

Melody

“It is said, melody is merely a succession of sounds. No doubt. And drawing is only an arrangement of colors. An orator uses ink to write out his compositions: does this mean ink is a very eloquent liquid?” (Jean-Jacques Rousseau, 1781)¹

Midas’s judgment

In ancient myths of music, melody often takes second place to harmony. The story of Pan’s duel with Apollo, the god of music, established this hierarchy through unequal participants, but also planted a seed of doubt through a disagreement over the duel’s outcome. After speaking poorly of Apollo’s gift, Pan was summoned to a competition between his monophonic pipes and Apollo’s multi-stringed lyre. This was to be judged by the old mountain god, Timolus. While Pan’s wild melody coaxed and charmed the animals, Apollo’s ‘skillful thumb’ brought forth such ‘sweetness’ from his strings that the sound won over all listeners but one.² King Midas defiantly disagreed with Timolus’ judgment, upon which—so the tale goes—Apollo promptly transformed Midas’ ears into those of an ass. Figure 1 shows Jean Matheus’ seventeenth-century engraving, which captures the scene, depicting hands raised, symbolically, in protest and power. While the tale scarcely conceals an official criticism of poetic form in which the bucolic is outranked by the lyric, it also offers license for a dissenting view of melody. For Midas’s pleasure in Pan’s melody, so shamefully written into his visage, establishes a precedent for defying the hierarchy of a cosmic harmony, for prioritizing melody as an autonomous form.

[figure 1 near here]

As a fundamental concept in Western musical thought, melody connotes the form and affective power of successive sounds (typically, single-pitch) in motion, perceived as an aesthetic unity. Typically, single-pitch sounds. Within the common practice period, its power of expressive shaping forms the focal point for listeners attuned to the top of a musical texture, that which seizes our attention, and whose character-defining contours most readily hook our sympathies and understanding. As an unfolding linear structure, it is also the compositional parameter that most closely mirrors our experience of finite duration, with all the allusive value this has for the nature of transient experience, sonic decay, expiring breath, and the impermanence of living matter. (Pan’s very instrument, Syrinx, was created from a nymph of the same name who had fatally metamorphosed into reeds to escape his advances.) Given this lofty profile, it is perhaps unsurprising that within the Humanities melody has enjoyed great currency as a literary metaphor and emblem of attainment. Within music theoretical writing more specifically, however, the nature and hierarchy of its constitutive, organizing materials remains contested, and has provoked vigorous, occasionally legally consequential, argument. Needless to say, its status as such is high within Western aesthetics.

¹ Jean-Jacques Rousseau / J. G. Herder, *On the Origins of Language: Two Essays*, trans. John H. Moran and Alexander Gode (Chicago and London: University of Chicago Press, 1986), 53.

² Ovid, *Metamorphoses*, trans. and ed. Charles Martin (New York and London: Norton, 2010), 294.

While melodic material has existed for millennia (and a rich melodic tradition in historical “folk” and vernacular musics must be presumed largely undocumented), this flowering of concept only occurred over the last three centuries, and writing since that time—both specialist and non-specialist—is replete with paeans to melody as the centerpiece of musical experience. The first major Western treatise devoted to melody, Johann Mattheson’s *Kern melodischer Wissenschaft*, set the tone: ‘the art of composing a good melody encompasses what is most essential in the whole of music.’³ The sentiment would be echoed in composition treatises later in the century, where J. G. Sulzer (1774) declared melody ‘the most essential element of a piece of music,’⁴ and Michel Chabnon (1785) identifies it more particularly as music’s ‘main driver and most effective agent, that which gives [music] form, movement and life.’⁵ By the *Gefühlsaesthetik* of the early 19th century, Anton Reicha could posit melody as nothing less than ‘the language of feeling’ itself, while E. T. A. Hoffmann, poeticizing melody’s affective power, vaunted it as ‘the primary and most exquisite thing in music, that which grasps human sensibility with wonderful magical power.’⁶ Within this genealogy of arch-advocates, it fell to Richard Wagner to epitomize a totalizing position whereby the concept becomes synonymous with music’s capacity to express. ‘Music’s only form is melody,’ he argued in *Oper und Drama* (1851), ‘it is not even conceivable without melody.’⁷ Even at this stage, Wagner’s sentiment—like Mattheson’s in 1737—set a trend that saw the magnitude of the concept expand further: writing in 1864, the Leipzig Kantor Moritz Hauptmann lauded melody as ‘the alpha and omega of music,’⁸ while in 1899, pedagogue Salomon Jadassohn iterated the point to students using the language of the classroom: ‘To composition there belong three elements: first melody, then again melody, and now finally, for the third time, melody.’⁹

There is a certainty about the discursive object in the above accounts. That is to say, each writer is confident in their reference. Ostensibly, then, melody ought to be relatively unambiguous: you know one when you hear one (adapting Thomas Aquinas’s verdict on the concept of ‘time’, or Supreme Court Justice Potter Stewart on

³ ‘Diese Kunst, eine gute Melodie zu machen, begreift das wesentlichste in der ganzen Music’ J. Mattheson, *Kern melodischer Wissenschaft* (Hamburg: Christian Herold, 1737), 29.

⁴ ‘Sie ist das Wesentliche des Tonstücks.’ J. G. Sulzer, *Allgemeine Theorie der schönen Künste* (Leipzig: Wiedmann 1779), 3: 219.

⁵ ‘[L]a mélodie est, en Musique, le principal ouvrier, l’argent le plus efficace. C’est elle qui donne les formes, le mouvement & la vie.’ Michel Paul Guy de Chabanon, *De la Musique considérée en elle-même et dans ses rapports avec la parole, les langues, la poésie et le théâtre* (Paris: Pissot, 1785), 29.

⁶ Anton Reicha, *Treatise on Melody*, trans. Peter M. Landey (Hillsdale, NY: Pendragon Press, 2000), 13. Hoffmann: ‘Das Erste und Vorzüglichste in der Musik, welches mit wunderbarer Zauberkraft das menschliche Gemüt ergreift, ist die Melodie.’ E. T. A. Hoffmann, ‘Über einen Ausspruch Sacchini’s un über den sogenannten Effekt in der Musik,’ *Fantasiestücke un Callot’s Manier* [1814], in *E. T. A. Hoffmann: Poetische Werke*, 6 vols. (Berlin: Aufbau, 1983), 1: 452.

⁷ Richard Wagner, *Sämtliche Schriften und Dichtungen*, 16 vols., (Leipzig: Breitkopf & Härtel, 1911 [vols. 1-12], 1914 [vols. 13-16]), 7: 125. Cf. *Prose Works*, trans. W. A. Ellis, 8 vols. (Lincoln and London: University of Nebraska Press, 1995), 3: 333.

⁸ Moritz Hauptmann to Carl Kossmaly, 9 September 1864, Leipzig, in *The Letters of a Leipzig Cantor*, trans. A. D. Coleridge (London: Richard Bentley & Son, 1892), 2: 249.

⁹ ‘Zum komponieren gehören drei Dingen: zuerst Melodie, dann nochmal Melodie und dann nun schließlich zum dritten Male Melodie.’ Cited in Ferruccio Busoni, *Wesen und Einheit der Musik* (Berlin: Hesse, 1956), 48.

‘obscenity’).¹⁰ To look at the English Hymnal of 1906, or the corpus of Bellinian operas, one would be forgiven for thinking such narrow bands of repertoire would be one way to begin substantiating such a case. The reassurance of common assumption is not borne out in the history of theoretical writing on melody, however. Johann Christian Heinichen touched on this point in his treatise on figured bass in 1711 when he protested that: ‘[a] musician is certainly unable to say what melody may be. There is a great difference, though, between entirely grasping something and thoroughly describing it,’ adding: ‘[a] confused picture will not do when teaching.’¹¹ Heinichen’s statement goes to the heart of the matter I want to address: melody has an identity problem.

Perhaps this ‘confused picture’ is just what we receive from that chestnut of theory pedagogy, the Prelude No. 1 in C major from J. S. Bach’s WTC book 1. Here, the physically comfortable arpeggiation of an underlying bass progression forms, for Joel Lester, the archetypal ‘pattern-prelude’ in which the overall coherence depends not on melodic material, but on ‘underlying harmonies and [contrapuntal] voice leading.’¹² In such a reading, the improvisational idiom and regular sixteenths conspire to create the very definition of harmonic rhythm, a model accompaniment, and it is indicative that Charles Gounod, composing in an age closer to Hoffmann than Mattheson, was only the first who saw fit to improvise a melody above it, as though one were somehow lacking.¹³

For Ernst Kurth in 1917, Bach’s monophonic lines—even in pieces that ‘appear to consist only in harmonic outlines’—have the goal of ‘evoking the impression of polyphony’ by alluding to accessory voices within the single line.¹⁴ While such ‘profoundly concealed subtleties’ resist systematic explication, they typically become audible through apex or accented pitches, implied melodic dissonances, and the counterpointing of melodic continuities in distinct registers, often through sequential passagework. Such latent polyphony—later dubbed melodic fission¹⁵—‘suggests an aural comprehension and supplementation of musical procedures,’ Kurth concludes. Like the famed optical illusions in which a single picture appears as a rabbit or a duck, an old or a young woman, depending on how you look at it, Bach’s Prelude might be seen as temporally unfolding *chords* (undoubtedly its chief identity) or as a monophonic *melody* based on a principle of sustained arpeggiation. In light of Gounod’s melodic

¹⁰ See Stewart’s judgment of *Jacobellis vs Ohio* (1964), in which he spoke about a threshold test for obscenity. This is critiqued in Paul Gewirtz, ‘On “I know it when I see it.”’ *Yale Law Review* 105 (1996): 1023-47.

¹¹ Cited in Mattheson *Kern melodischer Wissenschaft*, 34 fn.

¹² Joel Lester, *Bach’s Works for Solo Violin: Style, Structure, Performance* (Oxford and New York: Oxford University Press, 1999), 27.

¹³ Gounod’s *Méditation sur le Premier Prélude de Piano de S. Bach* (1852) allegedly resulted from his improvisation at the piano, and was notated by his father-in-law, Pierre-Joseph Zimmermann. Copycat descant melodies were applied to this and other ‘incomplete’ Preludes by Carl Kossmaly, Ferdinand Gumbert, Gustav Graben-Hoffmann, Mario Castelnuovo-Tedesco, Ignaz Moscheles, August Gottfried Ritter, and Johann Joseph Abert. On this topic see Georg Feder, ‘Gounods Méditation und ihre Folgen,’ in *Die Ausbreitung des Historismus über die Musik* (Regensburg: Gustav Bosse, 1969), 85-122.

¹⁴ Ernst Kurth, *Ernst Kurth: Selected Writings*, trans. and ed. Lee A. Rothfarb (Cambridge: Cambridge University Press, 1991), 76-77.

¹⁵ The term is Walter Piston’s, see *Counterpoint* (New York: Norton, 1947). See also W. J. Dowling, ‘The perception of interleaved melodies,’ *Cognitive Psychology* 5 (1973): 322-337.

ghosting (wherein no sixteenths are sustained), the sounding effect somehow meets in the middle, and the categorical distinction—melody or chord—becomes punctilious.

As Kurth argues, we may silently hear unwritten melodic lines such as Gounod's, prompted by underlying voice-leading, as a natural consequence of active listening, just as we may supply harmonic coherence for melodies deemed insufficiently harmonized (as Schumann did for Bach's works for solo violin and cello). Such instances of soliciting completion by the auditor arguably emerge from tension between abstract structure and sensuous realization, and merely constitute cases of individuals 'recording as composers what they had experienced as unusually active listeners,' as Edward T. Cone once suggested.¹⁶

This is literally the case in an episode from Schumann's *Humoreske* (1839), in which a third stave inserted between the pianist's two hands contains a melodic line that is neither to be played nor specifically imagined during performance. It is embodied in the outer parts 'as a kind of after-resonance,' observes Charles Rosen. 'It has its being within the mind and its existence only through its echo.'¹⁷ Is Bach's melody missing in quite the manner of Schumann's virtual melody? It is telling that commentators seem unable to decide. 'The [Prelude's] melody is not always inscribed recognizably for the eye,' Jadassohn chides in 1899, 'but the ear feels it. We hear the melody in the peaks of the arpeggiated chords. ... Every understanding performer would know here to subordinate the accompanying harmony.'¹⁸ Example 1 shows the close correlation between Gounod's applied melody and Jadassohn's voice-leading wherein square boxes indicate shared pitches. Given the correlation, this seemingly amounts to the same thing, where Gounod is merely elaborating as a descant the upper line Jadassohn identified, thereby externalizing what Kurth called Bach's curvilinear intensifications [*Kurvensteigerungen*]. Phenomenologically speaking, then, the 'melody' is present in the Prelude's structure, but it seemingly relies on external agents for realization, whether listeners or performer.

[EX. 1 & 2 near here]

The same argument might be made for the Largo of Chopin's Sonata Op. 58 (1844), given in example 2. Here—unlike the tradition of sequential harmonic arpeggiation in sonata developments (such as Beethoven's Op. 58i, Op. 2 no. 3i etc.)—a twice-recurring chordal arpeggiation is pregnant with melodic impetus, yet no line emerges to dominate attention. Whereas Schumann supplied an absent melody, Chopin resolutely delineates a tonic arpeggio, as though relishing the absence of melodic focus between the movement's more traditionally melodic outer sections: the RH eighth notes are weighted with calculated metrical accents to project the triad, and the peak pitches gently elaborate an E-major arpeggio (b–b–b–c#–b–g#–g#–e–e–d#–c#–B–B–A–G#)

¹⁶ Edward T. Cone, *Hearing and Knowing Music*, ed. Robert Morgan (Princeton: Princeton University Press, 2009), 33.

¹⁷ Charles Rosen, *The Romantic Generation* (London: Fontana, 1999), 8-9.

¹⁸ 'Nicht immer ist die Melodie für das Auge erkennbar gezeichnet; das Ohr empfindet sie jedoch. Wir hören die Melodie in den Spitzen der arpeggierten Accorde ... jeder verständige Spieler würde hier die begleitende Harmonie der Melodie ... unterzuordnen wissen.' Salomon Jadassohn, *Das Wesen der Melodie* (Leipzig: Breitkopf & Härtel, 1899), 1-2.

in a texture whose role seemingly is to project E major resonance against momentary inflections.

The above comparison of repertoire in which melody may be actual, implied or virtual begins to substantiate Heinichen's belief that while musicians cannot say what melody is, they grasp it. To this I would add a continuation: that they seldom agree on it. It is partly this condition of personal ownership that has undermined attempts to theorize melody beyond narrowly confined bands of repertoire. As successive pedagogical treatises acknowledged, melody turns out to be something of a slippery conceptual problem, forever flitting between definitions and local schemes of taste and identity. By the mid-19th century, the lack of consensus was itself an old story: 'Let's leave aside for once the misused, even equivocal expression "Melody,"' the critic Ludwig Bischoff demurs. 'Melody or no melody: we don't want to argue about that.'¹⁹ By the early 20th, art historian Oscar Bie simply admitted defeat, confessing that 'every definition falsifies.'²⁰ A durable, strict definition has indeed proven elusive, creating something of a moving target for writers and composers who sought to engage the concept for the purposes of recording or imparting musical knowledge. Even steeled with all the armament of tonal and post-tonal theory, the problem remained intractable well into the 20th century, it seems. And it is indicative that even after detailed illustration of Mozart's G minor symphony for CBS in 1962 Leonard Bernstein, asking what melody is, concluded evasively that 'melody is exactly what a great composer wants it to be.'²¹

Definitions

One reason for this enduring ambiguity is that the simplest definition of 'melody' advanced over the last three centuries—a linear succession of discrete pitches in time—has proven both too broad and too narrow: it could be a definition of music itself, but neglects telling details of style, shape, and patterning, not to mention expression and—since the mid-18th-century—putative relations to aesthetics. In other words, all the parameters that concern the phenomenological experience of sounds connected successively in time.

Another reason is that theories of melody inherently refer back to the judgment of a listening subject. This element of particularism, with its focus on unquantifiable factors of individual experience, renders the topic more resistant than most to traditional epistemological schemes such as Dahlhaus' three paradigms for the history of theory, or the broader schema of Foucauldian *épistèmes*.²² Approaches to 'melody,' conceived as an elusive, forever ill-defined concept, thus rely on the elective tracing of common discursive threads, and on historical comparison of nascent methods and their

¹⁹ 'Lassen wir einmal den durch Missbrauch allerdings zweideutig gewordenen ausdruck "Melodie." Melodie oder nicht Melodie: darüber wollen wir nicht straiten.' in Ludwig Bischoff, 'Richard Wagner's Lohengrin,' *Niederrheinische Musik-Zeitung* 38 (1858): 300.

²⁰ Oscar Bie, "Melody," trans. Theodor Baker, *Musical Quarterly* 2 (1916): 402-17, here 402.

²¹ Leonard Bernstein gave a series "Young People's Concerts" for CBS between 1958-72. This comment concludes the 21st broadcast on 21 December 1962, See <https://www.youtube.com/watch?v=O09V4NQkOKI> [accessed 4 January 2015].

²² Dahlhaus, *Die Musiktheorie im 18. Und 19. Jahrhundert: Grundzüge einer Systematik*. 2 vols. (Darmstadt: Wissenschaftlich Buchgesellschaft, 1989), 1: 6-9.

attendant commentaries. In this, though, the concept remains ensnared within a tension Nicholas Cook identifies between theory and epistemic self-awareness: ‘when theorists are confident of the epistemological status of their work they will say nothing about it, whereas when they *do* talk about it we can deduce they are not quite sure about what they are saying.’²³ The evidence indicates that ‘melody’ remains in permanent transition from the first category to the second, which helps explain why each theorist to write on the subject professed to being the first who dared to do so. Earlier attempts, if known, belonged to a moribund past. ‘The lack of continuity provokes astonishment when one considers the development of the theory of counterpoint and of harmony,’ Dahlhaus comments, qualifying that teaching of harmony ‘disappoints’ in its scope and limitation; that is, its ‘almost unbroken continuity’ is measured unequally to that of melody.²⁴

Historical Changes

A brief overview of the historical emergence of the concept of melody as a musical line offers some perspective on the matter. The earliest Western writings on the concept ‘melos,’ from Cleonides’s account of Aristoxenus to Aristotle and Aristides Quintilianus, differ in their discussion of four species of relative motion between sounds (sequence, succession, repetition, prolongation), but broadly insert the patterning of such motion within a strict musical typology that governs the properties of ‘melic’ movement (ode, dirge, hymn, paean, dithyramb). Here, Plato’s definition has come to hold sway: ‘melos’ referred to nothing less than music conceived as a performing art.²⁵ It centers on the conjoined entity of word, harmony and tempo / dance / movement that properly characterizes what Aristides Quintilianus calls ‘perfect melos’. In other words, music wherein:

it is necessary that melody, rhythm, and diction be considered so that the perfection of the song may be produced: in the case of melody, *simply a certain sound*; in case of rhythm, the motion of sound; and in the case of diction, the meter. The things contingent to perfect melos are motion—both of sounds and body—and also *chronoi* and the rhythms based on these.²⁶

Here melos appears to constitute nothing less than organized sound (‘a certain sound’), and, as such, offers a totalizing view of music’s organizing matter between the teachings of Aristotle and Aristides Quintilianus (ca. 480 BC and 300 AD).²⁷ Writing a hundred years thereafter, St. Augustine arguably engages the issue when he asks: ‘who can mentally perceive so subtle a thing as to be able to distinguish without great labour how sound may be prior to melody?’ He answers: ‘melody is formed sound ... [and] matter is prior to what is made out of it ... When it is sung, its sound is heard, for there is not first a formless sound that is afterwards formed into a melody.’²⁸ This critique of

²³ Nicholas Cook, ‘Epistemologies of music theory,’ *The Cambridge History of Western Music Theory* [2002], ed. Thomas Christensen (Cambridge: Cambridge University Press, 2013), 78.

²⁴ ‘Der Mangel an Kontinuität mag erstaunen hervorrufen, wenn man an die Entwicklung der Kontrapunkttheorie und der Harmonielehre denkt.’ Dahlhaus and Abraham, *Melodielehre*, 16-17.

²⁵ Plato, *Republic* III: 398 d.

²⁶ Cited in T. J. Mathiesen, *Apollo’s Lyre: Greek Music and Music Theory in Antiquity and the Middle Ages* (Lincoln and London: University of Nebraska Press, 1999), 25. Emphasis added. Chronoi are units of time that constitute metre.

²⁷ While melopoeia (Greek: ‘song making’) refers more specifically, by relation to onomatopoeia, to the melodic line of the verses in Greek tragedy, the later problem of a specific identity are latent here.

²⁸ Augustine, *The Confessions of St. Augustine*, trans. John Ryan (New York: Image Books, 1960), 298-99.

Genesis ('the earth was without form and void') sees the matter of sounding as prior in origin to the form of singing, but prior neither in time nor in choice; as such, it adds a philosophical ground for later debates over the identity of melody and its origin as a form.

Despite the vast body of medieval chant that bears witness to the praxis of melodic singing,²⁹ melody was only defined as a linear pitch structure in the late 16th century, amid the prestige and quantitative predominance of sacred polyphony within European cultural centers. In order to differentiate a single voice of successive pitches from a polyphonic texture, Friedrich Beurhusius argued in his *Erotematum musicae* of 1573 that 'melodia'—melody's Latin cognate—had two meanings: 'cantus conjunctus' was vocal music whose melody flows through several connected hexachords within a system of notation (i.e. using multiple vocal ranges), and 'cantus simplex' was vocal music whose melody moves within the hexachordal range of a single voice.³⁰

From this schism, the nascent definition of melody begins to solidify around 1599 with Joachim Burmeister, who posits melodia, still a succession of notes in a single voice, as an integral component of the syntactical structure of *musica poetica*:

A melody is the bringing about of sounds which follow one another by means of the raising and lowering of successive intervals, constituting a species of harmony, i.e. a single voice which when sung touches the sense in its own way, so that in a not obviously unmusical person the effects it creates are felt.³¹

Later the ordered sequence of pitches is cleanly contradistinguished from harmony, to which melody remains bound during polyphony:

²⁹ The body of western liturgical chant bears witness to the fact that monophonic vocal melody exists in ritualized practice from at least the 4th century AD onward. The extent to which singers and scholars in Benvento or Aquitaine conceived of these chants as autonomous linear pitch structures in parallel to the liturgical texts is unknowable. But applying the label 'melody' to them in this sense has arguably less to do with the intentional fallacy than the extent to which they relate to the four by two matrix of modes as a means of organizing the gamut of available tonal space (and the enduring debates over whether such a scheme, codified centuries later, was 'real'). Cf. Harold Powers, 'Is Mode Real: Pietro Aron, the Octenary System, and Polyphony,' *Basler Jahrbuch für historische Musikpraxis* 16 (1973): 189-239.

³⁰ 'What is a simple song? A simple one is one whose melody is inflected through a simple system of one order of voices, or at least transcends 'la' by the space of a second; and it is therefore performed by one order of voices, and the note exceeding 'la' is expressed by 'fa' (as it often is also in conjoined songs). What is a conjoined song? A conjoined one is one whose melody proceeds through a system of conjoined orders; and it is performed by a permutation of widely ranged voices, especially 're' and 'la', through the conjunction of those orders of voices.' ['Quis simplex Cantus? / Simplex est, cujus melodia per simplex unis vocum ordinis systema inflectitur, aut saltem La secundae spacio transcendit: ideoque uno vocum ordine exercetur, notaque La excedens per fa (ut etiam saepe in conjunctis) exprimitur,' and 'Quis Cantus Conjunctus? / Conjunctus est cujus Melodia per systema ordinum conjunctorum decurrit: Atque is per permutatione extremarum vocum, praesertim re et la, conjunctis illis ordinibus vocum exercetur.'] Friedrich Beurhusius, *Erotematum musicae* [1573], 2nd ed., Nuremberg, 1580. Facsimile, edited by W. Thoene, Cologne, 1961.

³¹ 'Melodia est sonorum aliorum post alios pro ratione elevationis & depressionis intervallorum se subsequentium effectio, Harmoniae speciem, videlicet unicum vocem constituens, quae decantata sensum suo modo tangit, ut affectus in homine non planè amuso create sentiantur.' Burmeister, *Hypomnematum Musicae Poeticae* (Rostock: Stephani Myliandri, 1599), Dd 4 f.

Melody and harmony are different, in that the latter is a euphony bound together from the melodies of a plurality of voices into a harmony; the former is a product of just one voice.³²

As Markus Bandur has argued, the principle of melodic monophony, perceived as a determinate musical shape, begins to emerge securely by the early 17th century.³³ In such a conception, ‘melody’ achieved a degree of autonomy as a formal structure, requiring neither text nor harmonic accompaniment. For Christian Bernhard, in his 1660 treatise *Tractatus compositionis augmentatus*: ‘it can also happen that notes by themselves can make a good melody, [but] sound ugly with underlaid text.’³⁴ During these decades of early codification, the terms tune, song, notes, Lied, Weise, ‘Thon,’ and Stimme, are used freely and interchangeably in Latin dictionaries to define ‘Cantus’ and ‘Melodia’ in the vernacular.³⁵ It is indicative of the consequential effect this had on contemporary understanding that Charles Butler could reverse the languages in a discussion of four-part writing that encapsulates the emergent historical category in 1636: ‘But heere one of dhe upper Partes is necessarily to have a special Melodi aboov the rest: which is called dhe *Cantus* or Tune: such as may delight a Musical ear, dhowgh [i.e. though] it bee sung along by it self.’³⁶ Numerous refinements to this basic position are traceable in French, German and British writings,³⁷ but it would take a century before the category, in a corresponding definition of melody by J. A. Scheibe, could be proposed as fully independent of harmonic accompaniment: ‘a natural connectedness of successive simple tones that sound good *with and without harmony*.’³⁸

It was at precisely this time, around 1730, that ‘melody’ attains perhaps its most familiar definition as a closed phenomenon, that of a connecting, progressing

³² ‘Melodia & harmonia differunt, eo quod haec sit modulamen, explurium vocum Melodiis in harmoniam devinctum; illa unius solum vocis affectio.’ Joachim Burmeister, *Hypomnematum Musicae Poeticae* (Rostock: Stephani Myliandri, 1599), C 4.

³³ Markus Bandur, ‘Melodia / Melodie,’ *Handwörterbuch der Musikologische Terminologie*, ed. Hans Heinrich Eggebrecht and Albert Riethmüller (Wiesbaden: Steiner, 1971-2006), 18-19.

³⁴ ‘Denn es kann sonst geschehen, daß *noten*, so an sich selbst eine gute *Melodie* haben, [aber] durch Unterlegung des *Textes* übel lauten.’ Christoph Bernhard, *Tractatus compositionis augmentatus: Die Kompositionslehre Heinrich Schützens in der Fassung seines Schülers Christoph Bernhard*, 2nd ed., (Kassel and New York: Bärenreiter, 1963), 40.

³⁵ The earliest example is Fritsche Closener, whose *Glossarum* of 1362 defines *melodia* as ‘Licht oder wise,’ in Kirchert and Klein (ed.), *die Vokabulare von Fritsche Closener u. Jacob Twinger von Königshofen* (Tübingen 1995), 2: 892. Further examples include: ‘Art. Cantus: Citharae Cantus ... The tune or melody,’ Thomas Cooper, *Thesaurus Linguae Romanae & Britannicae* (London, 1565), 3b; ‘Art. Cantus: A song or singer, a tune, sound melodie, or dumpe: a charme, an inchuntment in verses,’ in Thomas Thomas, *Dictionarium Linguae Latinae et Anglicanae* (London 1587).

³⁶ Charles Butler, *The Principles of Musik in Singing and Setting* (London: John Haviland, 1636), 45.

³⁷ Michael Praetorius wrote of melody in 1619 as ‘unicam cantilenae vocem ... vel Symphonium.’ And Butler of it in 1636, as ‘the sweete modulation or tune of each part in it self.’ See Praetorius, *Syntagma Mus. III* (Wolfenbüttel, 1619), 28; Charles Butler, *Principles of Musik*, 44. Thereafter, the identity of melody as an unaccompanied line is traceable across a range of sources, from Jacques Rousseau (*Traité de la Viole* [Paris 1687]), to Alan Malcolm—‘melody is the Effect only of one single Part’—(*A Treatise of Musick* [Edinburgh 1721], 414; and Roger North—‘Melody is the modulation of one production ... harmony is of divers’—(*The Music Grammarian* [1728], rpt Cambridge, 1990, 96).

³⁸ ‘Die *Melodie* aber ist ein natürlicher Zusammengang aufeinander folgender einfacher Klänge, welche mit und ohne *Harmonie* wohl klinget.’ J. A. Scheibe, *Compendium musices theoretico-practicum, das ist Kurzer Begriff derer nötigsten Compositions-Regeln* [1730], rpt as supplement to Peter Benary (ed), *Die deutsche Kompositionslehre des 18. Jahrhunderts* (Breitkopf & Härtel, 1961), 13. Emphasis added.

succession of tones, pitches, sounds or intervals that ensound an organic, actively unfolding form: ‘the Progression of a Sound proceeding from one Note to another successively in a single Part,’ as John Christopher Pepusch put it in his *Treatise on Harmony* (1737).³⁹ Arias from canonical operas by Handel, Hasse and Graun, to name but three contemporaries, would seem to offer ready exemplification of this conception of self-sufficient melody: texted vocal lines in intimate dialogue with, but timbrally and conceptually distinct from the orchestral accompaniment. Yet if we look to the keyboard music of the time, specifically the rich tradition of realizing thorough bass extempore, this image of a self-sufficient ‘melody’ becomes less clear. And this juncture has a claim to be an origin of the identity problem mentioned above.

In his 1711 treatise Heinichen treats melody as a special form of embellishment, i.e. a horizontal outgrowth or decoration of harmonic logic. As example 3 shows, he offers students a choice on how to realize a simple harmonic accompaniment (ex. 3a): (1) divide a rhythmicized accompaniment between the hands (ex. 3b); or (2) take the entire accompanimental harmony in the LH, leaving the RH ‘to invent a particular song or melody on the bass as good as our imagination, taste, and talent will allow’ (ex. 3c).⁴⁰ Here Heinichen appears to invest the concept of melody with a degree of autonomy, but locates melodic invention firmly within the grid of a predefined harmonic movement.

[EX. 3a-c near here]

We need only look to the Andante of J. S. Bach’s Italian Concerto (1735)—a d-minor cantilena (ABA), whose florid, arioso style, above uninterrupted accompanimental eighth notes, decorates two cadences (in VI and I)—to see that without a metrical container or the finitude of a singer’s breath, the endless spinning of melodic material relies on a harmonic syntax of prolongation rather than what we might call melodic form, derived from rhythmic periods or phrasal units. For prominent bassists such as Heinichen and Gasparini, such melodies were only warranted during ritornello passages or in solo performance, and C. P. E. Bach warns against obfuscating textures around them.⁴¹ Despite the manifest existence of an operatic repertoire and folksong tradition, then, Scheibe’s sense of ‘successive simple sounds that sound good *with and without harmony*’ would seem misleading to the extent the melodic line remains subservient to harmonic function within the epistemology of thorough bass.

Historiographically, the standard bearer for this argument is of course Rameau, who—

³⁹ J. C. Pepusch, *A Treatise on Harmony* [1730], rpt (Hildesheim and New York: Georg Olms, 1976): 3.

⁴⁰ J. D. Heinichen, *Neu erfundene und gründliche Anweisung ... zu vollkommener Erlernung des General-Basses* [1711], cited and translated in George Buelow, *Thorough-Bass Accompaniment according to Johann David Heinichen* (Berkeley and Los Angeles: University of California Press, 1966), 171.

⁴¹ ‘Gratuitous passage work and bustling noise do not constitute the beauties of accompaniment. In fact, they can easily do harm to the principal part by robbing it of its freedom to introduce variations into repetitions and elsewhere. ... [The accompanist] need feel no anxiety over his being forgotten if he is not constantly joining in the tumult. No! An understanding listener does not easily miss anything. In his soul’s perception melody and harmony are inseparable. Yet, should the opportunity arise and the nature of a piece permit it, when the principal part pauses or performs plain notes the accompanist may open the draft on his dampened fire.’ C. P. E. Bach, *Versuch über die wahre Art das Clavier zu spielen*, trans and ed. W. Mitchell, 2 vols. (New York: Norton, 1949), 367-68.

leaning on the dominant acoustic science of his age—makes this argument most clearly in the opening sentences of his *Traité*:

Music is the science of sounds ... [and] is generally divided into harmony and melody, but we shall show in the following that the latter is merely a part of the former and that a knowledge of harmony is sufficient for a complete understanding of all the properties of music.⁴²

The corollary of this position is made explicit when he proceeds to specify how a composer selects pitches to compose a melody: ‘once we know the chords each bass note should bear, we may choose any of the sounds in each chord so as to form a melody to our liking.’⁴³

Melody only exists by implication, then, as a liminal property. If it is merely a halo-effect of harmony, the suspicion that vocal melody could not function ‘without harmony’ raises the question as to whether melody, as a manifest form, ever really existed. Looking back from the mid 19th century, Helmholtz’s quasi-ethnographic argument that ‘finely cultivated music existed for thousands of years without harmony, and still exists today among non-Europeans,’ echoed A. B. Marx in asserting the historical primacy of melody. But this relies on an appreciation of overtones, as we shall see. And with continuing uncertainty about what melody ‘is,’ the argument buckles under the weight of its colonialist context.⁴⁴

Voice: The Children of Rousseau

One of the most effective opponents of the bassists’ view, Jean-Jacques Rousseau, is also the figure chiefly responsible for the longevity of melody as a popular concept. For his statements, in both the *Lettre sur la musique française* (1753) and the *Essai sur l’origine des langues* (1781), were widely read—in part because of the journalistic spats to which they gave rise—and bring together the cardinal discourses that would characterize later traumas over melodic theory: nationalism; feeling / expression; nature. It would seem no coincidence that melody emerges secure in an identity contradistinguished from harmony at this juncture, i.e. the moment its glassy fragility—as a decorative extension of harmony—is assertively and publicly repudiated.

Unlike thorough bassists concerned with harmony as a science of applied mathematics, Rousseau begins from the premise that all melody is fundamentally concerned with voice. His rationale is humanist rather than historical: ‘as soon as vocal signs strike your ear, they announce to you a being like yourself. They are, so to speak, the voice of the soul. If you hear them in the wilderness, they tell you you are not alone.’⁴⁵ This bond of communication underwrites the innateness of melodic expressivity, for him, carving out the space for a vocal-melodic epistemology untouchable by reasoning based on the overtone series. (This innateness of expression is arguably the basis for later claims—

⁴² Jean-Philippe Rameau, *Treatise on Harmony* [1722], trans. Philip Gossett (New York: Dover, 1971), 3.

⁴³ Sevenths need appropriate resolution through voice leading, he continues, indicating that Rameau’s principle refers to *consonant* sounds in the first instance. Rameau, *Treatise on Harmony*, 321.

⁴⁴ Helmholtz, *On the Sensations of Tone*, vii; Marx, *Die alte Musiklehre im Streit in unserer Zeit* (Leipzig: Breitkopf & Härtel, 1841), 16.

⁴⁵ J.-J. Rousseau, *The Origins on Language*, 63-64.

hermeneutic and mimetic—for quasi-semantic melodic meaning, from Arthur Schopenhauer who proselytized about intuitive understandings of a melody ‘which says a great deal’ as a criterion for natural selection,⁴⁶ to Reicha, for whom ‘there are good and bad melodies, that is, those which express something and those that do not.’⁴⁷ The derivative critic Max Nordau sums up the basic position: ‘melody may be said to be an effort of music to say something definite.’⁴⁸ Earlier writers had used the term ‘cantabile’ to refer to both melodic shape and a manner of performance, from Zarlino (1558), who refers to ‘[la] perfettione della Figure cantabili,’⁴⁹ to the title page of J. S. Bach’s *Inventions and Sinfonias* (1723), which seeks ‘eine cantabile Art im Spielen zu erlangen.’⁵⁰ Yet these establish little ground for an ontology of melody. By contrast, Rousseau, writing on a platform of historical linguistics, made the decisive claim in 1781 that melody and voice are intimately linked through the principle of imitation (in vogue among European philosophers, after J. J. Winckelmann’s 1764 treatise on Classical art declared it a modern necessity):

By imitating the inflections of the voice, melody expresses pity, cries of sorrow and joy, threats and groans. All the vocal signs of passion are within its domain. It imitates the tones of language, and the twists produced in every idiom by certain psychic acts ... [I]t has a hundred times the power of speech. This is what gives music its power of representation and song its power over sensitive hearts.⁵¹

Voice is here invested with the authority of centuries of human development; in the *Essai*’s schema, it forms an invisible bond reaching back to the earliest and most natural state of being (where the term *première mélodie* refers to the melodiousness of the very earliest languages), while also witnessing a transition from poetry to prose, figurative to conceptual forms of utterance, states of passion to those mediated by reflection. For this reason, voice—melody—nature were forged as a crucible of human identity, no less, for the Romantic imagination. This bond also laid the ground for 19th-century discourses of *Sprachmelodie* and its compositional outlets, from the satellite genres of melodrama to Schoenberg’s *Sprechstimme*. And we need only look to Herbert Spencer’s *Origin and Function of Music* (1858) for an evolutionist revision of Rousseau’s theory wherein sympathetic physiological response to vocal melodic sounds (most palpably markers of suffering: screams and cries) ensure we understand the intonation of utterances intuitively.

Returning to the Enlightenment, at a local level Rousseau famously invokes Nature in his *querelle* with Rameau to counter similarly lofty claims: that natural laws of acoustic science underpin the *corps sonore*. ‘Nature inspires songs, not accords,’ he corrects, ‘she

⁴⁶ ‘A significant melody which says a great deal soon makes its way round the entire earth, while one poor in meaning which says nothing straightaway fades and dies.’ Arthur Schopenhauer, *Essays and Aphorisms*, trans. R. J. Hollingdale (London: Penguin, 1970), 162.

⁴⁷ Reicha, *Treatise on Melody*, 3.

⁴⁸ Max Nordau, *Degeneration* [1895]. 2nd ed. (Lincoln and London: University of Nebraska Press, 1993), 200.

⁴⁹ G. Zarlino, *Le Istitutioni Harmoniche* (Venice: 1558), 260.

⁵⁰ J. S. Bach, *New Bach Reader*, ed. Hans David and Arthur Mendel, rev. Christoph Wolff (New York and London: Norton, 1998), 98.

⁵¹ J.-J. Rousseau, *On the Origins of Language*, 57.

speaks of melody, not harmony.’⁵² But the occasion tapped into a far deeper association with birdsong and folksong, where variegated constructions of the ‘natural’ further complicated the establishment of a lasting theory of melody. Consider the range of historical definitions of melody linked to concepts of nature, from melody as a natural product (Roger North: ‘a sort of musick . . . [that] seems to flow from nature’ [1710]),⁵³ to melody as a more essential part of nature (David Mollison: ‘this voice of nature’ [1798]).⁵⁴ From here it is only a small step to the hierarchical division of *Poiesis* into inspiration and human toil, in which agent-less minds of composers become the vessels through which the external authority of nature is channeled. Melody was centrally implicated in the discourse on musical genius in this sense, and Berlioz is representative in declaring it simply: ‘a gift of nature.’⁵⁵

At the risk of appearing practical and prosaic, such ideas were unhelpful for theorists engaged in pedagogy. They failed to engage with familiar, more useable concepts (pitch, rhythm, shape, pattern, form etc.); they failed to identify an organizing material for melody that could be learned, in other words. They also avoided specifying a hierarchy of expressive parameters for students of melody. ‘Why all these authorities anyway?’ asked a frustrated Flodoard Geyer, author of a quickly forgotten treatise on composition in 1862. ‘For every opinion, even the most absurd, there will always be at least *one* advocate!’⁵⁶ One zany skeptic declared A.B. Marx a charlatan for seeking, in his *Compositionslehre*, to grow periodic melodies organically from germinal motifs and scale formulae. ‘[S]hould [a composer] wish to invent a melody of eight bars, to fit to a long or short meter,’ the New York critic exhorts, ‘he will find, at last, that his carefully nursed [motivic] germs will forsake him in the hour of necessity, and he will be thrown back, musically poverty-stricken, upon his barren Marx again. I speak from experience.’⁵⁷ Enconced in Berlin, Marx did not reply.

As noted above, Rousseau had identified vocal utterance (its imitation and implied heritage) as the organizing material of melodic expression. While later philologists revised his arguments about language, it may be no coincidence that, after the age of the castrato, a celebrated tradition of Italian melodists—Bellini, Donizetti, Leoncavallo, Verdi, Puccini—rested on writing for voice, where new perceptions of operatic realism drew opera closer to the manner of a spoken play, with raw cries and *sotto voce*, differentiated vocal characters often dovetailing melodic lines in ensemble, cutting in and out of the drama as needed. Bellini’s famous conviction for opera links supple poetic forms with an inviolable amalgam of voice and melody in no uncertain terms:

⁵² *Ibid.*, 62.

⁵³ Cited in Graham Strahle (ed.), *An Early Music Dictionary* (Cambridge: Cambridge University Press, 2009), 8b.

⁵⁴ David Mollison, *Melody: The Soul of Music* (Glasgow: Courier Office, 1798), 17

⁵⁵ “C’est un don de la nature.” Berlioz, “De la musique en général I” [1837], *Revue et gazette musicale de Paris* IV (1837), 407a.

⁵⁶ “Ueberhaupt, wozu den immer Autoritäten? Für jede Meinung, selbst die absurdeste, wird es immer wenigstens einen Gewährrinn geben!” Flodoard Geyer, “Kann und soll die Melodie gelehrt werden?” *Neue Berliner Musik-Zeitung* (October 10, 1860), 322. Emphasis added.

⁵⁷ Max Braun, “Max versus Marx: Critical Analysis of A. B. Marx’s ‘Musical Composition’ with additional commentary on musical training,” *New York Musical World* 18 (1857): 567.

Carve into your head in adamantine letters: *Opera must make people weep, feel horrified, die through singing*. It's wrong to want to write all the numbers in the same way, but they must all be somehow shaped so as to make the music intelligible through their clarity of expression, at once concise and striking.⁵⁸

Perhaps the most prominent melodic theorist of the 19th century to cultivate the ground Rousseau (among others) established was German. As I have written elsewhere, Wagner's mid-century theory of melody posited language rather than music-theoretical concepts as its primary material. Moving beyond the principle of imitation, he drew on emergent philological studies of phonology to explicate melody, qua musical tone, in terms of a vowel-enhanced sounding of poetry that connects concepts through alliterated consonants: 'the redemption of the poet's endlessly conditioned thought into a deep-felt consciousness of emotion's highest freedom.'⁵⁹ This idealist definition of melody, at first glance a casually abstract gloss, refers quite deliberately to a rationalization of the process by which modern melodists were to retrieve the communicative power of fossilized units of utterance, whose indivisibility promised – for Sanskritists – the origin of all meaning. The slippage between enunciated vowel and musical tone links the domains of speech and music at the level of sensation, for Wagner, which meant, at the level of 'truth' and 'reality,' according to his intellectual mentor Ludwig Feuerbach.

Perhaps because this theory emerged in the same text as Wagner's public evisceration of Rossini as the 'murderer' of modern operatic melody, it spawned a bilious debate that saw Wagner labelled as a melodic pretender: a composer who denounced operatic melody hitherto, yet placed melody at the center of his worldview, and was himself unable to compose melody. Criticism that exceeded personal enmity often cited the central role of language as the problem, from skepticism towards Stabreim to suspicions of historically retrograde tendencies in opera:

If opera is indeed to be only a succession of recitatives, without a resting point – a mere musical intoning of the dramatic dialogue, without any specific musical aim and substance . . . Wagner is no reformer, but the most violent artistic reactionary, who ignores the progress made since Rameau and Lully, and in a most unpractical way and in place of the cultivated dramatic music we have had for eighty years, wants to re-establish recitative, the exclusive predominance of whose quintessence would form the worst monotony.⁶⁰

While Wagner resisted what we might call linguistic determinism (the idea that a text can be set to music in only one way, according to its constitutive intonation and syntax), the fear that he was vacating established ground by replacing metrically

⁵⁸ John Rosselli, *The Life of Bellini* (Cambridge: Cambridge University Press, 1996), 43.

⁵⁹ Richard Wagner, "Oper und Drama," *Sämtliche Schriften und Dichtungen*, 4:142. Cf. *Prose Works* 2: 281.

⁶⁰ "Soll die Oper nichts sein, als eine Reihe von Recitativen, ohne Ruhepunkt, – eine bloße musikalische Betonung der dramatischen Rede, ohne spezifisch musikalischen Zweck und Gehalt . . . Wagner ist dann kein Reformator, sondern der ärgste Reactionär im Gebiete der Kunst, der die seit Rameau und Lully gemachten Fortschritte mißachtet und, höchst unpractischer Weise, an die Stelle der ausgebildeten dramatischen Musik, wie wir sie seit achtzig Jahren besitzen, das Recitativ wieder herstellen möchte, dessen Alleinherrschaft den Inbegriff ärgster Monotonie bilden würde." W. M. S., "Lohengrin in Wien," *Monatschrift für Theater und Musik* (1858), 437.

governed, harmonically rounded arias with declamatory recitative secured his temporary role as the poster boy of *Melodiosigkeit*.

If we take a broad view of vocal melodic ‘composition,’ it becomes clear that others had made claims in the same direction. We might look to Guido d’Arezzo in the early 11th century, who developed a formal technique for setting a text to music automatically. Each vowel was assigned a pitch, and the melody resulted from the chain of vowels in the text.⁶¹ Or to Conrad Beissel in the early 18th century, who argued every sentence has a unique pitch structure determined by master and slave words.⁶² Not to mention the twin impulses of realism and nationalism that fuelled an international attraction to the language-melody axis in the 19th century, from a predominantly German discourse on *Sprachmelodie*, and the slightly later but no less radical concern for a unified French language—bolstered by Paul Passy’s phonetic dictionary in 1897—that explains the conspicuous display of French speech distinguishing contemporary *mélodie*,⁶³ to Mussorgsky’s musical ideal of ‘the sound of human speech in all its subtlest shadings.’⁶⁴

Objects of instrumental melody

Whether or not melody relates archeologically to voice, of course, not all melodies are actually vocal. Beyond the Rousseauian argument lay the challenge to define an alternative constitutive material or organizing principle for instrumental melody. The concept of an exclusively instrumental melodic line, non-transferable to texted voices, is traceable to the mid-seventeenth century, as noted above. While it would be misleading to claim this led to a consensus around the firming opposition of such categories,⁶⁵ Schoenberg’s uncontroversial observation that ‘instrumental melodies admit much more freedom in every respect than vocal’ raises the question of how this freedom was to be governed.⁶⁶ It proved a deceptively simple question. Answers differ widely among theorists of the last three centuries, a sampling of which can be summarized under the following categories, conceived both separately and in combination:

- periods / metrical rhythm (Koch; Reicha)
- intervals / dyads (Mattheson; Marx)
- rotation and development of figures or motives (Koch; Riepel; Daube; Reicha; Marx)
- imitation of models (Daube; Lobe)
- overtones (Helmholtz; Hindemith)
- archetype- and pattern-based expectation (Meyer; Namour)
- pitch peaks (Koch; Zotan; Jadassohn)

⁶¹ See d’Arezzo’s *Micrologus de disciplina artis musicae* (1025).

⁶² See Lloyd George Blakely, “Johann Conrad Beissel and Music of the Ephrata Cloister,” *Journal of Research in Music Education* 15 (1967), 120–38.

⁶³ Katherine Bergeron, *Voice Lessons: French Mélodie in the Belle Époque* (New York: Oxford University Press, 2010), x.

⁶⁴ Mussorgsky to Ludmilla Shestakova, 30 July 1868, cited in *Music in the Western World*, ed. Taruskin and Weiss (New York: Schirmer, 1984), 395.

⁶⁵ Reicha, for one, asserts ‘I do not treat vocal or instrumental melody specifically, but deal with them in general, leaving readers free to make applications to the genres of their interest.’ *Treatise on Melody*, 3.

⁶⁶ Arnold Schoenberg, *Fundamentals of Musical Composition*, ed. Gerald Strang (London: Faber, 1967), 98.

- contour, and arch shaping, of a phrase (Schoenberg; Dowling; Polansky & Bassein; Huron)⁶⁷

This list, appearing at once comprehensive and motley, needs to be qualified by a countervailing list of caveats—offered by some of the same theorists—about the impossibility of teaching melodic invention itself. In other words, it was possible to articulate the elements of instrumental melodic form, and their functional relationships, but not their genesis as an aesthetic impulse.

Mattheson (1737) simply declared such invention the province of Greek melopoieia, referencing the antique authority of Aristides Quintilianus without further explanation.⁶⁸ Koch (1782) is widely echoed in referencing genius, supported by taste, as the arbiter of melodic judgment, the ability to determine: ‘if and how [the sections of a work’s inner composition] are beautiful in themselves and varied among one another. ... To give rules for this,’ he continues, pre-empting Kant’s third critique, ‘according to which one judges the beauty and variety of the [melody], is actually not at all the object of the study of melody, in which we must only observe the outward form of the same.’⁶⁹ Philosopher Jean-Paul Richter reinforced this strategy of distancing inner impulse from outer form in 1802, arguing that each melody was its only manifest explanation, that all melodic theory could do was investigate the external structure of pre-existing models, where inner invention is glimpsed fleetingly through ‘genius of the instant’ driven by an inscrutable ‘blindness and security of instinct.’⁷⁰ Reicha (1814), believing his to be the first genuine melodic treatise, reluctantly accepted prior readings of melody as ‘the fruit of genius,’ and cautioned ‘let no one assume that the aim of my work is to impart a genius for melody to those who do not possess it.’⁷¹ But he also offers defiance, arguing that the objects creating meaning from ‘a succession of tones’ are nothing but ‘scales, intervals, modulations, various note values, the measure, cadences (or resting points), and rhythm.’⁷² Talent that engages these building blocks is more valuable than genius, he continues, for it can be cultivated through ‘assiduous, painstaking’ endeavor; genius without talent ‘amounts to little and often comes to nothing.’⁷³ In this work ethic he is echoed by numerous later voices, Weber, Lobe and Marx, among them.

⁶⁷ Schoenberg, *Fundamentals of Musical Composition*, 103; W. Jay Dowling, ‘Scale and Contour: The components of a theory of memory for melodies,’ *Psychological Review* 85 (1978): 341-54; Larry Polansky and Richard Bassein, ‘Possible and Impossible Melodies: Some Formal Aspects of Contour,’ *Journal of Music Theory* 36 (1992): 259-84.

⁶⁸ Mattheson, *Kern melodischer Wissenschaft*, 33.

⁶⁹ ‘[S]o ist es das Genie, vom Geschmack unterstützt, welches diese Theile so erfindet und wählt, daß sie schön, und gegen einander gehalten mannigfaltig sind. Hierüber Regeln zu geben, nach welchen man die Schönheit und Mannigfaltigkeit derselben beurtheilt, ist eigentlich gar nicht der Gegenstand der Lehre von der Melodie, in welcher wir nur die äusserliche Form derselben betrachten müssen.’ H. C. Koch, *Versuch einer Anleitung zur Composition.*, 3 vols., (1782), 1: 12.

⁷⁰ ‘Eine Melodestik gibt der Ton- und der Dichtkunst nur der Genius des Augenblicks; was die Ästhetiker dazu liefern kann, ist selber Melodie. ... [D]ie Oberherrschaft eines Organs und einer Kraft, z. B. in Mozart, wirkt alsdann mit der Blindheit und Sicherheit des Instinktes.’ Jean Paul Richter, *Vorschule der Aesthetik*, ed. Norbert Miller (Munich: Carl Hanser, 1974), 25, 56.

⁷¹ For centuries numerous treatises on harmony have been published, but not a single one on melody.’ Anton Reicha, *Treatise on Melody*, trans. Peter M. Landey (Hillsdale, NY: Pendragon, 2000), 1, 4.

⁷² Reicha, *Treatise on Melody*, 9.

⁷³ *Ibid.*, 6.

Turning from the perspectives of theory to criticism, the temperature rises without student readers to appease; at an extreme, melody conceived as an outpouring of the natural genius could achieve an untouchable status, beyond the reach of theory, and aggressively at odds with reformist aims of public education. To take just one example, the Wagner antagonist Eduard Sobolewski assumed an absolute stance in 1855: ‘Melody cannot be taught ... We may criticize it here and there, but we cannot improve it, or it is no melody.’⁷⁴ Leaning on apparent ethnographic evidence, he relates the following tale as proof of concept:

There lived in Dresden, when I was studying music there, a tall individual with ... an expression of pain in his countenance, who desired to be a composer, and was only deficient in one thing—melody. The poor man applied to many persons for advice, but no one could help him. Thereupon he continued to grow more and more melancholy, and, whenever a new composer came to Dresden, he would sell the last thing he had, pay a visit to him, and beg for lessons, under the impression that the stranger would be able to teach him what others could not. ... Nothing, however, availed him.⁷⁵

Why the defensive stance, we may wonder? Where, for such a critic, is the desire for a ‘ghost in the machine’ coming from?⁷⁶

One answer is that ‘melody’ is unwittingly presented in criticism as a totalizing phenomenon. This is not limited to the nineteenth century. ‘[M]usicologists have suffered from vertigo upon realising that melodic theory seems to dissolve into a theory of music as a whole,’ suggests Jean-Jacque Nattiez.⁷⁷ To compose one requires a composite set of skills—inseparable from each other—in harmony, counterpoint, rhythm, control of texture, and expression. Theories of individual parameters excerpted from this holistic totality inevitably fail in the eyes of those seeking to understand their response to a replete musical texture conceived as melodic form. For present purposes, I examine two such excerpted parameters: rhythm and intervals.

(1) Rhythm

A case in point is Anton’s Reicha theory of melodic rhythm that sought to balance ‘resting points’ and differing degrees of cadence within periodic forms. While he addresses matters such as contour, figure, patterning and rhetoric through fourteen ‘principles’ (explicated by analogy with oratory), a metrical bedrock remains:

The symmetry and unity of a good melody require that the second rhythm be similar to the first, that it be of equal length, and that the resting points be placed at equal intervals. ... The period is thus the most important part of melody; rhythm and cadences exist in relation to the period; without the period, it is impossible for a good melody to be created. The composer of interesting periods is sure to overcome all difficulties in the art of melody.⁷⁸

⁷⁴ Eduard Sobolewski, “Reactionary Letters II,” *The Musical World* 33 (1855), 45.

⁷⁵ Sobolewski, “Reactionary Letters I,” *The Musical World* 33 (1855), 19.

⁷⁶ I refer to Gilbert Ryle’s classic description of Cartesian dualism from *The Concept of Mind* [1949] rpt. (London: Penguin, 2000), 17.

⁷⁷ Jean-Jacques Nattiez, ‘Melodia,’ *Enciclopedia Einaudi*, 15 vols. (Turin, 1979), 8: 1042-67, here 1047.

⁷⁸ Reicha, *Treatise on Melody*, 15-16.

Here, the creation of balanced melodic periods with a single figure ('principle two') demonstrates the maximum economy of pitch, resulting in 'an interesting melody' of just three notes:

[Ex. 4 & 5 near here]

Writing within a evolutionary mind set, psychologist Edmund Gurney would later identify the principle of rhythmic balance Reicha sought in melody as a human 'characteristic of dual balance' that is basic to 'the superior musical development of man.'⁷⁹ As example 5 shows, Gurney illustrates this propensity towards melodies with even-numbered measures that alternate rhythmic patterns, a characteristic rooted 'in the simple fact of our being made symmetrically with two sides externally alike, which results in alternate motions with each side.'⁸⁰ To jump historical periods for a moment, the affinity between these examples and the minor-mode James Bond theme tune, resting principally on the rhythmically balanced repetition of scale degrees 1^ 2^ 3^ within a periodic structure, indicates that responses to such challenges easily transcend Reicha's epoch.

But François-Joseph Fétis, for one, found Reicha's focus wanting. 'The author has considered his topic in only one respect' he chides, 'that of rhythm and melodic phraseology ... a good treatise on melody is yet to be written.'⁸¹ Proceeding to call for more inclusive theories, where 'tonality, modulation, harmony and aesthetics' would be addressed, his attitude exemplifies instances wherein any attempt to reify melody appears partial, and risks similar criticism.

Beyond Fétis' individual predilection for *tonalité*, this totalizing view of melody emerged from traditional practices of schooling composers in thorough bass and counterpoint alone (of which Schenker's *Kontrapunkt* of 1922 appears perhaps the most extensive, late instance);⁸² here, as G. W. Fink argued, all that one needed to know about melody was to be found in principles of voice leading. Melody was not an exemplary object as such, i.e. autonomous and capable of imitation, but an inexplicable part of an overall musical fabric. A. B. Marx notably disagreed, arguing in 1841 that isolated training in separable compositional parameters—melody, form, rhythm, harmony—was needed for a new generation of composers.⁸³ By 1911, a draft definition of melody by Ferruccio Busoni (for his aborted treatise on the topic) indicates just how multifaceted the

⁷⁹ Edmund Gurney, *The Power of Sound* (London: Smith, E;der & Co., 1880), 132,

⁸⁰ *Ibid.*, 134.

⁸¹ François-Joseph Fétis, *Biographie universelle* (Paris, 1863). 7:203.

⁸² Fétis concludes his 1844 treatise on harmony by asserting the universal governance of tonality as a principle: "I will say that tonality resides in the melodic and harmonic affinities of the notes in the scale, from which results the quality of necessity in their successions and aggregations." In *Complete Treatise on the Theory and Practice of Harmony*, trans. Peter Landey (Hillsdale, NY: Pendragon, 2008), 246.

⁸³ In such a reading, it remains uncertain if general music theory should count as the substance of melody or as its ancillary support and regulation. His key statements, in opposition to Gottfried Wilhelm Fink, occur in *Die alte Musiklehre im Streit in unserer Zeit* (Leipzig: Breitkopf & Härtel, 1841); selected excerpts are translated in *Musical Form in the Age of Beethoven*, ed. and trans. Scott Burnham (Cambridge: Cambridge University Press, 2006), 17-34. The most comprehensive study of the Marx - Fink debate remains Kurt-Erich Eicke, *Der Streit zwischen Adolf Bernhard Marx und Gottfried Wilhelm Fink um die Kompositionslehre* (Regensburg: Gustav Bosse, 1966).

concept had become, and hence how many aspects of composition would be drawn into a putative melodic theory. Written as a footnote in a letter to his wife, it is one of the most comprehensive definitions of his age:

'Footnote: Attempt at a definition of melody: a row of repeated (1) rising and falling (2) intervals, rhythmically (3) articulated and animated, containing latent harmony within it (4) and conveying an atmosphere or mood (5); that exists and can exist independently of words of text for expression (6), independent of accompanying voices as a form (7); and by whose performance the number of pitches (8) and instruments (9) bring about a shift in its essence.⁸⁴

Reflecting on the tension between melody as a special category and musical totality half a century later, Abraham and Dahlhaus seize on Busoni's third and fourth points to declare the historical project of melodic theory a failure. 'A theory of melody pedagogy,' they asserted, 'in order to avoid dry abstraction, must suspend or involve a theory of musical rhythm—a contributing factor to melody—and a theory of harmony (in the original, comprehensive sense of the term: i.e. a theory of the ordering of tones). It thus appears as a summary discipline, concluding the cycle of music theory.'⁸⁵ The separability of melody from a musical texture remained an illusion for some in the late 20th century, in other words, just as it had for Rameauans in the mid-18th.

Two cases in which theorists frame a progression from empty stave to composed melody serve to illustrate the skills gap between singular theory and summary discipline. Daube presented two "arias by Mozart" as empty staves in 1797, indicating only where melodic figures and their repetition should occur. While the fixed spatial arrangement guards against artificial complexity and enables the substitution of "many changes and figures" vis-à-vis Mozart's unspecified originals, the remaining musical apparatus are glaringly absent.⁸⁶ Likewise, in 1844, in order to demonstrate the formation of melodic ideas, J. C. Lobe reverse engineered the principal theme of Haydn's symphony no. 104, leading from eight identical whole notes to progressive specification of melodic rhythm, its harmonic underpinning, and finally, its pitch content.⁸⁷ Such contrived demonstrations implied that melodic composition was not limited to a monophonic line but, by definition, carried a whole musical texture, whose linear pitch content digested a comprehensive understanding of other compositional means.

Unsurprisingly, some of the conceptual ambiguity spills over into terminology. Since the 18th century, the term melody was subsumed within syntactical categories of theme, idea, period, phrase. All imply the need for sensory unity, although inevitably, change in their usage is traceable. We have only to look at the 1st edition of *Grove's Dictionary*

⁸⁴ Busoni, 'Über Melodie: nachgelassene Skizzen', ed. F. Schnapp *Zeitschrift für Musik*, 97 (1930): 95–101, here 97.

⁸⁵ "Denn eine Melodienehre muß, um nicht dürftig abstrakt zu bleiben, eine Theorie des musikalischen Rhythmus – der ein Teilmoment der Melodie ist – und eine "Harmonielehre" (im ursprünglichen umfassenden Sinne des Wortes: also eine Theorie der Tonordnung) voraussetzen oder einschließen. Sie erscheint demnach als zusammenfassende, den Zyklus der Musiktheorie abschließende Disziplin." Lars Ulrich Abraham and Carl Dahlhaus, *MelodieLehre* (Cologne: Hans Gerig, 1972), 11.

⁸⁶ Daube, *Anleitung zur Erfindung der Melodie*, 24.

⁸⁷ Johann Christian Lobe, *Compositions-Lehre oder umfassende Theorie von der thematischen Arbeit und den modernen Instrumentalformen* (Weimar: Bernhard Friedrich Voigt, 1844), 3-4.

(1875) where the aspiring English church composer, Charles Hubert Parry, sought to differentiate tune / air from melody, where the former is ‘constructively and definitely complete’ while the latter—perhaps influenced by Wagner’s conception of *unendliche Melodie*—‘has a more indefinite signification, and need not be a distinct artistic whole.’⁸⁸

(2) Intervals: Towards a Scientific Paradigm

Beyond theories of rhythm, for those who sought to study melody as an exemplary object, intervals and their character appeared to offer a means of objectifying melodic expression. Dyads sit at the intersection of harmony and melody as separable elements within a musical texture. They are the minimal diachronic units extractable from a melodic line, and can imply a determinable harmonic identity, even without vertical stacking. As such the various historical attempts to characterize intervals for the purpose of melodic pedagogy typically assume a harmonic context.

In the early 20th century, the psychologist and comparative musicologist Carl Stumpf widened the remit of such enquiry by asking how humans first began to create transposable, fixed intervallic steps. He suggested two complementary impulses: (i) they took pleasure in the ‘fusion’ [*Verschmelzung*] effect of perfect consonances in our system, and valued the practical benefits of sending vocal signals further that such intervals afforded herdsmen; (ii) at the same time, humans used small incremental steps of equal distance from a given pitch to build stepwise pitch chains, which created the first transposable melodic motives. ‘If such songs with arbitrarily small steps were temporally prior, which is possible, indeed highly probable,’ Stumpf judged in 1909, ‘we would say: the secondary stream has a longer course but it does not hereby become the primary stream.’⁸⁹ A cognitive-biological appreciation for perfect consonance is primal, he maintains, and while later psychologists have substantiated Stumpf’s position,⁹⁰ there was almost an organological premonition of his thesis in 1798, when one melodic theorist proposed the invention of an ‘octave violin,’ which would have had double strings tuned at different octaves to be played simultaneously in order to increase the sonority of melodic lines (fully a century before this became orthodoxy for Puccini’s moments of lyric climax).⁹¹ That octave-related double courses were long common in a range of non-melodic, plucked string instruments—lutes, vihuelas, baroque guitars—and could seamlessly be transferred to melodic instruments, arguably only underscores the relevance of Stumpf’s insight.

Beyond the fundamental intervals, though, there appeared little means to rationalize other melodic steps. Theoretically, the intervallic organization of Greek tetrachords informed the sound of ‘melos’, but the concept of ‘melic composition’ underpinning it

⁸⁸ Hubert Parry, “Melody” *Grove’s Dictionary of Music and Musicians*, 1st ed. (1875), rpt. 3rd edn, ed. H. C. Colles (London: MacMillan and Co., 1929), 371.

⁸⁹ Carl Stumpf, *The Origins of Music*, trans. and ed. David Trippett (Oxford: Oxford University Press, 2012), 49.

⁹⁰ See E. G. Schellenberg and S. E. Trehub, ‘Frequency ratios and the discrimination of pure tone sequences,’ *Perception & Psychophysics* 56 (1994): 472-478; and *ibid.*, ‘Natural intervals in music: A perspective from infant listeners,’ *Psychological Science* 7 (1996): 272-277.

⁹¹ Mollison, *Melody: The Soul of Music*, 81.

did not exist as a topic in its own right. Cleonides defines four musical categories—genus, scale, tonos, and melos—and proceeds to explain types of modulation within each (where modulation in melic composition is a matter of switching from one ethos to another) as well as types of musical gesture in composition. But when it comes to melic composition per se, ‘it is disappointing that he has almost nothing to say,’ Thomas Mathiesen explains; it is merely ‘the use of everything described in the previous sections.’⁹² In one sense, this lacuna points to an anachronistic concept of composition—of organically piecing together disparate parts—that is not substantially part of Greek musical thought. But it also asks a question of melodic structure that has proven unanswerable—‘How are melodic intervals meaningful?’—one that would dog later investigation.

Returning to Mattheson’s treatise of 1737, his first chapter, ‘On the content of sounding intervals’ (*Vom Verhalt der klingenden Intervalle*), is devoted to outlining the array of all possible melodic intervals and their derivation, as ratios of each other, from the natural harmonic series. His synoptic illustration, reproduced as figure 2, makes clear his hierarchical elevation of harmony over linear dyad, which he later confirmed in no uncertain terms: ‘Melody is at root nothing but original, true and simple harmony itself, wherein all intervals follow successively, simultaneously and behind one another.’⁹³ Within this reconciliation, however, he equivocates between relative harmonic and melodic significance within interval types, citing the augmented and diminished 6th as those that serve a more harmonic than melodic function, while the augmented 5th and 4th ‘are more common and useable than those above and serve melody and harmony equally.’⁹⁴ This emphasis on the harmonic derivation of melodic intervals precedes his four species of ‘good’ melodic composition (‘simple, sweet, distinct, flowing’),⁹⁵ their ‘rules,’ and genre-based discussions of melodic type; that is, the authority of a natural harmonic series precedes any consideration of style and taste.

[FIGURE 2 near here]

Several later theorists offered typologies of melodic intervals that went beyond appeals to Nature. Attempts to order tonal intervals according to degrees of emotional character, implied movement etc. reveal a tale of discrepancy, however, that undermines claims for a truth coherence. A. B. Marx, whose *Die Kunst des Gesangs* (1826) assigns each tonal interval an apparently inherent emotional character for listeners, was on the cusp of a sematic melodic theory even while his presentation makes clear that each interval presupposes a harmonic context and the effort of human breath.⁹⁶ For philosopher Arthur Edwards one hundred and thirty years later, it is the perception of implied linear movement, or ‘degree of potential activity,’ rather than

⁹² *Apollo’s Lyre*, 389.

⁹³ ‘Die Melodie aber ist im Grunde nichts anders, als die ursprüngliche, wahre und einfache Harmonie selbst, darin alle Intervalle nach, auf und hintereinander folgen.’ Mattheson, *Kern melodischer Wissenschaft*, §6.

⁹⁴ ‘[Die] sind schon üblicher und brauchbarer, als obige Intervalle, und dienen sowol in der Melodie, als Harmonie, mit gutem Nutzen.’ Mattheson, *Kern*, 54.

⁹⁵ ‘leicht, lieblich, deutlich, fließend’, Mattheson, *Kern*, 35-36.

⁹⁶ A. B. Marx, *Die Kunst des Gesangs: Theoretisch – Praktisch* (Berlin, 1826), 258-59. See also my discussion in *Wagner’s Melodies*, 58-60.

character that is the distinguishing feature; like Marx's characterizations, this is sensed intuitively.⁹⁷ Figure 3 reproduces his list:

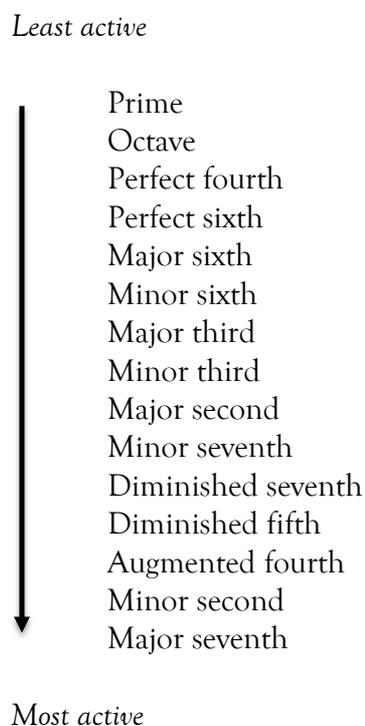


Figure 3.

Historically, such claims to quantify emotional expression in melody generated significant debate, and to the extent they concerned the concept of 'purely musical' experience, they could be seen as attempting to answer questions motivated philosophically rather than musically. The restless quest for a stable basis for intervallic expression was thus a tributary in search of a river; and historiographically, it can be read as a blip against the more enduring epistemological basis provided by the overtone series.

Helmholtz, writing in 1863, adjoined an aesthetics devoid of reason in this sense. To contemplate lofty works of art, he argued, teaches us 'to feel that even in the obscure depths of a healthy and harmoniously developed human mind ... there slumbers a germ of order that is capable of rich intellectual cultivation.'⁹⁸ As is well known, this germ, for him, was scrutable through empirical approaches to the auditory system's physiology in relation to physical overtones. Unlike Rameau, who rooted his theory of harmony in what is calculable with a monochord, Helmholtz regarded *melody* as 'the essential basis

⁹⁷ Arthur Edwards, *The Art of Melody* (New York: Philosophical Library, 1956), 151.

⁹⁸ Helmholtz, *Sensations*, 367.

of music.⁹⁹ As such he described himself as the first to draw empirically on auditory sensations to investigate the ‘real reason of the melodic relationship of two tones.’¹⁰⁰ His theory of melodic affinity identified the relational quality of two notes according to the perception of identical partial tones in the corresponding compound tones: ‘We shall consider musical tones to be related in the first degree which have two identical partial tones; and related in the second degree, when they are both related in the first degree to some third musical tone.’¹⁰¹ While first-degree relations accounted for perfect consonances, those of the second degree allowed for adjacent pitches in a diatonic scale to be related (his illustration was: c-d, related by the two partials each has in common with G). Pushing the aesthetic envelope, Helmholtz’s affinity theory led him to conclude that the major 6th and 3rd were the most beautiful intervals because the weakening overtone relations between their constituent pitches sit ‘at the limits of clearly intelligible intervals.’¹⁰²

Qualification and criticism of this brilliantly insightful, if seemingly straightforward, theory ensued. Helmholtz readily acknowledged the perception of overtones varies according to timbre, leading him to argue that our memory was crucial, that a listener’s recollection of overtone-rich pitches is associated with, and influences, how we hear overtone-poor pitches when we encounter them. But as Benjamin Steege reasons, the case of overtoneless melody in organ pipes nevertheless ‘emerged as a limit case for Helmholtz’s melodic theory.’¹⁰³ Others, such as the contemporary American philosopher Xenos Clark, followed Darwin in arguing empirical approaches to the auditory system are not particular to humans, and that the ‘physical peculiarities of vibrating bodies [that existed] long before any living being came upon the earth, are also the basis of human and . . . extra-human melody.’¹⁰⁴ Neither the empiricism of human particularity (trained ears) nor appeals to nature (ontic overtones) were impervious to critical revision in the debate over melodic intervals.

With an acoustic epistemology, Paul Hindemith was effectively cultivating the furrow Helmholtz had ploughed when he ordered melodic intervals in his Series 2 according to the combination tones they produced (the difference between the frequencies of the directly struck notes), an order that balanced what he called harmonic and melodic ‘force,’ as shown in figure 4. The relational ordering of all twelve chromatic pitches in Series 2 formed a structural device in his penultimate opera, *Die Harmonie der Welt* (1957), which allied concepts to keys based on the strength of their overtone relations to other keys (and allied concepts). It must count as one of the purest applications of Helmholtz’s melodic theory to composition: E [1] represents *musica mundana*, the

⁹⁹ Ibid., vii.

¹⁰⁰ Ibid., 368. Others—including R. H. Lotze and E. Hanslick—had looked to nervous excitation, but rejected the notion that this could ever yield information about melodic expression. See Lotze, *Medicinische Psychologie*, 237. I take this reference from Hanslick, *On the Musically Beautiful*, 55.

¹⁰¹ Helmholtz, *Sensations*, 256.

¹⁰² Ibid., 256.

¹⁰³ Ibid., 351.

¹⁰⁴ Steege, *Helmholtz and the Modern Listener* (Cambridge: Cambridge University Press, 2012), 134.

¹⁰⁵ Xenos Clark, ‘Animal music, its nature and origin’, *The American Naturalist* 24 (1879): 209–223, here 211.

cosmic sonorities sought by the opera's protagonist Johannes Kepler; B-flat [12] the forces most hostile to their attainment on earth.

From a more abstract stance, Hindemith's work highlights the way intervals pivot equivocally between 'harmony' and 'melody' in the conundrum we encountered earlier in Bach's Prelude: 'neither is strong enough to stand alone; each needs the other for its full unfolding ... [N]o harmonic progression can be made except through melody—that is, by traversing the intervals. Harmony, on the other hand, connects and organizes the waves of melody.'¹⁰⁵ Helmholtz's scientific explanation of the same was characteristic:

[W]hereas, however, in melodic relationship the equality of the upper partial tones can only be perceived by *remembering* the preceding compound tone, in harmonic relationships it is determined by *immediate sensation*, by the presence or absence of beats.¹⁰⁶

With this Helmholtz accounted for harmonic effect as the power of immediate sensation as opposed to a linear experience reliant on recollection and association, with all the cognitive distance this implies.

[FIGURE 4: near here]

We glimpse the contradictions between the above-mentioned approaches—*aesthetic and scientific*—when considering the harmonic tension or character of intervals that occur within a single chord. The postulate that 'a rising melody always expresses and excites a growing intensity of feeling . . . whilst a falling one depicts a relaxation . . . from the climax of excitement' as one critic summarized in 1849, does not apply when the intervals occur in a single chord, even in wide leaps, Hindemith explains: 'the traversing of this space involves no effort, and it does not produce in the listener the feeling of expectation fulfilled that he gets when the leap is made to a non-chord tone.'¹⁰⁷ Opinion was divided among earlier composers. A hundred and fifty years previously, William Crotch parroted Rameauian orthodoxy when he categorized 'essential and unessential [melodic] notes' as those that 'form a part of the harmony' and those that do not, respectively; while Wagner, writing thirty-eight years later, suggested the 'ineffectiveness of operatic melody hitherto' resulted from the opposite: the failure to differentiate accompanimental harmony from vocal melody owing to their timbral dissimilarity.¹⁰⁸

Each approach testifies to the importance of comprehensible expression, which an atomized approach to dyads appeared to offer. Even into the 21st century, psychological research into the perception of intervals continues to pursue the goal of determinate expression, but with the caveat that only perceived, rather than innate, expressive values are obtainable. Alf Gabrielsson, building on such milestones as Meyer's *Emotion and Meaning in Music* (1956) and Leirdahl and Jackendorff's *Generative Theory of Tonal*

¹⁰⁵ Paul Hindemith, *The Craft of Musical Composition*, trans. Arthur Mendel, 4th ed. (Mainz and London: Schott, 1970), 87.

¹⁰⁶ Helmholtz, *Sensations*, 368.

¹⁰⁷ Teutonius [pseudonym], "Letters to a Music Student: VI. Melody and Melodious Composition," *The Musical World* 50 (1848), 794. Hindemith, *Craft*, 189.

¹⁰⁸ William Crotch, *Elements of Musical Composition*, (London: Longman, Hurst, Rees, Orme & Brown, 1812), 74-75. Wagner, *Sämtliche Schriften und Dichtungen* 4: 168. Cf. *Prose Works*, 2: 310.

Music (1983), appears to move little beyond the speculative verbal categories of early 19th-century theorists when summarizing referential meanings perceived in different types of melodic motion:

[S]ome results indicate that large intervals sound more powerful than small ones, the octave is perceived as positive and strong and the minor second as the most sad interval. ... Stepwise motion may suggest dullness, intervallic leaps excitement; stepwise motion leading to melodic leaps may suggest peacefulness (Thompson and Robitaille 1992). Activity (sense of instability and motion) may be conveyed by a greater occurrence of minor seconds, tritones, and intervals larger than the octave. Potency (vigour and power) may be expressed by a greater occurrence of unisons and octaves (Costa et al. 2004).¹⁰⁹

The drive to quantify expression in this manner had met with incredulity when it was first suggested in the late 18th century, even from theorists hitherto content to bond music with rhetoric. J. A. P. Schulz, for one, poured cold water on the hope that individual intervals or characteristic figures (which, for contemporaries Daube and Riepel, formed the basis of melodic expression) could function as a kind of decipherable language of feelings. ‘It would be a ridiculous task to want to stipulate to the composer particular formulae or small melodic phrases that truly express every particular emotion, or even to say how he should invent such forms or phrases.’¹¹⁰ One reason, of course, would be that this presupposes a lexicon of ‘every particular emotion,’ for which composers would supply the musical counterpart. And the impossibility of itemizing the totality of human experience, specifically an alphabet of human thought, is precisely the reason the project of a universal language failed in the early 18th century after it had been promulgated by Descartes and Leibnitz et al..

Wholeness, Shape and Statistics

What are we to make of these historical efforts and skepticism? One of the arguments made against atomizing melody into its constituent intervals is that ‘we do not first enjoy one sixth, and then wait and enjoy the next,’ as Gurney observed in 1880. ‘It is as impossible to pick out special intervals in a melody, and say they are more attractive than others, as to pick out a certain square inch in a beautiful face, and say the same of it.’¹¹¹ Gurney’s argument that the beauty of an interval or square inch depends upon the whole to which it belongs has a long history. As an aesthetic principle, it dates back at least to Aristotle’s *Poetics*, while the perception of the wholeness of a melodic shape was obliquely defended in Rousseau’s theory of *unité de mélodie*, and formulated as a fully spatial (*plastisch*) aesthetics in Hegel’s words: ‘the meaning to be expressed in a musical theme is already exhausted in the theme.’¹¹² In either case, the holistic concept

¹⁰⁹ Alf Gabrielsson, “The relationship between musical structure and perceived expression,” *Oxford Handbook of Music Psychology* (Oxford: Oxford University Press, 2011), 144.

¹¹⁰ “Uebrigens würde es ein lächerliches Unternehmen seyn, dem Tonsetzer besondere Formeln, oder kleine melodische Sätze vorschreiben zu wollen, die für jede Empfindung den wahren Ausdruck haben, oder gar zu sagen, wie er solche erfinden soll.” Johann Georg Sulzer, *Allgemeine Theorie der schönen Künste in Einzelnen*, 2nd edn. (Leipzig: Weidmannschen, 1793), 3:379. (Schulz wrote the music entries in Sulzer’s edition.)

¹¹¹ Edmund Gurney, *The Power of Sound* [1880], rpt. (Cambridge: Cambridge University Press, 2011), 148.

¹¹² Rousseau’s *unité de mélodie* appears in the *Lettre sur la musique française*, see Rousseau, *Oeuvres complètes*, 5 vols. (Paris: Gallimard, 1959–95), 5: 289–328, esp. 305ff. Hegel, *Hegel’s Aesthetics: Lectures on Fine Arts*,

feeds into Gurney's crowning principle of 'ideal motion' wherein the experience of melodic form and motion 'are blended—where form is perceived by continuous advance along it.'¹¹³ The concept seeks to account for the paradox of perpetual movement within a fixed structure.

Ironically, the notion of melodic wholeness received its most enduring theoretical treatment outside of music theory. In 1890, philosopher Christian von Ehrenfels found melody to be a good example of what he called 'gestalt qualities,' i.e. a mentally created shape. He pointed out that when a melody is transposed to a different key, it is heard as being identical to the original melody, even though the two are constituted from entirely different pitches. Thus, the perception of a melody is more than the perception of its individual parts, he proposed. A melody is, therefore, a gestalt quality.¹¹⁴ For Stumpf, building on Ehrenfels' ideas, the ability to transpose a melody distinguishes human from avian musical faculties,¹¹⁵ though the practice of abstracting holistic form from constituent elements is demonstrable among primates, suggesting that a faculty of melodic transposition is merely undeveloped rather than absent in animals. When a dog recognizes its owner at different distances or in different lighting, for example, the visual stimuli received are different from those received when the owner stands directly in front of the dog. Hence the dog 'has managed to separate the form mentally from the different circumstances.'¹¹⁶ The remaining question, for Stumpf, is why birds never transposed songs using the same faculty, after humans had so readily.

Ongoing statistical research into preferences for melodic shape, pattern, or peak pitch indicates that the impulse to study pitch content empirically is unlikely to abate. One of the most comprehensive recent theories of melody as a note-to-note phenomenon is Eugene Narmour's Implication-Realization model (1990 / 1992). 'Because science in the past century has demonstrated everywhere nature's obedience to powerful yet parsimoniously structured laws,' he explains, echoing Helmholtz:

a similar kind of natural economy must govern the human perception of artworks. Thus, a few simple laws—perceptual-cognitive ones powerful enough to account both for the multiplicity of singular experiences and for the variation in perceived style—probably regulate the art of melody.¹¹⁷

Specifically, contours become foreground structures of 'implication and realization;' the implication of continuation arises through the workings of Gestalt principles of likeness, proximity, or common direction where consecutive pitches lie relatively close

trans T. M. Knox, 2 vols. (Oxford: Clarendon Press, 1988), 2: 896.

¹¹³ Gurney, *The Power of Sound*, 164.

¹¹⁴ Christian Ehrenfels, 'Über Gestaltqualitäten', *Vierteljahrsschrift für Wissenschaftliche Philosophie* 14 (1890): 249–292. See also Mitchell G. Ash, *Gestalt Psychology in German Culture 1890–1967: Holism and the Quest for Objectivity* (Cambridge: Cambridge University Press, 1995); Robert Gjerdingen, 'The psychology of music', in *The Cambridge History of Western Music Theory*, ed. Thomas Christensen (Cambridge: Cambridge University Press, 2002); Duane P. Schultz and Sydney E. Schult, *A History of Modern Psychology*, 7th ed. (Belmont, CA.: Wadsworth, Thomson Learning, 2000).

¹¹⁵ Stumpf notes that for years Otto Abraham carried out a number of experiments with parrots aiming at demonstrating a capacity for transposition, but without any luck. See *The Origins of Music*, 35–36.

¹¹⁶ Stumpf, *The Origins of Music*, 44.

¹¹⁷ Eugene Narmour, *The Analysis and Cognition of Basic Melodic Structures* (Chicago and London: University of Chicago Press, 1990), 4.

together. Two consecutive minor seconds establish a ‘process’ wherein we expect another small interval. That is, proximate pitches imply a continuing pitch direction and interval size. A large interval, by contract, implies differentiation, and hence a ‘reversal’ of direction and size. A falling minor sixth would imply a small interval in the opposite direction, for instance. Narmour identifies five melodic archetypes, of which ‘process’ and ‘reversal’ are the first two. While this seeks to model musical experience itself, criticism of IR echoes Fétis’ complaint about Reicha, that of partiality or insufficiency: ‘the influence of meter and rhythm are neither clearly nor separately ... delineated from the factors that Narmour purports to demonstrate govern note-to-note succession. ... [Similarly,] the role of harmony in the theory remains ambiguous.’¹¹⁸ In Narmour’s approach, sitting at the midpoint of notated pitches and their cognition as sound, the minimum individual structures of a melodic line must have at least three pitches, he explains; these are given letter symbols and combine to form anagram abbreviations of ongoing melodic processes. It is indicative of the taxonomic and combinatorial rationalism such a theory emotes that Narmour anticipates software using these symbol-string reductions to manipulate ‘large amounts of melodic data in “search and sort” operations. This has the potential,’ he continues, ‘for enabling critical analysts, style analysts, and ethnomusicologists to manage melodic data in new ways.’¹¹⁹

Picking up this thread of optimism, David Huron asserts that ‘inferential statistical approaches [to melody] will help us generate and test much more refined hypotheses about the precise nature of compositional processes. What indeed are composers doing when they arrange notes on a page? Are they arranging pitches, or intervals, or scale degrees, or contours ... or some combination? A systematic statistical approach allows us to answer such questions.’¹²⁰ The fruits of such confidence include Zohar Eitan’s combinatorial model of peak pitches in Haydn, Chopin and Berg, and Huron’s own investigation into melodic arches in folksongs using *Humdrum Toolkit* software to analyze the 6,251 melodies of the (mostly European) *Essen Folksong Collection*.¹²¹ The former argues that ‘an independent, nonsyntactic, gestural domain [exists] in music,’ exemplified in the pitch contour of melody, which Eitan posits as an embodied, primordial dimension of human utterance in general.¹²² Cross-stylistic analysis leads to the conclusion that:

few features tend to be associated with peaks in all three repertoires, and some are peculiar to one repertoire (e.g. the tendency to avoid second-inversion chords at peaks in Haydn) ... [A]n association with peaks with emphatic or intensifying features, is corroborated for two of the three repertoires, Chopin and Berg.¹²³

¹¹⁸ Ian Cross, review of Narmour, *The Analysis and Cognition of Melodic Complexity* (Chicago: University of Chicago Press, 1992), in *Music Perception* 12 (1995): 486-509, here 502.

¹¹⁹ Narmour, *The Analysis and Cognition of Melodic Complexity: The Implication Realization Model* (Chicago and London: University of Chicago Press, 1992), 340.

¹²⁰ David Huron, review of Zohar Eitan, *Highpoints: A Study of Melodic Peaks*, in *Music Perception* 16 (1999): 257-64. Online here: <http://www.musiccog.ohio-state.edu/Huron/Publications/huron.Eitan.review.html>.

¹²¹ Zohar Eitan, *Highpoints: A Study of Melodic Peaks* (Philadelphia: University of Pennsylvania Press, 1997). David Huron, ‘The Melodic Arch in western Folksongs,’ *Computing in Musicology* 10 (1996): 3-23. See also Helmut Schaffrath, *The Essen Folksong Collection in the Humdrum Kern Format*, ed. D. Huron (Menlo Park, CA: Center for Computer Assisted Research in the Humanities, 1995).

¹²² Eitan, *Highpoints*, 152.

¹²³ *Ibid.*, 145.

In Huron's study, each folk melody is coded for pitch and duration information, rests, bar lines, meter, and phrase markings. By quantifying melodies with a given number of pitches (5 to 15)—ignoring rests and interpreting tied notes as a single pitch—Huron was able to confirm a hypothesis that: 'a disproportionate number of musical phrases and melodies tend to exhibit an arch-shaped pitch contour.'¹²⁴ While these are based on average pitch contours within a melody-type of a fixed number of pitches, fewer than half of the melodies actually exhibited an arch shape in their contour, we learn. If we accept the 'tendency for ascending and descending phrases to be linked together in pairs' on the basis of such a study, this needs to be qualified by Huron's own caveat against phrasal balance or maintaining tessitura: 'What goes up is likely to come down, but what goes down is less likely to come back up,' he summarizes.¹²⁵

To be sure, such empirical approaches are a far cry from the recessed creativity celebrated by Jean Paul in 1802, and we might say if aesthetics is the privileged method of appreciating 18th and 19th-century melodic composition, statistical sampling is the natural complement of algorithmic composition. Such tools as Dirk-Jan Povel's *Melody Generator* (2010) or Dmitri Kartofelev and Jüri Engelbrecht's 'structured spontaneity' (2013) use Markov chains or fractal geometry to create melodies based on restrictive programming of overtone properties and predefined stylistic parameters.¹²⁶ This declarative approach to melodic data mirrors statistical analysis of the same, and the role of cognition recedes. Not all algorithmic approaches to melody work in such a directly automatic way, of course. Just as critic Eduard Kulke—fired by Darwin and Lamarck—believed melodies were subject to evolutionary principles, and proposed genealogies of melodic transformations in 1884 as part of a collective cultural memory (of which example 6 offers an illustration from Beethoven), so Francesco Vico's computer system *Melomics* (2010) uses an algorithm that mimics the process of natural selection. It first generates random musical fragments, mutates them, determines whether they conform to predefined rules (genre-specific, instrument-specific, stylistic). By this process, all fragments are incrementally refined into rule-adhering music. Under conditions of improvisation, such a process could not be entirely automated, of course. While evaluation criteria cannot be clearly stated in a programming language, Interactive Evolutionary Computation allows for interaction between the algorithm and human participant. One example is John Biles' jazz melody generator *GenJam*, described as 'a genetic algorithm-based model of a novice jazz musician learning to improvise' in which a human mentor gives real-time feedback which is then absorbed by the program to improve the future generation of melodic patterns, i.e. in a closed-loop feedback function.¹²⁷

¹²⁴ Huron, 'The Melodic Arch in western Folksongs,' *Computing in Musicology* 10 (1996): 3-23, here 4.

¹²⁵ *Ibid.*, 12.

¹²⁶ Dirk-Jan Povel, "Melody Generator: A Device for Algorithmic Music Construction," *Journal of Software Engineering and Applications* 3 (2010): 683-695. Dmitri Kartofelev and Jüri Engelbrecht, 'Algorithmic melody composition based on fractal geometry of music,' presentation. See <http://www.cs.ioc.ee/~dima/fractalmusic.html> [accessed 19 December 2015].

¹²⁷ See John Biles, 'Improvising with Genetic Algorithms,' in Miranda and Biles (ed.), *Evolutionary Computer Music* (London: Springer, 2007), 137-69. See also <http://igm.rit.edu/~jabics/GenJam.html> [accessed 5 January 2016].

[Example 6 near here]

Conclusion

With historiographic spectacles, it is tempting to conclude that the concept ‘melody’ is perhaps only scrutable in a range of historically specific definitions where each approach reflects the precepts and theories of its context, a verdict that renders the concept hollow, a means for examining the intellectual environment rather than an object sui generis.

The trouble with defending the ‘object’ theory is that approaches to melody are racked between the fixity of notation and phenomenological experience. Forms of notation, conceived as a closed system, offer ‘the completeness of the musical “text”’ in Jean-Jacques Nattiez’s sense of what can be said to be immanent.¹²⁸ This supports the comparative study of figures, metrical organization and intervals that proliferated in the late 18th and early 19th centuries. Yet a reception aesthetics, tracing individual responses to heard melodies, betrays an array of evaluations and their unpredictable psychology between and across cultures. At the end of his study of popular melody, Gino Stefani asks ‘[w]hy is melody truly popular? The answer is obvious now: because it is better suited than others for appropriation, in more ways, for more purposes.’¹²⁹ This, for Stefani, includes singing, whistling, dancing or marching, and setting to words, all of which constitute forms of arrangement. Perhaps this law of appropriation explains why the postman, recalling an optimistic prediction of Webern’s, is not yet whistling his melodies. The retort, from an 1909 interview with Schoenberg, would be that ‘what a musician and what a non-musician can whistle back are already two very different things,’ an argument that leads him to qualify that the flipside of (appealing) simplicity is primitiveness: ‘it follows that our simplicity is different from that of our predecessors, that it is more complex, but also that even this complexity will in turn be regarded one day as primitive.’¹³⁰

As suggested above, he appears to have been wrong. The history of aesthetics teaches that on the one hand, listeners between the 18th and 20th centuries would expect, by degree, originality and expressivity of thought from a melody, while on the other hand a certain regularity of syntax. It is a paradox of restriction that pits convention against novelty. For the more ‘original’ a melody, the less it accords to codes of communication that are understood by reference to melodic precedents (over and above the existence of melodic archetypes). Tonal function and modal coherence provide a systematic context for generating a repository of precedents. And here it would be hard to disagree with Dahlhaus’ observation that ‘the harmonic structure of a melody can be thoroughly individual and unrepeatable, and this is not rare in the 19th century.’¹³¹

¹²⁸ Jean-Jacques Nattiez, *Analyses et interprétations de la musique: La mélodie du berger dans le Tristan et Isolde de Richard Wagner* (Paris, France: Vrin, 2013), 372.

¹²⁹ Gino Stefani, ‘Melody: A Popular Perspective,’ *Popular Music* 6 (1987): 21-35, here 31.

¹³⁰ In Joseph Auner (ed), *A Schoenberg Reader: Documents of a Life* (New Haven and London: Yale University Press, 2003), 59.

¹³¹ ‘[D]ie harmonische Struktur einer Melodie [kann auch] durchaus individuell und unwiederholbar sein, und im 19. Jahrhundert ist sie es nicht selten.’ Dahlhaus and Abraham, *Melodielehre*, 16.

The conservative critic Carl Gollmick summarized what was at stake in 1839 when he wrote about melody's capacity to excite or be ineffectual: 'the more such successions of pitches [*Tonfolge*] are comprehensible, attractive and enduring to our ear, the more they deserve the name *melody* [*Melodie*]. Thus one says of *compositions* whose pitch successions lack these: they have no *melody*.'¹³² After the acerbic debates of the ensuing century, Busoni eyed the problem in historical terms as one of familiarity versus advancing technical means in composition. His statement sums up a certain frustration with attempts to specify what he called the material means of melodic expression:

It has become a commonplace of music history that the appearance of every new composition is reproached for a *lack of melody*. This complaint greeted *Don Giovanni* on the occasion of its first performance in Berlin, Beethoven's Violin Concerto, Wagner's music dramas etc. etc. Again and again one sets rising technical ingenuity against decreasing melodic invention! It almost seems as though technical mastery can operate more through what is *unfamiliar*, melodic expression only through what is *familiar*. In fact, Mozart was a richer melodist than his forebears; Beethoven broader and more protean than Mozart; Wagner more sumptuous than Beethoven, if also less noble, less independent, more material; more of a character-smith, less of a psychologist.¹³³

Busoni's animating impulse for this complaint was the view that 'immateriality is music's very essence, which always resounds in a blossoming and sublime melody.'¹³⁴ Whereas voice was self-expressive, carrying the association of soul, *pneuma*, and hence of primary essence, instrumental sounds were not. So quantifying 'expression' for instrumental lines appeared plausible only in the context of alternative schemes of knowledge, such as figures and intervals.

While calls to invest 'meaning' in the shaping or physiognomy of a melody have long since receded, Busoni's call appears to be on the wrong side of history, for scrutiny of melodic 'material' has grown with growing computational means. From a genealogical perspective, aligning algorithmic composition with statistical analysis arguably highlights what is missing in 'material,' and latterly, computational approaches to melody: consciousness, that slippery term for organic agency that is self-aware. It may be no coincidence, then, that while certain theorists advocated states of unconsciousness when composing, melody has more commonly been adopted as a metaphor for consciousness itself. Witness Schopenhauer, for whom:

¹³² 'Je mehr solche Tonfolgen verständlich, anziehend und bleibend für unser Ohr sind, desto mehr verdienen sie den Namen *Melodie*. Darum sagt man von *Compositionen*, deren Tonfolgen es nicht sind: sie haben keine *Melodie*.' Carl Gollmick, *Kritische Terminologie für Musik und Musikfreunde*, 2nd ed., (Frankfurt aM: Johann David Sauerländer, 1839), 59.

¹³³ "Es ist zum ständigen Gemeinplatz in der Musikhistorik geworden, jeder neuen kompositorischen Erscheinung *einen Mangel na Melodie* vorzuwerfen. Dieser Vorwurf traf den 'Don Giovanni' anlässlich der ersten Berliner Vorstellung, traf Beethovens geigenkonzert, die Wagnerschen Musikdramen ___ ___ ___ Und immer wieder setzte man die zunehmende technische Findigkeit gegen die abnehmende melodische Erfindung! Fast scheint es, daß technische Meisterschaft mehr durch das *Ungewohnte*, melodischer Ausdruck nur durch das *Vertraute* wirken könne. In der Tat was aber Mozart ein reicherer Melodiker als seine Vorgänger; Beethovne breiter und vielgestaltiger als Mozart, und Wagner üppiger als Beethoven, wenn auch weniger edel, unselbständiger, materieller; mehr Charakteristiker, weniger Psychologiker." Ferruccio Busoni, "Der Melodie die Zukunft," *Zeitschrift für Musik* 97 (1930): 94-95.

¹³⁴ Immaterialität ist der Musik eigentliches Wesen, das in einer immer blühenderen und erhabeneren Melodik ausklingen wird." Busoni, "Der Melodie die Zukunft," 95.

Only human beings, being endowed with reason, keep looking forwards and backwards over the course of their actual life as well as the countless possibilities, thereby achieving a life course that, in being thoughtful, is a coherent whole: ~ correspondingly, only melody is joined up from beginning to end in a way that is full both of purpose and significance. As such, it narrates the story of the will as it is illuminated by thoughtfulness, the will whose imprint in reality is the sequence of its deeds.¹³⁵

In 1905 Edmund Husserl would sharpen this metaphor into a phenomenological insight. He locates reality not in the total sequence of deeds but in the ‘real now’ of immediate perception, which ‘becomes unreal again and again’ as time passes and present moments become past moments.¹³⁶ The paradox that mental events ‘are in consciousness successively, but they fall within one and the same total act’ (22) of consciousness is exemplified in melody’s successive single pitches that give rise to an overall shape. Rather than overlaying discrete perceptual acts—pitches remembered, sensed ‘now,’ and anticipated—it is the mind’s capacity for simultaneous ‘primary consciousness, retention and protention’ (40) that allows it to comprehend dynamic totalities, whether life events or musical lines. That is, for Husserl, melody becomes an epistemological tool of the mind: a way of conceptualizing our understanding of the consciousness of time. In like vein, Henri Bergson (1910) and Jean-Paul Sartre (1936) both write of the unity of inner consciousness and ego, respectively, as a metaphysical melody.¹³⁷ It seems reasonable to read this as a verdict—albeit an inconclusive one—on centuries of debate, in which self-awareness of epistemological schemes, from mimesis to the overtone relation of intervals, fall short of what was needed: an objective confirmation of one’s own familiar preference.

¹³⁵ Arthur Schopenhauer, *The World and Will and Representation*, ed. and trans. Judith Norman and Alistair Welchman (Cambridge: Cambridge University Press, 2014), 1: 287.

¹³⁶ Edmund Husserl, *On the Phenomenology of the Consciousness of Internal Time (1893-1917)*, trans. John Barnett Brough (London: Kluwer Academic, 1991), 15.

¹³⁷ Bergson: ‘Il y a simplement la mélodie continue de notre vie intérieure, – mélodie qui se poursuit et se poursuivra, indivisible, du commencement à la fin de notre existence consciente.’ Henri Bergson, “La pensée et le mouvant,” in *Oeuvres*, ed. André Robinet (Paris: Presses Universitaires de France, 1972), 1251–1484, here 1384. And Sartre: ‘If we take a melody, for example, it is useless to presuppose an X which would serve as a support for the different notes. The unity here comes from the absolute indissolubility of the elements which cannot be conceived as separate, save by abstraction. ... For these very reasons, we shall not permit ourselves to see the ego as a sort of X-pole which would be the support of psychic phenomena.’ Sartre, *The Transcendence of the Ego*, trans. Forrest Williams and Robert Kirkpatrick (New York: Hill and Wang, 1991), 73-4.