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COLOPHON

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John Muniz

Transformation at the Margins of Tonality: Scriabin's Seventh Piano Sonata, Op. 64

Abstract

Analysts have applied a variety of conceptual tools to Scriabin's late works, including octatonic collections, set theory, and Russian functional theory. After critical discussion of these approaches, I extend and apply a markedly different methodology of triadic transformational analysis derived from the work of David Kopp. My discussion puts the sonata's harmonic idiolect in dialogue with an analysis of its form, couched in terms of Sonata Theory. This work paves the way for comparison with triadic harmony in other late chromatic music, as well as formal features of earlier and contemporaneous sonatas.

Transformation at the Margins of Tonality:
Scriabin's Seventh Piano Sonata, Op. 64[*]

John Muniz

INTRODUCTION AND LITERATURE REVIEW

In this essay I apply methods of transformational analysis to a late Scriabin piano sonata. A few theorists, notably Clifton Callender,[1] have already applied transformational methods to this repertory. However, my approach differs markedly from Callender's. Whereas he deals with ways in which various pitch collections can be derived from one another via transformations, I am interested in what happens when we deemphasize the differences between collections and look at the broader patterns of transformation they trace. This "zooming-out" operation allows for a more extended analysis of Scriabin than has typically appeared in the transformational literature. My essay also draws on a few concepts from triadic transformational analysis (hereafter TTA). This may seem strange since the sonorities in late Scriabin are large, dissonant chords rather than triads. However, as I will argue, a triadic viewpoint can allow us to grasp crucial features of Scriabin's harmony and suggest comparisons with triadic chromaticism.

Philip Ewell's 2002 article on the Seventh Sonata is one of very few extant English-language studies of the piece.[2] Despite having been published over a decade ago, his essay still provides a representative sampling of recent work on late Scriabin. Ewell considers

[1]   Clifton Callender, "Voice-Leading Parsimony in the Music of Alexander Scriabin," *Journal of Music Theory* 42/2 (1998), 219–233, https://doi.org/10.2307/843875.

[2]   Philip Ewell, "Scriabin's Seventh Piano Sonata: Three Analytical Approaches," *Indiana Theory Review* 23 (2002), 23–67. Allen Forte provides a brief set-theoretic vignette of the sonata's opening in *The Structure of Atonal Music* (New Haven, CT: Yale University Press, 1973), 58.

three analytical rubrics: octatonicism, modified dominant chords, and the harmonic-functional theories of Barbara Dernova and Yuri Kholopov;[3] Ewell ultimately advocates the third approach. All three, I will argue, are problematic.

Ewell rejects octatonic analysis ("octatonicism") as ill suited to the Seventh Sonata because the musical surface does not clearly articulate, or distinguish among, different octatonic collections. Therefore, he argues, octatonicism is of limited use. Both Ewell and George Perle also warn that the octatonic analyst runs the risk of conflating melodic and harmonic observations, for an octatonic collection can be regarded as either a melodic or a harmonic entity.[4] I would add that Scriabin's consistent use of octatonic subsets, rather than whole collections, makes it appropriate to treat these subsets as entities independent of their parent collections. While identifying octatonic collections is important, we still want to know why Scriabin chose certain subsets rather than others, as well as how they function as chords in their own right.[5]

Ewell has more sympathy with a quasi-tonal description of Scriabin's harmony in which dominant sonorities play the leading role. In this conception, a number of Scriabin's piano works are based on chromatically altered versions of ♭II → V^7 → I progressions. Example 1 presents Ewell's analysis of the middle-late piano work "Mask," Op. 63, No. 1.[6] For Ewell, this piece shows the culmination of Scriabin's "non-functional dominant" technique. But is this kind of tonal analysis a good description of Scriabin's music? Given that none of the dominants resolves to a tonic[7]—see, for instance, the closing harmony— it is unclear whether they function tonally at all. There are two issues here. First, there is an ambiguity among three senses of the word "dominant": 1) a tone or sonority on $\hat{5}$; 2) a major-minor seventh chord; and 3) a harmony that functions as a dominant, notably by leading to a tonic. The phrase "non-functional dominant" courts equivocation among these senses; in the third sense it would be self-contradictory. Ewell does not clearly state which sense he means and indeed seems to shift among them. The second issue is that when harmonic functionality is dubious—such as in the absence of a tonic—we lack

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3   Ewell, "Scriabin's Seventh," 24.

4   Ibid., 31–32. See also George Perle, "Scriabin's Self-Analyses," *Music Analysis* 3/2 (1984), 116, https://doi.org/10.2307/854313. Work on octatonicism in Scriabin includes Cheong Wai-Ling, "Scriabin's Octatonic Sonata," *Journal of the Royal Musical Association* 121/2 (1996), 206–28, https://doi.org/10.1093/jrma/121.2.206; James Baker, *The Music of Alexander Scriabin* (New Haven, CT: Yale University Press, 1986); Richard Taruskin, "Chernomor to Kashchei: Harmonic Sorcery; or, Stravinsky's 'Angle,'" *Journal of the American Musicological Society* 38 (1985), 99n, https://doi.org/10.1525/jams.1985.38.1.03a00030; and Callender, "Voice-Leading Parsimony."

5   Callender, "Voice-Leading Parsimony," bridges the gap by providing a detailed study of inclusion relations and voice leading between collections.

6   Ewell, "Scriabin's Seventh," 43.

7   At most, the chord pivots to its tritone-related form and back; the Seventh Sonata contains much similar behavior. Baker calls such sonorities "dual dominants" (Baker, *Music of Scriabin*, 4).

Example 1: Roman-numeral analysis of "Mask," Op. 63 No. 1 (reproduced from Ewell's Example 9)

criteria for distinguishing a $\flat\text{II}^7 \to \text{V}^7$ progression, as in mm. 2–5 of the example, from a mere succession of two tritone-related seventh chords without tonal implication. The Seventh Sonata, which is usually regarded as atonal, contains many chordal motions by tritone. It is therefore plausible to regard Op. 63, No. 1 as an earlier manifestation of this atonal technique, rather than a late manifestation of a functionally tonal technique.[8] As will be apparent later, I do believe that we can hear limited tonal relationships in late Scriabin. Nevertheless, designations such as $\flat\text{II}^7 \to \text{V}^7$ are surely too simplistic in ascribing ordinary tonal functions to Scriabin's later music.

Ewell's third and favorite candidate is the theory of harmonic function developed by Barbara Dernova and Yuri Kholopov.[9] Their approach treats chords separated by a tritone as functionally substitutable; chords separated by a minor third together constitute a "mono-functional sphere." For us, the relevant difference between the two theorists is, in the simplest terms, that Dernova would label the final harmony of Example 1 as a dominant, while Kholopov would regard it as a tonic. Figure 1 presents Kholopov's "neotonal" functional system, which in its symmetrical arrangement recalls dualist theories of harmony. Ewell endorses this system of analysis because he believes it is more faithful to Scriabin's intentions: "The forte of Dernova and Kholopov lies in their methodology: it seems that all the relevant concepts emanate from the music itself. One gets the sense that, after reading a Kholopov analysis, this is remarkably close to the way the composer was thinking."[10] However, these statements are shaky at several points: in being based on a subjective "seeming" and "sense," in their implicit identification of "the music itself" with "the way the composer was thinking," and in Ewell's presumption of access to the composer's intentions based on anecdotes from Scriabin's biographer Leonid Sabaneev and from Kholopov himself. The latter, at least, is an interested party whose theories surely go beyond what Scriabin actually said. The former, meanwhile, relies on a tête-à-tête with the composer, a source of biographical information about which we are often skeptical. Furthermore, even if Kholopov's theory does reflect what

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8   Dernova's translator Roy James Guenther also rejects this part of Dernova's approach, on apparently similar grounds; see Roy James Guenther, "Varvara Dernova's 'Garmoniia Skriabina': A Translation and Critical Commentary" (Ph.D. diss., Catholic University of America, 1979), 86–88. Discussing Guenther's work, Ewell ("Scriabin's Seventh," 37) seems at one point to recognize the difficulty but does not conclude that there is anything ultimately problematic about the idea of a non-functional dominant, and in fact agrees with Taruskin that the tritone relationship in late Scriabin tends toward the neutralization of function, but paradoxically describes the agent of the functional dissolution as a "$\flat\text{II–V}$ key relationship" (ibid., 51). Indeed, Ewell's assertion of a *key* relationship brings in the murkier problem of whether and how keys are established in Scriabin's middle and later work.

9   Guenther, "Garmoniia Skriabina"; Yuri Kholopov, "Klassicheskie struktury v sovremennoĭ garmonii," in *Problemy sovremennoĭ muzyki* (Moscow: Muzyka, 1967), 91–128.

10 Ewell, "Scriabin's Seventh," 66–67.

Figure 1: Yuri Kholopov's "neotonality" (reproduced from Ewell's Example 16)

T = tonic

D = dominant double

W = major submediant double

m = minor mediant

M = major mediant

S = subdominant

L = tonic double

D = dominant

W = major submediant

w = minor submediant

M = major mediant double

S = subdominant double

Scriabin thought, that does not necessary dictate how we should analyze his music.[11] Many theorists would instead argue that the usefulness of an analytical method—the analytical insight it affords—is justification enough for using it. Indeed, the elaborate functional system diagrammed in Figure 1 is anything but a parsimonious theory, and its explanatory power is not beyond doubt either.

All three of the approaches Ewell considers are therefore problematic. Transformational analysis, I think, fares better. As hinted above, my approach will essentially be to plot patterns of transposition between chords. Since many of the chord forms are non-identical, a large number of the transpositions are cross-type transformations as described by Julian Hook.[12] Further, I avoid the familiar transformational labels L, P, R, and so on, because

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11   Cf. Kholopov: "We cannot ignore what Scriabin himself thought, and how he presented his own music in harmonic analysis. He thought purely chordally and purely tonally. Therefore, Scriabin analyses should emanate from properties of the actual acting system of composition" (quoted in ibid., 59). There are many critiques of this sort of "actual intentionalism" throughout the philosophical literature; for one, see David Davies, *Art as Performance* (Oxford: Wiley-Blackwell, 2004), 84–89, https://doi.org/10.1002/9780470774922.

12   Julian Hook, "Cross-Type Transformations and the Path Consistency Condition," *Music Theory Spectrum* 29 (2007), 1–39,

they depend on the presence of distinct major and minor triads. These are not available in the Seventh Sonata, since most of its harmonies contain both major and minor triads. I will therefore use David Kopp's alternative transformational system,[13] with its connotations of root motion rather than triad qualities or mere transposition. While I will argue for the presence of "roots" (with permanent scare quotes) in the sonata, Kopp's symbols can be readily translated into neutral (cross-type) transposition labels instead: $M \approx T_8$, $\tau \approx T_6$, and so forth.

The point of using triadic concepts here will be to emphasize some salient features of the sonata that evoke chromatic tonality. TTA offers the possibility of a quasi-tonal hearing of late Scriabin—the "intelligibility to tonal ears" that Roger Scruton and others value in Scriabin's later music.[14] The sonata's "fundamental chord," which Kholopov regards as a dissonant tonic, supports such a hearing. The analogy with a tonic must be used with care: some of my arguments against the "dominant" status of the chord undermine its viability as a tonic as well.

THE FUNDAMENTAL CHORD

Like Dernova and Kholopov, we begin by identifying the "fundamental chord" from which almost all the sonata's harmony is derived. The opening two measures can be readily interpreted as arpeggiating the fundamental chord downward (see Example 2 and Figure 2).[15] The note spellings in my reduction reflect the intervals and acoustic qualities the chord has in common with a major-minor seventh ("dominant seventh") chord. These similarities invite us to hear the chord as an extended triad. A natural next step is to hear the conventional root of the "dominant-seventh" subset as a phenomenological focus or "root" of the fundamental chord as a whole. Since the fundamental chord in Figure 2 contains a unique dominant-seventh subset (F♯–A♯–C♯–E), the root of the fundamental chord would be F♯. The fundamental chord is a subset of $OCT_{0,1}$ but, as we have seen, this does not force us to emphasize octatonic collections as the main feature of the analysis.

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https://doi.org/10.1525/mts.2007.29.1.1. Hook also applies cross-type transformations to late chromatic repertoire in his analyses of Szymanowski and Rimsky-Korsakov.

13 David Kopp, *Chromatic Transformations in Nineteenth-Century Music* (Cambridge: Cambridge University Press, 2002, https://doi.org/10.1017/CBO9780511481932).

14 Roger Scruton, *Aesthetics of Music* (Oxford: Oxford University Press, 1997), 277.

15 Ewell omits the bottom B♯/C; I include it on the analogy of the countless tritone-supported chords throughout the sonata (the "underlined" chord forms F♯, etc., in my analysis below). Interestingly, an earlier version of the sonata has the bass B♯/C as the first pitch event—a rapid upbeat to mm. 1 and 2—suggesting even more strongly that it should be analyzed as part of the fundamental chord; see Leonid Sabaneev, *Vospominanija o Skrijabine* (Moscow: Muzyka, 1925), 98.

Figure 2: The fundamental chord, enharmonically respelled, with F♯ "root"

Figure 3: Common tones at T_3, T_6, and T_9 of the fundamental chord
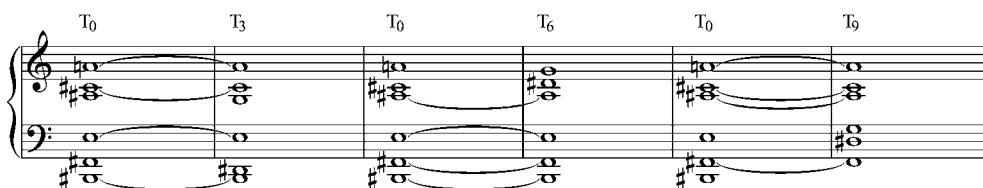
Positing an F♯ root and assigning corresponding enharmonic spelling does not entail that the piece is "tonal" in any robust sense of the word. Rather, as an opening chord, the chord in Figure 2 is referential for what follows and acquires a degree of stability. In these respects, the F♯ fundamental chord is analogous to a tonic triad in a common-practice tonal work.[16]

This analogy allows for a tonal hearing of the other members of the chord. The A♮, A♯, and C♯ can be heard to possess something of the tonal qualities, or "qualia," of ♭$\hat{3}$, ♮$\hat{3}$, and $\hat{5}$ respectively.[17] E carries a ♭$\hat{7}$ quality, but without any need to resolve as the seventh of a V⁷. I have respelled Scriabin's C as B♯ to suggest a quale of ♯$\hat{4}$. To my ear, this tone would be less aurally disruptive if it were placed in a higher register. By its position in the bass, however, it is a subversive presence in the chord that threatens to "tip it over" into its similar T_6 form. As Figure 3 indicates, the fundamental chord has four tones in common with its transpositions along a minor-third cycle: T_3, T_6, and T_9.[18] This property

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16 Again, Kholopov and Ewell make this comparison (Ewell, "Scriabin's Seventh," 53–55); they are surely correct that despite the fundamental chord's intervallic resemblance to a V⁷, it is more analogous to a tonic than to a dominant. Sabaneev's anecdote about Scriabin, for what it is worth, suggests that the composer agreed (Sabaneev, *Vospominanija*, 46–47; quoted in Ewell, "Scriabin's Seventh," 47–50). As Ewell (ibid., 50) and Baker (*Music of Scriabin*, 4) hold, Dernova's suggestion that each of these "dominant sevenths" evokes a corresponding tonic is implausible.

17 For a now-influential account of tonal qualia, see Steven Rings, *Tonality and Transformation* (New York: Oxford University Press, 2011, https://doi.org/10.1093/acprof:oso/9780195384277.001.0001).

18 The organizing power of common-tone connections between adjacent chords is a fundamental premise of Kopp, *Chromatic Transformations*. In this connection, the prevalence of third-related chords in the Seventh Sonata is apposite; see ibid., 3 ff., for discussion of chromatic third relations.

Figure 4: Frequently appearing subsets of the fundamental chord on F♯: a) major-minor tetrad; b) major-minor tetrad with minor seventh; c) "026" form
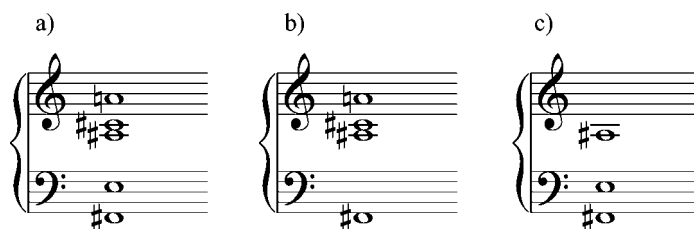
has significant implications for the chord's harmonic behavior throughout the work and has lent credence to Dernova's concept of the "tritone link," discussed below.[19]

Figure 4 shows three frequently appearing subsets of the fundamental chord. I will hereafter distinguish the full chord from its subsets by notation: X = a full presentation of the fundamental chord, X̄ = the chord with only "♯4̂" missing; XMm = the chord with "♯4̂" and "♭7̂" both missing (i.e., a major-minor tetrad); X026 = an instance of set class (026), with even less clear triadic implications. In each case, X is the root of the fundamental chord superset. Note that the "♯4̂" is missing from all three of the subsets, perhaps because of its destabilizing influence.

Although I will not overstress tonal function in my analysis, Figure 5 explores some of the tonal voice-leading implications that can be heard in the most common transformations of the fundamental chord, with the assumption that the "root" of the chord is in each case also a tonic.[20] This assumption is not far-fetched; at the opening of the work (discussed below), for instance, it is easy to hear an F♯ tonic, replaced in m. 3 by a D tonic. Aside from the hypothetical tonal implications suggested in Figure 5, my analysis remains strategically agnostic about the enharmonic interpretation of the chords involved; this move sidesteps problems that would otherwise arise from Scriabin's idiosyncratic note spellings. The transformation symbol τ indicates "root" movement by a tritone. **M** labels movement down an enharmonic major third, while **m** is movement down an enharmonic minor third.[21] Labeled arrows show how the chord tones, with their various functional affiliations, resolve to their differently affiliated neighbors in pitch-class space.[22] (Some registral messiness is inevitable in order to avoid multiple note

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19 Guenther, "Garmoniia Skriabina," 89.

20 Cf. the analysis of voice leading in triadic progressions in Kopp, *Chromatic Transformations*, 7.

21 The **M** symbol is Kopp's (ibid., 166), while the τ is my own.

22 For this method of analyzing "functional discharge" I am indebted to Daniel Harrison, *Harmonic Function in Chromatic Music* (Chicago: University of Chicago Press, 1994), especially the discussion of "linking analysis" (134–53). I follow Harrison in assigning S function to ♭2̂ and D function to ♯4̂.

Figure 5: Voice-leading implications of common transformations of the fundamental chord

doublings in the figure.) T, S, and D are tonic, subdominant, and dominant; the label DT, for instance, means a dominant-to-tonic resolution, such as $\hat{7}$ to $\hat{1}$. Some retained common tones also reinforce functional connections. Tritone-related forms of the chord are evenly balanced between ST and DT resolutions. The **m**-related forms are also balanced between ST and DT, but with fewer resolution connections between forms. The **M**-related chords, on the other hand, are noticeably skewed toward DT discharge. Scriabin exploits this feature in the right hand of mm. 1–3: even though the opening chord form is F♯, the pitches A, C♯, and E are marked by their higher register and inclusion in the subsequent arpeggio. Attending to this yields a distinct impression of V–I resolution to D. This effect, however, is atypical; tonal implications are much less salient in most of the sonata.

EXPOSITION

Throughout this article I will make informal use of terms from Hepokoski and Darcy's *Elements of Sonata Theory*.[23] Although the Scriabin sonata shows obvious differences from the eighteenth-century sonatas for which Sonata Theory is designed, a rough Sonata-Theoretic parsing is still useful to mark out rhetorical features such as transitional energy gain and developmental rotation. Readers with different formal-theoretic affiliations may substitute their own preferred system. Figure 6 is a synoptic chart of the form by measure number. In the exposition and recapitulation, terms such as "P," "TR," and the like designate the "action spaces" Primary Theme, Transition, and so forth. In the development, these symbols denote the origin, in the exposition, of the musical material appearing in the given measures. While my analysis will not insist on this exact construal of the sonata zones, my interpretation of the form will be a useful starting point for discussion of harmonic and formal processes.

Example 2 presents the opening of the sonata, annotated with chord "roots." The example stops at m. 9 because the remainder of P simply prolongs F♯. In my annotations and networks, I enharmonically simplify Scriabin's original orthography; further, I generally omit phrasing slurs in score excerpts. Figure 7 collects the chord forms into a transformational network of the P-zone (mm. 1–16). Solid arrows represent local motion between harmonies, while dashed arrows denote non-local relationships.[24]

The P-zone presents thematic material and arpeggiates F♯ downwards. The next chord form on D results in "root" movement by descending major third (**M**). The compound label DMm/D indicates the fact that Scriabin registrally isolates the major-minor tetrad subset from the lower chord tones in m. 3. This separation marks the subset as potentially significant. (The same is true, *mutatis mutandis*, for the EMm/E and F♯Mm/F♯.) The lower tritone G♯ links this chord to the next, which is rooted on G♯. The same pattern receives two more iterations—the third one accelerated, in dialogue with the conventions of sentential continuation[25]—until we reach a final F♯. The bookending relationship of

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23 James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata* (New York: Oxford University Press, 2006, https://doi.org/10.1093/acprof:oso/9780195146400.001.0001).

24 In each case, my measure numbers make no distinction among parts of a measure; a chord on the downbeat of m. 2 and one on the upbeat to m. 3 are equally labeled as belonging to m. 2. (The ordering of events with the same measure number can be inferred by the flow of the transformation arrows.) In other figures given below, transformations are accompanied by "joinings" (to be defined shortly). Since these abbreviate multiple transformations and hence multiple measure numbers, I provide the range of measure numbers.

25 See William E. Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven* (New York: Oxford University Press, 1998), 40–48.

Figure 6: Synoptic chart of the sonata's form

Measure numbers	Action space or thematic material
1–76	**Exposition**
1–16	P
17–28	TR
29–59	S
60–76	C
77–168	**Development**
77–80	P
81–88	S
89–92	P
93–118	S, TR, C
119–126	C
127–140	S, TR, C
141–156	TR
157–168	P?
169–236	**Recapitulation: first rotation**
169–182	P
183–196	TR
197–227	S
228–236	C
237–331	**Recapitulation: second rotation**
237–252	P
253–272	TR
273–288	S
289–312	C
313–331	P?
331–343	**Coda**

P: Primary zone
TR: Transition
S: Secondary zone
C: Closing zone

Example 2: Opening (mm. 1–9) annotated with chord "roots"

Figure 7: P-zone network (mm. 1–16; numbers indicate measures in which transformations occur)

⟶▶ : transformation

- - -▶ : non-local relationship
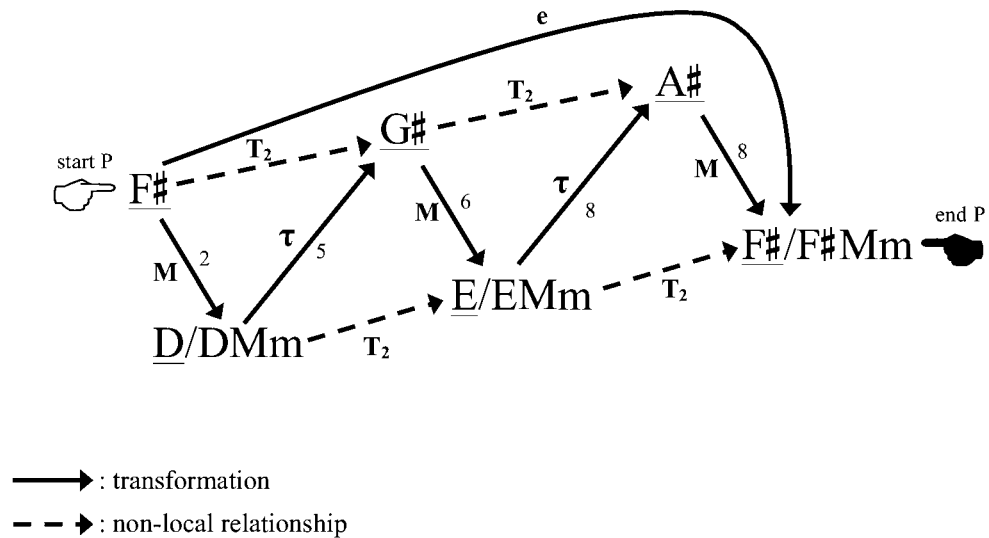
identity (**e**, *eigen*) between the opening and closing F♯s can be heard as a prolongation of F♯ spanning the whole of P. Non-local T_2 connections, shown by the dashed arrows, are perceptible between each iteration and the next. Not shown, but still audible, is the subset A–C♯–E and its transpositions brought out by the melody in the opening measures, giving a whiff of a V → I resolution into the D, E, and final F♯ chords. Nevertheless, the sonata is characterized by motions by third and tritone, rather than motions by perfect fifth.

Examples 3 and 4 give TR and an excerpt from S, respectively. Figure 8 gives a combined network for both zones. TR consists of only two chord forms, C and A♭; the zone behaves typically for a sonata transition by beginning *subito forte* and gaining energy throughout.[26] Scriabin connects P to the start of TR with a **τ** transformation to C and develops the TR theme sequentially with **M**, thus continuing P's **M**–**τ** harmonic sequence. The resulting A♭ at first supports motivic compression at m. 22, then a de-energizing rhythmic rarefaction in mm. 25–28. The lone G♯ in the right hand of mm. 27–28 simultaneously calls attention to the thinning texture and connects chromatically to the A and A♯ that open the S-theme in mm. 29–30. This MC-like moment deflates the bombast—the *sombre majesté*—with which the transition begins, into the *céleste volupté* of S.

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26 Hepokoski and Darcy, *Sonata Theory*, 93 and *passim*.

Example 3: TR (mm. 17–28)

The lyrical S-theme begins over $\underline{D}$ (m. 29); this $\underline{D}$'s τ relationship to the preceding $\underline{A\flat}$ continues the M–τ sequence a step further. The double-shafted arrow in Figure 8 denotes what I will call a *joining* of fundamental chord forms, here at tritone transposition (as the τ above the arrow shows). This concept of a joining is a broad one, designed to deal with Scriabin's complex, kaleidoscopic shifts in sonority.[27] I define joining as a symmetric but non-transitive relation among any number of chord forms that are either 1) superimposed on one another; 2) alternating with one another; or 3) mutually implicated in ambiguous sonorities. A τ-joining such as $\underline{D} \Leftrightarrow \underline{A\flat}$ plays upon the tendency of the fundamental chord to "flip" into its T_6 counterpart. $\underline{A\flat}$ supports the P-derived, quasi-arpeggiated, T_3-related right-hand chords in m. 35—symptom 2 of joining—before $\underline{D}$ is resumed in m. 39 with the embellished return of the S-theme. Note that mm. 36–38 interpolate material from P,

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27 Joining is reminiscent of Dernova's "tritone link" but more general in allowing for intervals other than a tritone, cardinalities of more than two chords, and non-hierarchical relationships among chords. (For Dernova, one chord of a tritone link always leads while the other follows; see Guenther, "Garmoniia Skriabina," 89 and *passim*.)

Example 4: Mm. 29–43 (excerpt from S)


foreshadowing an instability and interpenetration of thematic content in C and in the first stages of the development. The ambiguous sonorities at mm. 29 and 39 also contribute to the joining.

Starting in m. 45, there is a shift to harmonic motion via **m** (descending minor third) and **m⁻¹** ("m-inverse," ascending minor third): F̲ → A̲♭ → B̲. This prevalence of minor-third motion, like that of tritone motion in the preceding measures, is in line with the common-tone properties of the fundamental chord exhibited in Figure 3. B̲ ⇔ F̲ occupies the remainder of the S-zone. Note that the joined chord forms in S, B̲ ⇔ F̲ and D̲ ⇔ A̲♭, together exhaust a complete three-semitone interval cycle: their "roots" form a

Figure 8: Combined network of TR (mm. 16–28; chords bounded by small-dashed line) and S (mm. 29–59; chords bounded by large-dashed line)
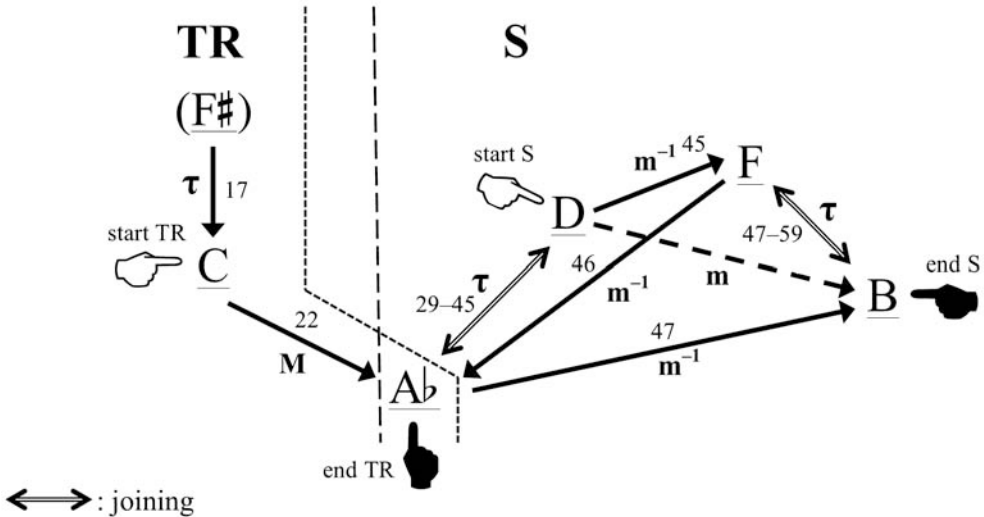
"diminished seventh chord." Scriabin articulates the two joinings separately, anticipating their union in a full, four-membered joining later in the sonata. This observation recasts the Dernova/Kholopov "mono-functional sphere," wherein minor-third-related chord forms are considered to be functionally equivalent. *Pace* those two theorists, an inference from joining to functional equivalence would be overhasty here; in any case, assertions about chordal function (in any robust sense of "function") in such highly chromatic music bear a heavy burden of proof. My weaker claim is instead that within this sonata, as well as other works in which Dernova and Kholopov locate their "mono-functional sphere," Scriabin uses contextual means to correlate chord forms along minor-third cycles, without this correlation's being necessarily underwritten by some *a priori* functional connection.

Figure 9 shows my reading of the closing zone's transformations (mm. 60–76). The opening $\overline{B}$ moves immediately, on the downbeat of m. 61, to a (026) set—on a G♯ bass—that at first seems to be simply part of the $\underline{D}$ sonority which ensues in the course of that measure (Example 5). However, I can see two reasons to consider this (026) as part of an independent sonority "rooted" on G♯. The first is that in mm. 73–74 (Example 6), the downward-stemmed eighth notes in the bass arpeggiate G♯–D♯–F♯–B♯–E♯, while the grace notes reinforce this sonority with similar ones. The major-minor seventh on G♯ is unmistakable, although the sonority as a whole differs from the fundamental chord forms seen hitherto and is therefore designated G♯*. The second is that the putative G♯026 is solidified into $\underline{G♯}$ at the end of m. 74, as though confirming the local significance of

Figure 9: C-zone network (mm. 60–76)
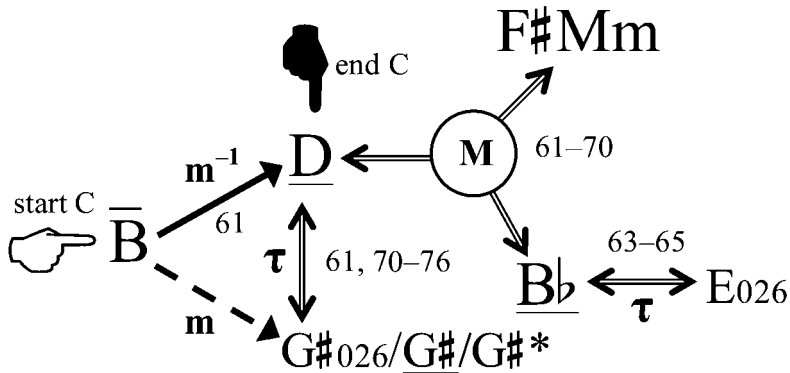
Example 5: Mm. 60–62 (excerpt from C)

Example 6: Mm. 73–74 (excerpt from C)

G♯. (A reader not convinced by these reasons may instead see an immediate **m⁻¹** to $\underline{D}$ in m. 61 without much damage to the analysis.) On this reading, $\overline{B}$ leads via **m** to a G♯–$\underline{D}$ joining. On the analogy of the G♯026, mm. 63–65 may be heard as bookended by E026; the resulting joining of $\underline{B♭}$ and E026 is embedded within the larger one of mm. 61–70. Note that mm. 70–72 contain an interpolation of S and TR material similar to the intrusion of TR into S at mm. 36–38.

　　To assess the larger implications of this segment: F♯, the chief pc at the beginning of

Figure 10: First half of the development (mm. 77–126)
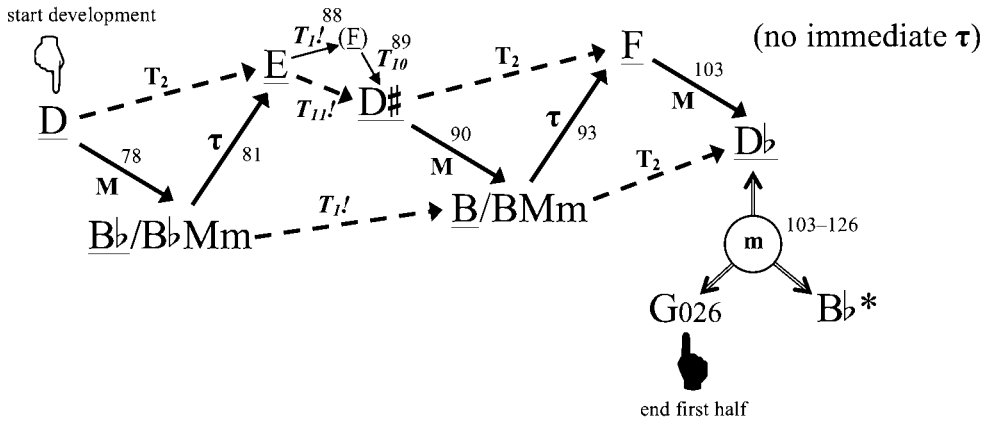
the sonata, now assumes a subordinate role. Here at the end of the exposition, **M**-joining replaces τ-joining, resonating with the **M** transformations from the P-zone and suggesting an eventual return to τ-joining in the course of the sonata. This formation of a complete major-third cycle among the "roots" D, B♭, and F♯ will also render appropriate Scriabin's construction of complete minor-third cycles in the development and recapitulation. The **M**s of the P-zone, in other words, will be replaced by the numerous **m**s of the S-zone.

DEVELOPMENT

Figure 10 gives the network for approximately the first half of the development. Scriabin's treatment of thematic material in the development (again, see Figure 5 for a synopsis) resembles the film technique of "intercutting," with P-material interrupted by dreamy tableaux from S in mm. 81 and 93.[28] Example 7 shows the first "cut" away to S-material. If the Sonata-Theoretic rotational principle is taken loosely with no requirement of strict thematic ordering,[29] the development is more or less fully rotational, with material appearing roughly in the expositional order. The developmental quasi-rotation begins off-"tonic" on D at m. 77. Although the standard motion by **M** and τ follows, the process is

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28   Compare Stravinsky's layered compositional technique in several of his works, called "stratification" in Edward T. Cone, "Stravinsky: The Progress of a Method," *Perspectives of New Music* 1/1 (1962), 18–26, https://doi.org/10.2307/832176. For a study of the somewhat similar device of "thematic superimposition" in Prokofiev—a suggestive national correlation—see Rebecca Perry, "Thematic Simultaneity and Structural Ambiguity in the Second Movement of Prokofiev's Piano Sonata No. 4, Op. 29," *Music Theory and Analysis* 3/2 (2016), 209–18, https://doi.org/10.11116/MTA.3.2.5.

29   Hepokoski and Darcy define "*rotational form* or the *rotational process*" as "two or more (varied) cyclings—rotations—through a modular pattern or succession laid down at the outset of the structure" (*Sonata Theory*, 16 n. 5).

Example 7: Opening of development (mm. 77–88); first "cut" to S material in m. 81

estranged by the fact that E here supports S-material, whereas in the corresponding place in the exposition P-material occurs.

As Figure 10 demonstrates, Scriabin makes an early alteration relative to the exposition. The music shifts slyly upward (*onduleux, insinuant*) from E to F in m. 88 (the T_1 is unusual), then apparently begins to repeat S before breaking off—as though shaking off the S-themed reverie—to begin the next sequence of P on D♯, a semitone "too low." Several hypotheses—not mutually exclusive—can be advanced for why Scriabin makes this alteration. It may be to create a sense of dislocation corresponding to the "intercutting" of contrasting thematic material. Another explanation is rooted in the fact that, had the composer followed the transformational pattern of the exposition, C and F♯ would have

Example 8: Development (excerpt), mm. 134–37

Example 9: Development (excerpt), mm. 149–54

resulted after E. But since F♯ is the quasi-tonic posited in the P-zone, de-emphasizing F♯ in the development renders the ultimate return to F♯ in the recapitulation more significant. Finally, it is worth noting that the recapitulation, too, unexpectedly declines to start the P-zone on F♯; the avoidance of F♯ here may foreshadow this event by problematizing that chord form.

Afterward, **M** and **τ** lead to a more stable treatment of S; P-material does not return in the development, except perhaps at its end. Although another **M** follows in m. 103, the expected final **τ** does not; the G026 of the joining comes later. This is fitting, since **τ** in P has hitherto been interjected in an energetic, eminently P-like fashion, accented and *forte* (e.g., mm. 2–3). Here, S instead projects a dangerously seductive languor. (The comparison of Scriabin's music with opium is hackneyed but nevertheless suggests itself.) The passage is crowned by the appearance in mm. 103–26 of an **m**-joining of G026, D♭, and B♭* (the deviant chord form last seen on G♯ in m. 73). This joining is both a drawing together of

Figure 11: Second half of the development (mm. 127–68)
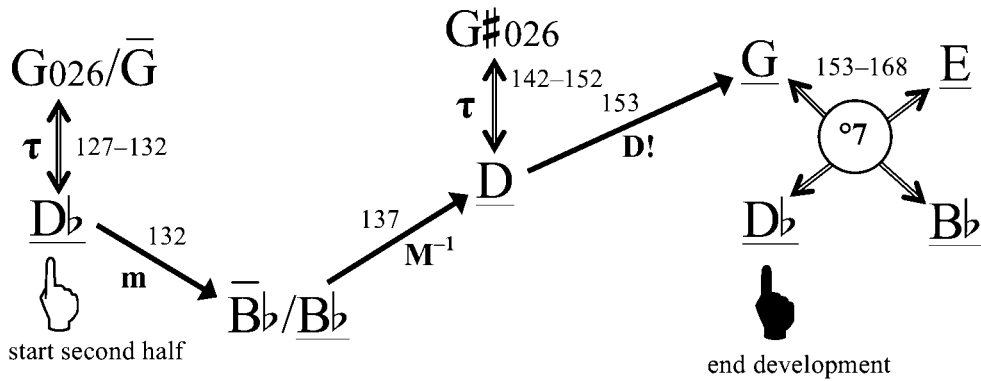
the loosely affiliated **m**-related roots of the exposition's S and a premonition of Scriabin's joining of a full minor-third cycle by the end of the development and ultimately at the end of the piece.

The development's second half,[30] excerpted in Examples 8 and 9 and diagrammed in Figure 11, sees continued play with the **m**-joined chord forms, with a brief, doubtful appearance of F♯ or C in mm. 135–36 (*pianissimo*; raising the question of their return?). A joining between D and G♯026 precedes one of only two dominant (**D**) transformations of the piece in m. 153; the sonata's harmonic idiom is far removed from diatonic tonality. The transformation calls back the developmental divagations to the planned "°7" **m**-joining that ends the development. Scriabin's *impérieux* marking in mm. 149 and 153, though taken from the corresponding material in TR, is appropriate to the peremptory ascending-fifth gesture in the left hand, perhaps derived originally from m. 2. The **m**-joining—comprising a complete minor-third cycle—seems to be a consummation of the partial minor-third cycle at the end of the development's first half. The joining also tightens the loose association of **m**-related "roots" in the exposition's S. The harmonic quasi-stasis created by the **m**-joining calls to mind the customary dominant lock at the end of Classical sonata developments.

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30   The division is not arbitrary: m. 127 is marked by a double bar line, a change in meter signature, and a shift to new thematic material. The material in mm. 119–26 also corresponds motivically to mm. 73–76. Because the latter measures are followed immediately by a formal demarcation (the beginning of the development), it is natural to hear a correspondingly important demarcation at m. 127.

Figure 12: Recapitulatory P (mm. 169–82), first rotation
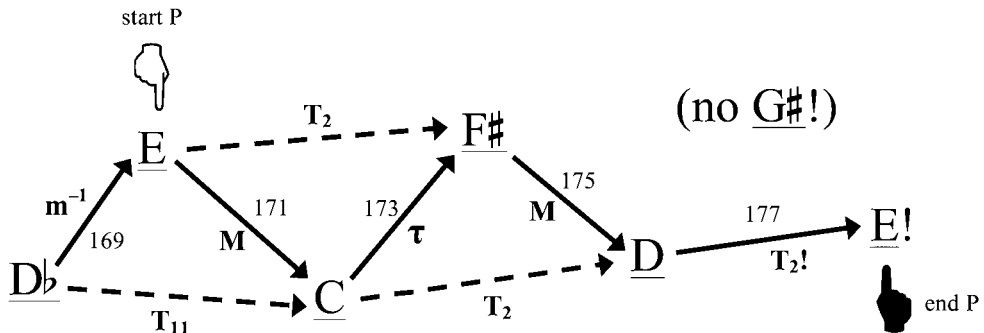
RECAPITULATION

The recapitulation of the Seventh Sonata is unusual in that it contains two thematic rotations: one spanning mm. 169–236 and the other comprising mm. 237–331, with a coda following the second rotation. Of the two rotations, the first conforms more closely than the second to the norms of sonata recapitulation. The second, meanwhile, is a thematically disordered crescendo of intensity and virtuosity, a sprint to the finish line. It gives the impression of a highly extended appendix or coda more than a straightforward reprise of expositional material.

As shown in Figure 12, the recapitulation begins on E, a whole step lower than the exposition. In making this alteration, Scriabin may have had in mind the beginning of the recapitulatory S on the sonata's "tonic," F♯; a slight alteration in the TR-S gap (there is no real MC) brings about this F♯. On the other hand, it is also possible that he simply ends up fortuitously on E here and steers toward F♯ at the appropriate time. In contrast to the exposition, the recapitulation elides the initial sequence by leaving out its third M and τ transformations; hence, an expected G♯ is omitted. This alteration is a natural development of the sense of continuation-like compression in mm. 6–7.

TR and S (diagrammed in Figure 13) are much like their expositional forerunners, with some simplification in the transformational design of S, as well as ramifications from the tonally altered P. These changes bring it about that the τ-joined pairs are now C ⇔ F♯ and A ⇔ E♭. This is doubly significant. First, with a single, brief exception of F♯ in the expositional C-zone, no member of the parent minor-third cycle has yet been represented in a joining; the appearance of all of its members in S decisively fills that gap. Second, F♯ has been marked from the expositional P as a "tonic"; by a modest conceptual extension we can regard the F♯–A–C–E♭ cycle itself as a "tonic cycle" in relation

Figure 13: Recapitulatory TR (mm. 183–96) and S (mm. 197–227), first rotation
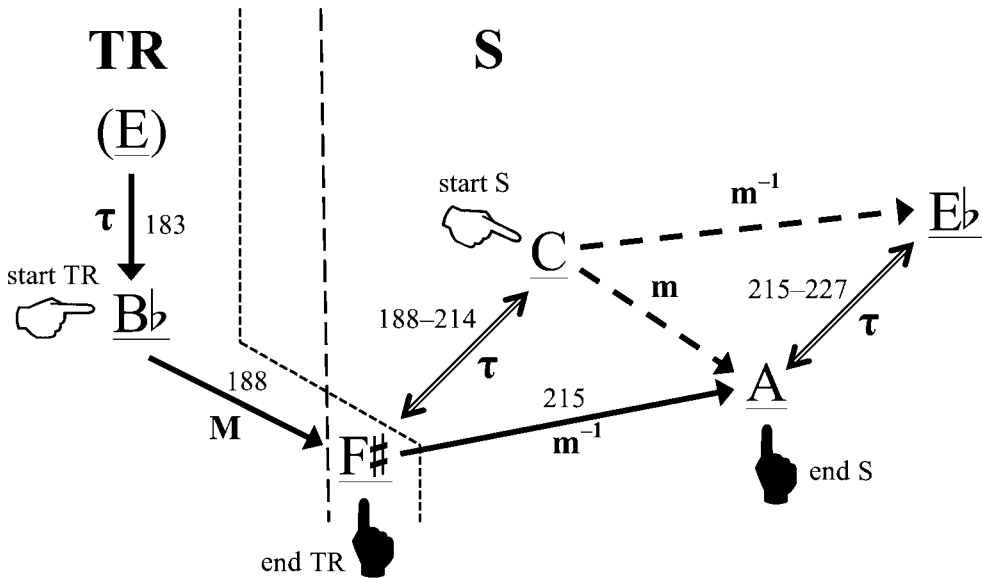
to the other two minor-third cycles. If we grant this, its occurrence at the traditionally tonic-confirming recapitulatory S, as well as at the end of the sonata, makes perfect sense.

Figure 14 summarizes the remainder of the first recapitulatory rotation and the entirety of the second rotation. Although the latter might seem to be an inappropriately large number of measures to synopsize glibly in half a figure, the harmony of the extra rotation is principally confined to a single minor-third cycle, albeit at great speed and with one chord form (E♭), added belatedly. The diagram is thus not a serious oversimplification, and my commentary will supply the remaining pertinent details.

Needless to say, a second rotation in the recapitulation is unusual for a sonata. Such a compositional decision invites a large number of hermeneutic possibilities; it is difficult or impossible to decide among them without more information about the norms of Scriabin's sonata practice. I would venture that the second rotation is marked most obviously by a sense of haste, intensification, and textural density. One (admittedly anachronistic) metaphor that suggests itself is that the second rotation "fast-forwards" through the material of the first; perhaps it was conceived as a super-charging or apotheosis of its precursor. The last rotation's fragmented, almost garbled presentation of thematic *disiecta membra*, replete with extended sequential repetition of motives, supports this assessment. The thematic chart in Figure 5 records the appearance of material, although formal or thematic analysis is not my primary concern.

Figure 14: Recapitulatory C (mm. 228–36) and entire second recapitulatory rotation plus coda (mm. 237–343), separated by dotted line
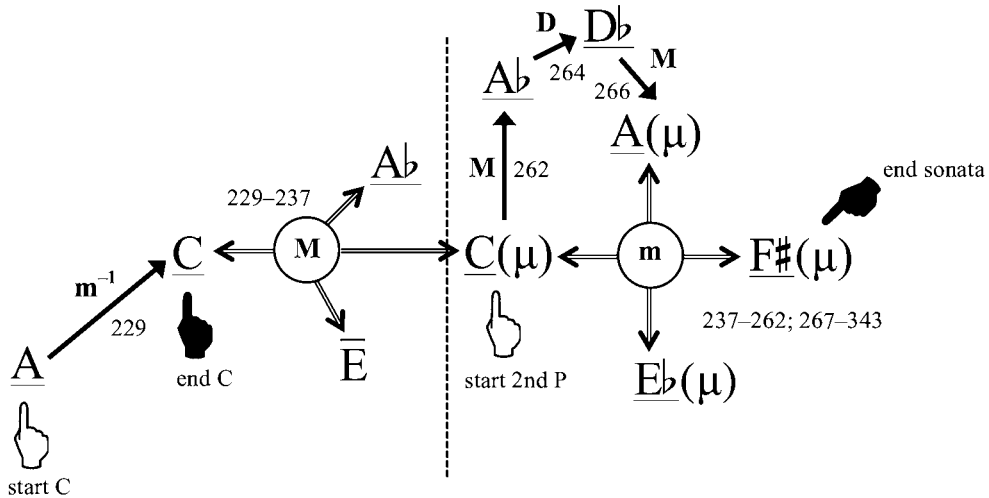
The only significant deviation from the dominant **m**-joining of the second rotation is the excursion from C̲ to A̲♭ and D̲♭ in mm. 262–66 with thematic material from TR (Example 10). Although the **D** transformation has only one precedent in the sonata (m. 153), the digression to A̲♭ at least is easily explicable as a reminiscence of TR from the exposition, which comprised chord forms C̲ and A̲♭ as well. The near-immediate return to the **m**-joining in m. 266 initiates a large-scale rhythmic, dynamic, and textural intensification until the enormous *fortissimo* arpeggiated chord in m. 331 (Example 12). After such an obvious culmination, the quiet music in the remaining measures of the sonata feel distinctly separate from the second rotation; thematically liquidated and ethereal, they seem to exist outside the sonata proper's realm of feverish activity, which is why I call them a coda (mm. 332–43).

This second recapitulatory rotation announces itself with a *forte* arpeggiation of the mystic chord in m. 237 (Example 11), after a *pianissimo* ending to the previous rotation. Correspondingly, mystic-chord forms (the μs in Figure 14) are interspersed among forms of the fundamental chord throughout the rotation. The **m**-joining of the second recapitulatory rotation is itself a culmination of earlier gestures toward completion: the numerous but disjointed **m** transformations in the expositional S, as well as the off-"tonic" **m**-joinings in the development, first with three chord forms (mm. 103–26) and then with four (mm. 153–68).

After an enigmatic chord form in mm. 332–34 (labeled A* in Example 12), Scriabin ends the sonata with a provocative gesture that simultaneously consolidates, confirming

Example 10: Deviation from **m**-joining in the second rotation (mm. 261–66)

Example 11: Mystic-chord opening to the second rotation (mm. 237–38)

the "tonic" status of F♯,[31] and liquidates, denaturing the remaining motivic content and subverting the primacy of the fundamental chord. The low F♯ octave in m. 335 serves as a bass for the final nine measures, which draw pitch material not from F♯ but from the mystic chord on F♯. Scriabin's positioning of the pitch F♯ in a low register and the subsequent departure from it toward the upper registral regions create a sense that the F♯ octave is sending something forth—perhaps its own distant overtones—into the upper atmosphere. Its passion spent, the sonata dissolves away.

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31   To this extent, Ewell's assertion ("Scriabin's Seventh," 23) that "[Scriabin's] late works lack tonal endings" must be qualified.

Example 12: Ending of the sonata (mm. 331–43)

CONCLUSION

As I argued earlier in this essay, transformational analysis is one of the most viable analytical approaches for the analysis of Scriabin's late music. While other methods have their supporters—notably octatonic analysis and the functional theories of Dernova and Kholopov—we should interrogate them. In particular, we should be wary of claims that a single analytic methodology is the correct one because it is most similar to the composer's own interpretation of his music. At the same time, I have suggested a transformational approach that is somewhat different from ones previously taken. Starting with a moderately nuanced picture of how tonal connotations operate within Scriabin's harmony, we can use cross-type transformations and conceptions from triadic transformational theory to obtain a synoptic view of the Seventh Sonata's harmonic design. A similar strategy for Scriabin's other late works promises to be equally successful.

There is potential for dialogue with the analysis of late nineteenth-century chromaticism as well. Given further analytical studies along similar lines, the use of comparable methodologies for both repertoires might further illuminate stylistic continuities between music close to the center of tonality and music at its margins: not only between Scriabin's earlier and later styles, but between late Scriabin and his predecessors and contemporaries. To explore such connections is beyond the scope of my study but seems a worthy research program for transformational analysts.

Abstract

Analysts have applied a variety of conceptual tools to Scriabin's late works, including octatonic collections, set theory, and Russian functional theory. After critical discussion of these approaches, I extend and apply a markedly different methodology of triadic transformational analysis derived from the work of David Kopp. My discussion puts the sonata's harmonic idiolect in dialogue with an analysis of its form, couched in terms of Sonata Theory. This work paves the way for comparison with triadic harmony in other late chromatic music, as well as formal features of earlier and contemporaneous sonatas.

About the Author

John Muniz received his Ph. D. in music theory from Yale University and is Assistant Professor of Music at the University of Arizona. His articles on enharmonic modulations are forthcoming in *Music Theory Spectrum* and *Indiana Theory Review*. He has presented papers internationally on the topics of chromaticism, musical rhythm, and the intersection of music theory and philosophy.