Noise before *The Art of Noises*: Thoughts on the History of Sound

Thomas W. Patteson

Presented at the Art of Noises Futurist Cocktail Party
<fidget>, Philadelphia
11 March, 2013

Noise as modern; noise as technological; noise as aggressive, subversive, violent. All of these readings have a basis in Russolo's manifesto, and yet these dominant interpretations of *The Art of Noises* have drowned out the work's other possible valences. Tonight I want to lead you on a little investigation into the history of sound in order to pose the question: does noise have a history? Was there noise before *The Art of Noises*?

Russolo's thumbnail history of noise is quite straightforward. He writes:

> The evolution toward noise-sound is only possible today. [...] First of all, musical art looked for the soft and limpid purity of sound. Then it amalgamated different sounds, intent upon caressing the ear with suave harmonies. Nowadays musical art aims at the shrillest, strangest, and most dissonant amalgams of sound. Thus we are approaching noise-sound. This revolution of music is paralleled by the increasing proliferation of machinery sharing in human labor.[1]

In this version of history, a simple, pastoral state of prelapsarian quietude gives way, stage by stage, to the noisy industrial society of the twentieth century. Noise, in short, is an index of modernity.

But this identification of noise and modernity that Russolo helped inaugurate has deafened us to the din of history. Throughout the course of European music, noise is there at every step—the shadow, so to speak, of the tireless quest for the absolute purity of tone.

The sensitivity for noise had to be meticulously purged from European ears. Only through a lengthy process of perceptual and intellectual conditioning could we learn to ignore the majority of that vast panoply of sounds that surrounded them. The definition of musical beauty in terms of tonal purity meant that noise became literally anaestheticized, rendered un-artistic, a mere signal at best.

---

[1] Luigi Russolo, *The Art of Noises*, trans. Robert Filliou (New York: Something Else Press, 1967; Reprinted by UbuClassics, 2004), 5-6.

The story of Western music is the story of noise suppression. It began when the universe of sound was passed through what I call the "sieve of Pythagoras," and only that which could be measured emerged on the other side.

Medieval music theorists used the term *sonus numeratus*—"numbered sound"—to distinguish the orderly, periodic, and measurable tones of music from the messy welter of worldly noises. The anonymous author of the ninth-century treatise *Musica enchiriadis* admonishes the reader that "pitches...are not just any kind of sound, but those which are suitable to melody by legitimate spacing between themselves."[2]

But even for Medievals, with their theologically supported ideas of consonance as an echo of the divine order, noise lurked around every corner. The treatise *De musica* of the English music theorist John Cotton, written around the year 1100, contains a fascinating discussion of the distinction between "discrete" and "indiscrete" sounds. Discrete sounds express clear pitch relationships, while indiscrete sounds, such as laughter or the barking of dogs, are governed by no measurable intervals. Here we have a familiar distinction between noise and musical tone, but what John says next is a bit surprising:

> Therefore music in no way admits of that sound which we have said to be indiscrete. Only discrete sound, which is technically called tone [*phthongus*] pertains to music. For music is nothing other than the fit progression of tones. We assert this especially against the ignorant men who stupidly deem that any sound whatever is music, that we may check this error.[3]

One must wonder, who were these medieval John Cages, these musical heretics who suggested that "any sound whatever is music"? And why would theorists devote such effort to distinguishing tone from noise if, as we tend to assume, music back then was all sweetness and light?

Think of the fascinating and well-documented practice of charivari, dating back at least to the middle ages, in which raucous communal noise-making was directed as an instrument of public shaming against those who had violated the moral code.

Or consider medieval instruments, which were on the whole more varied and noisy than the instruments of the orchestra that eventually supplanted them. Period accounts differentiated between instruments using the French words haut and bas, terms which meant not simply "high" and "low," but also connoted noisiness, timbre, and volume.

---

[2] Quoted in Leo Treitler, ed., *Strunk's Source Readings in Music History, Revised Edition* (New York: W. W. Norton, 1978), 189.

[3] John, "On Music," in *Hucbald, Guido, and John on Music: Three Medieval Treatises*, trans. Warren Babb (New Haven: Yale University Press, 1978), 107.

These terms allowed medieval musicians to differentiate between loud, piercing instruments such as shawms, bombards, horns, and drums, which were ideal for outdoor performances, and instruments such as flutes and psalteries, whose muted tone made them better suited for music-making in the home or at court.[4]

A later trace of premodern thinking about noise in music appears in the organological treatise *Harmonie universelle*, by the seventeeth-century Jesuit mathematician Marin Mersenne, one of the pioneers of acoustic research in his time. Mersenne stops short of including natural noises in his consideration of musical instruments, but he leaves the door enticingly open. He writes:

> I deal here solely with the instruments that serve in music, and which are so at the disposition of man that he can use them when it pleases him. Such does not happen with the noises of the wind and thunder, which are not dependent upon our will, which has those things alone which can fall under art at its disposal; still the brain which is more universal than the will can contemplate the natural noises, and examine whether the different thunderings, roarings, and rumblings of the sea form consonances and dissonances, of which I speak more fully in other places.[5]

For Mersenne, "natural noises" were disqualified from music not on account of their lack of pitch, but simply because they were not susceptible to human control—a small but significant nuance.

That noise was ever-present as a counterpart (and threat) to musical sound becomes clear in the writings of Enlightenment philosophers and historians of music, who argued the exact opposite of Russolo: the development of music—that is, of course, Western classical music—was a historical process of purification through which sound was purged of the dross of noisy additives and led to the resonant, pure tone that was the self-evident aesthetic ideal.

The silencing of noise distinguished not only the moderns from the ancients, but also set off the civilized people of Europe from the barbaric peoples of the world, who had probably never even heard of Stradivarius! Listen to the German historian Johann Forkel, circa 1800:

> Although tone [. . .] is only the means by which music is made perceptible, in primitive, uncultivated nations it is generally taken for the thing itself. Indeed [primitive people] consider every individual sound to be music. […] This explains why we find in all wild and uncivilized nations such great pleasure taken in the clamor of noisy instruments—

---

[4] Edmund A. Bowles, "Haut und Bas: The Grouping of Musical Instruments in the Middle Ages," *Musica Disciplina* 8 (1954), 115-140.

[5] Marin Mersenne, *Harmonie Universelle: The Book on Instruments*, trans. Roger E. Chapman (The Hague: Martinus Nijhoff, 1957), 16.

> in drums, for example, and rattles, in blaring trumpets, and extremely loud, ferocious shrieks.[6]

In the wake of the Enlightenment, the concept of nature came to signify the primordial chaos in opposition to which civilization defined itself. And noise was the sonic trace of this untamed "other": The history of music imagined as the conquest of noise mirrors precisely the triumphalist narrative of the technoscientific mastery of nature since the Renaissance.

In opposition to the Enlightenment's derogation of nature, nineteenth-century Romantics such as E. T. A. Hoffmann cultivated the idea of "nature music," that is, the notion that the sounds of nature were themselves an expression of a sentience or spirit inherent in the material world. In his hugely influential book *On the Beautiful in Music,* first published in 1854, the Viennese music critic Eduard Hanslick went out of his way to demolish this cherished Romantic ideal. He writes:

> Should not the murmuring brook, the roar of the ocean waves, the thundering avalanche, and the howling of the wind be at once the source of and the model for human music? Have all these rippling, whistling, and roaring noises nothing to do with our system of music? We have no option but to reply in the negative. All such sounds are mere noise—an irregular succession of sonorous pulses. Very seldom, and even then only in an isolated manner, does nature bring forth a musical note of definite and measurable pitch. But a musical note is the foundation of all music. [...] The "music" of nature and the music of man belong to two distinct categories. The transition from the former to the latter passes through the science of mathematics. [...] As everything in music must be measurable, while the spontaneous sounds of nature cannot be reduced to any definite quality, these two realms of sound have no true point of contact. Nature does not supply us with the art elements of a complete and ready-prepared system of sound, but only with the crude matter which we utilize for our music. Not the voices of animals but their gut is of importance to us; and the animal to which music is most indebted is not the nightingale but the sheep.[7]

Hanslick's diatribe is a last-ditch effort to wall off musical sound from the unruly world of noise and nature. As he knew, the orderly empire of tonal hierarchies that underlay the emerging canon of "great music" was a fragile construction. The barbarians of noise were ever at the gate.

And indeed, the tradition of "nature music," which Hanslick so vigorously disputed, finds an echo in Russolo's manifesto. In *The Art of Noises* there is a striking lack of distinction between the "natural" and the "technological": Russolo hails the sounds of war and industry, but also "thunder, wind, cascades, rivers, streams, leaves, a horse trotting away, the starts and jumps of a carriage on the pavement, the white solemn breathing of a city at night, all the noises made by feline and domestic animals and all those man's mouth can make without talking or singing."

---

[6] Quoted in Treitler, 1015-1016.

[7] Eduard Hanslick, *The Beautiful in Music*, trans. Gustav Cohen (Indianapolis: Bobbs-Merrill, 1957), 108-110.

Seen from this perspective, Russolo's manifesto was not a sudden influx of noise into Western music—the birth cry of musical modernity—but an intervention in a struggle as old as music itself. What Russolo attacked as the meagerness of the auditory sensorium at the dawn of the twentieth century was in fact the product of a protracted normalization of music enforced by the coordinated disciplines of aesthetics, instrumental technology, and music theory. The same process that tamed sound and enabled the stunning compositional constructions of European art music also drastically narrowed our ears' perceptual bandwidth, and made us deaf to the world beyond the confines of concert music and its domesticated, well-behaved, "indoor instruments."

For a century now we have been learning how to hear anew. Russolo did not discover noise, but helped us to recover it.

"Noise before *The Art of Noises*: Thoughts on the History of Sound" (20013) by Thomas W. Patteson is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License.