

# MUSIC, NOISE, AND ABSTRACTION

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BY VASILY KANDINSKY'S OWN ACCOUNT, his proto-abstract canvas *Impression III (Konzert)* (1911; plate 13) was directly inspired by a performance of Arnold Schoenberg's first atonal works (the Second String Quartet, op. 10, and the Three Piano Pieces, op. 11) at a concert in Munich on January 2, 1911, attended by Kandinsky and his *Blaue Reiter* compatriots (plate 6). The correspondence that Kandinsky launched with Schoenberg in the days following the concert makes it clear that both the painter and the composer saw direct parallels between the abandonment of tonality in music and the liberation from representation in visual art.<sup>1</sup> That both construed these artistic breakthroughs in spiritual terms is equally clear. Responding to the crisis of value prompted by scientific materialism, Kandinsky and Schoenberg affirmed an inner, spiritual realm that promised "ascent to a higher and better order," as Schoenberg would later put it.<sup>2</sup> Kandinsky looked to music, "the least material of the arts," as a means to "turn away from the soulless content of modern life, toward materials and environments that give a free hand to the nonmaterial strivings and searchings of the thirsty soul." "Schoenberg's music," he insisted, "leads us into a new realm, where musical experiences are no longer acoustic, but *purely spiritual*."<sup>3</sup>

But what constitutes the "abstraction" of music in general and of atonal music in particular? And might this well-worn story obscure alternative conceptions of "abstraction" and other relationships between music and art in European modernism? Contrary to the self-presentations of Schoenberg and Kandinsky, there is nothing fundamental about the analogy between abstraction and atonality—which is why Paul Klee, František Kupka, Marsden Hartley, and many other early abstract painters could find inspiration in the eighteenth-century polyphony that consolidated the tonal system in the first place.<sup>4</sup> Nothing inherently connects diatonic harmony or consonance with figuration and free chromaticism or unresolved dissonance with abstraction. The analogy rests solely on the parallel abandonment of hitherto dominant canons or systems—the canons of representation and the system of tonality—that have little to do with one another historically or conceptually. Indeed, the connection between Kandinsky and Schoenberg appears largely tactical: Kandinsky hoped to thwart the criticism that abstract paintings were arbitrary, childish, or merely decorative by asserting an affinity with the law-bound nonrepresentationality of music, particularly the vanguard music of an established figure. Likewise, Schoenberg looked to Kandinsky to validate his own work as a painter and as an ally in the struggle to find a way of abandoning tonality without sacrificing formal coherence.<sup>5</sup>

Music has been considered the exemplary nonmimetic, non-representational art for millennia, but philosophers and theorists have differed about what makes it so. Some construe music as *super*-representational (pure mathematics, pure form) while others declare it to be *sub*-representational (pure desire, emotion, or feeling). Some say music operates at the cosmic level (the Pythagorean concept of the "music of the spheres," beloved by Kandinsky and

Schoenberg, among many) and others that it functions at the intensive material level (the cauldron of natural forces that Friedrich Nietzsche called “Dionysus” or “the will to power”).<sup>6</sup> In short, music is taken to inhabit a level or scale either above or below the world of ordinary solid objects that constitutes the domain of representation and figuration.

The first of these conceptions—music as spiritual transcendence (Kandinsky’s Schoenberg) or pure form (Klee’s and Kupka’s Bach)—has dominated accounts of early abstraction’s musical inspiration. Yet several composers of the period—notably Luigi Russolo and Edgard Varèse—explored the second conception, offering a different understanding of abstraction, both aural and visual. A key condition of possibility for this understanding of music was the invention of the phonograph, in 1877. Though intended by its inventors as a device for capturing and replaying speech and music, the phonograph indiscriminately registered sounds and noises of all sorts, and thus vastly expanded the sonic field available for aesthetic apprehension. It also naturalized voice and music, denying their spiritual pretensions and revealing them simply as vibrations and frequencies that could be rendered by a machine. Dissolving articulate sound into the chaos of noise and the human into the natural continuum, the phonograph performed a sort of abstraction—not a transcendence of materiality but a deeper immersion in it, a decomposition of discrete forms into the intensive field of sonic forces out of which they are generated.<sup>7</sup>

This phonographic sensibility is manifest in the work of Russolo, who in 1913 abandoned painting and turned to music to explore ideas he had laid out early that year in “The Art of Noises,” a manifesto in the form of an open letter to his friend the “Great Futurist Composer” Balilla Pratella.<sup>8</sup> Schoenberg’s musical revolution may have relinquished hierarchy of pitch, but it retained much of the inherited apparatus of post-Renaissance European music, notably the division of the octave into twelve equal steps, the notation of pitch as discrete points on a staff, the instrumentation of the classical orchestra, and the distinction between musical and nonmusical sound. Russolo dispensed with all that. The modern ear, he argued, being attuned to “the noises of trams, of automobile engines, of carriages and brawling crowds,” no longer found sensuous satisfaction in the chromatic scale’s restricted set of pitches or in the “anemic sounds” produced by the modern orchestra.<sup>9</sup> “Today,” he wrote, “the machine has created such a variety and contention of noises that pure sound in its slightness and monotony no longer provokes emotion.”<sup>10</sup> Instead, Russolo maintained, modern life demanded an expanded conception of sonic art that would exceed music, encompassing all sound and requiring new instruments and new forms of notation. He dismissed the notion, so important to the modernist aesthetics of transcendence, that the art of music is pure and autonomous from nature. The idea of music as “a fantastic world superimposed on the real one, an inviolable and sacred world,” Russolo claimed, must give way to an “art of noises” that would draw from

“the infinite variety of noise-sounds” we encounter in life and nature.”

In place of the purity of musical tones, Russolo celebrated the sonic messiness of the real, its cacophony, simultaneity, and multiplicity.

The critique of separation and the affirmation of continuity are central to Russolo’s aesthetic position.<sup>12</sup> If his mentor Filippo Tommaso Marinetti perceived “deep analogies between the human, animal, vegetable, and mechanical worlds,” and the Futurist painter Carlo Carrà maintained the “continuity and simultaneity in the plastic transcendences of the animal, mineral, vegetable, and mechanical kingdoms,”<sup>13</sup> Russolo saw sound as a like continuum. The art of noises would encompass this entire domain, from “the rumbling of thunder, the whistling of the wind, [and] the roaring of a waterfall” to “the rustling of leaves,” “all the noises made by wild and domestic animals,” “the throbbing of valves, the bustle of pistons, [and] the shrieks of mechanical saws.”<sup>14</sup> This affirmation of continuity extended beyond sound’s sources and timbre; decrying “the stupid walls of the artificial and monotonous semitone,” Russolo also rejected any division of the sonic spectrum into discrete pitches, believing that “in nature and in life, sounds and noises are *all enharmonic*.”<sup>15</sup> Whether in “the howling of the wind” or the whine of “dynamos and electric motors,” nonmusical sounds rise and fall continuously, without division or leaps in pitch.<sup>16</sup> Where Kandinsky posed music as a model for painting, Russolo inverted the relationship: in its absurd limitations, he argued, the tempered harmonic system is analogous to a system of painting that would accept only the seven colors of the spectrum—one red, one orange, one yellow, and so on—and would abolish all the infinite gradations between them.<sup>17</sup> The art of noises, on the contrary, would follow painting in admitting the continuous spectrum of pitches and timbres encountered in the world. To that end, Russolo invented new noise instruments (*intonarumori*; plate 124) that favored glissandi, continuous sweeping pitches; and his “enharmonic notation” consisted of continuous lines rather than discrete, individuated points.

In another respect, Russolo’s fondness for glissandi can be seen as a response to a key problem in Futurist painting: how to present dynamic movement on a fixed canvas. With the philosopher Henri Bergson, the Futurists insisted that “all division of matter into independent bodies with absolutely determined outlines is an artificial division,” and that “every movement, inasmuch as it is a passage from rest to rest, is absolutely indivisible.”<sup>18</sup> They repeatedly criticized Cubism for its static presentation of space—for describing an object’s various appearances rather than projecting itself into the dynamic movement of the thing itself.<sup>19</sup> Yet Futurist paintings and sculptures remained static objects, able at best to suggest movement via serial representation, vibratory color, or the juxtaposition of fragments. By contrast, Russolo’s glissandi present movement, temporality, and continuity themselves, abandoning the “intermittent” or “fragmentary dynamicism” of both diatonic-chromatic music and the static art object in favor of a genuine “dynamic continuity” that renders natural becoming, “the *change* from one tone



to another, the shading, so to speak, that a tone makes in moving to the tone immediately above or below.”<sup>20</sup>

Varèse shared Russolo’s celebration of the sonic continuum, rejection of musical temperament, and fondness for urban and industrial noise. He cheerfully abandoned the term “music” in favor of “organized sound,” describing himself as “a worker in rhythms, frequencies, and intensities.”<sup>21</sup> Condemning formal musical analysis, Varèse characterized his compositional practice in terms drawn from physics and chemistry.<sup>22</sup> His language is not that of pitch, melody, harmony, counterpoint, or thematic development but of force and intensity: of “sound masses” and “shifting planes” that are subject to “collision,” “penetration,” “repulsion,” “projection,” and “transmutation”; of sonic “opacities,” “dilations,” “densities,” “rarefactions,” and “crystalizations”; of “speeds,” “magnitudes,” and “zones of intensity.”<sup>23</sup> This terminology is fitting for a music—*Hyperprism* (1923) and *Intégrales* (1925), for example—in which timbre and texture replace pitch as the primary concern and percussion becomes an autonomous element, a music marked by dynamic contrasts and juxtapositions rather than harmonic continuity or motivic development. In Varèse, music becomes *sound*, and sound is presented as the product of myriad forces and relations among forces.

From entirely different perspectives, both Varèse and Piet Mondrian criticized Russolo for musical mimesis, for “slavishly reproduc[ing] only what is commonplace and boring in the bustle of our daily lives.”<sup>24</sup> Yet Russolo’s manifesto repeatedly insists that the art of noises must not be an art of “imitative reproduction.”<sup>25</sup> Like Varèse, Russolo aimed not to reproduce the sounds of nature and life but to use them as “abstract material for works of art to be formed from them.”<sup>26</sup> Neither “estranged from life,” like traditional music, nor imitative of it, the art of noises would survey and draw from the sonic continuum in order to capture the dynamic forces of which nature and life are constituted.<sup>27</sup>

From a Russolian point of view, Varèse could be criticized for too readily accepting the instruments of the classical orchestra—an issue of which Varèse himself was aware. In a 1917 statement published in his roommate Francis Picabia’s journal 391 and repeated for decades after, Varèse acknowledged that woodwinds, brass, and percussion were merely provisional expedients awaiting replacement by new electronic instruments.<sup>28</sup> Indeed, in the early 1950s Varèse produced some of the first and most astonishing pieces of electronic music, works composed via the very direct, material process of selecting, filtering, and modulating streams of electrical current. Russolo’s experiments would later be developed by Pierre Schaeffer, who made montages of field recordings that he called “*musique concrète*” to mark their connection with life and nature, and to contrast them with the detached abstraction of traditional musical composition. Schaeffer’s terminology notwithstanding, both Russolo and Varèse pursued an *abstract* art—an abstraction not of purity and transcendence but of immanence, an art in intimate contact with the world and capturing its generative chaos and cacophony.

1 See Jelena Hahl-Koch, ed., *Arnold Schoenberg, Wassily Kandinsky: Letters, Pictures and Documents*, trans. John C. Crawford (London: Faber & Faber, 1984).

2 Arnold Schoenberg, quoted in Richard Taruskin, *The Oxford History of Western Music*, vol. 4, *The Early Twentieth Century* (Oxford: at the University Press, 2005), p. 339. See also the epigraph on p. 303. On the crisis in religion, science, and morality provoked by scientific materialism, see Kandinsky, *On the Spiritual in Art*, 1911, in *Kandinsky: Complete Writings on Art*, vol. 1, 1901–1921, ed. Kenneth C. Lindsay and Peter Vergo (Boston: G. K. Hall & Co, 1982), pp. 128, 145–46, and “On the Question of Form,” in *ibid.*, pp. 256–57. See also Thomas Harrison, 1910: *The Emancipation of Dissonance* (Berkeley: University of California Press, 1996), pp. 52–60 and *passim*.

3 Kandinsky, *On the Spiritual in Art*, pp. 154, 146, 149.

4 “In the eighteenth century,” Paul Klee noted, “music already perceived and resolved the paths of abstraction. . . . Painting is only beginning this task today.” Quoted in Karin von Maur, *The Sound of Painting: Music in Modern Art* (Munich: Prestel, 1999), p. 9. The influence of the fugue on early abstraction is documented in George C. Schuetze, *Convergences in Music and Art* (Warren, Mich.: Harmonie Park Press, 2005), pp. 7–14, and Vergo, *The Music of Painting* (London: Phaidon, 2010), pp. 203–53.

5 For a reading of Kandinsky and Schoenberg along these lines, see Vergo, *The Music of Painting*, pp. 143–87.

6 See James Leggio, “Kandinsky, Schoenberg, and the Music of the Spheres,” in Leggio, ed., *Music and Modern Art* (New York: Routledge, 2002), pp. 97–127, and Jamie James, *The Music of the Spheres* (New York: Copernicus, 1993), pp. 212–28. I discuss Arthur Schopenhauer, Friedrich Nietzsche, and these super- and subrepresentational conceptions of music more fully in “Beyond Representation and Signification: Toward a Sonic Materialism,” *Journal of Visual Culture* 10, no. 2 (2011):145–61.

7 See Friedrich Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford: at the University Press, 1999), and Christoph Cox, “The Alien Voice: Alvin Lucier’s *North American Time Capsule*,” *Mainframe Experimentalism*, ed. Hannah Higgins and Douglas Kahn (Berkeley: University of California Press, 2012).

8 Luigi Russolo, “The Art of Noises: Futurist Manifesto,” in *The Art of Noises*, trans. Barclay Brown (New York: Pendragon Press, 1986), p. 23.

9 *Ibid.*, p. 25.

10 *Ibid.*, pp. 24, 25.

11 *Ibid.*, pp. 27, 25.

12 For a rich discussion of the theme of continuity in Russolo and Futurism, see Luciano Chessa, *Luigi Russolo, Futurist: Noise, Visual Arts, and the Occult* (Berkeley: University of California Press, 2012), pp. 143ff.

13 Filippo Tommaso Marinetti, “The Variety Theater,” and Carlo Carrà, “The Painting of Sounds, Noises, and Smells” in Lawrence Rainey, Christine Poggi, and Laura Wittman, eds., *Futurism: An Anthology* (New Haven: Yale University Press, 2009), pp. 159, 157. In the same volume see also Marinetti, “Technical Manifesto of Futurist Literature,” p. 120, and “Destruction of Syntax — Radio Imagination — Words-in-Freedom,” pp. 146–47.

14 Russolo, “The Art of Noises: Futurist Manifesto,” pp. 25–26. See also Russolo’s essays “The Noises of Nature and Life (Timbres and Rhythms),” “The Noises of War,” and “The Noises of Language (Consonants),” in *The Art of Noises*, pp. 41–60.

15 Russolo, “The Conquest of Enharmonicism,” in *The Art of Noises*, p. 62.

16 *Ibid.*, p. 63.

17 *Ibid.*, p. 62.

18 Umberto Boccioni quotes these sentences of Henri Bergson’s in “The Plastic Foundations of Futurist Sculpture and Painting,” in Rainey, Poggi, and Wittman, *Futurism: An Anthology*, p. 141. See Bergson, *Matter and Memory*, trans. Nancy Margaret Paul and W. Scott Palmer (New York: Zone, 1988), pp. 196, 188.

19 See, for example, Boccioni, “Absolute Motion + Relative Motion = Dynamism,” in *ibid.*, pp. 187–94.

20 Russolo, “Enharmonic Notation,” in *The Art of Noises*, p. 68.

21 Edgard Varèse, “The Liberation of Sound,” *Perspectives of New Music* 5, no. 1 (Autumn–Winter 1966):18.

22 “By its very definition, analysis is sterile. To explain by means of it is to decompose, to mutilate the spirit of the work,” wrote Varèse in “Jerom s’en va-t’en guerre,” *Sackbut* 4 (December 1923), quoted in Jonathan W. Bernard, “Pitch/Register in the Music of Edgard Varèse,” *Music Theory Spectrum* 3 (Spring 1981):1.

23 See Varèse, “The Liberation of Sound.” Analysis of Varèse’s music tends to adopt this language as more suitable to his work than the vocabulary and concepts of traditional music theory. For a discussion of this point, see Robert P. Morgan, “Rewriting Music History: Second Thoughts on Ives and Varèse (Part II),” *Musical Newsletter* 3, no. 2 (April 1973):18ff.

24 Varèse, “Que la musique sonne,” 391 no. 5 (June 1917), quoted as an epigraph to “The Liberation of Sound”; and Piet Mondrian, “The Manifestation of Neo-Plasticism in Music and the Italian Futurists’ *Bruitists*,” 1921, in *The New Art — The New Life: The Collected Writings of Piet Mondrian*, ed. Harry Holtzman and Martin S. James (Boston: G. K. Hall, 1986), p. 155.

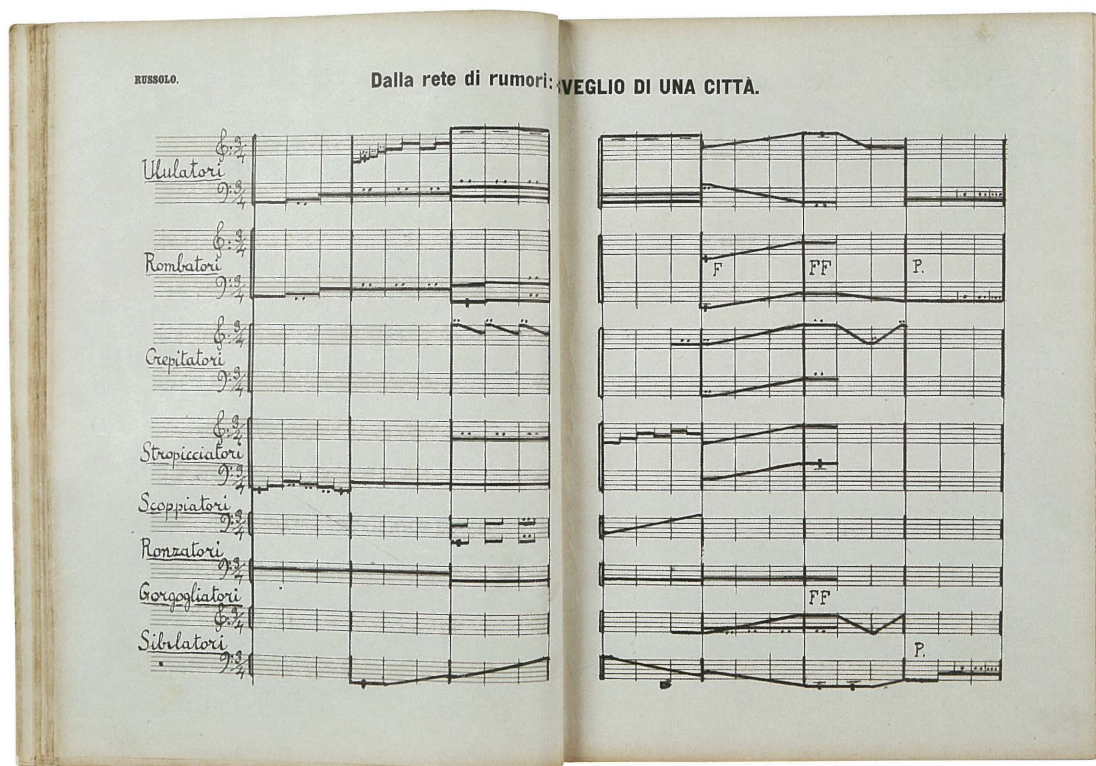
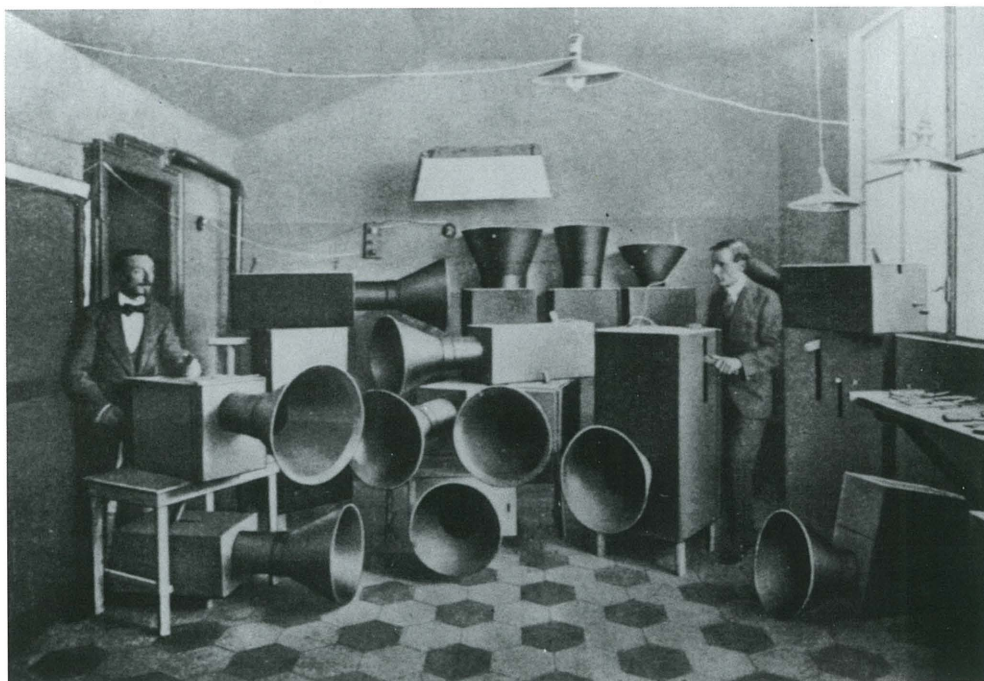
25 Russolo, “The Art of Noises: Futurist Manifesto,” pp. 27–28, 29, and “The Art of Noises: New Acoustical Pleasures,” in *The Art of Noises*, pp. 86–87.

26 *Ibid.*, p. 86.

27 Russolo, “The Art of Noises: Futurist Manifesto,” pp. 27–28.

28 Varèse, “Que la musique sonne.” Varèse’s personal and artistic connections to Dada are detailed in Olivia Mattis, “Varèse and Dada,” in Leggio, ed., *Music and Modern Art*, pp. 129–61.





124. Luigi Russolo and his assistant, Ugo Piatti, in their Milan studio with their *intonarumori* (noise machines). January 1, 1913. Photographer unknown. Repr. in *L'Arte dei rumori* (Milan: Edizione Futuriste di "Poesia," 1916). The Museum of Modern Art Library, New York

125. **LUIGI RUSSOLO**. Excerpt from the score for *Risveglio di una città* (Awakening of a city), to be played on *intonarumori* (noise machines). *Lacerba*, March 1, 1914, pp. 72–73. The Museum of Modern Art Library, New York