

Beethoven's Interrupted Tetrachord and the Seventh Symphony

by Robert Gauldin

In his *Beyond Orpheus*, David Epstein invokes Schoenberg's concept of *Grundgestalt*¹ as the basis for his investigation of unifying features in the initial movement of Beethoven's Third Symphony.² He states that the "basic shape of

[Editors' note: this article uses the ASA system of pitch designation (middle c = C4).]

¹In discussing the organicism of a composition arising from its initial inspiration to its completed state, Schoenberg incorporated a number of terms (*Einfall* or *Gedanke*, *Motiv*, and *Grundgestalt*) without sufficiently clarifying the precise meaning of each or their exact relation to each other. Although he appears to have used the last of these in connection with his serial writing (where *Grundgestalt* = original 12-tone set), it has subsequently been applied to tonal analysis as well. Epstein's definition will suffice for this investigation of the Seventh Symphony: it is a "flesh-and-blood" musical structure, "a configuration of musical elements that is significant to the form and structure of a work and is manifested throughout the work in differing guises." (See his "Schoenberg's *Grundgestalt* and Total Serialism: Their Relevance to Homophonic Analysis," [Ph.D. dissertation, Princeton University, 1968], 14). For an extended presentation of the evolution of Schoenberg's thoughts in this regard and later ramifications by his followers, Epstein, Patricia Carpenter, and Severine Neff, see Steven Laitz, "Pitch-Class Motives in the Songs of Franz Schubert: The Sub-Mediant Complex," (Ph.D. dissertation, Eastman School of Music, 1992), 2-29.

²Beethoven's quest for intramovement compositional unity has continued to arouse the interest of musical analysts. In addition to the movements discussed in the various volumes of Schenker's *Der Tonwille*, see Patricia Carpenter, "Grundgestalt as Tonal Function," *Music Theory Spectrum* 5 (1983), 15-38; David Headlam, "A Rhythmic Study of the Exposition of the

the opening theme is seminal for the entire movement," pointing out the manner in which subsequent foreground and middleground tonal events are derived largely by triadic outline or half-step motion.³ During his later discussion of ambiguity, he notes that a "local event of ambiguous nature" may exert "specific subsequent influence upon the work."⁴ In the case of the "Eroica" the C#3 in m. 5, resolving to the unexpected G-minor $\frac{6}{4}$, is later reinterpreted as Db, effecting a passing motion to C⁷ that prepares the new key of F major in the recapitulation (mm. 402–09).

Although Epstein's observations do not exceed the bounds of the opening movement, I would like to propose the further extension of a hypothetical "ambiguous *Grundgestalt*," whose basic characteristics influence the tonal unfolding of the *entire* four movements of a symphony. A case in point is the Seventh Symphony in A major, Op. 92, of Beethoven. Scholars of this work have commented on a number of its unusual features, without attempting to rationalize them in terms of some single basic

Second Movement of Beethoven's Quartet Op. 59, No. 1," *Music Theory Spectrum* 7 (1985), 114–38; Ernst Oster, "The Dramatic Character of the *Egmont* Overture," *Musicology* 2/3 (1949), 269–85; Carl Schachter, "Beethoven's Sketches for the First Movement of Op. 14, No. 1: A Study in Design," *Journal of Music Theory* 26/1 (1982), 1–21; Janet Levy, *Beethoven's Compositional Choices: the Two Versions of Op. 18, No. 1, First Movement* (Philadelphia: University of Pennsylvania Press, 1982), to cite but several. Some studies of intermovement relations are cited in footnote 33.

³David Epstein, *Beyond Orpheus: Studies in Musical Structure* (Cambridge: MIT Press, 1979), 111–38.

⁴Epstein, 162.

progenitor.⁵ The following analysis will endeavor to demonstrate that the origins of the subsequent tonal structure of this symphony may be traced directly to the opening ten measures of its introduction.

A glance at its reduction (Fig. 1) reveals that mm. 1–7 and 9–10 outline a descending chromatic tetrachord in the bass: A–G♯–G♭–F♯–F♭–E.⁶ As in the case of the opening thematic statement

⁵These include the imposing dimensions of the symphony's introduction (one of the longest in the composer's output), the rhythmically articulated E6 that bridges that section to the following Vivace exposition, the choice of the parallel mode for the Allegretto with its curious framing "second-inversion" sonorities, the foreign third-relationships of the monumental Scherzo, the emphasis on the dominant in the opening of the Finale, and the complete restatement of the first theme in C major during the development of that movement.

Although the older guides to Beethoven's symphonies such as those of Colombani, Evans, Girard, Grove, Nef, Nievergelt, Overhoff, and Tovey tend to stress a descriptive-thematic approach, without exception they mention at least one of the above features. Of the more recent surveys, those of Antony Hopkins, *The Nine Symphonies of Beethoven* (London: Heineman, 1981), 196–219, and Lionel Pike, *Beethoven, Sibelius, and the 'Profound Logic'* (London: The Athlone Press, 1978), 53–58, concentrate on more purely tonal processes.

⁶It is curious that almost none of the commentators on this symphony mentions this familiar device. Epstein observes several occurrences in the initial movement (see 226–27 in *Beyond Orpheus*), while Pike points out that the opening bass notes A–G♯–G constitute a motive that continually returns in various guises throughout the symphony (see 53–54 of his *Beethoven*). For example, refer to mm. 128–29 and 401–02 (first movement), 235–40 and 503–05 (third movement), and 381ff. (fourth movement).

The descending chromatic tetrachord is a "stock-in-trade" harmonic progression. Beethoven utilizes it prominently in several other works, including the Trio to the Scherzo of Op. 18, No. 2, the Thirty-Two Variations on An Original Theme, WoO 80, and the opening measures of the first two movements of the "Waldstein" Sonata, Op. 53. The latter's Introduzione is especially exotic and has prompted several different explanations. (See Charles J. Smith, "The Functional Extravagance of Chromatic Chords," *Music Theory Spectrum* 8 [1986]: 94–139; David Beach, "On Analysis, Beethoven, and Extravagance: A Response to Charles J. Smith," *Music Theory Spectrum* 9

Figure 1: Introduction to First Movement (mm. 1-15)

The musical score is written for a single melodic line on a treble clef staff. The key signature is A major, indicated by two sharps (F# and C#). The music consists of 15 measures. The first measure (m. 1) is a whole note chord of A major (A, C#, E). The second measure (m. 2) is a half note chord of A major (A, C#, E). The third measure (m. 3) is a half note chord of A major (A, C#, E). The fourth measure (m. 4) is a half note chord of A major (A, C#, E). The fifth measure (m. 5) is a half note chord of A major (A, C#, E). The sixth measure (m. 6) is a half note chord of A major (A, C#, E). The seventh measure (m. 7) is a half note chord of A major (A, C#, E). The eighth measure (m. 8) is a half note chord of A major (A, C#, E). The ninth measure (m. 9) is a half note chord of A major (A, C#, E). The tenth measure (m. 10) is a half note chord of A major (A, C#, E). The eleventh measure (m. 11) is a half note chord of A major (A, C#, E). The twelfth measure (m. 12) is a half note chord of A major (A, C#, E). The thirteenth measure (m. 13) is a half note chord of A major (A, C#, E). The fourteenth measure (m. 14) is a half note chord of A major (A, C#, E). The fifteenth measure (m. 15) is a half note chord of A major (A, C#, E). The number 15 is circled in the top right corner of the staff.

A: I (bIII) (bVI) V I

in the “Eroica,” the composer cannot resist the temptation to insert some deviant or aberrational element in this initial pronouncement, which may be restated later in the work before its ambiguity is eventually “resolved.”⁷ Measure 8 and the first portion of m. 9 represent an “interruption” (or *Einschaltung*) in the voice leading. The initial F \sharp supports an applied V $_2^4$ that resolves to a surprising \flat III $_6$, which, in turn, moves to \flat VI (substituting for the usual iv $_6$ or It $_6$). What is Beethoven’s reason for this momentary diversion, and what future implications does it pose for the remainder of the symphony?

[1987]: 173–85; and Charles J. Smith, “A Rejoinder to David Beach,” *Music Theory Spectrum* 9 [1987]: 186–94.)

⁷During the initial presentation of thematic material, the insertion of a “deviant gesture” whose compositional purpose is ambiguous until its resolution later in the movement may be observed in a number of Beethoven’s works. It is not unusual for the composer to restate this problem several times in the course of the music before its eventual “solution.” The unison C \sharp at the beginning of the Finale to the Eighth Symphony (already noted by Berlioz) readily comes to mind. Its immediate tonal role remains in doubt until it finally functions as the dominant of F \sharp minor at the beginning of the second recapitulation (mm. 372–80). This enharmonic Neapolitan in turn completes the descending cycle of fifths initiated with the substitute relations of A \flat and D \flat major in the earlier exposition and recapitulation; see Robert Gauldin, “A Labyrinth of Fifths: The Last Movement of Beethoven’s Eighth Symphony,” *Indiana Theory Review* 1/3 (1987): 4–11. The Introduction to the Fourth Symphony contains no less than three such digressions—the significance of the $\flat\hat{6}$ culminating in the “deceptive” resolution of the enharmonic German $\hat{5}$ in m. 25, the pedal on A in mm. 31–35 creating a “false” preparation of D major, and the leap of the leading-tone A 5 to D 6 at the beginning of the exposition. Each of these is restated in various guises before their respective resolutions in mm. 446–50, 212–30 and 476–82. Such procedures would appear to fall naturally within the province of musical narrative, as pointed out by Patrick McCreless in a paper “Roland Barthes’s S/Z from a Musical Point of View,” delivered at the Society for Music Theory National Convention, Rochester, New York, 1987. Also see Rey Longyear, “Beethoven and Romantic Irony,” in *The Creative World of Beethoven*, ed. Paul Henry Lang (New York: W. W. Norton & Co., 1970), 145–62.

Four distinct features of this introductory phrase (or “basic shape”) may be singled out for separate scrutiny: the predominance of the notes A and E (scale degrees $\hat{1}$ and $\hat{5}$) in the upper voice,⁸ the passing allusions to the mixture harmonies of \flat III and \flat VI, the concluding bass figure (E)–F \sharp –E–A, and, of course, the interrupted tetrachord itself. The ensuing discussion will attempt to demonstrate the crucial roles these characteristics play in the remainder of the work. Rather than treating the individual elements separately, I will opt to deal with each successive movement in its totality, in order to provide a clearer overview of how the four distinct components of the introductory *Grundgestalt* influence their tonal process. The reductive diagrams are not voice-leading graphs in the strict Schenkerian sense, but are rather intended to highlight the presence of those features listed above. Nevertheless, the sketches do provide an accurate picture of the tonal structure of each movement.

The remainder of the symphony’s introduction consists of a restatement of the opening tetrachordal progression in which the former interruption is now vastly expanded (mm. 20–52); consult the brackets in Fig. 2. The former momentary references to \flat III and \flat VI are composed-out through the use of a new thematic idea: mm. 23–32 in C major and mm. 42–49 in F major.⁹ Observe the

⁸The upper-voice retention of scale degrees $\hat{1}$ and $\hat{5}$ is similar to the chromatic tetrachord setting that opens Mozart’s *Don Giovanni* Overture.

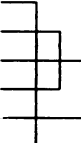
⁹A detailed analysis of this introduction may be found in Sulin Chen, “The Slow Introduction in the Early Works of Beethoven” (unpublished M.A. thesis, Eastman School of Music, 1982), 41–50. The proportions of the Introduction are interesting: [continued on p. 84]

Figure 2: Remainder of Introduction (mm. 15-67)

15 23 34 42 53 67
 4 4/2 6
 (bIII)
 A: I

prominent use of E and A as scale step $\hat{3}$ in the melodic line of these key areas.¹⁰ The transition between this pair of statements ascends from G# to C \natural in the bass (mm. 33–43), whose last note serves as the dominant for the ensuing \flat VI center. The arrival on E signals the typical dominant prolongation that prepares the following Vivace in A major.¹¹

The exposition features a large-scale octave descent from E ($\hat{5}$); consult Fig. 3 for a graph of the remainder of the first movement. Embedded within the basic harmonic scheme of I–V⁷/V–V are three brief “interruptions.” The deceptive motion to the mediant (from V⁷/V in mm. 109–15) will later be expanded in the exposition of the Finale. The pair of allusions to \flat III and \flat VI are set off by striking changes of texture and dynamics. While the C major passage (mm. 136–41) is more extensive, the latter briefly

Statement of opening tetrachord	14 measures	
Restatement of tetrachord	8 measures	
\flat III tonicization	11 measures	
Transition beginning on V ₆	8 measures	
\flat VI tonicization	11 measures	
Transition to Exposition	14 measures	

Beethoven had previously employed a very similar scheme in the introduction to his Cello Sonata, Op. 5, No. 2, although there the pair of tonicized areas is VI and \flat II in the minor mode.

¹⁰In his “Some Aspects of Tonal Relationships in Beethoven’s Seventh Symphony,” (*Music Review* 37/1 [1976], 1–4) Robert Below has traced the progress of the tone E throughout the entire work. However, the companion role of A, particularly in the Scherzo, is largely overlooked.

¹¹For Beethoven’s sketches of this section, see Gustav Nottebohm, *Zweite Beethoveniana* (Leipzig: C. F. Peters, 1887), 106.

functions as a substituted Neapolitan in the dominant key (mm. 162–63).

The tonal structure of the development assumes the shape of a long-range tetrachord, descending stepwise from V to iv, then through a passing I_3^6 to V_3^4 before the resolution to tonic in the recapitulation: E–D–C ♭–B–(A);¹² see the beaming in Fig. 3. Three inverted tetrachords appear in the bass of this section. During the initial chromatic motion from E up to A (mm. 177–236), the music pauses to restate a more emphatic tonicization of ♭III (mm. 181–210)¹³ before a final allusion to ♭VI (mm. 220–25). The A (as V/iv) then rises by half-step to the minor subdominant. One final tetrachord bridges the final B to E in the dominant area. Scale degree $\hat{5}$ (or E) remains suspended in the upper voice throughout, with the exception of the F ♭ neighbor during the D-minor section.

Following the restatement of first theme in the recapitulation (mm. 278–99), Beethoven proceeds to transpose the remainder of this section down a fifth to support an octave descent from the *tonic* pitch (A): I–IV–V⁷–I.¹⁴ With the exception of an ascending

¹²See the graph of this section in Felix Salzer, *Structural Hearing*, Vol. 2 (New York: Dover Publications, 1982), 226.

¹³The emphasis on G ♭ here (mm. 181ff.) in the context of C major is reminiscent of mm. 23–31 of the Introduction. Both are followed by a G ♯ (V_6); compare m. 24 with m. 211. One might also consider this extended ♭III section as an expansion of the earlier C-major interruption of the dominant area in the exposition (mm. 136–41).

¹⁴The movement to the subdominant in the transition of a recapitulation to prepare the succeeding V–I is exceedingly common in Classical major-mode sonata forms. The direct transposition of the first theme to IV, as in the present case, is a more daring procedure.

Figure 3: Vivace of First Movement

Exposition

Development

A: I V/V (iii) V (bIII) 6 (bII⁶/V) V/V V

V (bIII) 6 (bVI) V/iv iv 6 V⁴/₃

(Figure 3, cont'd.)

Recapitulation

Musical score for the Recapitulation section, measures 278-342. The score is written in treble clef with a key signature of one sharp (F#). The melody is marked with measure numbers 278, 301, and 342. The harmonic progression is indicated by Roman numerals: I, IV, 6, V, I, (bVI), 6, (bII⁶), V, I. The section concludes with a double bar line.

Coda

Musical score for the Coda section, measures 389-401. The score is written in treble clef with a key signature of one sharp (F#). The melody is marked with measure numbers 389 and 401. The section concludes with a double bar line.

third-progression, which substitutes for the previous “iii interruption” of the exposition (mm. 309–19), the music is essentially the same.

The coda opens with an aborted tetrachord from A to E, during which the unlikely enharmonic vii area ($G\sharp = A\flat$ major) is tonicized (mm. 389–94). Following the protracted alternation of V_2^4 – I_6 ,¹⁵ the movement concludes with an emphatic authentic cadence. In summary, it is hardly necessary to point out the significance of scale degrees $\hat{1}$ and $\hat{5}$ in the upper voice: E (in the exposition and development) and A (in the recapitulation). The development and coda feature no less than four prominent tetrachordal statements. The allusions to C and F major assume subsidiary functional roles of $\flat III$ and $\flat VI$ to the original tonic of A. Finally, the $\flat\hat{6}$ – $\hat{5}$ – $\hat{1}$ bass line of the Introduction’s original tetrachord occurs as the extended upper-line E – $F\flat$ – E –(A) in the development, as well as a surface transposition to $D\flat$ – $C\flat$ – $F\flat$ in the reference to $\flat VI$ (mm. 220–22).

The hybrid ternary/variation design of the Allegretto is cast in the tonic minor. This affords Beethoven easy access to its relative C major, the former $\flat III$ of the previous movement. This key is exploited in the short bridge from the contrasting section (mm. 139–43), forging a chromatic third-relation to its prevailing parallel A major, and in the reiterated opening theme, sketched in

¹⁵This is the famous passage that prompted the young Weber to declare Beethoven “fit for the madhouse.”

Fig. 4.¹⁶ Thus the flatted-median relation, released from its decidedly subservient role in the preceding Vivace, assumes greater tonal emphasis through its repeated tonicization.

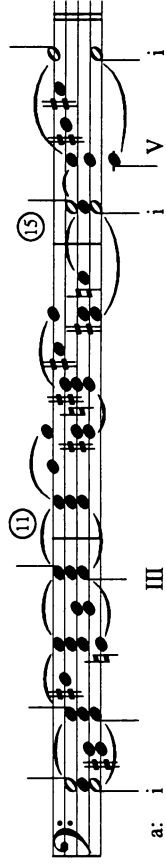
The insistence on E ($\hat{5}$) in the initial thematic statement (mm. 3–7) finds its counterpart in the extended dominant pedal of the contrasting section (mm. 116–22). In addition to the enigmatic “second inversions” that open and close the movement,¹⁷ the bass pronouncement of the variation theme in mm. 150–73 lends further weight to this tone. The consequent phrase of the movement’s beginning period features a descending chromatic tetrachord from E to B in the inner voice before its resolution to tonic (see Fig. 4). The single reference to the F–E–A motive is artfully disguised in the upper voice of the C-major bridge leading back to A minor (mm. 139ff.).

The gargantuan Scherzo is cast in the unlikely center of F major. The choice of any key other than a symphony’s tonic is rare for such a movement in the Classical period, but the occurrence of a \flat VI relation is virtually nonexistent. To compound matters, the key of the Trio is another third removed: F to D major. In fact, this movement is the only instance of a “double” chromatic relation in *all* of the Minuet/Scherzos of Beethoven’s major instrumental

¹⁶For sketches of this theme, see Nottebohm’s *Beethoveniana* (op. cit.), 106–7. It was originally intended for the String Quartet in C, Op. 59, No. 3.

¹⁷It is amusing to read the dialogue in Vol. I (1938) of *Revue Internationale de Musique* between Romain Rolland/Edgar Turel (105–7) and Alfredo Casella (299–301). This sonority has already been hinted at earlier in mm. 11–12 and 276–7 of the first movement.

Figure 4: Opening Theme of Second Movement




works.¹⁸ The rationale for this unique key scheme arises from a logical extension of the tonal processes established in the previous movements. The F major represents a large-scale composing-out of the \flat VI encountered in the symphony's initial Introduction and Vivace. To compensate for the absence of the original tonic area in the Scherzo's opening,¹⁹ the composer exploits A major as the basic subsidiary key in the Scherzo proper, so that the note A appears successively as scale degrees $\hat{3}$ (in F), $\hat{1}$ (in A), and $\hat{5}$ (in D of the Trio); consult Fig. 5.²⁰

The first retrogressive motive²¹ based on F–A–C–F may be viewed as scale degrees $\flat\hat{6}$, $\hat{1}$, and $\flat\hat{3}$ in terms of the symphony's overall tonic.²² The upper voice passes through G to

¹⁸See the *Alla danza tedesca* of Op. 130 (in VI \sharp). Opp. 27, No. 1; 70, No. 2; 74; and 131 feature scherzos in the relative key. A study of the key relationships of the Minuet/Scherzo and their Trios to the overall tonal design of Beethoven's sonata compositions may be found in Michael Luxner, *The Evolution of the Minuet/Scherzo in the Music of Beethoven* (Ann Arbor: University Microfilms, 1978), 171–2 and 185–6.

¹⁹Basil Lam observes that "the repeats add weight to the D major tonality of the Trio with its wonderful A inverted pedal, thus maintaining the tonic of the whole symphony as melodic, even when not tonal, centre." See Robert Simpson (ed.), *The Symphony: Haydn to Dvořák* (Baltimore: Penguin Books, 1966), 146.

²⁰The numbering of measures in the third movement includes first and second endings counted separately. See also the diagram in Hopkins, *Nine Symphonies*, 121.

²¹This gesture is centered on A: F A F A C A C (F).


²²Three sketches for the opening of this movement are quoted in Paul Mies, *Beethoven's Sketches*, trans. by Doris MacKinnon (London: Oxford University Press, 1929), 8. The first, apparently intended for the opening movement, is cast in the tonic key of A major; note the initial A–C \sharp , which eventually finds

Figure 5: Third Movement

Scherzo

Trio

F: I III # IV I V I

D: I V I V I F: V I

A, where the latter key is tonicized in place of the usual dominant, outlining the already familiar bass motive F-E-A in the first-reprise section. The cadential gesture in III \sharp (of F major) reiterates the concluding figure E-F \sharp -G \sharp -A of the preceding Allegretto (mm. 271ff.) in the 1st Flute part (mm. 21-22 of the Scherzo).

The second section of the two-reprise construct opens with a falling chromatic tetrachord from A that is broken off before its arrival on E: A-A \flat -G-G \flat -F. The final F functions as V⁷ for the return of the theme in the subdominant(!) of B \flat major. Beethoven sets matters right by its immediate restatement in the tonic of F. The former closing material in A is now set in the former "correct" key of C, perhaps as a kind of "apology" for the earlier use of III \sharp .²³ Its subsequent transposition to tonic concludes the Scherzo proper, with the residual A acting as a common-tone pivot to the D-major Trio.²⁴

its final form in mm. 25-26 of the completed Scherzo. The second version, although now set in F major, still insists on a cadence in A. The last example corresponds to the setting found in the symphony. Also see Schenker's foreground graph of the opening section in Vol. 2 of *Free Composition*, trans. and ed. Ernst Oster (New York: Longman Inc., 1979), Fig. 37b.

²³Beethoven frequently "apologized" for some of his more radical innovations. The eventual tonic presentation of the second theme (using its original textural setting) in the coda of the first movement of the "Waldstein" is a familiar example.

²⁴In regard to the possible origin of the half-step upper-neighbor motive so prominent in the Scherzo (as in mm. 32-43), see Hopkins, *Nine Symphonies*, 210-12.

The harmonic scheme of the Trio is based on a simple alternation of I and V⁽⁷⁾.²⁵ This allows the composer to hold A as an invariant pedal throughout this entire section. A brief transition based on the $\flat\hat{6}-\hat{5}-\hat{1}$ motive leads to the repeat of the Scherzo: C \sharp (=D \flat)-C-F. A series of *da capos*, producing a quasi-rondo design, moves to a miniature coda, where the omnipresent A finally moves to F. The brief reference to the D-minor sonority featuring A in the outer parts (consult mm. 645–48) is reminiscent of the “E-oriented” chord that opens and closes the Allegretto.

The Finale serves as a kind of summary of the four basic tetrachordal gestures that pervade the earlier movements: the return to an emphasis on E with its resolution to A, important tonicizations of \flat VI and \flat III in the development and recapitulation, the use of the $\flat\hat{6}-\hat{5}-\hat{1}$ motive as a significant aspect of the bass voice-leading, and an eventual “corrected” presentation of the original tetrachord (A down to E) *without* the former interruption; consult Fig. 6A.

The last movement opens on a prolonged V, supported by a double pedal in the outer voices. The melodic neighboring thirds above the bass resemble an inversion of the initial theme of the Allegretto (see Fig. 6B).²⁶ This dominant extension does not

²⁵A discussion of the derivation of the Trio melody from a pilgrim's hymn, as cited by Abbé Stadler (see *Thayer's Life of Beethoven*, reprint of the 3rd ed., vol. 2 [New York: Dover, 1962], 216), may be found in George Grove, *Beethoven and His Nine Symphonies* (London: Novello, Ewer, and Co., 1898), 256. However, Grove fails to point out its obvious relation to the half-step motive mentioned above.

²⁶For a discussion of Beethoven's reworking of the Irish folk song *Nora Creina* in the opening theme of the Finale, see Paul Bekker, “Beethoven's ‘Irische’ Sinfonie,” *Allgemeine Musikzeitung* 38 (1911): 481ff., and James Travis, “Celtic Elements in Beethoven's Seventh Symphony,” *Musical Quar-*

Figure 6A: Fourth Movement

Exposition

Development

Recapitulation

Coda

A: V I iii V (iVI) (i) bIII iv (bII)

22 79 128 150 180 229 259 280 310

Fig. 6B: II, 3-6

IV, 5-7

3 4 5 6

V I iv V I (iVI) I V I

achieve a real sense of resolution until the tonic statement beginning in m. 26.²⁷ If a conductor of this work immediately launches into the Finale, the relation to the preceding F of the Scherzo is unmistakable, producing a \flat VI–V–I (or our familiar F–E–A) in the bass.²⁸ The iii area, expanded from its previous role in the first movement Vivace, serves as a mediant-divider on the way to the final V of the exposition. The latter is abbreviated, since the ensuing repeat will pick up the reiterated dominant of the opening theme. Beethoven's choice of tonal centers is not arbitrary, since the prevalent upper-voice E functions in turn as $\hat{5}$, $\hat{3}$, and $\hat{1}$ in the successive keys of the exposition, a procedure that recalls the similar use of A in the Scherzo (as $\hat{3}$, $\hat{1}$, and $\hat{5}$). The $\flat\hat{6}$ – $\hat{5}$ – $\hat{1}$ bass motive provides the means of modulation in the first case: A–G \sharp –C \sharp (in iii).

The development continues to exploit this motive sequentially in a series of first-theme restatements by rising thirds: F major (\flat VI)–A minor (i)–C major (\flat III); see mm. 133–36, 140–43, 153–70 and consult the bass voice-leading in Fig. 6. The last of these key centers features a complete restatement of the Finale's

²⁷The numbering of measures in the Finale includes first and second endings counted separately.

²⁸An earlier instance of this procedure occurs between the second and third movements and in the transition to the Finale of the Fifth Symphony: A \flat –G–C, although the modality is minor. For major-mode instances, see the relation between the second and third movements of the "Emperor" Piano Concerto: B (=C \flat)–B \flat –E \flat ; and the last movements of the "Hammerclavier" Sonata: F \sharp (=G \flat)–F–B \flat . This motion also plays an important role in the Ninth Symphony, where the recitative-introduction to the last movement acts as an extended dominant, derived from the third movement's B \flat major and resolving to the D major of the "Ode to Joy" theme.

opening theme, with repeats.²⁹ An arpeggiated iv leads past the dominant to an extended reference to B♭ major or ♭II (mm. 208–26), thereby setting up the reappearance of the movement's original F♯–E–A motive leading back into the recapitulation (mm. 230ff.).³⁰ A prolonged retransition on V would prove redundant, since the opening measures of the exposition/recapitulation are already heavily saturated with dominant function.³¹

As in the first movement, the subdominant (iv in this case) provides the transpositional path back to tonic in the recapitulation: I–iv–V⁷–I. The signal for the coda (via the V⁷/IV in m. 154) is preceded by a final reference to ♭VI (mm. 330–41); notice the F♯–E–A bass in mm. 340–44. The *raison d'être* of the symphony's final section centers around one last tetrachordal presentation. Beethoven takes this opportunity to resolve the deviant gesture that opened the symphony by stating the tetrachord in its “correct” or normative version (mm. 378–405): A–G♯–G♭–F♯–F♭–E, albeit somewhat disguised by chromatic neighbors.

A few closing remarks are directed to the tonal design of the work as a whole, stressing possible *intermovement* relations derived from the tetrachordal *Grundgestalt*. Figure 7 graphs the

²⁹The change of key signature is the first such intramovement example found in the symphonies.

³⁰See Pike's comments on this passage in his *Beethoven*, 57.

³¹The second repeated section is missing at the opening of the recapitulation, which is doubtless due to the complete restatement of the first theme during the ♭III section of the development.

Figure 7: Summary of Symphony

(Intro.) | 1st Movement | 2nd Movement

3rd Movement

Scherzo | Trio | D.C. | 4th Movement

The image is a musical score summary for a symphony, presented as a single horizontal line of notation. It begins with an introduction marked '(Intro.)' and a double bar line. The first movement is indicated by a bracket above the staff. The second movement follows, also bracketed. The third movement is labeled '3rd Movement' and includes a 'Scherzo' section, a 'Trio' section, and a 'D.C.' (Double Coda) section. The fourth movement is labeled '4th Movement' and concludes the piece. The notation includes treble clefs, a key signature of one sharp (F#), and various musical symbols such as notes, rests, and bar lines to represent the flow of the symphony.

prominent outer voices of the four movements. While the framing movements move basically from E toward A, the middle movements stress E and A respectively. The bass motive (E)-F♭-E-A now suggests a explanation for the enigmatic second inversions that open and close the Allegretto: (E) to F (Scherzo) to the dominant emphasis of the Finale (E) that resolves to tonic (A). Not only are the ♭III and ♭VI harmonies featured as both foreground and middle-ground events, but the symphony's basic keys accommodate either E or A as a chordal member: A as $\hat{1}$ (I/i), $\hat{5}$ (IV/iv), $\hat{3}$ (♭VI), and E as $\hat{5}$ (I/i), $\hat{1}$ (V), and $\hat{3}$ (iii and ♭III). The use of the minor (!) subdominant key in the outer movements provides the ♭ $\hat{6}$ necessary for the (E)-F♭-E-A motive. Finally, the numerous descending/ascending allusions to the original chromatic tetrachord begin or end without exception on either E or A.³² However, Beethoven reserves the corrected version until the Coda to the Finale, preferring to wait until the last possible moment for his eventual solution to our tonal detective story.

This piece takes its rightful place among the handful of the master's other works that exhibit intensive tonal integration at almost all structural levels, both within and between movements.³³

³²Consult the graphs of the various movements, where the notable examples are beamed.

³³One may recall the polarity between D and B♭ that controls the Ninth Symphony (see Rudolf Reti's remarks in his *The Thematic Process in Music* [Westpoint, Connecticut: Greenwood Press, 1978], 11-30) and the continuing cycle of third relationships in the *Hammerclavier* Sonata (see Charles Rosen's analysis in his *The Classical Style* [London: Faber, 1984], 407-34). David Beach works from a more Schenkerian viewpoint in his pair of articles on Op. 110: "Motivic Repetition in Beethoven's Piano Sonata Op. 110, Parts I and II" in *Intégral* 1 (1987) and 2 (1988), 1-29 and 75-97 respectively. Also consult

The high degree of compositional integrity has been illustrated without recourse to the principle of thematic similarity or cyclicism, which many of Beethoven's Romantic descendents felt represented the key to musical "unity."³⁴ However, even that particular feature is not lacking in this work, as Deryck Cooke has pointed out.³⁵

the reproductions of Beethoven's different plans for the overall tonal scheme of his C# minor Quartet in Robert Winter's *The Compositional Origin of Beethoven's Opus 131* (Ann Arbor: UMI Research Press, 1982), 116, 119, 122, and 126.

³⁴For an interesting critique of the Romantic view of organic "Oneness in art," see Leonard Meyer, "A Pride of Prejudice; Or, Delight in Diversity," *Music Theory Spectrum* 13/2 (1991): 241–51.

³⁵Deryck Cooke, "In Defense of Functional Analysis," *Musical Times* 100 (1959): 456–60. Also see Benito Rivera's "Rhythmic Organization in Beethoven's Seventh Symphony," *19th-Century Music* 6/3 (1983): 241–51.