Rotational Form And Sonata-Type Hybridity In The First Movement Of Shostakovich's Fourth Symphony

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Abstract

ROTATIONAL FORM AND SONATA HYBRIDITY IN THE FIRST MOVEMENT OF SHOSTAKOVICH'S FOURTH SYMPHONY

by

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This dissertation examines Dmitri Shostakovich’s sonata-form movements—often framed as “sonata arch” or “reverse recapitulation” structures, wherein the primary- and secondary-zone themes return in reverse order after the development—through the lens of rotation. Using methodology from Hepokoski and Darcy’s Elements of Sonata Theory (2006), I explore concepts of rotation in Symphony No. 4’s opening movement and its interaction with a larger effect of boundary blurring and typological hybridity, manifest as a blending of double- and triple-rotational sonata-form types. This blurring effect is heightened by use of nontonal boundary sonorities at moments of expected tonal closure.

I begin by outlining double- and triple-rotational sonata structures—layouts corresponding to Hepokoski and Darcy’s Type 2 and Type 3 sonata forms respectively. Analyses from the initial movements of Shostakovich’s First and Fifth Symphonies, as well as contemporary initial movements by Sibelius and Shebalin, illustrate Shostakovich’s techniques of evoking triple-rotational elements within a double-rotational construction. By featuring both primary- and secondary-theme elements at the moment of post-development tonic return,
Shostakovich simultaneously elicits expectations of both sonata types, thus creating a kind of sonata-type hybrid while underscoring ordered rotational structures.

In-depth examination of Symphony No. 4’s first movement highlights its blending of double- and triple rotational structures while also exploring how moments of formal demarcation—including the MC, EEC, and ESC—illustrate Shostakovich’s postponing of tonal cadential closure in favor of non-tonal boundary sonorities. These post-tonal events correspond to formal boundaries, displacing tonal closure until the movement’s coda while forming transpositional and rhetorical correspondences across the movement analogous to tonal boundaries markers. This movement’s relationship with Mahler’s First Symphony—apparent in various thematic quotations—is broadened to include thematic, formal, and rotational elements, further highlighting Symphony No. 4’s rotational patterns and structural correspondences.

Sonata Theory’s emphasis on thematic rotations presents a new way of understanding Shostakovich’s blurring of sonata-form boundaries. In turn, Symphony No. 4 provides a fruitful landscape in which to examine the interplay between rotational, rhetorical, and tonal aspects of Sonata Theory and their application to polystylistic repertoire.
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The theoretical and analytical work that became this dissertation first began as discussions of Shostakovich and Sonata Theory with Patrick Connolly. Those conversations were a joy and I am grateful for his partnership in getting this project off the ground. Along the way, presentations of this work at conferences led to additional and valuable perspectives and ideas. Lynne Rogers was especially helpful in this regard and I am thankful for her attention and generous feedback.

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Introduction

Overview

Legendary for its grand proportions and withdrawal on the eve of its premiere, Dmitri Shostakovich’s Fourth Symphony was described by the composer as his “new way” of approaching symphonic composition. While this comment looks forward to his extensive multi-movement symphonic works, its Beethovenian associations simultaneously link the Fourth Symphony to Shostakovich’s continuing experimentation with sonata-form schemas in dialogue with historical models. Rooted both in historical traditions and more modern formal practices, especially those of Mahler, Shostakovich’s use of sonata-form elements situates his music within a multifaceted and challenging musical landscape featuring interactions between historical norms, twentieth-century alterations, and his particular tonal and formal choices.

This dissertation engages Shostakovich’s sonata-form practice, his ties to existing symphonic and sonata-form traditions, and his personal formal and tonal idioms through the lens of Sonata Theory and its accompanying architectural principles of rotation and rotational form, examining how these dialogic and theoretical considerations manifest in the highly expressive and formally complex opening movement of Symphony No. 4. Sonata Theory, as explained in depth in James Hepokoski and Warren Darcy’s book *Elements of Sonata Theory* (2006),

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1 See Pauline Fairclough, *A Soviet Credo: Shostakovich’s Fourth Symphony* (Aldershot: Ashgate, 2006), xiii. Symphony No. 4’s two predecessors, Symphonies 2 and 3, were both single-movement works, a format he would eschew for his multi-movement symphonies 4–15 to follow. A brief history of the remark’s Beethovenian origins can be found in James Hepokoski, “Formal Process, Sonata Theory, and the First Movement of Beethoven’s ‘Tempest’ Sonata” *Music Theory Online* 16, no. 2 (June 2010).
describes sonata structures as individualized dialogues with a system of norms and options and the compositional choices employed to override or conform to a norm for expressive purposes.²

Sonata Theory includes the concept of rotation—structures that recycle one or more times a referential thematic pattern established at the piece’s beginning—as a foundational component of sonata-form movements. Referred to by Hepokoski and Darcy variously as a form, idea, and principle, “rotation” is considered to be an archetypal element of musical structures that restate a referential pattern, module, or set of themes as part of a cyclic process wherein each successive repetition retains the original ordering. Sonata structures are a particular manifestation of rotational form, a construct that Darcy frames as “an overriding structural principle, an Urprinzip that in the instrumental genres may control the progress of movements organized according to more familiar Formenlehre categories such as sonata form or rondo.”³

Whereas sonata forms are considered by Hepokoski and Darcy to be organized around the concept of rotation, the theoretical construct of “rotational form” is more loosely defined and is applicable to a large number of traditional Formenlehre designs, as well as serving as a point of congruence between traditional structures and more experimental large-scale forms of the nineteenth and twentieth centuries that are not necessarily structured as traditional sonata forms. Works traditionally structured as sonata form (including the opening movements of symphonies) that resist a “sonata” label for tonal, rhetorical, or formal reasons may still contain cycles of


thematic statement and variation as an overarching structural idea. Rotational processes may predominate at a local level of sonata form structures as well, interacting with the overarching sonata structure in ways that either confirm to typical historical examples (one referential rotation in the exposition is retraced in the development and/or recapitulation), or may thwart these expectations by presenting extra subrotations within exposition or recapitulation spaces (a practice noted by Warren Darcy as common to Bruckner’s sonata forms, and one outlined in this study as present in Shostakovich’s Fourth Symphony) or by altering or emphasizing full rotational iterations within development space (a technique used by Brahms, Mahler, and Shostakovich, among many others).  

Varied repetitions of a particular referential rotation often build toward a large-scale goal, displaying expressive alterations and variations in pursuit of a culminating telos. Such alterations

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range from a traditional sonata’s recapitulatory secondary-theme tonic restatement to the synthesis of the two alternating contrasting themes in the slow movement of Mahler’s Sixth Symphony, to name but two.  

This rotational evolution, while not considered mandatory by Hepokoski and Darcy, nevertheless displays a particular trait—cumulative development over the course of a large-scale structure—that can be considered a defining formal process, separating rotation as a formal principle from the simple repetition of alternating thematic modules.

Sonata Theory and rotational form provide useful theoretical apparatuses for understanding sonata form as it was typically employed in eighteenth-century music, while also offering important theoretical insight into later developments. Sonata Theory’s emphasis on thematic rotations and essential tonal events as necessary constructs in the musical drama of sonata form presents a new way of understanding Shostakovich’s sonata-form movements. This reconsideration addresses analyses of Shostakovich’s pitch language, as well as his formal constructs, thematic placement, tonal layout, and repetition of rotationally active melodic material, most notably as manifest at the thematic and tonal boundaries between development and recapitulation spaces in Symphonies 1, 4, and 5, and offers a particular challenge to existing analyses. In turn, Shostakovich’s early symphonic works provide a fruitful landscape in which to examine and engage the interplay between rotational, rhetorical, and tonal aspects of Sonata Theory and their application to polystylistic twentieth-century repertoire.

More specifically, the interaction of rotational constructs and sonata-formal expectations helps to illuminate Shostakovich’s Fourth Symphony in terms of its dramatic formal blurring, remarkable thematic reordering, and complicated (and sometimes conflicting) interactions.

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6 Darcy, “Rotational Form, Teleological Genesis, and Fantasy-Projection in the Slow Movement of Mahler’s Sixth Symphony.”

between the movement’s unusual rotational structures, tonal and nontonal formal boundaries, surface events, sonata-formal ambiguities, and relationship to Mahlerian models. This investigation focuses on two interacting sonata-formal factors that contribute to the formal drama of Symphony IV/i: (1) the “reverse recapitulation,” or placement of the secondary theme at the moment of expected primary-theme sonata-form recapitulation; and (2) the non-resolving recapitulation, or delay of recapitulatory tonal resolution until the coda of a sonata-form movement. Each of these factors engages with rotational elements of Shostakovich’s sonata-form structures, and examination of them illuminates his practices of boundary divergence and formal blurring, significant elements in Symphony No. 4’s formal turmoil.

I begin this study by addressing theoretical issues concerning reverse recapitulations in relationship to double- and triple-rotational sonata layouts—that is, sonata forms featuring the movement’s tonic resolution at the secondary theme (forming a large-scale double rotational layout consisting of the exposition and a combination of the development and tonal resolution, or return of the secondary theme in the tonic) and more well-known models featuring a tonic recapitulation of the entire exposition (a large-scale triple rotational structure consisting of the exposition, development, and recapitulation sections, with each section also designated as a rotation). Shostakovich’s particular blending of double-rotational (Hepokoski and Darcy’s Type 2) and triple-rotational (Hepokoski and Darcy’s Type 3) sonata-form constructs is then related to his techniques of boundary blurring as manifest through conflicting and mismatched tonal, sonic, and rhetorical events, and rotational boundary articulations. These elements are then explored in relationship to Sonata Theory and rotational form in the opening of Shostakovich’s First Symphony (his first multi-movement symphony and the Fourth Symphony’s only multi-
movement symphony predecessor) as well as the opening movements of Sibelius’s Fourth Symphony and Shebalin’s Third Symphony.

I then present the opening movement of Shostakovich’s Symphony No. 5 as a case study in the interaction between Shostakovich’s sonata constructions and Sonata Theory and rotational form. This analysis of Symphony No. 5 expands Hepokoski and Darcy’s sonata-form criteria in relation to the first movement’s tonal and rotational environment, and addresses the thematic and tonal complications of the movement’s overall sonata design and discursive coda. Finally, a detailed analysis of Symphony No. 4’s first movement illustrates the complex interactions of its sonata-formal and rotational designs, as well as the dialogue between Shostakovich’s tonal and rhetorical choices, formal boundaries, normative earlier practices, and emerging catalogues of deformations as displayed in nineteenth- and twentieth-century symphonic predecessors. This analysis also engages the Fourth Symphony’s formal and thematic relationships with Mahler’s First Symphony.

Sonata Theory and Nineteenth- and Twentieth-Century Works

Compositional dialogues between Classic-era sonata-formal traditions and later styles have benefited from recent studies involving Sonata Theory and rotational form in works from the nineteenth and twentieth centuries. Boyd Pomeroy, in his 2013 article “Brahms’s Fused Formal Spaces and Their Analytical Implications: The Finale of the C-Minor String Quartet, Op. 51, No. 1,” employs Sonata Theory in his discussion of formal fusion, defined as “the fusion within one formal space of formal functions that normally occupy successive spaces.”

According to Pomeroy, this kind of fusion is made possible by the foregrounding of rotational

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8 See Pomeroy, Boyd, “Brahms's Fused Formal Spaces and Their Analytic Implications.”
considerations in nineteenth-century sonata forms. Developmental spaces begin to participate in the sonata-formal structure as full restatements of the initial expositional rotation, creating “explicitly triple-rotational sonata forms.”\textsuperscript{9} This design potentially complicates the overall sonata structure by placing the developmental iteration of the initial expositional rotation in dialogue with both the exposition and recapitulation. This developmental rotation may then create formal fusion by presenting tonal and/or thematic events that are not expected until the recapitulation rotation.

The triple-rotational layout of Brahms’s quartet is complicated by the key scheme and lack of tonal closure at the end of the first and second rotations. Pomeroy’s analysis consequently posits four possible sonata-formal parsings for the movement’s ambiguous design: Hepokoski and Darcy’s Sonata Types 1 (sonata without development); 2 (double-rotational sonata layout omitting all or most of the primary theme during post-development expositional retracking); and 3 (triple-rotational, “standard” sonata layout whose recapitulation includes all of the primary theme); as well as a “reverse recapitulation” design, with each option examined in terms of its thematic or tonal ramifications for the movement as a whole. This blurring of formal boundaries, and the concomitant foregrounding of rotational considerations, favored the nineteenth century’s “formal freedom and organic growth over dramatized tonal polarity and highly articulated formal rhetoric.”\textsuperscript{10}

My study draws on Pomeroy’s notion of blurred boundaries and the incorporation of the mismatching of rhetorical and tonal arrivals at the coda section. Pomeroy’s notions of formal fusion, however, rest largely on tonal considerations, especially as framed in Schenkerian terms. This scope proves too narrow for dealing with Shostakovich’s polystylistic language. Pomeroy

\textsuperscript{9} Ibid., 187
\textsuperscript{10} Pomeroy, “Brahms’s Fused Formal Spaces,” 187.
frames the fusion of development and recapitulatory function, and the third rotation with a combination of recapitulatory and coda function, in terms of tonal closure, specifically the lack of traditional cadential boundaries and the late arrival of the movement’s dividing dominant. While incorporating rotation strongly into his analysis, Pomeroy does not fully address how to reconcile the fusion of recapitulation and coda functions with the rotational return of P at the beginning of the coda, a location typically employed at the opening of coda space in historical models. Pomeroy also leaves unexplored the ramifications of the movement’s “failed” exposition, or an exposition that lacks a concluding perfect authentic cadence in the new key, as displayed at the parallel moment at the end of sonata space proper, or the lack of attainment of a perfect authentic cadence within recapitulation space and before the coda.11 This study takes such moments of tonal and formal mismatch, and the expressive avoidance of the Essential Expositional and Essential Structural Closure, as among its primary concerns, contextualizing them as part of Shostakovich’s particular practice of boundary blurring.

Seth Monahan’s 2008 dissertation, “Mahler’s Sonata Narratives,” his 2007 article “‘Inescapable’ Coherence and the Failure of the Novel-Symphony in the Finale of Mahler’s Sixth,” and his 2011 article, “Success and Failure in Mahler’s Sonata Recapitulations,” apply Sonata Theory in investigating Mahler’s sonata formal structures as musical plot paradigms, or,

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11 These structural cadences are referred to by Hepokoski and Darcy as the Essential Expositional Close and Essential Structural Close, perfect authentic cadences that conclude the exposition and recapitulation of a sonata form, respectively. Hepokoski and Darcy relate their theoretical grounding of the EEC and ESC in part to Heinrich Christoph Koch’s concept of a formal phrase-ending cadence [förmlichen Absatz], typically the first PAC in the new key after the secondary theme [Schlußsatz]. This cadence marks the end of the exposition proper [Hauptperiode]. Koch distinguished between the material before the first PAC and that after, and refers to post-cadential modules as “clarifying periods” [erklärender Periode] that serve an appendix function [Anhang] to the exposition. See Elements of Sonata Theory, 122.
sonata form as a “vehicle for musical storytelling.” Monahan’s dissertation incorporates Adorno’s novelistic and narrative images of Mahler into analyses featuring Sonata Theory’s tonal and rhetorical process-based dialogic approach. The resulting plot paradigmatic analyses are manifest within particular movements, across movements within a symphony, and throughout Mahler’s symphonic output.

Similar analytical legacies are observed in both Mahler and Shostakovich scholarship, with programmatic analyses seen as straining interpretive credibility with extra-musical and autobiographical assertions. In taking up issues of narrativity in Mahler, Monahan instead seeks to explore Mahler’s use of form itself as an expressive device, notably the adoption not only of “the schematic attributes of the classical sonata but also aspects of its intrinsic plot-mechanics—particularly those centering on the exposition and recapitulation of the second theme.”

Pushing back against Adorno’s notions of Mahler’s thematic and formal “disconnected impressions,” Monahan notes that Mahler’s “transformed repetitions serve as the carriers of teleological coherence,” as viewed in tandem with Sonata Theory’s notions of cadential attainment and rotational formal cycles. Monahan’s rigorous methodological framework—grounded in Sonata Theory and rotational form—thusly reexamines Adorno’s novelistic and nominalist Mahler readings, incorporating signposts of Mahler’s “classical” formal structures into his narrative-focused analyses. In its focus on rotational formal cycles and on dialogues

14 Ibid., 65.
15 Additional theoretical and analytical elements from Monahan’s thorough exploration of Mahler’s sonata-form practice will be addressed in chapters 2–5.
with traditional sonata constructs, Monahan’s explorations have influenced the present study. Notions of varied rotations, or “transformed repetitions,” as providing teleological coherence are used here as a means of contextualizing Shostakovich’s repetition of both fully formed thematic modules and thematic fragments as part of a large-scale formal process, and a concomitant hermeneutic struggle for transformation, that spans an entire movement. Shostakovich’s studies of Mahler’s music are well documented, and Monahan’s explications of Mahler’s cadential evasions at the end of sonata space, as well as his development-space treatment of problematic secondary-theme material, are useful when examining Shostakovich’s similar techniques in sonata form constructs in his early symphonic works. Monahan’s analyses also provide another means of examining Shostakovich’s engagement with historical forms by tracing Mahler’s similar explorations and deformations of traditional sonata models.

Sigrun Heinzelmann examines Ravel’s sonata-form movements from pre-war chamber music in her 2008 dissertation and in the essay, “Playing with Models: Sonata Form in Ravel’s String Quartet and Piano Trio.” Like Pomeroy, Heinzelmann incorporates both Schenkerian analysis and Sonata Theory into analytical readings of Ravel’s pre-war chamber music, focusing on Ravel’s engagement with classical formal traditions, as well as his development of a condensation of form, a “more sophisticated integration of motivic, harmonic, and formal substance; and increasingly complex interaction of diatonic and nondiatonic collections.”

Noting Sonata Theory’s benefits to analysis of Ravel, namely “both the flexibility to interpret unconventional features of Ravel’s sonata forms and a historical template against which to

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17 Heinzelmann, “Playing with Models,” 144.
contrast his designs,” Heinzelmann examines the tonal and cadential axioms of Sonata Theory, as well as the use of nondiatonic collections as delineating particular formal spaces. Specifically, Ravel’s use of octatonic and whole-tone passages in the String Quartet’s closing zone, as well as double-tonic complexes and numerous tonally open sectional conclusions, complicates tonality-based notions of sonata-form structures, and, Heinzelmann posits, ultimately serves both to engage and subvert the models he draws on. The use of diatonic and nondiatonic collections in the string quartet and evasion of the tonic return of the secondary theme in the Piano Trio, “change how we track the form,” simultaneously enticing and complicating sonata-form perceptions.

Heinzelmann is perhaps the first author to engage ideas of multiple tonal centers and nontonal collections in applying Sonata Theory concepts to twentieth-century sonata forms. Heinzelmann does not extend her exploration of Ravel’s tonal language to include nontonal closing events, such as the completion of a non-diatonic collection or the presence of a nontonal referential sonority, as candidates for chordal or cadential closure of a sonata-form movement. This study, like Heinzelmann’s, explores the use of nondiatonic collections as form defining, but seeks in addition to extend the concepts of Sonata Theory to nontonal harmonic phenomena, as well as thematic construction.

Hepokoski and Darcy also apply Sonata Theory, deformation, and rotational concepts to repertoire beyond Mozart and Beethoven. In various publications, Hepokoski employs Sonata Theory and rotational concepts in exploring the music of Sibelius and Strauss. Likewise, Darcy outlines the hermeneutic significance of rotational form and other features of Sonata Theory in publications dealing with the music of Mahler and Bruckner. These analyses are most notable for exploring the hermeneutic possibilities suggested by rotational form and its role in a dialogic...

Each of these works addresses the changing landscape of sonata-formal schemas, including extensions of practices previously considered deformational or exceptional and the dialogue between rotational constructions and tonal frameworks. Among the issues raised by Pomeroy, Monahan, and Heinzelmann, three main topics emerge that I seek to address here. First is the extent to which tonal, cadential, rhetorical, and rotational elements of sonata-formal works continue to remain, or can be expected to remain, relevant in nineteenth- and twentieth-century works. Whereas Monahan’s readings of Mahler’s off-tonic endings and evaded closures are positioned within a tonally expectant narrative of “success” and “failure,” Pomeroy’s analysis grapples with the mismatch between what could be considered a relatively straightforward Type 2 construction (a viewpoint that privileges the rotational elements) and the general lack of cadential sectional closure, culminating in the seeming arrival of a dividing dominant at the moment of expected tonic-confirming Essential Structural Close (a perfect authentic cadence that concludes the secondary theme zone and provides tonal closure to the recapitulation and to sonata space as a whole). This issue of tonal and cadential closure at
rotational conclusions is even more pronounced in Heinzelmann’s analysis of Ravel’s Piano Trio, where two tonics are asserted throughout, a situation that subverts sonata form tradition without necessarily invoking the same narrative topic of tonal success or failure seen in Monahan’s analyses of Mahler. The meaning of sonata “failure,” commented on by Monahan and engaged to some extent by Heinzelmann, lies at the heart of Sonata Theory’s interpretations of tonal progression in sonata-form movements. Its applicability to repertoire of the twentieth century (Mahler, Ravel, and Shostakovich) may lie in the fact that these composers, while consistently challenging and subverting expected tonal endings, do not abandon such cadential closings wholesale. In order for such moments to be notable, they must in some way remain “marked”—that is, non-normative. Within the process of transformation from deformational to normative practice, sonata-space cadential evasion is framed in this dissertation not as losing its marked identity entirely, but to some extent as inhabiting both a marked (or deformational) space in dialogue with nearly two centuries of tonal models, and an emerging, more normative boundary-blurring function, originating in Beethovenian practice and finding expanded expression within late nineteenth- and twentieth-century works, most notably Mahler. This work positions both tonal closing events and nontonal closure as part of Shostakovich’s practice of boundary obfuscation.

Second, these writings highlight the importance of rotational considerations as essential not only to Classic-era sonata-formal models, but also to deformational formal and tonal extensions in nineteenth- and twentieth-century works. Monahan’s and Darcy’s writings examine issues of sonata space and extra-formal utterances—such as rotationally active introductions and development-space utopian fantasy projections—within larger sonata-form and rotational structures. (I examine similar techniques in the development section of Shostakovich’s Fourth
Symphony.) The balance of tonal and rotational considerations is more complicated in Pomeroy’s reading of the Brahms; though foregrounding its triple-rotational structure, Pomeroy does not explicitly address the movement’s actual two-and-one-half rotations, a layout typically seen in historical Type 2 sonatas with a coda featuring a partial rotation of the exposition. Such a mismatch between the movement’s rotational and overarching tonal structures perhaps leaves the difference between a tonally open “parallel reprise,” (fusion of the development and recapitulatory functions within a second rotation consisting of the development and tonal resolution of the secondary theme), and a Type 2 design that fails to produce an ESC before the coda, unclear. 19 In Heinzelmann’s work on Ravel, formal and rotational considerations incorporate the alternation of diatonic and nondiatonic collections as demarcating formal and

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19 The Brahms quartet is in dialogue with Pomeroy’s “Parallel Sonata” principle: sonatas featuring wholesale transposition of the exposition’s key scheme (typically I-V) to the recapitulation (typically IV-I, though other transpositions are possible). See Pomeroy, “The Parallel Sonata Form: From Schubert’s Symphonies of 1815–16 to Rachmaninov,” Journal of Schenkerian Studies 3 (2008): 20–58. Formal fusion is attenuated in development sections that avoid tonic restatements of the exposition, particularly of post-medial caesura material. However, Pomeroy notes that developmental “parallel reprises” that feature tonic resolutions, combined with a triple-rotational layout and parallel sonata design, heighten parallelism between the exposition and development, especially if the development contains a tonic resolution. This creates a “parallel reprise” fusing developmental and recapitulatory functions. Such an occurrence in the development “will effectively usurp not only the thematic but also the tonal function of recapitulation, with potentially far-reaching implications for the overall tonal structure.” While Pomeroy notes the exposition’s lack of tonal closure as a “failed” exposition, he never directly addresses the cadential ramifications of this failure as it affects the recapitulation, namely the absence of the expected Essential Structural Closure (ESC). His hypothesis regarding the movement’s potential “reverse recapitulation” form is based on the large-scale tonal considerations evoked by placing the dividing dominant at the point of expected ESC. This tonal emphasis attenuates rotational principles: Pomeroy addresses the development’s commencing with tonic P-based material as indicating a strong preference toward a new rotation, while the coda’s similar statements of P- and TR-based themes in the tonic, treatments typical of coda spaces, are left open to question because of the lack of firm tonal closure first seen in the exposition. This may understate the rotational connections between P and S thematic materials heard in order during the development and post-crux tonal resolution.
rotational boundaries. Much like the works by Shostakovich examined here, Ravel’s large-scale rotational schemas may or may not feature tonal closure as an underlying goal.

As each author engages concepts of both bi-rotational and tri-rotational sonata structures, it becomes clear that despite the rise of the three-part sonata and rotationally active development sections during the nineteenth century, double-rotational schemas, far from fading away, remained a generically available option. Furthermore, each of these works engages with the interaction of double- and triple-rotational structures, exploring the double-rotational construction as a viable option for works of the era. This study continues in this vein by exploring Shostakovich’s particular contribution to the dialogue between double- and triple-rotational constructions, and in addition proposing the evocation of a sonata-type hybridity as a defining trait of Shostakovich’s early symphonic sonata forms, emerging as a result of the blurring created by the overlapping and mismatch of tonal, rotational, formal, and rhetorical elements within a movement.

Third, practices considered deformational in Classic-era compositions become more and more a part of standard practice in later repertoires. Pomeroy writes, “Another option in the adaptation of sonata form in the nineteenth century was to normalize certain tonal and formal strategies of a previously exceptional nature, bringing them into—or at least closer to—the mainstream of generic options.” Monahan addresses this issue as well, regarding “failed” sonatas, or nonresolving recapitulations: “if tonal resolution is (by a small margin) the exception

20 This includes Hepokoski and Darcy’s historical Type 2 sonata, as well as more loosely organized double-rotational structures and large-scale sonata-form structures involving the coda, such as Monahan’s large-scale bi-rotational (exposition/development and recapitulation/coda) structures.

among Mahler’s secondary themes, why should we elevate it to the status of a ‘norm’?\textsuperscript{22}

Darcy’s article on Bruckner’s sonata practices demonstrates such consistent use of nonresolving recapitulations that they become a first-level default, or Bruckner’s normative practice.\textsuperscript{23} As Monahan states, “a procedure that is novel at one point may be vernacularized over time, eventually becoming a recognized feature of the style—an ‘available’ default and thus no longer a deformation.”\textsuperscript{24} I propose that the availability of this option as a default, established in large part by its ubiquity in Mahlerian sonata-form movements, is exploited by Shostakovich as a oft-occurring part of his obfuscation techniques at moments of tonal and formal demarcation.

These considerations—tonal/rotational/thematic congruence, rotational foregrounding, and deformation—are fundamental in examining Shostakovich’s Fourth Symphony. Whereas Mahlerian models of sonata space and rotational strategies are evident, Shostakovich’s polystylistic tonal language does not necessarily correlate to Mahler’s more straightforward tonal schemas. Given Shostakovich’s conservatory training and engagement with Mahlerian and Beethovenian models of sonata construction, it is no surprise that exploration of \textit{Formenlehre} traditions are reflected in his symphonic sonata-form composition. Nevertheless, more traditional musical markers of sonata form—contrasting strident and lyrical themes in the movement’s first part, rhetorical pauses between these two themes, reconfirmation of the beginning tonic after exploratory development of the themes, and coda revisits to the main theme in the global tonic—are presented alongside unusual subrotational structures, thwarted cadential expectations, and tonal and nontonal boundary sonorities, both engaging and complicating sonata-space

\textsuperscript{22} Monahan, “Success and Failure,” 39–40.

\textsuperscript{23} Darcy, “Bruckner’s Sonata Deformations,” 258.

\textsuperscript{24} Monahan, “Success and Failure,” 40. Monahan notes that the matter of deformational versus normative events is dependent on whether we view such practices within the larger \textit{Formenlehre} tradition or in light of a composer’s specific practice. See Monahan, “Success and Failure,” 40n30.
demarcation and overall tonal trajectory. Examining Shostakovich’s employment of sonata-formal principles and heretofore-deformational techniques engages these points as a means of understanding Shostakovich’s dialogues with earlier models and his innovations, and as offering a hermeneutic context for the rotational foregrounding, problematic secondary-theme formation, developmental subrotations and *Durchbruch* gestures, formal/tonal mismatches, and simultaneous diatonic and nondiatonic closing sonorities displayed in Symphony No. 4.

**Sonata Theory and Shostakovich’s Tonal Language**

Because the formal norms and expectations for Shostakovich’s music are different from those of music composed between 1775 and 1825, and considering the rich catalogue of nineteenth- and twentieth-century works and analytical explorations listed above, it is necessary to address the challenges in adapting Sonata Theory for the music of Shostakovich. Just as norms must be understood in order to judge deformations, when a particular deformation is used consistently in a certain style, it might itself become a norm; this determination is part of the discovery process in analyzing repertoire in a new way. Further analytic challenges are posed by the diversity emblematic of Shostakovich’s compositions. Some of his pieces are explicitly atonal, others are almost completely diatonically oriented, but most often there is a blend of compositional resources that incorporates elements from tonality and atonality along with other diatonic and non-diatonic collections. This can create difficulties in marking formal unification and delineation of an entire movement on the basis of an overriding tonality-oriented or collection-based system. Throughout a given composition, several collections may be used, either at different times or simultaneously. Therefore, a prerequisite to a holistic structural analysis in dialogue with Sonata Theory’s system of expressive norms and deformations is the
ability to successfully parse the music’s constituent parts into syntactically logical sonata-formal elements without relying exclusively on any one overriding system.

This necessitates an engagement with both thematic principles governing rotational-form structures and with established tonal and post-tonal theories of phrase structure, providing the means by which one can identify the beginnings and endings of larger phrases with past rhetorical practices. For explicitly tonal compositions, these criteria are already in place. When examining the music of a polystylistic composer such as Shostakovich, however, issues of phrase structure are complicated by the variety of tonal materials he implements and their interaction with formal elements. Often a composition “modulates” back and forth between diatonicism, pentatonicism, octatonicism, and even atonality. Thus, the idea of a phrase and its completion cannot be limited to diatonically conceived pitch space, nor does it seem appropriate to do away with such discussions altogether.

Post-tonal theories of phrase parsing provide several analytical tools to augment tonal analysis of Shostakovich’s formal segmentations and cadential events. A strict definition of a “phrase” as necessitating directed tonal motion sometimes ignores the salient phrase-defining characteristics present in much post-tonal music, and just as certain large-scale formal constructs can be understood to derive from traditional paradigms (the idea of sonata deformation is but one example), so too can non-tonal teleological goals and cadential analogs.

This requires incorporation of several existing analytical methods in evaluating formal and phrase boundary criteria as needed for relating Sonata Theory to Shostakovich’s stylistic pluralism. The works of Christopher Hasty, Dora Hanninen, and Patricia Howland, among others, explore such phrase segmentation and boundary creation in post-tonal music in detail, outlining the use of such elements as pitch class, set class, dynamics, timbre, and duration in
determining phrase boundaries.\textsuperscript{25} These writings, as well as the listener-based theories of Fred Lerdahl and Ray Jackendoff, have informed this work, and my proposed expansion of Sonata Theory formal markers and phrase boundaries (and their associated criteria) draws from these sources.\textsuperscript{26}

The primary aim of this discussion of phrase boundaries is twofold. First, these varied and multivalent phrase boundaries—relatively ambiguous in comparison with more straightforward tonal cadential events—foreground rotational thematic considerations in dialogue with large-scale sonata-formal practice. When phrase endings are less clear, phrase beginnings—especially rotationally active returns of recognizable thematic modules—tend to be privileged in determining phrase structure and large-scale layout, further emphasizing rotational schemas. This is especially so when these themes also participate in generally recognized sonata-formal rhetorical dialogues and coordinate with historical expectations regarding primary- and secondary-theme placement and characterization.\textsuperscript{27}


Second, expanded notions of musical boundary markers offer potential correlations between non-tonal phrase endings, especially as displayed in Shostakovich’s Symphony No. 4, and Sonata Theory’s teleological concepts, almost all of which are concerned with tonally functional cadential events. One example is the medial caesura, a common feature in Shostakovich’s sonata-form works.\(^{28}\) This device is considered crucial in preparing musical space for the arrival of the Secondary Theme Zone, both harmonically and texturally. Rhetorical aspects of the medial caesura as described by Hepokoski and Darcy, including hammer strokes, a grand pause, and subsequent energy loss in preparation for the secondary theme, are present in Shostakovich’s music, giving rise to expectations that are quite similar in certain respects to what one finds in instrumental music of the late eighteenth century.

However, tonal aspects of this device have no consistent analogue. For instance, whereas in eighteenth-century composition the medial caesura almost always follows a clear half or authentic cadence, Shostakovich sometimes approaches the medial caesura with a traditional tonal preparation, sometimes with the completion of a non-diatonic pitch collection, and sometimes with other pitch organizations. Examples in chapters 1 and 2 excerpted from Shostakovich’s First and Fifth Symphonies will explore the special norms of his tonal and formal boundaries and shed light on the challenges surrounding the formal and rotational structure of the Fourth Symphony’s first movement.

**Shostakovich Scholarship**

Though considerable scholarly attention has been devoted to the biography of Dmitri Shostakovich and the historical context in which he composed, it is only relatively recently that

\(^{28}\) See Hepokoski and Darcy, *Elements of Sonata Theory*, chapter 3, for more details on the medial caesura.
analyses of his music have grown in number. Existing studies largely focus on pitch content and organizational or programmatic elements, and while these explanations of Shostakovich’s pitch and motivic techniques illuminated many aspects of his style, examinations of large-scale formal considerations that situate Shostakovich within the *Formenlehre* tradition have been comparatively overlooked. This relative dearth of formal examination exists despite the Shostakovich’s self-professed indebtedness to the classical symphonic tradition, and to composers such as Beethoven and (especially) Mahler.

Biographies and historical examinations of his cultural and artistic environment constitute the largest body of research related to Shostakovich. Many of these are multi-author collections that focus primarily on Shostakovich’s cultural milieu and his difficulties finding freedom of expression within the Soviet regime. Among music-theoretical analyses, Pauline Fairclough’s

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31 See also Malcolm Hamrick Brown, ed., *A Shostakovich Casebook* (Bloomington: Indiana University Press, 2004); Pauline Fairclough, “The ‘Perestroyka’ of Soviet Symphonism:
A Soviet Credo: Shostakovich’s Fourth Symphony is the most substantial work concerning the Fourth Symphony’s tonal and formal construction. Fairclough’s volume provides an in-depth analysis of the symphony, preceded by a thorough examination of the cultural and artistic developments of Soviet life and the potential effect of these factors on the composition of the Fourth Symphony. The analysis emphasizes both thematic content and large-scale harmonic


motion, avoiding the overly prescriptive programmatic linking found in past Shostakovich scholarship. Fairclough provides a description of narrative process that reflects Adorno’s characterizations of Mahlerian symphonic narrative practice.\textsuperscript{33} Challenges raised by Fairclough’s work include the Fourth Symphony’s general and specific engagement with Mahlerian thematic structures, which she explores without examining the interactions between thematic returns and rotational principles.\textsuperscript{34}

Largely produced before publication of \textit{Elements of Sonata Theory}, there have been a handful of published analyses that incorporate Sonata Theory in the analysis of Shostakovich. These offer readings which, while successfully incorporating some aspects of Sonata Theory in illuminating Shostakovich’s musical landscape, leave many very promising concepts regarding rotational form unexplored. As mentioned, multiple interpretations of Shostakovich’s sonata-formal constructions, even those employing Sonata Theory, have explained his formal designs as utilizing “reverse recapitulations,” a theoretical concept Hepokoski and Darcy largely reject.\textsuperscript{35}

\textsuperscript{33} See Monahan, “Mahler’s Sonata Narratives,” chapter 2, for details on historical and theoretical questions arising from Adorno’s work regarding sonata-form constructions.


\textsuperscript{35} See \textit{Elements of Sonata Theory}, 382–86. David Castro and Michael Mishra have each proposed “reverse recapitulation” or “sonata arch” constructions in dealing with Shostakovich’s instrumental works. See David Castro, “Sonata Form in the Music of Dmitri Shostakovich” (Ph.D. Diss., University of Oregon, 2006) and Michael Mishra, “Shostakovich’s ‘Trademark’ Form: The Arch-Sonata in the First Movement of the Fifth Symphony,” in \textit{A Shostakovich Companion}, 355–76. Hepokoski and Darcy address what they refer to as the “reverse
As will be discussed in chapter one, the concept of “reverse recapitulation” perhaps underemphasizes historical precedents rooted in double-rotational structures, and by doing so may also underplay other hermeneutic, rotational, and structural features of such works.

Three scholars specifically address Shostakovich’s music in terms of Sonata Theory to some degree. Sarah Reichardt employs critical theory and postmodern thought in Composing the Modern Subject: Four String Quartets by Dmitri Shostakovich (2008), drawing on theories of Lacan, Adorno, Bakhtin, Derrida, and others in considering notions of modern subjectivity in four of Shostakovich’s string quartets.\(^{36}\) Sonata Theory is eloquently incorporated into this work through Reichardt’s engagement with Sonata Theory’s characterization of formal design as expressive dialectic. Reichardt also uses Sonata Theory terminology to represent the theme zones of the exposition, and touches on potential key-area defaults suggested by Hepokoski and Darcy in her exploration of the coda’s identity as outside of sonata space proper. Rotational form is noted in the development of the first movement of the Sixth String Quartet and the coda in the first movement of the Seventh String Quartet. The book is focused on modern subjectivity, and there is no extensive or in-depth theoretical exploration of these or any other aspects of Sonata Theory.

Most recent is Judith Kuhn’s Shostakovich in Dialogue: Imagery and Ideas in Quartets 1–7 (2010), a work that views Shostakovich’s first seven string quartets as containing overlapping dialogues with his critics and with conventional genre and form.\(^{37}\) Kuhn presents recapitulation fallacy,” which mistakes a coda with P-based rhetoric, technically outside sonata space, for a reverse recapitulation.

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\(^{36}\) Sarah Reichardt, “Composing the Modern Subject: Four String Quartets by Dmitri Shostakovich” (Ph.D. diss., University of Texas at Austin, 2003); Composing the Modern Subject: Four String Quartets by Dmitri Shostakovich (Aldershot: Ashgate, 2008).

\(^{37}\) See Judith Kuhn, “Shostakovich in Dialogue: Form and Imagery in the First Six String Quartets” (Ph.D diss., University of Manchester, 2005); Kuhn, Shostakovich in Dialogue: Form,
analyses of each movement from these quartets, focusing heavily on Sonata Theory; she employs
Sonata Theory as representative of an archetypal teleological overarching plot, one focused on
the concept of cadential achievement. The results of most of these analyses are designations of
“failed” sonatas, a term Hepokoski and Darcy define as the lack of attainment of either the
Essential Expositional Closure (EEC), the key-confirming perfect authentic cadence in the new
key in the Secondary Theme Zone, or the Essential Structural Closure (ESC), an analogous
cadence (now in the original key) in the Secondary Theme Zone of the recapitulation. Evasion of
this cadence is termed an expressive strategy that symbolizes “frustration, nonattainment, or
failure.”

The idea of the “failed” sonata fits well with scholarly discourse regarding
Shostakovich’s political struggles and with the book’s philosophical arguments. Kuhn’s readings
of declined and omitted EECs and ESCs are, however, sometimes defined in the strictest
Classical-era harmonic terms. This may arise not only from Kuhn’s particular application of
Sonata Theory, adapted from her dissertation which was completed before the publication of
Elements of Sonata Theory, but also from the book’s almost singular engagement with
eighteenth-century models, largely omitting nineteenth- and twentieth-century (especially
Mahlerian) comparisons. As a result, the analyses lead to the “failed” label being applied to
nearly every movement. By omitting later models and developments, Kuhn’s analyses also
potentially privilege tonal cadential events and underemphasize rotational considerations, as well

Imagery and Ideas in Quartets 1–7 (Farnham: Ashgate, 2010). While Kuhn foregrounds issues
of sonata “failure,” she includes some discussion of rotational issues in considering “reverse
recapitulation” structures. Rotational form is also mentioned, though not treated in length, by
Patrick McCreless. See McCreless, “Shostakovich’s Politics of D Minor and its Neighbours,
189.

38 Hepokoski and Darcy, Elements of Sonata Theory, 177.
as other rhetorical and thematic elements and their interactions with both tonal and non-diatonic phrase boundaries. This abundance of “failed” sonata movements consequently leads to questions regarding the expressive impact of such a designation: are these indeed “failed” sonatas if such non-resolving recapitulations constitute such a large portion of Shostakovich’s sonata-formal language? Alternatively, we might consider boundary-space mismatches between rhetorical and tonal resolutions a more generic feature of his works, thus gaining additional hermeneutic or formal significance.

The present study seeks to establish a more flexible utilization of the EEC and ESC concepts in Shostakovich’s works, one that takes more fully into account how such rhetorical and tonal markers can be expressed within later musical styles and that provides a more fluid structural and tonal accounting of these formal structures. Engagement with important facets of Sonata Theory and deformation, such as structural or thematic zone typology, rhetorical and textural gestures, phrase structure, and especially rotational form, also aims to shed additional analytical light on the welcome premises offered by Kuhn regarding Shostakovich’s deformation of Classical-era norms in his non-resolving recapitulations.

A third scholar to address these issues is David Castro, in his 2005 dissertation “Sonata Form in the Music of Dmitri Shostakovich.” Castro utilizes the rhetorical and tonal norms from Sonata Theory in analyzing five works chosen from Shostakovich’s symphonies, chamber music, and concertos. He discusses Shostakovich’s compositional choices and their potential hermeneutic significance; a particular highlight of his study is the exploration of pitch collections and centers outside of traditional tonality and their role in both the large-scale and local formal organization. Castro also uses various concepts and terminology from Hepokoski and Darcy to illustrate hermeneutic trajectory and potential meaning of deviation from historical sonata-formal
norms. His utilization of Sonata Theory is chiefly concerned with tonal criteria, and he employs the “reverse recapitulation” designation in addressing Shostakovich’s thematic ordering.

My goal is to expand on the hermeneutic possibilities introduced by Castro by providing a more in-depth and flexible engagement with important rotational tenets of Sonata Theory within the framework of the ordered teleology of cyclical constructions. One example is found in Castro’s claim that Shostakovich’s music “rarely uses a Medial Caesura,” failing to “exhibit a feature that Darcy and Hepokoski view as an essential rhetorical aspect of the Classical model for sonata form.” As Castro states, the medial caesura is a central feature of Sonata Theory, and many of Shostakovich’s sonata-form movements do feature events that meet the criteria for the medial caesura in all ways except in their tonal function. The hermeneutic and formal function of this medial pause—the preparing of formal and rhetorical space for an impending secondary theme—are used to great effect by Shostakovich, as the ensuing S-themes prepared by these pauses are often challenged, underdeveloped, or obsessively circular, collapsing or failing to deliver on the promise embedded in the grand pause. Enabling the application of the medial caesura by allowing for boundary markers not found in earlier styles unlocks richer analytical possibilities by permitting recognition of Shostakovich’s dialogue with sonata-form rhetorical and rotational norms, despite differing tonal language.

While many of Shostakovich’s works engage with sonata-form principles, the Fourth Symphony is especially notable for its conflicting formal and rotational impulses, ambiguous boundaries, and rhetorical dramas. There is much to be gained from examining this work’s remarkable opening movement from the dialogic viewpoint of Sonata Theory and rotational

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form, and by broadening the prevailing narrative of Shostakovich’s formal boundaries and expressive practices.
Chapter One
Rotational Form, Reverse Recapitulations, and Double/Triple-Rotational Sonata-Form Hybrids

I. Rotational Form and Sonata Structures

Formal analyses of Dmitri Shostakovich’s sonata-form movements often focus on the idea of “sonata arch” or “reverse recapitulation” structures, wherein the primary- and secondary-zone themes return in reverse order after the development. This reordering is considered a common marker of Shostakovich’s style.¹ Yet in referring to “reverse recapitulation” or “sonata arch form” as a singular phenomenon, analysts may overlook Shostakovich’s rich and varied techniques in approaching this reverse effect, as well as the interplay between rotational expectations and thematic ordering. Using methodology from Elements of Sonata Theory, this chapter examines Shostakovich’s “reverse recapitulation” structures through the lens of rotational form and Sonata Theory, thus characterizing his music as a unique blend of double- and triple-rotational sonata-form constructions.

According to Hepokoski and Darcy, sonata forms are generically engaged with the formal principle of rotation.² Rotations, and by extension rotational forms, are concerned with structures that cycle through a referential thematic pattern. Its grounding principles are three-

¹ The most prominent purveyors of the “reverse recapitulation” or “sonata arch” structures as a theoretically notable aspect of Shostakovich’s sonata-form layout include Michael Mishra and David Castro. See Mishra, “Shostakovich’s ‘Trademark’ Form” and Castro’s “Sonata Form in the Music of Dmitri Shostakovich.” Most scholars mention Shostakovich’s “reversal” of primary and secondary themes in recapitulatory space, including Pauline Fairclough, Hugh Ottaway, and Patrick McCreless, among many others. Judith Kuhn addresses the conflict between rotational and “reverse” schemas. See Kuhn, “Shostakovich in Dialogue,” 76–78.
² Hepokoski and Darcy, Elements of Sonata Theory, 613.
fold. First, the initial motion through said thematic patterns is referential for the rest of a movement; thus, subsequent thematic patterns are heard in relation to the first rotation. Second, when the initial thematic module returns, it almost always signifies the beginning of another rotation. And third, when the end of a rotation is reached, a new rotation is expected to follow. Subsequent rotations are often altered, and variations create tension between the initial rotation and repeated cycles; implicit in rotational analyses is the dialectic of persistent loss and regeneration. The notions of circularity and rotation are considered foundational elements of Sonata Theory, manifest as the driving force behind the regenerative symmetrical and balanced formations of exposition/recapitulation structures.

*Elements of Sonata Theory* incorporates this rotational framework into the typologies of five sonata-formal constructions. Figure 1.1 displays the triple-rotational trajectory of a Type 3 sonata, the standard three-part sonata form featuring exposition, development, and recapitulation spaces. The exposition serves as the movement’s first rotation, creating what Hepokoski and Darcy call the “structure of promise,” or the ordered rhetorical arrangement of modules to be worked out in the recapitulation. Rotation 2 consists of the development: this space may or may not present expositional material rotationally, or may participate in the rotational schema in varied ways, such as with half-rotations, truncations, or full rotations. Rotation 3 consists of the recapitulation, or the “structure of accomplishment,” which is in dialogue with the exposition’s structure of promise. In Type 3 sonatas, this final rotation typically restates expositional modules in the tonic key.

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3 Hepokoski and Darcy, *Elements of Sonata Theory*, 17.

4 As mentioned in the introduction, Boyd Pomeroy notes developmental rotations that restate all or most of the expositional rotation become more common in nineteenth-century works. See Pomeroy, “Brahms's Fused Formal Spaced and Their Analytic Implications.”
FIGURE 1.1. Basic pattern of the Type 3 sonata

<table>
<thead>
<tr>
<th>Rotation 1</th>
<th>Rotation 2</th>
<th>Rotation 3</th>
<th>Coda (optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zone</strong></td>
<td><strong>Zone</strong></td>
<td><strong>Zone</strong></td>
<td></td>
</tr>
<tr>
<td>P TR ' S / C</td>
<td>Development</td>
<td>P TR ' S / C</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>V</td>
<td>I</td>
<td>I</td>
</tr>
</tbody>
</table>

**Key**
- Modulatory
- [V³]

**Medial Caesura**
- Essential Expositional Closure (EEC) and Essential Structural Closure (ESC) = /

Though considered outside sonata space proper, coda spaces often partake in the rotational dialogue by beginning with (and often featuring) primary-theme material. Codas may also participate in the overall rotational design by cycling through one or more statements of P- and S-based modules. Historically, the coda typically begins with P-based material, and this presentation of primary theme material, in rotational order at the beginning of a new formal section and following the restatement of expositional themes in the recapitulation, serves to strengthen and underscore the overall rotational layout of the entire movement.⁵

Figure 1.2 presents the double-rotational trajectory of a Type 2 sonata, a structure that does not feature a recapitulation of the full opening primary-theme material in the tonic key after the development. The first rotation is the exposition; the second rotation spans the development

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⁵ Seth Monahan includes coda structures in his large-scale bi-rotational parsing (exposition/development and recapitulation/coda) of Mahler’s Third Symphony, part one. See Monahan, “Mahler’s Sonata Narratives,” chapter 6.
and the secondary theme’s tonic restatement, or tonal resolution. Like the Type 3 design, the presence of a coda of a Type 2 sonata is considered outside sonata space and may or may not present additional full rotations. In contrast to Type 3 structures, the development space of a Type 2 construction tends to reserve S for the moment of tonal resolution, or presentation of S material in the tonic. Full rotations are possible within Type 2 developments before the moment of crux, or the resuming of expositional correspondence material in the tonic during the recapitulation. However, since S-theme appearances within development space are more prevalent in Type 3 formal layouts, their presence in a Type 2 sonata tends to suggest a Type 3 structure. Such complications will be discussed below in relation to Shostakovich’s formal blending and the development space’s participation in establishing sonata formal expectations.

As stated above, the return of the initial thematic module from previously heard rotations most often indicates the beginning of a new rotation. This archetypal principle is consistent with conceptualizations of the Type 3 recapitulation as a return to the movement’s opening rotationally active material, and further reinforced by the tendency of development spaces to

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6 See Hepokoski and Darcy, *Elements of Sonata Theory*, 353–87, for a detailed history of the Type 2 sonata’s structural, tonal, and historical origins.
begin with primary theme-based material. In other words, the primary theme tends to reiterate consistently at large-scale formal demarcations, acting as the initial structural thematic module at each large section of the sonata-form structure. Articulations of formal boundaries at the development and recapitulation then correlate to the reappearance of P-based themes; such events (tonal closure and cadences, changes in thematic material, and so on) converge at the ends and beginnings of new formal zones, reinforcing formal boundaries in a way that is congruent with P’s role as rotational relaunching. Historical models largely feature congruence between tonal boundaries and rotational structure, and the rotational nature of sonata constructions is emphasized by these restatements of P and by typical (though not compulsory) concomitant harmonic boundary structures.

Though rotational structures interact (and typically intersect) with tonal demarcations, rotational form frames the referential thematic pattern—established as an ordered succession at the piece’s onset—as a rhetorical principle, rather than a tonal one. Tonality is, as described in Elements of Sonata Theory,

irrelevant to the task of identifying the rotational principle. The central thing is an implied or actualized order sweep through a temporal sequence of thematic modules, along with the assumption that the most “natural” or expected continuation of the layout’s last module will be to lead to a relaunching of the initial module of the next, thus producing the characteristic spiral or circular effect.  

Most sonata-form expositions (and consequently, recapitulations) realize their rhetorical and tonal trajectories simultaneously, yet composers do sometimes choose to separate the tonal and rhetorical resolutions.  

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7 Hepokoski and Darcy, Elements of Sonata Theory, 612.
8 Noted examples include Beethoven, Mahler, and Bruckner, for whom such mismatches eventually became a standard practice. See Darcy, “Bruckner’s Sonata Deformations,” and
The rhetorical character and formal function of the secondary theme are similarly associated with its position as part of ordered rotational layouts. In the standard two-part exposition, the secondary theme’s function is one of continuation from the medial caesura to the Essential Expositional Closure (EEC) or Essential Structural Closure (ESC)—perfect authentic cadences that conclude the secondary theme zone and provide tonal closure to the exposition and recapitulation, respectively. Whenever the secondary theme is participating in the rotational structures of a sonata-form structure, it continues a thematic rotation already in progress, either referential (its presentation of new material in the expositional rotation) or reiterated (its retracing of the established referential rotation). Hepokoski and Darcy describe this thematic and rotational identity as “a fundamental characteristic of S qua S, one that is established in the expositional Anlage.” As such, in Type 3 and Type 2 constructions S neither initiates rotational structures within the exposition nor begins a large-scale structural unit at the recapitulation. This role remains unchanged in a Type 2 structure, providing the expressive effect of arriving at the tonic resolution, typically corresponding to the beginning of a rotation, at mid-rotation instead of congruently with the return of the primary theme as in a Type 3 structure.

Codas, along with introductions, are considered by Sonata Theory to be parageneric spaces, musical content outside of sonata form space. Sonata Theory privileges the notion of the coda as rhetorically positioned outside of sonata space in the overall thematic layout, appearing after the exposition’s closing thematic material has been reenacted, and in dialogue with prevailing rotational structures. The presence of standard P-based beginnings, along with various

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“Rotational Form, Teleological Genesis, and Fantasy-Projection in the Slow Movement of Mahler’s Sixth Symphony,” and Monahan, “Mahler’s Sonata Narratives,” as well as Hepokoski, “Beyond the Sonata Narrative” for examples.

tonal and thematic considerations, thus complicates ideas of “reverse recapitulations,” as these P statements are considered the functional, form-fulfilling tonic return, yet such “recapitulatory” reverse P statement takes place outside of recapitulation space itself. Furthermore, boundary spaces between recapitulations and codas may feature peculiar elements that smooth or blur formal lines and confirm or upend tonal expectations as to the conclusion of sonata space proper.\(^\text{10}\) Though this tonal blurring may expressively complicate the boundary between sonata formal space and coda space, it does not extend sonata space into the coda.

The interaction of rotational structures and tonal sonata-form boundaries is highlighted in two kinds of formal blurring in the Shostakovich’s early multi-movement symphonies examined in this and later chapters: first is the intermixing of Type 2 and Type 3 rhetorical and rotational elements at the end of development space. Second, Shostakovich misaligns the rotational and tonal elements at the border of sonata and coda spaces. These blended sonata types and blurred boundary spaces invoke a sense of expressive obfuscation, and affects a sense of delay in confirming a clear point of boundary arrival, continually thwarting expectations in a rotationally driven push to the movement’s conclusion. The next section will deal first with boundary blurring and the mixing of different sonata types at the end of development space, then examine similar boundary blurring at the end of sonata space and beginning of coda space.

\(^{10}\) Both Hepokoski and Darcy and William Caplin mention such treatments of this boundary. See Hepokoski and Darcy, *Elements of Sonata Theory*, 282, and Caplin, *Classical Form*, 181.
II. Reverse Recapitulations, Rotational Form, and Sonata Space Boundaries

Analyses from David Castro and Michael Mishra, among others, refer to Shostakovich’s presentation of themes in the recapitulation and coda in reverse order as “sonata arch” form. In explaining Shostakovich’s tendency to obscure the moment of expected recapitulation in the first movement of Shostakovich’s Fifth Symphony, Mishra refers to the “gradually emerging recapitulation,” in describing an off-tonic development appearance of P and the subsequent recapitulatory resuming of tonal correspondence with a post-opening P-zone module. Castro, in his analysis of Shostakovich’s Second String Quartet, uses the concept of tonal center and diatonic pitch collections to similarly argue against an apparent recapitulation beginning with primary theme material in favor of one beginning with the entry of the secondary theme, creating what he refers to as a “reverse” or “retrograde” recapitulation that includes a tonic coda statement of P.

Such appeals to the concept of the reverse recapitulation are not without their merits, especially as a description of the unexpected thematic substitution that takes place at the moment of an expected primary-theme recapitulatory return. In relation to Shostakovich’s music, however, further exploration reveals the complication of this designation, which may not sufficiently take into account the process whereby the themes are turned around. Additionally,

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11 See Mishra, “Shostakovich’s ‘Trademark’ Form” and Castro, “Sonata Form in the Music of Dmitri Shostakovich.” These “reversals” often feature P and TR or S and C pairings that remain in the original expositional order, and can be contrasted with sonata-form movements that truly reverse thematic modules, as well as palindromic structures that more strictly present the first half of a work in reverse as the second half. In works contemporary with Shostakovich’s Fourth Symphony, an example of the first may be found in the first movement of Bartok’s String Quartet No. 5 (1934), wherein three exposition themes are presented in strictly reversed order after the development. An example of the second is the last movement of Ruth Crawford Seeger’s String Quartet (1931), among many others.

interactions with rotational structures, parageneric space, formal boundaries, and large-scale formal expectations yield a diverse and complex formal dialogue with notions of thematic placement and thematic zone reversal.

Rather than considering these thematic phenomena to be symmetrical or mirror-like reversed returns, Shostakovich’s post-development placement of thematic modules may instead be fruitfully viewed as creating dialogues of boundary tension and formal hybridity within large-scale ordered rotational-form designs. Shostakovich uses multiple techniques in these thematic “reversals,” including potential “false recapitulation” motions in the development, fragments of primary theme appearing alongside TR- or S-based material, and recapitulations that commence with material other than the beginning of the primary theme zone, creating an ordered recapitulatory thematic layout not strictly presented in reverse from the expositional layout. These practices complicate the boundaries of sonata formal space beyond simply reversing P- and S-based thematic modules, to be detailed below. Additionally, these various types of compositional activities interact with larger rotational structures, and each commands differing rotational and hermeneutic interpretations in dialogue with Sonata Theory. Exploring Shostakovich’s nuanced and highly varied practices opens up new means of understanding his particular treatment of sonata form.

In place of “reverse recapitulation,” I propose that these structural issues, as well as the expressive features that result, can be better understood by seeing how such frameworks develop as an outcome of certain treatments of rotational form. In this, I follow Hepokoski and Darcy, who in a section from Elements titled “Type 2 Sonata Forms with P-Based Codas and the ‘Reverse Recapitulation’ Fallacy,” state that “it is not reasonable to claim that when such a tonic P[rimary theme]-restoration occurs in a Type 3 sonata it is self-evidently a coda, while when it is
found in a Type 2 sonata it is to be considered part of a presumed ‘reversed recapitulation’…

This claim rides rough-shod over the actually governing double rotation.” The distinction
between double- and triple-rotational sonata form structures and the concomitant reordering of
themes is significant, and these rotational impulses are crucial in exploring the expressive effects
of Shostakovich’s blending of Type 2 and Type 3 sonata formal elements, especially at the crux,
usually the moment wherein a Type 3 recapitulation is expected.

This formal blending chiefly involves interactions of thematic and rotational reoccurrence
at the crux, or return of correspondence to expositional material. Rather than presenting a
straightforward Type 3 restatement of the expositional rotation, or matching the post-
development tonic return with a strict S-based Type 2 tonal resolution, Shostakovich often
combines aspects of both types at these boundary seams. Such combinations may dramatically
convert a seemingly typical Type 3 construct to a Type 2 rotational layout just at the moment of
expected rotational and thematic rebeginning, upending the anticipated return to P. Contrasting
cycles of development-space P/S statements that seem to promise a Type 3 recapitulation lead to
a sudden recontextualization of the entire movement’s overall rotational structure into a Type 2
design. Other works complicate a Type 2 layout with post-opening P- or TR-based thematic
module, proposing but not delivering a return of the opening P module and the concomitant
retracing of expositional space in full. As these sonata types are not meant to be rigid
categories—but rather modes of processing interlocking rhetorical, thematic, and rotational
structures—Shostakovich’s particular combinations of these two types suggest a Type 2/Type 3
hybridity, or simultaneous dialogues with multiple sonata-form processes.

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13 Hepokoski and Darcy, Elements of Sonata Theory, 382.
The three rotational and thematic elements listed above—P-theme as rotational initiator, S-theme as rotational continuance, and coda space as rotationally active parageneric space—simultaneously confirm rotational processes and enable the thwarted formal expectations and rotational ambiguity of Shostakovich’s hybrid layouts. Enacted by the presence of Type 3 rotational elements within an overall Type 2 structure, this dramatic obscuring of distinctions between one formal scheme and the other is ultimately accomplished through each movement’s dialogue with continually emphasized thematic rotational orderings.

These elements interact with historical norms, deformational options, and Shostakovich’s own sonata-form practices. The following consideration of these elements and their interactions with sonata form includes the first movements of Shostakovich’s first multi-movement symphonic work, his First Symphony, and examples from initial movements of other early-twentieth-century Type 2 sonata-form symphonic works. These further illustrate the continuum of practices used to blur the lines between sonata types and instigate conversion from Type 3 to Type 2 structures. Later chapters examine connections between Shostakovich’s rotational layouts and the Type 2/Type 3 formal dialogues seen in Mahler’s First Symphony, specifically concerning the unusual formal and thematic layout of the first movement of Shostakovich’s Fourth Symphony.

III. Primary and Secondary Theme Modules: Rotational Initiation and Continuance

Sonata Theory describes the primary theme as “the idea that begins the sonata process… At the same time P establishes its rhetorical function as the initiator of rotations.” Based on this principle, subsequent reappearances of P or its recognizable variants may instigate additional full

14 Hepokoski and Darcy, Elements of Sonata Theory, 65.
or partial rotations through the referential expositional rotation. While the qualifier indicates P’s role is not universally enacted, it activates new rotational iterations in the vast majority of cases, both in historical and more recent models.

The primary theme’s propensity for initiating rotations is rarely more strongly indicated than at its recapitulatory return, after which a full recycling of the expositional thematic modules is routinely expected. This rotational return in fact defines the Type 3 sonata as a triple-rotational structure. Within Type 2 constructions, there is a continuum of possibilities available for post-P thematic correspondence, ranging in practice from as late as the beginning of the S-theme to as early as the second phrase or subphrase of P. The melodic module present at the moment of crux creates a rotational dialogue with the exposition (and perhaps development), manifest as greater or lesser resemblance to the exposition’s referential rotation. Rotationally, starting with S emphasizes development space’s P-based opening and S’s tonal resolution as a larger-scale double-rotational expositional retracking, while starting with a post-opening P- or TR-based module suggests something rhetorically closer to a Type 3 construction within an overarching Type 2 layout.

The first movement of Sibelius’s Symphony No. 4 in A minor, Op. 63 (1911) blurs its tonal markers, including the MC, EEC, and ESC, nearly to the limits of sonata-form resemblance, but maintains a clear Type 2 rotational structure. Figure 1.3 shows the formal layout of Sibelius IV/i. This movement features several similarities with the opening movement of Shostakovich’s Fourth Symphony, including a tonally ambiguous opening, whole-tone, octatonic, and third-related tonal motions, and a striking frenetic developmental string passage.
### FIGURE 1.3. Sibelius, Symphony No. 4, i, large-scale overview

#### Rotation 1

<table>
<thead>
<tr>
<th>Measure #</th>
<th>Section</th>
<th>Thematic Group</th>
<th>Key Area/Collection</th>
<th>Exposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>P</td>
<td>P(^0) (intro)</td>
<td>WT</td>
<td>P(^\prime)</td>
</tr>
<tr>
<td>7</td>
<td>TR</td>
<td>P(^1) (merged in some sense with P; division at m. 14 is due to melodic repetition and tonality shift).</td>
<td>a</td>
<td>MC-like gesture</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td>C/F#</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measure #</th>
<th>Section</th>
<th>Thematic Group</th>
<th>Key Area/Collection</th>
<th>Crux</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>S</td>
<td>P(^1)</td>
<td>F#</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td></td>
<td>P dissolves into new developmental material featuring imitative strings and tremolos.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Rotation 2

<table>
<thead>
<tr>
<th>Measure #</th>
<th>Section</th>
<th>Thematic Group</th>
<th>Key Area/Collection</th>
<th>Crux</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>S</td>
<td>P(^1)</td>
<td>OCT</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td></td>
<td>material featuring imitative strings and tremolos.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This section returns to instrumentation and texture of intro, in dialogue with coda.

<table>
<thead>
<tr>
<th>Measure #</th>
<th>Section</th>
<th>Thematic Group</th>
<th>Key Area/Collection</th>
<th>Coda</th>
</tr>
</thead>
<tbody>
<tr>
<td>89</td>
<td>S(\pm)</td>
<td>P(^1) (triple meter)</td>
<td>A major</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td></td>
<td>This section returns to instrumentation and texture of intro, in dialogue with coda.</td>
<td>A (plagal)</td>
<td>WT</td>
</tr>
<tr>
<td>108</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>
Whereas this movement is straightforward in its Type 2 design, Sibelius IV/i’s tonal and thematic explorations across this work are striking in their concentration and novelty, evading any strong boundary gestures in favor of its generative shifting tone-color processes. The movement’s dialogue with standard sonata-form markers is thus tenuous, murky, and highly nuanced, accentuating the larger rotational structure by the almost phantom suggestions of sonata-form rhetorical and cadential events. Although traditional tonal divisions are attenuated, the rotational layout of this movement is relatively straightforward in terms of its large-scale rotational ordering of thematic elements.

After a referential expositional rotation, P-based motives begin the second rotation and are followed by developmental activity. S-reminiscent modules are suppressed during the development, accentuating the larger-scale double-rotational structure, and reserved for the moment of crux. These elements all participate as would be expected in standard models of Type 2 sonata design. However, unlike Shostakovitch I/i, IV/i, and V/i, there is no suggestion of a Type 3 recapitulation at the crux and no coda return of the main P-theme after the completion of the second rotation. Consistently throughout this movement, the P-theme is considered the rotational initiator and appears at points of sectional boundary, while S is located at moments of continuation, commencing midway through the movement’s first and second halves.

The overall structure of the opening movement of Vissarion Shebalin’s Symphony No. 3 in C major, Op. 17 (1935), while also Type 2, is considerably more complex than the Sibelius example, featuring elements that blur the formal lines between Type 3 and Type 2 constructions, as well as a rotationally active coda space, charged with cementing the work’s close in the tonic
after its underdevelopment throughout the movement.\footnote{A contemporary and friend of Shostakovich, Shebalin was a graduate of Moscow Conservatory, and served as a professor there from 1935–41 and director from 1942 until his demotion as part of Zhdanov’s 1948 purges. In addition to five symphonies, he composed several operas and numerous chamber and solo works. Shostakovich dedicated his second string quartet to Shebalin.} This work, dedicated to Shostakovich, was completed just before Shostakovich’s own Fourth Symphony, and like Shostakovich’s, features an exposition with a meandering and fragmented set of secondary-zone thematic modules that conclude with a nontonal sonority.\footnote{This movement’s nontonal expositional boundary (0137) EEC tetrachord can be considered as strongly in dialogue with Shostakovich’s use of a nontonal (012479) EEC hexachord at the end of the exposition of Symphony IV/i. See chapters 3–5 for details.}

Figure 1.4 provides an overview of Shebalin III/i’s formal structure. Its blending of Type 3 and Type 2 sonata structures is quite dramatic: tonal and large-scale rotational schemas buttress a double-rotational hearing, as the tonal relationship of the S-theme’s opening and closing ideas, seen in the exposition, link the post-crux space together in an overarching complete reiteration of S. In the expositional statement, S modulates up a fifth, from B to F-sharp. At the crux, the S-theme begins in G and concludes down a fifth, in C. Elements of the P-theme accompaniment provide expectations of a Type 3 sonata layout, which are upended by the presence of S—the module charged with rotationally active continuance. Meanwhile, the intervening post-crux retracing of TR and MC material, as well as the accompanimental dyad and the post-crux interpolation of P-based developmental activities, problematize the Type 2 design with strong Type 3 recapitulatory markers. An expected Type 3 rhetorical and rotational arrival is in essence invaded by the S-theme: portions of P and S were matched at both the crux and post-MC moments in rotation 2. Types 2 and 3 pull equally at this movement’s post-development space,
### FIGURE 1.4. Shebalin, Symphony No. 3, i, large-scale overview

<table>
<thead>
<tr>
<th>Rotation 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exposition</strong></td>
<td></td>
</tr>
<tr>
<td><strong>measure #</strong></td>
<td>36</td>
</tr>
<tr>
<td><strong>section</strong></td>
<td>Intro</td>
</tr>
<tr>
<td><strong>thematic group</strong></td>
<td>P (sentence)</td>
</tr>
<tr>
<td><strong>key area/collection</strong></td>
<td>WT; C/D-flat dyad</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rotation 2</th>
<th>(Rotation 2, cont., with strong allusions to Rotation 3)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Development</strong></td>
<td>Crux, though strongly in dialogue with Recapitulation</td>
<td></td>
</tr>
<tr>
<td><strong>measure #</strong></td>
<td>183</td>
<td>206</td>
</tr>
<tr>
<td><strong>section</strong></td>
<td>flashback</td>
<td></td>
</tr>
<tr>
<td><strong>key area/collection</strong></td>
<td>WT</td>
<td>various</td>
</tr>
</tbody>
</table>
creating a highly expressive blending of—and competition between—differing rotational processes.

The potential Type 3/Type 2 conversion is complicated by the rotational ordering of thematic modules within post-crux space. These complications and their expressive dialogues are predicated on the ordered expression of the exposition’s referential rotation. Rather than reflecting a symmetrical design, the S-theme substitution replaces the P-theme module—responsible for initiating rotational structures—with the S-theme module—responsible for continuation toward rotational completion. This rotational role reversal is arguably part of the drama elicited by such substitutions, switching an expected return of P with a surprise appearance of S, and reinforces their importance in the cyclical dialectic of rotational returns.

With these examples in mind, let us now explore rotational blending in the opening movement of Shostakovich’s Symphony No. 1 in F minor, Op. 10 (1925). Compared with its successors, this movement is comparatively straightforward in its tonal articulations of sonata-form boundaries. Figure 1.5 displays the formal layout. From a structural standpoint, this movement accentuates the large-scale double-rotational construction through the ordered presentation of P-, TR-, S-, and C-zone thematic modules during the second rotation.

At the same time, Shostakovich creates a sense of sonata-type blurring by placing a restatement of the P-theme—one first presented in the tonic during the TR zone in an unusual position just before the exposition’s MC—at the moment of crux. This crux appearance of P immediately after the development, in the style of a Type 3 recapitulation, then progresses immediately to the MC and a completion of sonata space in a Type 2 configuration, not only blurring the lines between rotational structures but also thwarting recapitulatory expectations.
This movement begins with a buoyant, almost sardonic introductory passage that presents a handful of potential strident P-themes; each of these fragments is fleeting, escaping before accomplishing a fully realized P-theme. The layout of the exposition then unfolds in a relatively standard sequence: a properly assertive and borderline satirical clarinet P-theme begins in m. 68 and is structured as a parallel period whose repeat dissolves into TR-rhetoric.

At this point P emerges from the TR rhetoric at m. 84, stated clearly in the F-minor tonic just before the i:HC MC in m. 87. This tonic statement intervenes in otherwise exploratory TR space, interrupting the drive to the MC by a surprising stable assertion of P in the global tonic. (The resurgence of tonic-based P material before and after the MC is another boundary blurring, and will be discussed later in relation to pre- and post-MC tonic discourse in Shostakovich and Mahler). The subsequent triple-meter A-flat major S-theme bounces between instruments and presents two PACs as possible EECs; each is undone by repetitions of S-based material, obscuring and abandoning potential boundary points. The tonal attainment of A-flat is overdetermined in this section, while the melody is unable to achieve focus enough to conclude. Finally, at m. 133 a third PAC is followed by fragmentations of S serving as cadence-reinforcing codetta motives, transformed enough to confirm the EEC with an S-aftermath-like closing zone. Though rhetorically and thematically irreverent and experimental, this movement has so far progressed in a manner strongly in dialogue with a standard two-part expositional referential rotation, by featuring tonal and rhetorical gestures in line with historical P, TR, MC, S, and EEC models.

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17 See Hepokoski and Darcy, *Elements of Sonata Theory*, 182, for details about the C-as-S-aftermath option for closing zones. This is an often-overlooked exception to the guidelines for determining the position of the EEC when followed by S-based material. A similar effect is created by the modal mixture and codetta-like fragmentation of S after the EEC in the first movement of Shostakovich’s String Quartet No. 1.
FIGURE 1.5. Shostakovich, Symphony No. 1, i, large-scale overview

<table>
<thead>
<tr>
<th>Rotation 1</th>
<th>Exposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>measure #</td>
<td>section</td>
</tr>
<tr>
<td>1</td>
<td>Intro</td>
</tr>
<tr>
<td>58</td>
<td>P</td>
</tr>
<tr>
<td>66</td>
<td>TR</td>
</tr>
<tr>
<td>97</td>
<td>MC</td>
</tr>
<tr>
<td>94</td>
<td>S</td>
</tr>
<tr>
<td>133</td>
<td>EEC</td>
</tr>
<tr>
<td>133</td>
<td>C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rotation 2</th>
<th>Development</th>
<th>Crux</th>
<th>Coda</th>
</tr>
</thead>
<tbody>
<tr>
<td>measure #</td>
<td>section</td>
<td>thematic group</td>
<td>key area/collection</td>
</tr>
<tr>
<td>145</td>
<td>Intro</td>
<td>P/TR</td>
<td>Chrom./OCT</td>
</tr>
<tr>
<td>172</td>
<td>P</td>
<td>End of TR, returns with P statement just before MC</td>
<td>g/various</td>
</tr>
<tr>
<td>201</td>
<td>TR</td>
<td>S</td>
<td>d</td>
</tr>
<tr>
<td>204</td>
<td>MC</td>
<td>ESC</td>
<td>d:HCl</td>
</tr>
<tr>
<td>209</td>
<td>S</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td>248</td>
<td>S</td>
<td>P/S</td>
<td>F</td>
</tr>
<tr>
<td>248</td>
<td>S, with the addition of intro fragments as transition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>259</td>
<td>P fragments in stretto; developmental activity feat. P and S, incomplete statement of P in tonic; Intro.</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>f</td>
</tr>
</tbody>
</table>
The development begins in a similarly straightforward way, featuring introductory material that consequently elicits a sense of rotational rebeginning and concomitant expectations of a second rotation. This rotational retracking continues as P arrives off tonic in m. 172; as the development gains musical energy, additional tonal and motivic explorations can be perceived rotationally in ordered dialogue with the exposition’s P and TR zones.

Shostakovich maintains an overall large-scale double rotational design by linking the largely TR-based developmental material with the presence of TR at the crux. However, the Type 2/3 lines are blurred through emphasis on a curiosity from the TR-zone at the crux. In m. 201, the second rotation returns to tonal correspondence with the exposition, yet a Type 2 crux arrives not at the S-theme, but just before. The return to correspondence resumes with the interjecting P-theme statement first heard in the tonic at m. 84 (the point in the exposition when P returned in the tonic just before the MC). P has been transposed from F minor to D minor at the crux, situating the expositional modulation by third from F to A-flat so that the tonal resolution of S takes place in the major-mode tonic. Presenting such a clear and salient statement of P at the crux seems to be hinting at the idea of a P-based triple-rotational design even as the crux begins with TR; the second rotation thus precisely retraces the exposition, maintaining the overall Type 2 layout by presenting P, TR, S, and C in their original order. After the MC in m. 204, the S theme continues to retrace the expositional rotation through the ESC at m. 248 and into the closing zone. Rather than complete the C-zone unaltered, introductory fragments in m. 253 lead into a sizable and rotationally active coda that begins with P-based material. Shostakovich does more than just hint at the idea of a triple-rotational structure: the coda provides another P/S rotation, this time outside of sonata space.
To be detailed in subsequent chapters, Shostakovich blurs formal lines in the first movement of Symphony No. 5 by means similar to those seen in his First Symphony. These movements enact double-rotational schemas with Type 3 connotations by featuring pre-MC thematic content at the moment of crux, then retracing the expositional rotation in order. Shostakovich’s Fourth Symphony, on the other hand, employs these strategies and others in some ways more similar to Shebalin III/i, more dramatically evoking both sonata types at once by combining elements of both P and S at the moment of crux. This simultaneous conflict of rotational impulses—initiation and continuance—in the Fourth Symphony’s Type 2/Type 3 formal dialogue is then further complicated by subrotational and Mahlerian considerations.

IV. Recapitulations and P-based Parageneric Codas

Generically, analyses invoking “reverse recapitulations” almost universally place reversed returns of the P theme in coda space, and often do not overtly delineate between “reverse recapitulation” designs that include the final appearance of the primary theme as part of sonata space and those that place the final primary theme in the coda, outside of sonata space proper. Theoretical descriptions regarding “reverse recapitulation” typically rest on the implicit idea that recapitulatory spaces bear the generic responsibility of repeating each part of the exposition in the tonic, typically in the original order. While there is much diversity (and creativity) in compositional realizations, this concept of recapitulation—and what it means to “reverse” it—conflates several elements of recapitulation spaces. Specifically, these elements are the thematic and rhetorical features of P and S as they interact with overall rotational and tonal structures, and the tonal factors resulting from the “sonata principle,” or the idea that non-tonic exposition material be restated in the tonic. The return of P in the tonic near the end of a sonata-
form movement, often invoked as evidence of a “reverse” recapitulation, is actually located in the coda, not in the recapitulation. As such, the return of P takes place outside of sonata space. Let us examine how these relate to codas as parageneric spaces outside sonata form proper.

First, most examples of “reverse recapitulations” cited in Shostakovich’s sonata-form movements involve codas that begin with the P-theme in the tonic after a Type 2 sonata discourse. The coincidence of these factors—tonal, rotational, and thematic—tends to blur ideas of sonata-space tonal resolution with common coda-space tonal practice. Furthermore, such tonic-based coda events are demonstrated equally in both Type 2 and Type 3 forms.

In terms of tonality, coda spaces, by virtue of their ultimate positioning in the formal structure, tend to confirm the global tonic. This tendency toward tonal reinforcement is different from notions of rhetorical or rotational post-sonata reference. In examining historical coda models, James Hepokoski notes:

> The generic function of codas, when they existed at all, was to demonstrate the security of the tonic key finally fully attained in the preceding sonata form—even when, as often in Beethoven, they began with a temporary shift toward another key—one would expect that longer codas that reflect on events in the preceding structure would accomplish many of those backward glances in the tonic. The larger point, though, is that it is in the nature of coda-spaces, when they refer (for any number of reasons) to past sonata-form events, to do so in the home key. This reference need not be construed as a response to any imagined imperative from the sonata principle.¹⁸

This return to tonic is a hallmark of coda spaces, occurring equally in those that feature P-based openings and those that do not. Moreover, such practice is equally prevalent in codas of all sonata-form types, and is not exclusive to (or obligatory in) Type 2 structures. While it is true

¹⁸ Hepokoski, “Beyond the Sonata Principle,” 112.
that tonic reinforcement of P-based modules may take place within a coda space—under a variety of creative thematic, rotational, and expressive circumstances—there is no reason to associate this reinforcement with an obligation to present expositional P-based material in the tonic during the coda as a result of its omission at the moment of crux. In other words, the correspondence between the coda’s tonic reinforcement and the presence of P-based thematic material should not be considered compulsory because of a preceding Type 2 sonata structure. When such coda-space P-based tonic presentations are not present, as in Sibelius IV/i, there is no systematic reciprocal argument that the absence of a coda space fails to meet a generic responsibility to provide the tonic return of P.

In addressing these tonal conceptions of recapitulation, historical practices regarding tonal resolution within recapitulatory space may also shed light on notions of expositional returns. Hepokoski notes in relation to Edward Cone’s adaptation of sonata principle to non- tonic material in Beethoven’s sonata rondo episodes, that: “Whatever the sonata principle might be, within music from the decades around 1800 it is properly applied only to expectations normatively placed on expositional nontonic themes following the medial caesura (that is, from the secondary theme onward).”19 This description communicates a more general perception of historical sonata-form tonal practices as tending to recapitulate only post-MC off- tonic material in the tonic. This would not include P- and TR-based materials, already stated in the tonic during the expositional rotation. Such modules would presumably have no need for tonal resolution in the recapitulation, and this understanding is generally observed in common historical practice.20

19 Hepokoski, “Beyond the Sonata Principle,” 118. This topic is also treated at length in Hepokoski and Darcy, Elements of Sonata Theory, chapter 11.
20 Hepokoski and Darcy, Elements of Sonata Theory, 242–45.
And yet, tonal and thematic considerations are typically linked in reverse-recapitulation designs: one rarely, if ever, sees an off-tonic return of P in the coda labeled as part of a reverse recapitulation structure. This illustrates the second meaning of recapitulation implicit in “reverse-recapitulation” designs: addressing the change of rotational ordering in post-development or recapitulatory space from the referential expositional presentation. As noted above, the return of tonic emphasis in the coda is not dependent on the thematic presence of P, nor is the tonal resolution at the moment of crux in a Type 2 sonata formal movement. Thus, restatements of P in coda space that are considered part of a “reverse recapitulation” structure are perhaps so characterized in order to address a perceived thematic or rotational omission, instead of a tonal one.

This conception may implicitly privilege the Type 3 sonata form over other constructions.²¹ From a rotational perspective, Type 2 sonatas are not considered Type 3 recapitulations without a statement of P, but instead create a larger-scale rotation linking the off-tonic (or occasionally tonic-based) iteration of P at the beginning of the development with the S statement at the tonal resolution. As P is not obligated to appear in the tonic, this large-scale rotation is considered as having mapped the referential expositional rotation sufficiently. Moreover, the linking of P-based codas and Type 2 sonatas is by no means consistent, nor is there a uniform theoretical means to distinguish which P-based coda appearances following intervening post-S material are “reverse recapitulations” and which are not.

²¹ The independent development and evolution of the Type 2 sonata has been taken up thoroughly in Elements of Sonata Theory, and is described as a generically available formal option, not a truncated or adjusted version of the Type 3 model. Timothy L. Jackson also addresses the history of the “symmetrical” sonata; Jackson’s time frames and cited musical works generally mirror Hepokoski and Darcy’s. See Timothy Jackson, “The Tragic Reversed Recapitulation in the German Classical Tradition,” Journal of Music Theory 40, no. 1 (1996): 61–111.
Examples from this chapter present these potential dilemmas. The first and second large-scale rotations of Sibelius IV/i and Shostakovich I/i examined earlier each feature a post-cadential closing-zone-like section that ends both the first and second large-scale rotations. Sibelius IV/i features P-based material, while Shostakovich I/i reiterates S-based fragments as part of an S-aftermath C-zone. When repeated after the crux, each of these structures appears between the end of S-space and the beginning of coda space, in their original rotational order. This intervening material tends not to be consistently accounted for in considerations of thematic reversal. Furthermore, the literal thematic returns cannot be said to appear strictly in reverse (hence the expositional ordering P, TR, S, and C versus S, C, P) nor does the coda’s parageneric status appear challenged as a result of P’s presence at its beginning.

The coda space of Sibelius IV/i reintroduces material from the introduction, omitting the primary theme, while Shebalin III/i’s coda creates a discourse with the movement’s sonata structure that seems more tonal than thematic. In Shebalin III/i, the dramatic omission of the ESC’s final chord and its lack of tonic confirmation prompt another rotation that emphatically addresses not only this lack of tonal resolve, but the overall tonic underrepresentation. While P-based material does return throughout the coda, there are no complete tonic returns of the P theme after the moment of crux, and the coda seems to compensate for tonal or cadential omissions, not thematic ones.

In the case of Shostakovich I/i, the coda provides complete P/S subrotations before the return of P in the tonic. This parageneric rotation retraces the movement’s sonata journey as a whole, reflecting on the sonata-space events in order beginning with the return of P in m. 257 and followed by further exploratory activities resembling the development section of the movement. As the coda progresses, P is joined by S-based variants, the timpani and strings
present an anticipatory dominant pedal featuring P’s opening rhythm, and P arrives for one last full tonic statement in m. 283. Once this tonic statement is complete, the coda concludes with a truncated version of the introductory module.

While the return of P in F minor during the coda can be viewed in dialogue with its “omission” at the crux (technically it appears, though in its TR guise and off-tonic), this movement’s double-rotational structure is nonetheless reinforced through the coda, with several elements strongly underpinning rotational constructions. The coda’s first subrotation presents material from the P- and S-zones in rotational order, underscoring the ordered layout of the previous two sonata-space rotations. Additionally, the dominant preparation of P’s tonic statement lends an unmistakable anticipatory element, perhaps preparing the listener for a subrotational beginning. Owing to the subrotational activities of the coda, and to P’s tonal and rhetorical preparation, we are perhaps overtly encouraged to hear this statement of P as a point of reemergence; rotationally, this reemergence references each of the movement’s previous rotational beginnings.

Shostakovich I/i’s parageneric coda addresses the missing tonic statement of P—such missing statements are usually cited as connoting the necessity of a reverse-recapitulation structure—yet still participates in ordered P/S cyclings in dialogue with the rotational layout. The presence of a post-ESC closing zone (even one that utilizes S-based fragments, an atypical choice) and the presentation of a complete P/S subrotation before the tonic return of P distances the coda’s tonic P statement from sonata space’s S theme, and inserts ordered thematic modules (C and the coda P/S cycles) between S and the final statement of P. 22 These thematic and

22 Such S-aftermath closing zones are unusual owing to the generic definition of C-space as occurring after the EEC closure of S space. The EEC location is defined as the first PAC
rotational components simultaneously mitigate the possibility of a “reverse recapitulation” designation and display Shostakovich’s use of a rotationally active coda.

While it may be apparent that the reversal is in relation to the “main” or “tonic” return of P at the coda, the musical phenomena that make this restatement distinctive enough to participate in a reversal—and the concomitant implication of extended sonata- or recapitulatory space—could be cited as the very same criteria that make the coda sound like a new formal unit, indicating its parageneric status outside of the sonata formal boundary. While coda spaces feature particular rhetorical and tonal peculiarities, rotational expectations are inextricably linked with the parsing of sonata-space and not-sonata-space. P’s role as rotational initiator may explain its common use in commencing parageneric coda spaces: the rotational presence of P indicates the start of a new formal space, in this case outside sonata space proper. This sense of rotational rebeginning is then utilized and afforded the very same function it has employed consistently throughout the movement.

And finally, such coda spaces do not seem to be universally considered as co-opted into sonata space in Type 2 constructions. When they are, tonic P statements are not obligatory; the omission of such a return in Shebalin III/i presents just such a tonic P-return omission. In addition, codas following Type 2 structures often display similar practices and compositional variety as codas found in Type 3 sonatas, minimizing general coda treatment distinctions between Type 2 and Type 3 codas.

confirming the new tonal center that is followed by non-S material. As such, the definition of the S-concluding EEC seems to preclude such events. However, various elements can contribute to the forming of a closing space containing S-based material, including the treatment seen in Symphony No. 1, where fragments of the S module are treated cadentially, not melodically. Alternatively, these S-fragments can be plausibly viewed as cadential reiterations of the EEC. See Hepokoski and Darcy, Elements of Sonata Theory, 182–83.
This explication of rotational and tonal issues concerning “reverse recapitulations,” sonata types, and coda spaces aims not to eliminate the musical or psychological effect of such thematic reordering, but instead to highlight its relationship with rotational form and the complicated theoretical issues involved in each aspect of recapitulatory and coda designs. Instead of viewing Shostakovich’s “reverse recapitulation” structures as being reversed appearances of traditional Type 3 models, they may instead be fruitfully viewed as creating dialogues between two equally available generic sonata-formal sources. That there is more than one prevalent sonata-form option allows Shostakovich to simultaneously engage the dramatic and hermeneutic effects of each sonata formal type within the unfolding of a single movement, creating a type of hybrid sonata-formal experience. The hermeneutic consequences of a rotational reading involve setting the last presentation of P, whether triumphant or dejected, as a cyclical return outside of the form; while signaling a new space outside of the sonata, the last rotation is simultaneously moving forward in time and a reflection on each rotational cycle of the sonata that has just concluded.

This reconsideration of formal layout then generally intersects with explorations of Shostakovich’s treatment of boundary spaces. These boundaries include the points of rotational beginnings—the crux and coda spaces—as well as formal tonal closings and cadential events—including the MC and EEC, and the ESC—which will be taken up along with the previous formal and thematic concerns in the detailed analyses of later chapters.

V. Non-Resolving Recapitulations and Sonata Boundary Markers

In addition to rotational principles, Sonata Theory’s central tenets include the overall tonal goal of achieving the EEC and ESC, tonal closings that provide the basis for the form’s
overall narrative trajectory. This tonal goal seeking is characterized as “a dramatized musical activity that by means of fluctuations of energy seeks to pass through an ordered set of rhetorical and tonal gateways—cadential stations that must be visited on the way to the ESC and thence to the end of the piece.”23 The basis for the notion of cadential and tonal directionality lies in Sonata Theory’s conceptualization of the tonic as provisional; such provisionality “becomes reality—a confirmed tonic presence—only when ratified with a cadence.”24 This linear tonal journey then interacts with thematic, rhetorical, and rotational signposts on its way to the tonal telos, the ESC. Evading or failing to produce the ESC (and/or its predecessor, the EEC), is framed as forgoing sonata closure, and a symbol of nonattainment of the form’s central tonal goal. These failures to produce an acceptable ESC—referred to as a non-resolving recapitulation—are generally categorized into three deformational practices: a part 2 tonal resolution of S without a satisfactory ESC; a part 2 that begins on tonic but produces an off tonic cadence; and a part 2 presented entirely off-tonic.25 Such practices became generically recognizable over the course of the nineteenth and early twentieth centuries as instances of sonata deformation, part of an ever-increasing catalogue of creative and expressive deformational possibilities. Such deformations and failures “became an increasingly attractive option in the hands of nineteenth-century composers who, for one reason or another, wished to suggest the inadequacy of the Enlightenment-grounded solutions provided by generic sonata practice.”26

23 Hepokoski and Darcy, Elements of Sonata Theory, 250.
24 Ibid., 250.
25 Ibid., 245–47.
26 Ibid., 254.
That tonal closure could be shifted to the coda, outside of sonata space, did not resolve the omission of the generic tonal expectation within the form. Hepokoski and Darcy underscore this point:

Merely to claim that all turns out well because a resolution is eventually secured in the coda is to miss the point. It is more compelling to suggest that the closure in the coda only reflects on what did not happen in the preceding sonata—at times a disillusioned lamenting of the absence of closure in the proper structural space; at times an “external,” after-the-fact corrective in a necessarily appended, often discursive surplus-space; at times a desperate attempt to recover from a difficult situation through bluff and bravado.²⁷

Hepokoski and Darcy claim that in cases of ESC nonattainment, “the hermeneutic burden of the analyst is to explore the inner logic of this inadequacy” in addressing such events.²⁸ In response to Shostakovich’s common use of this deformation, I propose that delays or evasion of the ESC until coda space can be considered as expressing two overlapping hermeneutic dialogues with sonata form. The first dialogue is with the prevailing historical discourse surrounding sonata failure, evoking Sonata Theory’s notion of leaving a crucial task incomplete until the coda. The second dialogue is predicated on the first, and ensues from particular boundary blurring techniques resulting in the expressive mismatching of rotational and tonal/cadential boundary events. Such blurring techniques consistently place the front-accented processes of rotational returns in tension with the tonal, thematic, and rhetorical events closing previous rotations, creating formal tension that is ultimately maintained until the movement’s end.

²⁷ Hepokoski and Darcy, Elements of Sonata Theory, 246.
²⁸ Ibid.
Concomitant with the blurring of rotational boundaries, forgoing expositional and sonata-space closure can be considered another way of blurring formal boundaries. Treatments surrounding EEC and ESC events in Shostakovich’s early symphonic movements can be examined as falling into two types: tonal EEC/ESC confirmation with thematic and/or motivic boundary overlaps, and presentation of nontonal EEC and ESC rhetorical boundary markers within an overarching tonal narrative.  

The first type of boundary blurring achieves the tonal and/or cadential goals of the EEC and ESC, though not without problematizing the tonal achievement with thematic overlapping. This treatment can be seen in the opening movements of the First and Fifth symphonies. In the First Symphony, the S zone is generally tonally overdetermined; repeated PACs are consistently undone by the insistent continuation of the S-theme. It is not until the S-theme is truncated to just its cadential motive that one realizes that the third PAC is, almost retroactively, indeed the EEC. The S-theme fragments then continue still, serving as an S-aftermath C zone. In the Fifth

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29 Hepokoski and Darcy, in pages 246–47 of *Elements of Sonata Theory*, characterize the second and third types of non-resolving recapitulations (a part 2 that begins on tonic but produces an off tonic cadence, and a part 2 presented entirely off-tonic, respectively) as containing “two ESC-effects. The first one, within sonata-space proper (ending S), is a “substitute” or “false” ESC, providing the illusion of closure in the wrong key with an otherwise correctly placed PAC. The real ESC, bringing tonal closure to the whole movement, is articulated on the other side of sonata-space (or at least past the completion of S), normally in a coda. While the first type of nonresolving recapitulation [S without a PAC in tonic] mentioned above did not violate the orthodox conception of the sonata principle, this second type clearly does: the S-block is never resolved in the tonic key.” Mahler’s Symphony No. 6 is listed as among examples of later works wherein non-resolving recapitulations become a recognizable deformation option. Darcy touches on this in “Rotational Form, Teleological Genesis, and Fantasy-Projection in the Slow Movement of Mahler’s Sixth Symphony;” Figure 3, on page 54, features a diagram of the first movement of Mahler’s Sixth Symphony that is depicted as containing a “rhetorical ESC” in D major (IV) at the end of S-space (rotation 3), followed by a “tonal ESC” in A major at the end of the coda (rotation 4). Darcy does not clarify in this article the definition of a “rhetorical” ESC, the relative importance or effect of a “rhetorical” ESC (is it still “false”?) or to what extent such considerations reflect a change in notions of “substitute” or “false” ESCs and sonata “failure” in reference to the growing presence of non-resolving recapitulations in modern symphonic works.
Symphony’s first movement, an underdetermined tonic arrival at the end of S space serves as an attenuated EEC gesture, and a subsequent post-cadential transition consisting entirely of a single turn motive from the S theme follows. This motive also begins the development as well, joined by P’s bombastic brass arrival.30

The second situation allows for postponement of tonal confirmation until the coda, outside of sonata space proper, while still providing formal and rhetorical goalposts in dialogue with traditional EEC and ESC models. In the first movements of Shebalin’s Third and Shostakovich’s Fourth Symphonies, the journey through “ordered rhetorical and tonal gateways” is not limited to diatonic goalposts, but instead matches rhetorical, textural, and rotational features of historical models with nontonal boundary sonorities. In Shebalin III/i, a (0137) tetrachord provides a firm rhetorical close to the exposition by simultaneously mixing elements of the global and S-zone tonics. In Shostakovich IV/i, nontonal boundary sonorities appear throughout the movement, featuring transpositional relationships analogous to those used in typical sonata form diatonic progressions. The movement features a (01247) pentachord that serves as recurrent boundary sonority throughout, appearing at MC-, EEC- and ESC-analogous moments. Cadential confirmation of the global tonic is reserved for the coda, yet pentachord, hexachord, and septachord boundary sonorities strongly in dialogue with EEC and ESC models are achieved throughout the movement, and mirror relationships expected of typical diatonic sonata-form construction. This creates a multivalent tonal journey, with tonal and nontonal

30 The ESC of I/i mirrors the EEC; in the case of V/i, an off-tonic ESC gesture provides a rhetorical boundary marker yet postpones tonal closure until the coda, in dialogue with Hepokoski and Darcy’s second type of non-resolving recapitulation. A detailed analysis of this movement is provided in chapter two.
trajectories unfolding simultaneously, and positions the “failure” of the tonic to appear within sonata space as another method of boundary blurring.

**Nontonal Boundary Sonorities and Sonata Theory**

To account for Shostakovich’s use of multiple pitch collections as outlined above, this study broadens the definition of several tonally based Sonata Theory cadential effects—including the MC, EEC and ESC—in order to account for Shostakovich’s alternative means of organizing pitch structures at formal boundaries. Such broadening will include the historically established rhetorical events surrounding these MC, EEC, and ESC cadences in defining a contextual/structural means of classifying nontonal boundary events in dialogue with earlier sonata-form practice and Sonata Theory.

Whereas the tonal concepts behind Sonata Theory’s form-defining cadential motions are explicated in *Elements of Sonata Theory*, the possibility of extending these concepts to nontonal phrase boundaries in a systematic way relating to Shostakovich’s output has yet to be fully realized. Efforts to accommodate both tonal and post-tonal dialogues with Sonata Theory here are based in rotational principles and historical understandings of tonal cadential practice, as well as post-tonal set-class segmentation, the grouping theories of Fred Lerdahl and Ray Jackendoff, and work on post-tonal phrase segmentation by Christopher Hasty, Dora Hanninen, and Patricia Howland.  

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31 These post-tonal theories explore segmentation and grouping at various levels: Hasty and Hanninen deal primarily with motivic segmentation, while Howland explores combinations of these smaller segments into larger phrases and formal units. All of these approaches frame segmentation at some level in terms of continuity and discontinuity of particular types of musical content, and involve grouping items that share some basic musical parameter. These parameters vary in identity and scope: Hasty, Hanninen, and Howland all include generic aural events.
These closing figures could be approached on an individual case-by-case basis, though this study seeks to ground such \textit{ad hoc} determinations by drawing on post-tonal theories of segmentation in two ways. The first is to draw upon these theories’ definitions of boundary events involving non-tonal articulations, such as changes in duration, texture, register, contour, timbre, dynamic, and so on, in response to individual polystylistic structures and Shostakovich’s evocation of historical models at moments of nontonal boundary sonorities. The second is to draw on a theoretical approach that can systematically include non-pitch-based rhetorical and textural events and pitch-based elements (tonal and nontonal) at similar contextual levels within a theoretical and structural orientation that is grounded in Sonata Theory.

One such framework expressing resemblances between cadential events can be created by adapting the general segmentation theories of Dora Hanninen, which involve the notions of contextual and structural criteria in establishing segmentation associations known as \textit{structural motives}. In her general theory of segmentation, Hanninen defines three domains of music discourse: sonic (aural “primitives” including pitch, duration, dynamics, etc.); contextual (associations between segments that involve repetition of elements, including contour, sets, Roman numerals, etc.); and structural (groupings formed with respect to a particular theoretical orientation). In determining the associative qualities involved in motivic segmentation, sonic criteria generally determine motivic boundaries, while contextual criteria create segments. Hanninen defines separate criteria for determining sonic and contextual segmentation, and then involving duration, dynamics, and pitch (as broadly defined, including pitch, pitch class, set class, etc.). Hanninen includes contextual elements like repetition, while Howland specifically foregrounds timbre, density, and texture to previously explored musical phenomena. See Hasty, “Phrase Formation in Post-Tonal Music”; Hanninen, “Associative Sets, Categories, and Music Analysis”; and Howland, “Formal Processes in Post-Tonal Music: A Study of Selected Works by Babbitt, Stockhausen, and Carter.”
connects these to structural segmentations involving instantiation or repetitions of the associated sonic and contextual events listed above. Structural criteria are broader reaching, and include expressing a particular theoretical orientation in determining segmentation through contextual criteria.

Hanninen describes these structural criteria as belonging “to a conceptual universe…often characterized by rule-based relations among theoretical entities. We define a structural criterion as a rationale for segmentation that expresses an interpretation of a (potential) musical grouping supported by an orienting theory.”32 Importantly, Hanninen goes on to note that alone, “structural criteria may recommend segments or segment boundaries, but cannot convincingly produce segments until they are realized—that is, unless the instantiation of the structural criterion coincides fully and exactly with the instantiation of a sonic or contextual criterion.”

Under such a definition, a particular theoretical apparatus (in this case, Sonata Theory) may be extended to describe not only the contextual criterion realized at moments of tonal cadential motion (or, equivalencies in scale-degree content and chordal function), but can also include contextual and sonic criteria such as duration, contour, dynamics, interval ordering, pc segments, set class, set-class complementation, and more. This diverse set of criteria can encompass the rhetorical properties surrounding phrase boundary events in Shostakovich’s music—including forte chordal attacks, hammer strokes, grand pauses, and caesura fill—that are in dialogue with earlier models, as well as tonal and nontonal criteria.

Sonata Theory’s MC, EEC, and ESC actions may thus be classified as structural motives, or events that “carry interpretation with respect to an orienting theory in their definition

(modeled by T [structural] criteria systematically realized through C [contextual] criteria).”

Tonal and nontonal chordal relationships meet the criteria for Hanninen’s structural motives (common-practice cadences are expressed as Hanninen’s tonal contextual criteria $C_{RN}$, and set-class correspondence as $C_{SC}$). Other rhetorical equivalencies (duration, dynamics, etc.) may be similarly accounted for in both tonal and nontonal articulations, allowing comparisons based on both tonal and rhetorical factors. This theoretical approach allows examination of Shostakovich’s boundary-defining events as in dialogue with earlier models while still incorporating his polystylistic approach to pitch content and sonata form.

**Shostakovich’s Norms and Deformations**

As examined above, cadential events in dialogue with tonal ESC nonattainment are featured in the first movements of Shostakovich’s First, Fourth, and Fifth Symphonies, among other works. This occurs regularly enough, in fact, to be considered a marker of Shostakovich’s sonata form style.\(^{33}\) This deformational practice of consistently delaying tonal closure to coda space may be alternately—or concomitantly—viewed as an expressive manifestation of Shostakovich’s more general problematizing of sonata boundary spaces. Along with ESC delays, Shostakovich’s sonata structures display other subtle techniques of blurring the lines between closure attainment and nonattainment, including the aforementioned Type 2/Type 3 hybridity.

Given that such avoidances and boundary blurring are quite common in Shostakovich’s individualized dialogues with sonata-formal deformations, the question arises: could problematic and delayed ESCs be used consistently enough that such deformations themselves could be said

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\(^{33}\) Judith Kuhn treats this point at length in relation to Shostakovich’s string quartets; see Kuhn, *Shostakovich in Dialogue*. 
to attain a certain normative status within his compositional output? The prevalence of this practice suggests that this deformation could be considered not solely as an expressive deformation of an existent historical norm, but also as creating a signature type of rotational/cadential boundary tension. Shostakovich maintains just enough to sustain a sense—or even hope—of sonata form realization: two contrasting themes; cadential allusions; consistent evoking of a global tonic; and rotational, and thematic, and formal congruence. Yet these elements are placed in constant tension through mismatching or through the evasion or withholding of one or more of them at a moment of formal boundary. This chapter situates his tonal nonattainment procedures as part of a diversifying catalogue of available—and perhaps even expected—sonata-structural options, in dialogue with similar techniques first in Beethoven, then Mahler. As a result, this practice may have attained additional expressive significance beyond sonata space “failure.”

VI. Conclusion

This chapter highlights Shostakovich’s use of rotational form and the blending of elements from Hepokoski and Darcy’s Type 2 and Type 3 sonatas, creating a hybrid structure that elicits formal and expressive tension between the two narrative discourses. Elements of Type 3 rotational structure underscore the primary theme as the instigator of rotational cycles and, combined with the Type 2 construction highlighting the secondary theme’s role as mid-rotational tonal resolution, suggest a cyclical design over a symmetrical “reverse recapitulation.”

The drama between these elements is in dialogue not only with Classic-era expectations of sonata forms, primary themes, and secondary themes, but also with Shostakovich’s blurring of other tonal and formal boundaries. These occur notably at the rotational beginnings found at
moments of crux and at the sonata space/coda border, as well as at tonal and rhetorical closures throughout sonata-form movements, including events in dialogue with MC, EEC, and ESC demarcations. The following analyses employ broadened notions of Sonata Theory’s cadential junctures; whereas the first movement of Shostakovich I/i presents tonal versions of these cadential events, Shostakovich V/i is less tonally consistent, and Shostakovich IV/i employs non-tonal formal boundaries as well as tonal events. This engagement with polystylistic boundary markers allows exploration of complications stemming from rotational form as a generating engine of sonata-formal propulsion and misaligned formal/cadential boundary spaces, as well as the hermeneutic implications of these boundary overlaps in their interactions with rotational, rhetorical, and pitch structures and overall sonata-form expectations.
Chapter Two

Shostakovich’s Symphony No. 5, First Movement:
A Case Study in Rotation and Sonata-Type Hybridity

I. Introduction

Partly because of the political circumstances surrounding its composition, and partly
because of its analytical accessibility in comparison to the Fourth Symphony, Shostakovich’s
Fifth Symphony has received more analytical attention than its predecessors. Contrasting
perspectives regarding potential programmatic ideas and its balance of classical style and
socialist realism abound, as do differences in views of the formal structure of the first movement,
especially the location of the recapitulation. Analysts generally agree on the outlines of the
exposition and concur on the instability surrounding the end of the movement’s development
section and the obfuscation of the seam between developmental and recapitulatory spaces, a trait
Shostakovich regularly demonstrates in his symphonic and chamber output.¹

Michael Mishra reads this movement as an example of Shostakovich’s use of “sonata-
arch” form, wherein the secondary- and primary-theme modules return in reverse order after the
development. This reading takes the final appearance of P, which Mishra locates in the coda
section, as a form-defining appearance. In addition to the general challenges to this
characterization supplied in the Introduction and Chapter 1, Mishra’s reading may

¹ Some examples of works with unusual recapitulations or ambiguous formal constructs
surrounding the development/recapitulation divide include the first movement of the First String
Quartet, which presents the primary theme in a new meter, and the first movement of the Fourth
Symphony, whose formal boundary has been the subject of several differing analyses (see
chapters 3–5 for further details).
underemphasize the convergence of rotational, thematic, and rhetorical elements at the moment of crux in m. 243.

Crucial to discussions of the first movement’s formal structure are the elements of mixture and blending that happen at the development/recapitulatory border, namely the presentation of melodic and harmonic material from the movement’s primary theme zone, transition zone, and secondary theme at this juncture, without a tonic restatement of the primary theme’s first module. The return to tonic after the development instead features a post-opening, second primary-theme module, last was heard at its initial appearance in the exposition. This moment of tonic return, a unison *triple-forte* at m. 243, is not only marked by its assertive texture after the development, but also by the subdued texture of its first appearance. As such, it has been characterized as impassioned utterance, alternately considered both the voice of Stalin (by Ian McDonald) and the voice of Shostakovich himself, by Richard Taruskin. In highlighting this passage’s importance in his analysis of the Fifth Symphony, Taruskin states:

> It had been heard only once before, between fig. 3 and fig. 5, a quiet passage in the violins that links up with others (such as the one that comes four bars before 12) that have the characteristics of recitative, musical ‘speech’. When recitative appears in an instrumental context (e.g. in Beethoven’s late quartets, or Shostakovich’s) it is well understood to be an iconic convention, one that creates a sense, as Kerman puts is, of ‘direct communication’ from the author, a special ‘immediacy of address’. There is an inescapably subjective, self-referential component to the expression; the melody MacDonald associates with Stalin’s farcical harangue had already been marked for us as the composer’s own voice…I am convinced that those critics—Khovb for one—are right who have seen the climactic unison passages as representing the efforts of the brutalised subject—the hostage, if you will—to regain a sense of control at any cost.

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3 Taruskin, “Public Lies and Unspeakable Truth,” 51.
As Taruskin notes, this thematic return is marked in part because of its absence during the development section, and its coincidence with the return to the D-minor tonic after the development section.

Regarding the seam between development and recapitulation spaces, Mishra also claims this moment presents “the thematic point of resolution.” For Mishra, however, the A-D, introduction-like figure immediately preceding the tonic resurgence and return of the primary theme’s second module is less satisfactory than strong dominant preparation to follow at m. 253. For Mishra, the firm arrival of dominant preparation at m. 253 marks the end of a “gradually emerging recapitulation,” spanning from bars 243–253.

Downplaying the arrival of the crux at m. 243 may underplay the strong sense of thematic and tonal arrival at this point, but additionally slightsthe retracking of the exposition that follows. Measures 243–253 largely correspond to an ordered, truncated presentation of mm. 21–46, and the dominant arrival in m. 253, plus the following P-based material over the dominant arrival, can be viewed instead as a response to the problematic medial caesura, or grand pause between exposition parts 1 and 2, of the exposition.

In the analysis to follow, I propose that the location of expositional correspondence rests not only on harmonic considerations, but also on important thematic and rhetorical connections, as well as rotational expectations. This rotational viewpoint allows me to draw an additional connection and meaning for the moment of crux—that of rotational continuation between the over-represented and oppressive opening module during the development and the emergence of

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4 Mishra, “Shostakovich’s Trademark Form,” 362.
5 A similar treatment—presenting a more traditional harmonic preparation for the tonal resolution of the secondary theme in response to a tonic-suggestive expositional MC—may be found in the Fourth Symphony’s first movement. See chapters 3 and 4 for details.
the “direct communication” outburst at the climactic moment of crux—in ultimately designating this movement a Type 2, double-rotational sonata. The eruption at m. 243 of the previously subdued second P-theme module indeed regains a sense of control by ushering in the return of tonic, continuing sonata-form motion, and forming rotational correspondence with its earlier subdued statement, wresting progress from the obsessive opening P-theme. An examination of this movement’s formal and tonal layout serves as a case study of Shostakovich’s rotational form techniques and his blending of Type 2 and Type 3 sonata structures. As subsequent chapters will demonstrate, this successor of the Fourth Symphony is in many ways an artist’s response—tonally and formally straightforward in comparison—to the Fourth Symphony’s dramatic and complicated rotational and formal concerns.

II. Overall Tonal Structure

Tonally, the Fifth Symphony’s first movement can be seen as in dialogue with both traditional Classic-era models and the neighbor motions seen in more recent symphonic predecessors. Example 2.1 displays the overall tonal process of the first movement. This movement begins with D as a tonal center; the overall plan of the movement can be seen as expanding upon the D-minor triad, with the added juxtaposition of D Phrygian. This Phrygian coloration is accomplished at several levels by setting D and its upper neighbor E-flat against each other as the large-scale key areas of the primary- and secondary-theme zones, as well as in melodic and movitic gestures present throughout the movement.

EXAMPLE 2.1. Shostakovich, Symphony No. 5, i, large-scale tonal overview

III. Overall Formal Structure

The overall structure of the first movement of Symphony No. 5, shown in Figure 2.1, may be viewed most basically as a large balanced binary form: the material of the exposition, which starts in the tonic and modulates to another key, essentially repeats in varied form, starting in a non-tonic key at the beginning of the development and returning to the tonic at or near the recurrence of the exposition’s second thematic idea. This type of twofold presentation of the basic thematic material corresponds to Hepokoski and Darcy’s double-rotational Type 2 Sonata form. In this movement, however, the basic Type 2 layout is complicated by elements that suggest a Type 3 Sonata form, the more standard sonata-form plan with a clearly demarcated (and often rotationally active) development, followed by a full return of the exposition material in the tonic at the recapitulation.

The first rotation (mm. 1–122) contains the exposition and is divided into two parts that include three main thematic zones, corresponding to those typically seen in sonata form expositions: part one contains a primary theme zone (P) and a transitional zone (TR); the medial
caesura (‘) articulates the end of part one and beginning of part two, which features the secondary theme zone (S). The second large-scale rotation (mm. 122–299) embraces the development zone as well as a tonal resolution, or return to the tonic. This tonal resolution begins at the crux, a moment after the development that features the return of music corresponding to P-zone material from the exposition. Measures 300–316 feature a coda, which functions outside of sonata space.

IV. Detailed Analysis

Exposition

Let us now examine the large sections of the movement in turn. The exposition comprises the first large rotation, including the primary-theme, transition, and secondary-theme zones (see Figure 1). This structure is clearly in dialogue with Classical-model sonata-form expositions in its establishment of a stable opening theme, followed by transitional musical material and a demarcation analogous to Hepokoski and Darcy’s medial caesura. This demarcation is then followed by a contrasting theme in an oppositional key, analogous to a secondary theme zone. Each of these zones contains subrotations as well, repetitions of themes featuring material from the current zone or reappearances of material from earlier zones.
Figure 2.2 shows the overall structure of part one of the exposition. The primary and transition zones juxtapose D-minor and D-Phrygian tonalities along with extensive octatonicism, each tonal language undermining the others from the very start of the work. A four-bar phrase that I read as an introductory passage opens P-space, which itself contains two large-scale subrotations, mm. 1–12 and mm. 13–34. The transition zone, mm. 34–47, gains momentum and arrives at the medial caesura, the dominant preparation that opens musical space for the secondary-theme zone. This dominant preparation, however, is not of the relative major or parallel minor of Classic-era models, but instead the dominant of E-flat minor, D’s Neapolitan minor. Example 2.2 shows this overall progression from the D-centric opening to the E-flat minor tonality commencing at the exposition’s second part. Far from appearing out of nowhere, E-flat is first introduced in the primary theme zone; shown in Example 2.3, the enharmonic equivalents F-sharp and D-sharp appear at the end of the very first subphrase before returning as an element of the D-Phrygian Primary theme.

**P-space**

The primary-theme space presents the movement’s essential chromatic features and establishes the home tonality and expressive point of departure. In terms of overall structure, P-space consists of two large-scale subrotations, mm. 1–12 and mm. 13–34 (see Figure 2.2). The first subrotation features introductory and primary-theme statements, while the second subrotation elaborates the first’s thematic ideas, presenting more phrase articulations and denser thematic textures than the first subrotation. This accumulation of additional thematic modules during the second subrotation culminates in the emergence of rotational conflict, creating a
**FIGURE 2.2.** Shostakovich, Symphony No. 5, i, Exposition part 1, detailed subrotational and thematic overview

<table>
<thead>
<tr>
<th>Zone:</th>
<th>P</th>
<th>m. no.:</th>
<th>1</th>
<th>3</th>
<th>5</th>
<th>11</th>
<th>13</th>
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<th>17</th>
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<th>27</th>
<th>32</th>
<th>TR</th>
<th>34</th>
<th>38</th>
<th>41</th>
<th>43</th>
<th>MC</th>
<th>47</th>
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<tbody>
<tr>
<td>Thematic material:</td>
<td>$p^{1.0}$</td>
<td>$p^{1.0}$</td>
<td>$p^{1.1}$</td>
<td>$[C-F]^*$</td>
<td>$p^{1.0}$</td>
<td>$p^{1.0}$</td>
<td>$p^{2.1}$</td>
<td>$p^{2.2}$</td>
<td>$p^{2.3}$</td>
<td>$p^{3}$</td>
<td>$p^{3}$</td>
<td>$[C-F]^*$</td>
<td>$TR^{1.1}$</td>
<td>$TR^{2.1}$</td>
<td>$TR^{2.2}$</td>
<td>$TR^{3}$</td>
<td>$TR^{3}$</td>
<td>$MC$</td>
<td>47</td>
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<tr>
<td>Phrase structure 1</td>
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<tr>
<td>Rotational structure</td>
<td>Sub-rotation 1</td>
<td>Sub-rotation 2</td>
<td>Sub-rotation 3</td>
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*Caesura-fill*
EXAMPLE 2.2. Shostakovich, Symphony No. 5, i, Exposition Part One, tonal overview

formal blurring at the boundary of P-space and TR-space: here, P-space’s final thematic motive, \( P^3 \), overlaps with a restatement of \( P^{1.0} \), the movement’s opening thematic module.

P-space (and subrotation 1) begins with a strident four-measure phrase; shown in Example 2.4, this phrase consists of two sub-phrases featuring French Overture-like dotted material in imitation between the strings. The work ostensibly begins in D minor, which is somewhat reinforced by the first four pitches: D, B-flat, A, and C-sharp. After this initial pitch content, however, the tonal implications become much less clear; the appearance of the tonic D
EXAMPLE 2.4. Shostakovich, Symphony No. 5, i, mm. 1–6, displaying P-theme
is extremely brief at the outset of the movement, and the remaining pitches in this first subphrase (excluding the D) belong to an octatonic collection that does not include D. Also, the last two notes of this subphrase, F-sharp and D-sharp, strongly undermine D minor and, as their enharmonic equivalents, G-flat and E-flat, provide the first allusion to the E-flat minor key area of the secondary theme zone. In fact, many of the small-scale key areas visited throughout the exposition and development can trace their origins to this opening motive; most notable of these are the aforementioned E-flat as well as D’s lower neighbor, C, outlined in the C-G gesture of the third and fourth notes of the opening phrase immediately preceding the F-sharp and D-sharp (G-flat and E-flat) dyad.\(^7\)

Another feature introduced in this opening sub-phrase is a series of 5-6 intervallic shifts. Displayed in Example 2.5, this pattern reemerges in both descending and ascending appearances, featured as part of elaborations of this opening thematic material.

**EXAMPLE 2.5.** Shostakovich, Symphony No. 5, i, mm. 1–6, melody, with highlighted interval patterns and neighbor motions

\[
\text{Implied interval pattern: } (5) \quad 6 - 5 \quad 6 - 5 \quad (6, \text{ collapsed to } 3)
\]

\[
\text{Implied tonality: } \begin{array}{c}
\text{D} \\
\text{C (LN)} \\
\text{VII (LN)}
\end{array} \quad \begin{array}{c}
\text{E-flat (UN)} \\
\text{bii (UN)} \\
\text{i}
\end{array}
\]

\[
\text{Implied harmonic motion: } i \quad \text{V}
\]

\(^7\) For more discussion of the significance of D minor as a key-area choice and motion to its neighbors, see McCreless, “Shostakovich’s Politics of D Minor and its Neighbours, 1931–1949.”
The second sub-phrase (mm. 3–4) culminates in a half cadence and employs multiple strategies to emphasize the phrase boundary (see Example 4). First, the arrival of all four sounding string parts on A and the repetition of A in the upper strings emphasize A as pitch center, if not an explicitly presented dominant harmony. Second, contrary motion between the upper and lower strings create a wedge-like directional motion toward the meeting on A, with the upper strings presenting a descending Aeolian tetrachord and the lower strings maintaining the octatonic collection from the first sub-phrase as they ascend to the cadence. Third, the boundary points of D and A, demarcated by rests, strongly suggest a descent from tonic to dominant.

The next phrase, shown in Example 2.6, spans mm. 5–11 and follows the half-cadence rhetoric with stronger indication of D as tonic; the lower strings begin by alternating pitches D and A while the first violins present a melodic theme descending from A to D. Each of the neighbors to D introduced in the opening module returns here as a salient feature of this next theme: first, E-flat appears as part of the descending motion from A to D, changing the melody’s suspected orientation from D minor to D Phrygian. Then, C arises as a key area in the melody line, beginning in m. 8. Underneath this C-centered melody, E-flat reemerges as part of the lower strings’ oscillating figure, maintaining its presence in the accompaniment until the end of m. 10. The melody’s C-centricity dissolves into E-flat material in m. 9, before returning to C at the downbeat of m. 11 during a descending chromatic motion reminiscent of mm. 3–4.

Like D, each of these neighbor keys, C and E-flat, first appears as part of a minor-mode collection before being wrenched into Phrygian territory. The minor ninth outlined between the C and D-flat in the melody at m. 8 is striking in this regard. The F-flat, first passing in m. 9, then more prominently presented on the downbeat of m. 10, introduces Phrygian allusions to the descending B-flat-to-E-flat figure in m. 9.
The phrase concludes by introducing another key-area crisis; while the melody firmly arrives at C on the downbeat of m. 11, the lower strings conclude the bass with A. This A/C/E triad could be viewed as simply a minor-mode variation on A as the dominant of D, or another half-cadential articulation to match the concluding gesture of the opening four measures. However, the caesura fill ascends through a complete OCT 0,2 collection in mm. 11–12: the first five pitches of this motion (B-C-D-E-flat-F) match those of a C-minor scale and this caesura fill
ushers in the reappearance of the opening theme (mm. 1–4) in C minor at m. 12, creating a sense in hindsight that C has already arrived, further blurring the lines in terms of tonal arrival and orientation. This same technique, introducing uncertainty surrounding the dominant preparation at a point of formal demarcation, returns at the medial caesura (MC). This first contest between C and A (V/D), complete with a grand pause and caesura fill, can be viewed as a foreshadowing of the actual MC, a lengthier forte tonal showdown between V/D and V/E-flat, D’s upper neighbor. This A/C dyad is also an important boundary marker in the first movement of the Fourth Symphony, both at P-space phrase endings and at the MC.

In examining these two opening phrases—one more angular and strident, one more expressive and melodic—questions of thematic role and designation arise and illustrate the complicated role of the opening phrase in the movement as a whole. By virtue of the half-cadence at m. 4, and factoring in characteristics such as the disjunct motion in mm. 1–4 and more melodic and lyrical character of mm 5–11, the opening phrase in mm. 1–4 can be considered either an introduction to the next phrase in mm. 5–11 or as an antecedent phrase (mm. 1–4) paired with a consequent phrase (mm. 5–11). In regards to the labeling of thematic modules, the issue is ultimately not precisely what label is decided upon, but rather how the label communicates the relationship of a thematic module to other modules and the rotational structure of the work, as well as how the decision process brings greater understanding of the structure of the work and the hermeneutic implications stemming from each phrase’s respective function in P-space.

Depending on which analytical choice is made, if the beginning phrase (mm. 1–4) is considered an antecedent phrase, the sub-phrases in mm. 1–2 and 3–4 would be labeled P¹,1 and P¹,2 and the consequent phrase (mm. 5–11) would be considered P¹,3 or P² depending on the
cadence at m. 4. If considered introductory, the opening sub-phrases would be then labeled together as \(P^0\) or \(P^{1.0}\), labels used to denote the introductory nature of these measures, and mm. 5–11—the abovementioned potential \(P^{1.3}\) or \(P^2\) theme—would be considered the main thematic idea, and numbered as \(P^1\) or \(P^{1.1}\) in correspondence to the labeling of the opening measures.\(^8\)

Several factors support reading the opening phrase as introductory: the overlay of a more melodic theme featuring material from the opening phrase as accompaniment, as seen in mm. 5–11, suggests that the opening material is giving way to a stronger candidate for main theme. This reading is supported by the fact that material from mm. 5–11 is developed extensively throughout the movement, suggesting this theme is perhaps considered a preferable candidate for the main theme in comparison to the opening material. The generic history of sonata form literature features countless examples of such introductory passages, which open a thematic zone yet somehow seem preparatory to a more decisive or melodically stable thematic module.\(^9\)

Labeling the entire opening eleven-measure passage as \(P^1\) would undercut the sense of contrast between the two phrases. Considering the half cadence that concludes the opening four measures, a contradiction would occur if the second phrase were labeled \(P^2\), since the cadence is not a perfect authentic cadence (tonal phrase boundaries are privileged in most cases). The designation of \(P^{1.0}\) communicates both the phrase division and the sense of preparation and tonal destabilization the opening measures provides.

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\(^8\) See Hepokoski and Darcy, *Elements of Sonata Theory*, 86, for discussion of introductory modules and use of \(P^0\) vs. \(P^{1.0}\) labels. Hepokoski and Darcy state that the difference between a \(P^0\) and \(P^{1.0}\) designation is somewhat arbitrary: “Each label represents a broad span of modular types on a continuum of possibilities, shading into each other.”

\(^9\) Classical examples of this thematic construction include Beethoven’s Third Symphony, Schubert’s Fifth Symphony, and Mozart’s Violin Concerto No. 4 in D, K. 218, among many others. Additional models used in the nineteenth century including the \(P^{\text{gen}}\) and \(P^{\text{tel}}\) end-accented opening themes, are seen in Beethoven’s Ninth Symphony and most of Bruckner’s symphonies. See Darcy, “Bruckner’s Sonata Deformations.”
Subrotation 2 begins with a return of $P^{1.0}$ in the key of C at m. 13. This second subrotation presents elaborate variations on the opening P material, focusing on three elements of $P^{1.0}/P^{1.1}$. First, the phrase begins with a restatement of $P^{1.0}$ in its entirety, followed by a variant of the second sub-phrase of $P^{1.0}$ before continuing with new melodic modules; that is, the original model is presented in full, then varied and embellished using fragments of $P^{1.0}$. Second, this passage continues to highlight key areas suggested in the opening four measures, namely D, C and A, which compete for supremacy throughout the passage. Third, the 5-6 voice-leading pattern from mm. 1–2 reemerges, now stated as part of ascending and descending motion. In addition to these factors, this subrotation also features a punctuated clash between A and B-flat, the same clash of tonalities to be featured at the upcoming medial caesura.

The addition of thematic modules in this subrotation begins after the restatement of $P^{1.0}$; first, a diatonic descent based on mm. 3–4 is extended and transformed in mm. 16–17 into an OCT 1,2 collection descending from C to D-flat. The remainder of subrotation 2 then accelerates the rate of thematic addition and transformation, presenting new thematic modules in relatively quick succession: $P^{2.1}$ in mm. 20–22, $P^{2.2}$ in mm. 23–26, and $P^{2.3}$ in mm. 27–31. Absent traditional tonal closures, the phrase boundaries here are determined chiefly by silence and gesture. Whereas the quick succession of modules based on P fragments lends a transitional feeling to this subrotation, the emphasis on D minor triads and scalar passages allows melodic module $P^{3}$ to bring an end to subrotation 2 (and P-space as a whole) by providing the strongest orientation yet of D minor as a tonal area. This strong tonal establishment mediates any transitional aspect to this passage, clearing the tonal ambiguities and lending the subrotation a feeling of embellished repetition of subrotation 1. Example 2.7 shows each of these thematic modules and their entrances.
Successive thematic modules alternately suggest D, C, then A, as key areas before returning definitively to D with the statement of $P^{1,0}$ and $P^3$ at m. 32 (see Example 7). As $P^{2,1}$ begins, remnants of A minor from the previous two measures eventually shift to D in m. 21, corresponding to the start of a 6-5 intervallic pattern. This descending shift continues earlier patterns of emphasizing D’s neighbor C, here briefly touched before a return to D-oriented material. The next melodic module, $P^{2,2}$, begins firmly in C minor before commencing an ascending series of 5-6 intervallic shifts that touches on D Phrygian before eventually reaching A minor at m. 26. By replicating earlier sudden movements from minor to Phrygian collections, the final note of this melodic module, B-flat, transforms A minor to A Phrygian; after the B-flat appears, the phrase then ends immediately with a rest in all parts. This clash of A and B-Flat is not only in dialogue with the movement’s earlier juxtaposition of minor and Phrygian tonal collections, but also foreshadows the upcoming medial caesura tonal dilemma. The exact pitches presented together here, A and B-flat, also appear together at the MC, again immediately before a prominent pause.

Continuing subrotation 2, $P^{2,3}$ follows this pause with more 5-6 shifts suggesting C minor and D minor before reaching the climax of this subrotation, a *fortissimo* c-minor seventh chord at the beginning of m. 29. In context, this chord sounds like a second-inversion supertonic in B-flat; later in the movement, a close variation of this chord—C, E-flat, G-flat, and B-flat—returns at the essential expositional closure (EEC), as an E-flat minor tonic chord with an added sixth. After this climax, the interval shifts resume, now included in motion between triads and seventh chords, and through ascending motion pass through B minor and C major before the return of D minor in m. 32.
EXAMPLE 2.7. Shostakovich, Symphony No. 5, i, mm. 20–35, reduction, 5-6 interval patterns.
The final three measures of P-space confirm D minor with one additional melodic module, P^3. This P^3 module appears with a variant of P^{1.0} featuring the final descending tetrachord from mm. 3–4. Originally descending from D-A, this transformation presents the descent as A-D, clearly establishing D minor before the start of transition space by means of a dominant-to-tonic gesture. Significantly, this is the first such authentic-cadence-like motion of the movement.

The two subrotations included in P-space have thus far provided a referential arrangement of two primary themes acting as introductory (P^{1.0}) and principal (P^{1.1}). As elaboration of characteristics featured in these opening thematic modules, subrotation 2 developed additional thematic modules based on fragments and patterns from the P theme material—namely the contrasting neighboring key area and 5-6 interval pattern. Through this exploration, the second subrotation accomplishes the addition of P-based thematic modules for later variation in the development section, as well as further explicating and clarifying the tonal ambiguities of the opening bars by means of a phrase-closing confirmation of D minor strongly in dialogue with an authentic cadence.

**TR-space**

The transition space begins in m. 34 with a return of material from P^{1.0} in D, now paired with a D-centered restatement of P^{2.1}. In Classic-era models, TR space is generically expected to function as a series of continuation modules that increase musical energy and signal an acceptance of the Primary-theme zone as successfully established; this acceptance is signaled here by the P-theme’s reappearance in the tonic at the beginning of TR. In addition to the return of P^{1.0} in the tonic at the original *forte* dynamic at TR-space, the contrapuntal effect of adding
P².¹ (the opening appearance of P¹.⁰ was in unison) assists in emphasizing both the formal demarcation as well as a palpable sense of increased musical energy. This return to P-based material maintains treatment of D’s neighbors. After a fortissimo visit to C major escaped through the return of 5-6 shifts, the medial caesura (MC) is reached in m. 46. This MC, however, not only sets up the unusual key of E-flat minor for the secondary-theme zone, but is also nearly thwarted by an impulsive resurgence of the opening theme during the caesura fill bridging the space between TR and S zones.

Because of the additional melodic modules introduced in subrotation 2 of P-space, the textural TR obligation of energy-gain is in some sense already underway at m. 34. While the thematic content of P’s two subrotations accomplishes not one, but two referential statements of P’s thematic modules, the harmonic and tonal ambiguities introduced at the movement’s onset maintain their presence through the first subrotation and most of the second subrotation—it is not until the conclusive return to D in mm. 32–33, coinciding with the return of P¹.⁰ in the tonic, that the key of D minor seems to arrive incontrovertibly. In this case, P-based material is used here not only to indicate the beginning of another large-scale formal section, but also as a corralling of the energy built through the addition of P-variant melodic modules during subrotation 2 and as a confirmation of D as key area, taking advantage of the clear lead-in from the end of subrotation 2. Finally, the descent from A to D in m. 33, a recomposition of material from mm. 3–4, suggests an elided perfect authentic cadence leading into the beginning of TR in mm. 33–34; this is the first authentic cadence, suggested or otherwise, in D.

The boundary of P- and TR-space also features a boundary blurring, creating a conflict between two subrotational patterns: the last phrase of subrotation 2 of the P-zone combines P³ and P¹.⁰ and the beginning of TR presents P¹.⁰ simultaneously with P².¹. The aforementioned
transformation of the second subphrase of $P^{1.0}$ at the end of the P-zone, from a descending
tetrad chord approaching a half cadence to a descending pentad chord approaching D as $5-1$, implies
a reinterpretation of this motive as a concluding gesture that reinforces the sense of formal
division at m. 34. This recomposition, as well as a return of P-material in the original key, favors
the latter pair, $P^{1.0}$ and $P^{2.1}$, as the beginning of TR-space, though this technique of rotational
clouding forecasts further boundary blurring and overlaps to come.

Subrotation 3, TR$^{1.1}$, begins in mm. 34–37 and is P-based, though the content of the
original P-based material is altered from octatonicism to D minor, corroborating the strengthened
sense of D minor established at the end of P-space. Though TR-space is generally saturated with
P-material, significant departure from $P^{1.0}$'s original statement begins at m. 37, suggesting a TR
construction in dialogue with a dissolving consequent model. The original cadential tetrachord is
repositioned as a descending pentad chord in C minor, after which a ii$^7$-V$^13$ progression in D
presents a half cadential figure. This progression from D-C-A closely retraces the first and
second subrotations, specifically mm. 1–4 and 13–26.

TR$^{2.1}$ begins in m. 38, where the return of $P^{2.1}$ confirms a new rotational pattern
coincident with the beginning thematic module of TR$^{1.1}$. TR$^{2.1}$ is structured as a series of three
one-measure repetitions of $P^{2.1}$ material and a fourth repetition that gains significant musical
energy through further development and extension to three measures. During this section, D’s
neighbors return yet again to destabilize the tonal landscape: after visits to E and C-sharp, D’s
as-of-yet untouched neighbors, a stepwise ascent to G ushers in a $fortissimo$, triumphant
dominant seventh, not of D, but of $C$ major.$^{10}$ C is further punctuated not only by the increased

$^{10}$ These two key areas, D and C, also feature heavily during the TR zone in the first movement
of Shostakovich’s Fourth Symphony. See chapter 4 for further details.
dynamic level, but also by incessant repeating of G6–G5 octaves in the flutes and violins starting in m. 42. After several repetitions, these G6 gestures shift up to A6, a reenactment of the 5-6 shifts seen in P-space; C major then gives way to A minor, with another shift returning to D in m. 45. This D recurrence is anything but tonally clear, however, with F-natural and F-sharp presented simultaneously.

Shown in Example 2.8, a medial-caesura-like suggested half cadence arrives in m. 46. This cadence features rhetorical and tonal gestures strongly in dialogue with Classical-Era models of the medial caesura (MC), including hammer strokes in the strings and horns. These elements combine with descending material from the second subphrase of P^{1.0}, further supporting the half cadence through rhetoric analogous to that in m. 4, at the end of the movement’s introductory module. As the musical energy continues to build to the MC, scalar ascents progress from A to B-flat in every instrument except the flutes and E-flat clarinet, which tenaciously hold onto A. This semitonal clash was seen previously in m. 26, also at a phrase conclusion featuring a pause. The presence of both B-flat and A at the moment of the medial caesura is a significant departure from normative practice and a creative juxtaposition of two potential key area preparations at the seam between the exposition’s first and second parts. Indeed, this passage is striking in its refusal to commit tonally to either a second-level-default MC—featuring a half cadence in D—or to the dominant of E-flat, the Neapolitan of D minor and the eventual key of S-space. While still tonal, this moment is complicated by competing tonalities, realized by the juxtaposition of A and B-flat, a dissonant dyad emphasized at the final sounding pitches before the release of musical energy at the MC.

Immediately following this dyad, the succeeding caesura fill presents a significant departure from more typical post-MC rhetoric. A sudden return of music from the first subphrase
EXAMPLE 2.8. Shostakovich, Symphony No. 5, i, mm. 45–50, MC and caesura fill

A - MC: i:HC, second-level default?

B♭ is transformed into ♯4, MC declined!

MC: V/E♭?

energy loss...

V/E♭ regained, hammer strokes and pause; MC achieved.
of $P^{1.0}$, presented in m. 47 as caesura fill, seems to decline the medial caesura by returning to the primary theme in its original key. This caesura fill rejects the E-flat implication in favor of D minor, and B-flat regains its role as 6 through reintroduction of this thematic module in its original key of D. In addition, the B-flat at m. 46, previously acting as punctuation of the musical pause and formal demarcation, is reinterpreted as belonging not to the end of the previous phrase, but to the beginning of a now-unfolding restatement of P. The sudden appearance of the global tonic and caesura fill featuring P-based material complicate this formal boundary and are deformations strongly in dialogue with both the Fourth Symphony’s treatment of the MC and with Mahlerian models, to be detailed in later chapters.

Just before m. 50, a descending B-flat to F tetrachord set against an ascending horn line—material drawn from $P^{1.0}$’s half cadence in mm. 3–4—steps in to steer this interruption of P-material from a full restatement to a more “proper” caesura-fill. This second caesura-fill attempt is more strongly analogous to historical models wherein material seen to fill the space between TR and S zones typically descends from $^5$ to $^1$ in the new key. Lengthening the caesura space between TR and S to four measures creates an expanded caesura fill, one substantial enough to address the tonal ambiguity left by the actual MC event. This caesura fill is also strongly in dialogue with the Classic-era tendency for such caesura-fill material to emphasize energy-loss in the grand pause space between the TR and S zones; here the descent from B-flat to E-flat begins forte, maintaining the intensity left from $P^{1.0}$’s interruption before finishing piano at m. 50. Finally, another set of hammer strokes signals the end of the TR zone, with the secondary theme zone now set to begin in E-flat minor, D’s upper neighbor and minor Neapolitan.
**S-space**

The exposition’s second part commences as S-space begins in the second half of m. 50. S-space can be viewed as a rounded binary form, illustrated in Figure 2.3. Loosely structured as sentential phrases, sections A and B make up subrotation 1 and feature a contrasting S-theme derived from the P-theme and a preoccupation with melodic and harmonic treatment of the perfect fifth as well as a three-note encircling motive. A' serves as subrotation 2, featuring melodic material from both the A and B sections of S-space.

**FIGURE 2.3.** Shostakovich, Symphony No. 5, i, Exposition part 2, rotational layout

<table>
<thead>
<tr>
<th>Section:</th>
<th>A</th>
<th>B</th>
<th>A'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic zone:</td>
<td>S1(bi) (bi') (cont.)</td>
<td>S2(bi) (bi') (cont.)</td>
<td>S1 S2 as caesura-fill</td>
</tr>
<tr>
<td>Measure no.:</td>
<td>52 56 60</td>
<td>74 78 84</td>
<td>106 117</td>
</tr>
<tr>
<td>Rotational Structure:</td>
<td>Sub-rotation 1</td>
<td></td>
<td>Sub-rotation 2</td>
</tr>
</tbody>
</table>

The overall tonal plan of the S-zone can be seen as a nested set of ascending major-third modulatory PL transforms. The E-flat, G, and B key areas of Section A outline an augmented triad, shown in Example 2.9; on a larger level, the A section begins in E-flat minor, The B section in g minor, and the A' section in B minor. A' eventually returns to E-flat at the Essential Expositional Closure (EEC), featured as a tonic chord presented with an added sixth. A close variation of this chord was seen in m. 29 at the climax of subrotation 2, and material from the P-
space climactic moment appears during the B section of S space. After the EEC, a caesura fill linking the exposition and development sections repeats an encircling motive from the B section and reenacts the jarring modulatory actions found in the caesura fill between TR and S, dramatically lurching the key area up by step from E-flat to F as the development section begins.

Subrotation 1 of the S-zone begins with E-flat and G-flat in the strings, a dyad enharmonic with the D-sharp and F-sharp from the exposition’s introduction. This opening thematic module of S-space—labeled S$^1$ and seen in Example 2.10—is structured as a contrasting derivation secondary theme. In other words, this S-theme contrasts with P-zone material in tone, texture, and dynamics, but closely resembles the P-theme in phrase structure, rhythm, motive, and pitch contour. In addition to shared pitches, the introductory E-flat/G-flat dyad also features the long-short-short rhythm from the second subphrase of P$^{1.0}$, now transformed into an obsessive pattern of repeated notes rather than a descending tetrachord or pentachord.
EXAMPLE 2.10. Shostakovich, Symphony No. 5, i, mm. 51–59, reduction, outlining tonal motion from E-flat minor to G minor

$S^1$ is constructed as a sentential structure; like the more loosely sentential P-space introduction, there is a basic-idea motive—the ascending opening gesture matched by a descending leap of roughly the same size. Corresponding to mm. 1–2 of P-space, this four-note idea is then repeated; the S-theme presentation is, however, more strongly in dialogue with a sentential structure than the introduction by virtue of its harmonic accompaniment, a
paradigmatic i-ii-V-i progression common to sentential presentations. This progression does not close in E-flat, but instead concludes up a major third with an authentic cadence tonicizing G minor.

The continuation, beginning in m. 58, develops the presentation material (with only slight variation) through m. 67, at which point a contrapuntal tonal motion of V⁶-i in B minor moves the tonal focus up another major third. Melodic surface rhythm acceleration finally provides momentum near the continuation’s end; in mm. 69–73, shown in Example 2.11, a four-measure cadential-like gesture features bass motion by falling fifths, first suggesting cadences in E major and D minor before finally continuing on to G minor as the B section begins.

The melodic construction of S¹, in addition to offering a varied version of P-material, highlights segments of perfect-fifth interval cycles. The presentation’s melody comprises an E-flat pentatonic collection formed from E-flat, B-flat, F, C, and G, an ascending-fifth chain; C-flat is omitted from this passage entirely in favor of C. At the beginning of the continuation, A-flat major added-sixth chords and a five-note stacked-fifths chord (A-flat, E-flat, B-flat, F, C) in the harp continue the interval’s presence. After a series of half-step ascents, the fifths motion returns with the arrival of B minor in m. 67; this B minor resolves to E major in an authentic cadence gesture seemingly signaling the end of S¹. A caesura-fill passage then finishes the A section with a continuing chain of falling fifths: A major follows E major, resolving to D minor in m. 72 as almost an echo of the previous B-E cadence. The D minor then continues down a fifth to G minor in m. 74, resuming the fifths progression into the beginning of the B section and arriving on G melodically by descending half-step.

Still part of subrotation 1, S² forms the B section of S-space and is a sentential structure as well. Measures 74–77 comprise the basic idea, which includes a G-minor melody closely
EXAMPLE 2.11. Shostakovich, Symphony No. 5, i, mm. 67–75, reduction, outlining descending fifths motion leading to G-minor beginning of the B section

EXAMPLE 2.12. Shostakovich, Symphony No. 5, i, mm. 74–76, encircling motive
related to $S^1$ coupled with an encircling motive in the lower strings, shown in Example 2.12. This melody pairs the encircling motive with descending fifth gestures (D-G-C in mm. 75–77; G-C in mm. 79–80), before developing a variation of caesura fill from mm. 70–73 of the A section.

Three repetitions of this embellished fill comprise the continuation phrase; the first repetition (mm. 84–90) unfolds over B-flat minor and F-sharp minor sonorities; the second (mm. 91–100) begins in C-sharp minor, then shifts to G-flat major before a sudden change of melodic direction ushers in a breakthrough moment just prior to its conclusion. This breakthrough features material from the climax of P-space’s second subrotation, mm. 28–29. Shifted from B-flat major in P-space to E-flat major here, an F-minor seventh chord, $ii^7$ in the key of E-flat major, accompanies the high E-flat melodic climax at m. 99 and offers a glimpse of Neapolitan major amidst the catastrophic minor-mode S-theme space. This $ii^7$ is reminiscent of the B-flat $ii^4$, present at the original breakthrough moment in mm. 28–29 (see Example 7), with F and A-flat substituting for P-space’s G and B-flat. The third repetition (mm. 100–106) then languidly meanders through a plaintive D-minor version of the fill melody, undoing not only the E-flat major hopefulness of the breakthrough, but also reasserting the tonality of P-space, D minor, before finally continuing to B minor at m. 106, the beginning of the second subrotation and the A’ section.

A’ commences with a return to $S^1$ material in B minor in m. 106. As stated earlier, the key areas that begin each section of the S-Zone’s rounded binary structure, (see Figure 3), mirror the modulations found within the A section: E-flat, G, and B. The A’ section eventually returns to E-flat minor through a series of descending-fifths harmonic motions, with 5-6 voice-leading shifts, resembling those seen in P-space, highlighting E-flat’s upper and lower neighbors, F and D-flat.
respectively.\textsuperscript{11} E-flat major briefly prevails in m. 112, perhaps again offering a respite from the nihilism of the minor Neapolitan key area. However, the mode returns to minor in m. 114, and an E-flat minor cadence at m. 117 closes the movement’s first half.

I have designated this cadence at m. 117 the Essential Expositional Closure (EEC), a realization of tonal closure wherein S typically attains a PAC in the new key and is followed by new material. The cadence in m. 117 is the first and only cadence in E-flat in the entire secondary theme zone, and is strongly in dialogue with historical models and with Sonata Theory’s conception of the EEC as providing a cadential closure in the new key of the secondary theme zone, followed by new material. (In this case, the P theme returns at the beginning of the development section, after a period of S-based caesura fill).

The alterations to normative EEC models are relatively straightforward: an IAC, displayed in Example 2.13, appears instead of the PAC usual in Classic-era examples of the EEC. Quintal extensions at the arrival of E-flat minor in m. 115 leave C-natural as the prominent melody note. This is followed by an echo of the falling fifths from the conclusion of the A section; eventually B-flat, \textsuperscript{5}, serves as the melodic tone over E-flat minor at the conclusion of the cadence. In addition, the closing tonic chord, by virtue of the quintal extensions, is not strictly a minor triad but contains C-natural and F-natural as well; as seen throughout S-space, quintal chordal extensions have become a regular feature of the sonic landscape. Within Shostakovich’s approach to sonata-form events, this moment of tonal and rhetorical arrival can be considered not a failure of cadential attainment for its lack of a PAC, but instead the return of E-flat after an

\textsuperscript{11} The presence of P-space allusions—without direct quotation—near the end of S space also takes place in the first movement of Symphony No. 4.
ascending-third or PL-transformation journey across the octave and the result of continued appearances of stacked-fifth chordal construction.

The sense of rest is short-lived, however, as caesura fill featuring the encircling motive links the end of S-space with the menacing and abrupt beginning of the development zone. Like the caesura fill linking TR with S, this caesura fill (seen in Example 2.13) shifts the tonality up by step at the last moment, with the caesura fill following the EEC ushering in a dramatic start to the development, one now firmly planted in the key of F minor. The continued presence of S—an S-aftermath-like caesura fill—creates boundary blurring by motivic overlap, extending S’s thematic reach past the tonal closure of the EEC and transforming the encircling motive into an aggressive ostinato at the beginning of the development.

**EXAMPLE 2.13.** Shostakovich, Symphony No. 5, i, mm. 113–117, E-flat minor EEC and S-based caesura fill
Development

The development section begins the second large-scale rotation of the movement, and consists itself of three large subrotations. Along with these large-scale rotations, corresponding to emphasized cyclical reappearances of P-based material, two subrotations, corresponding roughly to the two-part subrotational design of P-space, encompass the two initial rotations, and the end of development space coupled with the crux, respectively. The crux, a return to correspondence with P-space material in the tonic features a melodic point of return, P$^{2.2}$, first featured in P-space’s second subrotation.

Sentence-like structures are a recurring presence in the development zone, with parts one and two each featuring sentential constructions. Figure 2.4 shows the development’s overall structure: part one, an entry zone, cycles through elements of P and S, with each subrotation dissolving into stretto and fragmentary textures. The presence of S is transformed, consisting of accompanimental turns and march-like textures that threaten to coopt its P-like contour into a menacing variant of the primary theme itself.

A P-based buoyant march, also structured as a sentence, begins part two and regains musical momentum in a push toward the recapitulation. However, the sense of overall triple-rotational construction, typically confirmed by a recapitulation in the tonic, is displaced by a double-rotational design. A false-recapitulation effect in part three brings back the opening theme in B-flat; a dominant lock then ushers in a return of exposition material but this return corresponds to m. 19 of the exposition, P-space’s second subrotation, entirely bypassing the introduction and main theme.
**FIGURE 2.4.** Shostakovich, Symphony No. 5, i, Development, Overall Rotational and Thematic Structure

<table>
<thead>
<tr>
<th>Measure # Zone</th>
<th>121</th>
<th>188</th>
<th>217</th>
<th>243</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part One</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part Two</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(March)</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Part Three</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(w/ False-Recap effect)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crux</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(corresponds to m. 19 of the exposition)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Thematic material**
  - $P^{1.1} + (S+P)x3$
  - $P^{1.1} + P^3 + P^{1.0} + P^{1.1}$
  - $P^{1.0} + S^1$
  - $P^{2.2}$

- **Rotational structure 1**
  - Subrotation 1
  - Subrotation 2
  - Subrotation 3

- **Rotational structure 2**
  - Retracks subrotation 1 from exposition P space
  - Retracks subrotation 2 from exposition P space

**Entry Zone (Part One)**

The development’s entry zone, displayed in Figure 2.5, features two sentential structures, spanning mm. 122–156 and mm. 157–187. While the first sentence consists of chiefly P-based material—mostly alternations of $P^{1.0}$, $P^{1.1}$, and $P^3$, with a brief appearance of $TR^{1.1}$—the second sentence features S material alternating with $P^3$ and $P^{1.0}$. Both sentences culminate in continuation phrases with abbreviated stretto statements and fragmented thematic treatment. The placement of thematic modules during this entry zone accomplishes two tasks: first, it establishes a P-based opening for the development, a choice in dialogue with normative Type 2 and Type 3 constructions in earlier sonata-form models and a melodic placement that signals the start of a new rotation after completion of the exposition. Second, it fuses two thematic modules, $P^3$ and $P^{1.0}$, reordering them from their original rotational scheme in the exposition. This new
ordering counterbalances their respective ascending and descending melodic contours and reiterates the boundary-blurring rotational overlap first seen at the seam between P space’s second subrotation and the beginning of TR space.
The first subrotation begins with the encircling motive in the piano and low strings, now menacingly circling F and D-flat and continuing from the fill at the end of the exposition. This figure is expressed both motivically and tonally in this subrotation. First, elements from the P-zone combine with the encircling motive as the horns present material from P\textsuperscript{1.1} in F minor and the trumpets answer with P\textsuperscript{1.1} in fugato-like imitation up a half step at F-sharp (starting in m. 132). Next, the continuation portion of the sentential structure emphasizes E as an outer boundary during stretto fragments of P\textsuperscript{1.1} and P\textsuperscript{3}; these three pitches (E, F, and F-sharp) served as the encircling motive at the development’s beginning.

These three P-space modules, P\textsuperscript{1.0}, P\textsuperscript{1.1} and P\textsuperscript{3}, are further developed as subrotation 2 continues: the encircling motive is used as part of an octatonic link from m. 145 to m. 147, where another statement of P\textsuperscript{1.0} leads into a series of P\textsuperscript{3} / P\textsuperscript{1.0} presentations. It is here these two modules fuse. Example 2.14 shows this fusing, centered on D in mm. 148–49, then E in mm. 150–155. The rising scale opening of P\textsuperscript{3} is combined with the descending tetrachord conclusion of P\textsuperscript{1.0}, combining two modules that were last seen paired at their simultaneous presentation surrounding the rotationally overlapping seam between P-space and TR-space in the exposition. After a brief one-measure interlude of material from TR\textsuperscript{1.1} in m. 152, P\textsuperscript{3} and P\textsuperscript{1.0} then reappear in stretto between the winds and strings during the continuation.

S-zone thematic modules begin the next sentential structure, following this initial reiteration of P- and TR-based material. Such placement completes a subrotational presentation of exposition material in the development’s entry zone, thereby preserving the rotational ordering established in the exposition, coordinating the first developmental statement of S material with the beginning of the next phrase unit, and reinforcing the overall rotational scheme.
This appearance of S in sequence after P and TR in development space is not only rotationally active but is also in a normative location within the development. This is in accordance with typical Type 3 sonata presentations of S material in the development, a factor that encourages the listener to continue assuming a Type 3 construction.\textsuperscript{12}

\textsuperscript{12} Hepokoski and Darcy, \textit{Elements of Sonata Theory}, 195–250.
S material permeates this sentence, alternating with \( P^3 \) and \( P^{1.0} \) (no longer fused) until m. 173, where \( S \) is further emphasized in stretto. The rotational ordering in this sentence echoes the reversal found in the previous phrase: \( S \) and \( P \) material and reversed, and \( P^3 \) once again appears before \( P^{1.0} \), an echo of the overlap at the exposition’s P/TR boundary. This reversal continues through the end of this sentential phrase; an emphatic statement of \( P^1 \), also in stretto, in m. 176, is followed by a fragmented appearance of material from \( P^3 \) in m. 180. This fragmentation gains musical energy, emphasizing C major and driving to the central action section of the development in m. 188.\(^{13}\)

While \( P \)- and \( S \)-based elements have thus far appeared in their expositional order, reinforcing Type 3 rotational norms, the freer treatment of intra-\( P \) reordering throughout this entry zone is more often seen in Type 2 developmental spaces, where \( S \) is unlikely to appear at all.\(^ {14}\) The continued attention to the \( P^3 / P^{1.0} \) overlap, and, consequently, the second subrotation of \( P \)-space, hints at the turbulence yet to come surrounding two remaining problematized boundaries: the point of crux and the delineation between the end of sonata space proper and coda space.

\(^{13}\) Hepokoski and Darcy refer to the middle section of the development zone as the central action section. This portion of the development is typified by “surging restlessness; moves to minor; _Sturm und Drang_ outbursts; quieter, reactive moments; special-effect episodes; and so on.” Central action zones may also lead to one or more crisis points, and feature sequential blocks, fugato or other contrapuntal activity, and/or false-recapitulation effects. See _Elements of Sonata Theory_, 230 for more details.

\(^{14}\) Hepokoski and Darcy, _Elements of Sonata Theory_, 195–250 and 378. In the interest of preserving the large-scale second rotation layout, \( S \) material is usually reserved for the crux and tonal resolution and more clearly outline the second rotation. In the cases where \( S \) is absent, \( P \)- and TR-based material, along with potential episodic interpolations, may function either rotationally or non-rotationally within developmental space.
Central Action Section

The central action section of the development begins with a strident march that recontextualizes C major as F Lydian and is based entirely on P material. Figure 2.6 illustrates the formal organization of this section. This march is itself structured as a sentence: a $P^{1.1}$-based basic idea (and first subrotation) in mm. 188–194 is followed by subrotation 2, bi', featuring $P^{1.1}$ in the winds and trombones. In mm. 200–201, the caesura fill material from m. 11 is presented as a link to the continuation, mm. 202–216. The sentence structure maps onto normative events usually seen in historical central action section models: this zone first provides a sense of arrival from the restless and somewhat fragmentary texture of the Entry Zone before embarking on its own thrust toward a crisis point after the march. This renewed energy, presumably headed for a Type 3 recapitulation, is accomplished by a return to fragmentary thematic statements and restless sequential blocks.

**FIGURE 2.6.** Shostakovich, Symphony No. 5, i, Central Action Zone (Part Two)
The basic idea, consisting of the emphatic F Lydian P\(^{1,1}\) march in the horns, is followed by a bi’ response in A Phrygian reminiscent of the development’s beginning. While the presence of A Phrygian displaces F’s major-sounding Lydian mode, the bass stubbornly hangs on to an F-C ostinato throughout, keeping F present through the start of the continuation. This F/A pairing is also reflective of the eventual B-flat/D key-area pairing present at the end of the development (and similar F/A maneuvering in the development of the first movement of the Fourth Symphony). At m. 202, the continuation initiates a massive energy gain: increased instrumental forces and a fortissimo dynamic marking accompany fragmented entries of several thematic modules, as quick and energized entries of P\(^3\) and P\(^{1,1}\) maintain this new rotational reordering throughout the central action section. In mm. 204–210, a bass statement of P\(^{1,0}\) beginning on C-sharp and concluding with an F-D dyad is followed by a horn presentation of P\(^{1,1}\) in E-flat Phrygian.

These boundary pitches—C-sharp, F, D, and E-flat—retrace the movement’s large-scale tonal and neighbor-note dilemmas while rhetorically driving the developmental section to a crisis point. This drive toward the recapitulation gains even more momentum with a switch to one-measure descending melodic modules in the horns and strings, along the continued militaristic rhythm in the percussion. Finally, a unison hemiola rhythm in mm. 215–216 and a sustained D bass sets the stage for a section change that, with the subsequent emergence of P\(^{1,0}\) in its original instrumentation in m. 217, has all the trappings of a recapitulation in the tonic.

“False Recap”

Blurring of the development/recapitulatory boundary begins before the development has even concluded, as a return of P\(^{1,0}\) suggests a Type 3 recapitulation. However suitable it may
initially seem, this grand return of P begins on B-flat, a major third lower than the original appearance in D, creating what could be considered a false-recapitulation effect and in dialogue with a purposeful and ultimately misleading suggestion of the recapitulatory arrival. This recapitulation effect proves illusory, as the faster tempo, lack of tonal resolution, the appearance of $S^1$ in a P-like guise in B-flat in m. 220 demolish any sense of a commencing third rotation.  

Presenting yet another rotational cycle, S material continues through another energy gain; after a series of fifth-related bass motions completes this prominent statement of $S^1$, a dominant lock emerges in m. 241, with most of the instruments sustaining A. This musical drive reaches its fruition at m. 243 with the presence of the crux; instead of the opening module in the tonic, however, the “recapitulation” omits the opening modules of the exposition and instead presents thematic material corresponding to m. 19.

**Crux**

As mentioned throughout this chapter, the emergence of music other than the exposition’s opening module at the point of return to tonic indicates a double-rotational Type 2 sonata structure, instead of the Type 3 sonata structure most commonly expected as the first movement of a symphonic work. The retracing of the exposition at m. 243 brings back elements

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15 Additional undermining of the recapitulation potential at this point may result from the contrapuntal treatment of both P and S and their rhythmic and contour-based similarities. Mishra speaks of the “canonic version of the movement’s second subject” at this point, noting that, “Given that the second subject is itself a rhythmic augmentation of the introduction, the effect is essentially that of a cantus firmus supporting contrapuntal variations of itself. See Mishra, “Shostakovich’s ‘Trademark’ Form,” 362.
of the primary theme. However, this return indicates neither full tonal resolution nor the beginnings of a third large-scale rotation.\textsuperscript{16}

Understanding a Type 2 structure as framing this movement suggests a retrospective recontextualization of the music thus far as a double-rotational structure, altering the roles of various elements from the development. The return of P-based material in the tonic at the crux, the subjective outcry noted by Taruskin at the beginning of this chapter, begins retracking the exposition at exposition correspondence m. 19; this places the “false recap” entry of $P_{1.0}$ material in m. 217 into the development section of a larger a double-rotational layout. From a rotational standpoint, this sense of reinterpretation—linking the beginning of the development and this moment of return to original rotations of P-space material—is strengthened by the fact that the appearance of $P_{1.0}$ in m. 13, the passage immediately preceding the crux’s correspondence measures, is also a non-tonic presentation of the material may be compared to the “false recap” passage at m. 217. The development’s opening and march sections can then be viewed within the double-rotational structure chiefly as an expansion of the exposition’s subrotation 1, with S present as a means of blurring the lines between Type 2 and Type 3 structures, creating a sense of formal hybridity or tension between the two formal possibilities while reinforcing P/S rotational cycles. This formal blurring is finally decided by the outburst of Taruskin’s Shostakovich, not only returning D minor and expositional correspondence but also allowing the previously plaintive $P_{2.1}$ module to serve as the assertive rotational link between the development’s beginning and the crux.

\textsuperscript{16} For more information on the general differences between Type 2 and Type 3 sonatas, see Hepokoski and Darcy, \textit{Elements of Sonata Theory}, chapters 11 and 17.
The overall structure of the crux and remainder of the second rotation is shown in Figure 2.7. After P and a truncated, recomposed TR based on $P^{1.0}$, S space is appended by $P^{3}$; this thematic sequence, $S^{1}$ followed by $P^{3}$, was emphasized extensively in the development’s entry zone (mm. 157ff), as the development version of S emerges as part of the crux. An attenuated return of S-zone material in D major and an off-tonic cadential figure blur the closure of sonata space while continuing to work out the tensions created by the movement’s consistent boundary obscuring and overlapping modules from P-space’s second subrotation. Finally, a coda section beginning at m. 300 provides a sense of conclusion through its presentation of an altered P-theme and by providing space for a delayed attainment of the Essential Structural Close (ESC), the concluding cadence in the tonic typically seen as an obligatory event in completing sonata space proper. While not itself normally obligatory, the coda—after a non-resolving recapitulatory space—may address the tonal unrest left by the non-attainment of tonal closure within sonata space.

Though the EEC was achieved, the coda is tasked with resolving the “wrong” ESC with achievement of the real ESC in the tonic six measures into coda space, and this placement of the ESC is a highly expressive compositional choice; from a hermeneutic viewpoint, this choice can be seen as representing the inability of the sonata to attain tonal closure until the return of $P^{1}$, as well as a detaching of the rhetorical and tonal boundary markers of sonata space. This musical boundary blurring and the ESC’s eventual attainment will be examined in detail in the discussion of the coda section.

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17 Hepokoski, “Back and Forth from Egmont.” Hepokoski outlines three broad types of this sonata deformation, all of which involve uncoupling of the rhetorical and tonal resolutions of the recapitulatory space. These types include minor-mode sonatas that modulate to the major-mode in the recapitulation but cadence in the minor mode; sonata spaces that return to the minor-mode global tonic for the secondary-theme zone but do not produce an ESC in that key; and sonata recapitulations that take place entirely in the wrong key. These types of deformations often invoke a return to the global tonic, confirmed by a suitable PAC, in the coda.
FIGURE 2.7. Shostakovich, Symphony No. 5, i, crux and remainder of second rotation

<table>
<thead>
<tr>
<th>Zone/event</th>
<th>P</th>
<th>TR</th>
<th>MC</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotational structure 2</td>
<td>Rotation 2 (in progress since Development)</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>measure #:</th>
<th>243</th>
<th>252</th>
<th>253</th>
<th>257</th>
<th>259</th>
<th>276</th>
<th>283</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Thematic material</th>
<th>( P^{2.2} )</th>
<th>( P^3 )</th>
<th>( P^{1.0} ) inverted!</th>
<th>( S^1 )</th>
<th>( P^3 )</th>
<th>( S^2 ) (truncated)</th>
</tr>
</thead>
</table>

| measure #: | 301 | 305 | 307 | | 309 | 311 |
|------------|-----|-----|-----| |-----|-----|

<table>
<thead>
<tr>
<th>Zone/event</th>
<th>Coda</th>
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<tr>
<th>Rotational structure 1</th>
<th>Sub-rotation 1</th>
<th>Sub-rotation 2</th>
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<table>
<thead>
<tr>
<th>Rotational structure 2</th>
<th>(Rotation 2)</th>
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\textit{P- and TR-Space}

After the dramatic moment of return to P in the tonic, metrical recontextualization and brief post-crux interpolations lend a feeling of uncertainty to an already attenuated primary theme zone. The appearance of \( P^{2.2} \) at m. 243, corresponding to m. 19 of the exposition, has been
metrically recontextualized, shifted a half-measure from its original appearance in the exposition.
This shift preserves the weak and strong beats, and lasts until m. 246, where an extra two beats
featuring a *fortissimo* quintal chord, and a measure of 5/4, lead to a realignment of the music
with the metrical layout of the exposition. At m. 250, another post-crux alteration, this time an
expansion by repetition, suspends the retracking of the exposition material yet again; this
expansion lasts until the downbeat of m. 252, at which point the music returns to
correspondence, concurrent with the appearance of P³.

A TR-like passage beginning in m. 253, at the same point as the arrival of a dominant
harmony, punctuated by descending A octaves, evoking a kind of preview MC or perhaps further
perpetuating the sense of boundary blurring by framing the ensuing P material as either a TR
substitute (which fits the rotational construction) or P-based caesura fill in dialogue with similar
fill during the exposition. P¹.⁰ in the bassoon and low strings, accompanied by the obsessive
rhythmic pattern from the S-zone in the brass, timpani, and high strings, is reminiscent of the
caesura fill from the MC in the exposition. This presentation of P¹.⁰ is inverted, the first such
treatment in the movement, and none of TR’s original P-based modules are present. The
inversion of the opening thematic module coupled with the instrumentation and obsessive
rhythm not only contribute to a sense of energy loss, a dramatic reversal from the musical motion
in the exposition and from a normative TR-zone rhetorical drive to the medial caesura, but also
further alienate this movement’s construction from typical Type 3 models, most of which are
rhetorically concerned with reenergizing and recomposing TR in preparation for the tonal
resolution of S material.

This loss of energy continues, with instruments dropping out until a unison A and a *piano*
dynamic are all that are left. The reduction of the instrumental forces is a significant expressive
choice signifying, from a hermeneutic viewpoint, a distinct sense of defeatism at a point usually marked by buoyant musical tension released by the grand pause of the MC. In m. 257, the tonally exotic approach to S in the exposition is replaced with a more common choice. A half cadence in D, corresponding to Sonata Theory’s second-level-default MC, prepares the return of S in the tonic, featuring the lone repeating A in place of the clashing A/B-flat dyad and D/E-flat tonal areas of the exposition.

*S-Space*

S begins not in D minor, but D major, a startling and beautiful effect considering that the S theme was originally in E-flat minor, the seldom-used minor Neapolitan key area. The flute and trumpet present the S¹ theme in imitation at the measure over the S rhythm in the strings, transformed here to an almost stately dance in response to the change of mode from the original S statement. This transformation is perhaps as a result of the imitation-filled P space and S-theme treatment in the development.¹⁸ The lyrical, straightforward nature of this S presentation is further supported by the tonal orientation of the accompaniment corresponding to the presentation portion of the sentential structure. Measures 259–262 solidify the D major tonic; mm. 263–264 suggest IV or ii over a D pedal point, mm. 265–266 provide V, and m. 267 returns to D major. This major-mode euphoria does not last, however. First, D major gives way to F-sharp major before succumbing to F minor in m. 281, corresponding to the B section of S space in the exposition. Additionally, the presence of P³ in mm. 276–278, centering on E-flat Phrygian, serves to disrupt the peace with an allusion to the S-theme’s past tonality. The intrusion of P-

¹⁸ To be detailed in future chapters, Symphony No. 4’s first movement features development-based transformation of the S theme during its post-crux appearances.
based material into the S zone took place in the exposition, during the breakthrough moment in the B section, as well as development spaces.

This portion of S space continues to retrack the exposition through m. 299; after several statements of the encircling motive in the winds, a chordal statement in the horns corresponding to m. 84 of the exposition features A minor. At the corresponding moment in the exposition, the harmony is B-flat minor and the B section continues to present two more chordal figures, one in B-flat and one in G-flat, before the breakthrough of material taken from P’s second subrotation bursts in in m. 97. Here, caesura fill corresponding to m. 117 and after the EEC, simultaneously appears with the S-theme’s B-section chordal material. The fill unexpectedly brings sonata space to a premature close, disturbing yet another formal boundary in two ways. First, this fill creates boundary-blurring overlap between two elements of S space. Second, it ceases retracking the exposition just before the exposition version featured material from P’s second rotation as a breakthrough; this expositional moment itself created a boundary complication within S-space. In a sense, S has now problematized its own formal boundaries and its relation to P-space’s subrotation-2 breakthrough while obscuring the ending of sonata space proper.

What in hindsight seems to become the ESC, located in m. 294, affirms A minor as a key area with a solemn A-minor triad in the horns. This initial statement of A minor is followed by an additional chordal figure, shifting A to the bass of a b-minor seventh chord in third inversion; this transformation of A from bass of a root-position triad to a chordal seventh is similar to the progression found at the EEC. (In the expositional version, E-flat minor became an added-sixth chord at the moment of the EEC, with the addition of C.) At the crux’s close, the effect is even more startling, as the bass becomes the dissonant tone and attenuates further the sense of tonal arrival. In addition, this dominant key area denies closure in the tonic and instead presents the
dilemma of interpreting it as a tonal arrival in the “wrong” key (though a key area much more normative for expositional modulation in S space) or as a kind of dominant ending to sonata space.

The hermeneutic redemption offered by a major mode tonal resolution and the boundary congruence of a tonic ESC and the end of sonata space are denied by the reemergence of A minor. This kind of loss of major-mode promise is a prominent feature of Mahler’s symphonic compositions; analysts have explored the narrative of nihilism and tragedy in Mahler’s music as successfully thwarting attempts at attaining redemption through major-mode moments of breakthrough by a return to the inevitable minor mode, as well as Mahler’s influence of Shostakovich’s symphonic compositions.¹⁹ That this cadential conclusion arrives just before what should be the retracking of such a breakthrough moment further strengthens the sense of defeat. This A minor cadence can perhaps be viewed as a kind of ESC in the “wrong” key; afterward, the encircling motive caesura fill hints at B minor before dissolving into the E-oriented beginning of the coda, invoking the falling-fifths motion seen throughout the movement.

That the actual ESC in the global tonic is not attained until six measures into the coda creates a mismatch between the rotational structure and tonal completion. Such a declination of an ESC within sonata space without some address in the coda would be considered a “failed” sonata, in which the lack of tonal closure within sonata space signals a failure of the formal

trajectory to reach its goal. Evasion of this cadence is an expressive strategy that fits well with scholarly discourse regarding Shostakovich’s struggles with the Soviet regime.\footnote{Among recent examples is Judith Kuhn’s \textit{Shostakovich in Dialogue}, which explores the issue of “failed sonata” in depth in Shostakovich’s first seven string quartets, viewing them as containing overlapping dialogues both between Shostakovich and his critics and with conventional genre and form.}

As mentioned in chapter one, Shostakovich’s use of this expressive device appears quite often, and its affective conditions vary widely across his output, raising the issue of appealing to the notion of “failed” sonata too frequently and weakening the analytical importance and expressive impact of the finding. As this kind of deformation occurs as a regular feature of Shostakovich’s work and creates varying levels of musical tension and options for hermeneutical interpretations of the unattained ESC’s meaning, ongoing analyses and narratives of his musical representations of struggle can begin to take place within a recognized framework of Shostakovich’s fully integrated stylistic innovations. The presence of a “wrong-key” ESC congruent with the rotational completion of sonata space can be considered as another stylistic expression of Shostakovich’s boundary-blending techniques throughout the movement.

Concomitant with this boundary overlap is the notion of “failed” sonatas. Perhaps the most important factor in this stylistic choice is Shostakovich’s was familiarity with this treatment through his study of Beethoven and Mahler. Declining the ESC, or deferring the ESC to the coda, was used to great hermeneutic effect by Mahler in his Sixth Symphony, and by Beethoven in his \textit{Egmont} Overture, Second Symphony, and String Quartet, op. 59, no. 3, as well as the middle movement of his Op. 81a Piano Sonata, among others.\footnote{See Hepokoski, “Back and Forth from \textit{Egmont},” for an in-depth treatment of non-resolving recapitulations.} The expressive choice of declining or delaying the ESC can be seen here as leading to false hope of tonal closure, as well...
as congruence between the tonal and rhetorical closures: the cadence in m. 294 analogous to the rotational/rhetorical positioning of the EEC can be considered a kind of “false” ESC in the wrong key. This “false” ESC, combined with the thematic omission of P¹ and the “lights-out” effect of re-solidifying the minor mode is an effective thwarting of the tonal promise of sonata form. This loss of hope reconciles the impending coda to both a minor-mode ending and to the responsibility of addressing the ongoing dialectic of unresolved tension manifest in misaligned formal boundaries seen throughout the movement.

Coda

The coda makes up the final sixteen measures of the movement, occupying measures 300–316. It begins with material from P¹. While it is common for Type 2 sonata examples to feature P-based codas, the normative presentation allows for musical material missing from the rotational presentation at the beginning of the recapitulation to appear in the tonic. This is broadly compensatory, though, in that it is the commencing of another rotation featuring P-based material in the tonic and arrives after a potentially expected third rotation with similar characteristics did not materialize. In this coda, however, the flute presents the P¹ theme in an unusual guise: both off-tonic, a treatment seen in the development, and in inversion, a technique seen in P¹₀’s return in m. 253 corresponding to the beginning of TR space. This return of the primary theme suggests more tragedy than triumph, and the presence of A and D in the low strings signal the reemergence of D minor in m. 305 and the arrival of the ESC. As if having waited for P¹₁’s return, even one so transformed, this cadence finally provides tonal closure corresponding to the melodic return of P¹₁ before P³ in imitation completes the movement.
The coda begins not in D minor, but E minor, as prepared by the falling fifths motion of the caesura fill in mm. 296–299. This off-tonic beginning is startling, perhaps leaving the listener wondering if the movement will be able to attain any kind of tonal resolution at all. Once P^{1.1} is presented in inversion, matters only worsen; the plaintive flute presentation lacks all of the drive of P’s earlier statements. It is not until mm. 304–305, where the piccolo’s apparent imitation of the flute’s inverted P^{1.1} statement transforms into P^{3} and the basses give up their B-E dyad in favor of A-D, that D minor emerges as a key area.

These first six measures of the coda feature a coalescence of several outstanding sonata-form issues presented in this work. First, the E-D movement reconciles D’s upper neighbor as one ultimately resolving to D, perhaps addressing the tonal closure denied at the end of sonata space proper. This descent-by-step action also recalls the D-C tonality shifts throughout the movement, most specifically the beginning of P space’s subrotation 2, where P^{1.1} is stated in C minor. Further, P^{3}’s statement in m. 305 highlights a B-flat minor tonality, recalling the statement of P^{1.1} and the false recapitulation effect in developmental space. And finally, the P^{1.1} with P^{3} pairing poignantly addresses the many areas of P-module boundary-blurring overlaps present throughout the movement, by appearing at the most dramatic instance of formal mismatch—the moment where tonal resolution comes six measures after rhetorical closure—and by “passing the torch” from P^{1.1} to P^{3} to complete the movement.

From a rotational standpoint, the treatment of P^{1.1} in the coda, both transposed and inverted, can potentially be viewed as a further weakening of the reverse-recapitulation idea when viewed in light of P’s previous return. The inversion corresponds to P^{1.0}’s treatment in m. 264, at the point corresponding to the exposition’s beginning of TR. Placing an inverted presentation of P at a formal boundary reinforces the sense of rotational ordering while obscuring
in some sense the role of $P$ as representing its initial expository appearance, or fulfilling its obligation under the premise of the “sonata principle”. Additionally, $S$ material is placed between the two statements, creating in some sense a complete presentation of rotational material before $P$’s inverted return. Rhetorically, this treatment is also notable in that it means $P$ does not in fact appear in its original contour at all after the crux. Rather than bringing back an element replicating the original $P$ statement in the exposition, as is inferred in the mirror-form model, this inverted presence represents the new, post-development presence of $P$, transformed and emphasized by rotationally ordered presentations at moments of formal demarcation, namely the end of sonata space and the beginning of the coda.

After the return to $D$ minor, the thematic statements seem to reminisce wistfully over the movement. In m. 309 the cellos and basses enter with material from $P^{1.0}$ at the pitch level utilized in the “false recap” entry from the development, continuing the presence of $B$-flat established by the piccolo’s statement of $P^3$. The violin repeats the $P^3$ motive in mm. 311–313 as the cellos and basses slowly collapse the statement of $P^{1.0}$ from its original form, first to an open fifth spanning $D$-$A$, then a minor third, $D$-$F$, confirming a sense of $D$ minor tonal space. By the last four measures, all the sounding instruments have resigned themselves to $D$ minor, with the exception of the hopeful celeste; with a gesture of possible redemption, the minor sixth heard in $P^{1.0}$ is presented as a filled-in ascending chromatic scale, resembling the ascending scalar passage seen in $P^3$. Use of the celeste is also seen in the adagio movement of Shostakovich’s Fifteenth Symphony, serving a similar role as attempted redeemer of a minor-mode tragic ending.\textsuperscript{22} This

\textsuperscript{22} In addition to this instrumentation similarity, Shostakovich features inversion of thematic modules in the coda of his Fifteenth Symphony’s adagio movement. The adagio also shows Mahler’s influence, bearing a particularly strong formal resemblance to the adagio of Mahler’s Third Symphony.
minor-sixth ascent begins on F-sharp, and ends on D, hinting at a possible major alternative to the D minor ending right up until the last measure, where a unison D seals the fate of the movement.
Chapter Three

Shostakovich’s Symphony No. 4, First Movement: Overall Structure

I. Introduction

Symphony No. 4 is considered the first of Shostakovich’s large-scale symphonies, far surpassing his previous symphonic works in both size and scope.¹ While the timing of the infamous “Muddle instead of Music” denunciation leveled against Shostakovich is now considered to be more political than musical, he withdrew the Fourth Symphony before its first public performance in part in an effort to avoid further political and personal harassment. The work was eventually premiered December 30, 1961, eight years after Stalin’s death.

Nearly an hour in length, Symphony No. 4 features two large outer movements flanking an eight-minute scherzo and trio. The Fourth Symphony is not only Mahlerian in size, scope, and design, but even includes quotes from Mahler’s First Symphony in its first movement. There are also allusions to Mahler’s Sixth Symphony, among others, in the orchestration, style, and thematic designs of the second and third movements.²

Existent analyses of the Fourth Symphony’s first movement explore the interaction between its formal experimentalism and grand proportions and the more standard historical

¹ The details surrounding Symphony No. 1’s composition are outlined in Chapter 1. Symphonies Nos. 2 and 3 are each one-movement through-composed works based on Soviet programs, subtitled “To October” and “First of May” respectively, and featuring texts based on Soviet themes. While in style at the time, these single-movement works are largely considered as more closely resembling symphonic poems.

² These quotes from, and allusions to, Mahler follow Shostakovich’s detailed study of Mahler’s symphonies with Sollertinsky during the decade prior to composing his Fourth Symphony. See Fairclough, A Soviet Credo: Shostakovich’s Fourth Symphony for a more detailed account.
sonata-form construction. This movement contains numerous formal and tonal complexities, most notably a restless and unsatisfactory secondary theme that finally emerges fully formed well into the movement, surrounded by developmental and highly unstable musical events. This secondary theme also displaces the primary theme at the moment of an expected sonata-form recapitulation, altering the thematic recurrence normally seen at the moment of recapitulation in a standard sonata-allegro symphonic movement.

This movement highlights Shostakovich’s techniques of evoking triple-rotational elements within a double-rotational construction by featuring both primary- and secondary-theme elements at the moment of post-development tonic return. In this way, Shostakovich simultaneously elicits expectations of both sonata types, thus creating a kind of sonata-type hybrid while underscoring ordered rotational structures. Furthermore, moments of formal demarcation throughout the movement—including at the MC, EEC, and ESC—feature postponing of tonal cadential closure in favor of non-tonal boundary sonorities. These post-tonal events correspond to formal boundaries, displacing tonal closure until the movement’s coda while forming transpositional and rhetorical correspondences across the movement analogous to tonal boundaries markers. This movement’s relationship with Mahler’s First Symphony—apparent in various thematic quotations—is broadened beyond quotation to include thematic, formal, and rotational elements, further highlighting Symphony No. 4’s rotational patterns and structural correspondences to Mahlerian practice.

II. Overall Formal Structure

Noting the use of nebulous formal boundaries and problematic secondary theme construction in the finale of Shostakovich’s Fifth Symphony, Patrick McCreless writes:
The movement is so aggressive that it is unable in its expository space to establish a second subject or tonal area. . . . When the maniacal energy plays itself out, . . . the impetus towards introspection begins. 3

This comment might also apply to the affect of the Fourth Symphony, with its atypical thematic strategy and tonal trajectory in its first movement. Indeed, far from banishing the purportedly formalist material of the Fourth Symphony to his proverbial desk drawer, Shostakovich incorporates elements of the Fourth Symphony throughout the Fifth by including direct quotes, indirect allusions, including instrumentation, key areas, and styles, and similarities in formal structures. 4

McCreless characterizes the Fifth Symphony’s finale as only weakly in dialogue with sonata-form models, instead considering it an example of Hepokoski and Darcy’s rotational form. According to Hepokoski and Darcy, rotational structures “extend through musical space by recycling one or more times—with appropriate alterations and adjustments—a referential thematic pattern established as an ordered succession at the piece’s outset.” 5 An analysis of the first movement of the Fourth Symphony could potentially lead to a similar conclusion: one can argue that this movement is not in fact a strict sonata-form construction, but instead is more rotational in principle. The secondary theme is unable to coalesce until well into the movement and is never presented without substantial tonal and motivic complications. Additionally, the movement as a whole is tonally nebulous and underdetermined, missing the cadential and tonal

4 Examples of these allusions as demonstrated in the first movement of the Fourth Symphony will be outlined in Chapters 4 and 5. Another example of similarity outside the first movement involves the scherzo movements of both symphonies, whose textures, formal structures, and even themes, are either quoted directly or highly similar.

5 Hepokoski and Darcy, Elements of Sonata Theory, 611.
landmarks that serve to buttress Classic-era sonata narratives as well as many of Shostakovich’s more conventional sonata-form works. And yet, analyses repeatedly identify this movement as a sonata structure, albeit an obscured, problematic, and highly unusual one.

This movement can be considered in dialogue with both sonata-form models and with the structural concepts of rotational form, and it is at the intersection of the two that many of the movement’s formal dilemmas are potentially brought to light. This chapter examines the Fourth Symphony’s first movement through the lenses of Sonata Theory’s type-2 and type-3 constructions and in terms of rotational-form processes. These formal strategies—sonata form and rotational form—are usually matched and mutually reinforcing in a sonata-form movement, but here are obscured and emphasized to varying degrees throughout their interactions. The transmission of the overall sonata-form narrative is alternately strengthened and weakened by the pervasive rotational and subrotational structures present during the movement.

**Sonata-Form Structure**

Let us first examine this movement’s overall formal structure in terms of sonata form and Sonata Theory. Hugh Ottaway describes this movement as purposefully in dialogue with sonata principles while consciously avoiding conventional expectations:

> Behind the appearance of “a free, rhapsodic form” familiar processes may be discovered. Formally speaking, the composer is having it both ways; and knowingly, I think, he makes a number of disruptions and displacements that confuse the form-making issue.⁶

Figure 3.1 displays my reading of the overall formal layout of the Fourth Symphony’s first movement. This movement can be considered as being in dialogue with the generic

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FIGURE 3.1. Shostakovich, Symphony No. 4, i, large-scale overview

<table>
<thead>
<tr>
<th>Rotation 1</th>
<th>Rotation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposition</td>
<td>Development</td>
</tr>
<tr>
<td>Part 1</td>
<td>Part 2</td>
</tr>
<tr>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>P</td>
<td>TR</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rotation 2 continued

<table>
<thead>
<tr>
<th>SR4</th>
<th>SR5</th>
<th>SR6</th>
<th>SR7</th>
<th>SR8</th>
</tr>
</thead>
<tbody>
<tr>
<td>477</td>
<td>717</td>
<td>787</td>
<td>882</td>
<td>906</td>
</tr>
<tr>
<td>P</td>
<td>P+TR</td>
<td>S, S-var, S + Mahler i/i retrans.</td>
<td>(introductory) + S-tel (S-var3) ESC? NO</td>
<td>1006</td>
</tr>
<tr>
<td>P+Sr-ov</td>
<td>P/TR</td>
<td>P+TR</td>
<td>ESC</td>
<td>P+Mahler</td>
</tr>
</tbody>
</table>

MC=medial caesura; SR=subrotation; ov=overwrite

expectations of sonata form by its overall coherent, if problematic, correspondence to the typical sonata-form layout: first, a primary theme is presented in the exposition and is followed by transitional material and a large pause before a contrasting thematic statement occurs.

This exposition is then followed by more exploratory developmental activity traversing various key areas and featuring altered or truncated statements of thematic material from the exposition. Typically, a recapitulatory section would normally follow, featuring the return of exposition material correlating tonally and thematically to the original expositional statements. This movement, however, features the notable absence of the primary theme in the original key at the point where a recapitulation in tonic would be expected in a standard three-part sonata structure. Like the first movement of the Fifth Symphony, it can be viewed as Hepokoski and Darcy’s double-rotational, type-2 sonata form, with elements of type-3 sonata structure present as well.
The drama and complexity of the dialogue between sonata types 2 and 3 arise from several factors. First, the rotational reappearance of both primary- and secondary-theme material throughout rotation 2 weakens the overarching larger second rotation. Additionally, primary-theme statements at mm. 477, 679, and 906—presented in varying states of completeness or in keys other than the movement’s C-minor tonic before resuming developmental activity—suggest, but never fulfill, the requirements for a type-3 recapitulation. The eventual tonal return, coupled with the secondary theme instead of the primary theme, leads to a reconsideration or conversion of the movement’s formal layout from the expected type-3 structure to a structure in dialogue with type-2 sonatas. The primary theme does eventually return in C minor, but this return takes place in the coda, at m. 1006 and outside of sonata space proper.

This movement also features an unusual treatment of the contrasting secondary theme: a fragmented and underdeveloped secondary theme in the exposition is eventually developed by means of teleological genesis, accomplished through thematic variation—a process wherein use of material derived from the secondary theme supplants the underdeveloped original statement while maintaining its rotational order. This variation process is attempted three times during the development zone, with each attempt featuring differing thematic and tonal elements of the secondary theme’s exposition version. The third variation, the most substantial and fully formed attempt, is then reprised at the movement’s tonal resolution in m. 906.7 The notions of teleological genesis and repeated attempts to develop a successful version of a thematic

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7 Varying or overwriting a problematic or flawed theme is a notable element of Mahler’s symphonic works; see Darcy, “Rotational Form, Teleological Genesis, and Fantasy-Projection in the Slow Movement of Mahler’s Sixth Symphony,” 19th-Century Music 24 (2001), 115–54.
statement have roots in the symphonic works of several European modernist composers. The process of triple attempts at a secondary theme overwrite also foreshadows the primary theme’s similar problematic statements before the crux, in the form of repeated hints at a potential type-3 recapitulation at bars 477, 679, and 906, respectively.

**Rotational Formal Design**

The exposition space of a sonata-form structure typically serves as the referential rotation in a larger-scale rotational design. This initial rotation is then repeated twice (development and recapitulation spaces, respectively) in a standard three-part sonata movement, or once (development/tonal resolution spaces) in sonata form structures without a reprise of the opening theme in the tonic. These rotational and teleological expectations, characteristic of sonata structures, lay the groundwork for the drama of this movement’s repeated attempts at, and eventual production of, the more fully formed secondary-theme variation in the development. These expectations also encourage the sense of thwarted return, deception, and frustration present in each of the rotational returns of primary-theme material in the development.

Figure 3.2 demonstrates the interaction between the overall sonata narrative and the movement’s preoccupation with rotational structures. Rotational structures are pervasive throughout the movement, manifested as subrotational cycles within the overall sonata-form

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8 See Hepokoski, *Sibelius: Symphony No. 5* (Cambridge: Cambridge University Press, 1993) and Darcy, “Rotational Form, Teleological Genesis, and Fantasy-Projection in the Slow Movement of Mahler’s Sixth Symphony” for detailed analyses.

9 These include works that are classified in Hepokoski and Darcy’s Type 2 sonata construction category. See *Elements*, pp. 353–65, for explanation of the double-rotational layout and discussion of historical considerations surrounding this sonata formal type. As with the more common Type 3 sonata, the typical tonal trajectory of a Type 2 sonata includes establishment of the S-zone key area (the EEC) and restatement of this cadence in the tonic (the ESC) within sonata space.
design. In this figure, each subrotation contained within the movement’s large-scale sonata-form second rotation is represented as a repeated rotation of the initial expositional material. Upon further examination, each can be considered a more or less complete representation of the initial expositional rotation: with the exception of the coda’s rotations, each subrotation of the expositional material represents at least two thematic areas from each of the exposition’s two parts, P and S, in rotational order. This P/S rotational manifestation is atypical for Type 2 sonatas, wherein the return of secondary theme material is normally reserved for the moment of tonal resolution following development space.

**FIGURE 3.2.** Shostakovich, Symphony No. 4, i, large-scale rotational overview

<table>
<thead>
<tr>
<th>Rotation 1</th>
<th>Rotation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotation 2</td>
<td>Rotation 3</td>
</tr>
<tr>
<td>1</td>
<td>18 31 32 158</td>
</tr>
<tr>
<td>P</td>
<td>TR MC S-gen EEC</td>
</tr>
</tbody>
</table>

Rotation 2 continued

<table>
<thead>
<tr>
<th>Rotation 5</th>
<th>Rotation 6</th>
<th>Crux</th>
<th>Coda</th>
</tr>
</thead>
<tbody>
<tr>
<td>477</td>
<td>717</td>
<td>787</td>
<td>906</td>
</tr>
<tr>
<td>1006 P TR ESC P+Mahler</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Generically, the withholding of the secondary theme from developmental space helps create a sense of rotational continuity between the statement of primary-theme-based material at the beginning of the development and the return of the secondary theme material at the crux.  

10 See Hepokoski and Darcy, *Elements of Sonata Theory*, 377, for discussion on the suppression of S in the development section of Type 2 sonata structures and the idea of the Type 3/Type 2 formal conversion.
Conversely, the presence of secondary-theme material in the development of this movement obscures the larger double-rotational structure in favor of repeated local rotational structures.

While the presence of primary and secondary thematic material in rotational order throughout the movement—including during the development section—is somewhat more typical in a type-3 sonata construction, such rotational appearances are usually presented in a straightforward manner corresponding to the sonata formal design. One complete rotation includes the exposition; then one or more rotations take place in the development; one rotation comprises the recapitulation; and, if present, a coda may present rotationally active material as well. In the Fourth Symphony’s first movement, several of the rotations within development space as shown in Figure 2 include not only varied repetitions of the primary and secondary themes, but also other rhetorical elements, such as the medial caesura (MC), that are normally reserved for the exposition and recapitulation spaces of a sonata structure. The continual reproduction of the expositional rotation through a series of developmental statements marks this development zone as potentially more concerned with rotational principles than with the overarching sonata form.

It is the expectation of rotational and sonata-formal congruence that creates tension in the first movement of Shostakovich’s Fourth Symphony. As the second rotation begins in m. 158 with the return of primary-theme material, one expects the next formal rotation and its associated section, the development, to commence. However, the second rotation arrives without the first rotation having accomplished the clear thematic or tonal events usually associated with a completed exposition section. This exposition declines a complete and stable contrasting theme, instead presenting overlapping statements of thematic fragments. The secondary theme zone also fails to firmly establish an opposing tonal area, typically accomplished through the content of the
contrasting melody. In a more typical sonata-form example, S-space’s key area is then confirmed by a cadential event such as the Essential Expositional Closure (EEC) and perhaps further reinforced through cadential repetitions in one or more closing modules. Here, this crucial formal boundary is missing the typical thematic, tonal, and cadential markers, yet through gestural and rotational constructs the boundary is still communicated, though in a novel and somewhat ambiguous way.

**Teleological Genesis**

Concomitant with the principle of rotational structures in this movement is the generative development of a fully formed climactic version of the secondary theme out of the competing fragments of its expositional presentation. At its most basic, Hepokoski outlines teleological genesis as involving “a matrix within which something else is engendered, usually a decisive climax or final goal (telos). The concept of a composition as gradually generative towards the revelation of a higher or fuller condition is characteristic of the modern composers.”¹¹ Darcy describes the interaction of teleological genesis with rotational form thus:

A brief motivic gesture or hint planted in an early rotation grows larger in later rotations and is ultimately unfurled as the telos, or final structural goal, in the last rotation. Thus the successive rotations become a sort of generative matrix within which this telos is engendered, processed, nurtured, and brought to full presence. As a result of this process of “teleological genesis,” the rotations may be construed—within the aesthetic of the time—as growing successively more “revelatory.”¹²

The repeated attempts at a telos, or a climactic and complete version of the secondary theme, reveal progressively fuller and more complex thematic presentations of the secondary

¹² Darcy, “Rotational Form, Teleological Genesis, and Fantasy-Projection in the Slow Movement of Mahler’s Sixth Symphony,” 52.
theme fragments with each successive rotational cycle. Several competing fragments first presented nearly simultaneously in the exposition are then developed in subsequent rotations, before the process culminates in the goal of a lyrical theme firmly planted in a contrasting key and the eventual return of this theme in the tonic. Hepokoski refers to a particular manifestation of this process as it takes place in Sibelius’s *Luonnotar* as “represented in three increasingly potent appearances (Promise / Near Approach / Culmination).” Similar language appears in Hepokoski and Darcy’s *Elements of Sonata Theory*, characterizing the overall trajectory of a sonata-form movement as featuring an expositional “structure of promise” that is then answered by the recapitulation’s “structure of accomplishment.”

In Shostakovich’s Fourth Symphony, the “structure of promise” expected in a normative expositional design is paired with the substitution of motivic fragments for a fully formed secondary theme. This symphony can then be viewed as “promise thwarted”; the secondary theme, normally presented as part two of the exposition and as a crucial element of type-2 and type-3 sonata structures, is disjointed and instead presented in its first appearance as fragmented and tonally unorganized. Each subsequent approach to this thematic problem takes up the structure of promise of the overall sonata form and the thematic promise of this lyrical contrasting material. Two fragments prove unsuccessful in subsequent rotations before the promise is finally fulfilled. (This arrival is not without other complications, however, which are in dialogue with Mahlerian practice and will be outlined later in this chapter.)

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13 Hepokoski, *Sibelius: Symphony No. 5*, 27.

14 Hepokoski and Darcy, *Elements of Sonata Theory*, 17. The discussion of these structures rests heavily on the tonal implications of the exposition’s EEC attainment of a contrasting key area, and on the consequent ESC’s recapturing of the global tonic. For Shostakovich, these elements of tonal identity and cadential closure are far less definitively at hand.
It is necessary, then, to consider two salient and corresponding elements when analyzing this movement. First, there is the presence of the gradually emerging secondary theme, not suitably and fully formed until m. 263, and its implications for the overall sonata-form narrative. Second, there is the rotational structure, which initiates a second cycle at m. 158 with a return of primary-theme material strongly in dialogue with the beginning of a development section.

Existing analyses, in balancing these factors, typically favor one governing principle over the other. Some readings do not interpret the appearance of the secondary theme until its full arrival at m. 263, thereby underplaying the overriding rotational schema, the generic sonata-form expectations evoked by the opening events, or the secondary theme’s rhetorically and thematically appropriate, if fragmented, placement earlier on. Other readings suggest the presence of two secondary themes, accounting for the rotational and rhetorical cues provided in mm. 1–158, the more complete secondary theme presentation in m. 263, and the work’s dialogue with sonata form. However, by calling these appearances of the same melodic materials two differing themes, such readings can underplay both the commonalities between the thematic statements and the teleological genesis in moving from the first presentation of the theme to its

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subsequent statements. Regardless of where the sonata form delineations are made, analytical
determinations in this work consistently wrestle with these factors.

This movement is saturated with rotational cycles that contend with the nature of the
secondary theme and with the overall sonata structure. I will address these elements by
examining the movement as in dialogue with types 2 and 3 sonata structures, rotational form, and
teleological genesis as seen in the gradually emergent secondary theme. While the eventual
thematic arrival of the secondary theme in the development is indeed the first fully-formed
appearance of this theme, I contend that the rotational principles are equally compelling and that
the rhetorical effects of the movement’s early landscape—including the dissolution of the
opening primary theme into more transitory and energy-gaining transitional material and the
grand pause at m. 31—are strongly in dialogue with the concept of the medial caesura, and the
change in texture, instrumentation, and meter present at m. 38 with an expositional second part.
These elements all seem to promise a secondary theme, even if it is fragmented, and support a
hearing of the first rotation as corresponding to the expositional rotation of a sonata-form
structure.

**Comparisons with Mahler’s First Symphony**

While much has been written about connections between Shostakovich’s Fourth
Symphony and Mahler’s Second, Sixth, and Seventh Symphonies, the formal similarities with
Mahler’s First Symphony have yet to be systematically explored. The most obvious connection
between the two works is Shostakovich’s quotations of the cuckoo and triplet horn motives from
Mahler’s First Symphony. In addition to these direct musical quotations, Mahler’s First and
Shostakovich’s Fourth Symphonies feature similar deformational events that transform sonata-form conventions and challenge standard expectations surrounding sonata formal boundaries.

One very general similarity between the first movement of Mahler’s First Symphony and Shostakovich’s Fourth is seen in the underrepresentation of secondary theme material in the exposition. In Mahler I/i, a lengthy introduction is followed by a continuous exposition—that is, an exposition without a secondary theme. Like Shostakovich’s Fourth, the sheer energy of Mahler’s primary theme, once it emerges, is formidable: Mahler’s continuous exposition keeps the primary-thematic material, already hinted at in the four-rotation introduction, cycling out right up to the arrival of the EEC in m. 135. The exposition is thus entirely concerned with primary-thematic material. While Shostakovich does present a secondary theme in the exposition of the Fourth Symphony, this exposition is also dominated by the sheer energy of its primary theme material. When the secondary theme does arrive, it is, as previously mentioned, fragmented, underdeveloped, and obsessed with circular repetition.

A more substantive similarity is seen in Mahler’s treatment of the movement’s main themes throughout the development and at the border of the development and recapitulation spaces. Figure 3.3 displays the overall design of Mahler I/i. Throughout development space, the primary thematic modules rotate and accompany a process of teleological genesis wherein the inferno motive becomes a gradually emerging element, through various iterations in the development of this movement and eventually as the primary theme of the fourth movement.

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16 The structural analysis and thematic labels referred to here are from unpublished analytical sketches created by Warren Darcy. I was first exposed to these formal sketches in coursework at Oberlin Conservatory in Spring 2005. The references and graphs presented here are created from my own class notes and class handouts; the analyses and terminology are Darcy’s.
The development space of Mahler I/i is primarily concerned with thematic genesis and rotational development. After first focusing on thematic modules from the *creatio ex nihilo* introduction, which emerged through several rotations at the work’s opening, Mahler combines modules from the introduction with P-based themes, subsequently organized and developed in a way that is thematically and harmonically reminiscent of strophes two and three of “Ging heut’ Morgen über’s Feld” from *Lieder eines fahrenden Gesellen*, the song from which this movement’s melodies are derived. After these strophes, an “inferno” section, featuring the motive gradually emergent during the development, foreshadows the fourth movement’s explosive opening. This inferno acts as a kind of preview that adds tension to the final module of the development while establishing a dominant lock preparing the return to the recapitulation.¹⁷

Mahler I/i’s recapitulation then begins not with the primary theme as it appeared in the exposition, but with a substitute, or thematic overwrite. This overwrite maintains the rotational ordering of the original primary theme and stands in for the original primary theme module at its most notable rotational and tonal return. After the first thematic module appears in overwrite form, two subsequent thematic modules are presented as overwrite substitutes as well before the original expositional modules return. In sum, the development features rotational cycles of expositional material, and these cycles are chiefly occupied with the gradual emergence and further development of the exposition’s themes. Additionally, the recapitulation’s entire first subrotation consists of substitute/overwrite versions of three P-based thematic modules. It is at these same thematic and formal junctures in his Fourth Symphony—namely in the gradually

¹⁷ The “inferno” label originally appeared in conjunction with the finale as part of the work’s program notes; the label no longer appeared in conjunction with the work after 1896.
emergent themes in developmental rotations and the melodic thwarting of expectations at the
border of developmental and recapitulatory spaces—where Shostakovich presents his own thematic geneses and substitutions. In Shostakovich’s case it is the telos—the fully formed version of the fragmented secondary theme that gradually emerged during developmental rotations—that occurs in the tonic at the border of development and tonal resolution spaces. This boundary seam, the end of the development and return to correspondence with the exposition, takes place in a type-2 sonata at the moment of crux, that is, the return of expositional material in the tonic.

The formal and tonal issues of Shostakovich’s Fourth Symphony are even more closely in dialogue with the finale of Mahler’s First. While not a strict type-2 sonata design, the finale of Mahler’s First Symphony nevertheless struggles with the matter of creating a recapitulation of primary-theme material in the tonic after a thematically diverse development section and substantial treatment of the secondary theme in the tonic. This movement also engages the formal matter of the Durchbruch, or Breakthrough, with the recapitulation space being interrupted by an enormous D-major triumphal breakthrough theme, first introduced in development space.

Figure 3.4 shows the overall structure of Mahler I/iv. The exposition shares several formal, tonal, rhetorical, and even thematic similarities with the first movement of Shostakovich’s Fourth Symphony, to be examined in detail later.
FIGURE 3.4. Mahler, Symphony No. 1, iv, large-scale overview

<table>
<thead>
<tr>
<th>Large-scale rotation:</th>
<th><strong>Rotation 1 - Exposition</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone:</td>
<td>Introduction</td>
</tr>
<tr>
<td>Subrotation:</td>
<td>SR1</td>
</tr>
<tr>
<td>Measure #:</td>
<td>55</td>
</tr>
<tr>
<td>Thematic modules:</td>
<td>p1.1 p1.2 p1.3 p1.1 p1.2 p1.1 p1.4 Coda? p1.1 p1.2 p1.3</td>
</tr>
<tr>
<td>f:</td>
<td>V</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Large-scale rotation:</th>
<th><strong>Rotation 1 - Exposition, cont.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone:</td>
<td>S</td>
</tr>
<tr>
<td>Subrotation:</td>
<td></td>
</tr>
<tr>
<td>Measure #:</td>
<td>176</td>
</tr>
<tr>
<td>f:</td>
<td>VI (D-flat)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Large-scale rotation:</th>
<th><strong>Rotation 2 - Development</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone:</td>
<td>Flashback 1</td>
</tr>
<tr>
<td>Subrotation:</td>
<td>238</td>
</tr>
<tr>
<td>Measure #:</td>
<td>254</td>
</tr>
<tr>
<td>Thematic modules:</td>
<td>/i</td>
</tr>
<tr>
<td>f:</td>
<td>iv</td>
</tr>
<tr>
<td>Formal function:</td>
<td>( Interruption-flashback )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Large-scale rotation:</th>
<th><strong>Rotation 2 - Development, cont.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone:</td>
<td>Development pt 2</td>
</tr>
<tr>
<td>Subrotation:</td>
<td>SR1</td>
</tr>
<tr>
<td>Measure #:</td>
<td>327</td>
</tr>
<tr>
<td>Thematic modules:</td>
<td>intro, SR1, SR2</td>
</tr>
<tr>
<td>f:</td>
<td>c: i</td>
</tr>
<tr>
<td>Formal function:</td>
<td>Development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Large-scale rotation:</th>
<th><strong>Rotation 2, cont.</strong></th>
<th><strong>Rotation 3 - Recapitulation/Breakthrough</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone:</td>
<td>Flashback 2</td>
<td>Retrans.</td>
</tr>
<tr>
<td>Subrotation:</td>
<td>SR1</td>
<td>SR2</td>
</tr>
<tr>
<td>Measure #:</td>
<td>458</td>
<td>533</td>
</tr>
<tr>
<td>Thematic modules:</td>
<td>i/i, S</td>
<td>S</td>
</tr>
<tr>
<td>f:</td>
<td>d-c</td>
<td>F:V</td>
</tr>
<tr>
<td>Formal function:</td>
<td>( Interruption-flashback )</td>
<td>D</td>
</tr>
</tbody>
</table>
In terms of the large-scale structure and sonata deformations, this movement features a
development that simultaneously rotates and develops material from the exposition. The
development also looks both backward and forward at once, through quotations of material from
earlier in the symphony and through previews of the breakthrough material to come.

The development space begins with Flashback 1, an introductory module largely
featuring themes from the symphony’s first movement. After this flashback, the development
proper starts in m. 254, where Mahler alternates rotational cycles of expositional material with
further formal interruptions. During development space proper, thematic modules from the
finale’s introduction are coupled with two subrotations of primary and secondary-themes.

The next interpolation looks not backward but forward: Preview 1 is an interrupting
module, temporarily suspending development of P and S. It starts with thematic material from
the transition portion of the exposition, and then moves to a subdued C-major preview statement
of the impending breakthrough theme. Along with this preview of the breakthrough, a
preparatory module—labeled Prep—serves as a transitional passage later featured as preparation
for a chorale-like thematic module. Development space proper subsequently returns, featuring
the return and further development of P-based expositional themes. Another interruption,
Preview 2, further develops two modules from the earlier preview interruption—Breakthrough
and Prep—and adds two additional modules, a choral theme and a coda. This preview also
introduces the key of D major and triumphant texture and dynamics in combination with the
breakthrough theme, presenting a “near-approach” of the telos yet to appear.

The development space then closes with two additional sections: Flashback 2 and
retransition. While these labels express the function of the thematic and harmonic content,
respectively (Flashback 2 begins with additional quotations from the symphony’s first movement
and the retransition consists almost entirely of a preparatory dominant lock), the presence of the secondary theme in both sections further complicates the sonata-formal layout of this movement. This complication occurs precisely at the threshold of development and recapitulatory spaces.

After featuring themes from the first movement, Flashback 2 turns its attention to the secondary theme. The secondary theme gradually emerges at the end of the Flashback 2 section and is further developed throughout the retransition. As noted earlier, the appearance of the secondary theme as part of the development rotation is not unusual in a type-3 sonata movement. However, there are several atypical factors here. First, this appearance of the secondary theme is comparable in length to its original expositional statement. Second, the appearance of this secondary theme statement is in $F$ major, the major-mode inflection of the movement’s global tonic. This $F$ major return is complicated by its placement over a pedal C-natural in the bass, creating a sustained dominant harmony throughout the entire secondary theme return. While the insistent dominant lock heard in the bass maintains the harmonic trajectory of a type-3 sonata, the thematic placement and focus on the movement’s global tonic simultaneously imply a type-2 layout.

Following this problematic suggestion of type 2, the return of the primary theme in its original F minor tonic attempts to bring about a type-3 recapitulation in m. 533. Rather than a full return of expositional material, including the restatement of the secondary theme in the tonic and the essential structural closure, the now fully formed breakthrough theme interjects after the primary theme and produces the movement’s jubilant telos. This breakthrough and its succeeding modules appear in the order presented during the development (at Preview 2) and completely displace the expected secondary-theme recapitulatory appearance normative to a type-3 sonata.
This substitution of developmental material for expositional return further complicates the movement’s dialogue with both type-2 and type-3 sonata forms.

These formal and thematic deformations—the gradual emergence and developing of a significant thematic module during developmental space; the combining of type-2 and type-3 formal elements; the return of the secondary theme in the tonic before that of the primary theme; and the substitution of the development-space breakthrough theme for the secondary theme during Rotation 3—are strongly in dialogue with the kinds and locations of alterations and deformations observed throughout Shostakovich IV/i’s overall formal design.

**Comparison with Overall Structure of Shostakovich’s Fifth Symphony, First Movement**

Having examined the broader associations between Shostakovich’s and Mahler’s sonata deformations, let us turn to the resemblance between the formal designs of Shostakovich’s Fourth and Fifth Symphonies. Figure 3.5 compares the overall structure of the first movements of these works. In terms of their general layouts, both movements can be considered in dialogue with Hepokoski and Darcy’s type-2 double-rotational sonata constructions.

Symphony No. 5’s first movement is generally considered a clearer and more straightforward sonata form, and can provide a lens through which to interpret Symphony No. 4’s complicated formal layout. Each of these movements features expositional and developmental spaces followed by a return of expositional material commencing after the primary theme. Whereas V/i resumes correspondence with a P-based thematic module after its developmental space, IV/i combines introductory material and the accompanimental portion of the primary theme with a statement of the variant version of the secondary theme, the version heard in the development. The relative formal clarity and continuity of V/i are preserved by
FIGURE 3.5. Shostakovich, Symphonies No. 4, i and No. 5, i, large-scale overviews

Symphony No. 5 large-scale overview

<table>
<thead>
<tr>
<th>Rotations</th>
<th>Rotation 1</th>
<th>Rotation 2</th>
<th>Coda /</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone</td>
<td>Exposition</td>
<td>Development</td>
<td>Crux</td>
</tr>
<tr>
<td>Measure #</td>
<td>P TR ' S</td>
<td>P k1 1</td>
<td>P k2 1 TR ' S</td>
</tr>
</tbody>
</table>

* = medial caesura (MC)
/ = EEC (Essential Expositional Closure) and ESC (Essential Structural Closure)

Symphony No. 4 large-scale overview

<table>
<thead>
<tr>
<th>Rotations</th>
<th>Rotation 1</th>
<th>Rotation 2</th>
<th>Coda /</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone</td>
<td>Exposition</td>
<td>Development</td>
<td>Crux</td>
</tr>
<tr>
<td>Measure #</td>
<td>P TR ' S</td>
<td>(P+S-var x 3; P+S x 2)</td>
<td>S-var</td>
</tr>
</tbody>
</table>

* = medial caesura (MC)
/ = EEC (Essential Expositional Closure) and ESC (Essential Structural Closure)
var = variant

presenting fewer rotations through primary- and secondary-theme material throughout the movement overall, offering less focus on secondary-theme material in the development, and by the use of an unaltered P-based thematic module at the crux.

In general, V/i is more conventional in its tonal orientation and thematic design. Though the cadential support in V/i is far from unambiguous—and still reflective of Shostakovich’s experimentalism—the clearer tonal landscape allocates the formal and rotational borders additional confirmation, with more straightforward cadential gestures at formal boundaries.
Both symphonies problematize their rotational layouts by similar means: each of these first movements creates ad hoc dialogues between sonata types 2 and 3 through the cycling of thematic modules in the development and the displacement of the primary theme’s tonic return. Both of these movements present a thematic complication in the development, to be worked out at the crux (in IV/i, it is the aforementioned S-variant module; in V/i, it is the false-recap return of P-based material in the wrong key and the absence of this same material at the actual moment of crux). Each movement also blurs the line between the development and crux, whether by a false recapitulation effect or by combining elements of both primary and secondary modules at the moment of tonal resolution. Both symphonies also eschew tonic confirmation at the normative point of ESC within sonata space and delay their final cadential confirmation of the tonic until the coda, outside of sonata space.

Symphony IV/i demonstrates similar proportions to V/i in its expositional and post-crux segments. But whereas V/i presents a developmental section roughly equal to the exposition and post-crux sections, IV/i is disproportionately devoted to developmental activity. The dialogue between Types 2 and 3 sonata constructions and the overtures toward a Type 3 recapitulation are also more pronounced in IV/i.

III. Overall Tonal Design

The tonal orientation of the opening movement of Shostakovich’s Fourth Symphony is far less clear than that of Mahler’s First or Shostakovich’s Fifth. The global tonic for the movement is considered to be C minor, owing to the primary theme’s opening statement. The

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18 Even if one considers m. 477 the beginning of the development, the movement is still overwhelmingly developmental in its overall construction. This alternate parsing would then create a significant mismatch between the proportions of the exposition and post-crux spaces.
return of C minor at the crux in m. 906 and during the coda in m. 1006 provides some correlation
to the overriding tonic and to the overarching sonata structure. Yet, these returns are brief and
surrounded by an ever-shifting landscape of fragmentation, modal juxtaposition, octatonicism,
whole-tonality, and even suggested polytonality.¹⁹

I will focus on five principal tonal/harmonic topics that unfold throughout the movement:

First, the C minor tonic established at the primary theme—already undermined in the
introduction by elements of D minor and A minor—is infiltrated by its parallel major mode
before completion of the first phrase. This juxtaposition of parallel modes is manifest in various
ways throughout the movement, including melodic and harmonic juxtaposition.

Second, the exposition’s secondary theme zone, mm. 35–158, features a highly unstable
tonal orientation that alternately highlights three modally mixed key areas: F major/minor, C
major/minor, and A major/minor. These key areas continue to reinforce the concept of modal
mixture present in the primary theme and are then reintroduced and worked out, along with the
secondary theme’s thematic and rhetorical problems, in the development rotations.

Third, as in his Fifth Symphony’s first movement, allusions to several of these tonal
conflicts are present from the movement’s opening measures, foreshadowed by appearances and
juxtapositions of pitches presented at the work’s beginning. To be discussed in detail below, the
introductory phrase that opens the work is tonally ambiguous; key areas associated with these

¹⁹ Darcy, “Rotational Form, Teleological Genesis, and Fantasy-Projection in the Slow Movement
of Mahler’s Sixth Symphony,” 60, n. 22. Darcy notes: “The key in which a movement opens
should be regarded as a provisional or proposed tonic, not a definitive one. The central musical
process of any movement grounded in the major-minor tonal system may be understood as a
formal procedure through which a given tonic is made fully present, realized, or called forth
toward the end of its essential process. The specific formal procedure at work will depend on the
generic paradigm with which the movement is in dialogue. Only at the point of essential
structural closure (ESC) does the tonic proposed at the outset of the work come into full presence
and attain concrete reality.”
opening pitches, including D, C, A, F, and G, reappear throughout the movement not as firm 
tonal regions but as competing and destabilizing forces, often undermining and obscuring the 
overall tonal and formal trajectory. (These tonal areas are also liberally intermixed with passages 
featuring octatonic and whole-tone collections.) The presence of these key areas and others at 
formal demarcations also becomes referential to particular sections and rotations. Most notably, 
they appear simultaneously in the secondary theme area, as mentioned above, as a means of 
undermining tonal clarity.

Fourth, tonal ambiguity is coupled with continual evasion of traditional cadential events 
in favor of gestural endings and harmonically multivalent concluding events. In place of tonal 
cadences, pitch-space wedges, completed collections, pentachords and hexachords, and 
cacophonous points of crisis followed by large pauses, reappear throughout the movement at 
points of formal boundary. The lack of tonal and cadential closure increases the importance of 
these closing gestures and thematic returns in articulating the formal structure, further 
highlighting the rotational design.

And fifth, the principle of Hepokoski and Darcy’s “failed sonata” may seem to apply 
here, owing to the failure to produce a tonal Essential Expositional Closure (EEC) at the end of 
the secondary theme zone and to reproduce the tonal EEC as an Essential Structural Closure 
(ESC) at the end of sonata space. Indeed, the P-theme return in the tonic and the ESC are delayed 
until the coda.20 However, in dialogue with the overarching rotational structure and the

20 See Hepokoski, “Back and Forth from Egmont: Beethoven, Mozart, and the Nonresolving Recapitulation.” Hepokoski explores post-sonata attainment of the ESC—including deceptive cadences at the expected moment of ESC followed by a “proper” tonic cadence in the coda—as a type of nonresolving recapitulation, or postponement of a work’s tonal resolution until the coda. This cadential non-attainment within the sonata structure prompts the “failed sonata” label defers closure beyond the rhetorical boundaries of sonata space. See Chapter 5 for further exploration.
uncoupling of simultaneous realizations of rhetorical, tonal, and chordal goals at boundary points, Shostakovich presents a distinctive pentachord, (01247), as a closing sonority or subset at various points throughout the movement, including at the moments of MC, EEC, and ESC. Its presence—not only in the positions of the EEC and ESC, but the appearance of a closely related (0147) tetrachord at the point of the expected ESC within sonata space and the presence of closely related chords at other subrotational and phrase boundaries throughout the movement—reinforces its association with boundary seams and suggests an identity as a closing sonority. This association is further supported by the aforementioned dearth of tonal cadences in this movement and by correspondences between formal and rhetorical boundaries in the exposition, development, and post-crux spaces and their associated pentachords, hexachords, and septachords.

Figure 3.6 displays the large-scale presence of this (01247) pentachord as a subset of the hexachords that appear at the formally and rhetorically indicated boundaries of the movement. Their locations at these expected points of tonal boundary correspond to the locations of more historically conventional EEC and ESC events. In addition to sharing the (012479) hexachord and their I₂ relationship, the EEC and ESC hexachordal boundary markers share four common tones: C, G, D, and C-sharp/D flat. These common tones connect the hexachords in pc space as well as by set class, while still maintaining the tonal ambiguity seen throughout the movement: neither hexachord presents a full C-major or C-minor triad, and both complicate the tonal landscape with the presence of C-sharp/D flat, a pitch that problematizes the opening sonority and final statement of the S-variant theme in the development.

The MC-analogous event features a (023469) hexachord, distinguishing it from the EEC- and ESC-analogous hexachords while maintaining a close voice-leading relationship (P²) in set-
Moreover, the \((01247)\) subsets of the MC and EEC hexachords are related by \(T_4\).

This transpositional distance—a major third—corresponds to the distance between the tonic and submediant in minor mode.

This tonal matter is taken up at length in the movement’s development section. While on the surface this movement severely problematizes the tonality of the secondary theme zone (to be discussed in detail later in this chapter), this \(T_4\) relationship between the MC and EEC can be viewed as analogous to the distance between a \(i:PAC\) MC and \(VI:PAC\). This movement features an MC event strongly in dialogue with a \(i:PAC\) MC, and the \(T_4\) relationship between these \((01247)\) subsets at the MC and EEC can be viewed as related to Ottaway’s notion of

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Shostakovich’s “having it both ways.” The large-scale relationship between these boundary-marking sonorities corresponds to more typical tonal plans, while the surface tonal ambiguity permits the achievement of the submediant as a secondary theme key area to remain a chief thematic and harmonic task in the development section. Lastly, the I₂ relationship between the EEC and ESC can be viewed as connected to the juxtaposition in the movement’s opening of C and D tonal areas (two potential pc axes of an I₂ operation). These keys are contrasted at various locations in the movement, including P and TR spaces and the development, and are also featured in major-mode versions in Mahler I/iv during the development’s breakthrough modules.

In addition to these large-scale formal boundaries, the (01247) pentachord appears within the development during the third S-variant. This return stands out from the development’s broader avoidance of (01247); (01368) and (01369), along with (02358), octatonic subsets, and the complete chromatic collection, serve as development-space boundary-marking sonorities. Finally, at m. 1006, the point in the movement where one would expect the ESC to occur within sonata space, a (0147) tetrachord hints at resolution without providing the hexachordal closure established at analogous formal boundaries. Much as in Symphony V/i, the tonal conclusion and the return of the (012479) hexachord are delayed until the coda.

Through these allusions and formal deformations, Shostakovich establishes a complicated dialogue in this movement between historical sonata-form models, rotational structures, Mahlerian allusions, and thematic and tonal trajectories. Rather than reinforce or reject any of these threads, an extensive and dramatic discourse advances between all of these elements as the movement unfolds.

22 These set classes, as well as others found at various boundary points in the movement, can be generally thought of as DIA+1, or a diatonic collection (often a segment of the 5-cycle) plus one chromatic note.
Chapter Four

Shostakovich’s Symphony No. 4, first movement:
Rotation One

I. Exposition Overview

With the overall structural layout in mind, we shall now examine the first large-scale rotation of the movement in more detail. The exposition comprises the first large rotation of the movement, and begins with a primary theme zone, occupying mm. 1–17. A transition zone then follows, in mm. 18–31, before a grand pause analogous to a medial caesura, in m. 31. A secondary theme zone, spanning mm. 35–158, completes the expositional rotation. Part one of expositional space outlines the generic layout expected of a typical sonata exposition—including a march-like strident primary theme, an energetic transition, and a grand pause before a contrasting theme—yet part two, the movement’s secondary theme zone, features obsessive repetitions of S-theme fragments and underdetermined tonal landscape that set up the dramatic thematic, rotational, and rhetorical issues with which Shostakovich grapples throughout the remainder of the movement.

Figure 4.1 provides an overview of these sections. An introductory module I have labeled P⁰ begins the movement on tonally ambiguous ground, suggesting several possible keys before the primary theme finally asserts C minor in m. 6. I have called this introduction P⁰ to reflect both its rotational connection to the primary theme and to communicate the tonal and rhetorical displacement of the introduction by the C-minor interruption at m. 6. Whereas the primary and transition theme zones are relatively straightforward melodically, the tonal dilemmas from the introduction continue through the remainder of these subsequent zones.
During the primary theme, C minor dissolves into modal mixture, maintaining the tonal and modal uncertainties from the introduction that become an enduring presence in this movement. After a P-based transition progresses from C major/minor to D minor/Dorian, the arrival of the medial caesura in m. 31 emphatically continues the tonal uncertainty. Rather than establishing a dominant preparation for the secondary key area, the medial caesura emphasizes an A/C dyad and (023469) hexachord hammer strokes, leaving the expected tonality of part two unclear.

The subsequent secondary theme zone continues this unsteadiness; erratic P-based caesura fill leads into a highly unstable S-theme. Four subrotations of S-based modules feature fragments of P-based modules, conflicting tonalities, and structural and cadential underdetermination. Finally, a passage reminiscent of closing-module material gains musical energy and drives to close the exposition, eschewing a more conventional tonal Essential Expositional Closure in favor of a (012479) hexachord.
II. Detailed Analysis

P-space

The primary theme zone is perhaps the most thematically straightforward portion of this movement. I read the design of P-space as consisting of a dramatic introductory module followed by the aggressive march-like primary theme. Tonally, the introduction is unusually indeterminate, presenting neither tonic nor dominant but instead foreshadowing various tonal conflicts to come. While suggesting but never delivering a firm tonal trajectory, the introduction is suddenly supplanted by the main theme, which interjects abruptly as a C-minor militaristic march. By the end of the primary theme, however, the presence of C major and D minor produces modal juxtapositions that once again undermine the sense of a prevailing tonic and mode even after the primary theme’s insistent C-minor opening emphasis.

The movement begins with a five-measure introductory module, a rhetorical call to attention that sets a tone of suspense and instability for the movement. The semitone tremolos coupled with the high-to-low, call-and-response dialogue between the winds and strings imbue this movement with a sense of apprehension right from its start. This five-measure phrase also introduces three topics that concern the movement as a whole.

First, it displays the tonal ambiguity that ultimately becomes a hallmark of the movement. Next, it depicts static-vs.-active rhetorical contrasts, displayed in its sustained tremolos and subphrase design; this contrast becomes a major component of this movement’s rhetorical narrative. And lastly, the aggressive arrival of the main thematic module in m. 6 sets up a deformational process linked to the concept of what I shall refer to as external reformation, that is, a process wherein the movement’s reluctance to produce generic expectations is framed not in terms of a singular deformation to be worked out or as a constant displacement of formal
concerns by thematic transformation, but instead as a dilemma of simultaneously unfolding formal, tonal, and thematic dialogues that persists from the movement’s very opening. This potential for reformation becomes a model employed throughout the movement and is characterized by sudden interjections and alterations aiming to correct or reform under-defined thematic and tonal elements. The eventual secondary-theme variations epitomize this paradigm, and this kind of abrupt rectification is featured throughout the movement as an insistent, blunt-force solution offered for (or imposed on) various tonal, melodic, and formal indeterminacies.

The origins of this work’s tonal conflicts can be seen right from the introductory phrase. The movement begins not with a clear establishment of tonic, but with three loud bursts of C/D-flat dyads in the horns and strings, shown in Example 4.1. The upper winds accompany these dyads with a stepwise descent from A to F. This third descent seems to imply D minor, yet before any sense can be made of a D-minor melodic arc accompanied by a C/D-flat dyad, the winds burst out of the suspenseful, immobile texture and finish the phrase with a strident descending melody.

As the wind melody unfolds, the tonal alignment appears transformed from an implied D minor to a potential D-Dorian or A-minor orientation. Finally, just as A minor seems to take hold in m. 5, striking C-minor march chords cut the introduction’s melodic journey short, seemingly mid-figure. The introduction is unable to resolve either the melodic trajectory or the tonal aim of the opening; it instead leaves only various tonal simultaneities and key-area allusions prior to the C minor disruption. Additionally, the dyad combinations introduced here, C/A, C/G, C/F, and C/D, return repeatedly over the course of the movement as tonally destabilizing forces, presented
EXAMPLE 4.1. Shostakovich, Symphony No. 4, i, mm. 1–6, reduction, tonal/dyad events

both as dyads and as competing key areas throughout the primary- and secondary-theme zones.¹

Thematically, the introduction can be parsed roughly in half. The opening melody and alternating tremolos seem almost out of time, because of their lengthy note values and the somewhat metrically indeterminate ratio (full measure to three-fourths measure) between the melody and tremolos. After the slow melodic descent from A to F, the stasis proves too much to sustain and the melody finally bursts out into energetic activity. This subphrase features not only increased movement through pitch space and quicker note values, but also a clear metrical presentation buttressed by emphasis on the beat and repetition of half-measure rhythmic motives.

¹ The tonally and melodically open-ended introduction of Shostakovich IV/i contrasts sharply with those of Mahler I/i and iv and Shostakovich V/i, all of which are chiefly preoccupied with dominant preparation and/or thematic introduction and development in the introductory modules. In Mahler I/i and I/iv, lengthy introductions establish the dominant that precedes the primary theme zone; Shostakovich’s Symphony V/i features a similar harmonic preparation of the dominant, though it proceeds along a more traditional tonal path, beginning with the tonic and descending by tetrachord to the dominant as a tonal preparation for the primary theme.
This juxtaposition of static and active musical motion recurs throughout the work. Rather than featuring affective contrasts more typical of Baroque-era or Classic-era symphonic models (slow, stately introductions coupled with active, progressive main themes), the static portions of this movement indicate a seeming reluctance to engage with the normative tonal and melodic expectations of generic sonata form construction. This reluctance continues past the opening subphrase: even as the wind melody of mm. 4–5 wrests the movement from its stationary beginnings, the melody still fails to offer a clear tonic with which to continue the movement. From a hermeneutic standpoint, the introduction successfully alerts the listener to the urgency of the movement, yet fails to capitalize on this attention by declining to participate in the movement’s generic formal and tonal expectations: producing a decisive tonal and melodic trajectory for the work.

In addition to the introductory gesture’s static-vs.-active juxtaposition and the displacement of the tremolos by the melodic outburst of mm. 4–5, the introduction in its entirety can be viewed as being displaced at m. 6 by the more tonally and melodically direct primary theme. As P-space continues to unfold, the introduction’s role in the rotational structure of the work and the hermeneutic affect of the displacing C-minor chords in m. 6 are of great importance in considering the introduction’s relationship to the primary theme and in establishing a formal designation to reflect this relationship.

Hepokoski and Darcy reference the interdependence or hypothetical dispensability of the opening thematic module as important criteria in designating the relationship between the introductory and primary-thematic segments. They state: “In making such a distinction, one might try to imagine whether it would have been possible for the composer to have suppressed
that opening module completely."² In this case, it is not only possible to imagine the movement beginning with the C-minor accompanimental chords at m. 6 instead of the introductory phrase in mm. 1–5, but these C-minor chords’ forceful arrival before a satisfactory melodic or cadential resting point can also be interpreted as an marked act of displacement of, or even substitution for, the introductory phrase. It is almost as if the displacement indicates the piece should have begun with the C-minor chords, given the myriad indeterminacies of the existent opening introduction.

This sense of displacement or substitution is maintained and developed throughout the movement, with these opening iterations serving as foreshadowing of the fragmentation and variations to come. This process is one that grew in importance by the twentieth century, to the point that deformations themselves came to feature predictable and expressive solutions, newer default gestures developed in response to the available catalog of deformations.³

Several types of sonata deformations, including postponing tonal closure until the coda, off-key returns of the secondary theme, and even the “reverse recapitulation,” have been in practice since the beginnings of the multi-movement symphonic tradition. Hepokoski and Darcy have each explored further deformational developments, in works of Sibelius, Strauss, Bruckner, and others. Such examples as the redemption paradigm, the rebirth paradigm, teleological genesis, rotational form, and the Klang as telos model, emerge in these explorations and largely coalesce around a set of deformations that engage the norms of sonata form at one level while specifically treating one aspect—theme, tonality, cadences, and so forth—to expressive

² See Hepokoski and Darcy, Elements of Sonata Theory, 86, for further discussion of P⁰ and P¹.⁰ introductory modules.
³ See Darcy, “Bruckner’s Sonata Deformations,” 257. While the process of sonata deformation reaches back to the creative alterations of Beethoven, more extensive work has explored deformational practices as they developed in nineteenth- and early twentieth-century symphonic works, leading to a number of standard sonata-form deformations practiced by the early twentieth century.
alteration in dialogue with the overall formal structure. Whether or not these deformations are viewed as positive or negative often emerges through the struggle to supply tonal or thematic completion for the structure s a whole. In describing Bruckner’s practices relating to the redemption paradigm, Darcy explains, for instance, that Bruckner:

> generally isolates the secondary theme zone (Gesangsperiode) from the main line of the default symphonic discourse; instead of functioning as an agent of redemption, it often represents a visionary world that is incapable of being realized. Bruckner always postpones the redemptive moment until the coda of the Finale, after the sonata-form portion of that movement has once again ‘failed’ to deliver it. According to sonata deformational theory, this coda must be understood as drawing its strength from outside the sonata form and, in a sense, must transcend that form in order to succeed.4

This deformational practice of postponing tonal or thematic closure until the coda is in dialogue with similar choices Shostakovich makes throughout his symphonic output, wherein he often saves the moment of cadential or thematic resolution until the coda space of a particular movement. As Darcy notes, this practice can be considered as demanding redemption from outside the form in order to provide resolution to the dilemmas left by the “failed” sonata.

Pauline Fairclough situates her analysis of this work’s structure within Adorno’s concepts of rupture and disintegration in his analyses of Mahler’s symphonies.5 In this light, thematic development and transformation, quasi-programmatic ideas of thematic narrative, and disintegration of normative symphonic strategy create formal drama. Fairclough complements Adorno’s exploration with Sollertinsky’s observations on Mahler’s thematic practices, and

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4 Darcy, “Bruckner’s Sonata Deformations,” 259.

5 See Fairclough, A Soviet Credo, 47. She considers Adorno’s characterization of Mahler’s approach as “comprising form, instrumentation, technique and the themes themselves” and that he “refuted both formal and narrative self-containment, capitulating neither to structural demands nor to a programmatic, narrative method which usurps form altogether. The dynamic between the two is what interests him, which is why he pursues the idea of establishing 'material' categories to describe musical phenomena that seem to reach beyond their symphonic confines to another state of being.”
quotes Sollertinsky’s characterization of Mahler’s ambivalent melodies as expressing “indirect lyric,” or “the lyric, darkened by the grotesque, the lyric made eccentric, a profoundly humane feeling disguised by the self-protective mask of buffoonery.” Sollertinsky’s and Adorno’s considerations of formal and thematic interaction incorporate orchestration, tone, and thematic variation over time in characterizing Mahler’s sonata-deformational activities.

In Fairclough’s view, however, there are problems in relating Adorno’s concept of “variant form” in Mahler’s symphonic works to Shostakovich’s symphonies, specifically in Adorno’s exploration of this construction as necessitating loosely structured thematic units:

Adorno’s remarks on developing variation do not square with Shostakovich’s penchant for strong themes. The opening theme of his Fourth Symphony is certainly far more foursquare and “unambiguously there” than anything Adorno had in mind. . . . In any case, Adorno is not claiming that all of Mahler’s themes fall into the category he is describing; his theory of variant form is only one aspect of his analysis of Mahler’s technique.

Fairclough goes on to note,

Thematic transformation is a far more potent element of Shostakovich’s symphonic dramaturgy than it is of Mahler’s, and by its very nature such a dramatized treatment of themes presupposes precisely the kind of strong thematic primary identity that Adorno claims much of Mahler’s themes do not possess. . . . In a wider dramaturgical context, Adorno’s theory of variant form is a theory of resistance: it opposes easy fulfillment and thematic complacency.

The present analysis seeks to engage Fairclough’s ideas regarding both thematic transformation as expressing “resistance” and her characterization of Adorno’s middle ground between structuralism and purely narrative concerns, as well as Darcy’s concepts of sonata deformation as expressive alterations of normative formal expectations. I have labeled this

7 Ibid., 54.
8 Ibid., 54–55.
process—addressing the movement’s reluctance to produce expected tonal and formal conventions by means of the abrupt correction of these perceived failures—a process of external reformation. The tonal and thematic underdetermination in this work is too soon and immediate, despite the seemingly well-formed introductory theme. The movement itself as a whole, instead of constantly resisting and transforming itself, seems to instead submit to the sonata form in some sense in order to succeed. The movement is simultaneously tonally, melodically, and rhetorically reticent to participate in the generic sonata structure. Consequently, change is seemingly enforced from outside; drama is created as an abrupt rectification process inserts itself into the formal narrative, addressing the resistance to conform and to produce expected formal results.

Because the deformational underdetermination in this movement manifests as persistent local disturbances to the formal layout, it constantly threatens the whole sonata enterprise. Rather than a singular tonal or rhetorical deformation against the relief of a largely stable (or compliant) formal whole, this movement is incessantly threatening to go off the formal rails. It is, in essence, a disagreement between the work’s inner and outer forces, placing the piece’s moment-to-moment expressive material in conflict with the overarching sonata layout.

And yet, the possibility of external reformation is available precisely because of the work’s continued dialogue with sonata-form practices: the work simultaneously disrupts and engages sonata expectations. Seen at the local level during the movement’s exposition, the connection between $P^0$ and $P^1$ results from the generic sonata-form introduction/P-space dialogue, despite the suggestion of dispensability indicated by the $P^0$ label. The tonally open introduction is generically unproblematic; such inconclusiveness is a typical feature of dominant-focused introductory modules. The fact that the introduction is tonally underdetermined to the
point of neglecting establishment of a tonic necessitates the introduction’s reformation, accomplished through the interjection of C-minor chords at m. 6.

These continued rotational cycles, featuring $P^0$ and $P^1$ paired together in rotational order in the exposition and at the crux, solidify $P^0$’s relationship with the primary theme proper, instead of functioning in some sense outside of sonata-space proper as seen in Mahler. In sum, the unwillingness to participate in the form highlights further the form’s existence as an influencing factor in the movement.

After the forceful interruption of unambiguous C-minor triads at m. 6, the primary theme proper, $P^1$, begins on the upbeat to m. 7 with a militaristic march. This march is structured as a hybrid phrase and is displayed in Example 4.2; the antecedent spans mm. 7–10 and the continuation spans mm. 11–17. The continuation is twice as long as the antecedent and expanded by means of a wedge-like motion in mm. 13–17 featuring fragmentation of antecedent motivic material.

From the primary theme’s very beginning, modal mixture is an evident aspect of the theme’s construction. Though C remains the definitive tonic throughout this phrase, various modal inflections suggest a mixture of C minor and C major. The modal landscape of this phrase remains inconsistent due to the additional presence of A-flat in m. 8, quickly following an analogous repeated statement of A natural. These two pitches—A flat and A—and their associated key areas continue to appear together throughout the exposition and development in

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9 Both the first and last movements of Mahler’s First Symphony begin with introductory passages. While the introduction of I/iv is focused on dominant harmony and well integrated with the following P module, the introduction to the first movement is its own creation ex nihilo formal section. Material from both of these introductions return later in the respective movements, though Mahler I/i features introduction material much more heavily than does Mahler I/iv. Rotational and subrotational cycles can also be observed within the introduction section of Mahler I/i.
EXAMPLE 4.2. Shostakovich, Symphony No. 4, i, mm. 6–18, reduction, P-space
both harmonic and melodic juxtaposition. Harmonically, the antecedent’s progression appears more conventional; a shift from a C/E-flat dyad to a B/G dyad in m. 9 suggests a dominant-positioned ending for the antecedent phrase. The continuation phrase is more chromatic, both melodically and harmonically, and initially reasserts C minor in its thematic design. Over A-flat minor and A-minor harmonies, the continuation seems to purge elements of C major in favor of C minor, until thwarting even the promise of C minor as tonic in its second half. First, a wedge motion in mm. 13–16—a figure used consistently in this movement at phrase closings—presents both modes simultaneously, featuring C major as its descending portion paired with C natural minor in its ascending line. Next, the phrase is brought to a close in mm. 17–18. Continuing to avoid more traditional cadential phrase endings, the primary theme ends with two simultaneous ascending scales: C major in the winds and D-Dorian, or perhaps C major spanning D–D, in the strings. C minor is once again displaced here before the phrase’s conclusion, unable to complete a tonally clear cadential act. Instead, the C-major and D-Dorian scales return to the tonal uncertainty present throughout both P⁰ and P¹. While C major has been a consistent presence throughout P¹, D Dorian reintroduces the modal ambiguity at its initial appearance in P⁰. Additionally, D natural minor, a close relative of D Dorian, will be featured prominently in the transition section; this phrase-concluding gesture may in fact serve as a small preview of the tonal dilemmas of the section to come.

TR-space

The transition section, which spans mm. 18–31, can be parsed roughly in half and features elements such as energy gain, fragmentation, and tonal uncertainty that are common to historical TR-zone structures. This transition begins with a P¹-inflected variation of P⁰, oriented
on an F/C dyad and juxtaposing F major and C major. Increased musical energy and fragmented motivic passages highlighting whole-tone and octatonic collections lead to an emphatic return of D minor and $P^1$-based melodic fragments at m. 25. As the transition draws to a close, another wedge motion leads to the medial caesura in m. 31, and the conclusion of the exposition’s first part. While this medial caesura is rhetorically closely in dialogue with Classic-era models, its arrival features no tonal or cadential preparation for the theme to follow, but instead centers around an A/C dyad and includes the first appearance of the boundary-marking ($01247$) pentachord, as part of a (023469) hexachord.

The transition begins with an altered $P^0$ thematic module, which has been modified in multiple ways that suggest the rehabilitation of $P^0$ as $P^1$’s assertive transition-zone substitute. First, the opening descending third is stylistically “corrected,” rectified by a transformation from static suspense into the more assertive parlance of the primary theme. This transformation is accomplished by means of simultaneously coupling elements of $P^0$ with $P^1$: the note values of the opening three-note descent are reduced by half and accompanied by the march-like rhythm from $P^1$. Next, the active wind melody originally emergent from the stasis of m. 4 is presented here in varied form and altered at its conclusion. In contrast to the diminution of the opening chords, the descending active figuration from m. 4, returning in m. 19, appears in its original two-measure proportion; this suggests this melody’s active rhythm is not in need of the corrective force applied to the movement’s opening gesture.

This active $P^0$ thematic subphrase is appended at m. 21 with an ascending scale matching the contour of $P^1$’s concluding gesture. Although the accompanimental figures of $P^1$ are incessantly present throughout the transition, and $P^0$’s alterations include elements of $P^1$, complete or even near-complete statements of the $P^1$ theme itself do not appear. Instead, the
rehabilitation of the introductory $P^0$ module into a more strident force takes precedence; this process is continued throughout the transition zone, accomplished through both motivic fragmentation and by $P^0$'s repositioning and treatment within a formal section historically preoccupied with musical energy gain.

From a tonal standpoint, the opening of the transition returns to the dilemmas first presented in the introduction, while also featuring additional pitch-collection explorations that can be viewed as strongly in dialogue with exploratory tonal techniques commonly seen in historical transition-space models. The transition opens with the aforementioned wind descent, now traversing C to A over an F/G-flat tremolo. This F/C dyad pairing was seen in the introduction and seems to begin the transition with the implication of a subdominant presence. Before F major can become firmly established as a key area, however, the B-flat is quickly replaced with B natural; C major, though still sounded over an F/G-flat dyad, quickly supplants F major as tonic. The aforementioned one-measure addition to the $P^0$ phrase, in m. 21, confirms C major melodically with an ascending C major scale spanning G-G, while the militaristic rhythm stubbornly maintains F and G flat.

This C-major confirmation is short-lived, however; the strings answer this ascending G-G scale with an ascending scale of their own, and their answer is whole-tone, not diatonic. Measure 22 signals a departure from diatonicism as the upper strings latch on to a fragment from $P^1$’s continuation and repeat minor third figures outlining first an OCT 0,1 collection, followed by OCT 1,2, which are both presented over a G bass. The bass continues its ascent to A flat in m. 23 while the parallel thirds shift to the third octatonic collection, OCT 0,2. These repetitions of octatonic figuration accompany a large crescendo and energy gain in mm. 23–24, as the strings repeat the three-note OCT 0,2 motive and other instruments gradually join in the $P^1$ march-like
rhythm, now repeating D incessantly as a preparation for the TR-zone’s second part. This blunt-force repetition of D not only facilitates energy gain, but also is reminiscent of the C/E-flat dyad at m.6, another point of blunt-force imposition of an impending tonic. A final ascent in the bass at the last eighth note of m. 24, from A flat to A, solidifies the move to D by presenting the only dominant-tonic motion heard in the piece so far.

The transitional energy bursts forth in TR-space’s second half, beginning in m. 25. A bombastic D-minor ascending scale in the low instruments gains momentum as the higher instruments continue an insistent, repeated D. This tonic D minor, competing with C from the movement’s opening bars, seems to have triumphed, but is supplanted quickly by more tonally unstable exploration.\(^{10}\) The restless energy gain resumes with a *triple-forte* dynamic in m. 27 as D minor is displaced by a return of the three-note OCT 0,2 motive. This motivic return incorporates P\(^1\)’s actual triplet rhythm while inverting its contour. The pitches from the triplet’s very first appearance in P\(^1\), B-C-D (presented in Example 4.2) are used here as well, now inverted to D-C-B, making this figure perhaps the most complete statement of P\(^1\)-based material seen in the transition thus far.

The transition reaches its climax in m. 29 with a closing wedge motion analogous to the wedge motion at the closing of P-space. Here, the lowest instruments ascend in parallel minor thirds from F/A-flat while the highest voices descend in parallel minor thirds from B-flat/G. The ascending lines begin with a whole-tone collection, which is quickly transformed into an A-major scale. The descending motion, meanwhile, begins as simultaneous C major/minor scales in m. 29, but transforms in m. 30 into a descending OCT 0,2 collection. These scales present a

\(^{10}\) D and C as key areas were also paired during the TR zone of Symphony No. 5’s first movement.
reminder of tonal elements seen in the exposition as a whole by providing octatonic and whole-tone collections as well as C major, C minor, and A-based collections. The remaining and as yet unrepresented tonal dilemma from the introduction, A minor, returns here with the addition of A major. F, C, and A are destined to become important components of the tonal ambiguities of the impending S-space.

These scales reach a dramatic conclusion at the downbeat of m. 31, with the arrival of the medial caesura. This medial caesura, seen in Example 4.3, is articulated in a way that is overwhelmingly consistent with its Classic-Era predecessors: a grand pause is featured in all instruments except the horns, which continue the final C of the OCT 0,2 as caesura fill. This is then followed by hammer strokes characteristic of traditional MC events.

At the actual moment of the MC arrival, an A/C dyad is presented in lieu of a more conclusively oriented dominant harmony, or even a complete triad. Since each of these pitches was recently presented as part of full statements of complete diatonic collections—A major/minor and C major/minor, respectively—the tonal uncertainty of TR space’s ending is maintained with the simultaneous presence of two potential tonics a third apart.\footnote{This third relation and its presence at a formal boundary is not unique to this work. See Stephen C. Brown’s “Axis Tonality and Submediant in the Music of Shostakovich,” \textit{Music Theory Online} 152 (June 2009). Brown explores Shostakovich’s use of third relations and axis relations, and details the presence of just such an axis of thirds at the MC/S-space boundary of Shostakovich’s Cello Concerto.}

Nevertheless, the rhetorical choices featured here—the grand pause after tonally exploratory material featuring fragmented P-based motives, the hammer strokes, and the subsequent loss of energy in preparation for a contrasting theme—typify not only historical models, but also match closely Shostakovich’s use of this formal divider in his Fifth Symphony and other works. Shostakovich also approaches the medial caesura in V/i with ascending
EXAMPLE 4.3. Shostakovich, Symphony No. 4, i, mm. 29–35, reduction, MC and caesura fill

stepwise motion in the bass, with sequential motions in other instruments, and with repeated march-like rhythmic figures emphasizing a single pitch. These pre-MC gestures are also followed by hammer strokes in V/i, as they are in IV/i, though the hammer strokes in V/i are not as protracted or dramatic as those in IV/i.

While the rhetorical articulations are consistent with earlier models, the tonal treatment here reflects the state of flux present throughout this TR section. Instead of the tonal preparation for part two expected in more conventional MC structures, the A/C dyad of m. 31 is followed in m. 32 by hammer strokes of a 6-Z45 hexachord, (023469), whose pitches are symmetrical
around A. In this case, (01247) is present as a subset; indeed, the hammer stroke chords form
(01247) excluding the pitch C, acting here as caesura fill.\textsuperscript{12} These hammer strokes are then
followed by more caesura fill: first, a small OCT 0,1 motive in parallel thirds, then a P\textsuperscript{0}\-like
figure in the low strings outlining C minor in mm. 34–35. C minor is, of course, the key of the
primary theme, and this is the first of many factors complicating the nature of the secondary
theme to follow. C was one of two pitches present at the MC itself, coupled with A. While an A-
major scale immediately precedes the A/C MC arrival at m. 31, it is C that begins and ends the
following caesura fill.

Although highly unusual, this reinforcement of the movement’s global tonic at the MC is
not unheard of, and is in fact strongly in dialogue with a fourth-level tonal default for the MC, a
i:PAC. The rarest of the four defaults, Hepokoski and Darcy note that the treatment of a i:PAC
MC in larger-scale works often results from a TR that “proves unable (or unwilling) to produce
any of the three more standard MC defaults: V:HC, I:HC, or V:PAC.”\textsuperscript{13} This i:PAC option
customarily results from failed attempts at lower-level defaults, or from an “ultra-stable tonic”
whose tonal principles TR is unable to escape.\textsuperscript{14} When such a fourth-level default is present,
modulation to a contrasting key is typically accomplished by an often-lengthy period of caesura
fill that follows the MC. Hepokoski and Darcy also note that the fourth-level default MC’s tonic
emphasis “demands analytical and hermeneutic interpretation.”\textsuperscript{15}

\textsuperscript{12} This hexachord can also represent a near-OCT 0,2 collection, with five pitches belonging to
OCT 0,2 and B flat, expunged at the beginning of TR-space, present as an outlier.
\textsuperscript{13} Hepokoski and Darcy, \textit{Elements of Sonata Theory}, 29
\textsuperscript{14} See Hepokoski and Darcy, \textit{Elements of Sonata Theory}, chapter 3, for more information on
characteristics of medial caesuras.
\textsuperscript{15} Hepokoski and Darcy, \textit{Elements of Sonata Theory}, 29.
That such a tonic-focused MC is a relatively rare occurrence may call into question the designation; however, there are several factors that support considering this moment a fourth-level-default MC. First, the presence of the tonic at the MC fits many of the descriptive criteria noted above, and can be read as a continued effort by C minor to accomplish establishment as a tonic, especially at a formal boundary. The movement’s abrupt correction of C minor at m. 6 and the obsessive character of P-space’s militaristic melody compulsively fill the space left open by the MC, seemingly commencing another round of corrections to P-space. Complications arise in the fourth-level default MC corresponding to the movement’s continued reluctance to progress to the next stage of sonata space. Hermeneutically, one can view the C-minor tonality and P-based material as refusing to relent even after the arrival of the MC. However, from a tonal perspective TR-space provided no real options for a lower-level default MC, generally failing to prepare for a contrasting key by offering few options at all for establishing an alternate key area amongst the simultaneous appearances of diatonic, whole-tone, and octatonic collections.

Next, the subsequent contrasting melodic module—combined with the preceding strident P-theme, musical and rhetorical material congruent with TR space, and standard MC-like gesture—forms a larger structure strongly in dialogue with typical sonata exposition presentations. In dialogue with its historical sonata-form role, the distinctive MC rhetoric—musical energy gain, fill-like repeated pitches, and hammer strokes—suggests a strong mid-rotation formal boundary marker between the first and second themes of a referential rotation.

And third, while tonic-oriented MC events are rare, the Fourth Symphony is not singular amongst Shostakovich’s output in featuring this construction. Tonic-based MCs and caesura fill are an important element of Symphony V/i’s medial caesura as well. Example 4.4 displays the MC and subsequent caesura fill of Symphony No. 5.
In V/i, many of the rhetorical and tonal elements mentioned in regards to IV/i, including hammer strokes and material derived from earlier cadential moments from P-space, are present. The inclusion of both B-flat and A at the moment of V/i’s MC creates a dyad-instigated tonal ambiguity similar to that seen in IV/i’s MC. The uncertainty this dyad produces at the MC seems to connote a lack of full commitment to either a second-level-default MC—a half cadence in
D—or a quasi-first-level default, the dominant of E-flat minor as the key of the upcoming S-space. Moreover, V/i’s caesura fill seems preoccupied with undermining the MC by bringing back P-based material from the movement’s introduction in the tonic key. Eventually, expanded caesura fill is needed to clear the P-based interruption of D minor and reestablish E flat as a viable S-space tonality.\textsuperscript{16}

The fourth-level default MC is also featured at the medial caesura in Mahler I/iv, shown in Example 4.5. In the case of Mahler, a codetta-like beginning of TR space gives way to P-based material in the tonic and a steady musical energy gain. It is not immediately apparent that the abrupt arrival of the i:PAC in m. 144 is in fact the medial caesura. During the following lengthy caesura fill, which features fragmented P-based motives and a substantial loss of energy, the MC becomes more discernable in retrospect. After such an emphatic confirmation of tonic, it is incumbent upon the extended caesura fill—mostly in tonic and P-based—to accomplish the modulation necessary to begin the secondary theme in D-flat major.

After the return of a B/D-flat dyad first seen in this movement’s introduction (seen here as part of the diminished chord on the downbeat of m.151), an appearance of the triplet horn motive Shostakovich quotes in IV/i occurs in m. 161. Shortly thereafter, D-flat’s dominant is finally introduced and the energy loss takes hold by means of a sustained chromatic ascent into S-space.

Each of these three medial caesuras is preoccupied with strident P-based material, lack of preparation for an alternate key area, the reinstatement of dyads from their respective introductions, and the use of lengthy caesura fill passages to rectify the rhetorical and tonal

\textsuperscript{16} See Chapter 2 of this dissertation for a detailed description of the Fifth Symphony’s medial caesura and the surrounding material.
ambiguities left unaddressed at the MC. These fill passages must also prepare the musical relocation to S-space, and its expected generically normative contrasting tonality and theme. The Fifth Symphony completes these tasks in a relatively brief four measures; Mahler I/iv takes considerably longer but features a fairly straightforward tonal transition between the fourth-level default MC and the secondary theme.

**EXAMPLE 4.5.** Mahler, Symphony No. 1, iv, mm. 143–175, reduction, MC and caesura fill
Symphony IV/i’s movement from the exposition’s first part to its second is neither brief nor straightforward, and the ambiguities evident at the medial caesura and in the supervening caesura fill consequently follow into S-space as well.
Let us now proceed to the exposition’s second part. If the first part could be considered as struggling heavily with establishing basic tonal and thematic foundations corresponding to generic formal expectations, the secondary theme zone faces even greater challenges. Figure 4.2 shows the overall structure of S-space, the exposition’s second part. After lengthy and unusual caesura fill wrestles with the aftermath of the tonally ambiguous medial caesura, the subsequent secondary theme zone commences with an introductory passage that faces encroaching motives reminiscent of P-space and lacks a strong sense of tonal underpinning. The subsequent secondary theme is chaotic and fragmented, largely made up of brief overlapping statements of melodic material. These brief prototypical versions of the S-theme, labeled collectively as $S^{\text{gen}}$, provide a preview of later iterations and variations to come.

Tonally, the $S^{\text{gen}}$ fragments feature third-related key areas including F major/minor, C major/minor, A major/minor, and E-flat major/minor. Many of these key areas were first seen in the introduction section of P-space and there, too, they were competing for primacy by means of largely underdeveloped appearances. After four rotations through $S^{\text{gen}}$ modules, a rhetorical and tonal call to attention attempts to reform this space and wrest direction from the muddle. This rhetorical intervention sets in motion a crescendo toward the close of the exposition, a (012479) hexachord similar to the (023469) hexachord seen at the medial caesura.

**FIGURE 4.2.** Shostakovich, Symphony No. 4, i, secondary theme zone rotational layout

<table>
<thead>
<tr>
<th>Part 2</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>$S$</td>
<td>$E_{EC}(?)$</td>
</tr>
<tr>
<td>35 47 60 75 96 111 128 157/58</td>
<td></td>
</tr>
<tr>
<td>$S^0$</td>
<td>$S$ ($S^{\text{gen}}$) $S^{\text{gen}}$ 2nd rot. $S^{\text{gen}}$ 3rd rot. $S^{\text{gen}}$ 4th rot. Call to attention 1 Call to attention 2 EEC/$P^0$ variant</td>
</tr>
</tbody>
</table>
Billed as “the most privileged zone of the expositional rotation” by Hepokoski and Darcy, typical sonata form S-zones occupy at least half of the exposition, with most comprising a larger proportion of expositional space.\textsuperscript{17} Even still, this exposition’s second part appears at first glance to take up 75-80\% of the exposition. However, when one considers the division of the second part into pre- and post-S-theme spaces, including the S\textsuperscript{0} module and “call to attention” statements that are in dialogue with more typical closing zones, the S-theme itself enters into a more common 60/40 proportional relationship with the exposition’s first part. Moreover, the rotational internal repetition scheme of the S-theme proper can be considered in dialogue with Bruckner’s S-zone themes.\textsuperscript{18}

Generally, the S\textsuperscript{0} module’s function is as a bridge between an anticipatory harmony (usually the dominant) from the medial caesura and a resolution harmony establishing the secondary theme’s new tonic. This S\textsuperscript{0} module, however, grapples with those expectations in its explorations and struggles to confirm a key for the S-theme. Additionally, when S\textsuperscript{1} does begin in m. 47, it maintains the shifting tonalities and thematic ambiguities seen in the S\textsuperscript{0} module. Collectively, the introductory module and its subsequent theme present myriad complications when viewed in light of generic sonata-space practice. Given this section’s unusual construction, various analytical approaches and labels have sought to make sense of its unfamiliar aspects.

\textsuperscript{17} See Hepokoski and Darcy, \textit{Elements of Sonata Theory}, 129. Some nineteenth-century examples of expositions with roughly 60/40 proportions include Schumann’s Symphony IV/iv (a Type 2 sonata form featuring a 22-measure part 1 and 39-measure part 2) and Symphony VIII/i (a Type 3 sonata with a 41-measure part 1 and 72-measure part 2), among many others. Later examples with more extreme proportions include Bruckner’s Symphony V/i (a Type 2 sonata with a 50-measure part 1 and 136-measure part 2) and Symphony VII/iv (a Type 2 sonata featuring a 34-measure part 1 and 128-measure part 2).

\textsuperscript{18} Darcy notes all of with the exception of three movements, almost all of Bruckner’s secondary theme zones composed after Symphony No. 2 are rotational and contain anywhere from two to six rotations. See Darcy, \textit{Bruckner Studies}, 271.
most common conclusions designate this section as either a second P-space module or as the first of two secondary-theme-like modules (the second beginning in m. 263).

The variety of analytical interpretations is perhaps a result of this section’s apparent shunning of generic S-space conventions and its overwhelming tonal and thematic instability. The generic stability of S-space is a concept largely taken for granted; Hepokoski and Darcy note that in typical sonata constructions, [emphasis theirs] “one thing is *de rigeur*: S must be harmonically and tonally stable. If not—if S is tonally unstable, or undergirded with a dominant pedal or some other tension-producing device—then one is dealing with the deformation of a generic norm.”19 It is perhaps this expectation of stability that most complicates the task of determining this section’s formal identity and generates the thematic and rotational dramas to come.

Even though this S-space as a whole, and the $S^{\text{gen}}$ thematic modules specifically, are unusual, this second part of the exposition can indeed be viewed as a highly expressive reaction to the tonal and thematic deformations of P-space. Reading this S-space as a highly evocative deformational response to sonata-form difficulties earlier in the movement is aided by situating it within the spectrum of generic S-theme deformations. I will do so by introducing four approaches to this movement’s S-space deformations. Each of these approaches is described briefly below; then, more detailed explorations of $S^0$ and $S^{\text{gen}}$ illustrate the application or expansion of each approach as seen in this movement.

First, the thematic fragments found here, as well as the melodic material beginning at m. 263 (what I read as the S-variant in the middle of the development) and at m. 915 (what I read as the tonal resolution), are part of the process of gradually emerging thematic development. That

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19 Hepokoski and Darcy, *Elements of Sonata Theory*, 129.
is, these themes are all variations, more and less developed, of the same melodic material; they are not separate thematic ideas.

Second, this section continues to reflect Mahlerian practice in its use of this gradually emerging thematic process. These thematic statements correspond to similar thematic processes in Mahler I/i and I/iv. The themes developed in Mahler’s First Symphony are distributed throughout the movement in such a way that the first appearance is during the exposition of the movement; subsequent appearances emerge during the development section; and the final version emerges at the moment of tonal resolution or recapitulation. Moreover, both Mahler I/i and I/iv deal with the continued development of thematic material through rotational reappearances and continued variation during development space. This phenomenon is especially notable in the development of Mahler I/iv, which will be discussed in more detail in the next chapter.

Third, this S-theme design can be viewed in light of, and as extending the practice of, other deformational S-theme customs, specifically Bruckner’s deformational practice of the “alienated S-theme.” This S-space features rhetorical, thematic, and rotational choices similar to those found in Bruckner’s alienated S-theme models, including cyclical rotations of repeated material and key areas other than standard minor-mode defaults. Shostakovich further extends this practice, expanding the tonal alienation of key and modal choice by declining a firm key area for S. Instead, this movement features constant changes of key and mode; from both local and global sonata-form perspectives, tonal alienation and rotational complication continue as expressive choices throughout the remainder of the movement.

20 See also Darcy, “Rotational Form, Teleological Genesis, and Fantasy-Projection in the Slow Movement of Mahler’s Sixth Symphony.”
Fourth, this secondary theme zone participates strongly in the external reformation paradigm. Reflecting the chaos and forced compliance of P-space, this thematic zone begins with an ambiguous introductory module and follows with a tonally and thematically underdetermined main theme space, before an interventional call-to-attention attempts to bring about more organized, conventional rhetoric. Once again, an external (to S-space) force is needed to impose order on the thematic fragments and guarantee continued progress through sonata space.

$S^0$ Module

The secondary theme zone opens with an introductory passage featuring restless, transitory material that is seemingly too organized to belong to the previous caesura fill. And yet, the music also seems to move on from caesura fill to S-space proper, partially because this passage is heard following an implied dominant harmony of C minor in m. 35. This harmony provides some sense of the standard dominant harmonic layout featured at the conclusion of most caesura-fill passages.

At the same time, this new thematic zone also seems to be lacking the qualities of a full-fledged secondary theme, as fragments of P-based rhythms and indeterminate tonal allusions stave off a feeling of arrival at S proper. To reflect this ambiguity, I have labeled the unstable material beginning in m. 36 as an $S^0$ module. As defined by Hepokoski and Darcy, an $S^0$ module is a preparatory module that precedes what seems to be the “real” initial theme of the S-zone. Analogous to the situation involving a $P^0$ versus $P^{1.0}$ determination, the relative connection between the opening module and the S-theme and the two modules’ interconnectedness (and the question: Is it possible for the S-theme to begin the section on its own, without the $S^0$ theme?) are the chief considerations here.
Perhaps mirroring the P-zone’s thematic arrangement, this passage is in dialogue with generic S\(^0\) modules from a rhetorical standpoint, while exhibiting unexpected deformations in relation to both historical models and the sonata form as a whole. Factors in correspondence to historical S\(^0\) models include S\(^0\) modules’ general tendency to participate in the S-space rhetorical shift from forte to piano, as happens here, by decreasing both the dynamic volume and the musical forces. Moreover, such modules are often structured either as sequential motions that finally settle into a tonic and new theme, or as sentential constructions. This passage can be read as sequential, with two two-bar thematic subphrases presented sequentially—mm. 36–37 and 38–39—followed by more transitory material. There is, perhaps, some semblance of sentential structure here as well, with the above double statement of a brief thematic module followed by longer transitory phrase.\(^{21}\)

This S\(^0\) module also contends with the rhetorical effect of the P-based caesura fill immediately preceding this passage; the sense of reluctance to relinquish P-based material is seen in the rhythmic continuation of the regular repeated eighth notes from P-space, and in other brief rhythmic motives within the thematic material of S\(^0\). While there are no direct quotes of P-space material, these rhythms hint at the possibility of their return. The presence of P-based motives is not unusual for an S\(^0\) module, and is also featured in the lengthy caesura fill in Mahler I/iv.\(^{22}\)

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\(^{21}\) Hepokoski and Darcy discuss S\(^0\) and S\(^1\) examples in *Elements of Sonata Theory*, 142–44.

\(^{22}\) Ibid., 143. In characterizing and distinguishing caesura fill from S\(^0\) modules, the authors state: “The distinction between the two—expanded caesura-fill and a genuine S\(^0\) or S\(^1\) module—can be difficult to make, and perhaps in some cases we should not make it at all. It may be that this kind of zero-theme is a thematically emphatic subset of that type of caesura-fill. The impression given by this context is that the caesura-gap has been held open: the gears have been pulled apart, [by the MC] awaiting re-engagement with S\(^1\) proper.” The example from Mahler I/iv,
This passage, however, also requires some reconsideration of typical $S^0$ practices. Example 4.6 displays the $S^0$ module and its tonal ambiguities. Like Mahler I/iv, this $S^0$ module occupies more musical space than historical $S^0$ modules. Additionally, this $S^0$ module does not complete the generic task of providing a suitable harmonic landscape from which the S-theme proper can emerge. The tonal orientation of this module is more indeterminate than is typical for S-zone introductions, a matter later addressed during the development. The first statement of the two-measure subphrase mentioned above, mm. 35-36, seems to outline C as a remnant from the caesura fill but quickly switches tonal emphasis by arpeggiating an A-minor triad in m. 37. Adding to the ambiguity, an E-flat major triad accompanies the C-centered melodic idea throughout m. 36. The repetition of this two-measure subphrase seems to pick up on the A-minor suggestion, but then adds B-flat, suggesting F major in m. 38, and D-flat, shifting to F minor in m. 39. A return to E in m. 40 corresponds to additional melodic fragments suggesting A minor in mm. 41–44, before giving way to a persistent repeated E-flat. To summarize, C, E flat, A, and F each appear as potential key areas, with none able to create a stable key-defining event and usher in the S-theme proper.

The intervening accompanimental material features collections last seen during the tonal upheaval of TR space: the OCT 1,2 chordal passage in m. 37 and the whole-tone chords in m. 40–42 are reappearances of collections from TR, another tonally unstable transitional moment in the movement. Whereas the transition zone is expected to be somewhat tonally turbulent, the presence of these competing collections and key areas at the beginning of S-space is far more unusual. At the conclusion of $S^0$, a two-note violin figure (E-flat to F) in m. 46 is picked up by shown in Example 5, is perhaps more easily considered caesura fill than $S^0$ because of its brevity, P-based motives, ascending scalar line, and harmonic preparation for the S-zone.
EXAMPLE 4.6. Shostakovich, Symphony No. 4, i, mm. 36–46, reduction, S^0 module implied tonalities

C major (held over from V/c end of caesura fill... ...becomes A minor A-flat minor(?), F major, then...

E-flat major... or minor? (OCT 1,2) dim.

F minor... A minor descending thirds hint at E-flat, F major, and A...

(enharmonic Mm; ...) (WT)

A minor

E-flat... G minor...

E-flat...

F minor... p espr.
the cellos, but transposed up to F-G, offering at the last moment yet another key option for the impending S-theme.

There are two moments of tonal agreement between the various simultaneous motivic fragments; these points are found in m. 40 and mm. 44–46, respectively. In the first case, the concurrence focuses on A minor, one of the tones of the C/A dyad and a third below the global C-minor tonic. In the second case, the agreement centers on E-flat, a third above the global tonic. Although the key of E-flat major, as the relative major represents a potential first-level default key area for a minor-mode sonata structure, it is not clear in this context whether the implied harmony is E-flat major or E-flat minor. A minor, on the other hand, was suggested at the medial caesura by the A/C dyad and the submediant rose in popularity as an S-theme key area in sonata-form models of the nineteenth century and later and was used by Shostakovich in other multi-movement works.\(^\text{23}\)

Thematically, this module can be seen as chiefly concerned with transitioning from the P- and TR-based motives of the medial caesura to the S-theme. This process occupies most of the \(S^0\) module, which starts out with motives more reminiscent of P- and TR-zone material than S-zone. While these motives do not quote P or TR directly, the presence of rhythmic figures and melodic contour resembling those found in P space set this introductory module apart as both still concerned with the unfinished tasks of the exposition’s first part and as remaining under the influence of the strident, reformative P-based melody. After the second repetition of the opening melodic idea, meter changes and open intervals shift the melody from the tighter-knit rhythms

\(^{23}\) See Brown, “Axis Tonality and Submediant in the Music of Shostakovich.”
reminiscent of P-space to looser-knit triplets that seem more in the style of the impending secondary theme.  

\[ S^1 (S^{\text{gen}}) \text{ Module} \]

The S theme proper begins at the upbeat to m. 47 and launches the first of four rotations through a collection of brief themes collectively labeled \( S^{\text{gen}} \). This designation situates the S-theme fragments as part of a process defined by Darcy as “a generative crescendo that leads to a thematic/tonal goal or telos.” In developing a conceptual labeling system for this thematic process in Bruckner’s primary themes, Darcy notes it is “convenient to refer to the two components as \( P^{\text{gen}} \) (the generative crescendo) and \( P^{\text{tel}} \) (the telos).” I have adapted these labels here to encompass the presence of underdeveloped S-thematic modules in the primary zone \( (S^{\text{gen}}) \), their continued generative variation in the development zone \( (S^{\text{var}}) \) and the eventual telos at the movement’s crux \( (S^{\text{tel}}) \).

Each rotation features contrapuntal melodic fragments that seem to thwart any sense of tonal arrival or cadential motion. Rotations 1 and 2 present \( S^{\text{gen}} \) melodic fragments 1–4, while rotations 3 and 4 add one additional \( S^{\text{gen}} \) module and introduce yet more fragmentation and tonal uncertainty, while at the same time becoming more metrically regular and oriented toward triple-meter construction. Two rotations of attempted reformation then produce energy gain and acceleration toward the end of the exposition.

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24 This change of meter reappears along with S-zone material throughout this movement; in addition, the use of meter change at moments of formal boundary can be seen at the recapitulation of Shostakovich’s String Quartet No. 1, first movement, where the primary theme returns transformed from triple to quadruple meter.

25 See *Bruckner Studies*, 260.
This S-theme is striking in its resistance to thematic stability and tonal or harmonic progression, creating a stalled sense of formal movement through musical time. In this way, the S-zone is strongly in dialogue with the practice of creating what Warren Darcy refers to as a “suspension field” or cessation of musical time between the primary zone and closing zone.\textsuperscript{26} This stopping of linear time is part of a pair of deformations Darcy outlines as the “alienated secondary theme zone” in Bruckner’s symphonies. Bruckner’s S-theme alienation process is explained as involving two factors. First, Bruckner’s S-zones tend to be repetitive, circular, and rotational. Second, they frequently employ Hepokoski’s concept of recapitulatory “tonal alienation”, which Darcy expands to include expositional material, specifically S-zone themes.\textsuperscript{27}

This secondary theme zone strongly corresponds to both of these deformational practices. First, this theme zone is highly repetitive and rotational, containing four rotations that each feature repetition of a small number of thematic units. (Even the oscillating F-G dyad that serves as an introductory gesture to the first rotation of S\textsuperscript{1} hints at the static, rotational thematic layout of the S-zone.) Second, the lack of tonal preparation during the medial caesura and S\textsuperscript{0} module, and the ambiguous and constantly changing tonal landscape of S\textsuperscript{1}, present a considerable expansion of the notion of tonal alienation.

While Bruckner and others accomplish tonal alienation through placing a particular key area as tonally alienated within a larger framework—a tonal dissonance against the global tonic

\textsuperscript{26} Darcy, “Bruckner’s Sonata Deformations,” 271. As mentioned, Darcy notes that with the exception of three movements, nearly all of Bruckner’s secondary theme zones composed after the Second Symphony are rotational.

\textsuperscript{27} Ibid., 272. Darcy defines these levels of tonal alienation as corresponding to and categorizes as primary, secondary, and double tonal alienation; these refer to unexpected keys prepared by their own dominants, expected keys prepared by foreign dominants, and unexpected keys prepared by chords other than their dominants, respectively. He also notes “one may also speak of modal alienation, in which the expected tonal center is subverted by the wrong mode.”
that must be rectified in the recapitulation—Shostakovich seems to withhold a clear depiction of any governing tonality within S-space. This more extensive alienation, an expansion of earlier deformational models, not only threatens to suspend tonal progress through expositional space, but then involves later efforts to achieve tonal “dealienation” of the expositional S-theme by stating the S-theme in yet another “wrong” key in the development. The S-variant “wrong key” version in the development is presented in A major, the chromatic submediant of C minor; this is a more typical choice for tonally alienated S themes. Then, a more corrective reformation occurs by means of the tonic restatement of S at the tonal resolution, in the strident and unequivocal C minor global tonic.

The first rotation of $S^1$ begins with two loosely structured thematic modules appearing simultaneously in quasi-contrapuntal style. While there are no direct quotes or strict inversional relationship between the primary theme zone and these opening G-minor and F-minor thematic ideas, the general contour is somewhat reminiscent of the primary theme and an opening thematic gesture that closely resembles the final melodic descent of TR-space. One can perhaps consider the S-zone thematic ideas as initially representing a contrasting variation or derivation of P- and TR-based themes. While these vestiges of P-based material remains, the thematic content of $S^1$ is considerably more loosely knit than the primary theme.

Additionally, the change of metric emphasis from quadruple meter to triple meter and metric instability reinforces the sense of having entered a new sonata-form space. Example 4.7

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28 See Darcy, “Bruckner’s Sonata Deformations,” 271–74, for a full explanation of tonally alienated S themes. Darcy notes Bruckner’s tendency to use the submediant in his symphonies’ secondary themes.

29 Symphony V/i features a secondary theme that closely resembles the primary theme. Rather than a contrasting derivation, Symphony V/i’s S-zone theme can perhaps be considered a type of P-based S theme. See Hepokoski and Darcy, *Elements of Sonata Theory*, 135–36, for more details on these S-theme types.
displays the first rotation of $S^1$. The upper strings present a thematic idea labeled $S^{\text{gen}1}$, first appearing in a full statement then in a truncated repetition. The lower strings accompany this with a scalar theme labeled $S^{\text{gen}2}$, followed by a brief arpeggio motive, $S^{\text{gen}3}$; this $S^{\text{gen}3}$ module eventually becomes the head motive of the S-overwrite theme in the development and the $S^{\text{tel}}$ theme at the tonal resolution. It also features a thematic connection to the breakthrough module in Mahler I/iv, to be discussed in the next chapter.

Rather than presenting a stable alternative to the problematic first part, the $S$-theme continues uncertainties seen in $P$ and $S^0$. First, the thematic ideas in this rotation are uneven in length and contour, offering constantly changing directions and little sense of melodic, tonal, or metrical stability. Second, like the $S^0$ module, there is little tonal correspondence between the two lines; aside from brief C- and G-oriented matches in this rotation’s second half, each theme maintains separate and constantly changing tonal foci. Furthermore, three tonalities touched on during this rotation—A, C, and E-flat—were largely featured during the $S^0$ module as well. The addition of G and F can be seen as an expansion of these third related key areas.

Rotation 2 is mostly preoccupied with abundant truncated repetitions of $S^{\text{gen}1}$. This rotation, shown in Example 4.8, also introduces $S^{\text{gen}4}$, a more strident thematic idea reminiscent of $P$-based figures, perhaps employed here to break $S^{\text{gen}1}$ out of its persistent repetitions.

Throughout $S^1$, but even more so in this varied repetition, the aforementioned third-related key

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30 While this exposition does not meet the criteria for Joseph N. Straus’s axis tonality—specifically, there is no explicit simultaneous harmonic manifestation of the A/C/E-flat/G axis—there is a loose correlation between Shostakovich’s treatment of thirds relationships in this exposition and overlapping third-related tonal areas observed in his other works. See Straus, “Axis Tonality in the Music of Stravinsky” and Brown, “Axis Tonality in Shostakovich.” Additionally, symmetrical constructions around A and C appear at other points in this movement, offering an alternate explanation for the F/A/C/E-flat/G tonal design. Finally, G minor could be viewed as in dialogue with a more traditional choice of minor v as a common S-zone key area in a minor-mode sonata-form movement.
areas are continually undermining each other: E-flat minor, C major/minor, F major/minor, and A major/minor. Also striking here is the mixing of modes, with suggestion of both versions of each key area except E-flat.\textsuperscript{31}

This rotation’s numerous statements of $S_{gen}^1$ are focused chiefly on C major/minor and A major/minor, while the new $S_{gen}^4$ thematic idea ventures from F to C by way of whole-tone activity. Like rotation 1, this rotation offers no thematic, rhythmic, or harmonic closure. Additionally, $S_{gen}^1$ seems trapped in a cycle of increasingly truncated statements, ending with no hint of conclusion. As mentioned, the rhetoric of $S_{gen}^4$ can be viewed in as a potential antidote

\textsuperscript{31} This type of modal mixture was also seen in the exposition’s first part.
EXAMPLE 4.8. Shostakovich, Symphony No. 4, i, mm. 61–75, reduction, thematic/tonal layout

...rhythm resembles Sgen4

A minor/C major?

A minor?

...also transforms into rhetoric of Sgen4
to $S_{\text{gen}1}$ meanderings, with the more assertive rhythmic construction offering a possible resuming of forward motion through the secondary theme zone. Indeed, a rhythmic motive from $S_{\text{gen}4}$ eventually clasps on to the end of several $S_{\text{gen}1}$ statements, attempting to provide firmer closure and momentum.

Attempting a third time to secure tonal and cadential definition, the violins launch into a third rotation of $S^1$, which is then quickly picked up by the winds. While the first rotation featured five potential keys areas, and the second briefly touched on F and E-flat while focusing mostly on C and A, this third rotation returns to F major/minor. Following statements of $S_{\text{gen}1}$ and $S_{\text{gen}4}$ and hints of $S_{\text{gen}2}$, a final melodic addition, $S_{\text{gen}5}$, features cascading descending thirds followed by a descending scalar figure symmetrical around C.

Example 4.9 shows the third rotation. This symmetrical scalar idea accompanies yet another truncated repetition of $S_{\text{gen}1}$, focused not on a particular key area, but instead outlining a (0124789) septachord, a chord that contains the (012479) hexachord seen at the conclusion of the exposition. This rotation begins to stabilize metrically—there is less alternating of meters and more emphasis on triple-oriented rhythms—yet the rotation comes to a close without presenting a clear tonal, harmonic, or metric direction. Indeed, aside from the midpoint agreement around F major/minor, there is little tonal congruence between the melodic fragments in this rotation.

Finally, a fourth repetition of $S^1$, shown in Example 4.10, emerges. Tonally, this rotation begins ambiguously by suggesting possible F major or C key areas. Moreover, $S_{\text{gen}1}$ is altered by the addition of a pedal-point A interspersed with the melody, adding some sense of A to the F and C intimations. Omitted from rotations 2 and 3, thematic module $S_{\text{gen}3}$ returns here in C minor, its original key from rotation 1. Variants of $S_{\text{gen}2}$ and $S_{\text{gen}4}$ reappear as well, in F major.
EXAMPLE 4.9. Shostakovich, Symphony No. 4, i, mm. 76–96, reduction, thematic/tonal layout
EXAMPLE 4.10. Shostakovich, Symphony No. 4, i, mm. 96–114, reduction, thematic/tonal layout and first “call to attention”
As with rotation 3, this rotation continues to become more metrically clear, switching meters briefly only twice.

The tonal ambiguity increases in this fourth rotation; aside from a brief highlighting of F and A as tonics in mm. 106–109, there is less tonal suggestion in each melodic fragment individually, quicker shifts between potential key areas, and more fragments with indeterminate tonal orientation or non-diatonic organization. This fourth rotation ends as inconclusively as the previous three, ruminating on a handful of mysterious and wandering melodic fragments. Collectively, these four rotations have suggested a number of key areas problematized earlier in the movement, but offers no tonal or harmonic footing. The rotations have stepped out of musical and formal time into a cyclical and static space, alienating the listener from overall formal and tonal progress in the midst of what seems like an intangible S theme.

“Call to Attention”

After four rotations, melodic completion and cadential closure for the S-theme are still elusive. In response to this lack of formal progress, two rhetorical interventions commence a impressive effort to renew tonal and rhetorical forward motion and to complete the secondary theme zone. Measure 111, shown near the end of Example 4.10, features a rhetorical “call to attention”—as if a return to P-like discipline can assist the S-zone out of its static suspension, with or without a cadence. This “call to attention” label emerges from the evolution of C-like modules, from codetta-like emphasis on the S-theme’s concluding cadence to a rhetorical shift in emphasis, perhaps in response to a breakdown of S or the inability of S to produce the EEC.
Hepokoski and Darcy, in *Elements*, frame the arrival of C-zone rhetoric without a satisfactory closing cadence for S thus:

Particularly in sonatas after 1800, S may break down without producing a PAC. This inability is sometimes followed by a decisive, contrasting, potentially “C-like” theme. In such instances, the question inevitably arises as to whether the nineteenth-century C, as a by-now reified, separable thematic concept, was capable of forging ahead on its own in the absence of an EEC. On the one hand, this contradicts the definition of C as postcadential (post-EEC): at least within the eighteenth-century norm nothing should exist conceptually as C until the EEC has been secured. On the other hand, one can imagine situations, especially after 1800, in which a composer might have intended to portray just such an S-breakdown. While S fails in its mission, C is left waiting for its “scheduled” turn to appear, and in fact, following the demands of unstoppable clock-time, it does so at the expected moment regardless of S’s lapse. The curious thing about such themes is that they seem to b estride both the S- and S-concepts. They are emphatically precedential, pre-EEC (the essence of S-space), and yet, in part because of the block-like layout of the exposition, one suspects that they are simultaneously implying the onset of what “should” be a C-idea.32

This phenomenon is seen in Beethoven, Mozart, Brahms, Bruckner, and Mahler. Hepokoski and Darcy ascribe an Sc label to such modules, though they state, “making a clean, reductive decision about labels and terminology is less important that explicating the crisis or ambiguity created by the breakdown of S.”

I have chosen to highlight the simultaneity of function and ambiguity here by labeling these “call to attention” modules in a more ad hoc manner. However, several general musical changes signal the end of the stasis that has so far occupied S-space, and indicate a shift toward more strident, even C-like, P-reminiscent material. Increases in orchestral forces, continual ascending gestures, increased surface rhythm, and a general cessation of metric change create a renewed sense of forward movement during the remainder of the S-zone. Furthermore, the

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rhythm at m. 111 and ascending scales soon to follow both resemble P-based motives; the P-zone is a common source of C-zone rhetorical and thematic ideas.

Launching the call to attention, a series of repeated G’s in the brass interjects at m. 111, resembling a dominant and perhaps signaling a return to C. Reinforcing this rhetorical change, m. 112 features a return to duple meter and a temporary end to the metric vacillations of the previous four rotations. As mentioned, this shift can be viewed rhetorically as the potential arrival of a closing zone, especially since such a zone would typically commence at this approximate point in the movement (and in fact seems to do so here, despite the lack of tonal closure for S). The arrival of C without the satisfactory completion of S may be an attempt to “move” the musical motion forward on schedule, even without the cadence typically necessary to invoke closing modules.

Although the rhetorical shift has increased the surface musical energy and seemingly resumed the forward trajectory of S space, this renewed tonal and metric discipline remains unable to generate tonal reformation or cadential activity. The strings immediately thwart the G’s dominant allusion with C-sharps; subsequent descending lines then present whole-tone and octatonic motives before returning to A major and F major, two of the key areas featured heavily during S-space. By m. 121, F, A, and C have all given way to octatonicism. Eventually, further melodic fragmentation and tonal ambiguity, as well as the return of S-inspired thematic modules, indicate that while the rhetorical shift suggests closing-zone modules at first, the S-zone is still governing this musical space.

This continuing lack of tonal or thematic certainty calls forth an additional attempt at reformation in m. 128. A call to attention, this time on E and suggesting A minor, is immediately denied by renewed scalar allusions to both F and G. By m. 130, shown in Example 4.11,
octatonicism and tonal ambiguity have returned as the low strings present an octatonic tetrachord suggesting G minor.

This tetrachord is then repeated and transformed by the brass, in m. 132, into an octatonic version of the chromatic-triplet brass motive from Mahler I/iv (the first quote in the movement thus far of this motive). In its original context, this motive appeared near the beginning of Mahler I/iv’s introduction, interjecting at fortissimo over a cadential six-four in F minor. At m. 132 in Shostakovich IV/i, the harmonic landscape is wrestling between F major, G minor, octatonicism,
and full chromaticism, and this motive adds to the musical energy as the tension and pitch continue to rise.

Subsequent ascending simultaneous chromatic and diatonic scales begin a renewed textural and rhetorical push, one that is seemingly capable of bringing about a climactic close to S-space even without a clear establishment of its tonality. This musical effort to close S-space begins with a return to triple meter in m. 136. Then, after an energetic ascent in the high strings, the low strings begin a *triple-forte* variation of the $S_{\text{gen}2}$ thematic module at m. 141. This theme is accompanied by frantic ascending chromatic passages, creating a wedge between the outer parts and seemingly racing toward a cadential finish. The final scalar descent found at the end of the arch-shaped $S_{\text{gen}2}$ is completed at m. 149; $S_{\text{gen}2}$ concludes on C, features a hemiola cadential-like rhythmic gesture, and is accompanied by the ongoing wedge-like movement as the high instruments reach A, their highest note in the piece so far, also at m. 149.

Rather than bring about closure, however, the high winds then launch into a panicked variation of the C/D-flat dyad from $P^0$, now a G-sharp/A-sharp dyad and a new high point for the work. Meanwhile, the low strings continue past the C and begin one last S-like melodic module starting on B. This new melodic module, shown in Example 4.12, suggests a G harmonic orientation by means of an accompanying chord featuring B, D, A flat and B flat. This melody is also solidly in triple meter and more tightly knit than previous S-zone modules. The more strident melody combined with the suggested dominant harmony seems to indicate preparation for another attempt at a cadence. The ever louder repeated G-sharp/A-sharp dyads, however, seems intractable, threatening to derail the cadential approach. Before the bass melody can traverse the distance of an octave from G to G, a dramatic timpani interjection following the melody’s F-sharp brings a sudden and forced ending to the impending crisis.
EXAMPLE 4.12. Shostakovich, Symphony No. 4, i, mm. 128–134, reduction, approach to the EEC

triple-meter, S-like melody; more tightly knit than previous melodic modules

ascent begins on G...

ascent cut off at F#...

EEC-like boundary marker
Conclusion of the Exposition

The exposition comes to a dramatic close with a timpani interjection, displayed at the conclusion of Example 12, that unambiguously asserts C, with a C-G-C articulation similar to that of the caesura fill that set up the $S^0$ module at the beginning of the S-Zone. The chord in m. 158 that accompanies this C-G-C interjection, however, is neither C major nor C minor. B flat, D flat, D-natural, and F join with the C and G to create a (012479) hexachord EEC-like boundary sonority, a similar hexachord to the (023469) hexachord seen at the medial caesura.

As mentioned earlier, these two hexachords feature the (01247) pentachord as a subset. The (01247) pentachords of the MC and EEC are related by $T_4$, the same transposition function between the tonic and submediant in minor-mode diatonicism or between the roots of a $i$:PAC (a typical fourth-level default MC) and $VI$:PAC (a typical EEC in the submediant). The hexachords, meanwhile, feature a near-$T_4$ relationship, offset by two semitones in pitch class space. Here, there is no super-chordal caesura fill, yet the note excluded from the second (01247) pentachord, F, does serve as the tonic of the first tonal area of the subsequent development’s opening phrases, which begin in F minor. This can be viewed as analogous to the C-minor emphasis following the (01247)-plus-C hexachord at the MC, where the musical material immediately following the chord focused on C minor. Furthermore, while this hexachord may not provide overt tonal support analogous to the EEC, the (0347) tetrachord of B-flat, D-flat, D, and F can be seen to encapsulate the S-zone’s tonal and modal struggles, and the interjected C-G-C gesture may be viewed as reaching back to the MC in another dramatic intervention, a reformative effort intended to set this movement in motion again.

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33 This MC/EEC configuration ($f$-minor $i$:PAC and D-flat major $VI$:PAC) was featured in the finale of Mahler’s First Symphony.
Within the highly unusual tonal landscape of the secondary theme zone, and considering the complete lack of cadential closing points in the movement thus far, this act can be viewed as an EEC substitute. This (012479) hexachord both serves as a boundary marker and proffers an attempt to transform the crisis of an underdetermined and tonally open secondary theme zone into a reformed development space.
Chapter Five

Shostakovich’s Symphony No. 4, First Movement:
Rotation Two

I. Development and Crux

The second large-scale rotation of this movement begins with a development zone; occupying mm. 160–906, this development further complicates the movement’s ongoing dialogue with sonata form, rather than confirming or clarifying it. After establishing a referential rotational framework in the exposition, the development struggles to escape five subrotational responses to the thematic and tonal problems in the exposition’s S-theme zone. These complete rotational statements constantly revisit the opening rotational structure, attenuating the sense of forward movement through the large-scale formal structure.

Figure 5.1 displays the overall layout of rotation 2. Five reiterations of the expository rotation feature a circuitous journey involving variants of S-theme fragments, the emergence of an S-theme variation, Mahlerian allusions and quotations, and a furious fugal passage. A brief retransition before the moment of crux builds expectations for a third large-scale recapitulatory rotation by featuring a rhetorical and tonal return to the movement’s opening. Though $P^0$ appears in the global tonic of C minor at m. 906, the movement then progresses to the telos version of the S-theme, instead of the $P^1$ module expected in Type 3 recapitulations. After presenting the $S^{tel}$ theme and reprising both the $S^{gen}$-theme fragments from the exposition and a breakthrough theme from the development, a 40-measure coda presents an additional rotation that includes $P^1$ in C minor, along with further allusions to Mahler’s First Symphony.
**FIGURE 5.1.** Shostakovich, Symphony No. 4, i, rotation 2, overall layout

<table>
<thead>
<tr>
<th>Large-scale Rotation:</th>
<th><strong>Rotation 2</strong></th>
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</thead>
<tbody>
<tr>
<td>Zone: Development</td>
<td></td>
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<tr>
<td>Subrotation:</td>
<td>SR1</td>
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<tr>
<td>Measure:</td>
<td>160</td>
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<tr>
<td>Theme</td>
<td>P+TR</td>
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<tr>
<td>Zones:</td>
<td>P+S, P</td>
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<td></td>
<td>MC</td>
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<td>S-var 1st try</td>
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<td>S-ov + P</td>
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<tr>
<td>Large-scale Rotation:</td>
<td><strong>Rotation 2 continued</strong></td>
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<tr>
<td>Zone: Development</td>
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<td>Subrotation:</td>
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<td>233</td>
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<tr>
<td>Large-scale Rotation:</td>
<td><strong>Rotation 2 continued</strong></td>
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<tr>
<td>Zone: Crux</td>
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<tr>
<td>Measure:</td>
<td>477</td>
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<tr>
<td>Theme</td>
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<td>Zones:</td>
<td>P+S-ov, P/TRA</td>
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**Formal Boundaries and the Location of the S-Theme**

The beginning of the development—a moment of primary-theme return after the thematically ambiguous and underdeveloped preceding section—has led to varying interpretations regarding the formal division at m. 160. The return to P-theme material and change of texture and key is generally viewed as indicating the beginning of a new section, considered either development space or some kind of TR zone. Such considerations typically rest
on the notion that the lyrical theme fragments in the preceding section bear some resemblance to P and are rhetorically unsuitable as an S-theme, especially paired with the lack of firm tonal articulation of a secondary-theme key or cadential closure in mm. 157–160. While most scholars consider mm. 47–159 as in dialogue with, or even an attempt at, a secondary theme, they differ as to whether its shortcomings disqualify it entirely (it is not to be considered an S-theme at all, but instead is a subsidiary theme of the P-theme zone), conditionally (it is a “failed” secondary theme that is addressed by the appearance of a lyrical “real” secondary theme beginning in m. 261), or partially (it is a troubled secondary theme that necessitates a “third,” more suitable theme in the development section).

Considerations of thematic wellformedness and key area are foregrounded in these discussions, which largely rest on the “real” S later in the movement, accomplished by the more satisfactory lyrical theme in m. 261 and the subsequent reappearance of this material just after the moment of crux in m. 906. The boundary space at mm. 157–160, where the initial segment of the P-theme makes its first post-opening return, is tonally blurred and problematized by the preceding theme zone’s inability to coalesce around a complete thematic statement and key. The

1 Several analyses consider this theme to be part of the first subject group, with characterizations ranging from “subsidiary theme” to “transition theme” to “false second subject”. See Fairclough, *A Soviet Credo*, 83; Roseberry, *Ideology, Style Content*, 389–95; Longman, *Expression and Structure*, 9; Sabinina, *Shostakovich-sinfonist*, 101; Kopp, *Form and Gehalt*, 157; Koball, *Pathos und Groteske*, 5, and Körner, “Schostakiwitschs Vierte Sinfonie,” 132. Hugh Ottaway reads the theme in m. 261 as belonging to development space. See Ottaway, “Looking Again at Shostakovich,” 20. Though the subsidiary theme designation is ascribed, consideration of thematic identity within particular analyses also seems to reflect the difficulties regarding the theme’s contrasting rhetoric and ambiguous tonality. For instance, Roseberry explicitly argues the identity of the theme beginning at m. 47 as a subsidiary theme of the first theme group, then immediately refers to it as a “secondary” theme.

2 While motivic and thematic factors are often cited for connecting the primary theme and so-called “subsidiary theme,” these analyses largely fail to contextualize the theme in m. 261 in terms of its earlier appearance as $S_{gen3}$.  

200
return of P-based fragments after the S-theme’s four cycles of thematic confusion add to the section’s ambiguity, as hexachordal and rhetorical boundary closure commences without tonal confirmation of a firm, S-zone key area.

Though the preceding theme zone thwarts expectations of a coherent lyrical contrasting theme, it is nonetheless quite effective in evoking secondary-theme expectations through its contrasting thematic construction, triple meter, and surrounding rhetoric. I contend that this formal boundary at mm. 157–160, in light of its preceding and succeeding thematic zones, can be viewed as the beginning of an extended development space. This partitioning is in concurrence with rotational constructions and in dialogue with elements seen at similar points in Shostakovich’s Fifth Symphony and the finale of Mahler’s First Symphony.

Various features support this contention. First, the S-theme zone (mm. 47–159) is prepared by events that strongly resemble historical expositional rhetoric as well as Symphony V/i’s TR zone and MC gesture. Symphony IV/i and V/i both feature TR energy gain, juxtaposition of the tonic key with its neighbor (C and D in both cases), and intrusion of P-theme motives and tonic allusions during the caesura fill leading to the exposition’s second part. Additionally, each features a multi-rotation S zone wherein P-based material returns near the end of the S zone. In the case of Symphony IV/i, it is the “call to attention” allusions to P-zone rhythm and contour; in Symphony V/i, the climax moment from P² reappears near the end of S.

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3 As noted in chapter 3, this parsing apportions a sizable development zone, while leaving the exposition and post-crux spaces similarly sized. Alternate parsings match the exposition and development spaces more closely, while creating a severely truncated “recapitulation” zone. See chapter 3, n18.

4 Pauline Fairclough characterizes the return of P¹-based material near the end of the subsidiary theme as invading and destabilizing the lyrical theme; though this theme creates triple-meter space for the later theme, such a P-based invasion disqualifies it as a candidate for S. See
Both movements exhibit tonally problematized cadential closures and thematic conclusions, as well as the S-aftermath-like boundary-blurring motivic techniques previously detailed. Each begins the development rotation with the immediate pairing of P and S elements and with imitative statements of the P-theme, not in the tonic or secondary zone key area, but in F minor. And finally, each movement reaches a dramatic crisis point during the development (see Symphony V/i, mm. 215–216, where the crisis point is followed by a “false” recapitulation, and Symphony IV/i, mm. 255–260, where the crisis point is followed by the return of $S^{\text{gen}3}$ as the S-variant theme).

The return of the P theme at m. 161 also reinforces rotational considerations. In conjunction with the changes in texture and key, this return signals not only the beginning of a new section, but also elicits expectations of a new rotational initiation after contrasting material. The subrotational structures that follow present several additional P/S cycles, reinforcing the referential expositional rotational identities of these themes. Rotational structures repeatedly cycle through this referential pattern, despite the nebulous tonal and thematic underpinnings of the S zone.

Where does this position what is considered by many scholars to be the “real” arrival of S, in m. 261? Existent readings consider the earlier appearance of S a failed or aborted attempt that is rectified by the later cohesive and completed statement beginning in m. 261. His later version is presented in A major, a chromatic variation on the submediant S-theme, a common “deformational” choice in sonata-form works by the time of this movement’s composition. Such a compensatory role for the S-variant theme at m. 261 is certainly a factor, considering the

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Fairclough, *A Soviet Credo*, 83. That a similar technique is used near the end of S-space in Symphony V/i is not noted by Fairclough or other scholars in relation to Symphony IV/i.
theme’s previous appearance as a fragment in S and the overall instability of S’s earlier appearance.

Alternately, the variation of $S_{\text{gen}^3}$ found in m. 261—set apart with dreamlike instrumentation after a crisis point, and emerging from an F-minor tonal landscape—can be viewed as presenting not merely a developing variant of the previously troubled lyrical theme, but also a transformed and fantasy-like version of the Durchbruch theme from the development of Mahler I/iv. In other words, the theme in m. 261 is presenting a utopian, fantasy projection of the problematic S-theme by alluding to motives from the breakthrough interruption theme in the development of Mahler I/iv. The theme is recast as plaintive and lyrical, instead of a bombastic breakthrough interruption, as in Mahler I/iv.

The Mahler I/iv Durchbruch theme first appeared as a fantastical and novel interruption of development space, then returned just after the crux, largely eclipsing the P theme and displacing the original S theme at the point of its expected recapitulation. The mixed allusions thus create an alternative formal identity for the lyrical theme in m. 261. Rather than extending the exposition, its appearances in the development and just after the crux can be considered part of an otherworldly, fantasy-like evolution in development space, and correspond to the breakthrough theme’s location in the development and after the crux of Mahler I/iv. These appearances may be positioned as part of a larger formal dialogue between the development sections of Shostakovich IV/i and Mahler I/iv, to be detailed below.

**Developmental Subrotations and Large-Scale Rotational Articulation**

Though the overall sonata-form layout eventually manifests as a Type 2 design, several events during the development-space rotations obfuscate the relationship between the sonata-
form design and the movement’s overall rotational structure, keeping this eventual configuration unclear. First, the developmental rotations contain thematic returns featuring the same key areas as the expositional appearances, whereas more typical developmental zones cycle through sequential progressions or distantly related tonal areas before returning to the tonic at the recapitulation or crux. Second, these developmental rotations sometimes include the medial caesura, a formal boundary not common in developmental rotations. Third, the developmental rotations continue to further explore and vary thematic modules from the secondary theme zone; these ongoing variations position each rotation as part of the teleological genesis of secondary-theme material in pursuit of its eventual telos at the crux. This succession of S-theme statements thus emphasizes the perpetual process of realization or rectification of the S theme, reinforcing rotational processes at the expense of more immediate and predictable progression through sonata-form space.

II. Overall Structure of the Development

Five subrotations retrace the expositional material between the beginning of the development at m. 160 and the arrival of the crux at m. 906. Each of these subrotations presents music from the first and second parts of the exposition in rotational order, constantly returning to

5 See Hepokoski and Darcy, *Elements of Sonata Theory*, 24. According to the authors, “[t]he medial caesura has two functions: it marks the end of the first part of the exposition (hence our adjective “medial”), and it is simultaneously the highlighted gesture that makes available the second part. The MC is the device that forcibly opens up S-space and defines the exposition type.” Though not common, development-space MCs are not unheard of; the development section of Beethoven’s Symphony II/i features one example.

6 The presence of S-based themes as part of this rotational process also undermines the typical practice of withholding S-modules in a Type 2 sonata construction until the moment of crux. This withholding emphasizes the larger double-rotational schema while foregoing complete smaller-scale rotations within development space.
the tonal and rhetorical dilemmas first seen in exposition space. These subrotational iterations also create a continual sense of thwarted return and delayed resolution, as the existent dilemmas remain unsolved in some way after each successive attempt at a solution, and the cycle begins anew in the next subrotation.

The emphasis on rotational revisions—along with the large number of complete subrotations in this development space—weakens the traditional correspondence between the two- or three-cycle rotational layout and standard sonata-form structures. Continual primary-theme restatements also lead to a sense of repeated abandonment of potential recapitulation opportunities, and to a concomitant avoidance of advancement through sonata-form space even as the seemingly unstoppable rotational forces continue on. These five developmental rotations are labeled as subrotations to preserve clarity between the larger-scale rotational level corresponding to sonata space and the subrotational iterations within development space; this labeling reflects their location within the larger double-rotational sonata-form layout.

Tonally and thematically, each of these five subrotations engages the exposition’s difficulties through the reappearance or recomposition of its P, TR, MC, and S modules, in an almost obsessive attempt to reform or even overwrite the exposition’s underdetermined and ambiguous initial rotation. Moreover, these recomposition techniques and formal interruptions continue to parallel practices seen in Mahler’s First Symphony, specifically the finale. Figure 5.2 displays the formal layout of Shostakovich IV/i’s developmental space alongside that of Mahler I/iv.

While there is no identical correlation, several congruencies are worth noting. First, both developments feature the alternation of more traditional developmental techniques with interruptions featuring fantasy or breakthrough material. Second, C major is featured at the
**FIGURE 5.2.** Shostakovich, Symphony No. 4, i, and Mahler, Symphony No. 1, iv, development spaces, comparison of formal layout

### Shostakovich IV/i:

<table>
<thead>
<tr>
<th>Large-scale rotation:</th>
<th>Rotation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone:</td>
<td>Development</td>
</tr>
<tr>
<td><strong>Subrotation:</strong></td>
<td><strong>SR1</strong></td>
</tr>
<tr>
<td>Measure #:</td>
<td>160</td>
</tr>
<tr>
<td>Thematic modules:</td>
<td>P+S, P TR MC S-var1</td>
</tr>
<tr>
<td><strong>c:</strong></td>
<td>f</td>
</tr>
<tr>
<td>Formal function:</td>
<td>Development</td>
</tr>
</tbody>
</table>

### Mahler I/iv:

<table>
<thead>
<tr>
<th>Large-scale rotation:</th>
<th>Rotation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone:</td>
<td>Development pt 1</td>
</tr>
<tr>
<td><strong>Subrotation:</strong></td>
<td><strong>intro SR1</strong></td>
</tr>
<tr>
<td>Measure #:</td>
<td>254</td>
</tr>
<tr>
<td>Thematic modules:</td>
<td>intro P+S</td>
</tr>
<tr>
<td><strong>f:</strong></td>
<td>g</td>
</tr>
<tr>
<td>Formal function:</td>
<td>Development</td>
</tr>
</tbody>
</table>

BT = breakthrough
### FIGURE 5.2, cont.

**Shostakovich IV/i:**

<table>
<thead>
<tr>
<th>Large-scale rotation:</th>
<th>Rotation 2, cont.</th>
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<tbody>
<tr>
<td><strong>Zone:</strong></td>
<td>Development, cont.</td>
</tr>
<tr>
<td><strong>Subrotation:</strong></td>
<td>SR4</td>
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<tr>
<td><strong>Measure #</strong></td>
<td>477</td>
</tr>
<tr>
<td><strong>Thematic modules:</strong></td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>P+ S-var</td>
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<tr>
<td></td>
<td>P/ TR</td>
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<tr>
<td></td>
<td>fugue: new</td>
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<tr>
<td></td>
<td>(quasi-P/ TR/ S)</td>
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<tr>
<td><strong>c:</strong></td>
<td>f</td>
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<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>f/ OCT</td>
</tr>
<tr>
<td><strong>Formal function:</strong></td>
<td>Development</td>
</tr>
<tr>
<td></td>
<td>(Interruption)</td>
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</tbody>
</table>

**-zone SR5**

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<tr>
<th><strong>Measure #</strong></th>
<th>551</th>
<th>580</th>
<th>679</th>
<th>717</th>
<th>818</th>
<th>88?</th>
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<td></td>
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<tr>
<td></td>
<td>P</td>
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<tr>
<td></td>
<td>P+ S-var</td>
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<tr>
<td></td>
<td>P/ TR</td>
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<td></td>
<td>fugue: new</td>
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<td>P + TR</td>
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<td>S-var, S + Mahler I/i</td>
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<td>retrans.</td>
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<td><strong>c:</strong></td>
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<td>f/ OCT</td>
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<tr>
<td><strong>Formal function:</strong></td>
<td>Development</td>
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<tr>
<td></td>
<td>(Interruption)</td>
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<tr>
<td><strong>- zone SR5</strong></td>
<td>OCT/WT (C/D/G/A)</td>
<td></td>
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<tr>
<td></td>
<td>OCT, f, g, b-flat</td>
<td></td>
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<tr>
<td></td>
<td>D-flat, E-flat B</td>
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<td></td>
<td>OCT, chromatic</td>
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<td></td>
<td>(Interruption-flashback?)</td>
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### Mahler I/iv:

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<td>Development pt. 2</td>
</tr>
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<td><strong>Subrotation:</strong></td>
<td>SR1</td>
</tr>
<tr>
<td><strong>Measure #:</strong></td>
<td>317</td>
</tr>
<tr>
<td><strong>Thematic modules:</strong></td>
<td>intro, SR1, SR2</td>
</tr>
<tr>
<td></td>
<td>BT</td>
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<tr>
<td></td>
<td>new</td>
</tr>
<tr>
<td><strong>f:</strong></td>
<td>c: i</td>
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<tr>
<td><strong>Formal function:</strong></td>
<td>Development</td>
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<td></td>
<td>(Interruption-Preview)</td>
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**zone SR2**

<table>
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<tr>
<th><strong>Measure #</strong></th>
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<th>337</th>
<th>370</th>
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<th>389</th>
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<th>429</th>
<th>458</th>
<th>54(!)</th>
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</thead>
<tbody>
<tr>
<td><strong>Thematic modules:</strong></td>
<td>intro, SR1, SR2</td>
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<td><strong>f:</strong></td>
<td>f: V</td>
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<tr>
<td><strong>Formal function:</strong></td>
<td>Development</td>
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<tr>
<td></td>
<td>(Interruption-Preview)</td>
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**zone SR1**

<table>
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<tr>
<th><strong>Preview 2</strong></th>
<th>BT prep choral coda</th>
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<tbody>
<tr>
<td></td>
<td>370</td>
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<td></td>
<td>386</td>
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<td>389</td>
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<td></td>
<td>413</td>
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<tr>
<td><strong>Flashback 2</strong></td>
<td>Mahler I/i, S</td>
</tr>
<tr>
<td></td>
<td>429</td>
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<tr>
<td></td>
<td>458</td>
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<td></td>
<td>54(!)</td>
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<tr>
<td><strong>Retrans.</strong></td>
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moment of breakthrough during the development space of both works. These breakthrough moments are then followed by preparatory or retransition passages before the beginning of the next formal section. And perhaps most striking, the end of each development zone features material alluding to the first movement of Mahler’s First Symphony; both Shostakovich IV/I and Mahler I/iv seem to allude to the same external source, Mahler I/i. In addition, the “inferno” triplet motive from Mahler I/iv—first presented first during Shostakovich IV/i’s exposition—continues to appear throughout development space, and is joined by new allusions, including the opening texture and cuckoo motive of Mahler I/i. The cuckoo motive is also quoted in Mahler I/iv’s development section, providing another correlation between the developments of Shostakovich I/i and Mahler I/iv. Of the five subrotations in development space, I read three as chiefly concerned with rectifying or overwriting the problematic S-space material, and two as preoccupied with resuming formal progress through sonata space before dissolving into renewed developmental exploration.

III. Detailed Analysis: Development

Subrotations 1–3: Addressing the Quandary of S

The development begins in m. 160 with the return of P¹. Shown in Figure 5.3, these first three subrotations of the development feature repeated attempts to engage the S-Zone’s problematic thematic and tonal issues by means of S-theme generative variation. Subrotation 1

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7 As mentioned, these generative variations are in dialogue with the process of teleological genesis. In addition, they could be considered examples of Hepokoski and Darcy’s concept of thematic overwriting, or the substitution of differing material for the original expositional version that nevertheless maintains the original’s rotational placement. In this case, the variation label seems more appropriate, as the thematic fragments were previously presented in the movement.
FIGURE 5.3. Shostakovich, Symphony No. 4, i, development, subrotations 1–3.

contains the first attempt at correcting the exposition’s problematic and fragmented S by means of an S-variant, pairing an A-flat bass ostinato—the commonly evoked deformational submediant key choice forwent in the exposition—with an extended and agitated version of $S^{\text{gen5}}$, in place of the more lyrical and recognizable $S^{\text{gen1}}$ theme. While the bass does eventually propose the submediant as a potential S-theme tonality, the erratic tonality and meandering thematic construction of $S^{\text{gen5}}$ undermines this proposed key area and S-theme statement. $S^{\text{gen5}}$’s shifting C- and F-major tonal trajectories and the tonal mismatch between the bass and melody elicit another rotational endeavor.

Subrotation 2 is tonally problematic from its very start: brief P and TR modules feature indeterminate diatonic and whole-tone collections before settling onto G at a gesture resembling the medial caesura. The second variant S-theme attempt lasts a mere three measures, obsessing
over three pitches: A, B, and C. This second problematic S variation is followed by a third subrotation, wherein TR rhetoric builds to a crisis chord pairing an F-minor triad with a D-flat/G-flat dyad; then, after a one-measure pause, the third S attempt commences. The most fully formed of the three, this variant is substantially extended compared to the previous two attempts and outlines A major while prominently featuring an expansion of melodic module $S^{\text{gen3}}$ that strongly resembles a lyrical variation of the breakthrough theme from Mahler I/iv.

The structural layout of this third S variant, the most substantial of the three, maps roughly onto the second part of the exposition and includes four repetitions of the $S^{\text{gen3}}$-based variant module. During the fourth repetition, musical energy gain reminiscent of the “call to attention” from the end of the exposition’s S-zone leads to a breakthrough climax in C major in m. 436, a vision of major-mode redemption.\footnote{This is in dialogue with the redemption paradigm—the expressive schema in which minor-mode tonic is displaced by major mode at the movement’s conclusion—and the notion of fantasy projection, a breakthrough vision of major-mode attainment that is ultimately unsustainable. See Darcy, “Bruckner’s Sonata Deformations” and “Rotational Form, Teleological Genesis, and Fantasy-Projection in the Slow Movement of Mahler’s Sixth Symphony.”} The breakthrough features the congruence of the S-zone’s triple meter and a rhetorically strident breakthrough variation of a new melodic fragment first introduced earlier in this subrotation. This return to triple-meter metric stability again recalls the end of the exposition, and the major-mode tonic appearance perhaps serves as both a breakthrough vision of tonal redemption for this movement and as a foreshadowing of the C-major breakthrough in the symphony’s finale.\footnote{The presence of a major-mode breakthrough during the final movement of Shostakovich’s Fourth Symphony is an additional general point of correspondence to Mahler’s First Symphony.} The major-mode vision is not meant to last, however, and fragmented destabilization soon resumes. This retransition is reminiscent of the end of the exposition, eventually juxtaposing an F-sharp bass with a C/A dyad just before a return to primary theme material at m. 477.
Each of these three subrotations features the rhetorical and thematic reforming of expositional material, as well as reengagement with the tonal issues introduced in the exposition. In examining each subrotation, I will address these expositional connections in light of rotational, thematic, and tonal factors. Additionally, I will continue to examine the apparent ongoing dialogue between this movement, Symphony No. 5’s first movement, and Mahler’s First Symphony.

Subrotation 1

Subrotation 1 launches the development with a statement of \( P^1 \) in F minor at m. 160, and at first seems to correspond to a typical development zone.\(^{10}\) A change from triple meter to duple facilitates the return of the primary theme in its original note values from the opening of the exposition. This meter change also helps to demarcate this section as separate from the triple-meter conclusion of the S-Zone. Moreover, the presence of \( S^{gen1} \) paired with the primary theme at m. 160 creates a sense of synthesis between the two thematic modules as the development begins, and mirrors the treatment of \( P \) and \( S \) in the first developmental module of Shostakovich

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\(^{10}\) In addition to the return of the \( P \) theme, the use of F minor as a key area in the development is seen in Shostakovich V/i, and the subdominant is proposed by A. B. Marx as a standard choice for developments in minor-mode sonata-form movements. See Marx’s “Form in Music,” translated and edited by Scott Burnham in *Musical Form in the Age of Beethoven*, Cambridge Studies in Music Theory and Analysis no. 12 (New York: Cambridge University Press, 1997) and Birgitte Moyer’s “Concepts of Musical Form in the Nineteenth Century, with Special Reference to A.B. Marx and Sonata Form” (Ph.D. diss., Stanford University, 1969) for details on Marx’s concepts of sonata-form developments; and Kholopov’s “Form in Shostakovich’s Instrumental Works” in *Shostakovich Studies*, ed. David Fanning (Cambridge: Cambridge University Press, 1995) for exploration of Marx’s formal structures as manifest in Shostakovich’s works.
V/i and Mahler I/iv.\textsuperscript{11} At the start of subrotation 1, the trombones present S-theme modules $S_{\text{gen}1}$ and $S_{\text{gen}2}$, accompanying the imitative P-theme treatment, before joining in the P-based imitation at m. 168. And lastly, the imitation seen between statements of the P theme during this development’s beginning is a shared feature with Shostakovich’s imitative P-theme statements at the beginning of development space in Symphony No. 5.\textsuperscript{12}

Even still, this first subrotation maintains a greater presence of expositional elements than is typical for the development space in sonata-form layouts. Most notable is the preservation of the medial caesura gesture: after extending and varying the P theme in F minor, fragments from the descending conclusion of the TR zone appear in the high winds beginning in m. 176. As in the exposition, this descending line is matched with an ascending scalar line in m. 182 and the subsequent return of OCT 0,2 and the A/C dyad in m. 194 continues to track the expositional TR and MC.

Whereas these scalar and octatonic elements were featured at the MC in the expositional rotation, the maintaining of the actual MC gesture itself within the development is somewhat unusual. Because of the rarity of MC repetitions in development space, its presence (coupled with the ordering and retention of the scalar and octatonic expositional elements) signals a

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\textsuperscript{11} As noted earlier in this chapter, rotation 2 of Mahler I/iv begins with a brief flashback to material from the first movement. At the beginning of the development proper, the musical modules from the exposition appear roughly in order; after a retracking of the introduction, the P- and S-themes appear first sequentially, then simultaneously. Mahler I/iv’s development also follows simultaneous statements of P and S with TR material, as this movement does. This kind of combination is quite common in development zones. See Hepokoski and Darcy, \textit{Elements of Sonata Theory}, 205–220 for additional details on development-space thematic considerations.

\textsuperscript{12} Symphony V/i’s developmental space also begins with quasi-imitative treatment of P-based material. Symphony V/i, however, features an S-theme that more closely resembles its P-theme. This thematic resemblance—and the fact that both expositional themes are more tonally stable in Symphony V/i—may provide some basis for considering the differences in S-theme treatment between the two symphonies.
departure from conventional developmental techniques. As a result, a stricter rotational retracking of the exposition displaces the normative harmonic sequences and tonal exploration usually seen in development space. This retracking in some sense temporarily contradicts the prevailing development-space rhetoric typical of a sonata-form structure, and consequently continues to obfuscate the formal progress of the movement by alluding to the exposition so directly. While strongly in dialogue with development-space techniques, expositional retracking simultaneously clouds the sense of forward motion through the form, perhaps questioning whether the work can truly move on, given the S-zone’s problems, without another corrective visit to the material.

After the reproduced MC gesture in m. 194, numerous musical elements indicate a potential recomposition of the exposition’s second part with a more conventional key area and thematic structure. Example 5.1 shows the approach to the MC, as well as the $S^0$ module and the beginning of the first S-variant. The hammer-stroke chords following the MC in m. 194 are paired with A-flat caesura fill to create a (0234679) septachord; this (0234679) septachord contains the (023469) hexachord, seen at the analogous MC event in the exposition, as a subset. Additionally, this septachord statement features pitch classes symmetrical around C, the other member of the A/C dyad seen at the MC in the exposition (the exposition’s MC featured A as the point of symmetry). And finally, the presence of A-flat as caesura fill here—analogous to the exposition’s C-based caesura fill, subsequently realized as the key area of $S^0$’s opening—suggests reorientation toward the submediant and preparation for a more typical S-theme tonal choice.

This septachord also contains the (01247) pentachord as a subset; however, as will be detailed later in this section, the development as a whole shifts away from (01247) in favor of alternative pentachords and complementary pentachord/septachord pairings.
EXAMPLE 5.1. Shostakovich, Symphony No. 4, i, mm. 191–213, reduction
This tonal and rhetorical correction toward a more normative S-zone continues after the MC into the recomposition of $S^0$ (also shown in Example 5.1). The $S^0$-module overwrite begins in m. 198, with alterations that more closely resemble typical historical examples of caesura fill and $S^0$-module rhetoric. Truncated from four-measure thematic statements into two-measure units, the sequential opening motive of $S^0$ repeats only twice before dissolving to a repeated A-flat. The oversized and tonally unclear $S^0$ seen in the exposition is overwritten here as briefer and more typical sequential $S^0$ rhetoric, then paired with a potential tonic preparation seen in more conventional S-themes. In light of this potential key area correction, the appearance of A-flat can perhaps be viewed in relation to the E-flat tonal preparation at $S^0$’s conclusion in the exposition, or a kind of fulfillment of that E-flat as the potential dominant of A-flat. (At this point in the exposition, a sudden turn to F and G in the measure immediately preceding the beginning of $S^1$ displaced the E-flat tonality and reoriented the tonal direction of S at the last minute.)

The shortened, sequential nature of the $S^0$ statements and the insistent repetitions of A-flat are all signs of a more standard rhetorical introduction and tonal preparation for S. Thus positioned, the subsequent S-theme variant can serve as replacement for the tonally confused and melodically wandering secondary theme. This promise, however, is not fulfilled. The descending

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14 The ending of a more normative historical $S^0$ module would typically feature a dominant preparation for the new key area. Though the E-flat was not realized as a dominant preparation in the exposition’s S-zone, it was presented as an option in a formally suitable location. The potential submediant modulation was also subtly represented in the aforementioned $T_4$ relationship between the MC and EEC hexachords. Whereas the exposition obfuscated tonal grounding while accomplished hexachordal closure, this development-space move to A-flat could be viewed as the delayed addressing of the S-theme’s tonal difficulties, a development-space realization of the exposition’s E-flat $S^0$ preparation. This brings the theme’s tonal trajectory in line with the hexachordal relationship, perhaps as part of an attempt to reform the unrealized expositional tonal preparation while still obscuring formal and tonal boundaries.
arpeggios of an $S^{\text{gen5}}$ variant, the last of the S-theme modules, derails this variant’s attempts at a more conventional and straightforward recomposition of S-space. $S^{\text{gen5}}$ juxtaposes C major and F major tonalities—a reenactment of the tonal confusion from the exposition’s S-theme—against an A-flat pedal in the basses and timpani. In addition to the return of tonal ambiguity, the meter changes from the exposition return at m. 221, reintroducing the metric instability from exposition space. This meter change simultaneously complicates efforts to reform the earlier S-space material and further bonds this development rotation with the exposition’s statement of S.\footnote{This connection between $S^{\text{gen5}}$’s restatement and its initial statement raises issues regarding the interaction of rotational considerations and sonata-form boundaries in interpretations of this movement’s formal structure. One point in particular may be addressed here: Pauline Fairclough labels this melodic change in m. 207 as the beginning of the exposition’s transition zone, featuring a “ghost waltz” (see \textit{A Soviet Credo}, 95). Hepokoski and Darcy’s various explications of rotational form would contradict Fairclough’s reading. I read this melodic return in concordance with Hepokoski and Darcy’s rotational principles for several reasons. First, regardless of sonata-formal boundary designation, this melodic module is not a new melodic idea; it was previously stated in an initial referential rotation that included two contrasting melodic presentations, themselves strongly in dialogue with typical sonata-formal exposition presentations. Thus, the $S^{\text{gen5}}$ return here, after a restatement of P, its precedent thematic module from the exposition’s referential rotation, privileges hearing this not as a thematic and rotational beginning, but as a mid-rotational event (see Hepokoski and Darcy, \textit{Elements of Sonata Theory}, 354). Second, this mid-rotational status is further confirmed by the repetition of the MC-like gesture in m. 194; in dialogue with its sonata-form role, the MC rhetoric suggests a strong mid-rotation formal boundary marker between the first and second themes of the referential rotation and its repetition here. Third, this subrotation and the one that follows feature dramatic decreases in musical energy; while not unheard of, such decreases are atypical in transition zones. However, developmental passages featuring a decrease in musical energy followed by musically static fantasy projections or diversionary material are not unusual in the development zones of modern-era symphonic composers. Such slowdowns and diversions occur in the development zones of several Mahler symphonies, including Symphony No. 1.}

After further exploration of material from $S^1$, a repeated C-B motive displaces S-theme material at m. 222, and the return of the “inferno” triplet motive from $P^1$ at m. 233 derails the reformation and ends subrotation 1. The reintroduction of P-based motives in m. 233—along with textural changes including the return of the full wind section—ends this subrotation without
suitable tonal or rhetorical resolution. Two elements, however, refuse to be displaced from the end of the subrotation 1: the A-flat pedal remains through the return of P-based material and into the beginning of subrotation 2; and the meter changes from the end of the S-variant place this return to P in 6/8, not its usual duple or quadruple meter. These two promises of S-space realization—the submediant tone and the triple-oriented meter—continue on, perhaps still seeking attainment of a more fully formed S-theme variant. They also serve to obscure the boundary between this subrotation and the next, recreating the boundary blurring seen at formal demarcations throughout the movement thus far.

Subrotation 2

Subrotation 2 commences in m. 233 with ascending triplets and diatonicism reminiscent of the opening primary theme. The tonality is ambiguous, focusing on B while featuring elements of both C major and C minor. In terms of tonal stability, this second subrotation dislocates itself quickly: first, whole-tone collections dissipate C diatonicism. Next, a return to A-flat is followed by P-based ascending figures featuring G, D, and whole-tone figures, before eventually settling on G.

This thwarted effort at a second retracking is further problematized by a massive loss of energy at the approach to the MC gesture.\textsuperscript{16} Despite the loss of energy, rhetoric suggestive of a medial caesura appears in mm. 245–248; the repeated G acts almost as caesura fill, potentially preparing G as dominant of C. Nevertheless, this MC gesture lacks the bravura and strength of

\textsuperscript{16} Typically, the approach to a medial caesura is characterized by energy gain generated by the transition zone. The subsequent grand pause then dissipates the accumulated energy in preparation for the contrasting secondary theme. See Hepokoski and Darcy, \textit{Elements of Sonata Theory}, 30–36, for additional details.
both a generic MC and of the previous MC appearances in this movement. The typically strident caesura fill is now intermittent and features a dramatic decrease in musical energy; the previously vigorous hammer chords then appear after the fill, arriving late at m. 249 and reduced in number to a single chord.

Presented at a *mezzo-piano* dynamic, the hammer chord in m. 249 is also one note short: a (02358) pentachord is stated here, in place of the larger hexachords and septachords employed at analogous formal boundaries within the movement. Example 5.2 shows the second part of subrotation 2 and the first part of subrotation 3. This pentachord is closely related in set-class space to the (01247) pentachordal subset featured at the MC and EEC; the two pentachords can be viewed as a P1 relation, removed by a single semitone. While bearing some resemblance to previous MC events, this pentachord continues the process of movement away from the chordal language of the exposition more dramatically than does its predecessor in subrotation 1. This shifting of chordal language away from the exposition, coincident with the more dramatically attenuated second subrotation, starts to derail the direct retracking of the exposition and the promise of a corrective experience of S, leading instead into an uncertain future of development-space struggle.

Instead of becoming a full-fledged version of the S-theme, the subsequent S-like melody features an ascending line suggesting A minor before becoming preoccupied with a B-C dyad, the same repeated dyad at the end of the previous S-variant attempt. The melody also simultaneously presents P and S elements. Rhetoric matching previous S-theme attempts is paired with a P-based fragment, collapsing the second rotation at mm. 251–252.

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EXAMPLE 5.2. Shostakovich, Symphony No. 4, i, mm. 241–255, reduction

241 [Subrotation 2 in progress]

MC? (energy gain, hammer stroke gestures)

244

Subrotational overlap between subrotations 2 and 3
S/P melody (S-like rhetoric, P-like theme)

249

[8,E,1,2,4]
(02358) pentachord (5-25); complement of 7-25 septachord at
closure of previous subrotation. This is first boundary chord without (01247) subset.

254

[5,6,8,E,0,1]
Crisis chord (012578)
Subrotation 3

The third subrotation responds to this critical breakdown with the musical energy of TR rhetoric, followed by the extended and substantial third S-theme attempt. Also shown in Example 2, a dramatic building of musical energy featuring increasingly faster repeated C’s continues into m. 255, where (012578) crisis chords present an F-minor triad, along with B natural and a D-flat/G-flat dyad. While these six pitches all belong to the OCT 0,1 collection, the most sonically salient feature of the chord, the F-minor triad, also suggests a possible tonality for the forthcoming attempt at S, in this case one of the original S-theme tonal foci, F minor. After prolonging the crisis chords for five measures, a dramatic pause at m. 260 clears musical space—by means of an MC-like grand pause—for the third S attempt.

The overall thematic layout of this third S-variant features four statements of the $S^{\text{gen3}}$ melodic module before a moment of breakthrough, then one statement after the breakthrough, as part of a retransition-like passage. Figure 5.4 shows the overall structure of subrotation 3. Thematically, the four-repetition scheme of the S-overwrite portion closely matches the thematic layout of the exposition’s S-zone. First, $S^{\text{gen3}}$ is transformed into a lyric main theme at m. 263; next, other S-theme modules from the exposition append $S^{\text{gen3}}$, including $S^{\text{gen1}}$ and $S^{\text{gen4}}$-based modules. Even still, $S^{\text{gen3}}$ maintains its position as the head motive of these four melodic statements and serves as the center of this S-based thematic variation.

I will trace four elements throughout this third S-variant. First, this subrotation’s S-variant presentation is strongly in dialogue with the expositional statements of $S^{\text{gen}}$ modules. This dialogue is maintained specifically by means of the overall layout, the repetition scheme of multiple $S^{\text{gen}}$ modules, the tonalities of these appearances, and recurrent meter changes.
FIGURE 5.4. Shostakovich, Symphony No. 4, i, development, subrotation 3.

<table>
<thead>
<tr>
<th>Large-scale rotations</th>
<th>Rotation 2 - Development, cont.</th>
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<tbody>
<tr>
<td>subrotation</td>
<td>Subrot. 3</td>
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<tr>
<td>thematic modules</td>
<td>TR crisis</td>
</tr>
<tr>
<td>measure #</td>
<td>252</td>
</tr>
<tr>
<td>S thematic modules</td>
<td>f/g-flat</td>
</tr>
<tr>
<td>key areas:</td>
<td>[012578]</td>
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<th>Rotation 2 - Development, cont.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Subrot. 3, cont.</td>
</tr>
<tr>
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<td>S-var3 (2x)</td>
</tr>
<tr>
<td>measure #</td>
<td>335</td>
</tr>
<tr>
<td>S thematic modules</td>
<td>Sgen3+cuckoo +Sgen3</td>
</tr>
<tr>
<td>key areas:</td>
<td>B+B-flat+D</td>
</tr>
</tbody>
</table>

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<thead>
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<th>Large-scale rotations</th>
<th>Rotation 2 - Development, cont.</th>
</tr>
</thead>
<tbody>
<tr>
<td>subrotation</td>
<td>Subrot. 3, cont.</td>
</tr>
<tr>
<td>thematic modules</td>
<td>S-var3 (3x)</td>
</tr>
<tr>
<td>measure #</td>
<td>372</td>
</tr>
<tr>
<td>S thematic modules</td>
<td>Sgen3+cuckoo</td>
</tr>
<tr>
<td>key areas:</td>
<td>A+D</td>
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</tbody>
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<thead>
<tr>
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<th>Rotation 2 - Development, cont.</th>
</tr>
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<tr>
<td>subrotation</td>
<td>Subrot. 3, cont.</td>
</tr>
<tr>
<td>thematic modules</td>
<td>S-var3 (4x) + Breakthrough</td>
</tr>
<tr>
<td>measure #</td>
<td>428</td>
</tr>
<tr>
<td>S thematic modules</td>
<td>Sgen3</td>
</tr>
<tr>
<td>key areas:</td>
<td>D</td>
</tr>
</tbody>
</table>

associated with the exposition’s S-zone. Second, the presence of whole-tone figures in the harp and celeste suggest a kind of fantasy projection; these instruments are highlighted in this section; I read this highlighting as a hermeneutic and rhetorical reference to an ultimately unattainable
major-mode S-zone dream or vision. Third, after the fourth repetition of \( S^{\text{var3}} \), the aforementioned dramatic breakthrough serves as the climax of the fantasy projection and highlights a melodic fragment introduced and developed throughout this third subrotation. And fourth, the ongoing dialogue with the development section of Mahler I/iv is maintained in this variant through formal and thematic correlations.

\( S^{\text{var3}} \) theme’s first and second phrases begin with melodic material whose contour strongly resembles the trumpet arpeggio motive and breakthrough theme from Mahler I/iv. Additionally, the “inferno” trumpet triplet figure from Mahler I/iv returns in this subrotation. And finally, the flute cuckoo figure from Mahler I/i is presented during this subrotation for the first time in the movement, and even appears at its original pitches. These allusions and quotations and their placement—along with the fantasy projection instrumentation and the prominent breakthrough—continue to evoke a sense of connection with Mahler I/iv’s development. This all coincides with the appearance of the third S-variant theme, which can itself be viewed as a variation on melodic material from Mahler I/iv’s extra-formal interruption of development space.

Overall, the initial statement and each repetition of the S-variant module engage the expositional thematic modules in roughly the same order during each repetition, as well as introducing the eventual breakthrough motive and various quotes from Mahler’s First Symphony. The first iteration of the S-variant occupies mm. 261–334 and presents the \( S^{\text{gen3}} \)-based variant theme in A major; whole-tone harp figures and the breakthrough motive are also introduced. The second, mm. 335–371, features the return of \( S^{\text{gen3}} \) in B major paired with a

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18 See Darcy, “Rotational Form,” 54. In the case of Mahler VI/ii, these interpolations into the rotational structure present a fantasy projection in E-flat major within the movement’s overall A-minor tonal plan.
cuckoo-like descending fourth; waltz-like versions of $S_{\text{gen}4}$ and $S_{\text{gen}1}$ are then followed by the return of octatonicism and the whole-tone harp figure, now in the celeste. The third iteration spans mm. 372–427 and places $S_{\text{gen}3}$ back in A major, now paired with an exact quote of the cuckoo motive from Mahler I/i at its original D-A pitches. This is followed by an inferno-like version of $S_{\text{gen}4}$, the return of the Mahler I/iv “inferno” trumpet motive, the development breakthrough motive, $S_{\text{gen}4}$ and $S_{\text{gen}1}$, and even material reminiscent of the primary theme, as this repetition gains musical energy.

The fourth iteration begins at m. 428; the briefest of the repetitions, it builds off of the previous repetition and presents $S_{\text{gen}3}$ in D major before a crescendo ushers in the breakthrough climax in the key of C major, placed over G and reminiscent of a dominant-functioning cadential six-four configuration. After the triumphant C-major breakthrough, the rotation ends by dissolving subrotation 3’s tenuous fantasy vision of a rectified S-zone theme. A chaotic retransition section beginning in m. 446 features a fifth appearance of $S_{\text{gen}3}$. This retransition rhetoric, fragmentation, and dissolution of the vision into sardonic chaos breaks the spell of the S-variant and further complicates the sense of overall sonata structure by presenting transitional rhetoric suggesting the potential end of development space without solving the S-theme’s tonal and rhetorical dilemmas.

Let us now look at the third S-variant in detail. After a grand one-measure pause following the crisis chords, a soft, E-G dyad from the low strings in m. 261 sets up what will become the most suitable candidate for an S-theme yet, a plaintive bassoon theme. Comprised of three phrases total, the third S-variant begins in m. 263 in A major, a modally mixed submediant

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19 These two major key areas—C and D—and the placement of the breakthrough theme over a bass scale-degree 5, are also prominent features of the breakthrough events in Mahler I/iv.
and member of the A/C dyad that opens and recurs throughout the movement.\textsuperscript{20} This A-major tonality also features the same modal mixing seen in the C-oriented primary theme, namely the presence of lowered scale degrees 6 and 7.

Example 5.3 shows the first entrance of $S^{\text{gen3}}$ in subrotation 3. $S^{\text{gen3}}$ was first heard in the cello line near the beginning of $S^1$, at mm. 53–55 in the exposition. Originally appearing in C minor, it was also presented in F major, in mm. 106–109 of the S-Zone. At m. 263, it is presented in the remaining key option from the prevailing S-Zone tonalities, A. This phrase, spanning mm. 263–286, considerably extends the $S^{\text{gen3}}$ melodic fragment with material reminiscent of other $S^{\text{gen}}$ fragments, but without any additional direct quotations of $S^{\text{gen}}$ materials besides $S^{\text{gen3}}$.

Although this lyrical $S^{\text{gen3}}$-based theme is rhetorically and tonally well-formed at its start, any sense of normative S-theme cadential achievement is undermined both by returning elements of the expositional S-zone modules and new elements. These new elements include an underdetermined bass and dreamlike whole-tone harp figures, both displayed in Example 5.15. Tonally, this phrase leaves A major behind relatively quickly; in m. 274 the tonal orientation seems to turn its focus from A major to D minor. The end of the phrase returns to E, which can be heard as a possible dominant of A, but this return is ultimately left unconfirmed by any definitive melodic or harmonic gesture.

Moreover, the bass fails to support the opening A-major tonality as well, instead intermittently repeating E, G, and C-sharp. As if to underscore this unsettling combination of melody and bass tonalities, otherworldly near-whole-tone harp figures in m. 284 and m. 286 cast

\textsuperscript{20} This key choice is also in dialogue with the increasingly common use of the submediant as a secondary theme key. See Darcy, “Bruckner’s Sonata Deformations,” 271–74, for details on submediant keys and Darcy’s concept of S-theme alienation.
EXAMPLE 5.3. Shostakovich, Symphony No. 4, i, mm. 261–299, reduction

261

Sgen3 as S-variant

bassoon $P_{espr.}$

strings

274

reorients from A major toward D minor

284

melodic material from bass in S-zone (m. 141), tonality unclear (D Phrygian or C minor)

harp $P$

violas, v-c $P_{espr.}$

near whole-tone

v-c, c-b, harp

294

hints of Sgen^4 and F major...

meter changes reminiscent of S-zone...
this section as mysterious and fantastical, sonically set apart from the rest of the movement through the highlighted instrumentation and pitch collection. By reintroducing the tonal uncertainties of the exposition, and in persisting with the ominous and tonally noncommittal bass line and harp figures, this opening phrase simultaneously represents the hope of a coherent S-variant in a suitable key and provides ever-present reminders of the movement’s previous challenges in producing a stable S-theme.

The openings of the S-variant theme’s first and second phrases bear strong resemblance to the breakthrough brass arpeggios and subsequent theme from Mahler I/iv. The S-variant theme’s opening arpeggio gesture, contour, and rhythm recall the Mahler brass breakthrough motive, shown with the Shostakovich S-variant in Example 5.4. The second phrase of the S-variant theme is also displayed in Example 5.4. While less precise a match to the Mahler breakthrough theme, it does feature similar descending-fourth motives, followed by an ascending leap of a seventh.

This resemblance is highlighted further at later points in the development, where these themes are paired with direct quotations from Mahler I/iv. Figure 5.5 shows the key areas and quotations from Mahler I/iv that appear in each repetition of the S-variant theme in subrotation 3. Each repetition of the Mahler-reminiscent S-variant theme features an increased presence of other Mahler I/iv quotations. Furthermore, the key areas of these repetitions feature the pitches that make up the melodic link between the brass arpeggios and breakthrough theme in Mahler I/iv: A-B-D. Lastly, the fourth repetition’s key choices, D and C, are featured key areas at the breakthrough statements in Mahler I/iv. The Mahler theme, originally an interjection of strength and vigor, serves perhaps as an external reformation attempt here, as though seeking to finally create a suitable S theme. The evident futility of this fantasy, as it were, is highlighted by the
**EXAMPLE 5.4.** Shostakovich, Symphony No. 4, i, mm. 263–275 and 287–295, demonstrating correspondences to Mahler, Symphony No. 1, iv, mm. 624–626 and 306–316

Shostakovich IV/i, S-variant theme, first phrase (mm. 263–275)

\[ \text{263} \]

Mahler I/iv, trumpet arpeggio breakthrough motive, third appearance (mm. 624–626); stems indicate correspondence to Shostakovich

\[ \text{624} \]

Shostakovich IV/i, S-variant theme, second phrase (mm. 287–295)

\[ \text{287} \]

Mahler I/iv, Breakthrough theme, first appearance (mm. 306–316); marked intervals indicate correspondences to Shostakovich

\[ \text{306} \]
FIGURE 5.5. Shostakovich, Symphony No. 4, i, subrotation 3 key and quotation layout, outlining additive quotation/allusion schema of repetitions

<table>
<thead>
<tr>
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<th>m. #</th>
<th>Key</th>
<th>Mahler I/iv allusions and quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repetition 1</td>
<td>263</td>
<td>A major</td>
<td>S-var3 (trumpet arpeggio; breakthrough theme)</td>
</tr>
<tr>
<td>Repetition 2</td>
<td>335</td>
<td>B major</td>
<td>S-var3; cuckoo motive (from Mahler I/I, also quoted in Mahler I/iv)</td>
</tr>
<tr>
<td>Repetition 3</td>
<td>372</td>
<td>A major</td>
<td>S-var 3; cuckoo motive at pitch (D-A); trumpet triplets</td>
</tr>
<tr>
<td>Repetition 4</td>
<td>428</td>
<td>D/C</td>
<td>S-var3; figuration; key areas; cadential six-four harmonic emphasis at breakthrough</td>
</tr>
</tbody>
</table>

transformation of this strong theme through subdued, otherworldly, dreamlike instrumentation, whole-tone collections and tonal uncertainty, and eventual encroachment of the metric shifts from the exposition.\(^{21}\)

This S-variant’s second phrase, found in mm. 287–309, continues to wander from A, introducing D-Phrygian material over the same G-E-C-sharp bass line as the first phrase. By m. 297, a melodic fragment resembling \(S^{\text{gen}4}\) provides F major tonal allusions in the melody, while the return of metric shifts first featured in the exposition further destabilizes this fantasy of S-theme redemption. As the \(S^{\text{gen}4}\)-like melody continues in m. 300, it is accompanied by a descending scale strongly resembling \(S^{\text{gen}1}\). These \(S^{\text{gen}}\) modules are paired contrapuntally or

\[^{21}\text{The matching of the S-variant theme with motivic allusions to Mahler I/iv also reemerges near the end of subrotation 5, to be discussed later in this chapter.}\]
placed sequentially throughout each section of the third variant, and this appearance establishes a \(S^{\text{gen3}}, S^{\text{gen4}}, S^{\text{gen1}}\) ordering that chiefly holds constant throughout this subrotation. One additional melodic motive is then added to the S-variant: over the course of mm. 300–307 a crescendo leads into the first statement of a new breakthrough motive, shown in Example 5.5. This breakthrough motive first appears in E-flat major as a three-measure melodic fragment, accompanied by a (02358) pentachord, the same pentachord found at the MC in subrotation 1. This latest melodic addition also ends without tonal closure, instead dissolving into a repetition of the whole-tone harp chords.22

The third phrase begins with a melodic variation of \(S^{\text{gen4}}\) in m. 318. Starting in D, this module features a small-scale breakthrough in E-flat major: at m. 324, a crescendo highlights a fortissimo high-E-flat-to-high-B-flat melodic leap, a variation of which was featured as a breakthrough moment in Shostakovich’s Symphony no. 5.23 After this breakthrough gesture, a two-measure meandering G-major melody is framed by two one-measure silences, dissipating the breakthrough energy and returning to a harp ostinato E and the beginning of the second statement of the S-variant theme.

The second presentation of the S-variant-3 theme begins in m. 335, and is considerably shorter than the previous presentation. Again introduced by a repeated E, the \(S^{\text{gen3}}\) melody appears in B major, A major’s upper neighbor, instead of maintaining or reinforcing the previous A-major key. This tonal departure is yet an additional sign that recent attempts at creating a more

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22 A somewhat analogous technique is seen in the development of Symphony V/i. During the development’s entry zone, S statements are appended by \(P^3\), \(P^{1.0}\), and \(P^{1.1}\) modules. These modules also reemerge after S’s post-crux restatement: \(P^3\) is interjected between \(S^1\) and \(S^2\).

23 See chapter 2, 73–75 and 85–86. In Symphony V/i, an extremely similar motive featuring an ascending leap up (from B flat to F) first appears in P-space, then returns near the end of the secondary theme zone.
EXAMPLE 5.5. Shostakovich, Symphony No. 4, i, mm. 307–314, reduction

suitable S-Zone may not accomplish the tonal and rhetorical clarity that the exposition failed to produce.

Melodically, the return of $S_{gen}^3$ in B major is paired with a cuckoo-like descending fourth motive in the piccolo. This allusion to Mahler I/i foreshadows the more literal quote to come in the next repetition. The piccolo’s fourths are insistent, playful, and even mocking, as they continue along with brief waltz-like versions of $S_{gen}^3$ and $S_{gen}^4$ in mm. 348–352. $S_{gen}^1$ is then
followed by the return of octatonicism and the whole-tone harp figure, now transferred to the celeste. This figure and its associated instruments—harp and celeste—mark melodic phrase boundaries in this subrotation, and continue to lend a fantasy association to this variant.

The third repetition of S-variant begins in m. 372, with a return to $S^{\text{gen}3}$ and A major. This repetition begins the musical energy gain that eventually culminates in the breakthrough climax and correlates to the resurgence of melodic ideas last featured in the “call to attention” portion of the expositional S-zone, including the “inferno” trumpet quotes from Mahler’s First Symphony first heard then. As this repetition unfolds, the opening $S^{\text{gen}3}$ theme is paired almost immediately with a direct quote of Mahler’s “cuckoo” descending fourth motive from the first movement of the First Symphony, the first time in the movement that this quote has appeared at pitch.24 This melody and quote are accompanied by (026) whole-tone trichords, creating a compression of elements—$S^{\text{gen}}$ melodic modules and whole-tone interjections—that have thus far appeared sequentially in this variant. Next, a variant of $S^{\text{gen}4}$ overlaps with $S^{\text{gen}3}$, outlining D minor beginning in m. 383. This statement of $S^{\text{gen}4}$ resembles its appearance in the “call to attention” portion of the exposition and features an analogous increase in musical energy.

An accelerando continues this energy gain to m. 393, where the “inferno” triplet trumpet motive from Mahler I/iv reemerges; these triplets were also last seen in the expositional S-zone’s “call to attention,” at mm. 132–134. Example 5.6 displays these Mahler triplets and the breakthrough passage that follows. Like its expositional statement, this appearance of the Mahler triplet figure features OCT 1,2 with an F pedal. In this passage, however, the F serves not as the bass but as one of three repeated tones: D, F, and F-sharp, with D serving as the bass. D as bass

24 In Mahler I/iv, the cuckoo motive quotation is also reserved for a breakthrough episode during the movement’s development section.
EXAMPLE 5.6. Shostakovich, Symphony No. 4, i, mm. 393–399, reduction
in this segment prolongs D’s recent presence as interlocutor with A during the tonally ambivalent melodic statements of this S-variant. The juxtaposition of D and C at the moments leading up to the breakthrough mirrors the key pairing at the moment of breakthrough in Mahler I/iv, though in reverse order: the C tonality gives way to the D major breakthrough in Mahler I/iv, while here the suggestions of D throughout the third S-variant eventually gives way to C major at the breakthrough climax.

These three Mahler motives—the brass arpeggios, trumpet triplets, and cuckoo quote from Mahler I/i—are not only matched during this third iteration of S-variant, but also appear together near the end of the development in Mahler I/iv. Such matching of allusions and quotations during an analogous formal space in Shostakovich IV/I’s not only continues its motivic and formal correlation to Mahler I/iv’s development space, but also perhaps imbues this portion of the development with the hope of a near-term third rotation or recapitulation, in line with the structure of Mahler I/iv.

The culmination of this third phrase features a preview of the breakthrough climax. As the Mahler “inferno” triplet motives accompany a crescendo push to an angular variant of the breakthrough motive in m. 396 (see Example 6), meter changes reemerge, again alluding to the exposition’s S-zone and robbing this breakthrough statement of rhetorical and metrical stability signaling arrival and triumph. After this breakthrough variant, strident entries of \( S^{gen4} \) in D minor and \( S^{gen1} \) in C major continue the musical energy unleashed during the breakthrough variant.

Along with these \( S^{gen} \) modules, ascending D-minor P-based melodic figures in m. 414 and \( P^0 \)-based tone clusters—paired with a waltz-like tonally indeterminate variant of \( S^{gen1} \) in m. 421—

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25 In Mahler I/iv, mm. 431–441 begin with a B-flat proto-statement of the triumphant D-major arpeggios found at m. 624, during the recapitulation. This arpeggio is followed first by the trumpet triplets in m. 435, then by the cuckoo quotation (transposed up a third to F-C) in m. 441.
drive the musical energy forward while suggesting a potential retransition to, or resurgence of, the primary theme.

The final repetition of the S-variant takes place in the midst of an emphatic push toward the breakthrough climax of this subrotation. At m. 428, the fourth statement of S-variant commences in D major. Shown in Example 5.7, the D major $S^{gen3}$ S-variant melody is matched with energetic scalar figures reminiscent of those preceding the breakthrough in Mahler I/iv. These figures shift from C diatonicism to figures suggestive of F major; at m. 433, elements of F and C are combined as the music slows in preparation for the breakthrough. The climactic breakthrough moment arrives at m. 436, where a resolute C-major triad accompanies the triple-\textit{forte} breakthrough melodic motive. The G in the bass keeps this moment energized, suggesting a cadential dominant-like harmonic landscape of the breakthrough moment in Mahler I/iv. Ascending triads and a steady triple meter also add to the drama and triumph of this moment of tonal and thematic clarity. This breakthrough is not only a vision of the major-mode tonic, but also serves in some sense as a preview of the triumphant return of C major during the symphony’s final movement.

This triumphal moment is, however, not meant to last. The first event to undermine the C-major-mode vision appears at m. 441, where the breakthrough theme is repeated not in C major, but in B-flat major, C’s whole-step lower neighbor. This key places the repeated melodic motive at odds with the E-flat-major harmony at the bar’s downbeat and the G bass. This B-flat tonality shift not only derails the tonic major-mode fantasy, but previews the bass’s departure from G, sustained through mm. 436–445, to B-flat, in m. 447. This move forgoes any resolution of the C-major dominant, G, and instead takes up the melodic B-flat emphasis at the moment of the breakthrough’s dissolution.
EXAMPLE 5.7. Shostakovich, Symphony No. 4, i, mm. 428–453, reduction

B-centered C diatonicism ...shifts through B-flat to suggested F major

Sgen3, fourth statement, now in D major

...shift to f

F major/minor or C major/minor? (01347)
EXAMPLE 5.7, cont.

Breakthrough in C major

ascending scales resemble end of exposition
(C: V♭)

Breakthrough shifts to B-flat major, still over G!

Breakthrough is derailed, retransition...

horns  
tuba
A retransition, shown at the end of Example 7, begins with a decrease in volume and the loss of breakthrough rhetoric. Scattershot minor ninths are presented alternately on and off the downbeat, lending metrical disorganization and signaling the breakdown of the fantasy. The tuba then picks up the $S_{\text{gen}^3}$ S-overwrite theme, now in B-flat, and repeats it one last time during this subrotation. This fortissimo presentation is harsh and mocking, almost making fun of the idea of redemption explored during the recent overwrite. The destabilization continues as the bass moves to F-sharp after presenting the opening 12 notes of the $S_{\text{gen}^3}$ S-variant, while the ninths continue the retransition. Allusions to P-based modules, the Mahler “inferno” trumpet triplet motive, and TR-based material lead to m. 473, where a bass return to F-sharp is coupled with a ritardando and a cadential motive featuring first D-flat, then C (C and D-flat formed one of the two opening dyads of $P^0$). This brings subrotation 3 to a close with transitional rhetoric, which, after the Mahlerian quotations and the breakdown of the breakthrough, perhaps suggests a standard Type 3 recapitulation is imminent.

**Subrotations 4 and 5: Formal Progress and Development/Recapitulation Boundaries**

Whereas subrotations 1–3 took up the problematic S-theme’s fragmentation—explored through fantasy projection—as their chief concern, subrotations 4 and 5 are then left with the task of negotiating the continued rotational structures of the development while resuming the movement’s progression through sonata-formal space. This is easier said than done; previous difficulties linger as the movement continues its rotational emphasis and struggles with the work’s formal urge to move on.
Pauline Fairclough refers to the section encompassing subrotations 4 and 5 as “a hall of mirrors: themes are transformed, often grotesquely, into miniature parodies of themselves, and there is no attempt to create links between them: each section is estranged from the next, though they derive their shapes from the same source.” The transformations Fairclough mentions involve sudden changes of timbre, style, and musical character throughout these subrotations. However, another viewpoint emerges regarding these sudden changes when considering this movement’s incessant rotational preoccupation. The fugal passage, sardonic waltz, and continued Mahlerian allusion at S’s final developmental statement all create contrast at the surface, yet they also continue a dialogue with the problematic expositional statement of S through rotational ordered references.

Subrotations 1–3 establish this pattern of rotational development by retracing the initial rotation and the ongoing evolution of the S-theme statements. During each of these subrotations, boundary markers indicating the imminent arrival of S were followed by striking changes in texture or style and varied presentations of S-based thematic modules. In this sense, these grotesque transformations in subrotations 4 and 5—and their predecessors in subrotations 1–3—may be alienated from each other stylistically, but are unified rotationally and inescapably linked to each other and to the expositional S-zone struggle through their rotational associations. To be explored in detail, these disparate yet rotationally active utterances can be considered peculiar not because they link to nothing, but because they almost obsessively link back to everything.

Figure 5.6 shows the overall structure of subrotations 4 and 5; each of these rotations commences with a clear return of the P-theme before descending into the developmental

**FIGURE 5.6.** Shostakovich, Symphony No. 4, i, development, subrotations 4–5.

<table>
<thead>
<tr>
<th>Large-scale rotation: Rotation 2</th>
<th></th>
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<tbody>
<tr>
<td>Zone: Development</td>
<td></td>
</tr>
<tr>
<td>Subrotation: SR4</td>
<td></td>
</tr>
<tr>
<td>Measure #: 477</td>
<td>499</td>
</tr>
<tr>
<td>Measure #: 679</td>
<td>818</td>
</tr>
<tr>
<td>Thematic modules: P, S-var+P</td>
<td>S-var, S-var, Svar + Mahler I/i, retrans.</td>
</tr>
<tr>
<td>Thematic modules: P (x3) + TR fragments</td>
<td>TR/MC</td>
</tr>
<tr>
<td>Thematic modules: P + TR</td>
<td>S-var</td>
</tr>
<tr>
<td>Thematic modules: c: f, f# g, b-flat</td>
<td>D-flat, E-flat</td>
</tr>
<tr>
<td>Formal function: Development</td>
<td></td>
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<tr>
<td>Near OCT/WT</td>
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<tr>
<td>Development</td>
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<tr>
<td>OCT, chromatic</td>
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<tr>
<td>(Flashback)</td>
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techniques mentioned above. In addition to rotational associations with earlier subrotations, the middle and end of subrotation 5 reflects several thematic and formal elements found in Mahler I/iv, especially in its dramatic flashback-like statement of the S-variant theme near the arrival of the crux. The key choice and quotations also resemble those found at the end of subrotation 3, creating a flashback-like dialogue between the transitional endings of subrotations 1–3 and 4–5.

Though the structural layouts of subrotations 4 and 5 mirror those of previous development subrotations and of the exposition, the process of transition between subrotations 3 and 4 initially suggests both recapitulatory and developmental activity. This sense of boundary dilemma is first manifest through musical rhetoric suggesting both a potential Type 3 recapitulation (at the border between the end of subrotation 3 and beginning of subrotation 4), which is followed by the presentation of more typical development material (including exploratory passages, a fugato-like imitative segment, and continued mapping of the development and recapitulatory retransition portions of Mahler I/iv) throughout subrotations 4 and 5. The ambiguity between the stasis of circular rotations and developmental formal progress exemplifies these two subrotations, creating uncertainty about which process will gain the upper hand.

**Subrotation 4**

The development’s fourth subrotation begins at m. 478 with the return of P¹ in F minor and rotationally retraces both tonal and thematic elements of subrotations 1–3. After the initial P¹ statement, two pairings of the S-variant theme and P-based fragments are followed by $S^{\text{gen}1}$ and $S^{\text{gen}4}$ modules. Rather than move forward into recapitulatory space, this subrotation obsessively revisits earlier rotational patterns. The P-theme reemerges in m. 551, beginning another
rotationally ordered presentation. After subsequent TR-based modules and a wedge-like motion reminiscent of previous MC gestures, a return of S seems imminent. However, in a substitution closely resembling earlier developmental subrotations, a surprising and frantic fugal string passage commences in place of S, building up musical energy by means of added contrapuntal lines and the return of P-, TR-, and S-like thematic fragments.

Some analyses consider the boundary at m. 477, what I label as the beginning of subrotation 4, as the beginning of the movement’s development section, owing to its location following the most fully developed statement of the S-variant theme. Conversely, this statement of P also appears after a retransition-like passage ending subrotation 3—one that features quotations from the end of Mahler I/iv’s development section—and could also initially be considered a potential recapitulatory passage. As at earlier moments in the movement, sonata-formal boundary designations are greatly complicated by ambiguous tonal closure, blurred boundary spaces, and continuous rotational cyclings.

Though the space commencing at this boundary becomes more texturally adventurous than previous subrotations, overall rotational designs continue to be reinforced here through evocative thematic and tonal correspondences linking this rotation with others within development space. These correspondences—as well as tonal and chordal associations—are maintained during subrotation 4 and suggest a link between subrotations 1–3 and subrotations 4–5 as part of a larger-scale development space.

\[27\] In a loose sense, this can perhaps be viewed as in dialogue with the “false recapitulation” effect near the end of development space in Symphony V/i. The return of P in V/i, while also off-tonic, more closely resembled the exposition’s instrumentation, producing a stronger recapitulation effect eventually undermined by S-based thematic material.
First, subrotation 4’s initial $P^1$ return strongly reflects several elements found at the beginning of the development’s subrotation 1, in m. 160. Both passages begin with $P^1$ in F minor, and both continue to omit the $P^0$ module in favor of $P^1$. This melodic and tonal congruence between the beginnings of subrotations 1 and 4 imbues subrotation 4’s potentially forward-moving primary-theme return with the struggles of the previous three subrotations, and of the movement as a whole. This congruence also continues the overlapping conflict between rotational forces (manifest through key and thematic associations) and rhetorical boundaries initially suggestive of both developmental and recapitulatory large-scale formal spaces (the boundary of subrotations 3 and 4) or expositional and developmental spaces (subrotations 1–5 as a whole). These sets of dual identities in subrotations 1–5 are perhaps most beneficially viewed as being in dialogue with Mahler-like interruptions of fantasy-projection developmental spaces, featuring flashback-like reflections on the exposition. Considered this way, subrotations 1–3 may be regarded as occupied with addressing previous S-zone difficulties through fantasy projection—even if those difficulties were not fully resolved—a task which seems to have taken precedence over more typical developmental processes. As such, subrotation 4 looks back to earlier rotational patterns while attempting to move forward with more typical developmental processes.

Second, a potential large-scale formal boundary between subrotations 3 and 4 is undermined by the absence of the pentachordal or hexachordal boundary chords—MC, EEC, and

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28 Whereas this return to $P^1$ is undermined as a potential recapitulation relatively quickly, the presence of a potential off-tonic recapitulatory return of P is also explored in the development section of Symphony V/i. As is the case here, developmental activities quickly displace the sense of recapitulation, and the eventual tonal resolution in both V/i and this movement correspond to thematic modules that first appeared after the opening primary theme. See chapter 2 for details on Symphony V/i’s “false-recapitulation” development-space event.
reproductions of the MC gestures—seen at previous rotational and subrotational boundaries. In comparison to these earlier boundaries, the beginning of subrotation 4 is incongruously decisive and underdetermined, with a clear statement of primary-theme material progressing without concomitant harmonic support or a firmly demarcated boundary sonority. Instead, an A/C dyad—also used throughout the movement as a formal marker, albeit it a rhetorically weak one—appears alongside F at the return of P₁.

Third, the key choice of F minor at the beginning of subrotation 4 could suggest this return is perhaps a subdominant-oriented recapitulatory technique seen in Classic-Era recapitulations. Contrariwise, returning to F minor at the statement of the most complete version of the primary theme since the movement’s opening may be considered as a kind of rotational resuming of an earlier instigated—but not yet satisfactorily realized—sonata developmental space. As mentioned, this key choice reflects subrotation 1’s F-minor beginning, and an additional appeal may be made to A.B. Marx, who lists the subdominant as a default key choice for development sections in minor-mode sonata forms. Marx’s link between the subdominant key area and formal layout would correspond not only to the formal designation of subrotation 4 as developmental, but also substantiates consideration of subrotation 1 as developmental space. Lastly, F minor continues this movement’s correspondence to Mahler I/iv, serving as global tonic of Mahler I/iv until its D-major recapitulatory breakthrough.

Ultimately, I read the key, chordal, and thematic associations as privileging rotational structures, and as suggesting that subrotations 1–5 belong to the same sonata-form space. This

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29 A well-known example of this technique includes the first movement of Mozart’s Piano Sonata K. 545.
30 See n9 in this chapter. The connection between Marx’s work and Shostakovich’s compositional practice is detailed in Kholopov, “Form in Shostakovich’s Instrumental Works.”
formal layout is, however, still problematized by the combination of rotational forces and the aforementioned sonata-form urges at work, including the retransition passage at the end of subrotation 3 and the placement of the fully formed S-variant theme. In light of subrotation 4’s seeming need to both progress through formal space and revisit the movement’s various complications, subrotations 1–3 can be viewed as developmental subrotations that are nevertheless in dialogue with the resolution of outstanding expositional concerns through fantasy projection. Subrotations 4 and 5 bring about developmental processes through additional full rotations through expositional material, a structural feature common to developments (and absent from exposition spaces). This frames the entire development as episodic, Mahlerian, and both forward- and backward-looking as a whole.

Let us now look more closely at subrotation 4’s rotational structure, and at its thematic and tonal correspondences with subrotations 1–3. Thematically, subrotations 1 and 4 closely mirror each other: P-based modules eventually destabilize each statement of S, and each S/P pairing is followed by a reemergence of TR-like rhetoric. In subrotation 4, a full presentation of \( P_1 \)’s antecedent phrase is followed by an expanded consequent featuring melodic sequences before S reappears. Twice presented simultaneously with P, S is then displaced by P-based material in mm. 499 and 514, respectively. Not only is this combination of P- and S-zone modules similar to those displayed at the beginning of subrotation 1, but the \( S^{\text{gen}1} \) and \( S^{\text{gen}4} \)

\[ \text{31 According to Hepokoski and Darcy, the absence of additional full rotations from expositional space is ontological: the exposition itself serves as the referential rotation on which subsequent rotations are based. See Elements of Sonata Theory, PAGE NO.} \]
modules’ subrotation 4 placement after the S/P pairings also corresponds to their general positioning during subrotation 3.\textsuperscript{32}

In addition to confirming rotational associations, these correspondences can be viewed as undermining the recapitulation potential at subrotation 4’s opening, eschewing progress to recapitulatory space in favor of further rotational engagement within developmental space. With the exception of a brief internal sequential expansion, subrotation 4’s initial P\textsuperscript{1} statement closely tracks subrotation 1 of the development through m. 498. This subrotation also begins with an unusual instrumentation—piccolo and clarinets—that creates the effect of both developmental experimentalism and stylistic sarcasm. F minor dissolves relatively quickly, shifting toward C diatonicism and tonal uncertainty by m. 486, in a manner closely resembling subrotation 1 and without any indication of reestablishing the global C-minor tonic. Altogether, these elements dissolve any recapitulatory impulses relatively quickly.

The rotational mapping suggested by the opening thematic and tonal references is further confirmed by a pair of S-variant statements, quickly problematized by P-based fragments. Displayed in Example 5.8, P-based motives in m. 499 continue alongside a duple-meter version of S (S was last seen in duple meter at the beginning of subrotation 1). A subsequent melodic statement of the beginning of TR in m. 503 asserts P’s prominence over S by continuing the subrotation not with S-based material, but with the TR module that immediately followed P in the exposition. Though the S-variant here is in the “correct” submediant key of A-flat major (also the key of the S-based module in subrotation 1), this statement is more developmental than its

\textsuperscript{32} The S\textsuperscript{gen1} and S\textsuperscript{gen4} ordering throughout subrotation 4 displays more variety than in subrotation 3. At times these modules appear in their subrotation 3 order, with S\textsuperscript{gen4} appearing first; at other appearances, S\textsuperscript{gen1} is first, reinstating the expositional ordering. However, these two thematic modules are used exclusively, corresponding to their exclusive use in earlier subrotations in the development, thus linking subrotations 1–3 and 4–5.
EXAMPLE 5.8. Shostakovich, Symphony No. 4, i, mm. 493–505, reduction
subrotation-1 appearance: the woodwind instrumentation and meter changes contrast with the more straightforward presentation in subrotation 1. This subrotation has thus far resurrected the main key areas of subrotation 1: F, C, and A-flat, with the P- and TR-based modules featuring F and C, and S presenting A-flat. Subrotation 4 is missing only the MC-like gestures presented in earlier development subrotations (aside from a slight MC-like association in m. 544,) in its retracking of earlier rotational structures.

Rather than break out of its rotational obsession, this subrotational tracking continues to recreate earlier developmental rotations. S’s second appearance in m. 514 features the same duple meter and melodic variations as its previous statement, but is interrupted even sooner by rhetorical and thematic elements of P. Simultaneous statements of P-based material and S’s second appearance, presented in A major (the S key presented in subrotation 3) then give way to P-based rhetoric without even completing S. These two appearances of the S-variant theme, taken together, sum up the tonal and melodic journeys of subrotations 1-3 while also tightening the rotational spiral through truncated appearances of S. Such motions represent both simultaneous progression through developmental space and the obsessive, circular reappearance of earlier development-space events.

The rotational correspondence forges ahead unabated, with a TR-like wedge motion in m. 521 and $S^{gen_1}$ and $S^{gen_4}$ modules at m. 531. These modules also followed the S-variant in subrotation 3 and their subrotation 4 statements—presented in the subrotation 1 ordering—are similarly interrupted here. First, TR-like rhetoric interjects in m. 540 and then the return of $P^1$ at m. 551 cuts prematurely truncates the $S^{gen_4}$ statement. As this thematic and rotational retracing unfolds, tonal correspondences continue as well, with emphasis on key areas presented throughout both the exposition’s S-zone and the first three developmental subrotations. Overall,
subrotation 4 presents P in F minor before dispersing into tonal uncertainty; this is followed by
S-variant material in A-flat major (last featured in S’s appearance in subrotation 1 of the
development) and A major (last featured at subrotation 3). Statements of $S^{\text{gen1}}$ and $S^{\text{gen4}}$ then
feature the same tonal ambiguity as their appearances in subrotation 3.

The close rotational correlations between subrotations 1–3 and subrotation 4 are
maintained until m. 579, where they are abruptly halted after an MC-like gesture strongly
resembling the closing of subrotation 1. At m. 551, P-based motives return, repeating three times
interspersed with TR-based fragments in a quasi-contrapuntal manner also displayed at the
opening of subrotation 1.\textsuperscript{33} The primary theme’s three iterations in mm. 551–575 once more
trace the movement’s tonal progress as seen in the exposition and in subrotations 1–3. First
featured is D minor (hinted at during the work’s $P^0$ module and featured in the development
space of Mahler i/iv); then, F minor (a constant player in the S-zone’s tonal juxtapositions and
the global tonic of Mahler i/iv); and, finally, octatonicism (featured during the TR modules of the
exposition and subrotations 1–3). Aside from the brief appearance of E minor during $S^{\text{gen1}}$, each
of the keys featured in subrotation 4 so far—C, D, F, A, and A-flat—factors heavily into the
tonal dialogues of previous rotations, and continue here to retrace subrotation 1.

\textsuperscript{33} A case could be made that this reappearance of P at m. 551 constitutes the beginning of an
additional subrotation. I have elected to include this statement of P and TR as part of subrotation
4 because of the continuing musical texture and meter, as well as the striking similarities
between the MC-like gesture ending subrotation 1 and the analogous gesture at m. 579. Also, this
later subrotation includes the beginning of TR; the structure of TR from the exposition can be
considered as Hepokoski and Darcy’s dissolving P-based type. Because TR-based fragments are
continually interrupting P-based material in this passage, I consider this passage as in dialogue
with TR’s formal and rotational presence instead of P’s. Although I designate this return of P as
an expansion of a P-based TR, an alternative parsing that partitions mm. 551–716 as subrotation
5 and the remainder of the development as subrotation 6 is plausible.
These rhetorical, rotational, and tonal allusions to subrotation 1 culminate in the boundary-marking gesture beginning at m. 576. TR-based material presents a large crescendo of instruments, and retraces the pitch-space wedge and stepwise bass descent of earlier boundary points. Signaling perhaps another attempt at S analogous to the (thwarted) attempt in subrotation 1, this TR rhetoric produces a wedge-like motion to a (012458) boundary gesture that strongly resembles the MC-like gesture at m. 196 in subrotation 1. Example 5.9 displays these analogous passages from subrotations 1 and 4. In addition to featuring minimally offset boundary hexachords, these two points also correspond rhythmically and motivically, with two-note cluster motives featuring a distinctive short-long rhythmic pattern.\(^\text{34}\)

This subrotation-4 bass approach to F-sharp, like its subrotation 1 predecessor, seems poised to present a rotationally active statement of the S theme. Instead, the expected S-based theme is declined (as it was in subrotation 1) and replaced with a surprising frantic four-voice fugal string passage, occupying mm. 580–716. This \textit{presto}, near-octatonic imitative segment first features new thematic material reminiscent of P before reintroducing melodic material more closely resembling P and S thematic modules in augmentation, altered to parlay the general character and contour of the fugato subject. Though the instruments, timbre, and formal placement of this section strongly resemble a similar passage in the development of Sibelius IV/i, the texture of the fugato is unusual for the movement.\(^\text{35}\)

The initial pitches from each voice’s entry—D, C, A, and C—mirror the first two pitch centers of the movement’s opening \(P^0\) and \(P^1\) modules (C and D) and the movement’s ongoing

\(^{34}\) (012457) and (012458) hexachords can be generically mapped onto each other by either T or I operations with a minimal offset of one semitone. See Straus, “Voice Leading in Set-Class Space,” 63.

\(^{35}\) See chapter 1 for details on the resemblance between this passage and the developmental string passage in Sibelius IV/i.
EXAMPLE 5.9. Shostakovich, Symphony No. 4, i, mm. 191–197 and 576–579, reduction, illustrating closely related boundary-marking gestures/hexachords

[asytext]

[asytext]

[asytext]

tonal dichotomy, A and C. Whereas the novel themes and fugato texture are striking, this denial of S in favor of more strident developmental material corresponds to an analogous expected appearance of the S theme in subrotation 1, at m. 207. The S statement of subrotation 1 was also
thwarted, moving instead to a strident and wandering S-gen\textsuperscript{5} variant and avoiding a fully formed lyrical S theme.\textsuperscript{36}

Example 5.10 shows the opening of this fugal passage and each subsequent voice’s entry. Whereas the \textit{presto} tempo and \textit{furioso} sixteenth-note figures propel this fugato energetically forward, the limited and obsessive character of the subject’s four statements keeps this thematic section contained until m. 679. At this point, the cellos and basses introduce a thematic module in dialogue with both the fugato subject in augmentation and with P\textsuperscript{1}. As subrotation 4 draws to a close, each of the three expositional theme zones—P, TR, and S—is featured by way of variant appearances as the fugato dissolves.

As the fugal texture disperses, material loosely derived from TR joins with the low strings’ P-like melody in mm. 689–692. Next, ascending scales and ascending three-note motives continue the TR-like rhetoric, and the melodic references change in m. 693 from P-based variants to S-based modules. Rising-third motives from the S-space “call to attention” are paired with the low instrument’s statements of an S-variant-based theme. The presence of two versions of S (the S-variant heard in the development section and the call-to-attention motive from the exposition) after two versions of P (the P-suggestive fugato subject and P-variant in mm. 689–692) and TR rhetoric creates a dynamic summation of the exposition’s thematic content at the fugato’s end. This placement and ordering can be considered to reinforce the notion that the movement has finally entered a “true” developmental space, and that each thematic zone is not only recalled here but perhaps ready to achieve the promise of resolution in the recapitulation.

\textsuperscript{36} Pauline Fairclough explores the use of fugatos in the development sections of Soviet symphonies; see Fairclough, \textit{A Soviet Credo}, 114.
EXAMPLE 5.10. Shostakovich, Symphony No. 4, i, mm. 580–84; 601–05; 629–32; 658–60, displaying each voice’s entry during the fugal passage
Finally, a fragment of $S_{\text{gen}3}$’s expositional appearance brings the S-like bass melody to a close, as a descending TR melody from just before the exposition’s MC gesture builds to the subrotation’s close at m. 716. Like its previous appearance, this TR module leads to a grand pause before a wholesale change in texture ushers in a new section. Also like previous boundary points, this grand pause is approached full throttle, with all instruments ascending before halting into silence. The sole instrument group providing caesura fill is the percussion, with brief pickups to the gallop rhythms of subrotation 5’s opening.

**Subrotation 5**

Serving as the conclusion of the development, subrotation 5 continues the rotational patterns of subrotations 1–4, including each of the exposition’s theme zones as well as MC- and $S^0$-like events, presenting the most complete developmental retracing of the exposition thus far. This subrotation’s opening rhythm and brass instrumentation closely resemble Symphony V/i’s development, and after expanded exploration of caesura fill and $S^0$-like material, the latter part of this subrotation takes a decidedly Mahlerian turn: $S^\text{var}$’s motivic connection to the breakthrough theme of Mahler I/iv is further cemented by its truncation to just arpeggios and the addition of two new Mahler allusions. The texture from the introduction of Mahler I/i accompanies the low string’s statement of the $S^\text{var}$ theme, and this $S^\text{var}$ is followed by a motive in dialogue with Mahler I/iv’s $P^{1,2}$ theme’s head motive. After a dramatic halt at m. 881, musical energy then builds from a single A to the full chromatic collection as a closing to the development, after which a Mahler-like octatonic retransitional passage leads to the return of $P^0$.

Subrotation 5 begins energetically, starting off strong with a strident gallop-like rhythm and clear statement of $P^1$ in the brass. Correspondence to the development of the first movement
of Symphony No. 5 is evoked through use of rhythms and instrumentation identical to the start of Symphony V/I’s central action zone. The change of texture and rhythm, as well as the return of P, buttress the sense of a subrotational restart at this point. A return to duple meter after a period of metric shifts also supports this rotational resetting, with \( P^1 \)’s return in imitation in the brass mirroring the beginning of subrotation 1. Emerging from the fugato’s dissolution, the four stretto-like entries of \( P^1 \) provide some connection with the fugato’s four-voice texture. However, unlike the fugato’s ambiguous, mid-rotational melodic material, these statements of P are clear: the first two statements, at m. 719 and m. 724, begin on C-sharp and C (placing these two statement on F-sharp and F tonal centers, respectively), whereas subsequent entries feature the trombones at m. 728 in G, trumpets and low brass in m. 733 suggesting C-sharp and A-flat respectively, and the low woodwinds, brass, and strings in m.738 implying B-flat. Though complicated by the F-sharp statement at m. 719, F appears, at m. 724, yet again as a key area at a rotational (or, in this case, subrotational) boundary.

This subrotation gains energy as the triplet motive from P is treated sequentially after \( P^1 \)’s four entries, a treatment and placement analogous to the sequential passage near the beginning of subrotation 4. By m. 748, this sequential activity has produced an energy gain leading to a triple-

\textit{forte} C-sharp minor chord, strongly resembling the midpoint crisis chords in subrotation 3. As subrotation 5 continues retracing the many rotational journeys of this movement, the crisis chords are prolonged here, in comparison with both the exposition and developmental subrotations, while a descending bass creates the wedge-like motion seen at many of this movement’s formal and rotational boundaries. This expansion eventually includes the caesura fill and \( S^0 \)-like module in this final development-space iteration of the MC-like boundary.
Example 5.11 shows a reduction of the crisis chords and wedge formation. The C-sharp minor chord in m. 748 first transforms into a (012479) hexachord, the same boundary hexachord seen at the EEC, as the bass descends by step, mirroring the descent seen during the end of TR and at other mid-rotational wedge gestures. The subsequent (01347) pentachord in m. 752 begins a smaller-scale wedge-like formation (most voices descend in this passage, though the trumpets ascend from G-sharp to C) arriving at a (013679) hexachord in m. 754. The overall contraction then continues, with tetrachords in mm. 755–758 giving way to trichords in m. 759, and concluding the descent with (02) and (01) dyads in mm. 765–766. Along with the wedge shape, the two-note gestures seen in mm. 755–766 resemble those at the MC-like gestures seen at subrotations 1 and 4 (see Example 8).

The entire passage spanning measures 766–811 can thus be read as an expansion of the P-based caesura fill and S\textsuperscript{0} module first seen after the MC gesture in the exposition. At m. 766, a triplet B in the timpani holds through from the (013), resembling the repeated-note fill at earlier MC-like events. Next, a unison octatonic ascent reverses the downward motion, providing expanded fill and a transitional passage analogous to the P-based caesura fill from the exposition. Meter changes, triplets, and the glissando ascending octave figure all match similar events first heard during the caesura fill and S\textsuperscript{0} passages of the exposition.

Another expansion—this time of the tonally ambiguous S\textsuperscript{0} module—takes place beginning in m. 787. Instead of maintaining the shifting meters of the exposition’s S\textsuperscript{0}, this passage places a variation of the caesura-fill triplet motive in triple meter, creating a grotesque waltz-like theme in A major/minor—the key areas featured at S\textsuperscript{0}’s opening—that eventually dissolves into octatonicism. A clear key area preparation for S is again left unaccomplished at a boundary space, and recalls the expositional efforts, also less than successful, to prepare the
EXAMPLE 5.11. Shostakovich, Symphony No. 4, i, mm. 748–66, reduction, illustrating chordal contraction and wedge-like boundary formation

Bass descent creates wedge coupled with inner-voice G#-C

<table>
<thead>
<tr>
<th></th>
<th>748</th>
<th>750</th>
<th>752</th>
<th>754</th>
</tr>
</thead>
<tbody>
<tr>
<td>C# min.</td>
<td>[4,6,7,8,E,1]</td>
<td>[5,6,8,9,0]</td>
<td>[5,6,8,9,0]</td>
<td>[5,6,8,9,0]</td>
</tr>
<tr>
<td></td>
<td>(012479)</td>
<td>(01347)</td>
<td>(012347)</td>
<td>(014568)</td>
</tr>
<tr>
<td>EEC hexachord</td>
<td>[4,6,7,8,E]</td>
<td>[2,5,6,8,9]</td>
<td>[4,6,7,8,E,0]</td>
<td>[5,6,8,E,0,2]</td>
</tr>
<tr>
<td></td>
<td>(013079)</td>
<td>(013079)</td>
<td>(014568)</td>
<td>(013679)</td>
</tr>
</tbody>
</table>

Bass now sustains B, while upper-voice steps create small wedges and two-note boundary gestures reminiscent of those at MC-like motions in subrotations 1 and 4

<table>
<thead>
<tr>
<th></th>
<th>755</th>
<th>757</th>
<th>759</th>
<th>761</th>
<th>763</th>
<th>765</th>
</tr>
</thead>
<tbody>
<tr>
<td>[5,8,9,E]</td>
<td>[5,8,T,E]</td>
<td>[E,2,5,6][E,2,5,8]</td>
<td>[E,2,3][E,2,4]</td>
<td>[E,0,1][E,0,3]</td>
<td>[7,T,E]</td>
<td>[6,8,9,E]</td>
</tr>
<tr>
<td></td>
<td>(0236)</td>
<td>(0136)</td>
<td>(0147)</td>
<td>(0369)</td>
<td>(014)</td>
<td>(012)</td>
</tr>
<tr>
<td>[E,1]</td>
<td>[E,0]</td>
<td>[7,T,E]</td>
<td>[6,8,9,E]</td>
<td>[E,1]</td>
<td>[E,0]</td>
<td>(02)</td>
</tr>
</tbody>
</table>

General contraction of chordal space, in size and interval content, from tetrachord to dyad

secondary theme. This waltz expansion of S⁰ space continues through m. 810, where a G bass and ascending violin G scale mimics both the caesura-fill key and gesture at the midpoint of subrotation 2.

Breaking with the thwarted attempts at S heard in subrotations 1, 2, and 4, this subrotation instead reflects back to subrotation 3 by presenting the S var theme in m. 812. Like subrotation 3, there are multiple S var presentations (subrotation 3 featured five repetitions of S var,
while subrotation 5 features three repetitions). In addition, the formal placement of this return, to a second fantasy-projection-like version of S, corresponds to the location of the second breakthrough interruption during the development of Mahler I/iv, commencing after a more standard developmental passage separating the second breakthrough from the first.

This second series of $S^{\text{var}}$ statements begins in D-flat major, the movement’s global Neapolitan and the key of the secondary theme from Mahler I/iv. The allusions to Mahler I/iv are not limited to formal placement, theme, and D-flat key area in this phrase: first, the initial presentation of $S^{\text{var}}$, shown in Example 5.12, features string accompanimental figures that transform the waltz-like triplet figure into a turn motive and ascending-sixth contour resembling accompanimental turns and the $P^{1,2}$ theme featured in Mahler I/iv. After this complete statement of $S^{\text{var}}$'s first phrase, motives from the breakthrough module from subrotation 3 (originally featuring transformation of the Mahler I/i cuckoo motive) lead to the second $S^{\text{var}}$ statement in m. 831, now in E-flat and shortened to only the opening Mahler-like arpeggio. Finally, motivic fragmentation and musical energy loss leads into another stasis point in m. 853; though sustaining B-flat, the wind instrumentation and texture strongly alludes to the opening of Mahler I/i and, with the presence of the campanelli, a return to the fantasy projection instrumentation.

A Mahler I/i quotation flashback is similarly featured near the end of the development of Mahler I/iv. Similarly located near the end of Mahler I/iv’s development, a quotation from the first movement appears in m. 429, during a flashback episode following the second breakthrough interruption. Example 5.13a displays mm. 428–448 of Mahler I/iv; Example 5.13b shows the corresponding passage, mm. 853–906 of Shostakovich IV/i. In the Shostakovich passage, $S^{\text{var}}$ returns for a third repetition in B major, the key of its statement in m. 335 near the end of

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37 The secondary theme area of Shostakovich V/i featured the minor Neapolitan as its tonic.
EXAMPLE 5.12. Shostakovich, Symphony No. 4, i, mm. 812–820, reduction, with Mahler allusions

Sₜₐᵦ in D-flat major, key of Mahler I/iv secondary theme area

Turn and figure outlining minor sixth, resembles motives from Mahler I/iv:

(turn motive, Mahler I/iv, m. 405ff)  (P1.2, Mahler I/iv)
subrotation 3, accompanied by the Mahler-like sustained wind B-flats. This semitone juxtaposition is also heard in the D/E-flat dyads at the analogous location in Mahler I/iv. Also corresponding to Mahler I/iv, Shostakovich IV/i’s development features melodic material from the S-zone prominently near its conclusion; the B major statement of the S theme in Shostakovich IV/i serves as the last thematic module of the development.38 Again shortened to just its initial arpeggio, this $S^{\text{var}}$ statement is followed in m. 860 by a figure whose ascending-sixth leap and semitone descent resembles the $P^{1.2}$ thematic module from Mahler I/iv. Following these, a descending melody journeys seemingly in mirror opposition to the chromatic ascending “flashback” theme that appears at both the opening and near the closing of Mahler I/iv’s development.

This descending melody then slips away into the inferno, leaving the Mahlerian B-flat accompanied by a (01345689) octachord that features a subset (01369) OCT pentachord in the strings. Example 25b displays this passage: after the octatonic pentachords, contrasting (0247) tetrachords break with strict octatonicism before the musical forces decrease to silence. A single timpani A in m. 882 begins a dramatic resurgence of musical forces as the conclusion of the development arrives: the A is first joined by C in m. 886, then by an (0235689) OCT septachord, and finally, by the full chromatic collection in mm. 894-897 featuring a crescendo to quintuple-forte.

This dramatic final sonority of the development section is followed by silence, after which an octatonic retransition closely resembling an S-based fragment from a similar transition passage near the end of Mahler I/iv’s development (see Example 5.13a and b). This retransition

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38 As mentioned earlier, this return of the S theme in the Mahler is followed by an attempted Type 3 recapitulation, wherein P returns but is ultimately displaced by breakthrough theme, creating an overall structure in dialogue with both Type 2 and Type 3 sonata constructions.
EXAMPLE 5.13a. Mahler, Symphony No. 1, i, mm. 429–448, reduction, outlining quotations and tonal/chordal events corresponding to Shostakovich IV/i

Chordal quotation from Mahler I/i

Melodic quotation from Mahler I/i

D/Eb half-step juxtaposition
EXAMPLE 5.13a, cont.

C/A♭ juxtaposition (seen throughout development of Shostakovich IV/i)

C/F juxtaposition (seen throughout development of Shostakovich IV/i)
Cuckoo quotations in C and F; cuckoos only quoted in development section of Mahler I/iv

Mahler I/iv S-based transition fragment

Mahler I/iv S-theme quotation

(the following measures feature “flashback” material as a retransition leads to an attempted Type 3 recapitulation)
EXAMPLE 5.13b. Shostakovich, Symphony No. 4, i, mm. 853–906, reduction, displaying Mahler allusions from development space

(The preceding passage featured fragments of the subrotation-3 breakthrough theme, originally derived from Mahler I/i cuckoo quotations)

Allusion to chordal quotation from Mahler I/i

Ascending sixth with descending semitone resolution resembles P1,2 of Mahler I/iv

(Losely resembles melodic "flashback" material from opening and closing of Mahler I/iv development)

(subset of (01247) boundary pentachord)
EXAMPLE 5.13b, cont.

886

\[ \text{A/C boundary dyad} \]

\[ [0,2,3,5,6,8,9] \]

(0235689) septachord, OCT and complement of (01369) in m. 875

894

Retransition featuring fragment closely resembling
Mahler I/iv S-based transition fragment, now OCT

901

Full chromatic collection

905

(Attempted Type 3 recapitulation)
shapes the Mahler quotation into rising five-note octatonic figures that usher in the return to $P^0$ at m. 906.

IV. Detailed Analysis: Crux and Coda

Overview

After a multifaceted and adventurous development section, the dramatic return to C minor and $P^0$ at pitch in m. 906 suggests the possible onset of a Type 3 recapitulation after several striving cycles of developmental P/S rotations. As $P^0$ begins, the C/D-flat dyad in the lower voices is expanded to ascending chromatic scales, as this passage retraces the movement’s introduction more or less precisely. The concomitant expectation of Type 3 recapitulation, however, is subsequently thwarted by the presence of $S^{tel}$—the tonic telos presentation of the $S^{var}$ theme from the development—in place of the $P^1$ theme. This creates a kind of hybrid between triple- and double-rotational sonata structures, invoking both in blurring the lines at this formal juncture.

Figure 5.7 displays the thematic layout of the crux and coda. After two statements of $S^{tel}$’s first phrase, accompanied by $P^1$ march chords, avoid tonal closure in C, the second phrase of $S^{tel}$ and an G-flat minor restatement of the development’s C-major breakthrough motive are followed by an MC-like gesture and the return of $S^{gen}$ fragments from the exposition. $S^{gen1}$ and the second half of $S^{gen3}$ (omitted from the development version and not heard since the exposition) are featured, with $S^{gen1}$ recomposed to emphasize C minor, in dialogue with the generic expectations of tonal resolution of S themes in sonata-form movements. Sonata space then concludes—after evaded closures and only hints of C minor and major—with a (0147)
**FIGURE 5.7.** Shostakovich, Symphony No. 4, i, crux and coda, thematic, formal, and tonal layout

<table>
<thead>
<tr>
<th>Large-scale rotations</th>
<th>Rotation 2 - Crux</th>
</tr>
</thead>
<tbody>
<tr>
<td>thematic modules</td>
<td></td>
</tr>
<tr>
<td>P₁ march + Stel phrase 1</td>
<td>P₁ march, Stel phrase 1 repeated, hint of Sgen5</td>
</tr>
<tr>
<td>measure #</td>
<td>914</td>
</tr>
<tr>
<td>key areas:</td>
<td>c</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Large-scale rotations</th>
<th>Rotation 2 - Crux, cont.</th>
</tr>
</thead>
<tbody>
<tr>
<td>thematic modules</td>
<td></td>
</tr>
<tr>
<td>Breakthrough motive from development, originally in C major</td>
<td>Stel + Mahler cuckoos</td>
</tr>
<tr>
<td>measure #</td>
<td>965</td>
</tr>
<tr>
<td>key areas:</td>
<td>g-flat</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Large-scale rotations</th>
<th>Coda</th>
</tr>
</thead>
<tbody>
<tr>
<td>thematic modules</td>
<td></td>
</tr>
<tr>
<td>P₁</td>
<td>TR, recomposed to open with P⁰ pitches (A-G-F)</td>
</tr>
<tr>
<td>measure #</td>
<td>1006</td>
</tr>
<tr>
<td>key areas:</td>
<td>c/d-flat, c</td>
</tr>
</tbody>
</table>

*Note: Measures and key areas are referenced to understand the thematic development and tonal evolution of the symphony.*
tetrachord, a near (01247) boundary sonority serving almost as a deceptive evasion of the ESC. The tetrachord is one note short of the (01247) boundary pentachord seen throughout the movement and two notes short of the (012479) chord that served as the EEC.

This final formal boundary—sonata space itself—is complicated by the separation and sequential unfolding of rhetorical, tonal, and chordal closure. After the rhetorical retracing of the exposition concludes at m. 1006 with a near-ESC, a return of $P^1$ in C minor indicates the beginning of the coda, where $P_1$ and Mahlerian cuckoos from the development appear in rotational order. An attenuated C minor arrival in m. 1032 presents closure in the tonic, but this conclusion is undermined by dynamics, instrumentation and Mahlerian cuckoo figures which lead to the eventual arrival of the (012479) ESC hexachord in m. 1035. A codetta then alternates sighing motives and the Mahler cuckoos, concluding the movement without delivering on the promise of C major salvation in the fantasy projection.

On first glance, this post-development thematic layout seemingly presents a straightforward “reverse recapitulation” design, wherein the secondary theme (typically considered by most analyses to be the $S^{tel}$ theme) and primary theme (presented in the tonic in the coda) are reversed. Several factors complicate this reading. First, the movement’s overall rotational structure is obscured by the presentation of both $P$- and $S$-based modules after the return of the introduction. $P^0$ is followed by march-like material originally featured at $P^1$, and $S^{tel}$ unfolds in C minor simultaneously with this $P^1$ accompanimental march. Owing to this pairing and the formal expectations involved, neither theme zone completely asserts an unproblematic large-scale tri- or bi-rotational identity for the movement.

Example 5.14 displays this boundary space. The simultaneous presentation of $P$ and $S$ elements resembles boundary-blurring events earlier in the movement, notably the border
between expositional and developmental spaces and the boundary between subrotations 4 and 5. This pairing is a regular feature of the movement at sectional junctures. As outlined earlier, the S\textsuperscript{tel} theme can also be considered in dialogue with the breakthrough theme from Mahler’s First Symphony, another movement that grapples with ambiguous thematic and rotational cues regarding Type 2 and Type 3 sonata construction. (In Mahler I/iv, S-based melodic material positioned over the dominant of F minor ends the development, and the breakthrough theme displaces the S portion of the recapitulation, blurring the lines between an S/P/breakthrough and P/breakthrough rotational ordering.)

Through the lens of an ongoing dialogue with Mahler’s First Symphony, it is possible to see a dual identity for S\textsuperscript{tel} at this point, as a realization of both the fully developed secondary theme and a breakthrough theme allusion. Whereas a breakthrough theme would presumably be under no obligation to present a tonal resolution; a secondary theme, however, is generically expected to fulfill the “sonata principle.” This consideration would perhaps indicate the S\textsuperscript{tel} theme’s stronger affinity with a “reformed” or tonally and thematically righted S-theme. This movement has consistently failed to deliver a rotationally ordered, fully realized S-theme. In the exposition, the fragmented S\textsuperscript{gen} modules were introduced in a rotationally normative and rhetorical suggestive manner, but failed to coalesce into a coherent S-theme. During the development, post-P-theme spaces prepared in a manner strongly in dialogue with the exposition’s rotational ordering were consistently followed by problematic realizations or avoidances of potential S themes. These potential S-theme appearances were fragmented, tonally problematic, or supplanted by fugal imitation and/or other treatments.
EXAMPLE 5.14. Shostakovich, Symphony No. 4, i, mm. 906–920, reduction

P₀ at pitch of introduction; not heard since the opening
Indicative of a Type 3 recapitulation

C/Db introduction dyads extended to full chromatic ascent

S_{tel} in C minor, combined with P₁ accompaniment.

P₁ march-like introductory accompaniment, with meter change
The large-scale bi-rotational structure finally places this crux appearance of the development version of the S theme in the second position of a larger-scale second rotation in progress. At the local level, however, it seems to be necessary to co-opt a portion of P space, namely the expected position of P$^1$ after the introduction, to accomplish the S-theme’s tonal and thematic resolution. In this manner, the S-theme essentially “breaks through” into P space.

In addition to connotations of S-theme function, there are further suggestions of a Mahler-like breakthrough. The arpeggios of the S$^\text{tel}$ theme are now in the horns, and appear after elements of P have already suggested a Type 3 recapitulation. S$^\text{tel}$ thus breaks through into P space in a way analogous to the breakthrough—emerging during a presumed recapitulation of P already in progress—in Mahler I/iv. This is also the theme’s third appearance of the movement, a configuration similar to the layout of Mahler. And lastly, the Mahler quotations saturate the crux and coda of Shostakovich IV/i, maintaining the Mahlerian allusions long past statements of S$^\text{tel}$ and completing the movement in a Mahler-like sonic world, much as the Mahler I/iv breakthrough usurps the original recapitulatory plan for the movement’s remainder.

Complicating matters, however, is the tonal resolution of two of the original Sgen fragments, located after an MC-like gesture with the pitch G, a dominant-like tonal preparation. The subsequent statements of S$^{\text{gen}1}$ and the concluding portion of S$^{\text{gen}3}$ are located in a rotationally ordered position, emerging at what would be part 2 of a standard Type 3 recapitulation, presenting off-tonic material from the exposition in the global tonic. After the development’s near-universal rejection of S-based fragments in favor of fantasy projections, fugatos, and the like, this post-MC return seems strange amongst the crux’s otherwise blurred formal connotations.
This “recapitulation” thus maximizes the blurring of formal distinctions seen throughout the movement, recalling Hugh Ottoway’s characterization of the work as “having it both ways.” As mentioned, the return of the introduction and P° accompaniment at the moment of crux, as well as the subsequent unfolding of S-based thematic elements from both the exposition and development, simultaneously elicit both Type 2 and Type 3 sonata forms, as well as placing S° in dialogue with both S-theme and Mahlerian breakthrough rhetoric. Two different presentations of S—one tonally resolved at the large-scale bi-rotational level, and one delivering resolution at the local P/S cyclical level in dialogue with the exposition—and the separation of rhetorical, tonal, and chordal closure at the border of sonata space and during the coda continue to complicate notions of “reverse recapitulation” and tonal resolution for S throughout the crux.

**Crux**

While this breach of P-space by S° begins with a C-minor presentation of the first phrase, the crux unfolds with a reconfiguration of S°’s original S° var thematic construction. Example 5.15 displays the thematic ordering and tonal foci of the crux’s S° section. Now conforming to the P-zone’s quadruple meter, the second phrase of S° is delayed in favor of a repetition of the first phrase; the first phrase’s initial C-minor statement is followed by a statement suggesting F# Phrygian. Prolonging the new key area, G-flat-minor linking material—derived from an S° gen4-like module in m. 298 of the development section—follows the first phrase’s repetition, out of order from its original positioning after S° var’s completion and reintroducing S-space’s metric shifts. The E-flat minor conclusion of this first link becomes E minor as S°’s second phrase begins a fifth higher than its development appearance. Unlike its
development statement, the second phrase is now paired with the descending-scale $S_{gen1}$ fragment, outlining its exposition G-minor scale.

As the English horn and bass clarinet unfold these two S-based themes—one from the development, one from the exposition—each comes to rest at a point suggesting resolution to C. Example 5.16 displays this approach to the tonic. While the English horn’s scale completes its C-major journey, orchestral harmonic backing is nowhere to be found, as the lower voices rest on the downbeat of m. 950, evading a possible tonal ESC in a Beethovenian deprivation of group harmonic support. Were the ESC to take place at this point, it would follow a complete presentation of both phrases of $S_{tel}$ in the tonic. After this missed opportunity at closure, waltz figures from the development’s subrotation 5 accompany an approach to the return of the development’s breakthrough motive, heard previously at m. 436. Stated there as a triumphant C-major breakthrough, this subdued appearance begins in G-flat, with motions toward C at m. 968 failing to convincingly confirm the global tonic. This breakthrough thus comes to naught,
EXAMPLE 5.16. Shostakovich, Symphony No. 4, i, mm. 947–952, displaying missed tonal closure

Dissolving through descending scalar motion to the same lack of motion and static atmosphere seen near the end of the development.

Finally, out of a singular sustained C in mm. 972–974, one final statement of \( S^{tel} \)'s first phrase emerges, along with the return of Mahlerian cuckoo figures. The cuckoos alternate fourths suggesting D-flat and F, while \( S^{tel} \) negotiates the final key area from the exposition’s S-space that it has yet to present: F. This F-major appearance could also be considered in dialogue with the global tonic of Mahler I/iv, and in combination with the cuckoos, reanimate the music enough to reach an MC-like pause on G at measure 986. This MC gesture is the only such full-stop moment after the crux—a single sustained G, the top note of an arpeggiated C-minor triad in dialogue with both a first-level- and fourth-level-default MC.

This grand pause ushers in a restatement of \( S^{gen} \) fragments strongly in dialogue with the exposition’s presentation, providing a surprisingly stable reenactment of S-space after the development space’s constant variations and evasions. The MC solo G at m. 986 serves not only
as the tonal preparation for the subsequent $S^{\text{gen1}}$ melody, but also as its first pitch: $S^{\text{gen1}}$'s exposition version commences in its original G-minor key, again paired with F as in the exposition. A few alterations emerge in this retracing: like $S^{\text{tel}}$, this theme is also subjected to the reformation of strict quadruple meter. B-flat is added to G and F, perhaps foreshadowing the conclusion of sonata space, and $S^{\text{gen1}}$'s melodic conclusion is reoriented from its half-cadential melodic contour to a conclusion on C, bringing about tonal resolution to the theme.

This $S^{\text{gen1}}$ restatement is followed by the reappearance of $S^{\text{gen3}}$'s ending module; this fragment is the precise portion of $S^{\text{gen3}}$ not included in its $S^{\text{var}}$ and $S^{\text{tel}}$ versions. This ending fragment, not heard since its expositional statement, originally suggested C minor at its conclusion, and nearly recreates this closure before instead highlighting B-flat in m. 998. As if attempting to reform the wandering melody, $S^{\text{gen1}}$ appears again for a second statement, beginning not in G, but in C minor. This attempt at reformation, however, also loses its tonal way, passing through suggestions of B-flat before chromatic figures lead to sonata space closure at measure 1006.

While the chordal closure at this point strongly resembles the (012479) EEC hexachord, the chordal conclusion to sonata space presents only a (0147) tetrachord, placing a D-flat in the bass of a chord too small to tonally close the movement and realize the EEC’s hexachordal promise. Example 5.17 displays this chord, almost a deceptive ESC, which delays hexachordal closure until the coda yet provides a kind of rhetorical ESC at the conclusion of sonata space. While this formal boundary evokes rhetorical and formal closure, tonal and chordal closure is yet to come, with each of these elements taking place at different times. Such separation of normally congruent formal, tonal, and rhetorical punctuation is yet another means of expressively
EXAMPLE 5.17. Shostakovich, Symphony No. 4, i, mm. 1003–1010, reduction, displaying deceptive near-ESC (0147) tetrachord and beginning of coda

obscurring the form-defining events expected in sonata-form symphonic movements, extending the drama into coda space.

Coda

Reduced to a single drum and bassoon, the coda provides a statement of $P^1$ in the tonic and the (012479) ESC hexachord. Both take place outside of sonata space and after a near-pass
at (012479) during a closing event in dialogue with the rhetorical ESC. The overall structure of this coda continues the rotational ordering seen throughout the movement, presenting material from P and TR that has yet to appear in the key of C. A subdued tonal arrival at C minor takes place in m. 1032, where Mahlerian cuckoos continue on to the hexachordal (012479) ESC in m. 1035. This bombastic chord fades to a piano codetta, pairing S^gen1-like sighing motives and Mahlerian cuckoos.

In contrast to the triumphant opening brass statement of P^1 in the exposition, the bassoon quietly performs an almost defeated version of P^1 beginning in m. 1006, having been displaced from the victorious brass by the interjection of S^tel at the crux. The drum’s march-like rhythm feels more like a funeral than the militaristic and bombastic exposition accompaniment. After presenting P^1 in the tonic, a portion of TR follows; in mm. 1027–1029, the English horn becomes stuck on P^1’s triplet motive, derailing the small bit of musical momentum provided by TR’s scalar rhetoric. Harmonic motion halts as well, with a G preparatory bass giving way to silence in m. 1030 as Mahler cuckoos featuring G and D once again emerge from the cessation of musical motion to revive the movement.

The cuckoos take up the march-like rhythm, having been reformed into an almost mechanistic force of forward motion. The brass are first to rejoin the cuckoos, as a chromatic (0123456) gives way to a (0237) C-minor chord coupled with the G-D cuckoos. This chordal motion provides the long-awaited arrival of C minor, providing tonal closure for the movement with a complete sonority in the trombones and tuba on the downbeat of m. 1032. While the tonal arrival of C minor confirms the global tonic, it does not correspond to the chordal closure seen throughout the movement at points of formal boundary. Nor, with its piano dynamic and
continued cuckoo accompaniment, does this moment of C-minor arrival supply enough closure to bring the movement to a close.

So far presented with separate, uncoordinated rhetorical and tonal closures, the G-D cuckoos continue their ceaseless march and P^1 interjects forcefully at triple-forte in m. 1034; a massive upward scalar push finally brings about the hexachordal ESC, a full (012479) hexachord, in m. 1035. Example 5.18 shows the ascending approach and ESC, as well as the MC, EEC, and ESC hexachords. The ESC’s hexachord consists of the (01247) boundary pentachord paired with A; the MC presented this same pentachord with C, and the EEC featured (01247) with F. Beyond simply providing chordal closure to the movement, each boundary pentachord is paired with one of the tonal areas suggested throughout the movement. Within this framework, it is possible to view the displacement of the (012479) hexachord into coda space as a form of “failed” sonata or evasion of chordal closure corresponding to the EEC within sonata space. The tetrachord near-ESC provided in its place suggests a kind of deceptive resolution, postponing true hexachordal resolution outside of the form. At the same time, this notion is complicated by the boundary-blurring techniques seen throughout the movement and the separate articulation of the rhetorical, tonal, and chordal resolutions that end this movement. This explication of three boundary events contrasts with Shostakovich’s treatment of the ESC in Symphony No. 5’s first movement; there, a rhetorical cadential event at m. 294 presents an A-minor cadence in place of an expected D-minor ESC. This tonal mismatch is address six measures into the coda, as a D-minor cadence responds to the A-minor substitution. Though boundary blurring is a significant factor in Symphony No. 5’s formal and rotational structure, the
EXAMPLE 5.18. Shostakovich, Symphony No. 4, i, mm. 1031–1035, reduction, displaying ESC (012479) hexachord and MC, EEC, and ESC (01247) pentachords plus added tones
ESC could be considered closer to a standard non-resolving recapitulation while still exploring boundary overlaps at the division of sonata and coda spaces.

Whereas Symphony No. 4’s recapitulation/crux is technically non-resolving from a tonal perspective, perhaps this postponement can be viewed as further along a continuum of boundary blurring and extension than Symphony No. 5. More than representing a “failed” sonata, these staggered closing events could instead be considered as creating a sense of fluidity or hybridity surrounding notions of boundary closure. While rhetorical and rotational events create a formal articulation ending sonata space at m. 1006, continued P/S rotations and the further separation of tonal and chordal resolution within the coda further problematize the idea of expecting congruence between formal, rhetorical, tonal, and chordal closure to the movement in light of the movement’s constant obscuring of boundary events and Shostakovich’s techniques in other movements.

After the formal, tonal, and chordal closures take place, the movement eventually ends not with a bang, but with a whisper. After the arrival of the chordal ESC, the G-D cuckoos continue unabated, finally loosening their ostinato-like grip at m. 1037. Two-note sighing figures resembling the opening two notes of $S^{gen1}$, coupled with vanishing cuckoos, bring the movement to a close in C minor as the cuckoos fade away into a distant memory of Mahlerian fantasies, breakthroughs, and tonal redemption.
Conclusion

Summary

Interpretations of Shostakovich’s music have seen a welcome resurgence in recent years, as analysts grapple with the legacy of his complicated political situation and its hermeneutic implications, as well as his tonal and formal experimentalism. This examination of the opening movement of Symphony No. 4 through the lenses of Sonata Theory and rotational form addressed Shostakovich’s particular engagement with sonata form, highlighting issues of sonata-type hybridity and blurring of formal and tonal boundaries.

I began by addressing the conflict between “reverse recapitulation” constructs and Sonata Theory’s inclusion of rotational form as an integral part of the narrative teleology of tonal, thematic, and rhetorical events. Ordered presentations establish rotational form’s referential thematic patterns, with subsequent rotations featuring variations and cumulative progress toward a long-range goal. Incorporated as a foundational principle of Sonata Theory, rotational structures complicate notions of “reverse recapitulations” through foregrounding expectations of ordered thematic placement.

Chapter 1 explored Shostakovich’s particular and expressive treatments of rotational form. Placements of the secondary theme at the moment of expected P-theme recapitulation are considered examples of sonata-type hybridity, blending elements of Hepokoski and Darcy’s Type 2 (double rotational) and Type 3 (triple rotational) sonata forms. I argued that it is rotational expectations that dramatize Shostakovich’s formal obfuscations in Symphony No. 1, No. 5, and No. 4, giving rise to dramatic hybrid
structures involving both Type 2 and Type 3 constructs wherein the exposition’s thematic modules are not presented strictly in reverse.

Chapter 1 also broadened Sonata Theory’s EEC and ESC tonal markers to include nontonal analogues. Drawing on work of Hasty, Howland, and Hanninen, set-class chordal entities are established alongside cadential progressions as instances of Hanninen’s structural motives. Nontonal sonorities serve as particular contextual criteria alongside thematic, rhetorical, and motivic considerations, all of which may contribute to forming the goalposts of EEC and ESC attainment. This approach allows incorporation of nontonal boundary sonorities into Sonata Theory while still accommodating dramatic nonattainment of more traditional EEC and ESC cadences. Such “failures,” a regular feature of Shostakovich’s sonata-form movements, are thus contextualized as in dialogue with both sonata failure and with avoidance of congruencies between the rotational, thematic, and tonal boundary markers. Two types of boundary-blurring activities are used by Shostakovich at moments of EEC and ESC in the early symphonies: attainment of the tonal EEC and/or ESC with thematic or motivic boundary overlap; and uncoupling of the tonal attainment of the EEC and/or ESC from the rhetorical, thematic, and nontonal boundary events.

Chapters 2–5 drew on these considerations and observations in close readings of the initial movements of Shostakovich’s Fourth and Fifth Symphonies. Chapter 2 explored Symphony No. 5’s formal and tonal elements, highlighting the blending of Type 2 and Type 3 elements at the moment of crux, as well as S-aftermath-like motivic blurring of the exposition/development seam and the postponement of tonal closure until the coda, detached from the rhetorical, thematic, and motivic signals of sonata-space.
conclusion. More straightforward in its rotational and tonal layout than the Fourth Symphony, Symphony V/i serves as a case study in Shostakovich’s boundary-space blurring.

Chapters 3–5 investigated the tonal and formal details of Symphony No. 4’s first movement, relating it to its successor and to the first and final movements of Mahler’s First Symphony, a work quoted in the first movement of Symphony No. 4. In-depth examination of Symphony No. 4’s first movement considers moments of formal demarcation—including the MC, EEC, and ESC—as illustrating Shostakovich’s combination of double- and triple-rotational constructions at formal boundaries, and his postponing of tonal cadential closure to the coda, in favor of non-tonal boundary sonorities. These post-tonal events correspond to each formal boundary and feature (01247) pentachords that displace tonal closure until the movement’s coda while also forming transpositional and rhetorical relationships analogous to those seen in tonal boundaries markers—most notably the $T_4$ relationship between the MC and EEC and the $I_2$ relationship between the EEC and ESC—across the movement as a whole. This movement’s relationship with Mahler’s First Symphony—apparent in various thematic quotations—is broadened to include formal and rotational elements as well, further highlighting Symphony No. 4’s underlying rotational patterns and structural correspondences.

Avenues for Further Research

Among many avenues for continued research, the following five areas are fruitful for future consideration:
1. Tracing the evolution of these techniques in Shostakovich’s later symphonies.

Regarding the immediate successors, strong correspondences to Symphony No. 5’s Type 2 construction, tripartite secondary-theme zone, false-recapitulation effects, and problematized EEC and ESC can be found in the first movement of Shostakovich’s Symphony No. 8. Such resemblances may also be observed between the first movements of Shostakovich’s Fourth and Seventh Symphonies. The first movement of Symphony No. 7 features an oversized development section, spanning 396 measures, or nearly 60% of the movement. Concepts of rotation are streamlined into repetition; obscured rotational structures in the Fourth Symphony give way to twelve clear iterations of the “invasion” theme in the Seventh Symphony. (The “invasion” theme’s reference to Lady Macbeth of the Mtsensk District draws yet another connection to Symphony No. 4, insofar as it was the subject of public condemnation that Shostakovich suffered shortly before Symphony No. 4’s withdrawal.) Furthermore, tonal and cadential events—including the MC, EEC, and ESC—are strikingly straightforward in Symphony No. 7, while boundary-blurring events such as a post-EEC S-aftermath (brought back as a caesura-fill after the crux,) and the resurgence of P- and TR-based material surrounding the crux can be related to similar treatments and sonata-type hybridity present within Symphony IV/i.

2. Broadening the investigation beyond first movements. While boundary-blurring techniques and sonata-type hybridity seem to be most prevalent in Shostakovich’s initial movements, such designs in other movements are worth further exploration. Rotational form, as featured in sonata-form movements and in Mahlerian slow movements, is also worth exploring. One such example of rotational form may be perceived in the Adagio movement of Shostakovich’s Fifteenth Symphony, where rotational and subrotational
cycles of two contrasting themes illuminate struggles toward synthesis. Initially separate, each pair of themes cycles through three subrotations, eventually joining during the third large-scale rotation of the movement.

3. **Investigating further interactions between tonal and nontonal boundary sonorities.** Recent attention to interactions of formal and tonal boundaries, especially as related to Sonata Theory, is focused on successful or frustrated attempts at tonal closure. Inclusion of nontonal boundary sonorities in relation to Sonata Theory’s concepts of EEC and ESC, and the interaction, simultaneous or not, of tonal and nontonal chordal closures, are thus far unexplored. Discussion of these phenomena in Symphony No. 4 expands the sonata-closure dialogue in novel ways, and further examination of Shostakovich’s later works may shed additional light on theoretical notions of chordal closure in sonata-form movements, exchanges between tonal and nontonal pitch languages at formal demarcations, and concomitant narrative and hermeneutic trajectories of both tonal and nontonal closures in the works of Shostakovich and others.

4. **Exploring the significance of rotations in relation to non-normative phrase endings.** Related to the notion of the reformation paradigm, further work regarding the interaction of rotational form and attenuated or tonally inconclusive phrase endings would be most fruitful. As phrase-ending events are obscured, attenuated, or transformed, phrase beginnings—and concomitant rotational relaunching—gain perceptual prominence in signaling movement through formal space. Dramatic “reformation” gestures in Symphony IV/i, i.e., interjections of thematic or motivic material that force renewed progression through sonata space through, invite engagement with notions of phrase completion, truncation, and rotational structures.
5. Discovering additional sonata-type hybrids. While this study is limited to initial movements and particular issues surrounding the Type 2/Type 3 hybrids manifest in “reverse recapitulation” structures, investigation of Shostakovich’s Type 1 (sonata form without development), Type 4 (sonata-rondo form), and Type 5 (concerto form) layouts remains unexplored. Especially promising is the interactions between Types 2 and 5 in Shostakovich’s instrumental concertos, a logical place to begin given the designations of “reverse recapitulation” in existing analyses.

Conclusion

The formal, thematic, and tonal complications explored in this study broaden notions of division and closure, especially as embodied in Sonata Theory’s historical models. Tonal structures of promise and accomplishment have provided an expressive landscape in which to situation dramatic nonattainment of cadential goals throughout the large-scale symphonic repertoire. Nevertheless, Shostakovich’s particular approach to the intersections of rotational, rhetorical, and tonal closure, as well as his mixture of tonal and nontonal pitch language, complicates considerations of sonata “failure.”

As illustrative of Shostakovich’s musical, personal, and political troubles, appeals to nonattainment are particularly apt in highlighting the incongruence of thematic and tonal conclusions. And yet, perhaps out of the ashes of these “failed” sonatas rises the Phoenix of formal and stylistic innovation. The uncoupling of formal, tonal, thematic, and rhetorical boundary markers, and the inclusion of nontonal trajectories into traditional tonal narratives, may instead become hallmarks of resilience and newness in the midst of musical struggle.
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