

AUXILIARY CADENCES AND THE BINARY RONDO

JOEL GALAND

In their monumental theoretical enterprise, *Elements of Sonata Theory*, James Hepokoski and Warren Darcy (hereafter cited as “H&D”) devote comparatively little space to exploring the Schenkerian implications of their approach. Understandably enough, they are more concerned with staking out positions on recent theory that explicitly concerns itself first and foremost with classical form.¹ What they do have to say about how Sonata Theory might be brought to bear on Schenkerian theory, and vice-versa, is intriguing and opens up broad avenues for future research.² The present essay contributes to that research program. It focuses specifically on the Schenkerian notion of the auxiliary cadence and how it manifests itself in a formal design that up until recently has not been well understood, namely the category of rondo that H&D have termed the Type 4¹ sonata.³ In what follows, I will begin by reviewing the two theoretical concepts of

¹ James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata* (New York: Oxford Univ. Press, 2006). A section entitled “Some Schenkerian Implications” (147–150), together with a few remarks *passim*, occupies roughly 1% of their text. In contrast, William Caplin’s work is cited or discussed on about 6% of their 621 pages.

² H&D’s remarks center mainly on the implications of Schenkerian theory for their notion of the “essential exposition closure” (EEC). I discuss this passage in my review of *Elements of Sonata Theory* (*Journal of Music Theory* 57/2 [2013]: 383–418). Some theorists have begun the task of providing a Schenkerian gloss on Sonata Theory. L. Poundie Burstein focuses on Hepokoski and Darcy’s notion of the trimodular block (“The Trimodular Block, the Three-Part Exposition, and the Classical Transition Section,” paper given at the Annual AMS/SMT Conference, Los Angeles, California, 3 November 2006). Jan Miyake discusses secondary groups with multiple themes (“The Role of Multiple New-key Themes in Selected Sonata-Form Expositions,” Ph.D. diss., City Univ. of New York, 2004). Lauri Suurpää considers H&D’s “continuous exposition” category from a Schenkerian perspective (“Continuous Exposition and Tonal Structure in Three Late Haydn Works,” *Music Theory Spectrum* 21/2 [1999]: 174–199). Allen Cadwallader and Warren Darcy offer complementary analyses (Schenkerian and sonata-theoretical, respectively) of selected sonata expositions in “Intersections Between Two Analytical Perspectives on Sonata Form,” in *Essays from the Fourth International Schenker Symposium*, Vol. 1, ed. Cadwallader (Hildesheim: Georg Olms Verlag, 2008): 85–109.

³ Hepokoski and Darcy, *Elements of Sonata Theory*, 407–412.

auxiliary cadence and Type 4¹ sonata. I will then analyze the role that the auxiliary cadence plays in a group of four closely related Type 4¹ rondos: the finales of Beethoven's Piano Concerto No. 4 in G, Op. 58; his String Quartet in E Minor, Op. 59/2; Brahms's Piano Concerto in B \flat , Op. 83; and his String Quintet in G, Op. 111. I also touch briefly on the finale to Schubert's late Piano Sonata in B \flat , D. 960. It is possible—although it cannot be proven—that the Beethoven finales provided a model for Schubert's and Brahms's.

General Remarks on Auxiliary Cadences and on Type 4¹ Sonatas

In the past fifteen years or so, theorists seem to have suddenly become aware of the auxiliary cadence (German: *Hilfscadenz*), long one of the more obscure Schenkerian transformations; at least four oft-cited papers have been entirely devoted to the topic.⁴ Carl Schachter has provided a conveniently succinct definition of the auxiliary cadence: “A progression that leads via V to I, but that lacks a structural I at the beginning.”⁵ Another way of thinking about the auxiliary cadence is that, unlike a complete progression, it replicates only a portion of a Schenkerian *Ursatz*. Thus, Schenker's term “incomplete transferences of the forms of the fundamental structure” (*unvollständige Übertragungen der Ursatzformen*) is a synonym for “auxiliary cadence.”⁶ The syntax of the auxiliary cadence is entirely proleptic: it points forward to a tonic

⁴ See Eric McKee, “Auxiliary Progressions as a Source of Conflict between Tonal Structure and Phrase Structure,” *Music Theory Spectrum* 18/1 (1996): 51–76 (a chronological outlier); Edward Laufer, “Notes on the Auxiliary Cadence,” paper read at the Third International Schenker Symposium, New York City, 1999; L. Poundie Burstein, “Unraveling Schenker's Concept of the Auxiliary Cadence,” *Music Theory Spectrum* 27/2 (2005): 159–185; and Roger Kamien, “‘Quasi-Auxiliary Cadences' Beginning on a Root-Position Tonic Chord: Some Preliminary Observations,” in *Essays From the Third International Schenker Symposium*, ed. Allen Cadwallader (Hildesheim: Georg Olms Verlag, 2006): 37–50. In addition, several other recent papers apply the concept in such a way as to make the auxiliary cadence a central part of their analytical strategy; for a representative list of these, see Burstein, “Unraveling Schenker's Concept,” 159, nn. 1–2.

⁵ Carl Schachter, “Chopin's Fantasy, Op. 49: The Two-Key Scheme,” in *Chopin Studies*, ed. Jim Samson (Cambridge: Cambridge Univ. Press, 1988), 263.

⁶ Burstein, “Unraveling Schenker's Concept,” is indispensable for “unraveling” what Schenker meant—and did

that has not yet emerged.⁷ If the auxiliary cadence opens with a non-structural tonic (I⁶), or a substitute for I or I⁶ (VI or III), we can understand that harmony as an anticipation of the eventual I.⁸ Moreover, if the auxiliary cadence dispenses not only with a structural tonic (i.e., a root-position tonic) but with any tonic at all, the tonality may be in doubt until the auxiliary cadence has reached its goal—or even longer. This is particularly the case if the opening non-tonic scale step (II, III, IV, or VI) is itself tonicized.

Auxiliary cadences are an optimal means of blurring the boundaries between formal divisions.⁹ It is therefore not surprising that when H&D move beyond their “first-level default,” two-part sonata exposition to consider other sonata procedures, they often end up describing pieces that establish their secondary key by means of an auxiliary cadence.¹⁰ Auxiliary cadences attenuate the high degree of sectionalization that inheres in genres—like the rondo—that depend on the periodic return of a tonic theme. Predictably, composers like Beethoven and (even more so) Brahms, who strove to accommodate traditional patterns of formal articulation within more

not mean—by these terms. For Schenker’s own discussion, see Heinrich Schenker, *Free Composition (Der freie Satz)* [1935], trans. and ed. Ernst Oster (New York: Longman, 1979), §244–246.

⁷ At this point, the reader may look ahead to Figures 4, 12, and 16 for prototypical representations of some possible auxiliary cadences. Schenker, *Free Composition (Der freie Satz)*, Fig. 110, provides a more complete list.

⁸ Laufer, “Notes on the Auxiliary Cadence,” consistently reads the initial harmonies of these auxiliary cadences as anticipating one or more elements of the emergent tonic. Even an initial IV, which contains $\hat{1}$, can appear as an “indirect” anticipation of the auxiliary cadence’s goal.

⁹ See Burstein, “Unraveling Schenker’s Concept,” on this point: Auxiliary cadences “promote harmonic fluidity” and “soften motion between keys” (168).

¹⁰ Their “first-level default” is the type of exposition in which a “medial caesura” (MC) on a half-cadential V in the new key divides the two parts of the exposition. The MC brings the transition to a close and ushers in the secondary theme. H&D define the MC as “the brief, rhetorically reinforced break or gap that serves to divide an exposition into two [tonally differentiated] parts In rapid-tempo compositions a medial caesura is usually built around a strong half cadence that has been rhythmically, harmonically, or texturally reinforced” (*Elements of Sonata Theory*, 24). Lower-level defaults and “deformations” include the possibility of an MC being articulated by a perfect authentic cadence in the new key. The effect of the MC can also be mitigated by such techniques as the “blocked medial caesura,” or there may be more than one apparent MC (as in the so-called “tri-modular” block), or the MC may be absent altogether, in which case the exposition is “continuous” rather than two-part. All of these alternatives to the “first-level” default frequently—though not invariably—involve auxiliary cadences, and we will see an example of one of these below, when we consider the finale of Brahms’s Piano Concerto No. 2. For more on the Schenkerian implications of H&D’s expositional subtypes, see my review of *Elements of Sonata Theory*.

continuous trajectories, frequently incorporated auxiliary cadences into their music, including several of their rondo refrains.¹¹ The rondos by Beethoven and Brahms that we will be considering below all exemplify H&D's Type 4¹ sonata-rondo mixture. It is to the consideration of this formal category that we now turn.

H&D define rotational form as a fundamental, transgeneric formal principle, defined as “two or more (varied) cyclings—rotations—through a modular pattern or succession laid down at the outset of the structure.”¹² Each of their five sonata types—and their various subtypes—is one instantiation of rotational form. All five of H&D's sonata types include an expositional rotation, which provides “a referential arrangement or layout of specialized themes and textures against which the events of the two subsequent spaces—development and recapitulation—are to be measured and understood.”¹³ The types differ from each other principally in the total number of rotations they present and in their harmonic orientation. (Type 4 and 5 cover sonata-rondo and sonata-concerto mixtures, and therefore also present crucial generic differences alongside the rotational ones.)

The rotational structure of the Type 1 sonata is clear: A recapitulatory rotation immediately follows the expositional one, with at most an intervening retransition. A P-based “discursive coda” may add a partial third rotation. The recapitulatory rotation is frequently expanded—developmentally, episodically, or both—somewhere around the juncture between the principal theme and the transition. To that end, H&D distinguish the unexpanded Type 1 (e.g., the overture to Mozart's *The Marriage of Figaro*) from Type 1^{exp} (e.g., the slow movement of Mozart's

¹¹ For explorations of Brahms's sonata forms in light of the quest for “organic” continuity, see Peter Smith, “Brahms and Schenker: A Mutual Response to Sonata Form,” *Music Theory Spectrum* 16/1 (1994): 77–103; and *idem*, “Liquidation, Augmentation, and Recapitulatory Overlaps,” *19th-Century Music* 17/3 (1994): 237–261.

¹² Hepokoski and Darcy, *Elements of Sonata Theory*, 16, n. 5.

¹³ Hepokoski and Darcy, *Elements of Sonata Theory*, 16.

“Dissonant” String Quartet, K. 465). We may further distinguish between an expansion that arises by means of a discrete parenthetical insertion, and an expansion in which the processes of recapitulation and developmental expansion become intertwined. In the first case we could, following Mark Evan Bonds, speak of a “disjunct recapitulation” split on either side of what might be characterized as a “displaced” or “secondary” development (or episode).¹⁴ But if the expansion is not merely inserted within the recapitulation but “writes over” some of the expositional material, then we can speak, with Robert Pascall, of a “conflated” recapitulation and development.¹⁵ The sheer number of terms that have been proposed for this sonata type suggests a certain bewilderment with the “premature” double return of tonic and opening theme in movements that are neither alternating rondos nor “normative” sonata-rondos (where the immediate return is eventually followed by a conventional recapitulation).¹⁶

H&D’s Type 4 sonata encompasses various sonata-rondo mixtures. Type 4³ comprises the standard, “textbook” sonata-rondos with which we are all familiar, but which H&D defamiliarize by stressing its quadri-rotational organization, as shown in Figure 1. (For a list of abbreviations used in this and future examples, please consult the Appendix.) Types 4¹ and 4^{1-exp}, whose rotational layout appears in Figure 2, unfold much like their Type 1 counterparts, so much so that

¹⁴ Mark Evan Bonds, “Haydn’s False Recapitulations and the Perception of Sonata Form in the Eighteenth Century” (Ph.D. diss., Harvard Univ., 1988).

¹⁵ Robert Pascall, “Some Special Uses of Sonata Form by Brahms,” *Soundings* 4 (1974): 58–63.

¹⁶ Here a few examples (those without a citation have become everyday terms in theory classrooms): the form of the “Italian seria overture” (Fritz Tutenberg, “Die Durchführungsfrage in der vorneuklassischen Sinfonie,” *Zeitschrift für Musikwissenschaft* 9 [1926–27]: 90–94); “sonatina form” (numerous authors); “slow-movement form” (Charles Rosen, *Sonata Forms* [New York: W. W. Norton, 1980]); “sonata with secondary development” (numerous authors); “exposition-recapitulation form” (Jan LaRue, *Guidelines for Style Analysis* [New York: W. W. Norton, 1970]); “premature reprise” (Oliver Strunk, “Haydn’s Divertimenti for Baryton, Viola, and Bass,” *Musical Quarterly* 18/2 [1932]: 216–251); “immediate reprise” (James Webster, “Binary Variants of Sonata Form in Early Haydn Instrumental Music,” in *Joseph Haydn: Bericht über den Internationalen Joseph Haydn Kongress, Wien, Hofburg 5–12 September 1982*, ed. Eva Badura-Skoda [Munich: G. Henle, 1986]: 127–135); “disjunct (or split) recapitulation” (Bonds, “Haydn’s False Recapitulations”); sonata with “conflated response” (Pascall, “Some Special Uses of Sonata Form by Brahms”); “amplified binary” (John Daverio, “From ‘Concertante Rondo’ to ‘Lyric Sonata’: A Commentary on Brahms’s Reception of Mozart,” in *Brahms Studies*, ed. David Brodbeck [Lincoln: Univ. of Nebraska Press, 1994]: 111–138).

FIGURE 1. Rotational layout of the Type 4³ sonata (“textbook” sonata-rondo form)

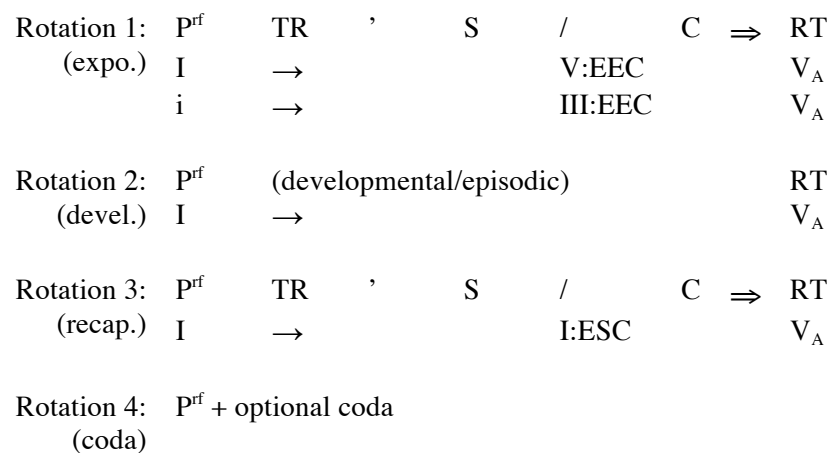


FIGURE 2. Rotational layout of the Type 4^{1exp} sonata

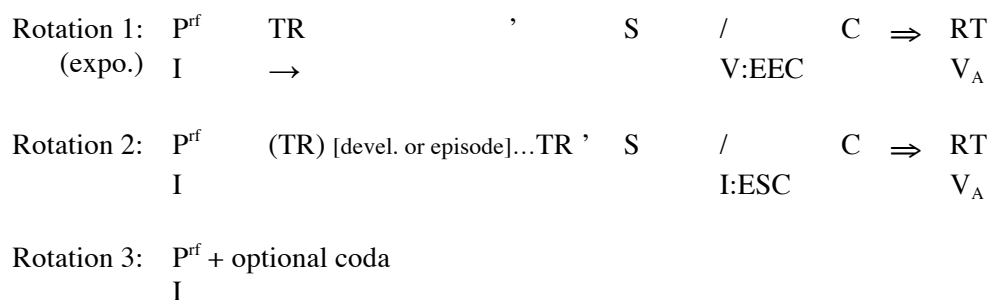
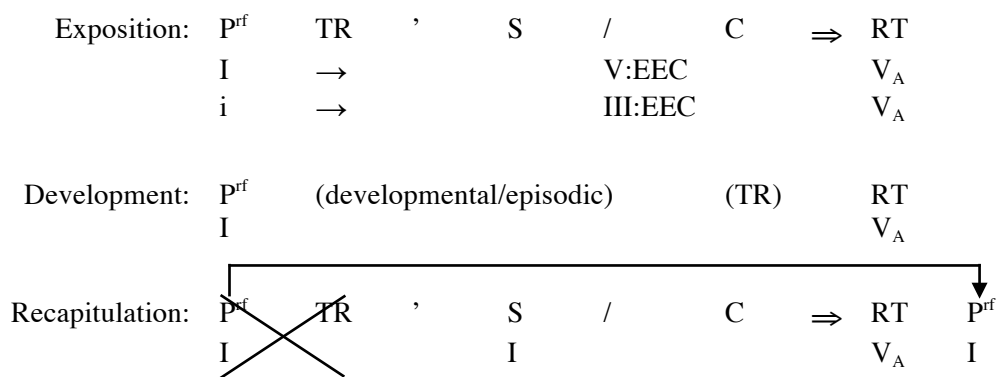


FIGURE 3. Conventional interpretation of Type 4^{1exp} sonata



it can be hard to distinguish them, apart from generic clues such as the character of a rondo refrain versus a first-movement principal theme. Mozart was especially fond of the $4^{1\text{-exp}}$ rondo type, using it in thirty-five finales and stand-alone rondos.¹⁷ Scholars have usually analyzed such rondos as a Type 4^3 that has been modified along the lines suggested by Figure 3. According to this interpretation, the composer omits the third statement of the refrain, thereby effecting a “reversed recapitulation” following the central episode cum development. This is in fact precisely Schenker’s explanation, when he mentions Mozart’s favored rondo form.¹⁸ The prob-

¹⁷ Daverio, “From ‘Concertante Rondo’ to ‘Lyric Sonata,’” 114, provides a list, to which I would add the Rondo for Violin and Orchestra in C, K. 373 (1781); the finale of the Piano Concerto in E \flat , K. 449 (1784); the finale of the Flute Quartet in A, K. 298 (1786); and possibly the finale to *A Musical Joke* (1788).

¹⁸ Schenker, *Free Composition (Der freie Satz)*, 142. Similar views are found in C. M. Girdlestone, *Mozart’s Piano Concertos* (London: Cassell, 1948), 323; Malcolm S. Cole, “The Development of the Instrumental Rondo Finale from 1750 to 1800” (Ph.D. diss., Princeton Univ., 1964), 131; Cole, “Rondo,” in *The New Grove Dictionary of Music and Musicians*. 2nd ed., ed. Stanley Sadie and John Tyrell (London: Macmillan, 2001): vol. 21, 649–656; Rosen, *Sonata Forms*, 121 (“The Mozart Rondo generally has a recapitulation in reverse”); and Leon Plantinga, review of *Robert Schumann: Herald of a “New Poetic Age,”* by John Daverio, *Journal of the American Musicological Society* 51/2 (1998), 390. Exceptions are provided in Pascall, “Some Special Uses of Sonata Form by Brahms”; Joel Galand, “Rondo-Form Problems in Eighteenth- and Nineteenth-Century Instrumental Music, with Reference to the Application of Schenker’s Form Theory to Historical Context” (Ph.D. diss., Yale Univ., 1990); Galand, “Form, Genre, and Style in the Eighteenth-Century Rondo,” *Music Theory Spectrum* 17/1 (1995): 27–52; Galand, “The Large-Scale Formal Role of the Solo Entry Theme in the Eighteenth-Century Concerto,” *Journal of Music Theory* 44/2 (2000): 381–450; Daverio, “From ‘Concertante Rondo’ to ‘Lyric Sonata’”; Hepokoski and Darcy, *Elements of Sonata Theory*; and James Webster, “Brahms’s Tragic Overture: The Form of Tragedy,” in *Brahms: Biographical, Documentary and Analytical Studies*, ed. Robert Pascall (Cambridge: Cambridge Univ. Press, 1983): 99–124. Rosen, *Sonata Forms* (127), analyzes the finale of Mozart’s String Quintet in C, K. 515, according to the Type 4^1 binary scheme, but oddly enough he regards the very similar finale of the String Quintet in G minor, K. 516, as having a reversed recapitulation. See also William E. Caplin, who describes a “standard deviation, adopted frequently by Mozart, [that] eliminates refrain 3 from the form” (*Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Beethoven and Mozart* [Oxford: Oxford Univ. Press, 1998], 239). Donald Francis Tovey has the jump on modern scholarship: “Mozart, Schubert, and Brahms have a form, always worked on a very large scale, which consists only of A, B (new key), A, B (tonic), coda; where a certain amount of development is edged in apropos of the transition-passage on its recapitulation. Only the style of the main theme can distinguish this from a first-movement that omits its normal development section” (*The Forms of Music: Music Articles in the Encyclopedia Britannica*, ed. Hubert J. Foss [London: Oxford Univ. Press, 1957], 193). For the “reversed recapitulation” view, see Timothy L. Jackson on Brahms’s Opp. 81, 101/i, and 108/iv (“The Tragic Reversed Recapitulation in the German Classical Tradition,” *Journal of Music Theory* 40/1 [1996]: 61–111); and Peter Smith on Brahms’s Opp. 51/1/iv, 90/iv, and 108/iv (“Brahms and Schenker”). (But Smith analyzes Brahms’s Op. 111/iv as a Type $4^{1\text{exp}}$ rondo in “Brahms’s Motivic Harmonies and Contemporary Tonal Theory: Three Case Studies From the Chamber Music,” *Music Analysis* 28/1 [2009]: 63–110.) David Brian Niven, adopting the analytical methodology of Felix Salzer, interprets some, but not all, of Brahms’s Type 1 and 4^1 movements as binary structures (see Niven, “Brahms and the Binary Sonata: A Structuralist Interpretation” [Ph.D. diss., Univ. of California, Los Angeles, 1992]).

lem is that Mozart never sets up any expectation of a third refrain: the developmental or episodic expansion, often itself inextricable from the recapitulatory process, merges seamlessly with the remaining exposition material. Mozart's favored finale arrangement stems from the incorporation of ritornello procedures within the bipartite framework of an exposition answered by an enlarged recapitulation. The "reverse recapitulation" interpretation simply does not hold up.

The emphasis that H&D place on the rotational format of Types 4¹ and 4^{1-exp} has the advantage of clarifying the source of the Mozartean sonata-rondo in the Type 1 sonata. Whether the second rotation is minimally expanded or subjected to a full-scale episodic or developmental "bulge," the added material will typically merge with at least the end of the original TR; S is prepared much as it was in the exposition. If we listen closely to these rondo types, we should notice this emerging parallelism between the two rotations and not be led to expect a refrain onset in the midst of the second one. Schenkerian analyses will invariably confirm that the second rotation in the 4¹ types unfurls a varied restatement of the first rotation and constitutes a single voice-leading trajectory—the responsive portion of an interruption form.¹⁹

Beethoven: Piano Concerto in G, Op. 58/iii

The Type I sonata is not nearly as prevalent in Beethoven's oeuvre as it is in that of Mozart, Schubert, and Brahms (not to mention Christian Cannabich and Joseph Anton Steffan, two contemporaries of Mozart who seem to have shared their more famous colleague's special penchant for this formal design). Beethoven will sometimes use the Type 1 scheme in slow movements (e.g., that of the Quartet in G, Op. 18/2), but I know of only four relevant fast movements: the finales of the String Quartet in B \flat , Op. 18/6 ("La Malinconia"); the Piano

¹⁹ I provide such analytical demonstrations in those of my earlier publications that are cited below.

Concerto No. 4 in G, Op. 58; the String Quartet in E Minor, Op. 59/2; and the String Quartet in F Minor, Op. 95 (“Serioso”). The Opp. 18/6 and 95 finales are highly compact exposition–recapitulation designs preceded by slow introductions; both of their recapitulations lead to unusually long ritornello/coda sections that occupy over a third of the whole and include changes of tempo and meter. The finales of Opp. 58 and 59/2, composed within months of each other, also form a related pair: they are both rondos (expanded Type 4¹ movements) whose refrains begin with auxiliary cadences (IV–V–I and VI–V–I, respectively).²⁰ There are certain advantages in beginning Type 1 and 4¹ pieces this way. The definitive tonic return can be postponed until the recapitulation of the more stable second group; meanwhile, the auxiliary cadence readily lends itself to the internal expansions that normally precede the second group’s recapitulation. By placing less emphasis on the tonic at the beginning of the responsive part of the form (i.e., the second rotation), the auxiliary cadence promotes continuity across the ritornello articulations.

Leon Plantinga considers the Op. 58 finale’s “play with the wrong key for the ritornello” a “transformation” of an older tradition, persisting in the rondos of C. P. E. Bach, of introducing ritornellos in contrasting keys.²¹ To Plantinga’s ears, the refrain hovers ambiguously between the keys of C and G (“neither key is really settled here”). Indeed, he proposes that we might plausibly hear the refrain as a rounded binary form in C major:

²⁰ L. Poundie Burstein also notes the close relationship between these two movements: “Of all of Beethoven’s works, it is in the finales of Op. 58 and Op. 59 No. 2 where the tonic key is most strongly obscured at the beginning of the movement. As noted above, the finale of Op. 58 sounds as though it might begin in the key of C major, which is ultimately understood as the local key of IV within G major. Similarly, the finale of Op. 59 No. 2 also seems to begin in the key of C major, which is ultimately understood to function as the local key of VI within E minor” (Burstein, “The Off-Tonic Return in Beethoven’s Piano Concerto in G Major, Op. 58, and Other Works,” *Music Analysis* 24/3 [2005], 337). For Burstein, the finale of the Cello Sonata in G minor, Op. 5/2, bears “even stronger similarities to the finale of Op. 58” (338); among these similarities, the most obvious is that both are rondos with refrains beginning on the subdominant with a IV–V–I auxiliary cadence. The Op. 5/2 finale lies beyond the scope of the present study, however, because it adheres to the more conventional sonata-rondo mixture, Hepokoski and Darcy’s Type 4³.

²¹ Leon Plantinga, *Beethoven’s Concertos: History, Style, and Performance* (New York: W. W. Norton, 1999), 18.

m. 1/11	21	32
a	b	a ¹
I →V [IAC] :	V →V/V [HC]	I

Poundie Burstein also stresses the refrain’s bivalent harmonic organization: “At the very least, the tonality at the outset of this concerto’s finale is ambiguous.”²²

Despite the uncertainty that the refrain might arouse on a first hearing, the harmonic underpinnings of the opening auxiliary cadence are clear enough:

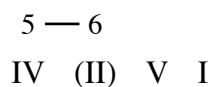


Figure 4 provides a graphic schema for such an auxiliary cadence. The prototype at (a) exhibits parallel 5ths, offset at (b) by the 5–6 motion over IV. We understand the initial G in the top voice as an anticipation of its eventual emergence as $\hat{1}/I$.²³ While it is easy to demonstrate that the bass line in the first phrase of the Op. 58 finale (mm. 1–10, repeated in mm. 11–20) transforms the Figure 4 prototype, coordinating this prototype with the highly disjunct melodic line is anything but straightforward. Figure 5 is based on Schenker’s graph of mm. 1–10.²⁴ The initial auxiliary cadence supports an unfolding of the upper third of the IV *Stufe*, while the subsequent cadential bass prolongs I via an initial $\hat{3}\text{--}\hat{4}\text{--}\hat{5}$ ascent (*Anstieg*) in the upper voice. Figure 6 derives from Burstein.²⁵ The analysis in some ways resembles Schenker’s, with its demarcation of two ascending thirds (E to G and G to B) supported by the two cadential bass motions. More radical,

²² Burstein, “The Off-Tonic Return,” 332.

²³ Laufer, “Notes on the Auxiliary Cadence,” introduces the term “indirect anticipation,” to distinguish this form of auxiliary cadence from those in which the initial harmony of the auxiliary cadence presents a direct anticipation of the primary tone. A direct anticipation of $\hat{3}$ or $\hat{5}$ is possible for auxiliary cadences based on $I^6\text{--}V\text{--}I$ and $III\text{--}V\text{--}I$; the $VI\text{--}V\text{--}I$ auxiliary cadence accommodates a direct anticipation of $\hat{3}$.

²⁴ See Schenker, *Free Composition (Der freie Satz)*, Fig. 151. All further citations of Schenker are to this book.

²⁵ Burstein, “The Off-Tonic Return,” 331.

FIGURE 4. Prototype of IV–V–I auxiliary cadence

(a) (b)

IV V I IV (II) V I

FIGURE 5. Sketch of Beethoven, Op. 58/iii: refrain (after Schenker)

(ascent)

IV (II) V I II⁶ V I

FIGURE 6. Sketch of Beethoven, Op. 58/iii: refrain (after Burstein)

FIGURE 7. Sketch of Beethoven, Op. 58/iii: refrain complex

though, are the dotted lines connecting the IV chords at mm. 1 and 11, suggesting the structural retention of the IV across the cadences in G. In Figure 7, I provide a sketch of the entire refrain complex; my reading of mm. 1–10 is very close to Edward Laufer's.²⁶ Of the three readings, this one is the least oriented towards the initial IV: there is no unfolding or linear progression prolonging C major; rather, the first $\hat{4}-\hat{5}-\hat{1}$ bass motion supports an *Anstieg* to the primary tone, while the second one supports a middleground replication of the overall *Urlinie*, albeit one in which the arrival on $\hat{1}$ is only implied. Perhaps this reading points too resolutely to the eventual G-major tonic, but, after all, C major is not tonicized (as it will be in the retransitions to future iterations of the refrain). I question whether the arpeggiated C-major triad in mm. 1–4 can carry the burden of casting us imaginatively into a world in which Beethoven's refrain sounds like a rounded binary form in C major.

In Figure 8, I propose an interpretation of the Op. 58 finale's rotational form. The first 342 measures (exactly 57% of the movement) encompass two ordered rotations through the P–TR–S–C materials first exposed in mm. 1–159. Typical of rondo finales is that both the first (expositional) rotation and the second (recapitulatory) rotation end with retransitions to the

²⁶ Laufer, "Notes on the Auxiliary Cadence."

FIGURE 8. Beethoven, Op. 58/iii: Rotational layout

**FIRST ROTATION
(Exposition)****R¹** (refrain complex)

m. 1 a a¹ aux cad
 m. 21 b I→V[HC]
 m. 32 a² ⇒ TR

TR

m. 32 I→V/V[HC]

m. 57 “dom lock” V/V

S

m. 80 V–V[EEC]

C⇒RT

m. 110 C V
 m. 124 C ⇒ RT V→V⁷/IV

**SECOND ROTATION
(Recapitulation)****R²** (refrain complex)

m. 160 a a¹ aux cad
 m. 180 b
 m. 191 a² ⇒ TR

TR⇒Developmental expansion

m. 191 rev. of m. 32–56 I→^bVI
 m. 216 devel. on R ^bVI→V[HC]
 m. 272 “dom lock” V

S

m. 299 I–I[ESC]

C⇒Developmental expansion ⇒ RT

m. 329 C I
 m. 343 C ⇒ RT I→^bVI→^bIII→iv→vii^{o7}→V⁷/IV

**THIRD ROTATION
(Coda)****R³**

m. 416 a aux cad

m. 426 a² ⇒ TR I

TR (abridged & revised)

m. 426 I→VII[#]

S

m. 459 VII[#]→IV→I

Tutti to Cadenza

m. 491 I→cad. 6/4 [^] V⁷ (written-out cad.)

R⁴

m. 520 a³ I (no aux cad)–V⁷

Presto**RT**

m. 554 V→V⁷/IV

R⁵

m. 568 aux cad with cadential suffixes

subsequent rondo return.²⁷ (Not so typical, of course, is that the retransitions are exceedingly massive—even by the standards of Beethoven’s “heroic” phase—together occupying 109 measures, or nearly one fifth of the whole. Also atypical is that these elaborate preparations are *à propos* of the “wrong” tonic, namely the initial harmony of our auxiliary cadence.²⁸) In the expositional Rotation 1, Beethoven states the closing theme (C) twice, beginning at mm. 110 and 124. The second iteration soon merges with the retransition, so that its original fourteen-bar length is expanded to thirty-seven bars plus a written-out *Eingang*. In Rotation 2, the first iteration of C returns fairly literally, at the lower fifth in mm. 329–342 (aside from some revisions of the piano figuration for the sake of register). Up to that point, nothing has seriously cast doubt on the Type 1 parallel binary scheme, the developmental expansion in mm. 216–271 notwithstanding. Apart from those fifty-six measures and an additional four-bar expansion of the “dominant lock” (*cf.* mm. 57–79 and 272–298), Rotations 1 and 2 correspond measure for measure through the first iteration of C.²⁹

Figure 9 aligns Rotations 1 and 2 in order to clarify that Rotation 2 indeed comprises an expanded sonata recapitulation of Rotation 1; the example focuses on the material through the S theme (mm. 1–109 and 160–328). In Rotation 2, Beethoven transforms the turn to E minor (as II

²⁷ *Cf.* Hepokoski and Darcy, *Elements of Sonata Theory*, 408: “The distinguishing feature of the Type 1 sonata-rondo mixture, Type 4¹, is the extensive retransition that also concludes Rotation 2, as well as the relatively literal restatement of P that follows.”

²⁸ Schenker puts the matter succinctly: “Every return to the first theme of the Rondo, which seems to begin in C major, had to be prepared through G major I⁷ Despite the difficulties posed by the deceptive beginning, Beethoven boldly met this requirement of the rondo form, specifically by expansive embellishments of the fermatas which lead back to the initial tone” (§303). Burstein (“The Off-Tonic Return,” 329) reads this finale in the comic mode, as an exemplar of Jean Paul’s “inverse sublimity,” a reading I find more convincing than Owen Jander’s tragic interpretation (*Beethoven’s “Orpheus Concerto”: The Fourth Piano Concerto in Its Cultural Context* [Hillsdale, NY: Pendragon Press, 2009]), according to which he claims that Beethoven is programmatically depicting Orpheus’s evisceration at the hands of his once loyal Bacchantes. For Burstein, the huge build-up to IV “creates a comedic situation: in spite of the big hubbub raised by the retransition, this passage leads ultimately not to the background tonality of G major, but merely to a local key” (332).

²⁹ The “dominant lock” is how H&D refer to the phrase extension, typical of sonata transitions, that prolongs the half-cadential arrival in the new key (*Elements of Sonata Theory*, 24). The equivalent in William Caplin’s theory is the “standing on the dominant” (*Classical Form*, 16), a locution borrowed from Erwin Ratz.

FIGURE 9. Beethoven, Op. 58/iii

(a) Rotation 1

R¹ a¹ ⇒ TR **S**

41/45 49/53 57 80 96

I 5 — 6 — V: II V I IV II V I

(b) Rotation 2

R² **TR** **[developmental expansion]** **S**

160=1 198 200=41 204 216 228 240 256 260 272=57 323 326 329

I 6 — bVI — V — I — 5 — 6 — #6 — V I — IV — II $\frac{4}{3}$ — V I

(IV)

of D major) from the TR portion of Rotation 1 into an expansive tonicization of E \flat major (\flat VI). At this point, he develops the auxiliary-cadence idea from the refrain by incorporating three successive, “nested auxiliary cadences” that tonicize E \flat , B \flat , and F in turn, generating an ascending-fifths sequence.³⁰ The moves to B \flat and F are literal transpositions of one another (*cf.* mm. 216–227 and 228–239), but after m. 240, the voice leading becomes thorny. At first, Beethoven proceeds as if he were going to prepare yet another auxiliary cadence, thereby continuing the ascending-fifth series to land on C: mm. 240–247 correspond exactly to mm. 216–223 and 228–235. The sequence breaks off, however, at m. 248, as the bass E continues down another chromatic half step to arrive at a $\text{vii}^{\circ 4}$ of G, extended for a further eight bars. As Burstein points out, we would normally expect the bass E \flat to resolve to D, and he regards the events in mm. 256–271 as a digression that delays the D until m. 272.³¹

I agree that the arrival at m. 272 achieves an indirect resolution of the E \flat previously left dangling, but I am not sure that Burstein’s graph quite explains the underlying voice leading here, and my reading differs from his in several respects. I propose that not only does Beethoven omit the expected bass D at m. 256, but also the resolution of that D to G. (That is why, in Figure 9b, both D and G appear as implied tones in the bass at m. 256.) In Figure 10, I attempt to show the voice-leading paradigm behind mm. 240–256. Here, the F-major harmony (mm. 240–243) moves to a D⁷ via a descending chromatic third in the bass. I interpret this progression as an unfolding of \flat VII–V⁷ in G.³² Through rhythmic and registral displacement, Beethoven has

³⁰ I borrow the convenient locution “nested auxiliary cadence” from Timothy L. Jackson, “Observations on Crystallization and Entropy in the Music of Sibelius and Other Composers,” in *Sibelius Studies*, ed. Jackson and Veijo Murtomäki (Cambridge: Cambridge Univ. Press, 2001): 175–272.

³¹ Burstein, “The Off-Tonic Return,” 334.

³² In short, I read the passage as exemplifying the VII–V prototype that Schenker proposed in a passage devoted to “The Descending Third VII–V” (§246). (Significantly, Schenker mentions that the “ \flat VII belongs to the V³ in the sense of an auxiliary cadence.” Elsewhere, L. Poundie Burstein has shown how this Schenkerian transformation

FIGURE 10. Beethoven, Op. 58/iii: Rotation 2 synopsis

telescoped this progression: the $\text{vii}^{\circ 4}_2$ supported by the bass E^{\flat} represents both the E^{\flat} passing tone and the D supporting V^7 , to which that passing tone would ordinarily have led. We can understand the actual bass note B^{\flat} at m. 256 as a substitution for the G, and as a registral displacement of the $\text{B}^{\flat}6$ to which the rising solo flute line F6-G6-A6 in mm. 240–248 would normally have proceeded (for simplicity’s sake, I have transposed the flute line down an octave in Figure 9b). Moreover, the dissonant bass F in mm. 260–263 (supporting $\text{vii}^{\circ 4}_3/\text{IV}$) makes sense only as a passing tone from G to E^{\flat} , another reason for implying a bass G at m. 256. Of course, the G-minor harmony in mm. 256–259 does not imply a structural return to the tonic. As Figures 9b and 10 both show, the G minor occurs within a large scale 5–6 motion over E^{\flat} ($\text{bVI}^5\text{--IV}^6$) that governs most of this developmental interpolation. As it does in the refrains and retransition, the subdominant holds sway within the expansive portion of Rotation 2.

From the standpoint of both Schenkerian voice-leading analysis and H&D’s Sonata Theory, the structural demands of sonata form are met by m. 329, the moment at which Rotation 2 finishes with the S material, reaches the tonic PAC that H&D term the “essential sonata

informs several works of Haydn’s and Beethoven’s (“Surprising Returns: The VII^{\sharp} in Beethoven’s Op. 18, No. 3, and Its Antecedents in Haydn,” *Music Analysis* 17/3 [1998]: 295–312), and discusses how it relates to the auxiliary cadence concept (“Unraveling Schenker’s Concept”).

FIGURE 11. Beethoven, Op. 58/iii: Retransition to R³ and Rotation 3

329 351 372 376 384 388 392 401 402 416

I IV V I₄[!] $\frac{5}{3}$ \flat III IV \flat VII^{o7} V $\frac{6}{4}$ V⁷ I^{b7} IV
= C: ii⁷ V⁷ I

closure” (ESC), and launches the recapitulation of C (mm. 329–342).³³ But then something unusual happens. In Rotation 1, C had been followed by an expanded thirty-seven-measure repetition that merged with the retransition. In Rotation 2, Beethoven expands these thirty-seven measures yet further, yielding seventy-three measures plus another written-out *Eingang* (mm. 343–415). In effect, this recomposed retransition yields a second developmental excursus, alongside the earlier one at the juncture of the refrain and transition zones, within an otherwise parallel rotation. Like the earlier expansion, the retransitional one emphasizes \flat VI. Beginning with that harmony Beethoven restates the refrain lyrically (for once) in the violas, thereby effecting an auxiliary cadence in B \flat major (\flat III); this hugely expanded auxiliary cadence occupies much of the expansion (mm. 351–384). Figure 11 presents a figured-bass reduction of this expanded retransition, which for the most part follows a fairly standard middleground prototype, namely the bass arpeggiation I– \flat III–IV–V, within which the flat mediant is prolonged via the refrain’s motivic auxiliary cadence, and the dominant by another VII⁷–V⁷ unfolding.³⁴ But that unfolding

³³ H&D define the “essential expositional closure” (EEC) as the “the first satisfactory PAC [in the key in which the exposition closes] that proceeds onward to differing material (*Elements of Sonata Theory*, 120).” In Op. 58/iii, that moment occurs at m. 110, and its correlate, the ESC in the recapitulation, occurs at m. 329. The EEC and ESC correspond to the boundary that William Rothstein locates between the second theme and the closing theme, codetta, or any other suffixes. Such suffixes comprise “only those portions of the second group following the first strongly articulated perfect cadence in the goal key . . . normally, it is the first perfect authentic cadence in the key of the second group” (*Phrase Rhythm in Tonal Music* [New York: Schirmer Books, 1989], 116).

³⁴ For Burstein, the *sforzando* diminished-seventh chords on F \sharp at m. 392 $ff.$ effect “the dramatic climax of the

goes awry; we would normally have expected the passing $\frac{6}{4}$ chord at m. 400 to connect two forms of the dominant function in G, namely the $\text{VII}^{\circ 7}$ and the V^7 . At the last minute, however, Beethoven substitutes a D-minor seventh for the expected dominant, thereby preparing G not as I but as V^7/IV , in preparation for the third ritornello.³⁵

The sheer length of the passage spanning mm. 343–415 has been responsible, I think, for why no accounts of this piece (to my knowledge) have noticed its underlying binary, rotational design and have misinterpreted it as an admittedly quirky instantiation of the conventional (Type 4³) sonata rondo instead of the Type 4¹. Here is Leon Plantinga—whose analyses of Beethoven’s concertos and their relation to historical traditions are otherwise always on the mark—on the subject:

Among Mozart’s various “deviations” from [the generic version of sonata-rondo common to all of Beethoven’s concerto finales], a favorite of his was the *omission of the third ritornello from the pattern* At this juncture of such movements he usually brings back the tonic key together with something other than the rondo theme, saving the third (and final) appearance of that theme to inaugurate a coda-like construction at the end. Here...Beethoven parts company with his great predecessor over the matter of recapitulation. For Mozart a double return—the simultaneous revisiting of both main theme and key—is only one possibility among several. In the finales of all Beethoven’s concertos it is the only solution: *the third ritornello starts off the recapitulation*³⁶

Accordingly, Plantinga locates the coda around m. 443, after that third ritornello. Burstein shares this more restricted view of the coda, which follows from his assertion that mm. 329–415

movement” (“The Off-Tonic Return,” 332). He associates it with the diminished-seventh chord at m. 248 that also fails to resolve properly to G.

³⁵ Burstein’s sketch of this passage (“The Off-Tonic Return,” 335) differs: he does not regard $\flat\text{III}$ as any sort of goal, omitting it from his graph altogether. Instead he reads a large-scale bass unfolding from $\text{E}\flat$ to C over the course mm. 351–390. To be sure, $\flat\text{III}$ mostly appears as a $\frac{6}{4}$ chord over an F pedal (mm. 376–378), although the root position does arrive at m. 384. But by now we have become accustomed to hearing the refrain’s goal harmony, not its initial one, as tonic. And so when the theme begins “in” $\text{E}\flat$ major, I think we need to take analytical stock of the $\text{B}\flat$ major to which it leads, its $\frac{6}{4}$ manifestation notwithstanding. I am happy to consider the $\frac{6}{4}$ chord at m. 376 as a comparatively rare instance of the “consonant $\frac{6}{4}$.”

³⁶ Plantinga, *Beethoven’s Concertos*, 19, italics mine.

constitute “a transition from the B' to the A" section of the recapitulation.”³⁷ Here, Burstein is suggesting that the recapitulation of Beethoven’s finale comprises mm. 299–442 (or thereabouts); this would be a reversed recapitulation, with a developmental transition inserted between the two reversed groups. For reasons that by now should be clear, I do not think that the “reversed recapitulation” interpretation is correct, even though I can see how Beethoven’s unusual procedures might obscure the underlying formal idea; this is a highly “deformational” Type 4^{1.38}

Tovey takes a large view of the coda; he says that it takes up 45% of the form.³⁹ That would place it literally at m. 330, but obviously he means the post-secondary material beginning at m. 329. Thus, Tovey implicitly subscribes to the interpretation of the movement that I propose. The recapitulation is essentially over at m. 329 and the third refrain/ritornello is not part of it, much less of a reversed one. Tovey’s reading also accords perfectly with H&D’s notion of the essential sonata closure as well as the Schenkerian view, as interpreted by Rothstein.⁴⁰ Still, 45% seems like a lot for a coda, and if we look again at the rotational aspect shown in Figure 8, we might well identify the coda with the onset of Rotation 3 at m. 416. This coda is rotational because it takes up the ritornello, transition, and secondary theme, each in turn and in that order. The S receives a fresh treatment in so far as Beethoven restates it in the keys of VII \sharp , IV, and I in

³⁷ Burstein, “The Off-Tonic Return,” 345, n. 35. Jander, *Beethoven’s “Orpheus Concerto,”* 129, considers the Op. 58 finale a “truncated rondo” without a third return of the ritornello. He, too, overlooks its provenance in the binary Type 1 sonata, as does Joseph Kerman, who adopts the “missing ritornello” interpretation (“4. Klavierkonzert G-Dur op. 58,” trans. Gudrun Budde in *Beethoven: Interpretationen seiner Werke 1*, ed. Albrecht Riethmüller, Carl Dahlhaus, and Alexander L. Ringer [Laaber: Laaber Verlag, 1994]: 415–429).

³⁸ In H&D’s *Sonata Theory*, the term deformation means “the stretching of a normative procedure to its maximally expected limits or even beyond them” (*Elements of Sonata Theory*, 614). Individual works are understood to be in dialogue with a community-shared genre-system. Creatively deformational works maintain this dialogue as they stretch generic traits to their limits, perhaps overriding or “writing over” some of them.

³⁹ Donald Francis Tovey, *Essays in Musical Analysis, Volume 3: Concertos* (London: Oxford Univ. Press, 1936), 81.

⁴⁰ See n. 33 above.

close succession. As both Burstein and Plantinga point out, the coda ends with a final statement of the ritornello theme, or rather two, for a variant of the theme appears at mm. 520–546, regularized so that, for the first time, Beethoven allows it both to begin and end in G major. This resolution of sorts is not the final word, as the original form of the refrain subsequently returns within the final *presto* (m. 568). But even if we cavil about the exact location of the coda's onset—the ESC or the launching of Rotation 3—I think we must take a larger view of the coda than normally proposed; the alternative means overlooking the rotational organization of the movement generally and its take on the Type 1 sonata specifically.

Beethoven: String Quartet in C Major, Op. 59/2/iv

Figure 12a presents another auxiliary cadence prototype, this one based on VI–V–I. As in Figure 4a, parallel fifths loom; they are corrected at (b) by an interpolated $\frac{6}{4}$ chord and by ascending melodic motion in the upper voice. Figure 13 shows how Beethoven transforms this prototype in the refrain theme of the finale from the Quartet in C major, Op. 59/2.⁴¹ Here, the potential parallel fifths are further offset by motion to and from an inner voice. The main theme is heard four times over the course of the tonic group (mm. 1–9, 10–18, 19–31, and 32–55). Beethoven expands the third statement with a prefix in the guise of a further auxiliary cadence applied to the initial VI. This nested auxiliary cadence, first heard in mm. 19–23, also appears in Figure 13. It is based on the III–V–I prototype (*cf.* Schenker, Fig. 110d). Beethoven has further transformed that schema by expressing the V through a VII \sharp –V progression, which, as noted earlier, Schenker regarded as akin to an auxiliary cadence prolonging the dominant. The twenty-four-bar fourth statement expands the third statement even further with cadential expansions and

⁴¹ This graph is partially based on Schenker's analysis of mm. 1–9 (Fig. 149/5).

FIGURE 12. Prototype of VI–V–I auxiliary cadence

FIGURE 13. Beethoven, String Quartet in G, Op. 59/2/iv: refrain complex

extensions. Figure 14 provides an overall sketch of the fourth movement of Op. 59/2. The transition and second group (mm. 56–89) tonicize the minor dominant. Beethoven easily effects the retransition (mm. 89–106) by means of a 5–6 motion over B, transforming V into V/VI.

In Rotation 2, Beethoven recapitulates mm. 1–40 with minimal changes. At the forty-first measure, however, nearly half-way through the already enlarged fourth refrain statement, Beethoven introduces a further expansion whereby mm. 41–55 are replaced by mm. 146–193. The graph shows how this passage continues to prolong the VI, instead of leading to an emphatic tonic cadence the way the corresponding expositional passage did. To be sure, this expanded version of the refrain does lead to a tonic at m. 194, at which point Beethoven recapitulates the transition. The transition, too, is expanded, but begins by repeating mm. 56–63 at nearly the

FIGURE 14. Beethoven, Op. 59/2: Overview

Rotation 1
R¹ TR 56 65 S 70 rt 89

Rotation 2
R² (expansion of R¹, 4th statement) 107 146 (=41) 170 178 190

TR 194-215 (=56-69 expanded) 200

S 216 247

VIV I V V V[♯]VI (I) I VI IV ♭VII V → II V I (I) IV V I V I

= B: Ger^{+♯}₅ V I ♭II⁶ V[♯]₄ : ♯ I VI⁵ 6

FIGURE 15. Beethoven, Op. 59/2: Summary

m. 52 65 66 70 107 137 142 170 178 182 186 190 194 209 212

I 6 v → V VI — IV⁶ V[♯]

original pitch level (there are some changes, particularly in the upper parts). We could potentially locate, then, the definitive tonic return at m. 194, the beginning of the recapitulated transition. The preparation for this tonic is weak, however, compared to the huge emphasis on VI that precedes it, not to mention the subsequent arrival on V at m. 212, prepared with an augmented-sixth chord and extended through m. 215. Accordingly, the graph proposes, by means of parentheses around the Roman numeral I, that the tonic at m. 194 is only apparent. Specifically, it functions as a leaping passing tone supporting the upper-voice B within a C–B–A motion that spans mm. 190–209 and effects a large-scale 5–6 motion over the VI; the harmonic sense of the entire passage is VI–(IV⁶)–V, not VI–I–IV⁶–V. The punctuation is provided by the V that is the goal of the recomposed transition, and the earlier tonic is subsidiary to the large-scale preparation for this dominant. All of this is perhaps made clearer in the synoptic view presented in Figure 15.

I would go further and assert that the prolongation of VI began already at m. 107: that is, the tonic return within the ritornello (R²) that opens Rotation 2 (at m. 115, repeated at mm. 124 and 137) is itself subsumed within a hugely expanded of VI–IV–V progression; in this sense, both tonic returns at mm. 137 and 194 are apparent. This is why the $\hat{2}$ – $\hat{1}$ descent over V–I within R² also appears in parentheses in Figure 14 (see also the notation of the tonic at m. 137 in Figure 15). Reinforcing this reading is that the dominant major arrives only at m. 212, and it is really this V that functions as the binary divider. In this deformational Type 4¹ movement, the rotational (or rhetorical) form, which places the two-part division at m. 107, is out of synch with the tonal form. The Schenkerian reading here differs from the thematically based rotational one by proposing a binary division that responds to the more pronounced dominant emphasis and tonic rearticulation later in the movement. Even if some find the interpretation in Figures 14 and 15 to be forced or excessively precious, we can agree that Beethoven's recontextualizations of the

GAMUT 6/2 (2013)

initial auxiliary cadence throughout the movement have achieved a rare degree of formal seamlessness within a genre that is usually articulated by many returns and new points of departures.

Brahms: Piano Concerto in B \flat , Op. 83/iii

Out of the twenty-three Type 1 or Type 4¹ movements that Brahms composed, two adopt Beethoven's auxiliary-cadence strategy.⁴² The finale of the B \flat Piano Concerto begs comparison to that of Beethoven's Fourth Piano Concerto: Both movements have ternary (or rounded-binary) refrains starting on the subdominant, and both deploy the Type 4^{1exp} rondo rotation. In each case, the expansion of Rotation 2 arises from the insertion of two developmental passages, although their placement and proportions differ. Recall that in the Beethoven, the first expansion emerged towards the beginning of the transition, and the second during the retransitional closing group. The second expansion, in particular, was unusually broad, resulting in a second rotation about 60% longer than the first (256 measures versus 159). In the Brahms, Rotation 2 occupies mm. 165–368; it is only about 25% longer than Rotation 1. The first expansion (mm. 173–251) emerges within the refrain itself, wedged in between the *a* and *b* sections of the ternary refrain. The material on either side of this expansion corresponds bar-for-bar with Rotation 1. Measures 165–172 recapitulate mm. 1–8 in a new scoring (omitting the written-out, varied repeat in mm. 9–16); mm. 252 (with anacrusis)–279 recapitulate mm. 17 (with anacrusis)–44. The second expansion occurs at the juncture between the refrain and the transition; mm. 280–298 stand in place of mm. 45–56.

⁴² Pascall, "Some Special Uses of Sonata Form by Brahms," lists only twelve Type 1 movements: Opp. 25/i; 26/iv; 34/iv; 51/1/iv; 68/iv; 90/iv; 98/ii and iii; 101/i; 108/iv; 8/iv (version 2); and 114/iv. Daverio, "From 'Concertante Rondo' to 'Lyric Sonata,'" adds the following eight: Opp. 11/vi; 25/iv; 77/iii; 81; 83/iv; 111/iv; 116/1; and 120/1/iv. I believe that Opp. 76/5; 99/iv; and 100/iii also belong in this group, bringing the total to twenty-three.

FIGURE 16. Brahms, Op. 83/iii: Auxiliary cadence

Brahms's retransitions are shorter than Beethoven's and he uses III^\sharp (D major) rather than $\text{I}^{\flat 7}$ ($=\text{V}^7/\text{IV}$) to effect them. His coda rotation (mm. 369–488), unlike the one in the Op. 58 concerto, is not fully rotational, limiting itself mostly to refrain material. (Tonally, however, it recalls events that lie outside the initial refrain complex.) The overall proportions of Brahms's rondo finale make it easier to discern its basis in the parallel, binary Type 1 sonata form.

Figure 16a shows the auxiliary cadence schema upon which Brahms's refrain is based, while (b) and (c) show how Brahms customizes the schema. At (b), we see that the dominant appears as an augmented triad. This happens consistently at each rondo return, with the result that the refrain proper never achieves a provisional structural closure: the primary tone $\hat{3}$ never descends to $\hat{1}$. In Figure 16c, a $\hat{6}-\hat{5}$ neighboring motion is superposed on the more basic $\hat{4}-\hat{3}$. Further details appear in Figure 17, a graph of the entire initial refrain complex (mm. 1–55). In every iteration of the auxiliary cadence, the initial IV receives a subsidiary prolongation in the form of a neighboring D^7 chord ($\text{III}^\sharp 7$). This small detail foreshadows the more prominent, form-generating uses of III^\sharp to come. Unlike the auxiliary cadences in Beethoven's Opp. 58 and 59 rondo themes, Brahms's never casts the tonic status of B^\flat in the slightest doubt, partly because the auxiliary cadence does not last long and partly because mm. 1–8 (repeated in mm. 9–16 and

FIGURE 17. Brahms, Op. 83/iii: refrain complex

R¹ a (ant) 1/9
(cons) 5/13
b (ant) 17 24
(cons) 31 35 41
a¹ (expanded) 45 47 49 53 55

IV (III) V || IV V I
aux. cadence

II V || I II v V
expanded aux. cadence

III (I) VII II V I
expanded aux. cadence

labeled Ra in Figure 17) are cast as a parallel period. The conventionality of this form makes it unlikely that we would hear the half-cadential arrival in m. 4 as anything other than a V, even though no tonic has yet sounded.

The middle section of the refrain (mm. 17–30, and labeled Rb) is likewise organized as a parallel period, this time with a half cadence on V followed by an authentic cadence in V (better understood, perhaps, as a tonicized half cadence). Unlike Beethoven’s ternary refrain, this middle section is not of the contrastive type but is based largely on the cadence at mm. 7–8/15–16, with its augmented V. Whereas Beethoven immediately juxtaposed the V goal of the refrain’s middle section with its IV incipit, Brahms interpolates four measures on a D⁷ chord (mm. 31–34), thereby expanding the IV–V–I auxiliary cadence to III^{#7}–IV–V. Brahms also expands the consequent phrase of Ra upon its return, subsuming the IV within an ascending progression in parallel tenths that has the effect of further prolonging III[#] (mm. 39–55).

Figure 18 shows the transition (TR) and the beginning of the second group, a complicated passage that may be interpreted as a characteristically Brahmsian three-key exposition but also, as I have done, as an adaptation of H&D’s “trimodular block” (hereafter, TMB).⁴³ An apparently brief TR leads to a V:HC at m. 59, extended for six more bars but suddenly and quietly veering

⁴³ It is beyond the scope of this study to explicate the concepts of the three-key exposition and the TMB and to trace the evolution of the former out of the latter. For the three-key exposition, an ideal place to start is James Webster, “Schubert’s Sonata Form and Brahms’s First Maturity,” *19th-Century Music* 2/1 (1979): 18–35 and 3/1 (1980): 52–71. The TMB, as illustrated in Figure 19, is a multimodular second group launched by an initial medial caesura (MC), usually a I:HC. There follows a passage typically suffused with just enough lyricism or characteristic second-theme rhetoric to suggest the onset of a conventional S. This thematic effusion dissolves, however, into a passage, perhaps marked by a renewed TR texture, that sets up a second caesura, most often a V:MC, ushering in a new, more “successful” S—“a ‘second chance’ for S,” as H&D aptly put it (*Elements of Sonata Theory*, 172). As the term suggests, the TMB can be segmented into three phases: the S-like passage following the initial MC (TM¹), its dissolution leading to the second MC (TM²), and the subsequent material leading to the EEC (TM³). There is often no strict boundary between the first two stages of the TMB, hence the symbol TM¹⇒TM². In the eighteenth century, the broad proportions of the TMB made it particularly suitable for concertos. The first movement of Mozart’s Concerto in C, K. 467, can serve as an example: MC on V (“dominant lock” at m. 105); TM¹ in the dominant minor (m. 109, merging with TM² around m. 119); new MC on V/V (“dominant lock” at m. 122); TM³ (m. 128).

FIGURE 18. Brahms, Op. 83/iii: Transition and first part of second group

TR 55 57 59 (2)

TM¹ 65/73

76

TM² 80 81

ant 85

cons 89

varied rep 95

B \flat : I V:HC MC
a: III V I 6 III V I \flat II V \rightarrow III V I
F: III IV V \rightarrow V II III IV II₇⁹ V⁷ I

FIGURE 19. The “trimodular block” (see footnote 43)

P	TR	TM ¹	TM ²	TM ³	C
I	\rightarrow I:HC MC	V	\rightarrow V:HC MC	V EEC	
		(S-rhetoric but unable to prod. EEC)	(dissolves back into TR rhetoric)	(new, “successful” S)	

FIGURE 20. Brahms, Op. 83/iii: TM² summary

into A minor (mm. 63–65). Measures 65–80 form a parallel period in that key, although the descent from $\hat{5}$ in the consequent phrase is weakly supported and arguably only reaches $\hat{3}$, the $\hat{2}$ being rhythmically displaced to enter over I. I have designated this tentative group as the initial module (TM¹) of the trimodular block. Measures 81–88 are also organized like a parallel period, but a curious one. The antecedent (mm. 81–84) can be understood entirely as a half-cadential phrase in the dominant F major: IV–I–V/V–V. With its subdominant beginning, we can even hear it as a disguised repetition of mm. 1–4. We might expect the consequent phrase (mm. 85–88) to lead to a PAC in F, in preparation for the dominant theme that we have been expecting since m. 59; but it returns to A minor instead, so that we retrospectively hear the F-major phrase as a tonicized submediant and C major as III within an A-minor, I–III–V bass arpeggiation spanning mm. 80–88. But then Brahms repeats mm. 81–88, this time “correcting” the consequent; F major definitively arrives at m. 95. I have designated mm. 81–96 as the second module of the trimodular block (TM²). It lacks obvious transitional rhetoric, but it flits delightfully between A minor and F major, settling into the goal key only at the very end. Figure 20 summarizes the

entire passage. What becomes clear is that Brahms has organized his trimodular block as a leisurely paced, III–IV–V–I auxiliary cadence in F.⁴⁴

The F-major theme, the third module of the trimodular block (TM³), is graphically represented in Figure 21. The theme is organized as a small ternary form whose first section *a* twice emphasizes the major mediant (III[♯]), but both times within an elaborated I–III[♯]–V bass arpeggiation (mm. 97–105 and 105–112, of which the graph shows just the first). Of course, the prominent C[♯]s, now locally consonant, recall the many dissonant C[♯]s in the refrain. The middle section *b*, however, transposes mm. 81–88 from TM² down a fifth, with the result that this time the A-major harmony (with added seventh) serves as the dominant of a tonicized D minor. Perhaps the most unique feature of the second group is that the return of the *a* section (*a'*) at m. 121 does not lead to the expected EEC in F major, but rather modulates back to A minor, whereupon Brahms takes us through the whole process again, repeating (with altered instrumentation) mm. 65–96, less the already restated mm. 81–88. Because F major has been established by now, the repetition of TM¹ and TM² no longer generates an auxiliary cadence in F; instead, we must understand the retonicization of A minor as effecting a nested auxiliary cadence in that key, spanning mm. 127–144. The F-major EEC finally arrives at m. 151.

The retransition to Rotation 2 (mm. 157–164) hearkens back to the III⁷_♯ of mm. 31–34, resulting in another expansion of the IV–V–I auxiliary cadence to III–IV–V–I. Figure 22 shows the first part of Rotation 2; it corresponds to mm. 1–17, but with a large developmental interpolation (mm. 173–251.1). Measure 172 corresponds to m. 16, while the second half of m. 251 corresponds to the anacrusis to m. 17 (i.e., the second half of m. 16). Within this developmental expansion, the first portion exploits a descending +4 cycle (A^bM, F^bM [spelled EM in the score],

⁴⁴ This is one example, among many, of a deviation from the normative two-part exposition turning out to be built around an auxiliary cadence.

FIGURE 21. Brahms, Op. 83/iii: TM³ (second group, Part 2)

Figure 21 shows two systems of music. The first system is divided into sections 'a' and 'b'. Section 'a' starts at measure 97/105 with a $\hat{2}$ annotation. Section 'b' starts at measure 101/109. The second system is divided into sections 'a'' and 'b'. Section 'a'' starts at measure 121 with a $\hat{2}$ annotation. Section 'b' starts at measure 127=63. The score includes chord symbols: F: I, II, V, I, (VI), III \sharp , V, I, v, VI, I, III, IV, V, I, IV, V, I, III.

FIGURE 22. Brahms, Op. 83/iii: Development interpolation within R2

Figure 22 shows a single system of music. It is divided into sections 'S', 'RT', 'R1', '[developmental interpolation]', and 'R2 (cont)'. Section 'S' starts at measure 159 with a $\hat{2}$ annotation. Section 'RT' starts at measure 164 with a $\hat{3}$ annotation. Section 'R1' starts at measure 172=16. Section '[developmental interpolation]' starts at measure 181. Section 'R2 (cont)' starts at measure 252=17 with a $\hat{3}$ annotation. The score includes chord symbols: V, III \sharp , IV \sharp 5, V, I, \flat II, VII $^{\circ}$ 7, I, \flat II \flat , II 7 , V 7 , I, V, V, I, \flat II, VII $^{\circ}$ 7, I, II 7 , V 7 , V 9 , \sharp 5, I.

CM). Brahms then interprets C as \flat II of B minor, itself \flat II \flat of the movement's tonic (we understand B minor as an enharmonic respelling of C \flat minor). The core of the development centers on \flat II, after which Brahms prolongs III (D minor) in the same way; mm. 234–247 transpose mm. 197–211 up a minor third. The reinterpretation of the A⁷ chord (V⁷ of III) as V⁹ of B \flat , by means of the three common tones (m. 249), recalls the play between A and F in the TM² portion of the second group. Moreover, the C \sharp in the A⁷ harmony is almost immediately juxtaposed with its return as part of the motivic V ^{\sharp 5}/F triad, with which the recapitulation resumes at m. 251, as if nothing had happened.

Figure 23 graphically represents the remainder of Rotation 2. As I noted earlier, in Rotation 2, Brahms developmentally expands the last phrase of the refrain (itself already an expansion of the consequent phrase as it first appears in mm. 5–8) and the transition. The caesura at m. 299 corresponds to the MC on V/V at m. 59, but it's on the “wrong dominant”—V/D \flat instead of V/B \flat . Brahms yanks it up a half step so it can prepare TM¹, which reappears “on schedule” at the lower fifth, D minor (m. 309). The recapitulated second group remains in D minor. The only portion of TM³ (originally 33 measures) that Brahms preserves is the last eight-bar phrase from mm. 121–129—the one that goes back to A minor. The effect of recapitulating this phrase at the lower fifth in mm. 333–341 is that the tonic return of TM³ appears as a parenthesis within a prolongation of III. Why does Brahms keep almost the entire TMB in D minor, instead of duplicating the original A minor/F major trajectory at the lower fifth? It may be because by cadencing in D major at the last minute (m. 355), he can prepare the third ritornello cum coda rotation with another expanded III \sharp –IV–V–I cadence, which now spans mm. 309–384 (each time Brahms uses it, the progression takes longer). But, *caveat emptor*, it's not an auxiliary cadence any more, having been assimilated into the large-scale I– \flat III– \natural III–IV–V–I bass arpeggiation that spans all of Rotation 2.

FIGURE 23. Brahms, Op. 83/iii: Recapitulation of TR and TMB

280=45 $\hat{3}$ 287 $\hat{b}3$ 291 295 299=57 305=65 309 324 $\hat{b}3$ 333 355 369 384

I \flat ————— \flat VI V I V V I V I \flat # (I) III \sharp IV V I

\flat III \flat III \flat III

FIGURE 24. Brahms, Op. 83/iii: Coda

R³ Coda ESC

392 398 410 418 422 428 432 462 467 468 469 472

$\hat{3}$ $\hat{2}$ $\hat{1}$

I III \sharp IV⁶ \flat VII V⁷ I⁶V #5 I V⁷ III \sharp II⁶ V⁶₄⁵ I

The coda is not fully rotational, but it does bring together several elements for the last time. As the graph in Figure 24 clarifies, III \sharp continues to predominate, and there are two more I–III \sharp –V–I arpeggiations. The C \sharp continues to prevent $\hat{3}$ from descending; the ESC has to await m. 472, about 97% into the finale. A final bass descent to V (mm. 476–483) does not bring about a final PAC, but rather a reminiscence of the $\hat{1}$ – $\hat{3}$ – $\hat{5}$ bass motion, this time with III \sharp “corrected” to I 6 .

In his G-major concerto, Beethoven expanded his auxiliary cadence through the simple means of building up huge retransitions on V of IV. With Brahms, the formal seams show still less, for the prolonged major mediant are fully assimilated into the auxiliary cadence itself (and indeed were prefigured in the movement’s very first measure). Moreover, the dominant goal of Rotation 1 is itself prepared by another III–IV–V–I auxiliary cadence, albeit using the diatonic minor rather than major mediant. Finally, after it is too late for any further auxiliary cadence, Brahms nonetheless preserves the progression itself, incorporating it into the bass arpeggiation that brings about the much-postponed ESC.

Brahms: String Quintet in G, Op. 111/iv; Concluding Remarks

In an earlier article (one touching only tangentially on auxiliary cadences), I had this to write about the finale of the String Quintet in G, Op. 111:

Brahms carries even further Beethoven’s technique of using the auxiliary cadence to diminish the impact of the tonic at the moment of recapitulation. The first phrase of Brahms’s refrain (mm. 1–8) remains entirely in B minor, leading to a half cadence on V/III; a V–I in G appears in m. 11, but G continues to compete with B as tonic until it clearly emerges at m. 13. After the refrain returns at m. 81, Brahms begins his expansion at m. 90, *before* the tonic has had the chance to return. After a developmental passage, Brahms regains the V/III at m. 146 [respelled initially as G \flat] and extends it through m. 163. Further expansions, based on mm. 9–13, delay the definitive tonic return until m. 170 [corresponding to m. 13]. Brahms has enlarged his original auxiliary cadence to some ninety measures! Unlike Beethoven, Brahms does not even give us an “apparent

tonic” prior to the recapitulation of the second group. A more detailed comparison of Brahms’s Type II movements with Beethoven’s, focusing especially on the treatment of the auxiliary cadence, deserves a separate future study.⁴⁵

The present essay is intended as that “separate future study.” In the meantime, however, Peter Smith has written a superb piece on Brahms’s “motivic harmonies,” the last section of which deals with the Op. 111 finale.⁴⁶ Smith recognizes that the III, however expanded, ultimately finds its true function as the initiating harmony of an auxiliary cadence in G major. Yet he warns us not to succumb entirely to the security of a Schenkerian “synoptic” view:

Yet although the harmonic hierarchy of an auxiliary cadence represents a viable framework within which to hear the passage, the synoptic perspective it and my formal analysis imply nevertheless represents only one listening context for these opening measures. Within more local contexts of the theme group and some of the form’s other crucial points, an equivocal relationship develops between B and G. [. . .] The finale . . . develops an ambiguity such that it is not always clear which harmony is controlling and which is subsidiary, following conventions associated with the nineteenth-century technique of tonal pairing. There are moments when B clearly functions as the mediant of G, as a synoptic perspective indicates, but there are also passages in which B is thrust into the forefront, forcing G to take on a submediant character.⁴⁷

The auxiliary cadence, in short, performs a dual role. From the formal perspective that I have been developing, it interacts with the Type 4¹ sonata-rondo mixture so as to attenuate considerably the potentially clunky effect of repeatedly stopping and restarting that the rondo genre threatens to create. When a composer developmentally expands the auxiliary cadence of a rondo refrain to seven times its original length, he has effectively obscured the formal division normally articulated by a rondo return (a reason why such movements may not even be recognized as Type 1 variants, although Smith provides a welcome exception). Smith focuses on the

⁴⁵ Joel Galand, “Some Eighteenth-Century Ritornello Scripts and Their Nineteenth-Century Revivals,” *Music Theory Spectrum* 30/2 (2008), 265, 266.

⁴⁶ Smith, “Brahms’s Motivic Harmonies.”

⁴⁷ Smith, “Brahms’s Motivic Harmonies,” 91–92.

auxiliary cadence's harmonic role, setting up a tonal polarity to be exploited throughout the movement. Our other three movements do not establish tonal pairings to nearly the same extent. We cannot say, even in the case of the Beethoven quartet finale, that the opening on C major creates much in the way of tonal ambiguity—there is no functional harmonic succession whatsoever in that key.

Something closer to what is going on in Brahms's Op. 111 finale happens in the last movement of Schubert's late Piano Sonata in B \flat . This is another Type 4^{1exp} sonata-rondo mixture starting with an auxiliary cadence, which, from the bass plan alone, appears to be based on the same VI–V–I prototype as Beethoven's Op. 59/2 finale. Locally, however, VI (G) functions as a V \sharp^7 , moving to a C-minor $\frac{6}{4}$ chord before moving on, via the bass passing tone G \flat , to F, supporting a cadential $\frac{6}{4}$ in B \flat major. The entire auxiliary cadence (mm. 1–10, repeated in mm. 10–19) toys with G, C and B \flat as potential tonal areas, and when Schubert introduces a contrasting phrase that modulates to G minor, we could, in retrospect, take mm. 1–33 to be a two-part refrain (*a a b*) in G, within which the B \flat functions as III within a large-scale I–III–V–I plan. We could then mistake mm. 34–62 as a transition to the second group in the relative major. Only when mm. 1–10 return at m. 64 do we realize that the proportions of the refrain complex were larger than we suspected. That said, once past that point, Schubert never again threatens the tonic status of B \flat . As for the expansions in Rotation 2, there is just one, and Schubert simply wedges it in between mm. 32 and 33 of Rotation 1. Since m. 32 ends a phrase in G minor and m. 33 begins with the sustained G in octaves from mm. 1–2, the expansion has the effect of delaying the second ritornello's definitive tonic goal by fifty-six extra measures. As charming as the movement is, it involves a relatively mechanical application of the Type 4^{1exp} format. (For the sake of brevity, I omit a more detailed analysis of the movement.)

The five rondos by Beethoven, Schubert, and Brahms discussed here form a close-knit group by virtue of their marked family resemblances. Nineteenth-century instances of the type 4¹ rondo are relatively uncommon to begin with; not only do these movements share this form, but they each also begin with an auxiliary cadence. Brahms certainly knew the three earlier works, and it is entirely plausible that Schubert had heard the Beethoven concerto and quartet. Beethoven wrote his two works at about the same time. That the five movements adopt the same comparatively unusual strategies for making rondo finales more continuous suggests that they form an interdependent group whose filiations may arise from influence, however unconscious.

APPENDIX

ABBREVIATIONS USED

C	Closing group (sonata form)
EEC	Essential Expository Closure
ESC	Essential Structural Closure
HC	Half Cadence (I:HC is a half cadence in the tonic key; V:HC is a half cadence in the dominant key)
MC	Medial Caesura
P	Principal theme (sonata form)
P ^{ref}	Principal theme in a sonata-rondo mixture (alternative to R)
PAC	Perfect Authentic Cadence
R	Rondo refrain or ritornello
RT	Retransition
TMB	Trimodular Block (individual modules are TM ^{1,2,3})
TR	Transition (sonata form)
→	Modulatory
⇒	Becoming or merging (as in a fusion of principal theme and transition)

WORKS CITED

- Bonds, Mark Evan. "Haydn's False Recapitulations and the Perception of Sonata Form in the Eighteenth Century." Ph.D. dissertation, Harvard University, 1988.
- Burstein, L. Poundie. "The Off-Tonic Return in Beethoven's Piano Concerto in G Major, Op. 58, and Other Works." *Music Analysis* 24/3 (2005): 305–347.
- . "Surprising Returns: The VII[♯] in Beethoven's Op. 18, No. 3, and Its Antecedents in Haydn." *Music Analysis* 17/3 (1998): 295–312.
- . "The Trimodular Block, the Three-Part Exposition, and the Classical Transition Section." Paper given at the Annual AMS/SMT Conference, Los Angeles, California, 3 November 2006.
- . "Unraveling Schenker's Concept of the Auxiliary Cadence." *Music Theory Spectrum* 27/2 (2005): 159–185.
- Cadwallader, Allen and Warren Darcy. "Intersections Between Two Analytical Perspectives on Sonata Form." In *Essays from the Fourth International Schenker Symposium*, Vol. 1, edited by Allen Cadwallader, 85–109. Hildesheim: Georg Olms Verlag, 2008.
- Caplin, William E. *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Beethoven and Mozart*. Oxford: Oxford University Press, 1998.
- Cole, Malcolm S. "The Development of the Instrumental Rondo Finale from 1750 to 1800." Ph.D. dissertation, Princeton University, 1964.
- Cole, Malcolm S. "Rondo." *The New Grove Dictionary of Music and Musicians*. 2nd edition, edited by Stanley Sadie and John Tyrell, vol. 21: 649–656. London: Macmillan, 2001.
- Daverio, John. "From 'Concertante Rondo' to 'Lyric Sonata': A Commentary on Brahms's Reception of Mozart." In *Brahms Studies*, edited by David Brodbeck, 111–138. Lincoln: University of Nebraska Press, 1994.
- Galand, Joel. "Form, Genre, and Style in the Eighteenth-Century Rondo." *Music Theory Spectrum* 17/1 (1995): 27–52.
- . "The Large-Scale Formal Role of the Solo Entry Theme in the Eighteenth-Century Concerto." *Journal of Music Theory* 44/2 (2000): 381–450.
- . Review of James Hepokoski and Warren Darcy, *Elements of Sonata Theory*. *Journal of Music Theory* 57/2 (2013): 383–418.

- . “Rondo-Form Problems in Eighteenth- and Nineteenth-Century Instrumental Music, with Reference to the Application of Schenker’s Form Theory to Historical Context.” Ph.D. dissertation, Yale University, 1990.
- . “Some Eighteenth-Century Ritornello Scripts and Their Nineteenth-Century Revivals.” *Music Theory Spectrum* 30/2 (2008): 239–282.
- Girdlestone, C. M. *Mozart’s Piano Concertos*. London: Cassell, 1948.
- Hepokoski, James, and Warren Darcy. *Elements of Sonata Theory: Norms, Types, and Deformations in the Late–Eighteenth-Century Sonata*. New York: Oxford University Press, 2006.
- Jackson, Timothy L. “Observations on Crystallization and Entropy in the Music of Sibelius and Other Composers.” In *Sibelius Studies*, edited by Jackson and Veijo Murtomäki, 175–272. Cambridge: Cambridge University Press, 2001.
- . “The Tragic Reversed Recapitulation in the German Classical Tradition.” *Journal of Music Theory* 40/1 (1996): 61–111.
- Jander, Owen. *Beethoven’s “Orpheus Concerto”: The Fourth Piano Concerto in Its Cultural Context*. Hillsdale, NY: Pendragon Press, 2009.
- Kamien, Roger. ““Quasi-Auxiliary Cadences’ Beginning on a Root-Position Tonic Chord: Some Preliminary Observations.” In *Essays From the Third International Schenker Symposium*, edited by Allen Cadwallader, 37–50. Hildesheim: Georg Olms Verlag, 2006.
- Kerman, Joseph. “4. Klavierkonzert G-Dur op. 58.” Translated by Gudrun Budde in *Beethoven: Interpretationen seiner Werke 1*, edited by Albrecht Riethmüller, Carl Dahlhaus, and Alexander L. Ringer, 415–429. Laaber: Laaber Verlag, 1994.
- LaRue, Jan. *Guidelines for Style Analysis*. New York: W. W. Norton, 1970.
- Laufer, Edward. “Notes on the Auxiliary Cadence.” Paper read at the Third International Schenker Symposium, New York City, 1999b.
- McKee, Eric. “Auxiliary Progressions as a Source of Conflict between Tonal Structure and Phrase Structure.” *Music Theory Spectrum* 18/1 (1996): 51–76.
- Miyake, Jan. “The Role of Multiple New-key Themes in Selected Sonata-Form Expositions.” Ph.D. dissertation, City University of New York, 2004.
- Niven, David Brian. “Brahms and the Binary Sonata: A Structuralist Interpretation.” Ph.D. dissertation, University of California, Los Angeles, 1992.
- Pascall, Robert. “Some Special Uses of Sonata Form by Brahms.” *Soundings* 4 (1974): 58–63.

- Plantinga, Leon. *Beethoven's Concertos: History, Style, and Performance*. New York: W. W. Norton, 1999.
- . Review of *Robert Schumann: Herald of a "New Poetic Age,"* by John Daverio. *Journal of the American Musicological Society* 51/2 (1998): 384–392.
- Rothstein, William. *Phrase Rhythm in Tonal Music*. New York: Schirmer Books, 1989.
- Rosen, Charles. *Sonata Forms*. New York: W. W. Norton, 1980.
- Schachter, Carl. "Chopin's Fantasy, Op. 49: The Two-Key Scheme." In *Chopin Studies*, edited by Jim Samson, 524–529. Cambridge: Cambridge University Press, 1988. Reprinted in Schachter, *Unfoldings: Essays in Schenkerian Theory and Analysis*, edited by Joseph N. Straus, 260–288. New York: Oxford University Press, 1999.
- Schenker, Heinrich. *Free Composition (Der freie Satz)* [1935]. Translated and edited by Ernst Oster. New York: Longman, 1979.
- Smith, Peter. "Brahms and Schenker: A Mutual Response to Sonata Form." *Music Theory Spectrum* 16/1 (1994): 77–103.
- . "Brahms's Motivic Harmonies and Contemporary Tonal Theory: Three Case Studies From the Chamber Music." *Music Analysis* 28/1 (2009): 63–110.
- . "Liquidation, Augmentation, and Recapitulatory Overlaps." *19th-Century Music* 17/3 (1994): 237–261.
- Strunk, Oliver. "Haydn's Divertimenti for Baryton, Viola, and Bass." *Musical Quarterly* 18/2 (1932): 216–251. Reprinted in Strunk, *Essays on Music in the Western World*, 126–170. New York: W. W. Norton, 1974.
- Suurpää, Lauri. "Continuous Exposition and Tonal Structure in Three Late Haydn Works." *Music Theory Spectrum* 21/2 (1999a): 174–199.
- Tovey, Donald Francis. *Essays in Musical Analysis, Volume 3: Concertos*. London: Oxford University Press, 1936.
- . *The Forms of Music: Music Articles in the Encyclopedia Britannica*. Edited by Hubert J. Foss. London: Oxford University Press, 1957.
- Tutenberg, Fritz. "Die Durchführungsfrage in der vorneuklassischen Sinfonie." *Zeitschrift für Musikwissenschaft* 9 (1926–27): 90–94.
- Webster, James. "Binary Variants of Sonata Form in Early Haydn Instrumental Music." In *Joseph Haydn: Bericht über den Internationalen Joseph Haydn Kongress, Wien, Hofburg 5–12 September 1982*, edited by Eva Badura-Skoda, 127–135. Munich: G. Henle, 1986.

———. “Brahms’s Tragic Overture: The Form of Tragedy.” In *Brahms: Biographical, Documentary and Analytical Studies*, edited by Robert Pascall, 99–124. Cambridge: Cambridge University Press, 1983.

———. “Schubert’s Sonata Form and Brahms’s First Maturity.” *19th-Century Music* 2/1 (1979): 18–35 and 3/1 (1980): 52–71.

ABSTRACT

James Hepokoski’s and Warren Darcy’s *Elements of Sonata Theory* is fast emerging as one the most influential theories of form to have been advanced in recent decades. The authors only briefly discuss some of the Schenkerian implications of their work, but what they have to say is intriguing and opens up broad avenues of future research. This essay contributes to that research program. It focuses on the Schenkerian notion of the *auxiliary cadence* and how it manifests itself in a formal design that up until recently has not been well understood, namely the category of rondo that Hepokoski and Darcy have termed the *Type 4¹ sonata*. To that end, I analyze the role that the auxiliary cadence plays in a group of four closely-related Type 4¹ rondos: the finales of Beethoven’s Piano Concerto, Op. 58; his String Quartet Op. 59/2; Brahms’s Piano Concerto, Op. 83; and his String Quintet, Op. 111. I also touch briefly on the finale to Schubert’s late Piano Sonata in B \flat , D. 960. It is possible—although it cannot be proven—that the Beethoven finales provided a model for Schubert’s and Brahms’s.

This article is part of a special, serialized feature: *A Music-Theoretical Matrix: Essays in Honor of Allen Forte (Part V)*.

HOW TO CITE THIS ARTICLE

(An example based on a humanities-style note citation)

Joel Galand, “Auxiliary Cadences and the Binary Rondo,” in *A Music-Theoretical Matrix: Essays in Honor of Allen Forte (Part V)*, ed. David Carson Berry, *Gamut* 6/2 (2013): 51–93.

ABOUT THE AUTHOR

Joel Galand is Associate Director of the School of Music at Florida International University. He is a past editor of the *Journal of Music Theory* and has contributed articles and reviews pertaining to eighteenth-century music and Schenkerian theory to *Journal of Music Theory*, *Music Theory Spectrum*, *Intégral*, *Notes*, *Current Musicology*, and the International Schenker Symposium book series. He also publishes on the music of Kurt Weill. He has been a volume editor for the Kurt Weill Edition and serves on its Editorial Board.

This article uploaded to the *Gamut* site on 4 May 2014.

