins the full orchestra, providing rich background support. In this movement, the piccolo performs a fast moving melodic - phrase when paired with the flute or first violins to strengthen the melodic passages or themes. Measures 90-91 provide a good example of the piccolo color brighten up the first

violin melody by doubling an octave higher, while the remaining of the woodwinds accompanies the melody.

Symphony No.6, "Sinfonia Pastorale" Op. 68, Fourth Movement (1808)

In this movement, the piccolo has no melodic passage, and its sole function is to reinforce the orchestral tutti passages during the "storm" scene.

Egmont Overture, Op. 84 (1810)

In this overture, Beethoven demonstrates the piccolo's ability to solo in its high melodic register, and he scores piccolo with the flute and violins texture. A long solo part for piccolo is seen at measures 293-307; where a brilliant melody projects the best range of the instrument and soars above the orchestra. Another solo part enhances the bass line at measures 330-340, where Beethoven's use of the piccolo's lower register enhances out the bass line. This orchestration technique is unique and effective, where other accompanying instruments either play long notes or tremolos.

Symphony No. 9, Op. 125 Fourth Movement (1824)

The *Alla Marcia* section (measures 331-431) benefits from the piccolo's high, shrill timbre to enhance on the "Ode to Joy" theme; and the piccolo is scored primarily an octave above the woodwinds at the beginning of the *Prestissimo*. The new combination of the piccolo with the solo voice reveals a new timbre between the soprano vocal line and the piccolo at measures 869-875. This is the only distinctive passage written for

piccolo in the Maestoso (measures 917-918), where the piccolo scoring is separate from the woodwinds but in unison with the strings.

CHAPTER V

CONCLUSION

This dissertation has presented Beethoven's orchestration technique utilizing on the piccolo through discussion and comparison of his symphonic works: Symphony No. 5, Symphony No. 6, *Egmont Overture* and Symphony No. 9. The assessment includes a comparison of the evolution from the baroque piccolo toward the modern one. The assessment also includes structural harmonic analysis, range, balance, instrumental paring, and melodic organization. Through these analytical tools, the following four elements emerge as a conclusion:

Piccolo Usage Introduces the Joyous, Major Mode Harmony

Hector Berlioz writes in his orchestration book, "In pieces of joyous character, the sounds of the second octave may be suitable, in all their gradations; while the upper notes are excellent (*fortissimo*) for violent and tearing effects: in a storm for instance, or in a scene of fierce or infernal character."⁴⁵

Also mentioned by Cecil Forsyth, all piccolo passages found in Beethoven's symphonic works are in major, brilliant and dramatic in style; in other words, no sad mode or slow melancholy passages. In Beethoven's Fifth Symphony, he concludes a minor-mode work with a major-mode finale, adding piccolo and changing from C minor to C major, in an atypical fashion from three examples in another C minor works, such as

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⁴⁵ Berlioz, *Treatise*, 121-5.

the Third Piano Trio Op. 1 and the String Quartet Op. 18, IV. 46 The key relationship used in his Fifth Symphony foreshadows that used in the Ninth Symphony, which provides a triumphant finale over a darkened world.

Beethoven pioneered the use of piccolo as a shrill and joyous instrument, and although piccolo is largely used other loud, piercing and vibrant instruments, the delicate effect with its soft capabilities should not be overloaded in producing a lighthearted effect.

Range

Forsyth says, "One must remember that as the piccolo reaches the top of its compass, the notes are produced with greater difficulty that the corresponding notes of the flute.",47

Beethoven writes for the piccolo in this brilliant, high register; for example, the G-A trills in the Fifth Symphony and continuing a scale passage from flute to piccolo creates the sound of only one instrument with a wide range. Particularly the solos in Egmont Overture and the Ninth Symphony, Beethoven maximizes the piccolo's range. Although there are some arguments regarding the lower-range usage of the instrument, this issue belongs to the balance between the baroque and modern orchestral artistic decisions.

⁴⁶ Joseph Kerman, "Beethoven's Minority," in Haydn, Mozart and Beethoven: Essays in Honor of Alan *Tyson*, ed. Sieghard Brandengerg (Oxford, 1998), 146-98. ⁴⁷ Forsyth, 200.

Balance

The dissertation chronicles the mature growth of Beethoven's orchestration technique from the Fifth Symphony to the Ninth Symphony. The balance of piccolo usage is shown on the Instrumental Pairing table, with noted issues from a comparison of the Fifth and Sixth Symphonies to the *Egmont Overture* and finally Ninth Symphony; Beethoven learned and developed his style of piccolo usage from the experiences gained as a composer and orchestrator.

Melodic organization

According to period sources, the Fifth Symphony was completed after the Sixth Symphony, and as a result, one observes the reason that the Fifth Symphony includes more piccolo melodic figures than the Sixth Symphony. However, although the piccolo has solos in the Fifth Symphony, most of the solos double with paired flutes and other instruments, and only a fragment of a solo was written for the piccolo.

In the *Egmont Overture* and the Ninth Symphony, one observes a drastic change in the length of melody or solos given to the piccolo. Beginning with the end of the *Egmont Overture* and the *Alla Marcia* and *Prestissimo* of the Ninth Symphony, the substantial growth in solo length for the piccolo demonstrates the newly important role of the piccolo and its acceptance by the composer and the early nineteenth century audience.

This dissertation includes observations of performers, theorists and musicians; and these guides provide the reader with better understanding of the piccolo's usage in

Beethoven's orchestration. By following the constructive advices, piccolo players will bring a deeper musical, technical understanding to individual performances.

APPENDIX A SUPPLEMENTAL TABLES AND FIGURES



Figure A.1: Boxwood piccolo with bands and one brass key used during the 18th century.



Figure A.2: Piccolos with six silver keys used after 1825.



Figure A.3: The Boehm system piccolos used after 1850.

Table A.1: Beethoven's works that include piccolo.

1790	Musik zu einem Ritterballett – Mvt. 1, 3 ("Jagdlied," Trio), 6, and 8
1795	Menuetten – Number 1, 9, 11, and 12, Trio
1795	Deutsche Tänze – Number 6,10, 11, and 12, Coda
1805	Fifth Symphony – 4 th mvt., Op. 67
1808	Sixth Symphony – 4 th mvt., Op. 68
1809	Märsche für Militärmusik, WoO 18
1810	Märsche für Militärmusik, WoO 19
1809-10	Marsch (Zapfensrtreich), WoO 20
1810	Polonaise, WoO 21
1810	Ecossaise, WoO 22
1810	Egmont Overture, Op. 84
1811	Die Ruinen von Athen – Number 4, Marcia alla turca
1811	König Stephen – 3 rd mvt., Siegesmarsch
1813	Wellingtons Sieg oder Die Schlacht bei Vittoria – Menuet
1816	Militär-Marsch, WoO 24 – Trio all'Ongarere
1824	Ninth Symphony – 4 th mvt., Turkish Marsch

Example A.1: Beethoven's Menuetten 12.









Table A.2: Musical Function of Piccolo in Fifth Symphony, Fourth Movement.

Discola Hanna	Musical Function			
Piccolo Usage	Measures	Details		
Expansion of Texture and Range	1-22	 The non-chromatic passage provides clarity to the sound. Highlights the importance of the piccolo as a soloistic instrument by enlarging the scope of the orchestra. Expands the range by using the piccolo in its third octave. 		
Voicing	25-33	 Adds brilliance to the violin texture. E dominant seven → A major. 		
	253-259	 Exact repeat of measures 44-50. Creates new height, adding brilliance at this dramatic moment in the movement. 		
	385-389	 Unique orchestral voicing with tenor trombone that is joined by the trombone duo; Forms a suspended cadence to an augmented 6th progression, V – I cadence. 		
Modulation	65-76	 C# diminished seventh → D major (vii°⁷-I) E dominant seventh → A minor (V⁷-i) A major → E major → G major Violins – major and minor mode Piccolo – major mode only, conveys "Joy". 		
Rhythmic Motive	244-250	 (F#-G-G-G—) recalls the short motif at the beginning of the first movement – the fate motive. Melodic figure fills the barmony and further 		

Table A.3: Musical Function of Piccolo in Sixth Symphony, Fourth Movement (measures 82-119).

Discola Hanna	Musical Function		
Piccolo Usage	Measures	Details	
Enhances Bass Line	78-94	 Descending bass line from (G3-G^b2) with ascending piccolo passage from (A^b6-D^b6). Chord Progressions*: A^{b7}- D^b [V⁷ - I] - F⁷- B^b [V⁷ - I] - B^{b7}- E^bm [V⁷ - i/ii (of D^b)] - C^{Ø7}- A^b- D^b [vii^{Ø7} - V⁷ - I] 	
Chromatic-Modulation	95-103	 G2, sustains throughout the entire chromatic passage. The strings and woodwinds illustrate the blowing wind. G2 (piccolo) and pedal E (2nd Bassoon) form the E diminished seventh chord. 	
Chord Functions	106-119	 Serves as the fifth note of F# diminished seventh chord. A diminished seventh (serving as the third note of the chord), leading to B^b minor. F (root of F dominant seventh) – F (fifth of B^b minor) – G (third of E diminished seventh on pedal F) and finally arrives at F (root of F dominant, leading back into B^b minor). 	
Dynamic Balance	82-116	An arch-shape harmony provides the high point of the piccolo usage, although its distinctive voice creates a different timbre.	

^{*}The bold notes in the chord progressions indicate the piccolo pitch.

Table A.4: Musical Function of Piccolo in *Egmont Overture*.

Piccolo Usage	Musical Function			
	Measures	Details		
Dominant Pedal	293-307	 Trills on third space C2 → A2 (Dominant → Mediant of F major) Ostinato figures A-G-F-G-A depict the triumphant march over the tonic F major 		
Ostinato figures	311-329	 Extends the violin's ostinato figures, filling the half notes, and creating the effect of extension and suspension. I-V-vii°-I, through a short modulation from F⁷-D-G-B^bm-C-F. 		
Chord Function	330-347	 Articulates the middle range ascending arpeggios. Dominant pedal tone; contrasted with a timpani roll on the tonic pedal, creating a solid fifth pedal chord that leads to F major. 		

Table A.5: Musical Function of Piccolo in Ninth Symphony, Fourth Movement.

Piccolo Usage	Musical Function			
	Measures	Details		
Distant Modulation	331-431	 New modulation key represents a kind of recapitulation while creating a quality of large-scale closure. Piccolo's pp → ff depicts a military parade and extends the "Ode to Joy" theme new heights through repetition. D major → B^b major → D major 		
New timbre with Voice	851-875	Paved with voice and orchestra, broadening the dynamic range and maximizing the orchestral		
	876-902	The highest-pitched instrument to lead the harmonic progression, based on the modal mixture of D major and D minor, followed by a half-cadence.		
Melodic Function	916-919	 Melodic passage paired with strings. 32nd-subdivisions that hold back the emotion before entering the <i>Prestissimo</i> Finale. 		
	920-940	 Leads the strings and winds by changing meter from 3/4 to 4/4. States the "Ode to Joy" theme while the strings are in a compressed version; with voices both interwoven to the brilliant ending. 		

Example A.2: Beethoven's Piano Sonata Op. 7, Rondo.



* The E major before the final E^{b} major.

APPENDIX B PERFORMANCE PRACTICE SUGGESTIONS

Symphony No.5, Op. 67, Fourth Movement

Example B.1: Measures 330-333.



The piccolo player must be careful not to enter late after the downbeat or arrive behind the orchestra on the third beat, using a light articulation for a successful result.

Example B.2: Measures 336-339.



Jack Wellbaum states in his excerpt book, "The G-A trill is a long one! Try to increase intensity as it progresses." To achieve this effect, the piccolo player should increase the

⁴⁸ Jack Wellbaum, *Orchestral Excerpts for Piccolo with Piano Accompaniment*, ed. Daniel Dorff with piano reductions by Martha Rearick (Bryn Mawr, PA: Theodore Presser, 1999).

air speed steadily and be careful of the intonation; the pitch tends to rise with additional drop from air speed or reduced air support.

Symphony No.6, Op. 68, Fourth Movement

Example B.3: Measures 78-94.



The piccolo player should listen to the bass line before the entrance at measure 82, to stabilize intonation and of attach for accuracy. The piccolo player should listen to the Cello or Double Bass throughout the movement as the entrance lacks preparation or warm up before the exposed entrance.

Symphony No.9, Op. 125, Fourth Movement

Example B.4: Measures 331-431.



The *pianissimo* dynamic at the entrance in measure 343, continues the same volume for 40 measures, and the piccolo player must preserve the *sempre pianissimo* into the high register above D3 (measure 351), taking care with the difficulties of pitch intonation at soft dynamic levels in this area of the piccolo.

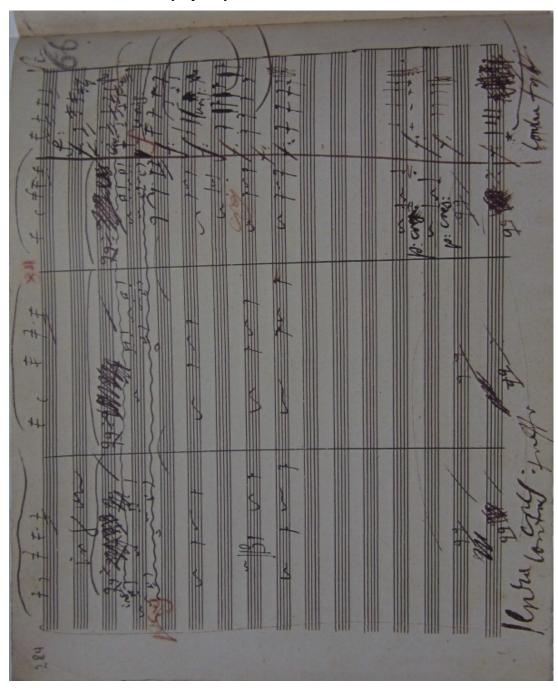
Example B.5: Measures 851-875 from Symphony No.9, Op. 125, fourth movement.

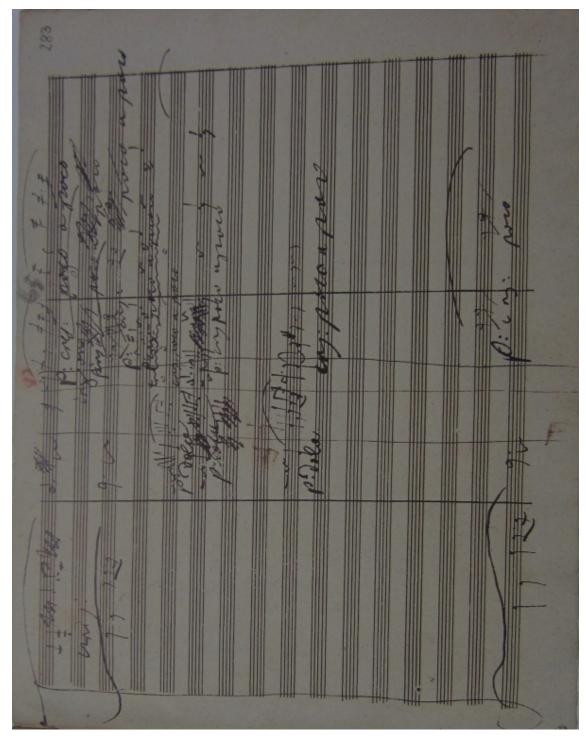


After the opening solo of the *Turkish Marsch*, the piccolo maintains its melodic role throughout the *prestissimo* passage. Piccolo is written in unison with the other woodwinds but sounds an octave higher, and the piccolo player should take care to avoid of the sharp intonation. With the flutes also in the third octave, it is essential to match the intonation with the flutes. Following the extended A trill, the piccolo continues in measure 869 with the main melodic line. Sounding an octave higher than the soprano soloist, the piccolo player should listen to both the orchestra and solo voices that serve as harmonic and melodic points of reference.

$\label{eq:appendix} \textbf{APPENDIX} \ \textbf{C}$ FACSIMILES FROM VERLAG, BREITSKOPF & HÄRTEL

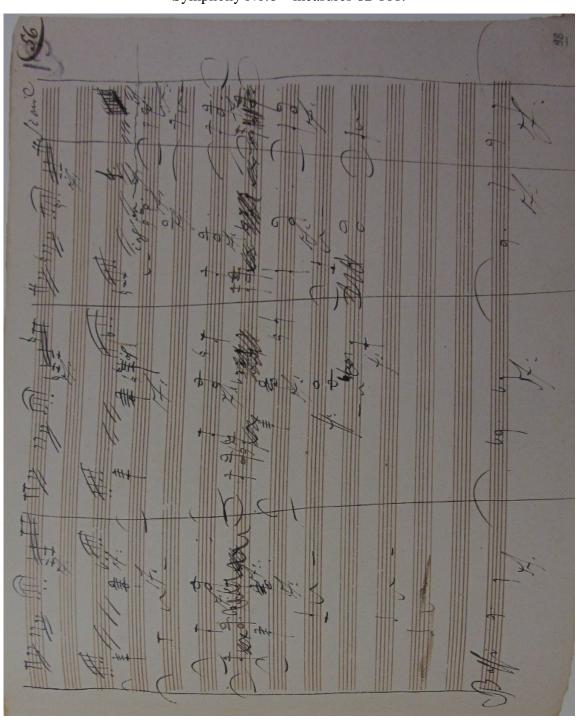
Symphony No.5 – measures 336-344

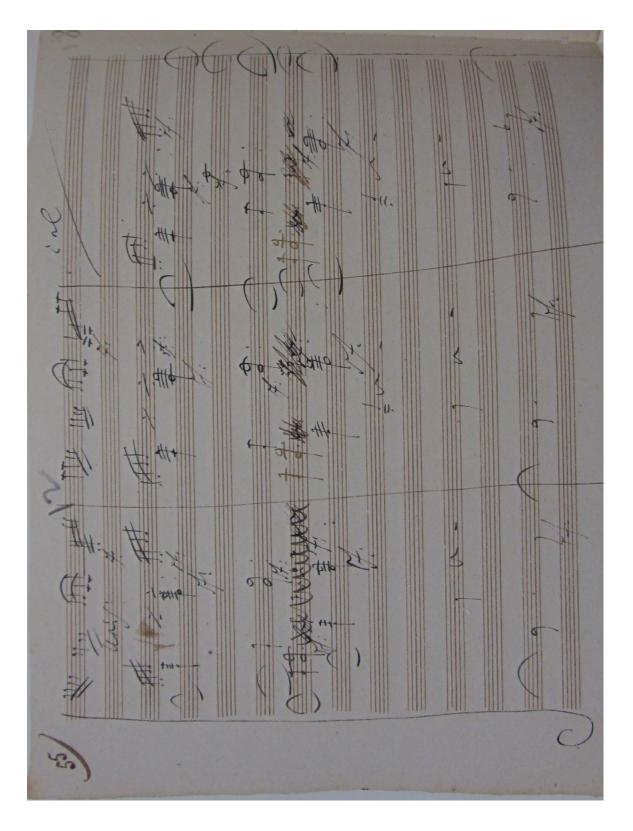


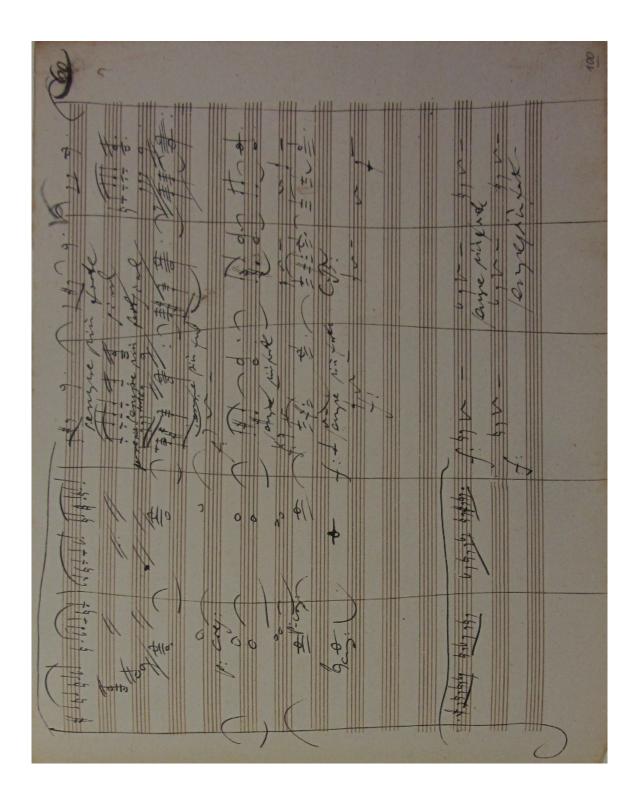


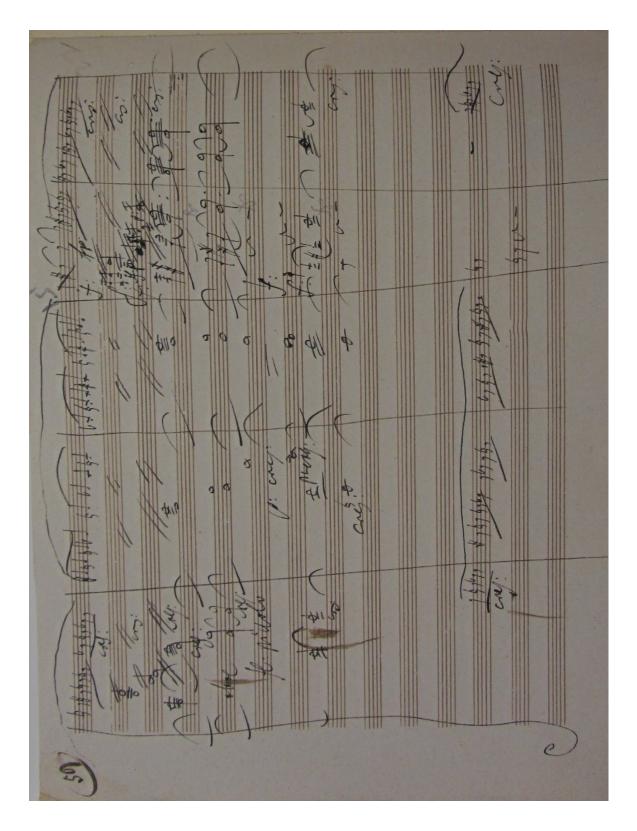
*Noted that the Stings are placed above the Woodwinds, followed by Brass and Percussion.

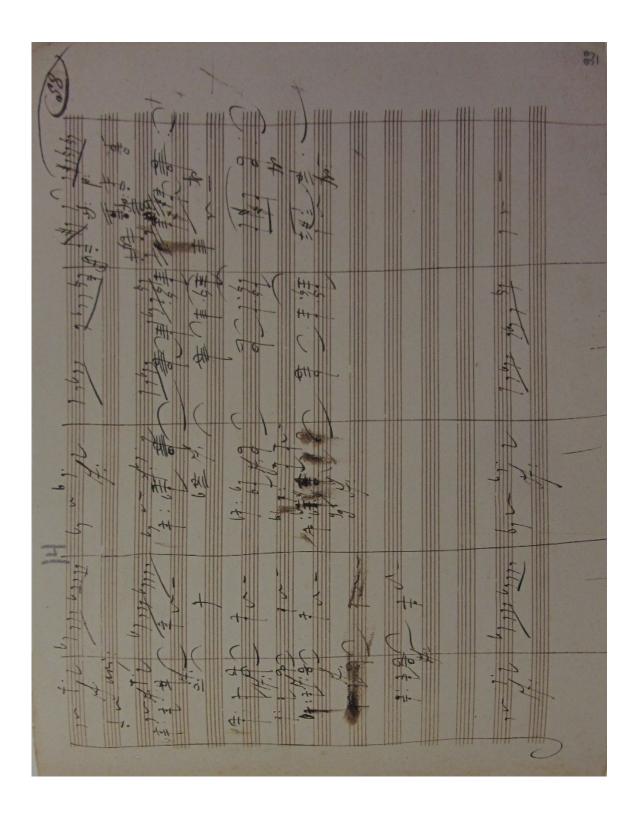
 $Symphony\ No.6-measures\ 82\text{-}101.$

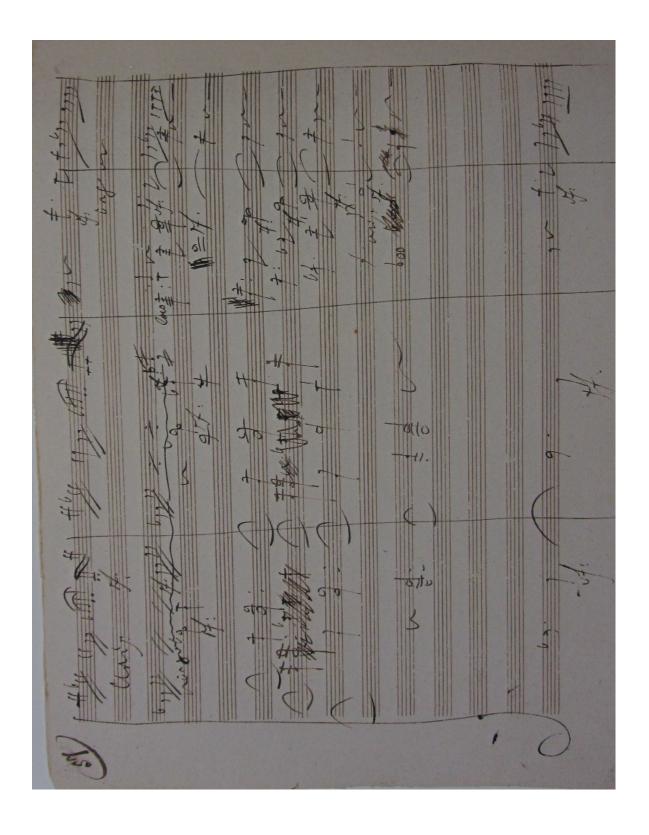


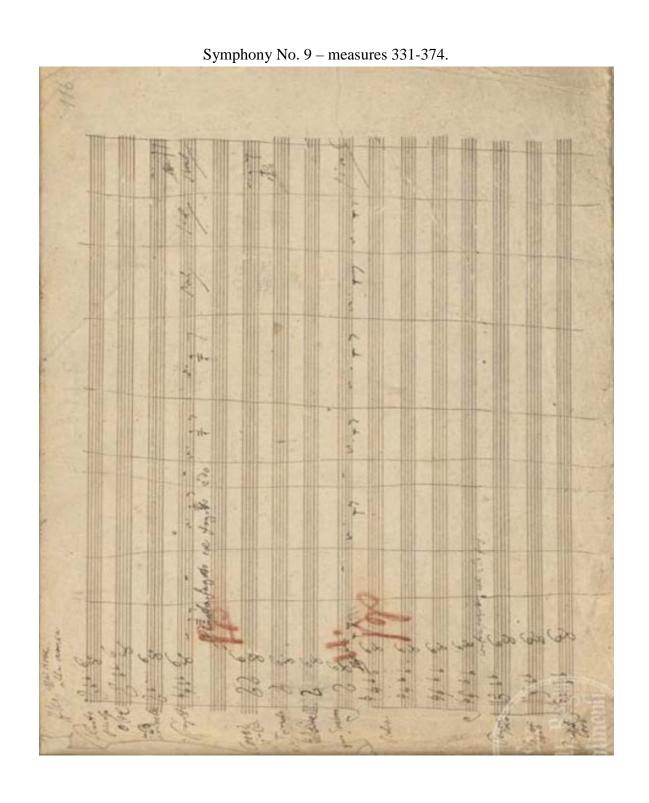


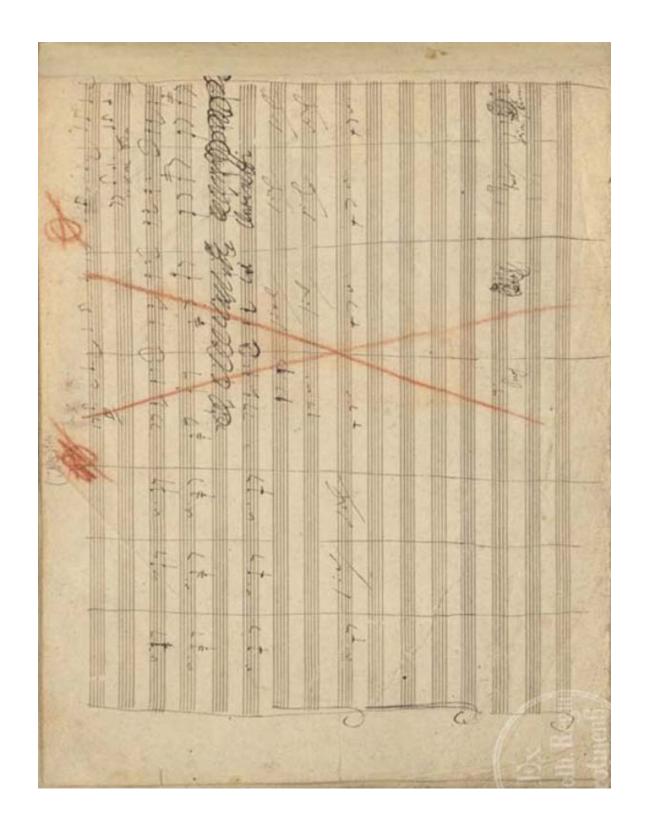


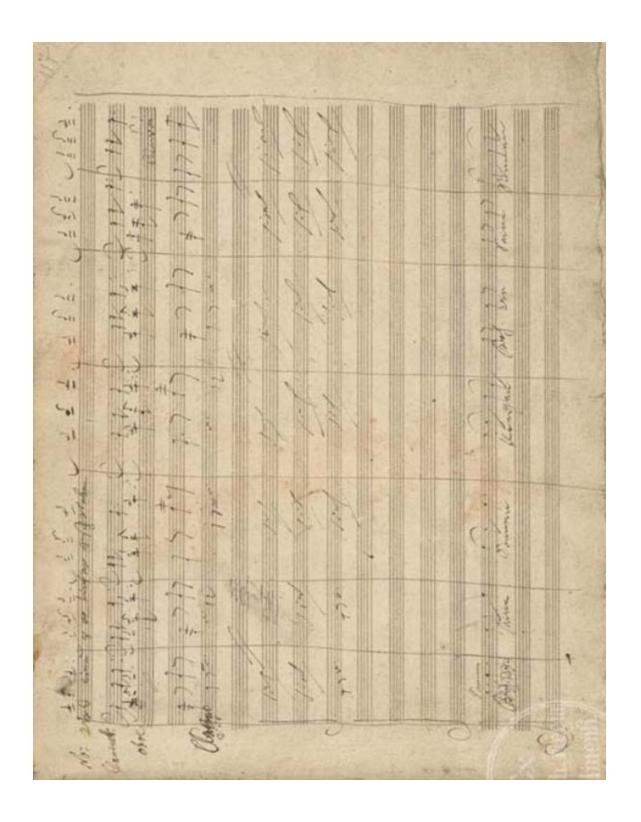


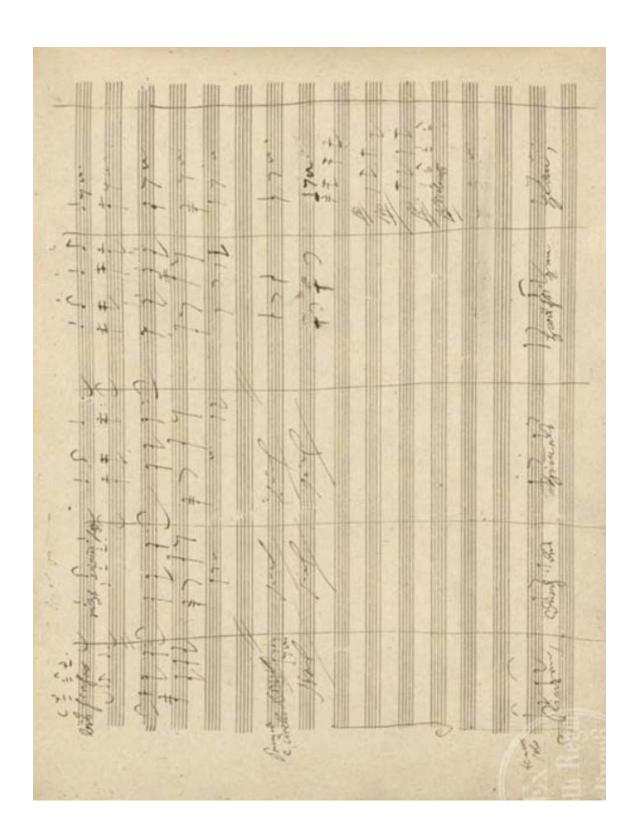


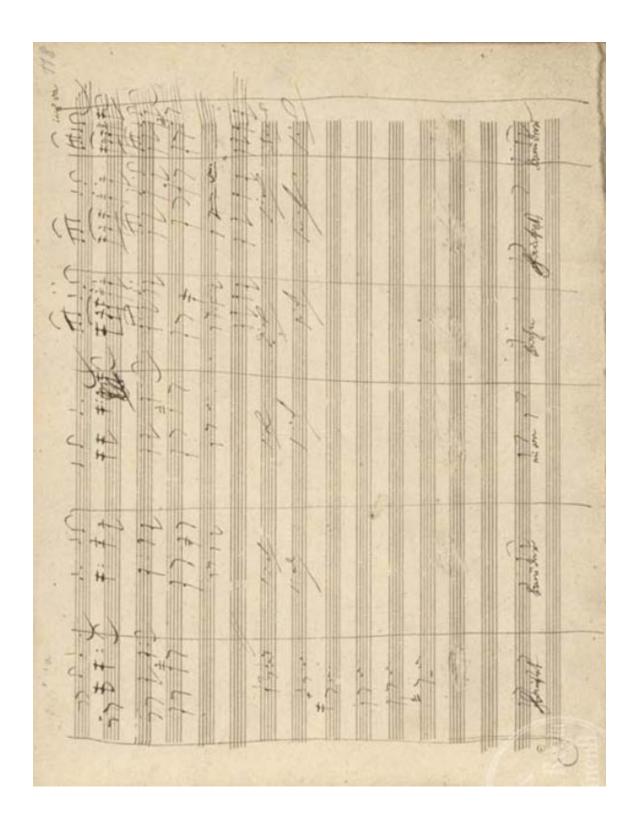


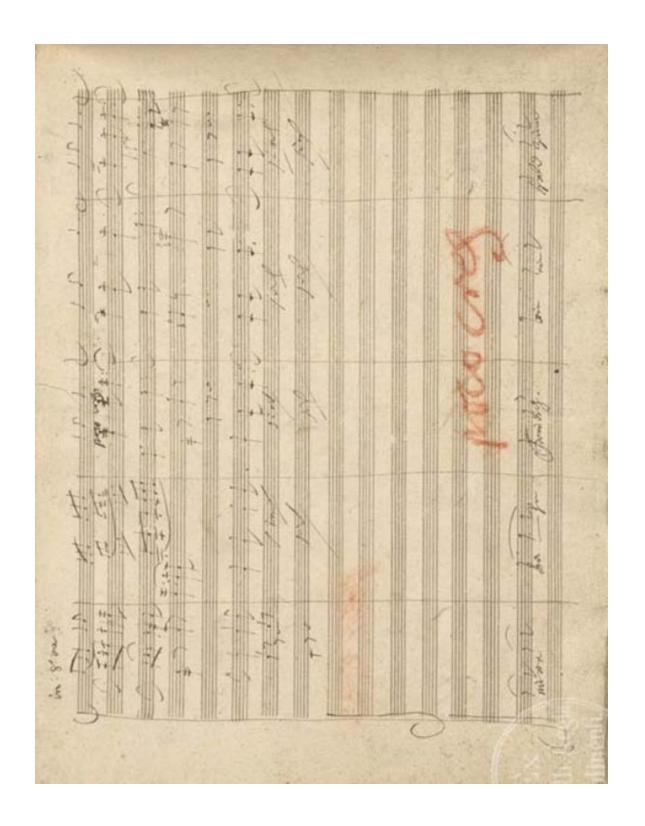


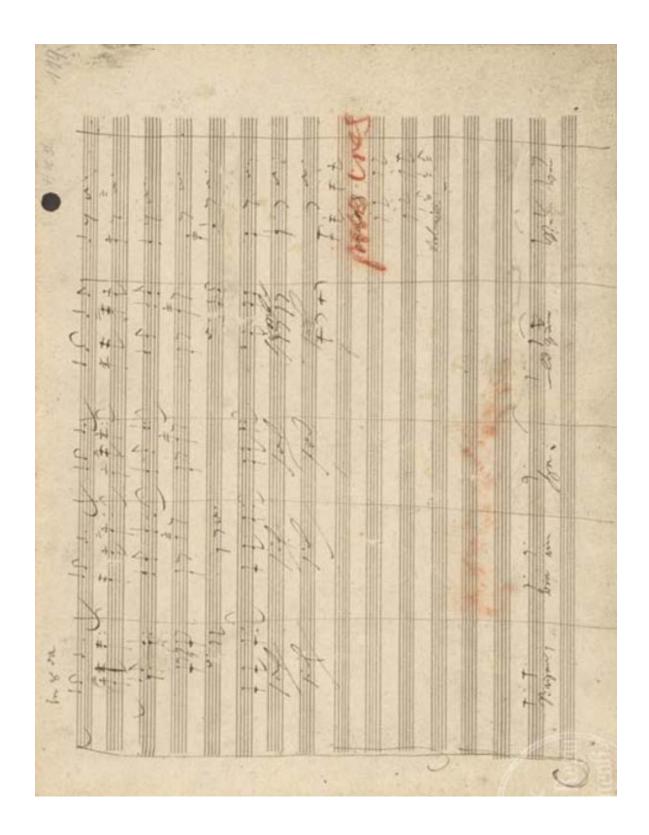


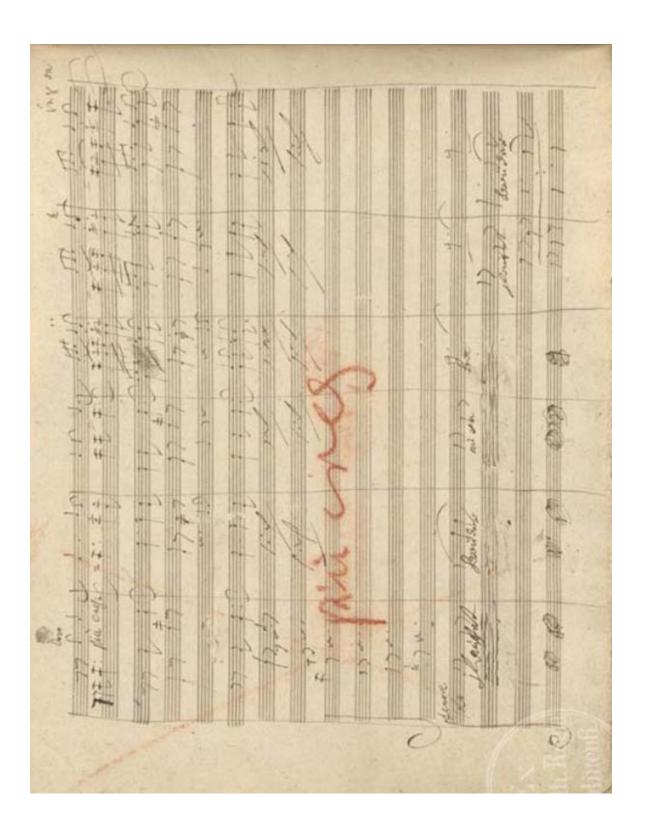


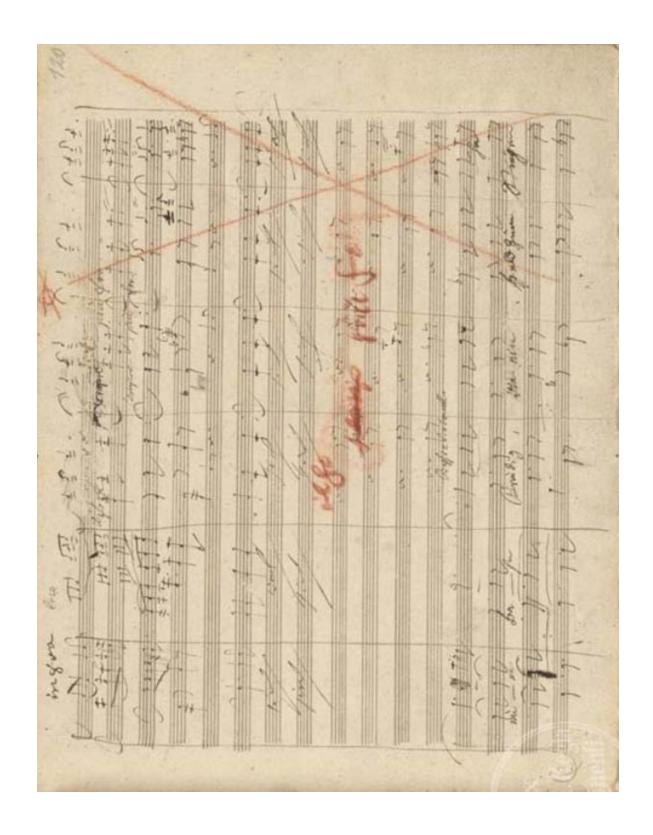


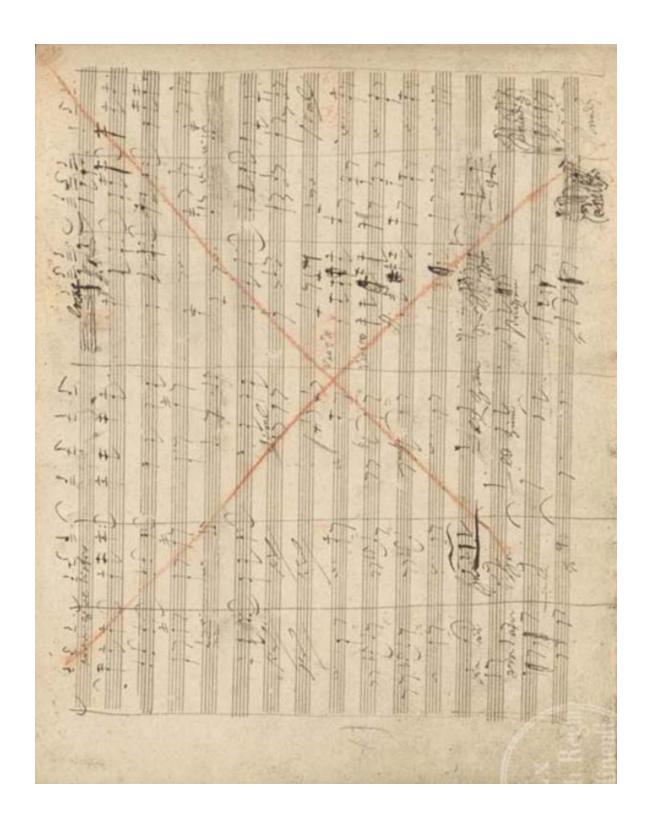


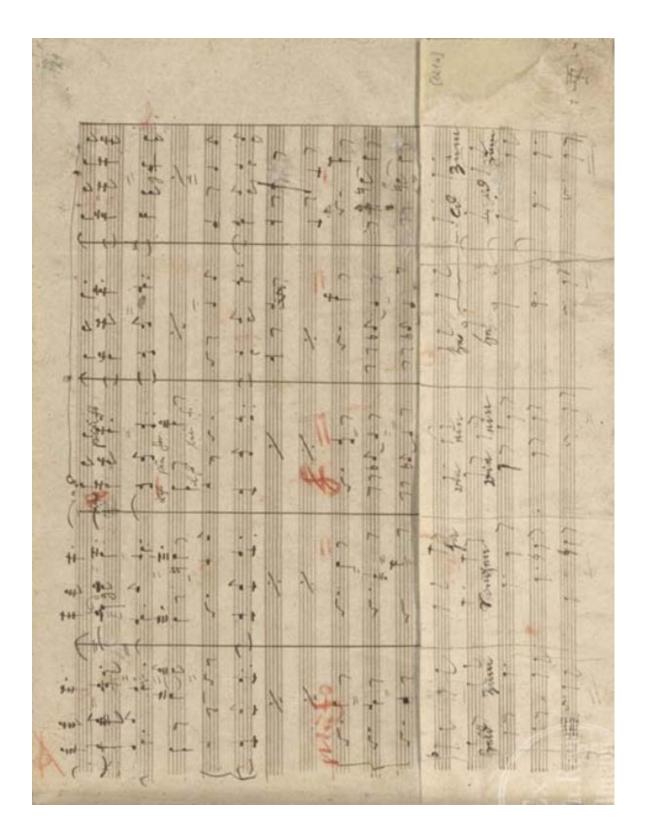












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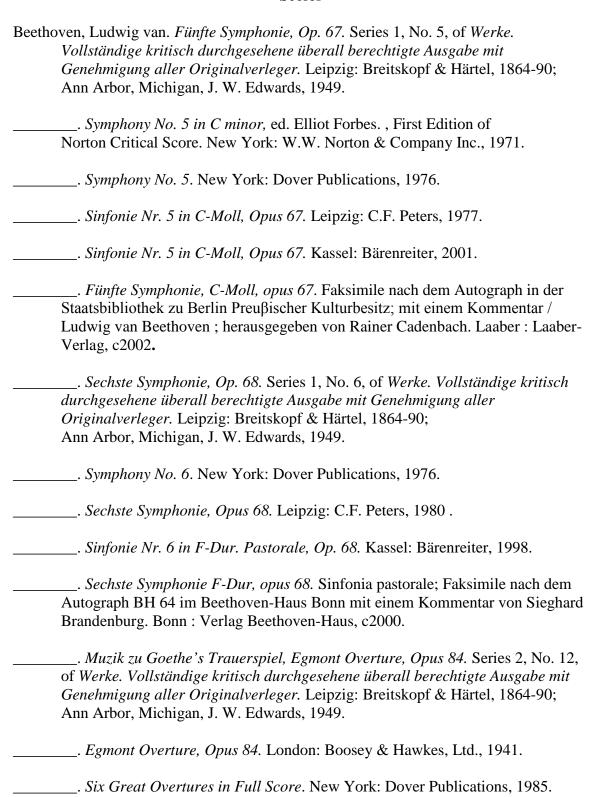
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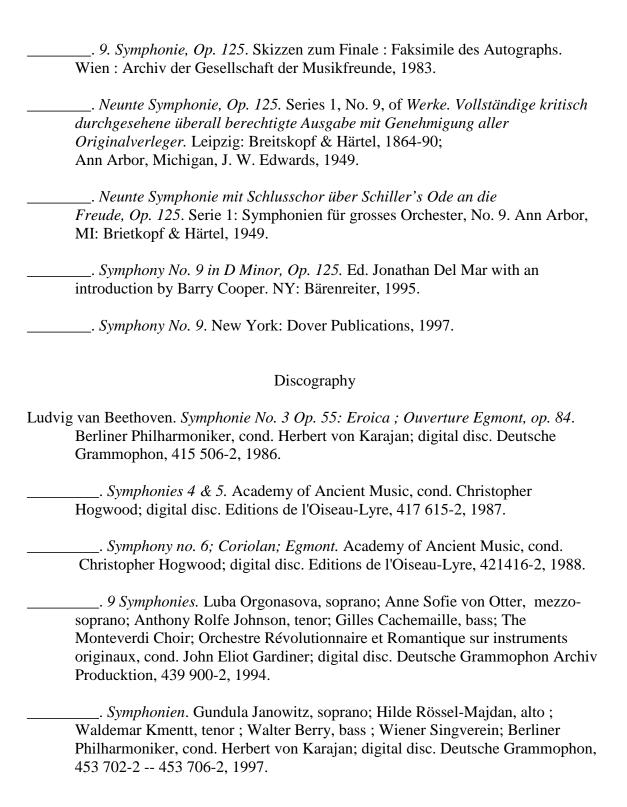
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Scores





______. Symphony no. 9. Sinéad Mulhern, soprano; Carolin Masur, mezzo-soprano; Dominik Wortig, tenor; Konstantin Wolff, bass-baritone; Chœur de chambre Les Éléments; La Chambre philharmonique, cond. Emmanuel Krivine; digital disc. Naïve, 822186052020, 2009.