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# Ravel's "Russian" Period: Octatonicism in His Early Works, 1893–1908

STEVEN BAUR

The most significant writing on the octatonic scale in Western music has taken as a starting point the music of Igor Stravinsky. Arthur Berger introduced the term *octatonic* in his landmark 1963 article in which he identified the scale as a useful framework for analyzing much of Stravinsky's music. Following Berger, Pieter van den Toorn discussed in greater depth the nature of Stravinsky's octatonic practice, describing the composer's manipulations of the harmonic and melodic resources provided by the scale. Neither Berger nor van den Toorn sought to account for the origins of the octatonic scale, prompting Richard Taruskin's brilliant historical survey in which he mapped these origins and subsequent appearances of the scale prior to Stravinsky.<sup>1</sup> In so doing, Taruskin traced the genesis of both the octatonic scale and the whole-tone scale to the prominent mediant relationships common in the music of Schubert and Liszt, and he revealed the extent to which both pitch fields pervade Russian chromatic harmony from the latter half of the nineteenth century, citing works by Glinka, Musorgsky, Borodin, Lyadov, and Cherepnin, among others. Prior to Stravinsky, however, no composer engaged more extensively with octatonicism than Nikolai Rimsky-Korsakov

A shorter version of this paper was presented at the Sixty-fifth Annual Meeting of the American Musicological Society, Kansas City, November 1999. I would like to thank Frank D'Accone, Sylvia Kahan, Raymond Knapp, Susan McClary, Mitchell Morris, Colin Slim, Richard Taruskin, and Robert Walser for their thoughtful readings of preliminary versions of this essay and for their valuable comments and contributions.

1. Arthur Berger, "Problems of Pitch Organization in Stravinsky," *Perspectives of New Music* 2, no. 1 (1963): 11–42; reprinted in *Perspectives on Schoenberg and Stravinsky*, ed. Benjamin Boretz and Edward T. Cone (Princeton: Princeton University Press, 1968), 123–55; Pieter C. van den Toorn, *The Music of Igor Stravinsky* (New Haven: Yale University Press, 1983), and "Octatonic Pitch Structure in Stravinsky," in *Confronting Stravinsky*, ed. Jann Pasler (Berkeley and Los Angeles: University of California Press, 1986), 130–56; and Richard Taruskin, "Chernomor to Kashchei: Harmonic Sorcery; or, Stravinsky's 'Angle,'" this *Journal* 38 (1985): 72–142. The Fifty-second Annual Meeting of the American Musicological Society (1986) included an animated panel discussion dedicated entirely to the issues raised by Taruskin, featuring panelists Elliot Antokoletz, Allen Forte, Lawrence Gushee, van den Toorn, and Taruskin. A revised version of Taruskin's article comprises chapter 4 of his *Stravinsky and the Russian Traditions: A Biography of the Works Through "Mavra"* (Berkeley and Los Angeles: University of California Press, 1996), 255–306.

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(Stravinsky's teacher from 1905 to 1908), and Taruskin offers numerous examples to illustrate the consistency with which the scale appears in his music. Although Stravinsky's octatonicism differs substantially from that of Rimsky-Korsakov, Taruskin demonstrates that he inherited much directly from his teacher.

Others have examined appearances of the octatonic scale outside of Russia, with several French sources garnering much of the attention. Yet none of the literature on French octatonicism has been significantly informed by the wealth of scholarship on the Russian octatonic tradition—this, in spite of the fact that we have long known of the profound interest in Russian music cultivated among the musicians in Parisian circles beginning in the 1870s.<sup>2</sup> The existing literature on French octatonicism deals primarily with the music of Claude Debussy (and later that of Olivier Messiaen), but octatonicism also figures prominently in the music of Maurice Ravel in ways that warrant a closer look.<sup>3</sup> My purpose here is to survey and analyze Ravel's octatonic writing within the context of what has been learned from the studies cited above. More specifically, I will focus on music composed during the first fifteen years of Ravel's professional career, concluding with his *Rapsodie espagnole*, completed in 1908 and admired in Russia after its auspicious St. Petersburg premiere the following year. Several works from this period directly implicate Ravel in the octatonic legacy, manifesting the influence of nineteenth-century chromatic harmony as practiced by Liszt and Rimsky-Korsakov and at the same time anticipating methods of octatonic partitioning heretofore considered specifically Stravinskian innovations.

The octatonic scale results from the strict alternation of whole tones and semitones. Because any given octatonic scale produces the same pitch collection as the octatonic scale located a minor third away, the scale is limited to three collections (Ex. 1)—hence, Messiaen's classification of the scale as one of the "modes of limited transposition." Minor-third and diminished-fifth relationships often assume a privileged status in octatonic contexts, and therefore theorists have also referred to the scale as the "diminished mode."<sup>4</sup>

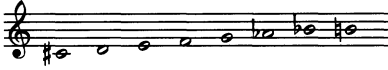
2. See, for example, Elaine Brody, *Paris: The Musical Kaleidoscope, 1870–1925* (New York: George Braziller, 1987), 190–212; and by the same author, "The Russians in Paris (1889–1914)," in *Russian and Soviet Music: Essays for Boris Schwarz*, ed. Malcolm Hamrick Brown (Ann Arbor: UMI Research Press, 1984), 157–83.

3. The principal works on Debussy's octatonicism include Allen Forte, "Debussy and the Octatonic," *Music Analysis* 10 (1991): 125–69; Richard S. Parks, *The Music of Claude Debussy* (New Haven: Yale University Press, 1989); and Joel Eric Suben, "Debussy and Octatonic Pitch Structure" (Ph.D. diss., Brandeis University, 1980). The only study dedicated to octatonicism in Ravel's music is Thomas Kabisch, "Oktatonik, Tonalität und Form in der Musik Maurice Ravel's," *Musiktheorie* 5 (1990): 117–36. Kabisch discusses three works, each separated from the next by at least a decade—the String Quartet in F major (1902–3), *Trois Poèmes de Stéphane Mallarmé* (1913), and *L'Enfant et les sortilèges* (1925).

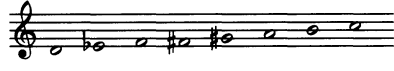
4. Taruskin, *Stravinsky and the Russian Traditions*, 283. Taruskin cites Russian theorist Boleslav Yavorsky's "Neskol'ko misley v svyazi s yubileyem Frantsa Lista," *Muzika*, no. 45 (8 October 1911): 961.

**Example 1** The octatonic scale

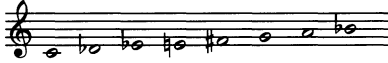
Collection I



Collection II



Collection III



Liszt, Rimsky, and others found particularly useful the octatonic scale's aptness for harmonic motion and melodic sequence by minor thirds and tritones. The alternating whole tones and semitones that define the octatonic scale divide the octave symmetrically by minor thirds into four "nodes" (to use Taruskin's term). When arranged such that the semitone comes first, the octatonic scale provides the pitches necessary to construct various conventional harmonies on each of the nodes, including major and minor triads, dominant seventh chords, minor seventh chords, diminished seventh chords, half-diminished seventh chords, and dominant ninth chords (Ex. 2a). When the whole tone comes first, the octatonic scale partitions into Dorian tetrachords (i.e., tone–semitone–tone), each beginning on one of the nodes (Ex. 2b).<sup>5</sup> Of course Dorian tetrachords also occur when the scale begins with the semitone, but the initial pitch of each tetrachord does not align with the harmonic nodes of the given scale. When the scale appears in descending order, however, the harmonic and tetrachordal nodes do correspond (Ex. 2c). Thus, the octatonic scale provides the resources for a harmonic and melodic vocabulary that has much in common with that of traditional diatonic practice; by enabling symmetrical division of the octave by minor thirds and tritones, however, it undermines diatonic functions, which depend upon the asymmetrical division of the octave.

## French Octatonicism and Its Sources

From the very outset of his career, Ravel found himself mired in a bitter public controversy concerning his alleged appropriation of stylistic and technical

5. In his sketchbooks, Rimsky distinguished between the "one scale" and the "other scale" depending on whether the semitone or the whole tone was the initial interval. Taruskin refers to them as the "harmony scale" and the "melody scale" (*Stravinsky and the Russian Traditions*, 272–88). Jazz theorists and musicians also recognize both forms of the octatonic scale, commonly referred to as the "diminished scale." See, for example, Mark Levine, *The Jazz Theory Book* (Petaluma, Calif.: Sher Music, 1995), 78–88.

The chord names used here refer only to structural chord types and are not intended to imply functional significance, unless otherwise noted. Throughout I use "dominant ninth" to refer to a dominant seventh chord with an additional minor ninth.

## Example 2

(a) The harmony scale, Collection II

(b) The melody scale, Collection I

(c) The descending harmony/melody scale, Collection II

innovations introduced by Debussy. The most persistent voice in the debate belonged to Pierre Lalo, music critic for *Le Temps* and an avowed Debussyite. Lalo regularly portrayed Ravel as a wholly derivative composer, consistently attacking him on grounds that his music lacked anything that could be considered original—an accusation often echoed by subsequent commentators.<sup>6</sup>

6. As early as 1899, Lalo asserted that Ravel was “obviously under the dangerous influence of a musician whom one should esteem but not imitate, Claude Debussy” (*Le Temps*, 13 June 1899). In 1906 he identified as the most striking of Ravel’s “very apparent and rather annoying faults” the “strange resemblance of his music to that of M. Claude Debussy” (*Le Temps*, 30 January 1906). Lalo frequently insinuated that Debussy was the only French composer of the day with any capacity for originality, and he continued to impugn Ravel’s growing reputation as a forward-looking modernist. The *affaire Ravel* came to a head when Lalo dedicated his Sunday column on 19 March 1907 to the subject of “Debussyism.” A scathing review of Ravel’s song cycle *Histoires naturelles* had served as the pretext for Lalo’s diatribe against the plagiarists of

That Debussy did in fact make use of the octatonic scale prior to Ravel would at first seem to support Lalo's charges. It is likely, however, that the octatonic element in both composers' early work is more a matter of common sources than of direct borrowing between them, and for these sources we must look to Liszt and the Russians.

Taruskin argues convincingly that the octatonic scale first appeared as a by-product of third-related harmonic progressions, a point he illustrates with a passage from Liszt's symphonic poem *Ce qu'on entend sur la montagne* (1848–49) in which a descending octatonic scale in the bass connects a string of chords related by minor thirds.<sup>7</sup> Taruskin also demonstrates that similar circumstances typify early appearances of the whole-tone scale, citing Glinka's opera *Ruslan and Lyudmila* (1842), in which a descending whole-tone scale functions as a leitmotif representing the evil sorcerer Chernomor. In the overture to the opera, the scale connects harmonies related by major thirds. More than any of his Russian contemporaries, Rimsky-Korsakov was conscious of the octatonic and whole-tone scales used by Liszt and Glinka to link third-related harmonies, and he mentions both works in connection with his tone poem *Sadko* (1867), which features his earliest explicit application of the octatonic scale.<sup>8</sup> Here, octatonic scales unfold in the uppermost voices over a chain of triads related by minor third. Taruskin appropriately uses the term *triadic octatonicism* to refer to such passages in which pitches referable to an octatonic collection are used to construct harmonies rooted on the nodes of that collection, and he offers several examples displaying the close relationship between mediant progressions and the octatonic scale in much of Rimsky's music.<sup>9</sup> In addition to progressions by minor third, harmonic motion between chords located a tritone apart (i.e., chords built upon alternating nodes within a given collection) also figures prominently in the triadic octatonicism practiced by Rimsky and other Russians.

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Debussy, leaving little doubt that Ravel was the primary object of his disapprobation. The entire column appears in Victor I. Scroff, *Maurice Ravel* (New York: Holt, 1953), 102–11.

7. Taruskin, *Stravinsky and the Russian Traditions*, 255–72. See Example 5a below.

8. "The Introduction [to *Sadko*] . . . contains the harmonic and modulatory basis of the beginning of Liszt's '*Ce qu'on entend sur la montagne*' (modulation by a minor third downward). The beginning of the Allegro . . . is reminiscent of the moment where Lyudmila is spirited away by Chernomor in Act I of *Ruslan and Lyudmila*. However, Glinka's scale, descending by whole tones, has been replaced by another descending scale of semitone, whole tone, semitone, whole tone—a scale which subsequently played an important role in many of my compositions" (Nikolai Rimsky-Korsakov, *My Musical Life*, trans. Judah A. Joffe [London: Eulenberg, 1974], 78). According to Taruskin, Rimsky's testimony points up the conceptual parallel between whole-tone and octatonic scales—"They were functional equivalents: both were outgrowths of mediant interval cycles, both first appeared as descending basses, both were originally modulatory devices; and both, for Russian composers, were evocative of evil magic." The octatonic scale became so common in Rimsky's work that it was known in St. Petersburg circles as the "Rimsky-Korsakov scale" (*Stravinsky and the Russian Traditions*, 266–68, 272).

9. See Taruskin, *Stravinsky and the Russian Traditions*, 266–88.

## Debussy and the Russians

Allen Forte identifies numerous octatonic passages in the music of Claude Debussy, including several early works. While Forte's application of set theory offers an illuminating classification of the octatonic pitch-class sets employed by Debussy, a more traditional approach may be equally illuminating. Conventional harmonic analysis reveals a consistent element in Debussy's early encounters with octatonicism: third-related harmonic progressions. In fact, almost every example cited by Forte predating *La Mer* (1905) can be reduced to the same mediant progressions that first drew Liszt and Rimsky-Korsakov to the octatonic. Although he identifies octatonic elements in Debussy's music dating back to 1880, the song "L'Ombre des arbres" (1885–87) is the earliest work by Debussy that Forte suggests exhibits a conscious application of the scale as a conceptual framework (Ex. 3).<sup>10</sup> The accompaniment consists of harmonies on C#, G, and E—three of the four octatonic nodes—and exhausts Collection I. The only foreign pitch is the E♭ passing tone (circled in the example). The melody adheres exclusively to the collection through measure 5, covering seven of its eight pitches. Whether or not this passage unambiguously proves Debussy's consciousness of the octatonic collection, it does demonstrate—as do all of Forte's early examples—that the octatonic element in Debussy's music consistently appears in conjunction with harmonies related by minor third and by tritone.<sup>11</sup>

According to Forte, Debussy's earliest octatonic writing (1880) predates his contact with any manifestly octatonic music.<sup>12</sup> Debussy did, however, have prior contact with explicit examples of Russian triadic octatonicism. In October of 1874 the library of the Paris Conservatory received a package containing twenty-seven scores of Russian music, including Rimsky-Korsakov's

10. For his purposes, Forte uses the term *octatonic* broadly to refer "not only to the octatonic scale, but also and more generally to any [ordered or unordered] subset of that scale that contains from three to seven notes" ("Debussy and the Octatonic," 126). As a result, in some of the examples provided by Forte, the octatonic element appears to be incidental. For instance, some excerpts consist of nothing more than a succession of two third-related triads. Such progressions can indeed engage up to six pitches that are all referable to an octatonic collection, but two chords located a minor third apart (and their constituent pitches) can also exist comfortably in diatonic contexts. Many of Forte's early examples also contain important pitches foreign to the octatonic collection, thus casting further doubt on the likelihood that the octatonic collection provided the conceptual framework for such excerpts.

11. Other examples cited by Forte and the mediant progressions they employ include the songs "Fleur de blés," 1880 (E♭ minor seventh/C dominant seventh/G♭ dominant seventh); "Beau soir," 1880 (E major/G minor); "Il dort encore," 1880 (B dominant seventh/D dominant seventh, with intervening diminished chords rooted on G# and B); and "La Mer est plus belle que les cathédrales," 1891 (B major/D minor, then E major/G dominant seventh), as well as *Pelléas et Mélisande*, 1893–1902 (B♭ half-diminished seventh/C# half-diminished seventh, then F half-diminished seventh/G# half-diminished seventh [Forte's Ex. 11]); and later, C major/D# minor, then B♭ major/C# minor [Forte's Ex. 12]).

12. Forte, "Debussy and the Octatonic," 133.

Example 3 Debussy, "L'Ombre des arbres," mm. 1–5

Lent et triste

*pp*

L'om-bre des ar-bres dans la ri-  
-vière em-bru-mé-e Meurt com-me de la fu-mé-e

*Sadko* and Glinka's *Ruslan and Lyudmila*—two works cited, along with Liszt's *Ce qu'on entend sur la montagne*, in Rimsky's account of his own introduction to octatonicism (see n. 8 above).<sup>13</sup> Debussy first entered the Conservatory in 1873, and by 1877 he began frequenting its library, where he would have had access to these scores.<sup>14</sup> In a series of descriptive and analytical essays on Russian music appearing in the *Revue et Gazette musicale* between 1878 and 1880, César Cui discusses both *Sadko* and *Ruslan and Lyudmila*. He refers directly to the same whole-tone passage cited by Rimsky, as well as the "puissants et nouveaux" third-related harmonies that accompany Chernomor's leitmotif.<sup>15</sup> Debussy would have had the opportunity to hear both

13. André Schaeffner, "Debussy et ses rapports avec la musique russe," in *Musique russe: Études réunies par Pierre Souvtchinsky*, ed. Pierre Souvtchinsky (Paris: Presses Universitaires de France, 1953), 1:107–8. The package also contained Musorgsky's *Boris Godunov*, with its famous Coronation scene, featuring the direct oscillation between tritone-related dominant seventh chords.

14. *Ibid.*, 108.

15. *Revue et Gazette musicale*, 12 May 1878 through 5 October 1880. Cui published these essays as a collection in 1880 under the title *La Musique en Russie* (Paris: Fischbacher, 1880). The reference to Chernomor's whole-tone leitmotif as used in the overture to the opera appears on page 35 of this volume.



works performed at the World Exposition of 1878. *Sadko* received two additional performances in Paris under the direction of Jules Pasdeloup in December of the same year, and another on 1 February 1880.<sup>16</sup>

If *Ruslan and Lyudmila* and *Sadko*—two works that make explicit the relationship between symmetrical scales (whole-tone in the former, octatonic in the latter) and mediant harmonic progressions—somehow escaped Debussy's attention prior to 1880 (either in print or in performance), we can confirm his familiarity during the same year with another clear example of Russian triadic octatonicism. On 18 August, Debussy read through a four-hand piano arrangement of Tchaikovsky's Symphony No. 4 (1877) in Switzerland with Nadezhda von Meck, who had hired him as a piano instructor for her children.<sup>17</sup> The first movement of the symphony uses a symmetrical key scheme, completing a full rotation through key centers related by minor third.<sup>18</sup> Tchaikovsky condenses this modulatory plan into a harmonic progression during the second movement (Ex. 4). Here, major triads built on the four octatonic nodes (A♭, B, D, and F) completely engage Collection II.<sup>19</sup> The melodic line carried by the violins states the collection in its entirety, excepting only a D♭ passing tone in place of D♯ in the second measure of the excerpt. By condensing into a mediant chord progression what appeared previously as a long-range tonal scheme, Tchaikovsky's symphony calls to mind Liszt's *Ce qu'on entend sur la montagne*. Liszt opens the symphonic poem with a series of modulations downward by minor third, which he later condenses into a mediant chord progression—a progression accompanied by what Taruskin identifies as “perhaps the earliest ‘functioning’ octatonic scale in European music” (Ex. 5a).<sup>20</sup> Tchaikovsky's finale contains a passage that bears a strong resemblance to Liszt's exemplar of triadic octatonicism (Ex. 5b). In both excerpts, a descending Collection III scale in the bass line supports a rotation of chords

16. Schaeffner, “Debussy et ses rapports,” 118.

17. Alexander Poznansky, *Tchaikovsky: The Quest for the Inner Man* (New York: Schirmer, 1991), 374. In a letter to Tchaikovsky dated 19 August 1880, von Meck wrote, “Yesterday I decided for the first time to play our symphony [Tchaikovsky's Symphony No. 4] with my little Frenchman [Debussy]. . . . My partner performed it not well, though he played splendidly. This is his sole though still enormous merit: he reads compositions, even yours, *à livre ouvert*. His second merit, reflective so to speak, is that he is in raptures over your music.” Although dating Debussy's early works remains problematic, we can be fairly certain that his earliest works cited by Forte postdate this reading. Based on the dedication, John Trevitt dates “Fleur des blés” toward the end of 1880. He dates “Beau soir,” previously ascribed to 1880, to sometime during 1882 inasmuch as the text of the song wasn't published until that year. See John Trevitt, “Debussy inconnu: An Inquiry. Part 1: The Earlier Vocal Music,” *Musical Times* 114 (1973): 881–86.

18. The exposition opens in F minor, with a second theme in A♭ major and a closing theme in B major. The recapitulation begins in D minor and presents the second theme in F major, thus completing the rotation. The movement closes in F minor.

19. Any complete harmonic rotation by minor thirds through all four nodes will exhaust the octatonic collection.

20. Taruskin, *Stravinsky and the Russian Traditions*, 266.

**Example 4** Tchaikovsky, Symphony No. 4, second movement, mm. 110–17 (reduction)

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through all four nodes of the collection: E $\flat$ , C, A, and F $\sharp$ . Tchaikovsky's example also reproduces a rhythmic motif prominent in the Liszt excerpt (♩ 7 ♩ ♩ ♩ ♩). Forte minimizes the significance of Russian influence on Debussy's earliest octatonic writing, citing instead passages from Berlioz and Liszt.<sup>21</sup> But the Russians provided a more immediate source for Debussy, and their examples more clearly implicate the octatonic collection in symmetrical divisions of the octave by minor third and by tritone.

21. Forte, "Debussy and the Octatonic," 153–55. While Liszt—progenitor of many chromatic devices used commonly throughout the second half of the nineteenth century—cannot be dismissed, the examples from Berlioz are less convincing. Forte offers two passages from the *Symphonie fantastique*. In the first, five notes of an octatonic scale result from the simple filling out of a diminished seventh chord with passing tones. Taruskin distinguishes between such "mere embellishment[s] of a diminished-seventh chord" and "true third-related root linkage" such as that found in *Ce qu'on entend sur la montagne* and Tchaikovsky's Fourth. As he demonstrates, the former can be found as early as Bach, and he dismisses this sort of "octatonicism" as a "fortuitous veneer" on the surface of common practice. For Taruskin, "true octatonicism preempts functions normally exercised by the circle of fifths, whether by a rotation of thirds or, more radically, by a tonally stable diminished harmony." See Taruskin, *Stravinsky and the Russian Traditions*, 266–69. Forte's other examples from Berlioz do employ tritone and mediant progressions, but less exclusively and less thoroughly than do the Russian examples.

Roy Howat nominates Chopin as a source for both Debussy's and Ravel's octatonicism, but most of the examples he provides involve the same kind of diminished seventh chord embellishment that Taruskin distinguishes from "true octatonicism." Two cursory passages from Chopin that do involve third- and tritone-related harmonic progressions (Howat's examples 25d and 25e from the Sonata in B $\flat$  Minor and the Fourth Ballade, respectively) amount to a total of three measures between them, making Chopin a far less substantial source for octatonic writing than the Russians. See Roy Howat, "Chopin's Influence on the *Fin de Siècle* and Beyond," in *The Cambridge Companion to Chopin*, ed. Jim Samson (Cambridge and New York: Cambridge University Press, 1992), 275–78.

Sylvia Kahan has identified an additional source of French octatonicism that predates both Debussy and Ravel in the music of Edmond de Polignac (1834–1901), the French aristocrat and dilettante composer. While the examples identified by Kahan qualify as "true octatonicism" as defined by Taruskin, Polignac was a peripheral figure, and his music is not likely to have had a significant impact on that of either Debussy or Ravel. I am grateful to Professor Kahan for sharing her findings with me prior to publishing her study.

Example 5a Liszt, *Ce qu'on entend sur la montagne*, 16 mm. before letter Y, reduction

The image shows two systems of musical notation for Liszt's *Ce qu'on entend sur la montagne*. Each system consists of a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The first system begins with a treble clef and a key signature of two flats (B-flat and E-flat). The melody in the treble clef is marked with a fermata over the first measure. The bass clef part features a complex accompaniment with many beamed sixteenth notes and chords. The second system continues the piece, showing a key change to one flat (B-flat) and a change in the bass clef accompaniment.

Example 5b Tchaikovsky, *Symphony No. 4*, fourth movement, mm. 47–48, reduction

The image shows a single system of musical notation for Tchaikovsky's *Symphony No. 4*, fourth movement, measures 47–48. It is a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The key signature is one flat (B-flat). The treble clef part features a melody with a fermata over the first measure. The bass clef part has a rhythmic accompaniment with eighth and sixteenth notes.

### Ravel and the Russians

Ravel's contact with Russian music during his youth was even more extensive than that of Debussy. The interest in Russian music cultivated at the Paris Conservatory during Debussy's studentship had only intensified by the time Ravel entered as a piano student in 1889.<sup>22</sup> Ravel's closest acquaintance during his years at the Conservatory (and for many years thereafter) was the Spanish pianist Ricardo Viñes. Ravel and Viñes met in 1888—both thirteen years of age—and together they spent numerous hours at the keyboard playing through a variety of works, including substantial portions of Rimsky-

22. That year, the Conservatory received one hundred additional scores of Russian music to supplement the package received in 1874, and another fifty had arrived before Ravel completed his earliest published composition in 1893. As early as 1880, music history classes taught at the Conservatory by Louis Bourgault-Ducoudray included the music of Rimsky-Korsakov and Musorgsky, and Schaeffner assures us that the Conservatory's collection of Russian scores circulated regularly ("Debussy et ses rapports," 108–12).

Korsakov, Balakirev, Borodin, and Glazunov.<sup>23</sup> They frequented the 1889 World Exposition where Rimsky-Korsakov conducted two programs dedicated to Russian composers. There Ravel, in all likelihood, heard Glinka's overture to *Ruslan and Lyudmila* and Rimsky's own *Antar*, another work that exploits whole-tone scales within the context of mediant chord progressions. The earliest critical accounts of Ravel's music note the influence of the Russian school. Henri Gauthier-Villars—extending Lalo's charges of plagiarism to cover additional sources—described Ravel's first orchestral work, *Ouverture de Shéhérazade* (1898), as “a clumsy plagiarism of the Russian school (of Rimsky faked by a Debussyan who is anxious to equal Erik Satie).”<sup>24</sup> Although many subsequent writers have acknowledged the influence of Russian music on Ravel, such commentary typically focuses primarily on matters of orchestration.<sup>25</sup> But Ravel also borrowed from the harmonic vocabulary of Rimsky and the *école russe* in ways that have yet to be adequately discussed.

As Taruskin demonstrates, Russian composers relied heavily on specific types of chromaticism to evoke the world of evil magic, a world that figures prominently in nineteenth-century Russian opera. Depictions of sorcerers and other supernatural characters often involved whole-tone or octatonic elements, while folk characters—another mainstay of nineteenth-century Russian opera—remained grounded in diatonic and modal contexts. In Ravel's earliest works one can find passages that incorporate a type of chromatic harmony similar to that used by the Russians. At the age of eighteen, Ravel composed his first piece for solo piano, the impish *Sérénade grotesque* (1893). Throughout the piece, mediant and tritone relationships play mischief with an otherwise diatonic environment. The first ten measures adhere entirely to the whole-tone collection (Ex. 6a).<sup>26</sup> As he would do often in subsequent works, Ravel emphasizes points of intersection between diatonic and nondiatonic

23. Arbie Orenstein, *Ravel: Man and Musician* (New York: Columbia University Press, 1975), 16.

24. Gauthier-Villars, *Garçon l'audition!* (Paris, 1901), 125, as quoted in Orenstein, *Ravel: Man and Musician*, 24.

25. For example, Forte states, “The major influence that Rimsky exerted upon younger composers, including Debussy and Ravel, was in the area of orchestration” (“Debussy and the Octatonic,” 157). Gerald Larner's recent Ravel biography similarly limits its discussion of Rimskian influence primarily to techniques of orchestration (*Maurice Ravel* [London: Phaidon, 1996], 105–6). Published over twenty years ago, Orenstein's *Ravel: Man and Musician* remains the most authoritative study of Ravel's life and works. While he acknowledges Russian influence on Ravel's melodic style—particularly its combination of tonality and modality (including Dorian, Phrygian, whole-tone, and pentatonic modes) and its tendency toward sequential (as opposed to motivic) development—Orenstein did not have the benefit of recent scholarship on nineteenth-century Russian chromatic harmony published since his book, and the octatonic scale goes unrecognized in his analyses of Ravel's music.

26. Just as there are only three possible octatonic collections, there are only two possible whole-tone collections, (C, D, E, F#, G#, A#) and (C#, D#, F, G, A, B), the latter of which is featured here.

Example 6 Ravel, *Sérénade grotesque*

(a) Mm. 1–10

Très rude (♩ = 100)

The musical score consists of three systems of music. The first system (measures 1-3) shows a piano part with a forte fortissimo (*ff*) *pizzicatissimo* marking. The second system (measures 4-6) includes a dynamic marking of *ff* and an asterisk (\*) under a note. The third system (measures 7-10) also includes an asterisk (\*) under a note. The tempo is marked as *Très rude* with a quarter note equal to 100 beats per minute (♩ = 100).

pitch fields.<sup>27</sup> The introduction consists almost exclusively of seventh chords with omitted fifths—a chord type common in diatonic contexts but wholly referable to the whole-tone collection—in a progression governed by mediant and tritone relationships. The first half of the progression (mm. 1–2, 5–6) moves by whole tone between chords rooted on C# and A, while the second half of the progression (mm. 3–4, 7–8) foregrounds the C#–G tritone. Later, Ravel employs chords related by minor third (G# minor/B minor/G# dominant seventh/D dominant seventh). Every pitch belongs to Collection II, while each harmony in the passage corresponds to one of the octatonic nodes (Ex. 6b).<sup>28</sup> Just as the Russians had relied on whole-tone and octatonic con-

27. In “Oktatonik, Tonalität und Form,” Kabisch discusses octatonic-diatonic intersections in the String Quartet in F Major (1902–3), *Trois Poèmes de Stéphane Mallarmé* (1913), and *L’Enfant et les sortilèges* (1925).

28. Because octatonic referability is the inevitable outcome of any minor-third progression of conventional harmonies, a progression such as the one given in Example 6b does not necessarily

## Example 6 continued

(b) Mm. 45–50

The musical score for Example 6 continued, measures 45–50, is presented in two systems. The first system, measures 45–48, is marked **Tempo primo**. It begins with a treble clef and a key signature of two sharps (D major/C# minor). The music features a complex texture with multiple voices in both hands. Dynamics include *sff*, *p*, and *très sec* in the first half, and *vivace* and *ff* in the second half. The second system, measures 49–50, is marked **Più lento**. It continues in the same key signature and features a more relaxed tempo. Dynamics include *pp*. The score includes various musical notations such as slurs, accents, and fingerings.

texts to evoke the otherworldly, Ravel relies on symmetrical chromaticism to construct this microcosm of grotesqueries.

Octatonically referable mediant progressions pervade “Un Grand Sommeil noir” (1895), a setting of Verlaine’s morose three-stanza poem, and again Ravel exploits intersections between diatonic and chromatic pitch fields. The song opens with a chordal ostinato accompaniment oscillating between E major and C# minor—relative key centers in diatonic contexts, but also harmonies built upon two of the four nodes of Collection I. Midway through the first stanza, a dominant seventh chord on the next octatonic node (A#) enters the pattern (Ex. 7). Symmetry dictates the harmonic motion of the accompaniment (A# dominant seventh/E major/C# major/E major), in which an octave-bisecting tritone (A#–E) is then bisected itself by minor third (C#–E). The vocal pedal tone provides alternately the seventh, third, and fifth of the supporting harmony, and every pitch belongs to Collection I.

Ravel moves outside of the octatonic collection for the second stanza, but returns for the closing stanza. He reestablishes the symmetrical tritone/minor-third harmonic pattern, which he sequences through all three octatonic

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imply an *a priori* conceptualization of the scale as a compositional apparatus. Clearly, the opening measures given in Example 6a evince Ravel’s consciousness of the whole-tone scale—functional equivalent of the octatonic scale (see n. 8 above)—and its association with mediant and tritone progressions. At the very least, the *Sérénade grotesque* demonstrates that from the outset mediant and tritone relationships figured prominently in Ravel’s harmonic vocabulary, resulting in local passages entirely referable to whole-tone and octatonic pitch fields.

## Example 7 Ravel, "Un Grand Sommeil noir," mm. 12–14

12

Dor-mez toute en- vi- e.

*plus fort*

collections (Ex. 8). The first line of the stanza unfolds over harmonies on three of the four nodes from Collection II (F dominant seventh/B major/G# major), which, but for one absent pitch, is fully represented. A shift to Collection III accompanies the second line of the stanza, and again harmonies on three of the four nodes (D# dominant seventh/A major/F# major) nearly exhaust the collection. The last two lines of the poem coincide with a return to Collection I, which accompanied the opening stanza. To this point, Ravel has engaged only three octatonic nodes as harmonic roots at any given moment, and as a result the collection has in each case remained one pitch short of full representation. These two lines (mm. 33–38) unfold over harmonies on all four nodes (C# dominant seventh/G major/E major; then A# dominant seventh/E major/C# major), thus engaging every pitch from the collection. The dark slumber described by Verlaine takes place largely in the haze of triadic octatonicism.<sup>29</sup>

29. It is difficult to determine whether or not Ravel was thinking specifically in terms of the octatonic collection when he composed "Un Grand Sommeil noir." The strictness with which he adheres to his mediant progressions and the voice leading of his accompaniment—particularly from measure 33 through measure 36—suggest that this is likely. In any case, he was clearly thinking in terms of symmetrical divisions of the octave by thirds and tritones. This kind of chromatic symmetry also pervades Ravel's "Si morne!" (1898), another morbid song setting a text by Emile Verhaeren. Here the tritone becomes an important tonal axis, largely through the prominent disposition of the French sixth chord—a chord with tritone invertibility (i.e., either of two pitches located a tritone apart can serve as the theoretical root without altering the structure of the resulting chord). Ravel highlights this property of the chord in his piano accompaniment. Tritone and mediant relationships predominate throughout the song, usually in whole-tone contexts. Later the same year Ravel completed his first orchestral work, the *Ouverture de Shéhérazade*, on which he acknowledged a "heavy Russian influence," and again he relies on symmetrical chromaticism. The introduction (mm. 1–24) completes a rotation through tonal centers related by major third (B, G, Eb, B). Whole-tone scales saturate the overture, including an opening theme built around a descending whole-tone tetrachord and emphasizing the tritone defined by its outer pitches. The tritone assumes a degree of stability during the climax of the introduction (mm. 19–24), where a melodic whole-tone motif teetering between C and F# coincides with a harmonic oscillation between dominant seventh chords rooted on the same two pitches—an octatonically referable harmonic oscillation with many Russian precedents. Both works also contain brief passages with

## Example 8 Ravel, "Un Grand Sommeil noir," mm. 28–38

28

Collection II *très doux* Collection III

Je suis un ber- ceau Qu'une main ba-

*p* *simile*

32

Collection I

-lan- ce Au creux d'un ca- veau.

*dim.*

36

*pp*

Si- len- ce,

*ppp*

harmonic progressions consisting of chords related by minor third (and therefore referable to the octatonic collection), but neither goes beyond "Un Grand Sommeil noir" in this respect. Ravel's song "Manteau de fleurs" (1903) contains a passage consisting of little more than triadic octatonicism (mm. 14–23), as overt harmonic motion by tritone and minor third accompanies an exclusively octatonic vocal line. Like "Un Grand Sommeil noir," "Manteau de fleurs" has three clearly defined sections. Whereas octatonicism predominates the outer sections of the former, however, it comes to the fore in the central section of the latter.



Shortly after the turn of the century, Ravel and Viñes joined a circle of writers, artists, and musicians who called themselves the “Apaches.” The nucleus of the group came together around 1900, and by 1902 they were meeting every Saturday at the apartment of Maurice Delage. The Apaches shared with Ravel and Viñes their interest in all things Russian, an interest nourished by the presence among their ranks of Dmitri Calvocoressi, author of numerous articles on Russian music as well as books on Musorgsky and Glinka.<sup>30</sup> Sight-reading Russian scores, particularly four-hand piano arrangements of orchestral works by Rimsky-Korsakov, Balakirev, Musorgsky, and Borodin, was among the favorite activities of the Apaches, who used as their “password” the opening theme of Borodin’s Second Symphony. Here Ravel cultivated a greater knowledge of Russian music, and many of his works from this period bear the influence of nineteenth-century Russian chromatic harmony.<sup>31</sup>

Ravel’s years with the Apaches (ca. 1902–14) encompass the most productive decade of his career. In 1903, he completed the String Quartet in F, the song cycle *Shéhérazade* for voice and orchestra, and the first movement of his *Sonatine*. The same year also saw Ravel’s fourth consecutive failed attempt at the Prix de Rome. For the cantata portion of the competition, the committee assigned him a text by Marguerite Coiffier entitled *Alyssa*, featuring as the title character a sea nymph residing in an underwater kingdom. Alyssa appears to Braÿzyl, a Celtic chieftain, after he inhales the fragrance of a verbena blossom. In Coiffier’s archetypal plot, the protagonist must choose between love and duty as Alyssa tries to persuade him to leave behind his earthly responsibilities

30. Other Apaches besides Ravel, Viñes, and Calvocoressi included composers Florent Schmitt, Maurice Delage, Paul Ladmirault, and Edouard Bénédictus, poets Léon-Paul Fargue and Tristan Klingsor, critic Emil Vuillermoz, vocal instructor Marcel Chadeigne, set designers Paul Sordes and Georges Mouveau, conductor D. E. Inghelbrecht, and lithographer Léon Pivet. In 1910, Stravinsky joined the Apache circle and remained with the group until 1914, when World War I interrupted their regular meetings. See Jann Pasler, “Stravinsky and the Apaches,” *Musical Times* 123 (1982): 403–4.

31. Other musicians immediately recognized Ravel’s familiarity with Russian music, including Alfredo Casella (1883–1947), the Italian composer, pianist, and conductor who met Ravel at the Paris Conservatory around this time. “In the winter of 1900–01 I audited Gabriel Fauré’s composition class,” Casella writes. “A very brilliant class in quality, it included at that time Roger-Ducasse, Charles Koechlin, Maurice Ravel, and several others of great talent. . . . Ravel and I became close friends at once. . . . As soon as I made his acquaintance, I realized what an intellectual force inhabited that tiny little man and tried to be around him as much as possible. . . . His culture was vast, in literature as well as in music. I owe him my first knowledge of Russian music, including that of Mussorgsky. Once or twice a week we met at the home of Pierre Sechiari, the concertmaster of the Lamoureux orchestra, and read in four-hand arrangements all the operatic and symphonic repertoire of the Russian ‘Five’ and of Glazunov, Liapunov, Liadov, and others. . . . A great impression was made on us by the music of Borodin, Balakirev, and Rimsky-Korsakov” (*Music in My Time: The Memoirs of Alfredo Casella*, trans. Spencer Norton [Norman: University of Oklahoma Press, 1955], 59–61; quoted in Arbie Orenstein, ed., *A Ravel Reader: Correspondence, Articles, Interviews* [New York: Columbia University Press, 1990], 136–37 n. 3).

and take up permanent residence with her beneath the sea. Ravel presents a plainly stated octatonic scale at the moment in which the floral aroma begins to have its magical effect (Ex. 9a, mm. 91–92). This linear application of the scale has conspicuous precedents in Rimsky-Korsakov's opera *Sadko* (1897), completed thirty years after the tone poem of the same name (Ex. 9b). In both excerpts the scale facilitates a modulation and leads directly to the arrival of the new key, which occurs on a second-inversion tonic triad. The text assigned to Ravel might well have called to his mind Rimsky's opera. Like *Sadko*, *Alyssa* deals with the betrothal of an earthly protagonist to an undersea-dwelling fairy, and like Rimsky, Ravel engages the octatonic scale to color its fantastical episodes.<sup>32</sup>

Ravel collaborated with fellow Apache Tristan Klingsor on *Shéhérazade*, a three-song cycle for voice and orchestra also completed in 1903.<sup>33</sup> In the first song of the cycle, "Asie," a typical octatonic progression consists of major triads rooted on all four nodes of Collection I: C#, E, G, and Bb (Ex. 10a). Here, triadic octatonicism coincides with a technique that Taruskin refers to as "tetrachordal octatonicism."<sup>34</sup> Besides partitioning into conventional harmonies rooted on the third-related octatonic nodes, the octatonic scale partitions into four Dorian tetrachords, also spaced at the interval of a minor third. The mediant progression in "Asie" accompanies a melodic figure that outlines a succession of overlapping Dorian tetrachords starting on B, D, and F (see the reduction in Ex. 10b). As noted above, the harmonic and tetrachordal nodes do not correspond to each other in ascending order, but here Ravel emphasizes the second degree of each tetrachord to foreground points of intersection between harmonic and melodic elements, both derived from the same octatonic collection.

Of all the works Ravel completed in 1903, the String Quartet in F major makes the most extensive use of the octatonic scale, which is central to the formal design and expressive strategy of the first movement. Although cast in a conventional sonata form, the movement relies on a long-term modulation from diatonic to octatonic pitch fields and back again.<sup>35</sup> Brief octatonic references in the exposition—although conspicuous—never threaten to derail a

32. Another octatonic reference in *Alyssa* occurs when Braizyl enters an enchanted forest replete with dancing elves ("Prélude," four measures before R13). Here, Ravel partitions the octatonic scale into two successive Dorian tetrachords—(G#, A#, B, C#) and (B, C#, D, E)—which he superimposes on a third (D, E, F, G), thus engaging Collection I entirely and exclusively.

33. Tristan Klingsor was the pseudonym used by the French poet, painter, art critic, and composer Arthur Justin Léon Leclère (1874–1966).

34. Taruskin, *Stravinsky and the Russian Traditions*, 292–95.

35. Cf. Stephen Paul Hartke, "Comparative Aspects of the Treatment of the 'Harmonic Envelope' in the First Movements of Debussy's String Quartet in G Minor and Ravel's String Quartet in F Major" (Ph.D. diss., University of California, Santa Barbara, 1982), 21–25.

Example 9a Ravel, *Alyssa*, scene 1, mm. 86–95

86

Une om-bre vai-ne m'au-rait el-le lais-sé cet-te fleur de ver-

89 24

-vei-ne

Violin

Oh! quel par-fums!

93

Example 9b Rimsky-Korsakov, *Sadko*, act 4, 4 mm. before R173

Sopr.

Alti.

Tenori.

Bassi.

Won- der, a mi-ra-

Won- der,

Viol. 3 3 3

Tr-bni.

173 Allegro  $\text{♩} = 66$

-cle has oc- cur red! Glo- ry!

-cle has oc- cur red! Glo- ry!

-cle has oc- cur red! Glo- ry!

mir- a- cle! Glo- ry!

Fl., Ob., Clar. *cresc.* *ff* *sva*

Example 10 Ravel, *Schéherazade*, "Asie"

(a) Mm. 111-15

111 *mf*

Je vou-drais voir des pau-vres et des rei-nes; Je vou-drais voir des ro-ses et du sang;

*Modéré* *pizz.*

*p subito* *mp*

*Div. #* *p* *mp* *mp* *mp* *mp*

*pizz. p* *p* *mp* *mp* *mp* *mp*

Example 10 continued

113

Je vou- drais voir mou- rir d'a- mour ou bien de hai- ne.

*ff*

*f*

*mp*

*p*

*f*

*mf*

*mf*

*mf*

*p*

Unis.

Unis.

Div.

Unis.

Div. arco

Rall.

arco

3

*f*

*mp*

*p*

*f*

*mf*

*mf*

*mf*

arco

*p*

Detailed description: This is a musical score for a vocal and piano piece. The top staff is the vocal line, starting with a forte (*ff*) dynamic and a triplet of notes. The lyrics are: "Je vou- drais voir mou- rir d'a- mour ou bien de hai- ne." Below the vocal line are four piano staves. The first piano staff is marked *f* and features a triplet. The second piano staff is marked *mp*. The third piano staff is marked *p*. The fourth piano staff is marked *f*. The score includes various performance instructions: "Unis." (unison) for the piano parts, "Div." (divisi) for the vocal part, "Div. arco" (divisi arco) for the piano parts, and "Rall." (rallentando) for the vocal part. The dynamics range from *ff* to *p*. The score is numbered 113 in the top left corner.

## Example 10 continued

(b) Reduction

harmonic scheme governed largely by fifth relationships.<sup>36</sup> In the development, however, mediant and tritone relationships come to the fore, leading to the affective climax of the movement (Ex. 11a). Here, a thematic motive, initially carried by the viola, unfolds in a rising sequence by minor third and outlines a series of overlapping Dorian tetrachords, thus engaging every pitch from Collection II (see the reduction in Ex. 11b). Ravel sets this over a plainly stated rising scale from the same collection. The only pitches foreign to Collection II belong to a Collection III scale sounded by the violins in alternating measures, moving in strict parallel motion to the octatonic bass line at the interval of a minor seventh (actually, a fourteenth—the minor seventh plus an octave). Together, the Collection II bass line, the parallel Collection III scale, and the rising sequence of Collection II tetrachords articulate a harmonic series involving two interlocking mediant progressions (presented in the bottom staff of Ex. 11b with enharmonic chord spellings). On the strong beats, a series of mostly half-diminished seventh chords moves through two full minor-third rotations. On the weak beats, a series of triads and seventh chords also completes two minor-third cycles.

The development intensifies at measure 115 as Ravel initiates a rapid crescendo, heightening the rhythmic activity and distilling each instrument to an accelerating ostinato pattern. In the outer voices, a repeating bass line and a thematic violin motive each delineate incomplete Dorian tetrachords on C. Ravel sets this against a rhythmic F# pedal and a chromatic viola line. Every

36. For example, during the bridge leading to the second theme group (mm. 31–34), a motive derived from the opening theme alternates with plainly stated octatonic scales carried by the first violin. The scales unfold in a succession of overlapping, sixteenth-note Dorian tetrachords located a minor third apart. Here, the scale merely fills in a diminished seventh chord, which the viola articulates in an eighth-note arpeggiation. This particular diminished seventh chord (G#, B, D, F) provides the four upper pitches of the dominant ninth chord on E, the root being supplied by thematic motive. This prepares a brief move to A major, which in turn sets up the arrival at D minor (the relative minor) for the second theme group. Although it serves an explicitly diatonic function, the octatonic scale here is conspicuous by virtue of its stark presentation and the parallel tritones maintained between the viola and the first violin. A similar instance occurs earlier in the exposition (mm. 24–27), where clearly stated octatonic scales embellish a diminished seventh chord (E, G, Bb, C#) containing the four upper pitches of a dominant ninth chord, the root being supplied by a cello pedal on C.

Example 11 Ravel, String Quartet, first movement

(a) Mm. 110–21

110

1st Violin

Collection III

mp

2nd Violin

p

mp

Viola

p

Collection II

Cello

113

*mf*

*mf*

*p subito*

*p subito*

*p subito*

*p subito*

*crescendo*

Collection II

*e*

*accelerando*

116

*poco*

*a*

*poco*

*ff*

*ff*

*ff*

*ff*



## Example 11 continued

**H** Poco meno vivo

Collection III      Whole Tone      Collection III *un poco dim.*      Whole Tone

119 *fff* *fff* *fff* *fff*

121 *p* *f vibrato* *f* *f*

*F#7* *Fr.6* *4<sup>e</sup> Corde*

pitch belongs to Collection II except the G# in the chromatic viola line. Ravel's wonderful climax (mm. 119–22) involves an abrupt shift to Collection III, a thematic motif derived from the opening measure of the quartet, and a harmonic accompaniment that shimmers between octatonic and whole-tone sonorities. In the first half of each measure, a dominant seventh chord on F# combines with the thematic pitches A and G to sound six of the eight pitches from Collection III. In the second half of each measure, the thematic D and C combine with a French sixth chord, also on F#, to sound five of the six pitches from the whole-tone collection. The second violin sustains the tritone common to both collections, as chromatic scales have overtaken the movement.<sup>37</sup>

37. Although the F# dominant seventh chord and the French sixth chord both have strong diatonic implications, neither can fulfill its typical function in this context. The given passage directly precedes the recapitulation, thus making the tonic F major the immediate harmonic goal. The dominant seventh chord on F# is of no use in this regard, since it implies a resolution to a dis-

## Example 11 continued

## (b) Reduction

Collection II  
110-11

112

113

Viola

Collection III

Violins  
Cello

Collection II

Harmonic Reduction

$d^{\#o7}$

$f^{\#o7}$

$a^{o7}$

$c^{o7}$

$e^{\flat o7}$

$F^7$

$A^{\flat 7}$

$B^7$

$D^7$

$F^7$

114

115-18

Collection III  
119-21

Whole Tone

chromatic

$f^{\#o7}$

$a^{o7}$

$c^{o7}$

$g^{\#4}$

$g^{\#}$

$B^7$

$D^{\flat 9}$

$D^{\flat 9}$

$F^{\#7}$

$Fr.6$

The foregoing examples from the first decade of Ravel's career evince his familiarity with Russian chromatic harmony and the workings of triadic and

tant key. The French sixth chord, also rooted on  $F^{\#}$ , conventionally resolves down by half step as it eventually does here, but it typically moves to a dominant-functioning harmony, not to the tonic. As such, Ravel's tonic preparation short-circuits the circle of fifths, effectively using the French sixth chord—the one chord common to octatonic, whole-tone, and diatonic systems—as a harmonic pivot between chromatic and diatonic pitch fields.

In the twelve measures immediately preceding this excerpt (mm. 98–109), Ravel gradually establishes the octatonic collection as the referent pitch field, first implied (mm. 98–101) by a harmonic oscillation of third-related chords ( $F$  dominant seventh and  $A^{\flat}$  minor seventh), then more clearly defined (m. 102) with the introduction of a chord on the third node ( $B$  dominant seventh) and a motivic variation on the second theme outlining a Dorian tetrachord ( $E^{\flat}$ ,  $F$ ,  $G^{\flat}$ ,  $A^{\flat}$ ), referable to the same collection.

tetrachordal octatonicism, an aspect of his early style that has gone largely unrecognized. As recently stated by Jean-Michel Boulay, “The words ‘octatonic’ and ‘octatonicism’ evoke the music of Stravinsky, Scriabin, and Messiaen. To these names, probably because of recent writings on the subject, some may add Liszt, Rimsky-Korsakov, and Debussy.”<sup>38</sup> If these were the only instances of octatonicism in Ravel’s early oeuvre, then this inattention might be justified. Indeed, none of the previous examples contain any significant departures from what can be found in the music of Liszt or Rimsky-Korsakov. Ravel’s earliest uses of the collection correspond to the systematic triadic and tetrachordal octatonicism for which Liszt and, to a greater extent, Rimsky-Korsakov provided the most accessible and explicit models. But there are additional examples of octatonic writing in Ravel’s early works that augur the vaunted practices of Igor Stravinsky.

### Ravel, Stravinsky, and the Octatonic

Berger, van den Toorn, Taruskin, and others have analyzed and discussed at length octatonicism in the music of Stravinsky. Following Berger, van den Toorn went on to describe and classify the methods by which Stravinsky partitioned the octatonic collection into its constituent harmonies and tetrachords; without the benefit of Taruskin’s historical survey, however, van den Toorn assumed many of these methods to be original to Stravinsky. It was left to Taruskin to identify precisely what aspects of Stravinsky’s octatonicism have precedents in the music of Rimsky-Korsakov’s generation and what aspects of it represent a significant departure from the octatonic practices of his predecessors:

Not one of the octatonic partitioning devices so assiduously and exhaustively ferreted out by Berger and van den Toorn in the work of Stravinsky lacks a precedent in Rimsky-Korsakov. . . . Stravinsky’s great advance consisted in superimposing what had been successions or oscillations in Rimsky, presenting them in the form of vertical simultaneities. This applies not only to the “Petrushka chord” and other Stravinskian “polytonalisms,” but to the tetrachordal partitions in *The Rite of Spring* that so determined its radical harmony.<sup>39</sup>

But was this “great advance” entirely Stravinsky’s?

We can find instances as early as 1905 in which Ravel vertically superimposes octatonically referable tetrachords. In that year he composed the *Introduction et Allegro* (for harp, accompanied by string quartet, flute, and clarinet), commissioned by the Erard company and designed to display the

38. Boulay, “Octatonicism and Chromatic Harmony,” *Canadian University Music Review* 17, no. 1 (1996): 40–56, at 40. Boulay makes a case for adding the name of Richard Strauss to the list.

39. Taruskin, “Chernomor to Kashchei,” 140–41.

chromatic dexterity of the firm's recently developed line of harps. Like the first movement of the String Quartet, the *Introduction et Allegro* falls into a fairly conventional sonata form, and like the String Quartet, its compositional strategy involves a modulation from diatonic to octatonic pitch fields. As in the quartet, the dramatic climax of the piece takes form in a concentrated onslaught of obstreperous octatonicism (Ex. 12a).<sup>40</sup> The thematic material in the winds delineates a Dorian tetrachord descending from E $\flat$  (with the addition of the lower octatonic neighboring tone), while the violin motive outlines the tetrachord located a tritone away (descending from A, again with the additional neighboring tone). At measure 197 both tetrachords move up a minor third, resulting in descending tetrachords on the two remaining nodes, F $\sharp$  and C. Thus, Ravel has deployed tetrachords on all four of the octatonic nodes (see the reduction in Ex. 12b). Rimsky-Korsakov's tetrachordal octatonicism never involved more than two tetrachords in a given passage, and Taruskin identifies Stravinsky's *Scherzo fantastique* (1908), composed three years after the *Introduction et Allegro*, as the earliest example in which he took tetrachordal partitioning beyond the bi-nodal practices of his teacher.<sup>41</sup> More importantly, however, throughout the excerpt Ravel superimposes the tritone-related tetrachords, presenting them as vertical simultaneities—the very advance cited by Taruskin as distinguishing Stravinsky's octatonicism from that of his predecessors and contemporaries. During this passage the now-familiar brand of triadic octatonicism also occurs in a succession of third- and tritone-related harmonies. The excerpt adheres exclusively to Collection III, engaged here in its entirety.

Another octatonic device for which Taruskin credits Stravinsky involves a clever manipulation of octatonically complementary diminished seventh chords:

40. Ravel had to compose the *Introduction et Allegro* hurriedly, and the first movement of the String Quartet may well have provided a convenient model for the later work. He wrote the *Introduction et Allegro* during "a week of continuous work and three sleepless nights" so that he could join Alfred and Misia Edwards on a yachting vacation after the Prix de Rome scandal of 1905. The committee disqualified Ravel in the preliminary round of the competition, his fifth consecutive failed attempt to earn the Paris Conservatory's top honor.

As in the String Quartet, passing references to the octatonic collection (mm. 52–55, 90–95) color an otherwise conventional exposition, but diatonic relationships give way to the octatonic collection, which aggressively asserts authority in the development. In both works, the octatonic scale behaves much like the fabled wolf in sheep's clothing, quietly—yet conspicuously—lurking behind a diatonic disguise in the exposition before baring its teeth with more pungent octatonic sonorities in the development at the dramatic climax of the movement. In the *Introduction et Allegro*, octatonic references in the exposition aren't as easily reconcilable with conventional diatonic functions as they are in the String Quartet (see n. 36 above). Therefore, in the later work, octatonicism lurks more noticeably in the exposition before issuing its major assault in the development.

41. "All the characteristic Rimskian partitions are employed . . . , including a passage that goes Rimsky one—no, two—better by placing minor tetrachords at each of the four octatonic nodes" (Taruskin, *Stravinsky and the Russian Traditions*, 327).

**Example 12** Ravel, *Introduction et Allegro*  
(a) Mm. 191–200

191

16

Fl. *f*

Cl. *f*

Harpe

*sfz*

Vns *f* 3 *arco* *f* 3

Alto *f* 3

Vclle *f*

Example 12 continued

Musical score for Example 12 continued, measures 194-200. The score is written for six parts: Flute (Fl.), Clarinet (Cl.), Harpe (Harp), Violon (Vlon), Alto, and Voile (Voice). The key signature is one flat (B-flat major/D minor) and the time signature is 4/4. The score is divided into two systems by a dashed line. The first system (measures 194-199) features the Flute and Clarinet playing a melodic line with long slurs, while the Harpe provides a rhythmic accompaniment. The Violon and Voile parts are present but mostly silent in this system. The second system (measures 200-200) shows the Violon and Voile parts becoming more active, with the Voile part featuring a complex melodic line with many slurs and ties. The Harpe continues its accompaniment. The Flute and Clarinet parts are also present but less active in this system.

194

Fl.

Cl.

Harpe

(*sva*)

Vlon

Alto

Voile

Example 12 continued

197 **Très animé**

Fl. *ff*

Cl. *ff*

Harpe

Vn *ff*

Alto *ff*

Vclle *ff*

*gva.*  
La #  
Do #

*gva.*

**Très animé**

## Example 12 continued

(b) Reduction

The image shows a musical score reduction for Example 12, divided into two sections: 191-96 and 197-200. The top staff is labeled 'Tetrachords' and shows a melodic line with chromatic movement. The bottom staff is labeled 'Harmonies' and shows a series of chords, including diminished seventh chords and their complements.

That opulent octatonic whirligigs à la Rimsky continue their pirouette through the pages of *The Nightingale* could go without saying. Still, one or two passages where Stravinsky managed a particularly neat “advance” over the usages of his teacher ought to be noted. At fig. [43], Collection I is partitioned into its two constituent diminished-seventh chords. One of them (B–D–F–Ab) is sustained *flautando e tremolando* in the violins and violas *divisi*, while its complement (G–Bb–Db–E) is slowly arpeggiated by the bass instruments (two harps and bass clarinet) on the downbeats, each successive tone forming the next factitious root in a series of “dominant ninth” chords in a typically decorative (“nonfunctional”) thirds rotation.<sup>42</sup>

This “neat ‘advance’” can also be found in Ravel’s *Introduction et Allegro*, completed three years before Stravinsky began working on *The Nightingale*. Immediately following the climactic episode presented in Example 12, the development winds down with a spiraling octatonic denouement (Ex. 13). The passage keeps in effect the referential Collection III, which Ravel partitions into its two constituent diminished seventh chords. One of the diminished seventh chords (G–Bb–C#–E) is sustained throughout the passage in the rushing harp and wind arpeggios and the pizzicato chords sounded by the lower strings. The violins slowly arpeggiate its complement (F#–Eb–C–A) on the downbeats, each successive note supplying the next root in a series of third-related dominant ninth chords. The passage cycles through almost two complete rotations of thirds and sets up a highly chromatic harp cadenza, which preempts the recapitulation.

Lacking any evidence that Stravinsky knew of the *Introduction et Allegro*, published by Durand in 1906, prior to composing *Scherzo fantastique* or *The Nightingale*, it remains possible (and perhaps likely) that both composers—expanding on Rimsky—arrived independently at the same methods of octatonic partitioning featured in these works. The earliest documented contact that Stravinsky had with Ravel’s music took place on 10 November 1907 at a concert in St. Petersburg sponsored by the “Evenings of Contemporary Music” and featuring four works by Ravel—*Jeux d’eau*, *Sonatine*, *Miroirs*, and

42. Ibid., 477–80.



Example 13 Ravel, *Introduction et Allegro*, mm. 201–8

201

Fl.

Cl.

Harpe

8<sup>va</sup>

*ff*

*Ad libitum*

Vrous

Alto

Vclle

8<sup>va</sup>

pizz.

Example 13 continued

205

The musical score is arranged in two systems. The first system contains staves for Flute (Fl.), Clarinet (Cl.), and Harpe (Harp). The second system contains staves for Violoncello (Vcns), Alto, and Violon (Velle). The Flute and Clarinet parts feature melodic lines with slurs and ties. The Harpe part has a chordal accompaniment with the notes Fa, Mi, and Do indicated. The Violoncello and Violon parts have a rhythmic accompaniment with slurs. The Alto part has a melodic line with slurs. The Violon part has a rhythmic accompaniment with slurs. The score is marked with a forte dynamic (*ff*) at the beginning of the second system.

Fl.

Cl.

Harpe

Vcns

Alto

Velle

*ff*

Fa ♭ | Mi ♭  
Do ♭

*Histoires naturelles*.<sup>43</sup> In *Jeux d'eau* (1901), the earliest work on the program, Ravel makes extensive use of nondiatonic pitch collections, most conspicuously during a cadenza consisting of tritone-related triads vertically superimposed on F $\sharp$  and C, the same configuration famously known as the “*Petrushka* chord” after its subsequent appearance in Stravinsky’s ballet from 1911. According to Taruskin, Ravel’s *Petrushka* chord has a “very different historical background” than that of Stravinsky, and a “different functional explanation, but which an analyst unarmed with historical perspective might be tempted to adduce as a precedent for Stravinsky’s usage.”<sup>44</sup> Ravel’s *Petrushka* chord does indeed have a different functional explanation than that of Stravinsky, and Taruskin does well to demonstrate just this.<sup>45</sup> But it does have a similar historical background to Stravinsky’s *Petrushka* chord. Ravel drew heavily and consistently from the harmonic practices of nineteenth-century Russian composers as manifested in the ubiquitous mediant and tritone relationships that pervade his early works. The *Petrushka* chord in *Jeux d'eau* is an extension of those practices. That it is also an extension of conventional diatonic practice should not obscure its connection to the Russian octatonic tradition.

As Taruskin demonstrates, Ravel’s application of the *Petrushka* chord differs from Stravinsky’s in that one of the constituent triads provides a functional root, enabling the chord to participate in articulating large-scale diatonic functions, whereas Stravinsky’s *Petrushka* chord appears in a movement governed primarily by octatonic relationships. In this context, the tritone becomes a stable tonal axis, and neither of the constituent triads in Stravinsky’s *Petrushka*

43. *Ibid.*, 369–84. Taruskin covers in fascinating detail the individuals behind the “Evenings of Contemporary Music,” their aesthetic outlook, the concert programs given under their sponsorship, and Stravinsky’s relationship with the society.

44. Richard Taruskin, “*Chez Pétrouchka: Harmony and Tonality chez Stravinsky*,” *19th-Century Music* 10 (1987): 268.

45. “[Ravel’s] *Petrushka* chord is a derivation from a French sixth chord on F-sharp that contributes to an extremely elaborate prolongation of the pre-dominant supertonic within a perfect authentic cadence in E major that forms the structural backbone of *Jeux d'eau*’s recapitulation. Each of the constituent tritone-related thirds in the chord has sprouted a fifth—a procedure not unlike one traced in the Introduction to *The Firebird*. But Ravel’s progression cannot really be compared with Stravinsky’s, since there is never a doubt that F-sharp is the functional root of Ravel’s *Petrushka* chord, whereas the whole point of Stravinsky’s usage is that the two constituent triads of the chord are in a sort of stalemate, referable not to a single tonic, but to the fourfold octatonic axis of potential centers” (Taruskin, *Stravinsky and the Russian Traditions*, 771 n. 205).

While Ravel’s *Petrushka* chord does serve diatonic functions, I would question characterizing it as an altered French sixth chord. Ravel clearly spells it as two distinct triads, and while the chord does contain an augmented sixth, it does not resolve characteristically by expanding to the octave. More importantly, in this passage the chord resolves from a dominant-functioning harmony (the dominant of the dominant) to a nondominant harmony (the flattened supertonic)—precisely the opposite of how the French sixth chord conventionally functions. It is more likely that Ravel arrived at the chord not by expanding a French sixth chord, but by vertically superimposing octatonically referable tritone-related triads, which appear as a harmonic succession in the clear display of triadic octatonicism that immediately precedes the *Petrushka* chord in *Jeux d'eau* (see Ex. 15 below).

chord assumes functional priority.<sup>46</sup> This important difference notwithstanding, Ravel's *Petrushka* chord is a precedent for Stravinsky's insofar as it represents the vertical superimposition of tritone-related triads within an octatonic context, albeit a local octatonic context that colors an overarching diatonic scheme. As we have seen, Ravel was particularly adept at incorporating nondiatonic pitch fields into diatonic structures, an aptitude he exploits extensively in *Jeux d'eau*. He casts the piece in a relatively straightforward sonata form, but chromatic scales saturate the musical surface, at times amounting to prolonged elaborations of common diatonic mechanisms. Ravel's tonic preparation preceding the recapitulation in *Jeux d'eau* (mm. 51–62) exemplifies well this aspect of his harmonic language. At this important structural juncture, Ravel employs a standard V/V–V–I cadence, but he dedicates the greater part of the excerpt to a chromatic elaboration of that cadence (see the harmonic reduction in Ex. 14). The passage begins with a major triad on F#, the dominant of the dominant, but this initiates a series of chords related by whole tone, eventually completing almost two rotations through the scale with chords rooted on F#, G#, A#, C, D, and E. Ravel foregrounds the tritone between the prominent seventh chord on D and the G# pedal sustained throughout the passage, and he interrupts the whole-tone pattern only at the last instant before the recapitulation with an abrupt move to the dominant. Although he retains the clear outlines of a conventional diatonic structure, he divests dominant-functioning harmonies of their typical weight and diverts much of the content of the piece to local surface embellishments. Such embellishments typically involve the admixture of a variety of scalar resources, including diatonic, pentatonic, octatonic, whole-tone, and semitone scales, often occurring simultaneously or unfolding in rapid succession. In this respect, *Jeux d'eau* is homologous to the object from which it takes its title—its surface activity, like that of a fountain, is elusive and ever changing. Yet, the course it ultimately takes is predetermined by the boundaries of a rigid, regulating structure.<sup>47</sup>

46. According to Taruskin, Stravinsky raises the octatonic scale to the level of a "key" in "Chez Pétouchka," the second tableau of his ballet, where it determines not only local pitch content, but also large-scale structural relationships, making it the most "thoroughgoingly octatonic" movement to date. Taruskin, *Stravinsky and the Russian Traditions*, 737. See also Taruskin, "Chez Pétouchka."

47. For a good example of multiple pitch fields appearing one after the other on the surface of *Jeux d'eau*, see the passage (mm. 33–61) that immediately precedes Example 14. At this point we have just heard several variations on the pentatonic second theme. Tritone- and third-related chords referable to Collection I dominate from measures 33–40, engaging all four nodes of the collection (E, A#, G, C#) as harmonic roots. Chromatic scales embellish the octatonic chord progression (mm. 38–39). Ravel shifts to Collection III at measure 41 with chords on three of the nodes (C, F#, A), again with chromatic runs, but only to revert back to Collection I at measure 43. Harmonic motion by semitone dominates at measures 46–47, and the resulting progression exhausts all twelve tones of the chromatic scale, excepting the tonic E. A pentatonic black-key glissando provides the dynamic climax of the development (m. 48), followed by the sequence of whole-tone-related chords presented in Example 14, which precedes the tonic arrival at the recapitulation.

Example 14 Ravel, *Jeux d'eau*, mm. 51–62, harmonic reduction

The *Petrushka* chord in *Jeux d'eau* occurs during another chromatic elaboration of a diatonic cadence, this time within the recapitulation proper. Shortly after the tonic restatement of the first theme, chromatic scales surface again to dictate local harmonic content (Ex. 15). During much of the passage Ravel maintains distinct harmonic progressions in the right- and left-hand parts. In the first measure of the excerpt, the right hand performs a series of (major and minor) triads in a whole-tone sequence, the triadic roots comprising five of the six pitches of the whole-tone scale (B, A, G, F, E $\flat$ ). The triads themselves engage all twelve tones of the chromatic scale. The left hand performs a series of chords (seventh chords and augmented triads) with root motion corresponding to the other whole-tone scale (G $\sharp$ , F $\sharp$ , E, D, C). Ravel maintains distinct harmonic sequences in each hand in the following measure (m. 69), now octatonic mediant progressions. Here, the right hand plays through a rotation of minor triads rooted on the four nodes of Collection III (C, A, F $\sharp$ , and E $\flat$ ) while the left hand completes a rotation of seventh chords (with thirds omitted) through the four nodes of Collection II (B, G $\sharp$ , F, and D). Ravel clearly spells the right- and left-hand parts as two separate progressions, each of which exhausts a different octatonic collection. From measure 70, the *Petrushka* chord begins to crystallize, first as a dominant seventh chord on C over an F $\sharp$  pedal, then as a complete *Petrushka* chord (m. 72), which Ravel works up into a full-fledged cadenza, accommodating over thirty statements of the chord running up and down the piano register. Ravel's *Petrushka* chord resolves into another passage featuring chords related by whole tone (m. 73)—a series of ninth chords with harmonic roots that move through an entire whole-tone collection (F, E $\flat$ , C $\sharp$ , B, A, G)—breaking the pattern only with the final chord of the passage, an eleventh chord on F $\sharp$ . Indeed, this has all been a prolongation of the pre-cadential dominant of the dominant, but Ravel devotes most of the excerpt to a chromatic elaboration of this diatonic device.

Taruskin traces the patrimony of Stravinsky's *Petrushka* chord to a passage from Rimsky-Korsakov's sketchbooks dating from the last months of his life.<sup>48</sup> According to Taruskin, one of Rimsky's sketches is "momentous," and

it does something heretofore unprecedented in Russian octatonic exploration: it superimposes vertically the two tritone-related triads that were so familiar as an oscillation—and in so doing produced what we now call a "*Petrushka* chord." Here we have the kernel of Stravinsky's "polytonalism," leaving no doubts, if any remained, as to its historical patrimony.

48. Taruskin, *Stravinsky and the Russian Traditions*, 402–6.

Example 15 Ravel, *Jeux d'eau*, mm. 68–76, reduction

The musical score is presented in three systems. The first system (mm. 68-71) is in G major and 3/4 time. It features a complex texture with multiple layers of chords and arpeggiated figures. The right hand plays dense chordal textures, while the left hand plays a more rhythmic, arpeggiated pattern. The second system (mm. 72-74) continues this texture with some melodic lines in the right hand. The third system (mm. 75-76) shows a simpler chordal texture. Performance markings include 'gva' (glissando) and 'arpegg.' (arpeggiato).

But Rimsky-Korsakov also attended the “Evenings of Contemporary Music” concert that featured *Jeux d'eau* and three other works by Ravel. During the forty years before the concert, dating back to his tone poem *Sadko* (1867), Rimsky-Korsakov made the octatonic collection a fundamental component of his musical vocabulary, and no composer of his generation or before relied on it as consistently or experimented as thoroughly with triadic octatonicism. Yet no evidence emerges from those forty years to suggest that Rimsky ever conceived of a *Petrushka* chord. Only in his final sketches—sketches that he made within months after hearing *Jeux d'eau*—does the chord appear in Rimsky’s hand. It was at this concert that Rimsky-Korsakov made a well-known remark, mistakenly understood since as having been made in reference to Debussy. M. F. Gnesin, a member of both Rimsky’s circle and the “Evenings of Contemporary Music,” recounts the incident:

I recall that at one of the “Evenings of Contemporary Music,” where some compositions of Ravel and other then young composers were performed (it was during the season 1907–1908), the leaders of the “Evenings” circle came up to Rimsky-Korsakov and began interrogating him as to how he liked what he’d heard. Nikolai Andreyevich hemmed and hawed for a while, and then

said: "As far as the principle of using dissonances with all the rights of consonances is concerned, it's not my cup of tea, although," he added half-jokingly, "I should hurry right home lest I get used to it and, God forbid, begin to like it."<sup>49</sup>

We can assume that had Rimsky lived to compose out what he had sketched, his usage of the *Petrushka* chord, like Stravinsky's, would have differed in significant ways from that of Ravel. But no one well versed in the workings of triadic octatonicism in attendance that evening could have failed to appreciate a chord as pronounced as the *Petrushka* chord in *Jeux d'eau*.

In addition to triadic superimposition, Pieter van den Toorn finds unique to Stravinsky's octatonic practice a technique in which a three-note ostinato pattern simultaneously articulates harmonic and tetrachordal configurations.<sup>50</sup> According to van den Toorn, this technique sustains the "Dance of the Adolescents" from *The Rite of Spring* (1913), which Stravinsky constructs around a distinctive ostinato pattern covering three of the four pitches of a Dorian tetrachord (E♭, D♭, [C], B♭). These pitches simultaneously outline the root, seventh, and fifth of an E♭ dominant seventh chord, which Stravinsky vertically superimposes over a C-major triad for much of the section. For van den Toorn, this device enables interaction between diatonic and octatonic contexts and is peculiar to Stravinsky's so-called "Russian" period:

And we apprehend within all these varied octatonic and octatonic-diatonic transactions one of the deepest "secrets" pervading Stravinsky's "Russian" musical thought: the (0 2 3 5) tetrachord, as the principal fragment of the "Russian" period, may in its referential implications be either octatonic or diatonic. It serves therefore as a pivot, as the principal connecting link between blocks of octatonic, diatonic, or octatonic-diatonic content. And when (0 2 [3] 5) is incomplete, it connects a (0 2 3 5) partitioning of the octatonic collection with a "dominant seventh" partitioning. Consequently, its very (0 2 [3] 5) incompleteness, even when inferred on a surface articulative level, as with the English horn's D♭–B♭–E♭–B♭ ostinato at 14 in *The Rite* or indeed as the "basic cell" of *Les Noces*, may be envisioned as embodying matters fundamental to the identity and distinction of "Russian" works.<sup>51</sup>

There is also a French connection. Another work on the "Evenings of Contemporary Music" program in November of 1907 was Ravel's *Sonatine* (1903–5). The same incomplete tetrachord configuration that van den Toorn

49. M. F. Gnesin, *Misli i vospominaniya o N. A. Rimskom-Korsakove* (Moscow: Muzgiz, 1956), 207; quoted by Taruskin in *Stravinsky and the Russian Traditions*, 376 n. 17. Stravinsky incorrectly cited this statement as having been made in reference to Debussy. Cf. Igor Stravinsky, *An Autobiography* (New York: W. W. Norton, 1962), 18. There were no works by Debussy on the program.

50. Van den Toorn, "Octatonic Pitch Structure in Stravinsky," 136–41.

51. *Ibid.*, 139–40. Van den Toorn numbers pitches by half step (e.g., a unison is identified by the number 0, a minor second by the number 1, a major second by the number 2, an octave by the number 12).

envisions as “embodying matters fundamental to the identity and distinction of [Stravinsky’s] ‘Russian’ works” figures prominently in *Sonatine* as an ostinato pattern that sustains much of the final movement. The excerpt presented in Example 16 adheres entirely to the octatonic collection and revolves around a three-note ostinato pattern (A, G, and E). These pitches simultaneously articulate an incomplete Dorian tetrachord (A, G, [F#], E) and the root, seventh, and fifth of a dominant seventh chord on A. This chord serves as a pedal harmony until a ninth chord on F#, the next octatonic node, enters (m. 71). The next four measures oscillate between harmonies rooted on A and D#, tritone-related octatonic nodes, and the ostinato correspondingly oscillates by tritone during these four measures. For much of the excerpt, Ravel holds in equilibrium the nodes on A and F#. As Stravinsky would do in *The Rite of Spring*, Ravel superimposes mediant-related chords, including one articulated by an incomplete tetrachord ostinato. Again Ravel’s octatonicism intersects with diatonic practice. The two octatonic nodes that he foregrounds are F# and A, the tonic and relative major scale degrees—the same points of octatonic-diatonic intersection foregrounded in “Un Grand Sommeil noir.”

Ravel uses a more pronounced ostinato pattern in the *Rapsodie espagnole* (1907–8), a descending octatonic tetrachord that persists throughout the first movement, subtitled “Prélude à la nuit.”<sup>52</sup> From the outset, diatonic and octatonic elements delicately brush against each other. Between the two pitch fields, Ravel subtly creates a tension that first centers around a marked ambivalence between the pitches A $\flat$  and A $\natural$ . The latter belongs to Collection I, as does the ubiquitous tetrachord, but is foreign to the implied key, D minor. The former, while external to the collection, is central to the putative diatonic pitch field. The two pitches grate against each other from the beginning of the movement (Ex. 17). Taken separately, the strings strongly suggest D minor: the bass consists of a clear I–V oscillation, while the tetrachord provides the first three scale degrees and the leading tone. The pattern carried by the winds and harp colors this tonality as it teeters between the A $\flat$ /B $\flat$  dyad and the A $\natural$ /B $\natural$  dyad. Together with the tetrachord, this pattern articulates an oscillation between a dominant seventh chord on B $\flat$  and a ninth chord on A (bVI<sup>7</sup>–V<sup>9</sup> in D). The main theme (m. 14) immediately foregrounds the friction between A $\natural$  and A $\flat$  (spelled as G#), but by the end of the first phrase (m. 17), Ravel has purged the former, not only in the thematic voices, but also in the bass pattern, which now outlines the A#–E tritone central to Collection I. The following measures adhere completely to the collection and introduce the next point of contention between diatonic and octatonic pitch fields.

A constituent of Collection I, C# has been present in the tetrachord ostinato from the beginning of the movement. In Example 17, a sustained C# enters as the bass pattern shifts to the A#–E tritone (m. 18), thus foregrounding

52. In this case Ravel uses not a Dorian tetrachord, but the other tetrachord available within the octatonic collection (semitone, tone, semitone).



Example 16 Ravel, *Sonatine*, third movement, mm. 60–91

The image displays a musical score for the third movement of Maurice Ravel's *Sonatine*, measures 60 through 91. The score is written for piano and is in 3/4 time with a key signature of two sharps (D major). It is divided into six systems, each with a measure number at the beginning. The notation includes treble and bass staves with various musical symbols such as notes, rests, and dynamic markings. The dynamics range from *pp* (pianissimo) to *ff* (fortissimo). There are also markings for *8va* (octave) and *mf* (mezzo-forte). The score shows a complex interplay of textures, with some measures featuring rapid sixteenth-note passages and others with more sustained, arpeggiated figures.

## Example 16 continued

78

*p*

*pp*

82

*pp marqué*

86

89

three of the octatonic nodes. Shortly thereafter, Ravel's thematic material again highlights tension between octatonic and diatonic elements, now focusing on the ambivalence between  $C\sharp$  and  $C\flat$ . The introduction of  $C\flat$  coincides with the return of  $A\flat$ , the only two pitches in the movement not referable to the octatonic collection (Ex. 18). Both pitches figure significantly in the melody and in the dominant seventh chord on D, here functioning locally as the dominant of the subdominant G minor. With the nonoctatonic pitches having firmly established themselves, Ravel shifts to Collection III, a collection that accommodates the two heretofore nonreferable pitches. This shift takes form in the clarinet cadenza running up and down the collection (Ex. 19). The octatonic clarinet runs embellish an A-minor triad, outlined by the sustained notes in the cadenza. Ravel places this triad over a flat-ninth chord on  $E\flat$  sustained in the strings. Once again he vertically superimposes tritone-related harmonies, which he clearly separates by timbre and register. This

Example 17 Ravel, *Rhapsodie espagnole*, "Prélude à la nuit," mm. 1–22

**Moderato**

Vln. *ppp*  
Vla.

Oboe *p*

Winds *sotto* >  
Harp  
Vc. *p*  
C.B.

**Moderato**

6 Vln. *p*  
Vla.

Harp >  
Horns  
Winds *p*

*ppp*

Example 17 continued

Musical score for Example 17 continued, measures 12-18. The score is written for a symphony orchestra and includes the following parts:

- Violin I (Vln.):** Measures 12-18. Dynamics include *p* and *pp*. A *p* *espressivo* marking is present in measure 12.
- Violin II (Vln. II):** Measures 12-18. Dynamics include *pp*.
- Viola (Vla.):** Measures 12-18. Dynamics include *pp*.
- Violoncello (Vc.):** Measures 12-18. Dynamics include *p* and *pp*. A *p* *espressivo* marking is present in measure 12.
- Clarinets (Cl.):** Measures 12-18. Dynamics include *p* and *pp*. A *p* *espressivo* marking is present in measure 12.
- Trumpets (Trump.):** Measures 12-18. Dynamics include *pp*.
- Flute I (Fl. I):** Measures 18-18. Dynamics include *pp*.
- Flute II (Fl. II):** Measures 18-18. Dynamics include *pp*.
- Horn I (Hrn. I):** Measures 18-18. Dynamics include *pp*.
- Contra Bass (C.B.):** Measures 18-18. Dynamics include *pp*.

The score features various musical notations including slurs, accents, and dynamic markings. The key signature is one sharp (F#) and the time signature is 4/4.

Example 18 Ravel, *Rapsodie espagnole*, "Prélude à la nuit," mm. 28–37

The musical score is presented in two systems. The first system covers measures 28 to 32, and the second system covers measures 33 to 37. The instruments involved are Strings, Winds, Horns, and Bassoon (Bsn.).

**Measure 28:** Starts with a triplet of eighth notes in the strings. Dynamics include *mf* *espressivo* for the strings and *p* for the winds. A *poco rit.* marking is present.

**Measure 29:** Dynamics include *f* for the strings and *mf* for the winds. A *poco rit.* marking is present.

**Measure 30:** Dynamics include *f* for the strings and *mf* for the winds. A *poco rit.* marking is present.

**Measure 31:** Dynamics include *f* for the strings and *mf* for the winds. A *poco rit.* marking is present.

**Measure 32:** Dynamics include *f* for the strings and *mf* for the winds. A *poco rit.* marking is present.

**Measure 33:** Dynamics include *p* for the strings and *p* for the winds. A *poco rit.* marking is present.

**Measure 34:** Dynamics include *p* for the strings and *p* for the winds. A *poco rit.* marking is present.

**Measure 35:** Dynamics include *p* for the strings and *p* for the winds. A *poco rit.* marking is present.

**Measure 36:** Dynamics include *p* for the strings and *p* for the winds. A *poco rit.* marking is present.

**Measure 37:** Dynamics include *p* for the strings and *p* for the winds. A *poco rit.* marking is present.

Additional markings include *a tempo* at the start of measure 33, and *ppp subito* markings in measures 34, 35, and 36.

Example 19 Ravel, *Rapsodie espagnole*, "Prélude à la nuit," mm. 44-45

*Cadenza ad lib*

44 Cl. *pp* Cl. *pp*

Strings + Flute *pp*

*pp*

chord actually goes one step beyond the *Petrushka* chord, which employs six of the eight pitches of the octatonic collection. The superimposition of a complete ninth chord and a minor triad results in a bolder sonority that employs seven constituent pitches.

The octatonic collection having taken over, a return to the original Collection I follows the cadenza. The tetrachord ostinato reestablishes itself and participates in an oscillation between dominant seventh chords and minor triads on C#, the new harmonic pedal. The melody and accompaniment that featured the prominent Ab at the beginning of the movement now appear in a wholly octatonic mutation (mm. 46–53). This precedes the second cadenza (Ex. 20). Again Ravel partitions the octatonic collection into multiple harmonies, which he vertically superimposes. The strings, excepting a solo violin, sustain a flat-ninth chord on Bb; the solo violin outlines a seventh chord on E, articulated with artificial harmonics; and the bassoon's octatonic runs embellish a dominant seventh chord on C#. Here, Ravel does both *Jeux d'eau* and *Petrushka* one better, vertically superimposing harmonies on three of the octatonic nodes. Following the cadenza and a brief restatement of the opening section, the movement comes to a close. Like the first movement in the String Quartet and the *Introduction et Allegro*, the opening movement of the *Rapsodie espagnole* falls into a tripartite form. While octatonic and diatonic constituents delicately contend for primacy in the outer portions, the central section, framed by the cadenzas, is fully octatonic.

In his analysis of *The Rite of Spring*, van den Toorn describes a characteristically Stravinskian method of octatonic partitioning in which the composer superimposes dominant seventh chords, triads, and tetrachords, but differentiates these elements by timbre, register, and rhythm.<sup>53</sup> Much of van den Toorn's description applies as well to the first movement of the *Rapsodie espagnole*. Here Ravel consistently differentiates superimposed harmonies and tetrachords through rhythmic and timbral separation. The tetrachord ostinato, set apart rhythmically by its two-beat period, conflicts with the prevailing triple meter. Timbral differentiation persists throughout the movement. Ravel treats the winds and strings as separate ensembles, and, excepting the all-pervasive ostinato, they rarely share musical materials. During the cadenzas, this timbral separation differentiates the various superimposed harmonies. In the *Rite of Spring*, Stravinsky heightens dynamic intensity and rhythmic complexity to produce a more striking effect than Ravel's more subtle application in the *Rapsodie espagnole*, but several techniques that are basic to Stravinskian octatonicism have precedents in Ravel's exotic orchestral suite.

The *Rapsodie espagnole* received its Russian premiere in January of 1909 under the baton of Alexander Siloti. Preceding this performance, St. Petersburg's primary music journal, *Russkaia muzykal'naiia gazeta*, printed an extensive analytical description of the work, complete with notated examples

53. Van den Toorn, "Octatonic Pitch Structure in Stravinsky," 134–35.

Example 20 Ravel, *Rapsodie espagnole*, "Prélude à la nuit," mm. 54–55

54 8

Bassoon

Harp

1st Violin Solo

Violins Violas

Cello C.B.

*glissando*

*Ad libitum*

*simili ad lib.*

*tr*

(sourdines)

*tr*

*etc.*

illustrating, among other things, the tetrachord ostinato and octatonic cadenzas in the first movement. According to the author:

Following Debussy, Charpentier, and Dukas, the name of Maurice Ravel has become reasonably well known in the musical circles of France. . . . The piece he has written has attracted critical attention by its boldness and freshness of



expression as well as the indisputable talent and uniqueness of voice manifested in the piece. . . . Its premiere on 15 March 1908 was accompanied by absolute success. . . . We may say that in the recent annals of concerts in the West only two compositions of new composers have had such an impact in terms of a large audience and have received such extraordinary success. These are *Kaleidoscope* by Noren (1907) and the *Rapsodie espagnole* by Ravel. . . . At the premiere, the second movement was repeated, followed by an episode typical of the Parisian audience: some found that the audience did not reflect its enthusiasm warmly enough, and after the encore a voice from above cried, "Once again for those below who did not understand."<sup>54</sup>

Stravinsky attended when Siloti conducted the repeat performance of the *Rapsodie espagnole* in St. Petersburg in December of 1909, just as he began work on his first ballet, *The Firebird*.<sup>55</sup>

The *Rapsodie espagnole* left its mark on several passages in *The Firebird*. There are two fairly direct quotations, the most conspicuous of which quotes the distinctive rhythms and orchestral glissando at the conclusion of Ravel's finale. Stravinsky borrows this effect for the conclusion of his "Danse infernale." Taruskin cites this borrowing, but only to disavow the significance of French influence on *The Firebird*:

With reference to the suite numbers [i.e., dances] one can readily concur with Stravinsky's later write-off of his first ballet as "belonging to the styles of its time." One concurs, that is, with two provisos. The first is that the styles in question are all Russian; French influence, despite what has been usually said about *The Firebird* from the time of the premiere up to the present day, is still a negligible factor, confined to details of scoring (like the orchestral glissando at the end of the Danse Infernale, rather brazenly cribbed from the ending of the *Rapsodie espagnole*).<sup>56</sup>

Taruskin proceeds to identify the manifold Russian sources upon which Stravinsky modeled the various dances in *The Firebird*. He identifies two Russian sources for the Firebird's "Berceuse"—Liadov's *Kikimora*, a work that Stravinsky heard on the same 1909 program with the *Rapsodie espagnole*,

54. " 'Ispanskaia rapsodiia' Ravelia," *Ruskaia muzykal'naia gazeta* 15, no. 48 (30 November 1908), cols. 1076–90. The author is identified only as M. The date given corresponds to the Julian calendar, which in 1908 lagged thirteen days behind the Western calendar. Austrian composer Heinrich Noren (1861–1928) studied violin with Massart in Paris beginning in 1883. The last movement of his *Kaleidoscope*, a set of orchestral variations, appropriates a theme from Strauss's *Ein Heldenleben*. The work was successful enough to instigate legal action from Strauss's publishers.

I would like to thank Anindita Banerjee and Annelie Chapman for their assistance with Russian translations.

55. Taruskin, *Stravinsky and the Russian Traditions*, 632. Here Taruskin states that the performance on 12 December 1909 was the Russian premiere of the *Rapsodie espagnole*, but it was actually the repeat performance, the premiere having taken place in January of that year (cf. *ibid.*, 310).

56. *Ibid.*, 614–15.

and the cavatina from the second act of Rimsky-Korsakov's *Snegurochka*.<sup>57</sup> Taruskin convincingly demonstrates that the opening of the Firebird's "Berceuse" derives from the former, while the end of the dance has its origins in the latter. But the central portion of the "Berceuse" is clearly modeled on another distinctive passage in the *Rapsodie espagnole* (Exx. 21a and b).<sup>58</sup> In both examples, the strings carry the primary melodic material, characterized by an ascending gesture rising to the ninth degree of the supporting harmony, which is, in both cases, a seventh chord with the added ninth. A harp glissando accompanies their initial rising gestures, and the melodic contour and rhythmic phrasing of their continuations are nearly identical. Both passages occur at the dynamic climax of a section or movement that revolves around a four-note ostinato, and in each case, the phrase immediately repeats itself in an almost literal restatement. The similarities are beyond the possibility of coincidence.

Taruskin cites another direct reference to the *Rapsodie espagnole* in *The Firebird*, and he does so in order to illustrate "a constant underlying irony":

That irony consists in the fact that the French composers who interested the Russian composers of Stravinsky's generation were themselves heavily indebted to the Russian composers of Rimsky-Korsakov's generation. This is particularly evident in the case of the *Rapsodie espagnole*, with its numerous Rimskian affinities ranging from woodwind cadenzas à la *Shéhérazade* or *Capriccio espagnole* to rushing octatonic scales à la *Sadko*. Some of the very features of Debussy's or Ravel's music that seem to have affected Stravinsky's most directly were actually Russian borrowings of this kind.<sup>59</sup>

Taruskin cites the natural-harmonic string glissando in *The Firebird*—an effect that Stravinsky claimed to have discovered in his ballet, but which he actually learned from Ravel. The same effect occurs in the last movement of the *Rapsodie espagnole*. But, as Taruskin shows, Ravel in turn had borrowed the effect from Rimsky-Korsakov.

It is precisely this "irony" that I have attempted to illustrate. Taruskin traces the transmission of specific technical devices from Rimsky-Korsakov through Ravel to Stravinsky, but only "negligible factors, confined to details of scoring." He is less willing to accept this line of transmission with respect to more substantial aspects of Stravinsky's style, such as his celebrated methods of octatonic partitioning. The elements in Ravel's music that most affected Stravinsky were themselves derived from Russian sources, and, for Taruskin, this is reason to discount their significance. This would be justified if there were no appreciable difference in Ravel's application of the techniques he borrowed from Rimsky-Korsakov, as is the case with the natural-harmonic glissando that

57. *Ibid.*, 632.

58. This and several other passages from the *Rapsodie espagnole* that resonate with passages in *The Firebird* are cited in Louis Andriessen and Elmer Schönberger, *The Apollonian Clockwork: On Stravinsky*, trans. Jeff Hamburg (Oxford and New York: Oxford University Press, 1989), 236–38.

59. Taruskin, *Stravinsky and the Russian Traditions*, 310–15.

Example 21a Ravel, *Rapsodie espagnole*, "Prélude à la nuit," R4, reduction

Winds *ppp*

Harp *gliss.*

1st Violins div. *p*

2nd Violin *pizz.* *p*

Violas div. *p*

C.B. *ppp* *p*

Example 21b Stravinsky, *Firebird*, "Berceuse," 1 m. before R185–4 mm. after R185, reduction

The musical score is arranged in a system with seven staves. From top to bottom, the staves are: Harp II/III, Harp I, Winds, 1st Violins div., 2nd Violins, Viola, and Vc. C.B. The key signature is one flat (B-flat major or D minor). The score includes various dynamics such as *p* (piano), *mf* (mezzo-forte), and *mf* (mezzo-forte). Performance markings include *gliss.* (glissando) for the harps and *mf* for the winds. The 1st Violins div. and 2nd Violins staves have a bracket underneath them. The Viola and Vc. C.B. staves have a bracket underneath them. The score is a reduction of a larger orchestral work.

Taruskin cites. But we have seen in *Jeux d'eau*, the *Introduction et Allegro*, and the *Rapsodie espagnole* that Ravel presents significant advances beyond Rimsky's techniques of octatonic partitioning that show up later in Stravinsky's music, the most consequential such advance being the vertical superimposition of octatonic harmonies and tetrachords. Ravel did indeed derive his octatonic vocabulary largely from Russian sources, but his octatonicism differs from that of Rimsky's generation in precisely the same ways that much of Stravinsky's would. One additional example will further illustrate.

Taruskin makes passing reference to the woodwind cadenzas in the *Rapsodie espagnole* (presented above as Exx. 19 and 20), which, like the natural-harmonic glissando, he cites in support of his implication that Ravel brought nothing new to the table that Stravinsky couldn't have gotten directly from Rimsky-Korsakov. Ravel's cadenzas are clearly foreshadowed by those in Rimsky's *Shéhérazade* (Ex. 22a), but this does not negate the possibility that Ravel's cadenzas could have influenced Stravinsky's famous woodwind passages in *Petrushka* in ways that Rimsky's could not. According to Taruskin, Rimsky's cadenza

reverberates in *Petrushka*: the three clarinet cadenzas over static harmonies provided the model for the big cadenza bar (1 before [59]) in "Chez Pétrouchka." . . . Rimsky's cadenza passage after [F], moreover, is exclusively and exhaustively octatonic, referable to Collection III. The harmonies of the second and third bars, in fact, sum up the exact contents of the *Petrushka* chord.<sup>60</sup>

But Rimsky's passage is not the only model; in fact, Stravinsky's clarinet cadenza (Ex. 22b) resembles more closely the octatonic clarinet cadenza in the *Rapsodie espagnole* (Ex. 19). Ravel's and Stravinsky's cadenzas cover a much wider compass, each spanning an eleventh, while Rimsky's is limited to a perfect fourth.<sup>61</sup> Both Ravel and Stravinsky mix conjunct and disjunct motion, but Rimsky's cadenzas are restricted to stepwise motion. Finally, the rhythmic phrasing of Stravinsky's cadenza resembles more closely the model provided by Ravel than by Rimsky-Korsakov.

But what appreciable difference is there in Ravel's Rimskian borrowings that anticipates Stravinsky's usage in ways that Rimsky's does not? As Taruskin notes, Rimsky's clarinet cadenzas take place over a succession of harmonies, the last two of which sum up the exact contents of the *Petrushka* chord. Stravinsky's first presentation of the *Petrushka* chord is indeed a clarinet passage (Ex. 23), but his paired clarinets bear a more striking resemblance to the paired clarinets in the *Rapsodie espagnole*. If the tritone-related harmonies in Stravinsky's *Petrushka* chord occurred as a succession, as they do in Rimsky's excerpt, then there would be nothing remarkable about the passage; however, there is a significant difference, a difference for which Ravel provides the earli-

60. *Ibid.*, 741–45.

61. Ravel's cadenza is for two clarinets; one spans an eleventh, the other a tenth.

Example 22a Rimsky-Korsakov, *Shéhérazade*, second movement, letter F

Example 22a shows three systems of musical notation for a piano and clarinet. The first system is marked *Moderato assai* ( $\text{♩} = 72$ ) and includes dynamics *sf quasi pizz.*, *f*, and *p*. The tempo markings *lunga*, *accel.*, and *poco rit.* are indicated above the staff. The second system starts with *a tempo* and includes dynamics *f* and *p*, with the instruction *senza ritard. nè accelerare*. The third system starts with *a tempo* and includes dynamics *f* and *p*, with the instruction *senza ritard. nè accel.* and a *ten.* marking at the end.

est explicit example—in Ravel’s clarinet passage the tritone-related chords occur as a vertical simultaneity, clearly prefiguring Stravinsky’s “great advance.” Soon after Stravinsky’s clarinets first sound the *Petrushka* chord, the piano unfurls it in a passage (beginning fifteen measures after R49) dripping with vestiges of *Jeux d’eau*.

The examples presented here bear witness to a fin-de-siècle Franco-Russian musical dialogue in which specific aspects of a national dialect were appropriated, fused into a different tradition, and returned with a French twist. Ravel’s early acquaintance with specific, overt models of Russian octatonicism consistently influenced his harmonic language during the fifteen years with which this study has been concerned.<sup>62</sup> Prior to Ravel’s earliest compositions, French

62. Additional works from this period featuring octatonic passages include *Miroirs* (1904–5) and *Gaspard de la nuit* (1908) for solo piano, “Le Cygne” from the song cycle *Histoires naturelles* (1906), and *L’Heure espagnole* (1907–9), Ravel’s first opera. Of course subsequent compositions by Ravel were also subject to the influence of Russian chromatic harmony. See, for example, the rampant triadic octatonicism in the “Introduction et Danse religieuse” from *Daphnis et Chloé* (1909–12), commissioned by Diaghilev in 1909, as well as *Trois Poèmes de Stéphane Mallarmé* (1913) and *L’Enfant et les sortilèges* (1920–25), as discussed by Kabisch (“Oktatonik, Tonalität und Form,” 125–35).

Example 22b Stravinsky, *Petrushka*, "Chez Pétrouchka," 3 mm. after R58

The musical score consists of six staves, each representing a different instrument or section:

- Cl. I, II:** Features a *simile* section with a *ten.* (tension) marking and a *ff* (fortissimo) dynamic. It includes a 7-measure phrase and a *1. Solo* section with a 3-measure phrase.
- Cl. III:** Features a *tr* (trill) marking and a *ff* dynamic.
- Piano:** Features an *8va* (octave) marking.
- Viole:** Features an *arco* (arco) marking.
- Celli:** Features *sff* (sforzando), *pizz.* (pizzicato), and *ff* markings.
- C.B. (Cello/Bass):** Features a *ff* dynamic.

Additional markings include a 6-measure phrase in the Cl. I, II staff and a 3-measure phrase in the Cl. III staff.

Example 22 continued

The musical score is arranged in a system with seven staves. The top staff is for Clarinet I and II (Cl. I, II), followed by Clarinet III (Cl. III). The bottom three staves are for Piano, Violin (Viola), and Cello/Double Bass (C.B.).

Key features of the score include:

- Cl. I, II:** Features a melodic line with a *molto ritard.* marking and a *p* dynamic. The music is marked *lamentoso assai*.
- Cl. III:** Plays a sustained note with a fermata.
- Piano:** Includes the instruction *Colla parte dell' Clarinetto.* and features a *string.* marking with a *8va* (8va) marking above the staff.
- Violin:** Features a *8va* (8va) marking above the staff.
- Cello/Double Bass:** Includes a *p* dynamic marking.



Example 23 Stravinsky, *Petrushka*, "Chez Pétouchka," R49

49] **Molto meno.**  $\text{♩} = 50.$

Cl. I (Sib)

Cl. II (LA)

Fag. I, II

I. SOLO.

*mf* *lamentoso*

Cl. I (Sib)

Cl. II (LA)

Fag. I, II

*f*

Tr. I

*f*

*Solo lamentoso assai*

sord.

*mf*

Piano

*mf*

V. I

*mf*

*pizz.*  $\text{r} \text{ } 3$

*Soli con sord.*

10

Example 23 continued

**Allegro.** ♩ = 76.

*f*

*p*

*mf*

senza sord.

50

Cl. I. = LA

*Colla parte*

*f*

10

10

8va

Cl. I (Sb)

Cl. II (LA)

Piano

Piano

V. I

Piano

Cl. I (Sb)

Cl. II (LA)

Piano

Detailed description: This musical score is for Example 23 continued, marked 'Allegro' with a tempo of 76 beats per minute. It consists of two systems of staves. The first system includes parts for Clarinet I (Sb), Clarinet II (LA), Piano, and Violin I. The Clarinet I part begins with a forte (*f*) dynamic and features several triplet markings. The Piano part starts with a piano (*p*) dynamic and includes a five-measure rest. The Violin I part is marked 'senza sord.' and begins with a mezzo-forte (*mf*) dynamic. A box containing the number '50' is placed above the Violin I staff. The second system includes parts for Clarinet I (Sb), Clarinet II (LA), and Piano. The Clarinet I part is marked 'Cl. I. = LA' and 'Colla parte'. The Piano part begins with a forte (*f*) dynamic and includes two ten-measure rests. The score is written in treble clef with a key signature of one flat.

musicians had become acquainted with a substantial number of Russian musical sources. Ravel actively immersed himself in these sources and, perhaps more than any non-Russian composer of his day, was conversant in the workings of Russian chromatic harmony. Several of his early works bearing the strongest effects of this familiarity made their way into St. Petersburg musical circles precisely at a time when Stravinsky became increasingly susceptible to outside influences.

Taruskin gives a richly detailed account of the events surrounding Stravinsky's gradual withdrawal, between 1906 and 1908, from the Rimsky-Korsakov circle in favor of the more progressive "Evenings of Contemporary Music," a group that did much to strengthen the Franco-Russian musical alliance during the first decade of the twentieth century.<sup>63</sup> A guiding force behind the group, organized in 1901 in conjunction with Diaghilev's arts monthly *Mir iskusstva* (*World of Art*), was Alfred Nurok, who met Ravel in 1906. Diaghilev himself met Ravel while in Paris for the 1906–7 winter season.<sup>64</sup> In May of 1907, Diaghilev presented his first musical production in Paris, a festival of Russian music that included the participation of a number of leading Russian musical figures, including, among others, Rimsky-Korsakov, Glazunov, Rachmaninov, Scriabin, and Chaliapin, as well as Walter Nouvel, Nurok's chief partner in organizing the "Evenings of Contemporary Music." They too would have had the opportunity to become acquainted with Ravel, who accompanied them at a banquet held in honor of the Russian visitors on 29 May.<sup>65</sup> The Paris visit of the Russian musical entourage occurred just as Ravel was thrust to the forefront of Parisian cultural life. As the following items indicate, the *affaire Ravel* was the topic of the day:

Léon Vallas, "L'Affaire Ravel," *Revue musicale de Lyon*, 10 February 1907

Pierre Lalo, "Quelques ouvrages nouveaux de M. Ravel et le Debussysme," *Le Temps*, 19 March 1907

Louis Laloy, "Musique nouvelle—Maurice Ravel," *Mercure musical et bulletin français de la S. I. M.*, 15 March 1907

Henry Gauthier-Villars, "Pierre Lalo contre Ravel, Louis Laloy pro Ravel," *Mercure de France*, 1 April 1907

63. Taruskin, *Stravinsky and the Russian Traditions*, 369–419.

64. Seroff, *Maurice Ravel*, 139–42. Seroff relates an anecdote regarding Diaghilev's visit to Paris. When Calvocoressi introduced Diaghilev to the Apaches, the Russian impresario hoped to impress the assembled French musicians. He brought a briefcase filled with scores of Russian music that he thought would dazzle the group with their originality and novelty, but to his surprise, members offered to play the works in Diaghilev's collection from memory. Ravel, along with Calvocoressi, convinced Diaghilev to stage *Boris Godunov*, as opposed to Musorgsky's *Khovanshchina* or Rimsky's *Sadko*, in Paris in 1908.

65. *Mercure musicale et bulletin français de la S. I. M.* 3, no. 6 (15 June 1907): 676. Rachmaninov was the only member of the Russian retinue that did not attend the banquet. In addition to Ravel, French musicians in attendance included Gabriel Fauré, Vincent d'Indy, Albert Roussel, Dmitri Calvocoressi, and Florent Schmitt, among others.

- Pierre Lalo, "Encore le Debussysme: Une Lettre de M. Ravel," *Le Temps*, 9 April 1907
- Léon Vallas, "Encore 'l'affaire Ravel' et le Debussysme," *Revue musicale de Lyon*, 14 April 1907
- Jean Marnold, "L'Affaire Ravel," *Revue musicale de Lyon*, 1 May 1907
- Dmitri Calvocoressi, "*Les Histoires naturelles* et l'imitation debussyste," *La Grande Revue*, 10 May 1907
- Léon Vallas, "L'Affaire Ravel," *Revue musicale de Lyon*, 15 June 1907

Certainly the Russian contingent would have been interested in the composer attracting all of this attention, and we can only speculate as to what direct contact they had with Ravel or what scores of his they might have brought back with them to St. Petersburg.<sup>66</sup> We do know that Nurok and Nouvel placed *Jeux d'eau*, *Sonatine*, *Miroirs*, and *Histoires naturelles* on an "Evenings of Contemporary Music" program late in 1907, and we know that the *Rapsodie espagnole* was performed twice in St. Petersburg in 1909. We also know that Stravinsky heard all of these works in performance. Ravel's music became known in St. Petersburg just as Stravinsky sought to expand his musical horizons beyond the confines of the Rimskian nest. The circle that attracted his loyalties would bring Stravinsky international recognition by staging *The Firebird* in Paris in 1910, but only after they had made known in St. Petersburg several explicit examples of Ravelian octatonic partitioning. Although Ravel derived his octatonicism primarily from Russian models, he introduced specific variations that became central to Stravinsky's later octatonic practice. Stravinsky would develop more radical octatonic applications by superimposing more layers of octatonic chords and tetrachords, which he set in motion with more intense opposition among rhythmic, timbral, and registral parameters. But the technique of octatonic superimposition itself derives largely from Ravel. In light of this, Stravinsky's avowal that Ravel was the only musician who immediately understood *The Rite of Spring* might be taken as an acknowledgment that aspects of his provocative ballet were related to the processes at work in Ravel's early music.<sup>67</sup>

Stravinsky's arrival in Paris initiated a close, if not enduring, friendship between the two musicians, and Stravinsky himself joined the Apaches in 1910. The two composers often attended rehearsals of each other's music, and Stravinsky sat with Ravel in the composer's box at the premiere of *Daphnis et Chloé*.<sup>68</sup> In 1913 Stravinsky entrusted Ravel with assisting him in the orchestration of Musorgsky's *Khovanshchina*, thereby "rescuing it from

66. By this time Ravel had published most of the works discussed in the present study, including *Jeux d'eau*, the String Quartet, *Shéhérazade*, *Sonatine*, the *Introduction et Allegro*, and the *Rapsodie espagnole*.

67. Igor Stravinsky and Robert Craft, *Conversations with Igor Stravinsky* (Garden City, N.Y.: Doubleday, 1959), 67.

68. Pasler, "Stravinsky and the Apaches," 405 n. 21. The premiere took place on 8 June 1912.

Rimsky-Korsakov.”<sup>69</sup> Perhaps Stravinsky recognized in Ravel an uncommon understanding of Russian musical sensibilities. I. Kaplan, writing for the *Russkaia muzykal’naia gazeta* in 1911, observed a kinship with Musorgsky in particular:

Ravel is a curious and original personality. His is a great and inimitable talent, almost without precedent in the history of music. . . . In his works, Ravel strives to convey not impressions received from contemplations of nature, but nature and life itself. He attempts with sound to imitate the rhythm of our lives and in this he succeeds as few of today’s composers do. In this respect he has much in common with Musorgsky. The music of Ravel is tender, emotional, bright, and full of new and fresh ideas. He has not written much, but what he has written gives us the right to count Ravel among one of the more courageous innovators of our time.<sup>70</sup>

Stravinsky’s subsequent recollections confirm that he was well acquainted with Ravel’s music prior to 1910, particularly several of the works considered here:

My acquaintance with Debussy’s piano music and songs in my St. Petersburg days was very slight. The piano music of Ravel was better known, and not only the piano music. Most of the musicians of my generation regarded the *Rapsodie espagnole*, conducted by Siloti, as the *dernier cri* in harmonic subtlety and orchestral brilliance.<sup>71</sup>

Stravinsky rarely commented on Ravel as a composer, and when he did, his remarks were less than complimentary: “Ravel? When I think of him, for example, in relation to Satie, he appears quite ordinary.”<sup>72</sup> But as we know from his incessant devaluation of Rimsky-Korsakov’s music, Stravinsky tended to be most critical of those who most affected him. In a disparaging (but telling) comment from 1924, Stravinsky equated his two mentors: “As for Ravel’s talent, it is Rimsky-Korsakov’s fifty years younger.”<sup>73</sup> While Stravinsky’s remark accurately recognizes Ravel’s Russophile tendencies, it perpetuates a point of view that has colored the discourse on Ravel since first articulated by Pierre Lalo—that Ravel’s chief talent as a composer resided in his ability to mimic others. Writing in 1907, Lalo concluded a characteristic attack on the composer with the pointed question, “M. Ravel . . . in these fifteen years, what did he produce?”<sup>74</sup> We might answer that in these fifteen years, Ravel produced a substantial body of work that prefigures some of the most significant developments of the twentieth century.

69. Stravinsky and Craft, *Conversations with Igor Stravinsky*, 66–67.

70. I. Kaplan, “Maurice Ravel,” *Russkaia muzykal’naia gazeta* 18, no. 5 (30 January 1911), cols. 132–34.

71. Igor Stravinsky and Robert Craft, *Expositions and Developments* (Garden City, N.Y.: Doubleday, 1962), 85–86.

72. Stravinsky and Craft, *Conversations with Igor Stravinsky*, 67.

73. Andriessen and Schönberger, *The Apollonian Clockwork*, 236.

74. *Le Temps*, 19 March 1907.

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## Abstract

The octatonic scale has provided composers an important alternative to common diatonic practice since the middle of the nineteenth century. Scholars have traced a direct line of transmission with respect to octatonic writing passing from Liszt, through Rimsky-Korsakov, to Stravinsky. But octatonicism also figures prominently in the music of Maurice Ravel, and several works from the first fifteen years of his career implicate Ravel directly in the octatonic legacy, simultaneously bearing the influence of nineteenth-century chromatic harmony as practiced by Liszt and Rimsky-Korsakov and anticipating methods of octatonic partitioning heretofore considered specifically Stravinskian innovations.