The Rise of $\hat{6}$ in the Nineteenth Century

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INTRODUCTION

Ethnomusicologists and theorists of non-Western music maintain a useful distinction between "scale" and "mode"—that is, between a neutral collection of tones in a given musical tradition and the actual conventions of melodic practice in that tradition. Example 1, for instance, illustrates the tonal hierarchy and motivic dispositions that transform the undifferentiated pitch material of a Hindustani *that* ("scale") into a *raga* ("mode"), which in turn constitutes the governing syntax for a piece or improvisation. In short, "[mode] is more than merely a scale."[1] While inquiries into unfamiliar musical systems engage mode as a matter of course, recent studies of the Western major scale have more often concerned scale as scale, investigating group-theoretic criteria such as "coherence" and "well-formedness," or acoustic properties such as "optimum consonance."[2] These studies help to explain the relative prevalence of a handful of scales throughout the world, and to delimit those scales' structural potentials, but they fail to address melodic practice. Setting out along the musical continuum pictured in Example 2, we will begin to explore the question of scales "in/as" music.

Western music, to be sure, has no equivalent of *raga;* after all, it is harmony, not melody, that largely dominates its theoretical and compositional discourse. Nevertheless, "modal," or "syntactic" aspects of the major and minor scales reside firmly within the intuition of competent musicians, and we can therefore attempt to delimit these aspects with the hope of illuminating analytical and style-historical issues. In this paper I will discuss such melodic principles, examining in particular the theory and practice of $\hat{6}$ in the major scale. By tracing the history and, as it were, the reception of this degree, I will reinforce some well-worn formulations while also offering new evidence for what might be called a "second practice of nineteenth-century melody."[3] Along the way, I will also extend my observations beyond the realm of syntax into that of semantics (thus adding a further layer of correspondence with *raga*), providing thereby a source for hermeneutic insights.

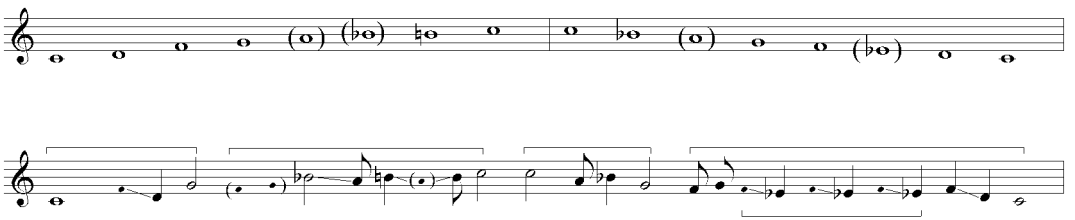
A version of this paper was presented at the annual meeting of the Society for Music Theory, Atlanta, Georgia, November, 1999. I am grateful for the stimulating discussion offered there by David Epstein, William Caplin, Mary Arlin, and anonymous others; for the input of David Neumeyer and Daniel Harrison; and above all for the careful readings by James Webster, Steven Stucky, Carol Krumhansl, Sarah Day-O'Connell, and my anonymous referees. For a more detailed study, see Day-O'Connell (in progress).

[1]Powers 2001, 776.

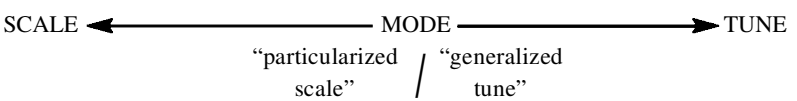
[2]The most recent such studies include Clough, Engebretsen, & Kochavi 1999; van Egmond & Butler 1997; Agmon 1996; Carey & Clampitt 1996; Huron 1994; Hajdu 1993; Rahn 1991; and Clough & Douthett 1991.

[3]I paraphrase the title of Kinderman & Krebs 1996.

Example 1. *Raga Miyan-ki-Mallar* (Kaufmann 1968, 3, 404)



Example 2. Mode within the continuum of the melodic domain (after Powers 2001, 776)



THEORY: $\hat{6}$ IN THE MAJOR MODE

OLDER THEORIES OF THE SCALE

Technically, $\hat{6}$ was not $\hat{6}$ until the emergence of the major mode, and hence a history of $\hat{6}$ might begin sometime during the seventeenth century. However, we do well to recall the system of hexachordal solmization, which (alongside modal theory) had dominated musical pedagogy for centuries before the seventeenth. During this time, the universe of diatonic material comprised superimposed transpositions of a single hexachord, a stepwise unit encompassing a major sixth. The sixth embodied pedagogical considerations in containing a single, uniquely positioned semitone, while it also represented a theoretical boundary in that the hexachord was the largest collection which, when transposed from C to either G or F, introduced no new tones into the gamut but stayed within the realm of *musica recta*.[4] The reality of heptatonicism, of course, entailed the frequent application of hexachordal mutation. Nevertheless, to some extent the hexachord itself must have befitted the restrained ambitus of the monophonic repertoire for which Guido d'Arezzo invented solmization in the first place.[5] Furthermore, several compositions attest to the hexachord's conceptual status as a self-sufficient musical entity: keyboard compo-

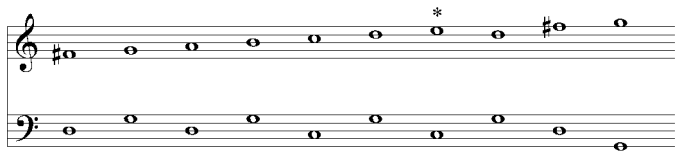
[4]Equivalently, hexachords "have the function of representing the range within which coincide the surrounding intervals of fifth-related tones" (Dahlhaus [1967] 1990, 172).

[5]Guido's famous paradigmatic melody, the Hymn to St. John, not only features successive hexachordal pitches at the beginning of each phrase—the very property that satisfied Guido's mnemonic purposes—but in fact remains within the range of the hexachord throughout.

sitions by Sweelinck, Byrd, and Bull, and a Mass movement by Burton, whether meant as self-conscious didacticism or not, use as *cantus firmus* the archetypal sequence *ut-re-mi-fa-sol-la.*[6] Around 1600, a new solmization degree, *si,* gained increasingly widespread acceptance, although not without heated objection from conservatives; even as late as the eighteenth century, controversy surrounded the relative merits of hexachordal versus major-minor thinking.[7]

Eventually, as the major-minor system coalesced, the leading tone became a defining component of tonality, and the heptatonic octave finally emerged as the unqualified foundation of musical pitch. But as important as $\hat{7}$ became in common-practice harmony, it presented certain problems from the standpoint of scale, at least when reckoned as the step above $\hat{6}$.[8] In one of Rameau's models of the major scale, shown in Example 3,[9] the step from $\hat{6}$ to $\hat{7}$ confounded the fundamental bass: in the course of harmonizing an ascending melodic scale, the normative harmonic progression by fifths breaks off at this point. The succession of three whole tones, $\hat{4}$–$\hat{5}$–$\hat{6}$–$\hat{7}$, strikes Rameau as "not at all natural," and he gives in response a more roundabout octave ascent, which *begins* on $\hat{7}$, apparently a compensation for an irregularity in the higher register, where $\hat{6}$ returns to $\hat{5}$ before a leap to the conclusive $\hat{7}$–$\hat{8}$.[10] A similar reluctance to bridge $\hat{6}$ and $\hat{7}$ characterizes Heinichen's pedagogical *schemata modorum* for the figured bass, shown in Example 4. Although the bass line touches upon all the scale degrees, it does so within a scale bounded by $\hat{7}$ on the lower end and

Example 3. Rameau, *Génération harmonique* 1737, Example VI



by $\hat{6}$ on the upper.[11] Over a century later, Moritz Hauptmann's aversion to a rising $\hat{6}$ would echo Rameau's, but with a characteristically Hegelian twist: since $\hat{6}$ is associated with subdominant harmony and $\hat{7}$ with dominant, a succession from one to the other implies a harmonic progression between chords that do not share a common tone, contrary to the very foundation of Hauptmann's theory. Hauptmann goes so far as to describe a gap between the two degrees; and although he admits that the interval in question is no larger than that between $\hat{1}$ and $\hat{2}$ or $\hat{4}$ and $\hat{5}$, his dialectical system requires that, in the case of $\hat{6}$–$\hat{7}$ the interval be considered a leap—even one comparable in difficulty to the tritone.[12] (Both Rameau and Hauptmann ultimately relax their prohibitions through the introduction of secondary triads, but in each case the rising $\hat{6}$ enters with excuses.) The tradition continued into the twentieth century, with Louis and Thuille again postulating a "gap" between the major scale's $\hat{6}$ and $\hat{7}$.[13]

Descriptions of the major scale, then, have historically cast $\hat{6}$ as something of an upper boundary, notwithstanding the assumption of a seven-note octave. The "modal" analogue of this view, moreover, emerged in the conception of $\hat{6}$ as a tendency tone directed

[6]See compositions in the Fitzwilliam Virginal Book (#51, #101, #118, #215) and Burton's *Missa Ut, re, mi, fa, sol, la.*

[7]Fux, for one, insisted upon the hexachord, and the system formed the basis of Haydn's choirboy education under Fux's successor Reuter (not under Fux himself, *pace* Lester 1992, 171). Schenkman (1976) has described vestiges of the hexachordal orientation in Baroque music.

[8]Harrison 1994, 73–126, surveys this issue.

[9]Rameau 1737, Example VI *verso.*

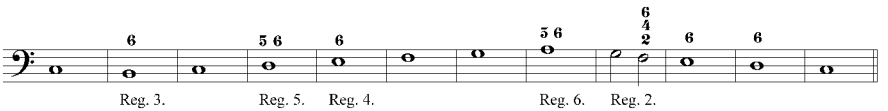
[10]Rameau 1737, 66.

[11]Schröter's octave is similarly disposed, as is Gasparini's. In contrast, Mattheson gives the straightforward $\hat{1}$–$\hat{8}$ version that has become the standard "rule of the octave"—unsurprisingly, considering his outspoken opposition to hexachords. See Arnold 1931.

[12]Hauptmann [1853] 1893, 34–8.

[13]Schwartz 1982, 47.

Example 4. Heinichen, *Der Generalbass* 1728, 745



toward $\hat{5}$. The notion of tendency tones initially concerned only the leading tone and, later, its tritone partner, $\hat{4}$. But starting in the nineteenth century, theorists and pedagogues attributed melodic energy to $\hat{6}$ as well. The English pedagogue John Curwen described the non-tonic degrees as tones of "suspense and dependence," where $\hat{6}$ in particular "leaves no doubt as to its resting tone [$\hat{5}$]," albeit with less of an imperative than $\hat{4}$ and $\hat{7}$. Curwen depicts $\hat{6}$ as a skyrocket, which, "having reached its height, shines beautifully for a moment, and then softly and elegantly descends."[14] In addition, Curwen's chironomy, shown in Example 5, visually underscores the character of each degree in the scale; a downturned palm and sagging wrist (note the visual similarity with $\hat{4}$) signal the sixth degree, "LAH. The sad or weeping tone."[15] The Viennese theorist Simon Sechter offered an account of scalar tendencies that revolved around questions of tuning; because of the "dubious fifth" between $\hat{2}$ and $\hat{6}$, treatment of the sixth degree, at least when supported by a ii chord, requires preparation and downward resolution, as if it were a dissonance.[16] Louis and Thuille also characterized $\hat{6}$ as a downward-tending degree, and for this reason they considered the minor subdominant to be the consummation of subdominant function, its flattened $\hat{6}$ amplifying the melodic tendency present in the natural $\hat{6}$.[17] To this day, our

[14]Curwen [1875] 1986, 114.

[15]John Curwen, *Standard Course of Lessons and Exercises in the Tonic-Sol-fa Method of Teaching Music* (1880), reproduced in Rainbow 2001, 606. The Kodaly pedagogy employs these same signals.

[16]Sechter [1853] 1880, 22.

[17]Schwartz 1982, 194.

Example 5. Curwen, *Standard Course* 1880 (in Rainbow 2001, 606)

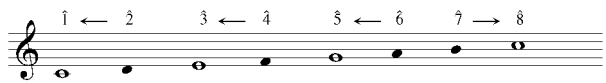
theoretical language concerning $\hat{6}$ reflects primarily structural as opposed to phenomenological sensibilities through the adoption of Rameau's term "submediant" (*sous-mediante*), a term abandoned by Fétis who, true to his more melodic outlook, favored the stepwise connotations of "superdominant" (*sus-dominante*).[18]

[18]Fétis 1849, 2.

A WORKING MODEL OF THE MAJOR MODE

Today, a discussion of the major scale's dynamic nature has become a near-obligatory component of harmony textbooks, if only a token one. A broad consensus exists concerning these dynamics: the "active"/"dynamic"/"dependent" degrees progress stepwise to the "stable"/"static"/"principal" degrees of the tonic triad.[19] These features, summarized in Example 6, embody two important aspects of what we may properly call the major *mode:* the primacy of the tonic triad and the primacy of stepwise motion. While the former is a veritable axiom of tonality, the latter is no less crucial a theoretical assumption. To Schenker, steps are "the true bearers of the contrapuntal-melodic element," critical to the transformation of pure harmony into living music.[20] On a practical level, stepwise motion correlates with the realities of vocal production, the ultimate basis of melody; hence Riemann insists, "[melodic] progressions by step are always preferable to those by leap," an oft-repeated prescription related to Bruckner's and Dürrnberger's more general "law of the shortest way."[21] Indeed, the normative status of conjunct motion in tonal melody partially explains our habitual if ill-advised equation of mode with scale. Finally, an additional property indicated by Example 6 is the primacy—again, vocally derived—of melodic descent, what Hindemith called "undoubtedly the most natural [motion] in music,"[22] which is trumped only in the case of $\hat{7}$, by the "law of the half step."[23]

Example 6. The essence of the major mode (after Sadai 1980, 4)



One could improve upon this simple model by first of all recognizing a hierarchy of stability among the three tonic degrees: for instance, while $\hat{3}$ may serve as the resolution of $\hat{4}$, a weaker, but persistent attraction toward the distant tonic will remain to be satisfied. The forces, then, approximate a sort of "tonal gravity,"[24] the melody wending its way about the ridges of a rolling hill, as in Victor Zuckerkandl's diagram reproduced in Example 7. Zuckerkandl offers a useful illustration of $\hat{6}$'s double function as an upper neighbor to $\hat{5}$ as well as a passing tone within motion from $\hat{5}$ to $\hat{8}$. However, the diagram, with its hump on $\hat{5}$, suggests an effortless motion (visually, a descent) from $\hat{5}$ to $\hat{8}$, and thus accepts as unproblematic the interval between $\hat{6}$ and $\hat{7}$. I prefer to recognize the unique nature of the "terrain" in this upper fourth by placing the hump *between* $\hat{6}$ and $\hat{7}$, as in Example 8. This example takes account of $\hat{7}$'s attraction toward $\hat{8}$ as well as $\hat{6}$'s attraction toward $\hat{5}$ while accounting also for motion between $\hat{6}$ and $\hat{7}$. Motion from $\hat{5}$ to $\hat{8}$, then, requires a certain investment of energy in overcoming $\hat{6}$'s downward pull, but this investment is quickly paid off by the cadential impulse accrued by $\hat{7}$ toward $\hat{8}$; conversely, motion *down* the scale from $\hat{8}$ must first escape the semitone attraction, after which the descent continues with comparatively less effort. (The steepest inclines of the terrain, moreover, correspond to the half-steps $\hat{3}$–$\hat{4}$ and $\hat{7}$–$\hat{8}$.) Finally, we might complete the topographical

[19]See, respectively: Gauldin 1997, 34 (also Aldwell & Schachter 1989, 9); Sadai 1980, 3; Mitchell 1965, 6. Although all writers agree on the stepwise dependency of active tones upon stable tones, the precise characterization of that dependency varies. Sadai's "tonal code," paraphrased in Example 6, offers the simplest model, which is confirmed by Lerdahl's algorithm for calculating "resultant attraction." (See Sadai 1980, 4, and Lerdahl 1996, 348.) Drabkin 2001 differs only in his additional inclusion of an upward tendency for $\hat{2}$. Gauldin (1997, 35) and Aldwell & Schachter (1989, 9) further complicate the model with an upward-tending $\hat{4}$ and the inclusion of motion from $\hat{5}$ to $\hat{8}$; this latter motion will be taken up presently. See also Larson 1993, who characterizes melodic tendencies in terms of a triumvirate of forces: "gravity," "magnetism," and "inertia."

[20]Schenker [1935] 1971, 30. See also Schenker [1910] 1987, part I, 94; part II, 58.

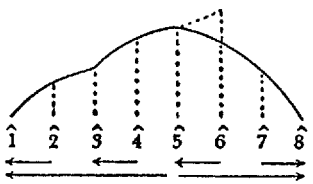
[21]Riemann [1893] 1896, 18. See also Wason 1985, 70.

[22]Hindemith 1942, 188.

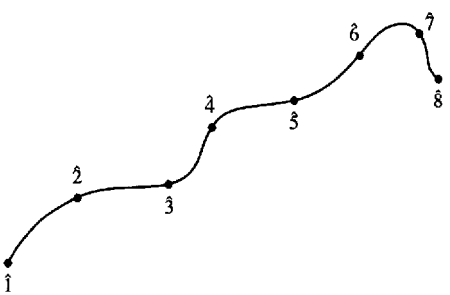
[23]Forte 1974, 12.

[24]Such "tonal gravity," also discussed in Larson 1993, clearly underlies the melodic descent of Schenker's three *Urlinien,* the necessity of which, however, has been questioned in Neumeyer 1987.

Example 7. Zuckerkandl 1956, 98. Copyright © 1956 by Princeton University Press. Reprinted by permission.



Example 8. The major mode as a "tonal terrain"

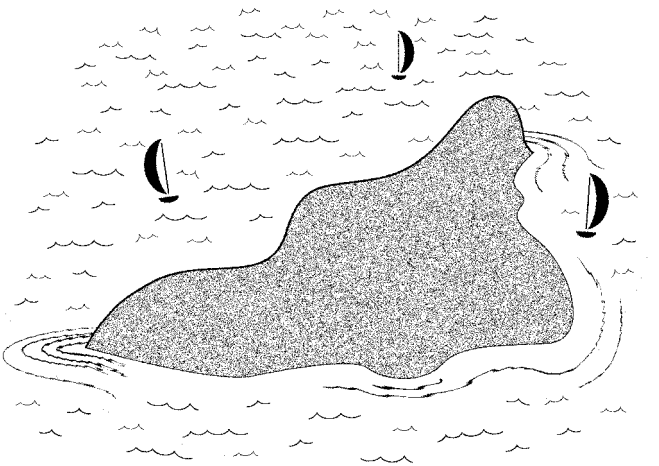


metaphor by recognizing the paradoxical nature of octave equivalence: the scale's linear progression is potentially circular (with $\hat{8}$ and $\hat{1}$ both tonics), and yet according to the precept of "obligatory register," not all tonics are created equal. The Escher-esque play with perspective in Example 9 attempts to convey these competing ideas simultaneously: by some measures, $\hat{8}$ is "higher" than $\hat{1}$, while by other measures, the two points are found to be at the same height after all, both enjoying the stable state of tonic.[25]

This model of stepwise dynamics is, to be sure, just that: a model against which to consider the reality of melody. Actual

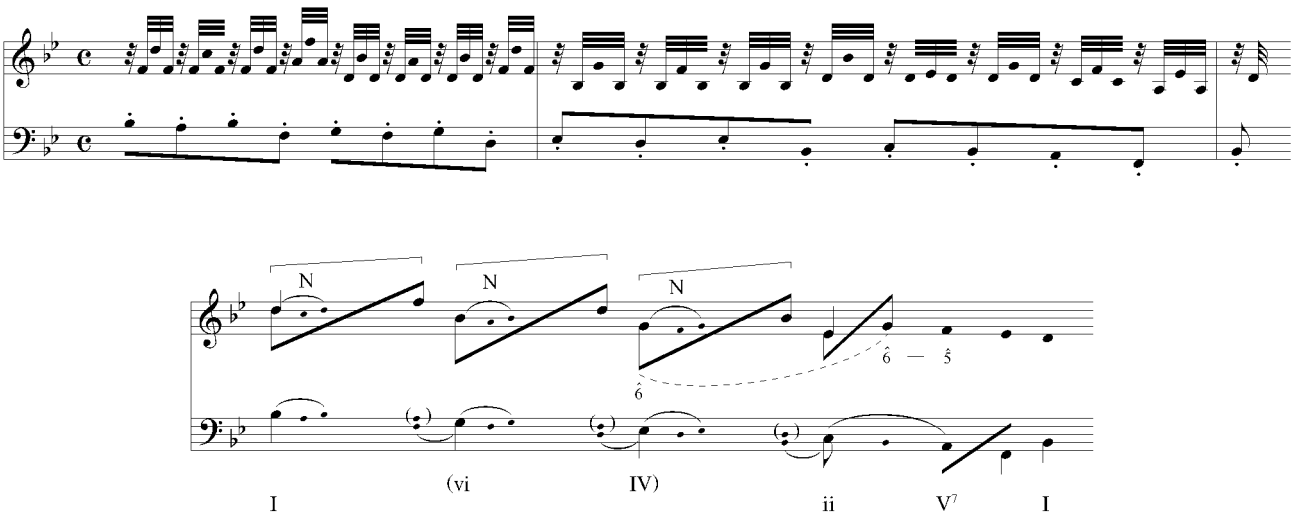
[25]The gravitational metaphor, as applied to stepwise dynamics, thus resolves a difficulty observed by Krumhansl (1990, 111): that of depicting temporal ordering in visual-spatial models of pitch-space.

Example 9. The "tonal terrain," with octave equivalence.



melodies trace circuitous routes through the scale, enlivened with leaps and all manner of delayed resolutions. Melodic behavior that diverges from the model's prescriptions may represent not a lack of cogency so much as the exercise of artistic expression. And the analyst, in comparing musical specimens to musical models, hopes to gain insights into that artistic expression. Analysis, in addressing those context-specific details that contribute to the individuality of a given piece, reveals the myriad ways that cogent melodies adhere to the spirit of the law, as it were, if not the letter. The behavior of $\hat{6}$ in m. 2 of Example 10, for instance, suggests three compositional justifications for a nonstepwise resolution of this tendency tone, illustrated in the accompanying linear reduction: (1) the continuation of an established motivic pattern ($\hat{6}$–$\hat{8}$ echoes the earlier unfoldings $\hat{3}$–$\hat{5}$ and $\hat{1}$–$\hat{3}$); (2) the ultimate recapture of $\hat{6}$ in the next beat, followed by its proper resolution to $\hat{5}$; and (3), which is related to both (1) and (2), the presence, albeit at a deeper level of contrapuntal structure, of a polyphonic melody ($\hat{6}$–$\hat{8}$ as an arpeggiation within subdominant harmony).

Example 10. J. S. Bach, WTC I, no. 21, mm. 1–3



This last factor, while the least salient of the three, is perhaps the most relevant to the current discussion, as arpeggiation may be thought to represent stepwise motion of a higher order, the ad hoc bestowal of "honorary adjacencies" upon a harmony's otherwise disjunct tones. Moreover, such honorary adjacencies may operate on a number of levels, chiefly those enumerated in Lerdahl's model of hierarchical pitch-space, Example 11.[26] Tonal distances thus become contingent upon context, for a given note's adjacencies may be an octave away (as measured in octave space), a third or fourth away (triadic space), or a second away (diatonic space). While Lerdahl fails to relate his structure to actual melodic practice (doing so would apparently require the selective transposition of each level according to the region, chord, and pitch in operation at any given time) the levels do express three basic aspects of common-practice melodic orientation, namely octave equivalence, arpeggiation, and stepwise motion. The model also formalizes the status of $\hat{6}$ which, like its upper neighbor $\hat{7}$, appears no higher than the diatonic level, but whose *lower* neighbor $\hat{5}$ appears one level higher. Both the Schenkerian understanding of melodic motion—as an idealized force within the substrate of harmony—and the concept of hierarchical pitch space help explain the relationship between stepwise and non-stepwise motion, and both will return later in provocative ways when considering a particular class of unusual motion from $\hat{6}$. First, however, it will prove useful to document and discuss the "classical" behavior of $\hat{6}$—that is, its normative role as the upper adjacency to $\hat{5}$.

[26]See also Lerdahl 1988, which includes a further level, "fifth space" to account for harmonic motion.

Example 11. Tonal pitch-spaces (after Lerdahl 1996, 343)

octave	$\hat{1}$												$\hat{8}$
triadic	$\hat{1}$				$\hat{3}$			$\hat{5}$					$\hat{8}$
diatonic	$\hat{1}$		$\hat{2}$		$\hat{3}$	$\hat{4}$		$\hat{5}$		$\hat{6}$		$\hat{7}$	$\hat{8}$
chromatic	$\hat{1}$	$\sharp\hat{1}/\flat\hat{2}$	$\hat{2}$	$\sharp\hat{2}/\flat\hat{3}$	$\hat{3}$	$\hat{4}$	$\sharp\hat{4}/\flat\hat{5}$	$\hat{5}$	$\sharp\hat{5}/\flat\hat{6}$	$\hat{6}$	$\sharp\hat{6}/\flat\hat{7}$	$\hat{7}$	$\hat{8}$

PRACTICE: CLASSICAL $\hat{6}$

TYPICAL CONTEXTS

Example 12 illustrates the conventional syntax of $\hat{6}$ by reviewing some of its typical harmonic contexts. The embellishing plagal cadence in (a) exemplifies the normative role of $\hat{6}$ in the major mode just as the dominant cadence exemplifies that of $\hat{7}$. Its chromatic sibling, the common-tone diminished-seventh chord, also finds $\hat{6}$ falling to $\hat{5}$ (b), while in another idiomatic harmonization, $\hat{6}$ dutifully descends as the seventh of a leading-tone seventh chord (c). In the case of pre-*dominant* harmony, $\hat{6}$ may rise to the leading tone (Sechter notwithstanding), but a supertonic seventh chord does necessitate $\hat{6}$–$\hat{5}$ motion to avoid doubling the leading tone, which will follow instead as the resolution of the chordal seventh, $\hat{8}$ (d). Finally, in chords applied to V, $\hat{6}$–$\hat{5}$ motion becomes $\hat{2}$–$\hat{1}$ motion (e), and, indeed, the pivot relation $\hat{6} = \hat{2}$ offers a favorite means of modulation and tonicization.

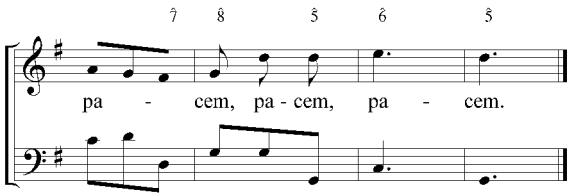
Chromatic alterations of $\hat{6}$ in major magnify its tendency to descend, for which reason a minor-tinged plagal cadence so frequently follows (and rarely precedes) a standard plagal. The use of $\flat\hat{6}$ as a rhetorical exclamation point after $\natural\hat{6}$ can even assume motivic status in the course of a theme, as in Example 13. In fact, virtually all the favorite chromatic devices within the major key, illustrated in Example 14—the Neapolitan, the diminished seventh, the minor subdominants, and the family of augmented sixths—arise at least in part from the chromaticization of $\hat{6}$–$\hat{5}$. By contrast, $\sharp\hat{6}$ in major occurs infrequently, the much-discussed theme of Beethoven's "Eroica" Symphony serving as the exception that proves the rule.

A Semantic Digression: Stemming from its position as a *de facto* scalar extremity, classical $\hat{6}$ often plays an important role in cadential formations, particularly in music of the Classic era. Encapsulating both the melodic function of descent and the harmonic function of subdominant, $\hat{6}$ catalyzes the subdominant–dominant–tonic progression traditionally associated with tonal cadences, which helps to explain why Mozart's stock cadential scales so often feature a high note on $\hat{6}$, as in Example 15. While this cadential $\hat{6}$-scale capitalizes on the $\hat{6}$–$\hat{5}$ progression, certain other cadential gestures simply highlight the contour reversal implied by $\hat{6}$'s position at the outer reaches of the major scale. In a particularly ubiquitous closural device, shown in Example 16, $\hat{6}$ is endowed with chromatic emphasis from below before descending within a subdominant arpeggiation. Finally, Example 17 illustrates another cadential cliché, a potentially awkward, but in fact idiomatic leap from $\hat{6}$ *down* to $\hat{7}$; this enterprising device represents a compromise that at once facilitates a swift return to obligatory register, accommodates $\hat{6}$'s gravitational tendency, and enjoys the stepwise connection between $\hat{6}$ and $\hat{7}$ (*modulo* the octave) while avoiding the supposedly problematic ascending "gap" $\hat{6}$–$\hat{7}$.[27]

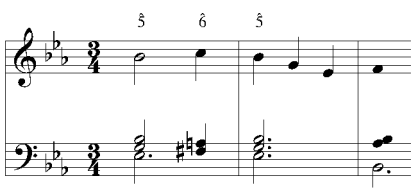
[27] $\hat{6}$–$\hat{7}$, both with and without the registral shift, may contain structural significance, as suggested in Neumeyer 1987.

Example 12. Classical $\hat{6}$: typical contexts

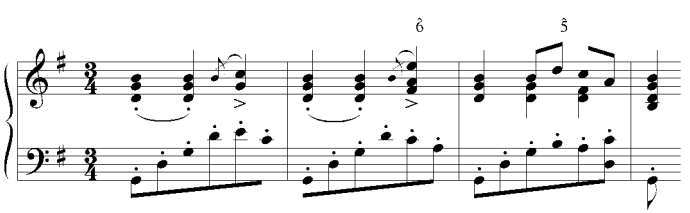
(a) Mozart, Mass, K. 49, end



(b) Mendelssohn, Symphony no. 1: ii, mm. 1–3

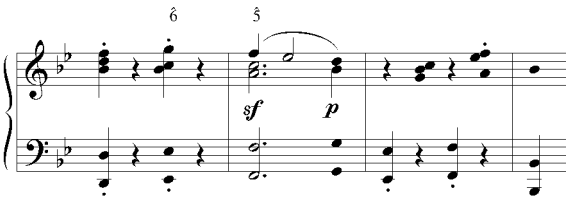


(c) Brahms, Symphony no. 2: iii, mm. 1–4

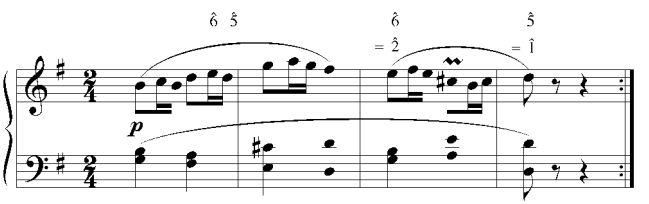


Example 12. [*continued*]

(d) Mozart, *Die Zauberflöte:* "Hm! hm! hm!" mm. 200–3



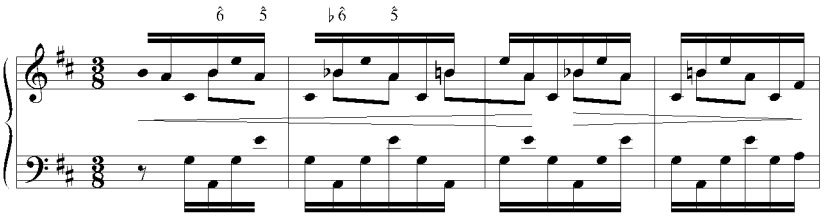
(e) Beethoven, Sonata, op. 79: iii, mm. 5–8



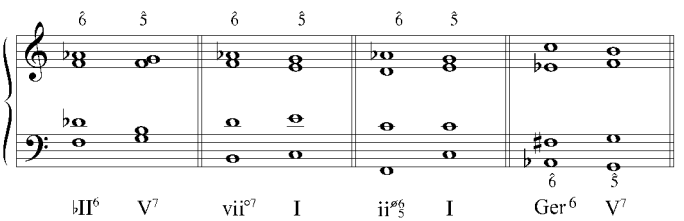
These observations regarding $\hat{6}$'s cadential usage correspond to what has been termed "introversive semiosis," a sort of interface between syntax and semantics.[28] Moving now to "external semiosis," that is, to fully *referential* meaning, an entire class of examples of $\hat{6}$ stands out: those related to pastoral and/or folk-like contexts, which can be shown to intersect with eighteenth-century nature-imagery. Example 18 gives two pastoral hexachordal melodies, presumably allusions to the limited compass of bagpipes, shepherd's flutes, and the like. $\hat{6}$ forms the upper boundary of both, and the $\hat{5}$–$\hat{6}$–$\hat{5}$ motion lends itself readily to parallel thirds, another component of the pastoral topic. Furthermore, the consonance of $\hat{6}$ over the stereotypical tonic pedal-point resonates

[28]Agawu 1991, 23.

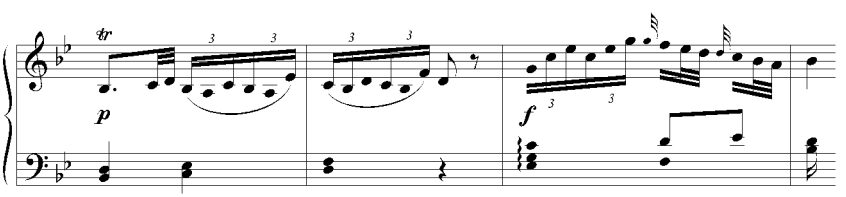
Example 13. Chopin, Prelude in D major, op. 28, mm. 1–4



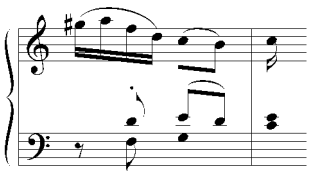
Example 14. Chromatic chords in the major key



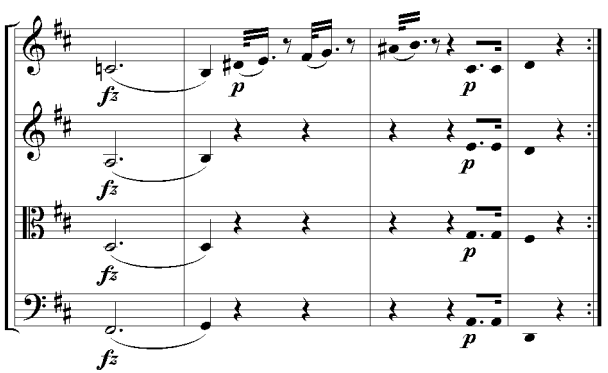
Example 15. Mozart, Sonata, K. 281: i, mm. 5–8



Example 16. Mozart, Sonata, K. 330: iii, mm. 15–16



Example 17. Haydn, Quartet, op. 50, no. 6: Minuet, mm. 6–9



with the construction of folk life as simple and carefree.[29] Perhaps related, the bare motive ($\hat{5}$)–$\hat{6}$–$\hat{5}$ (or, equivalently, the trilled $\hat{5}$) often denotes bird calls, as in Example 19, or rustic horn signals, as in Example 20.[30]

[29]Cooke describes the sixth degree as one of "pleasurable longing," and of $\hat{5}$–$\hat{6}$–$\hat{5}$ as expressing "the innocence and purity of angels and children, or of some natural phenomenon which possesses the same qualities in the eyes of men." Cooke 1959, 90, 154.

[30]Rosen has pointed out the hunting-horn allusion in Schubert's "Der Lindenbaum" (my Example 20[a]), although it was more likely the stylized horn-fifths in mm. 7–8 that caught his attention. Rosen 1995, 116.

NINETEENTH-CENTURY EXTENSIONS

In the nineteenth century, classical $\hat{6}$ appears to have grown in popularity, not least of all in its role as a pastoral signifier. The transition theme from the first movement of Beethoven's Pastoral Symphony, shown in Example 21, although hardly tuneful, reminds us of the outdoor scene with characteristic $\hat{6}$–$\hat{5}$ appoggiaturas; these appoggiaturas, incidentally, demonstrate the versatility of $\hat{6}$, in its idiomatic roles as either 6–5 over I or 9–8 over V^7.[31] Pastoral $\hat{6}$ earned a privileged position in Schubert and Schumann as a melodic or, more often, an accompanimental habit that suggests a "proto-pentatonicism." (Examples 22 and 23 show typical usages.) Example 24 conveys the pastoral in several ways: the "simple" key of F major, a trill on $\hat{5}$, and, as in the Beethoven above, a tonic arpeggio decorated with $\hat{6}$. Notice, however, that here the figuration resembles something more like an undifferentiated tonal set—the added sixth appears not as the highest note, but as part of a continuous descent. The behavior of the note itself, resolving down to $\hat{5}$, adheres to the tradition, of course, but its coloristic use displays an innovative and distinctly Romantic sensibility. Finally, no doubt related to pastoral $\hat{6}$, we also find $\hat{5}$–$\hat{6}$–$\hat{5}$ figures in the nineteenth-century *Wiegenlied,* such as shown in Example 25; the prominence of this figure in such well-known Christmas lullabies as "Josef, liebe," and "Stille Nacht" can hardly be coincidental.

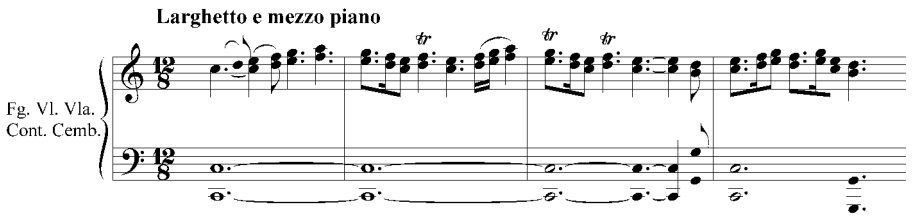
Outside of the world of the pastoral, the sweet sound of $\hat{6}$ increasingly captured composers' affections.[32] One particularly memorable instance is Example 26, where Schubert's elegant appoggiaturas open each phrase, in blithe disregard of the conventions of musical beginnings. $\hat{6}$, moreover, became a veritable hallmark of the salon and ballroom styles; waltzes of Chopin and Strauss (Examples 27 and 28) are peppered with these characteristic appoggiaturas on $\hat{6}$ (again, over both I and V^7), no doubt harking

[31]In American "Indianist" music as well, $\hat{6}$–$\hat{5}$ served as a sign of the pastoral-primitive. Pisani 1998, 240.

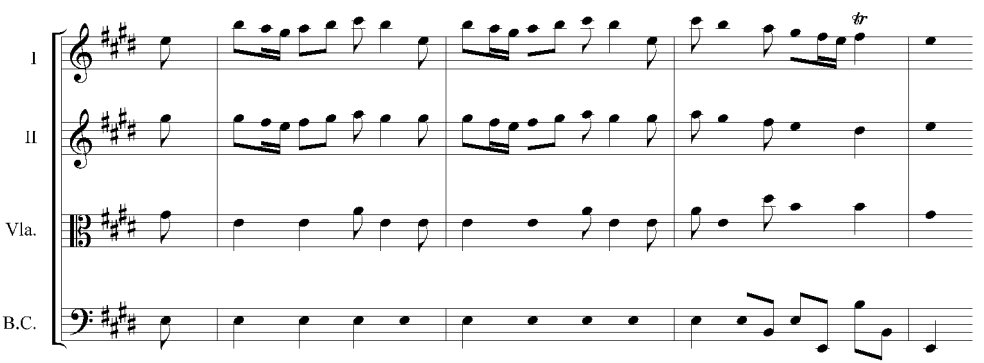
[32]DeVoto (1995) has identified an emphasis on $\hat{6}$ as characteristic of nineteenth-century Russian music.

Example 18. Hexachordal melodies

(a) Handel, *Messiah:* "Pastoral Symphony," mm. 1–4



(b) Vivaldi, *La Primavera,* mm. 7–10

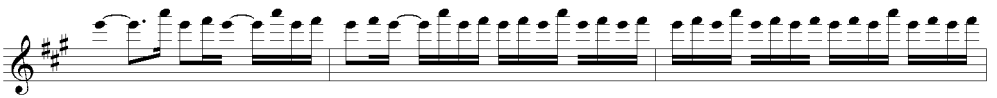


back to the spirit of folk-dance and the world of Schubert's Ländlers. The Strauss example demonstrates an increased freedom in usage—more "harmonic" than "melodic"—but an eventual resolution to $\hat{5}$ does occur. The flourishing of such added-sixth chords in the nineteenth century hardly required intensive cultivation; in reference to triadic harmony, the sixth is, after all, the only chordal additive that forms a consonance with the root. Although we cannot always distinguish between appoggiaturas and true added sixths, the two concepts are useful ones. If Examples 24 and 28 represent stepping-stones from the one technique to the other, Example 29 continues this trend, and the famous final chord in Example 30 represents its apotheosis: the added sixth chord does not resolve, but remains forever, "*ewig.*"

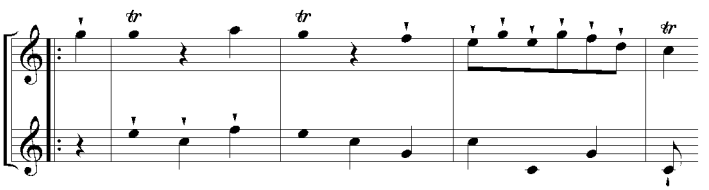
Nineteenth-century composers' seeming infatuation with $\hat{6}$, and the evolution from $\hat{6}$–$\hat{5}$ appoggiaturas to the use of additive harmony, form but two remarkable strands in the history of $\hat{6}$. An apparently unnoticed, but even more fascinating strand—$\hat{6}$'s non-classical behavior—will concern the rest of this paper.

Example 19. $\hat{6}$–$\hat{5}$ bird motives

(a) Vivaldi, Concerto in A, "Il cucu," mm. 18–20

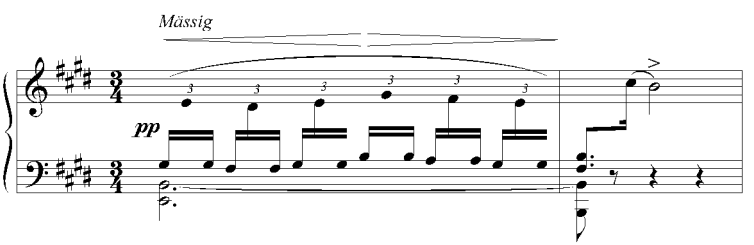


(b) Haydn, Quartet, op. 33, no. 3: ii, mm. 35–8

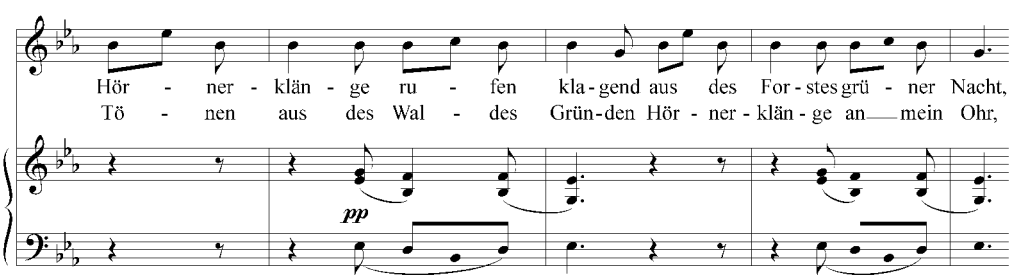


Example 20. $\hat{6}$–$\hat{5}$ horn calls

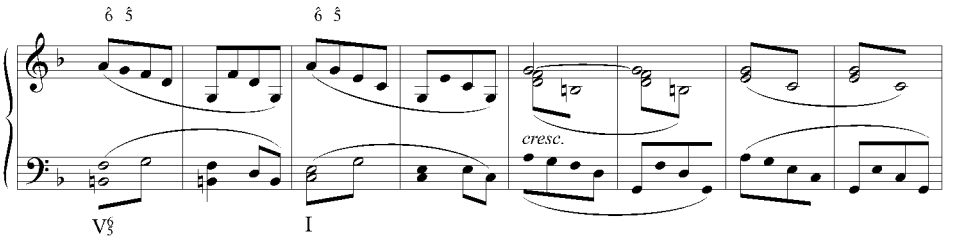
(a) Schubert, *Winterreise,* "Der Lindenbaum," mm. 1–2



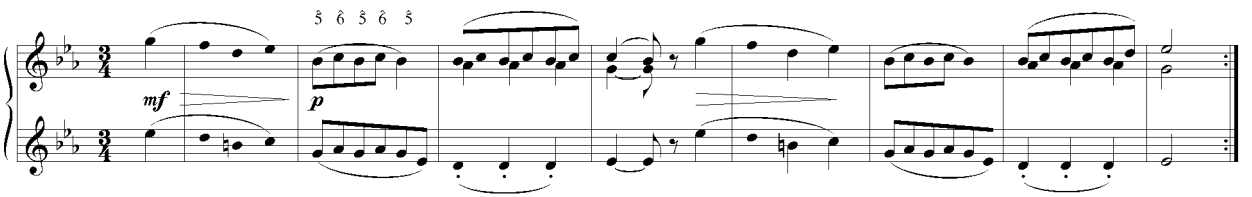
(b) Schubert, "Trost" D. 671, mm. 10–14



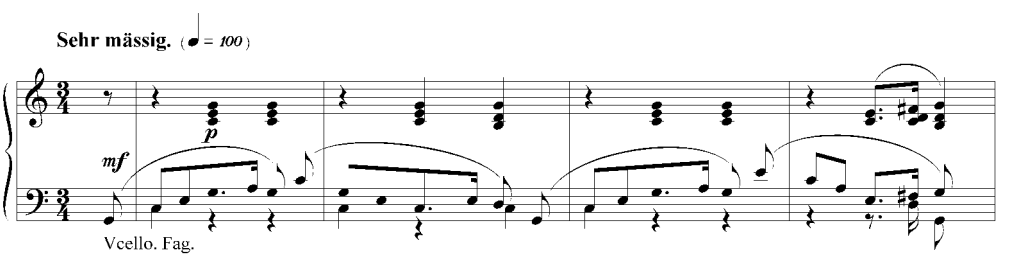
Example 21. Beethoven, Symphony no. 6: i, mm. 67–74



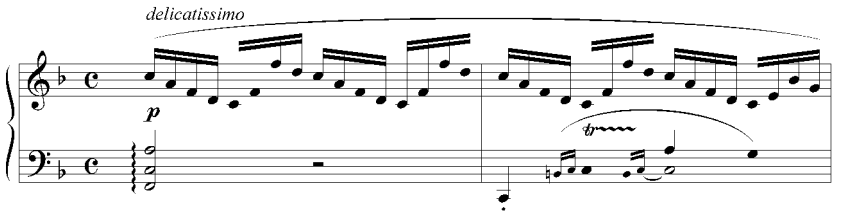
Example 22. Schubert, Ländler, D. 681, no. 8, mm. 1–8, *primo*



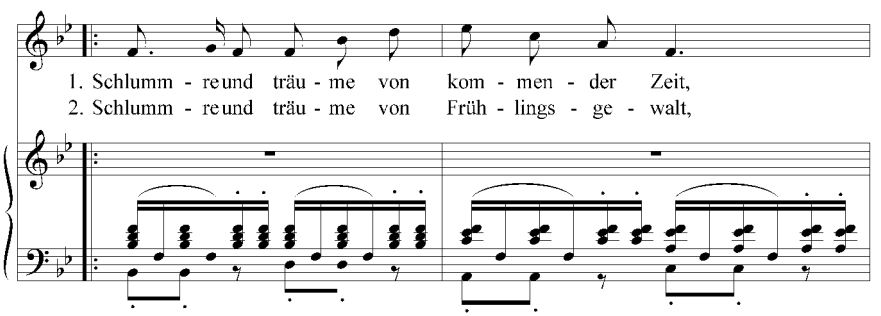
Example 23. Schumann, Symphony no. 3: ii, mm. 1–4



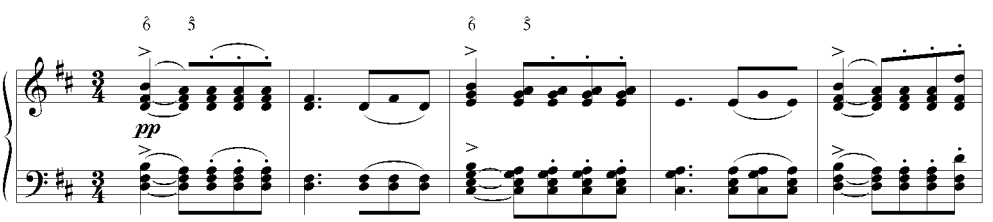
Example 24. Chopin, Prelude in F major, op. 28, mm. 1–2



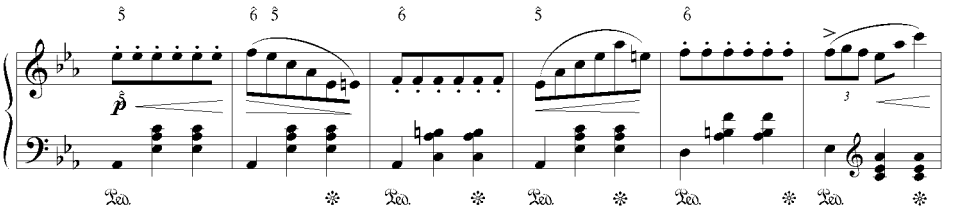
Example 25. Mendelssohn, "Bei der Wiege," op. 47, no. 6, mm. 5–6



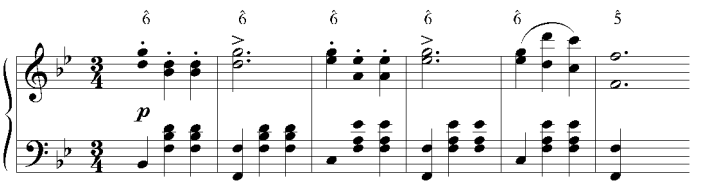
Example 26. Schubert, Sonata, D. 664: ii, mm. 1–5



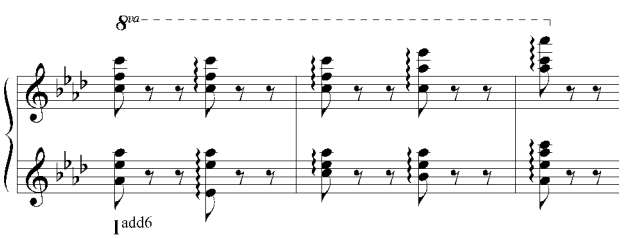
Example 27. Chopin, Waltz, op. 18, mm. 22–7



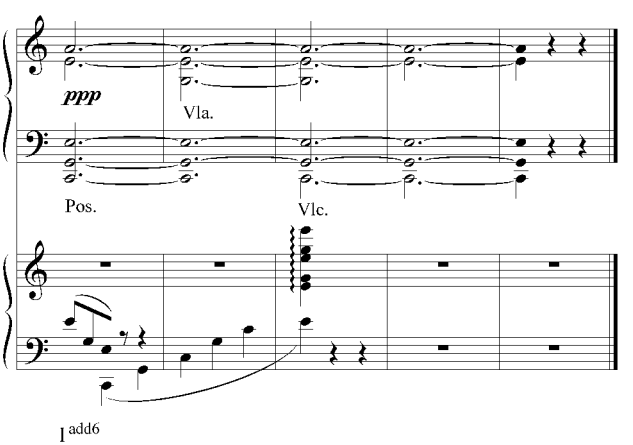
Example 28. Johann Strauss, Jr., *Donauweibchen,* no. 2, mm. 5–10



Example 29. Fauré, Barcarolle, op. 44, mm. 99–101



Example 30. Mahler, *Das Lied von der Erde:* "Der Abschied," end



PRACTICE AGAINST THEORY: NON-CLASSICAL $\hat{6}$

PRELIMINARY EXAMPLES

Ever since its premiere in 1830, Berlioz' *Symphonie fantastique* has commanded attention for its revolutionary approaches to orchestration, harmony, form, and program. One small innovation may be added to this list, a detail that appears at the very end of the first movement: a plagal cadence with melodic $\hat{6}$–$\hat{8}$ (Example 31). Although one may discern a more classical $\hat{6}$–$\hat{5}$ just below the contrapuntal surface—and the final chord, I/$\hat{5}$ encourages this (see reduction)—the foreground cadential $\hat{6}$–$\hat{8}$ represents a compositional first, as far as I know.[33] Indeed, the sampling of plagal cadences to 1830 presented in Example 32 reveals an unwavering preference for stepwise or oblique motion in the melody, whether $\hat{6}$–$\hat{5}$, $\hat{4}$–$\hat{3}$, or $\hat{1}$–$\hat{1}$.[34] This preference reflects modal norms and underscores the essentially ornamental nature of these cadences as voice-leading prolongations of tonic harmony. Nineteenth-century composers, on the other hand, embraced the leaping $\hat{6}$–$\hat{8}$ cadence as a novel and compelling gesture in its own right. Example 33 cites several instances, some of which will be discussed below.[35]

In the case of Berlioz and many others, the $\hat{6}$–$\hat{8}$ cadence embodied a uniquely Romantic spirituality: the Protestant "Amen" conflated with the minor-third shapes of Catholic liturgical intonation.[36] But the cadence is found in a wide variety of pieces that are not always explicitly programmatic, and the $\hat{6}$–$\hat{5}$ foreground connection is generally absent—both indications of the extent to which this development earned its place among the fundamentals of nineteenth-century musical procedure. A contrapuntal reduction of Example 34, for instance, would necessarily describe a connection between the melodic $\hat{6}$ and the ensuing inner-voice $\hat{5}$,[37] but this connection requires of the listener slightly more imagination than does the Berlioz (or more still than the Bach shown in Example 10). In fact, the melodic $\hat{6}$–$\hat{8}$ here acts as a salient cadential "answer" to the preceding, inversionally related $\hat{5}$–$\hat{3}$ (itself a quasi-cadential Ländler gesture, about which more will be added below). By its very nature—that of an ending—a final $\hat{6}$–$\hat{8}$ cadence will typically lack any subsequent opportunity to evince the implicit neighbor relation $\hat{6}$–$\hat{5}$. That is, short of an extension-cum-explanation (as in the Berlioz), one must *imagine* the descent to $\hat{5}$ (or settle for its fulfillment in an inner part), rather than merely await it—a not uncommon circumstance in contrapuntal music, but one that helps to gauge the congruity of theory with practice and, by implication, to gauge the expressive content of such moments.

A THEORETICAL ACCOMMODATION

The $\hat{6}$–$\hat{8}$ cadence appears to violate the "law of the shortest way," and more to the point, it complicates the conventional role of the plagal cadence as a neighbor-chord formation. In short, taking $\hat{6}$–$\hat{5}$ as our analytical "foil," we begin to observe a qualitatively new brand of deviation from that foil. Moreover, the precise nature of this deviation illustrates the potential interaction of scale

[33]To obviate any potential confusion: what I refer to in the remainder of this paper as the cadential "$\hat{6}$–$\hat{8}$" (melody) should not be mistaken for the cadential "6–8" (counterpoint) of medieval music.

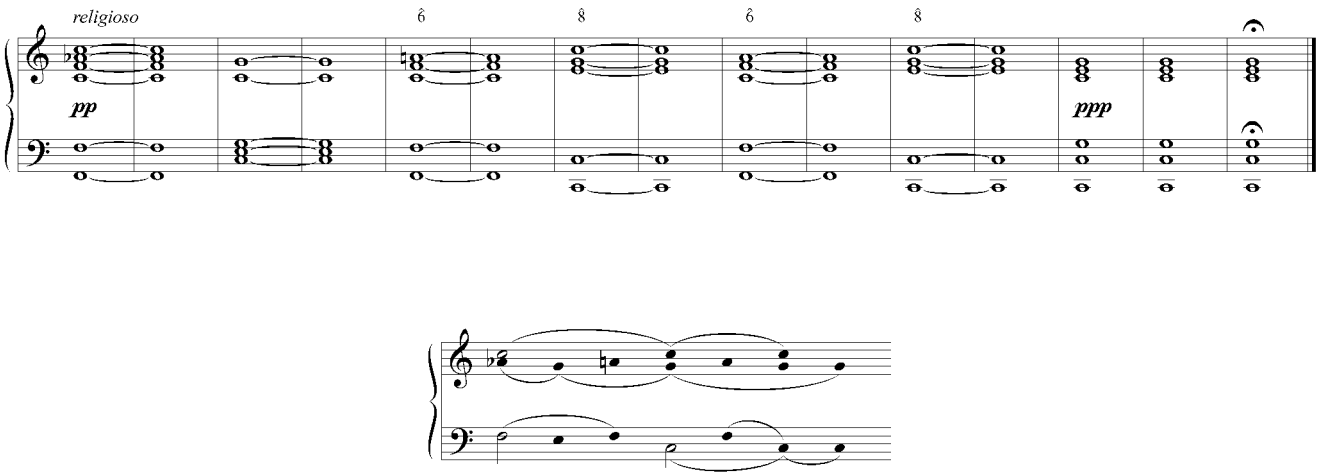
[34]All inner voices likewise display classical voice leading, with the single exception of the five-voice Handel anthem HWV 251a.

[35]Haydn and Beethoven, in their folksong settings and variations, did have occasion to write $\hat{6}$–$\hat{8}$ cadences, but while these composers assimilated certain Scottish idiosyncrasies into their accompaniments, *composed* $\hat{6}$–$\hat{8}$ does not occur, except as derived from the given tune. Unless otherwise indicated, the cadences in Example 33 appear at the end of the piece or movement cited. The list could be lengthened greatly with the inclusion of twentieth-century and popular musics.

[36]See Day-O'Connell (in progress), Chapter 3, "The Religious Pentatonic," a version of which was presented at the annual meeting of the American Musicological Society, Kansas City, 1999, as "'The Idea of the Infinite': Pentatonicism as a Religious *Topos* in 19th-Century Music."

[37]"Whatever else may be happening in a plagal cadence, one can be sure that the $\hat{6}$–$\hat{5}$ connection is being made." Harrison 1994, 91.

Example 31. Berlioz, *Symphonie fantastique:* i, end



and mode, both of which are, after all, abstractions of melody. Bearing in mind Powers' formulation quoted earlier—mode as "particularized scale"—Example 35 represents its logical extension in light of "non-classical" $\hat{6}$: scale as "generalized mode." That is, this modal novelty impels us to infer a new stratum of pitch-space alongside our existing family of chromatic, diatonic, triadic, and octave spaces, what might be called "pentatonic" or "hexatonic" space.[38] By retaining the fundamental (scalar) principle of adjacency, this model accommodates the possibility that composers actually construed $\hat{6}$–$\hat{8}$ as a veritable "step," a possibility that is born out further in examples below. Through this theoretical response to a subtle but pervasive change in practice, we thus shift focus away from implicit, unheard adjacencies and toward a new kind of adjacency.

The cadential $\hat{6}$–$\hat{8}$ offers the clearest demonstration of pentatonic space, but the "subtonic $\hat{6}$" may be implicated in non-cadential contexts as well, including the neighbor chord *par excellence,* the common-tone diminished-seventh. The progression in Example 36, for instance, frames the theme of the piece, opening

[38]With respect to the behavior of $\hat{6}$, the two are equivalent, and hence I will simply use the more familiar term "pentatonic." The $\hat{6}$–$\hat{8}$ "step," after all, embodies the chief distinction of both spaces, as the pentatonic's $\hat{3}$–$\hat{5}$ already exists in the realm of triadic space. My usage of the term "pentatonic" hence both broadens and limits the conventional usage: passages containing only the five notes of the anhemitonic pentatonic scale may nevertheless fail to qualify as "pentatonic" in the strong sense, while passages containing more than five notes may nevertheless qualify, depending on the behavior of $\hat{6}$. (This stance has been adopted also by Beveridge 1977, 26.) It is important to note, however, as have Dahlhaus (1990, 172) and others, that pentatonic space alone constitutes a system *per se,* owing to the hexatonic's "self-contradictory" disposition of step sizes. See Day-O'Connell 2001. The term "hexatonic" has recently been adopted by neo-Riemannian theorists to denote set-class 6-20[014589]. I use it in the more traditional sense to denote the $\hat{1}$–$\hat{6}$ subset of the major scale.

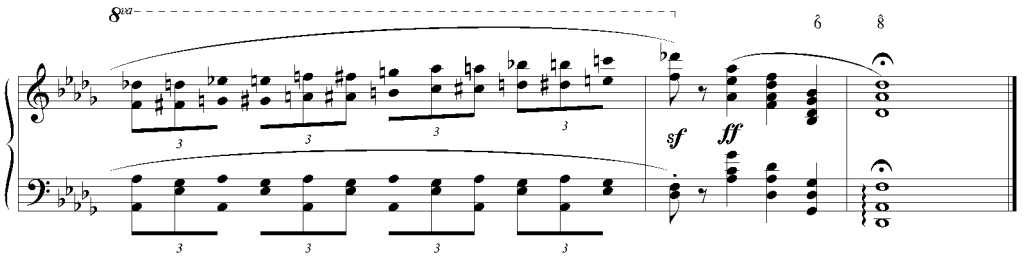
Example 32. Major-mode terminal plagal cadences to 1830

		Soprano
Arcadelt	*Ave Maria*	$\hat{1}$–$\hat{1}$
Bach	B-minor Mass, *Credo*	$\hat{4}$–$\hat{3}$
Handel	Messiah, "And the Glory"	$\hat{4}$–$\hat{3}$
	Messiah, "Lift Up Your Heads"	$\hat{6}$–$\hat{5}$
	Messiah, "Hallelujah"	$\hat{1}$–$\hat{1}$
	Anthem "O Be Joyful in the Lord," HWV 246	
	#5 "O Go Your Way"	$\hat{4}$–$\hat{3}$
	#8 "As It Was In the Beginning"	$\hat{6}$–$\hat{5}$
	Anthem "I Will Magnify Thee," HWV 250a	$\hat{4}$–$\hat{3}$
	Anthem "I Will Magnify Thee," HWV 250b	$\hat{4}$–$\hat{3}$
	Anthem "As Pants the Hart," HWV 251a	$\hat{4}$–$\hat{3}$
	Anthem "As Pants the Hart," HWV 251b	$\hat{4}$–$\hat{3}$
	Anthem "As Pants the Hart," HWV 251d	$\hat{4}$–$\hat{3}$
	Anthem "My Song Shall Be Always," HWV 252	$\hat{4}$–$\hat{3}$
	Anthem "Let God Arise," HWV 256a	$\hat{1}$–$\hat{1}$
	Anthem "Let God Arise," HWV 256b	$\hat{4}$–$\hat{3}$
Haydn	Missa brevis in F, *Benedictus*	$\hat{4}$–$\hat{3}$
	Missa brevis in G	$\hat{1}$–$\hat{1}$
Monteverdi	Vespers, SV 206, i	$\hat{6}$–$\hat{5}$
Mozart	Mass, K. 49, *Agnus Dei*	$\hat{6}$–$\hat{5}$
	Mass, K. 167, *Agnus Dei*	$\hat{6}$–$\hat{5}$
	Mass, K. 167, *Gloria*	$\hat{6}$–$\hat{5}$
	Mass, K. 192, *Agnus Dei*	$\hat{6}$–$\hat{5}$
	Mass, K. 258, *Agnus Dei*	$\hat{6}$–$\hat{5}$
Palestrina	*Missa Papae Marcelli*	$\hat{4}$–$\hat{3}$
Purcell	Te Deum and Jubilate in D, z232	$\hat{1}$–$\hat{1}$
Schubert	Mass #1 in F, *Gloria*	$\hat{6}$–$\hat{5}$
	Mass #1 in F, *Benedictus*	$\hat{6}$–$\hat{5}$
	"German Mass," D. 872b, #8. *Schlussgesang*	$\hat{1}$–$\hat{1}$
	Antiphon for Palm Sunday, D. 696, #3	$\hat{6}$–$\hat{5}$
	Antiphon for Palm Sunday, D. 696, #6	$\hat{4}$–$\hat{3}$
	Salve Regina, D. 386	$\hat{1}$–$\hat{1}$

Example 33. Plagal cadences with melodic $\hat{6}$–$\hat{8}$ (terminal, except as indicated)

Berlioz	*Symphonie fantastique,* i
	Requiem, *Introit* (mm. 164–5)
Brahms	Alto Rhapsody
Chopin	Nocturne in C♯ minor, op. 27, no. 1
	Etude in D♭, op. 25, no. 8
Fauré	Requiem, *Pie Jesu*
Gade	*Comala,* #1 (mm. 2–3)
Gounod	"Les Naïades"
	Mass in G minor, *Agnus Dei*
	Mass in C, *Gloria* (mm. 41–2)
	Requiem, *Pie Jesu*
Grieg	"Bell Ringing," op. 54, no. 6
Liszt	Missa Solemnis, *Sanctus*
	St. Cecilia (rehearsal N)
	Organ Mass, *Credo*
	"Marche funèbre"
	Hungarian Coronation Mass, *Sanctus*
	Sposalizio
Mahler	*Lieder eines fahrenden Gesellen*
Massenet	"Lêve-toi"
Puccini	Messa di Gloria, *Credo:* "Et incarnatus est"
	Gianni Schicchi, "O mio babbino caro"
Reyer	"A un berceau"
Saint-Saens	"Le matin"
	Piano Concerto no. 5, i
Schumann	Symphony no. 3, ii
Tchaikovsky	*Romeo and Juliet*
Wagner	*Lohengrin,* Prelude

Example 34. Chopin, Etude, op. 25, no. 8, end

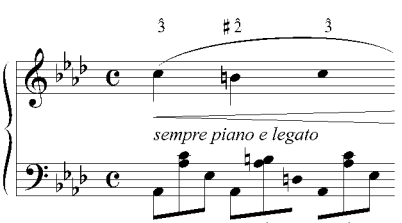


Example 35. Pentatonic pitch-space

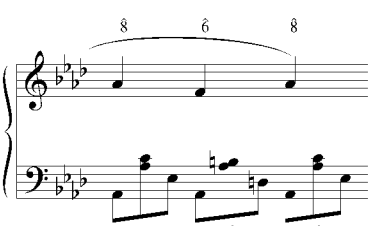
											(!)	
triadic	1̂				3̂			5̂				8̂
pentatonic/hexatonic	**1̂**		**2̂**		**3̂**	**(4̂)**		**5̂**		**6̂**		**8̂**
diatonic	1̂		2̂		3̂	4̂		5̂		6̂	7̂	8̂
chromatic	1̂	♯1̂/♭2̂	2̂	♯2̂/♭3̂	3̂	4̂	♯4̂/♭5̂	5̂	♯5̂/♭6̂	6̂	♯6̂/♭7̂	7̂	8̂

Example 36. Chopin, Nocturne, op. 32, no. 2

(a) beginning of theme (m. 3)



(b) codetta of theme (m. 10)



with a tense chromatic neighbor $\hat{3}$–$\sharp\hat{2}$–$\hat{3}$, but confirming the cadence with the relaxed pentatonic neighbor $\hat{8}$–$\hat{6}$–$\hat{8}$. Example 37(a) gives a similar common-tone progression, and although its $\hat{6}$–$\hat{8}$, like that of the previous example, appears to result from motion between two independent contrapuntal voices, a comparison with (b) reveals another factor that must have guided Schubert's decisions: the major-mode theme differs from its minor-mode prototype precisely in its inclusion of the $\hat{6}$–$\hat{8}$, suggesting that *melodic* proximity (b♮–d compared to b♭–d) provided the critical justification for the leap.[39] Furthermore, as should be expected, pentatonic space also posits the other type of adjacency, in which $\hat{6}$ is a passing tone in a $\hat{5}$–$\hat{6}$–$\hat{8}$ formation. For instance, Example 38 accomplishes a pentatonic voice-exchange: the prolongation of tonic harmony through the "stepwise" exchange of voices a "pentatonic third" apart.[40]

Such pentatonic passing tones are unremarkable and, in fact, idiomatic structures in many musical traditions, as in Scott Joplin's execution of his own "Maple Leaf Rag," transcribed in Example 39.[41] Just as Joplin can be seen as having integrated vernacular "African retentions" into his music, European composers' traversal of pentatonic space relates in part to a growing interest in music outside the sphere of modern Europe, from the plainchant revival to exoticisms both Northern (e.g., Ossianism) and Eastern (*chinoiserie*) to the extensions of pastoralism noted earlier. The various interactions of these influences with the Romantic imperative of artistic originality and the inherent possibilities of Western diatonicism produced a subtle but momentous broadening of melodic sensibility during the nineteenth century.[42]

Another Semantic Digression: Returning to the fleeting but significant $\hat{6}$–$\hat{8}$ in Example 37(a), its semantic import can be thought to derive loosely from a resemblance to "primitive" third-calls, such as street cries, Ländler cadences, or cuckoo calls. Whereas Example 40 invokes these associations plainly to express the childlike playfulness of young love, Schubert's usage is brutally ironic, exposing his protagonist's tragic naiveté.[43] Having now identified a second potential meaning for the $\hat{6}$–$\hat{8}$ gesture, the pastoral/primitive, and having thus discerned a common semantic strand between classical and non-classical $\hat{6}$, it remains to reconcile this with my first interpretation, of $\hat{6}$–$\hat{8}$ as religious. Their common *musical* derivation is clear: after all, liturgical intonation in its simplest forms serves ultimately as a call, a purposeful heightening of speech. Moreover, the *conceptual* equation of the pastoral with the spiritual, a familiar trope in Christian tradition, represents on a more abstract level an emblem of Romantic ideology. That both semantic capacities may operate simultaneously will be demonstrated in some examples below.

IMPLICATIONS

Within pentatonic space, the progressions in Examples 31, 34, and 36–40 remain neighbor or passing progressions, with $\hat{6}$ replacing $\hat{7}$ as the tonic's lower adjacency, a surrogate leading tone

[39]The improbability of the succession ♭$\hat{6}$–$\hat{8}$ is attested to by Tovey, writing on its appearance opening the first theme of Tchaikovsky's Symphony no. 5: "Great harmonic distinction is given to this theme by its first note. Those who misremember it as B [i.e., $\hat{5}$] will learn a useful lesson in style when they come to notice that this note is C and not B." Tovey [1935–39] 1981, 514.

[40]This distinctive harmonization of the Dresden Amen reflects Mahler's peculiar sensitivity to the faux-Gregorian theme. Compare Wagner's more conventional harmonization in the Grail motif of *Parsifal.* The more classically oriented "Reformation" Symphony of Mendelssohn presents only the second half of the theme—i.e., without the $\hat{5}$–$\hat{6}$–$\hat{8}$—perhaps a judgment upon non-classical $\hat{6}$ as musically and religiously "unreformed."

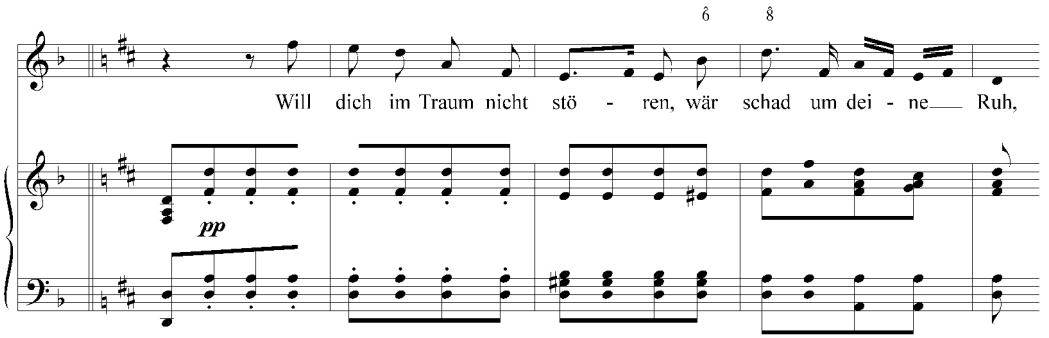
[41]Floyd & Reisser (1984, 51) have proposed an African origin for Ragtime pentatonicism. The *ossia* in Example 39 is my transcription from "Scott Joplin. 'The Entertainer'" (Biograph BCD101, 1987).

[42]Echoes of non-classical $\hat{6}$ resound throughout the twentieth century, for instance in sentimental popular songs like Rodgers' "Blue Moon" with its final $\hat{6}$–$\hat{8}$ cadence. The nineteenth-century pedigree, however, is often overshadowed by more direct influences from folk and popular musics, most notably jazz.

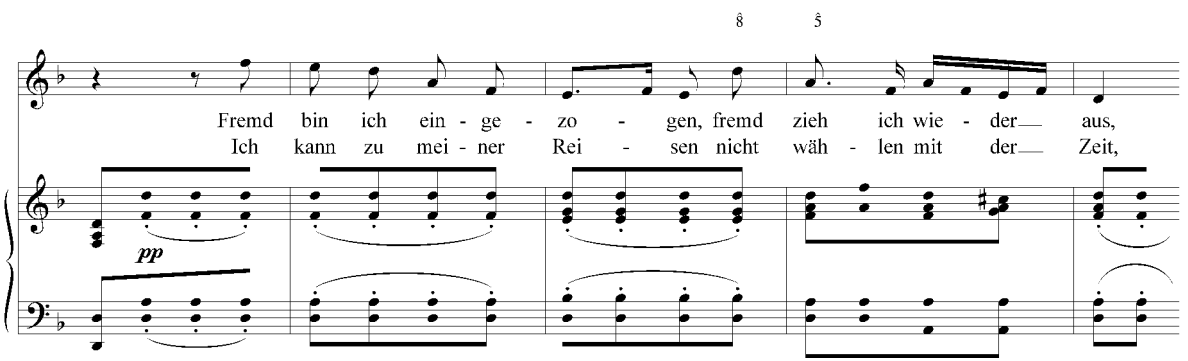
[43]A similarly ironic use of $\hat{6}$–$\hat{8}$ appears at the end of Mahler's *Lieder eines fahrenden Gesellen.*

Example 37. Schubert, *Winterreise:* "Gute Nacht"

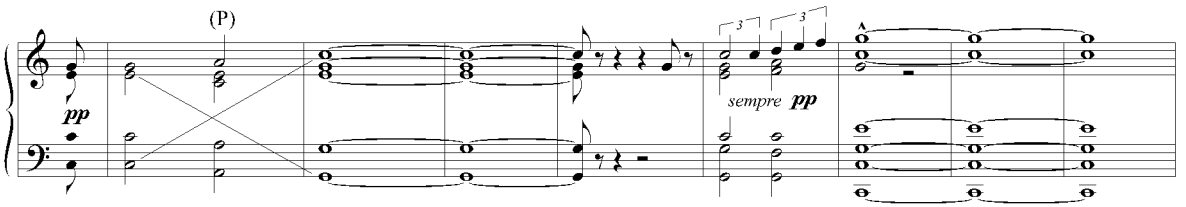
(a) mm. 71–5



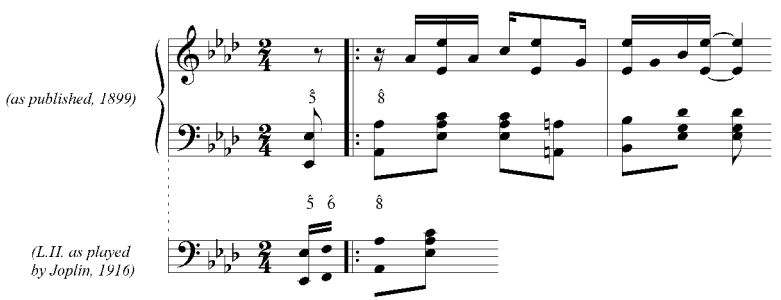
b) mm. 7–11



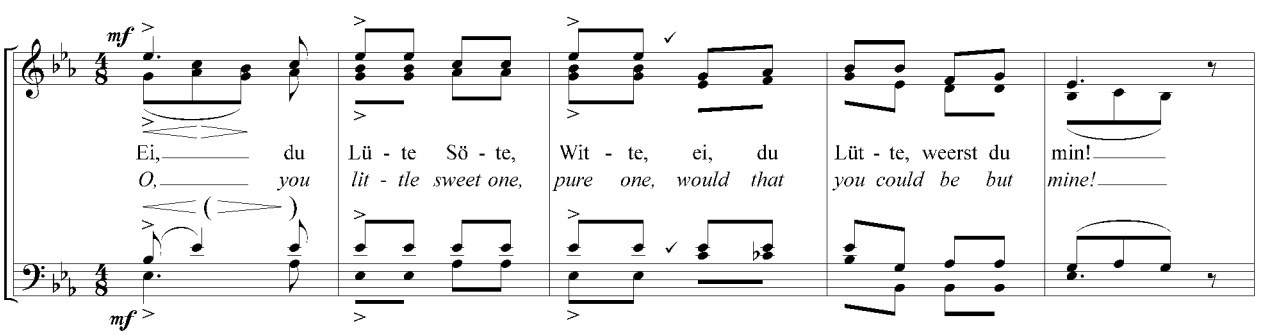
Example 38. Mahler, Symphony no. 1, rehearsal 26



Example 39. Joplin, *Maple Leaf Rag*



Example 40. Schoenberg, "Ei, du Lütte," mm. 1–5



for the "plagalists" of the nineteenth century. We have thus arrived at a curious twist in the story of $\hat{6}$, where according to conventional theory $\hat{6}$–$\hat{7}$ resembles a leap, while according to practice $\hat{6}$–$\hat{8}$ resembles a step. Of special importance in the emergence of non-classical $\hat{6}$ are its various implications in the realms of harmony, rhetoric, and structure.

Plagal Empowerment: $\hat{6}$–$\hat{8}$ cadences embody a decidedly stronger version of the classical plagal cadence, a means of "compensation" for the otherwise static quality of these progressions.[44] The voice leading in the classical plagal, with its parallel motion of $\hat{6}$–$\hat{5}$ and $\hat{4}$–$\hat{3}$, and the absence of any motion to the tonic, produce a somewhat pale harmonic effect by comparison.[45] The relative strength, then, of the "plagal leading tone," particularly its introduction of both contrary motion and motion to the tonic, proves useful in accomplishing modulations, as seen in Example 41. Furthermore, $\hat{6}$–$\hat{8}$ implies a unique harmonic progression: whereas $\hat{6}$–$\hat{5}$, $\hat{4}$–$\hat{3}$ and $\hat{2}$–$\hat{1}$ may each suggest *either* plagal or dominant cadential harmony, $\hat{6}$–$\hat{8}$ determines plagal closure unambiguously, precisely analogous in this regard to the authentic closure of $\hat{7}$–$\hat{8}$.[46] In this way $\hat{6}$–$\hat{8}$ satisfies the principle of "redundancy," one of Leonard Meyer's conditions for stylistic stability.[47] The implications of this property manifest themselves at the beginning of Mahler's Fifth Symphony (Example 42), when an unharmonized $\hat{6}$–$\hat{8}$ negotiates a dramatic tonal shift to A major.[48] Not unrelated, the migration of $\hat{6}$–$\hat{8}$ to the bass represents another significant development, in the "quasi-progression" vi–I: notwithstanding the two common tones, a vague sense of progression, and even of cadence, is possible. Example 43 employs such a progression, one in which we also find $\hat{6}$ at the intersection of the pastoral and the religious. The *Dies irae* from Liszt's Requiem ends with a series of bass $\hat{6}$–$\hat{8}$ progressions (Example 44), the closest thing to a structural cadence anywhere in the movement.

Harmonic Innovation: Perhaps most important among its harmonic implications, melodic $\hat{6}$–$\hat{8}$ allows for a new cadential harmonization—namely, the use of $\hat{2}$ as the bass of the plagal harmony without the threat of parallel fifths, yielding ii–I and ii^7–I cadences, which became increasingly common in the nineteenth century. One instance was seen in Example 41 above, and another is shown in Example 45. By using the $\hat{6}$–$\hat{8}$ cadence here, Puccini foregrounds the allusive nature of the text as both a childish plea ("babbo") and a solemn prayer ("pietà"). Composers' endorsement of the ii–I progression consummates the gradual divergence that I have described between practice and theory. That is, through its own inherent possibilities, $\hat{6}$–$\hat{8}$ came to renounce its very origins; by rendering the underlying classical $\hat{6}$–$\hat{5}$ analytically inadmissible, these cadences illustrate the unfilial tendencies often latent within style-history.

The "Picardy sixth": Beyond its consequences for the history of harmony, the emergence and acceptance of $\hat{6}$–$\hat{8}$ also gave rise to rhetorical possibilities in the opposition of pentatonic with chromatic. Especially when juxtaposed with $\flat\hat{6}$ mixture, the upward-leaping $\natural\hat{6}$ generates an extraordinary effect, what might be called the "Picardy sixth." Example 46, for instance, expresses an overwhelming sense of catharsis from the cadential reversal of the $\flat\hat{6}$–$\hat{5}$ motion: $\flat\hat{6}$ is "redeemed," or "lifted up," first through its reinterpretation as $\sharp\hat{5}$, and then as $\natural\hat{6}$ rises to $\hat{8}$. The device functions in two distinct semiotic modes: in addition to its direct evocation of liturgical chant, and thereby of spiritual matters, it serves as a tonal metaphor of heavenly deliverance, a seemingly

[44]The term "compensation" is Deborah Stein's (1983, 166); her discussion of the subdominant, however, fails to consider the possibility of $\hat{6}$–$\hat{8}$.

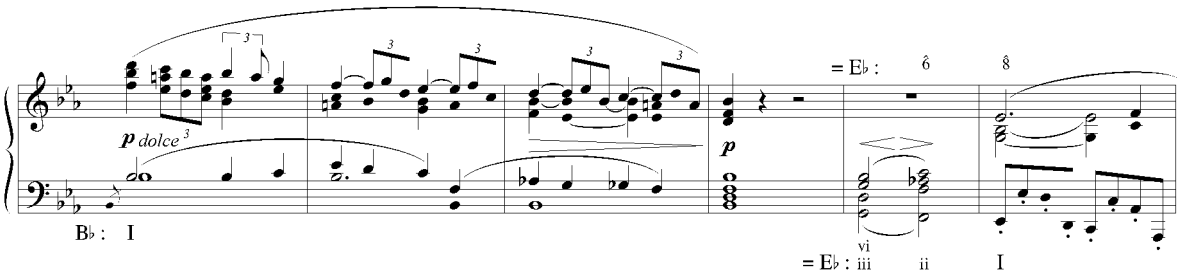
[45]The less common ii$_{(5)}^{6}$–I/$\hat{2}$–$\hat{1}$ does contain melodic motion to the tonic, albeit parallel motion; more often the upward "resolution," $\hat{2}$–$\hat{3}$ will obtain.

[46]"This resolution [$\hat{7}$–$\hat{8}$] could itself imply a harmonic progression V–I; for this reason the leading note may be thought of as the most characteristic melodic scale degree" (Sadie 2001). Admittedly, even $\hat{7}$–$\hat{8}$ tolerates a seemingly "mixed" chord such as vii$^{ø4}_{3}$ or vii$^{o4}_{3}$ (as discussed in the Dvorak below), but in general, cadential $\hat{7}$–$\hat{8}$ presupposes dominant-tonic motion.

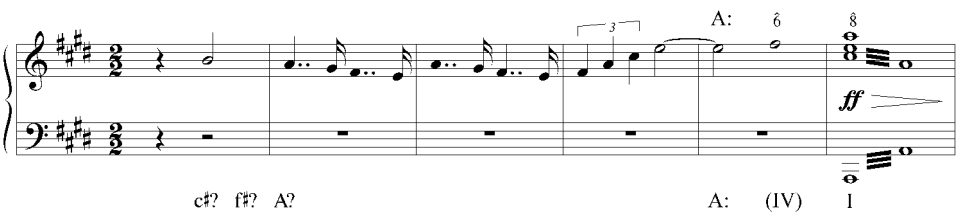
[47]Meyer 1989, 140.

[48]For another salient, unharmonized $\hat{6}$–$\hat{8}$, see the end of Liszt's Hungarian Coronation Mass, *Sanctus*.

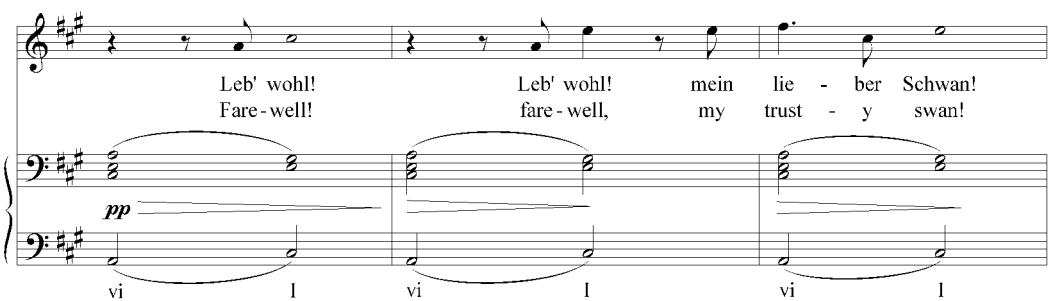
Example 41. Brahms, *Schicksalslied,* mm. 64–9



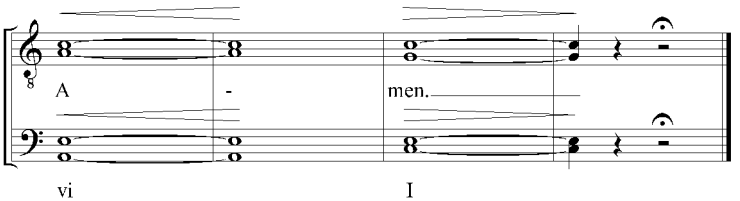
Example 42. Mahler, Symphony no. 5: i, mm. 9–14



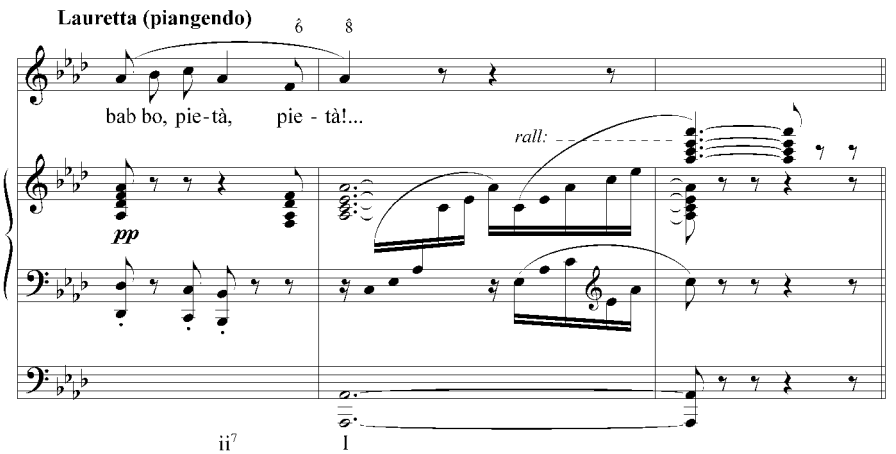
Example 43. Wagner, *Lohengrin,* Act I, Scene iii, mm. 42–4



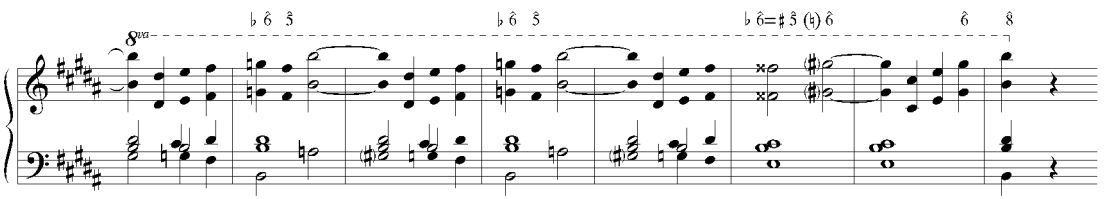
Example 44. Liszt, Requiem: *Dies irae,* end



Example 45. Puccini, *Gianni Schicchi:* "O mio babbino caro," end



Example 46. Tchaikovsky, *Romeo and Juliet,* mm. 517–24



miraculous act reversing $\flat\hat{6}$'s tendency to fall.[49] In addition to this well-known example, both the *Symphonie fantastique* and the Liszt Requiem also feature the Picardy sixth; it is a more widespread phenomenon than might be suspected.[50]

Structural Resonances: Example 47 shows a simple antecedent-consequent period with a straightforward "interruption structure" based on a pentatonic lower-neighbor, demonstrating non-classical $\hat{6}$'s potential relevance to phrase structure. If $\hat{6}$ sometimes acts as a subtonic cadential agent in its own right—taking the place of $\hat{7}$, the very cornerstone of common-practice tonality—then what deeper structural consequences might follow? The Largo of Dvorak's "New World" Symphony provides an illustrative case study, as the cadences in this movement exhibit an unorthodox approach to closure. The three cadences of the A section of this ternary form, shown in Examples 48(a), (b), and (c), trace a progressive shift away from authentic closure toward plagal closure, even as each successive cadence assumes greater structural weight. The $\hat{6}$–$\hat{8}$ cadence in Example 48(c), which proves to be the signature cadence of the movement, receives a ii^6_5–I progression to close the section. Depending on one's perspective, then, the cadence (d) near the end of the piece—a leading tone analogue of this signature cadence—may be heard either as a long-overdue, greatly anticipated return to classical norms of scalar behavior, or as a disruption of an idyllic pentatonic sound-world. According to the first interpretation, the $\hat{6}$–$\hat{8}$ gap represented all along a curious anomaly mercifully filled in by the all-important leading tone, and the structurally required dominant discharge prevails, notwithstanding its unusual form as a $\mathrm{vii}^{\circ 4}_{3}$. In the second interpretation, this inverted diminished-seventh chord stands as a dissonant substitute chord, necessitating the gesture of continuation embodied in the elided oboe and violin lines, and true closure arrives only with the unharmonized $\hat{6}$–$\hat{8}$ cadence at the end of the excerpt; a structural plagal cadence would thus emerge, a token of Dvorak's Arcadian pentatonicism.[51]

CONCLUSIONS: HEARING THE SUBTONIC $\hat{6}$

In the absence of the leading tone, will a competent listener, conditioned to expect that leading tone, welcome a $\hat{6}$–$\hat{8}$ cadence as merely the next best thing? Will the specter of $\hat{6}$–$\hat{5}$ haunt such a cadence, creating that quintessentially Romantic sense of openness which "reverberate[s] in the silence of subsequent time"?[52] Or can intra-opus considerations actually lead one to revise one's tonal understanding to such a degree as to accept $\hat{6}$–$\hat{8}$ unconditionally? In short, to what extent, and under what circumstances can a listener negotiate between the pentatonic and the diatonic strata of pitch space given in Example 35?

These rhetorical questions beg the delicate matter of musical ambiguity: I believe that the incongruity between $\hat{6}$–$\hat{8}$ as a "pentatonic step" and a "diatonic third" confronts the listener as a musical-interpretive problem, for which I hesitate to offer a single solution.[53] Notwithstanding its increasing currency in the nineteenth century, $\hat{6}$–$\hat{8}$ challenges common-practice norms only from the margins. Nevertheless, the legitimacy of the subtonic $\hat{6}$ certainly benefits from its analogy to $\hat{7}$, and it benefits as well from the

[49]Both of these functions involve "iconic" (i.e., depictive) processes, though the latter mode seems less direct in its signification, presupposing as it does the more or less arbitrary notions of melodic "ascent," and of tonal gravity, as well as the (less arbitrary) correlation of chromaticism with tension.

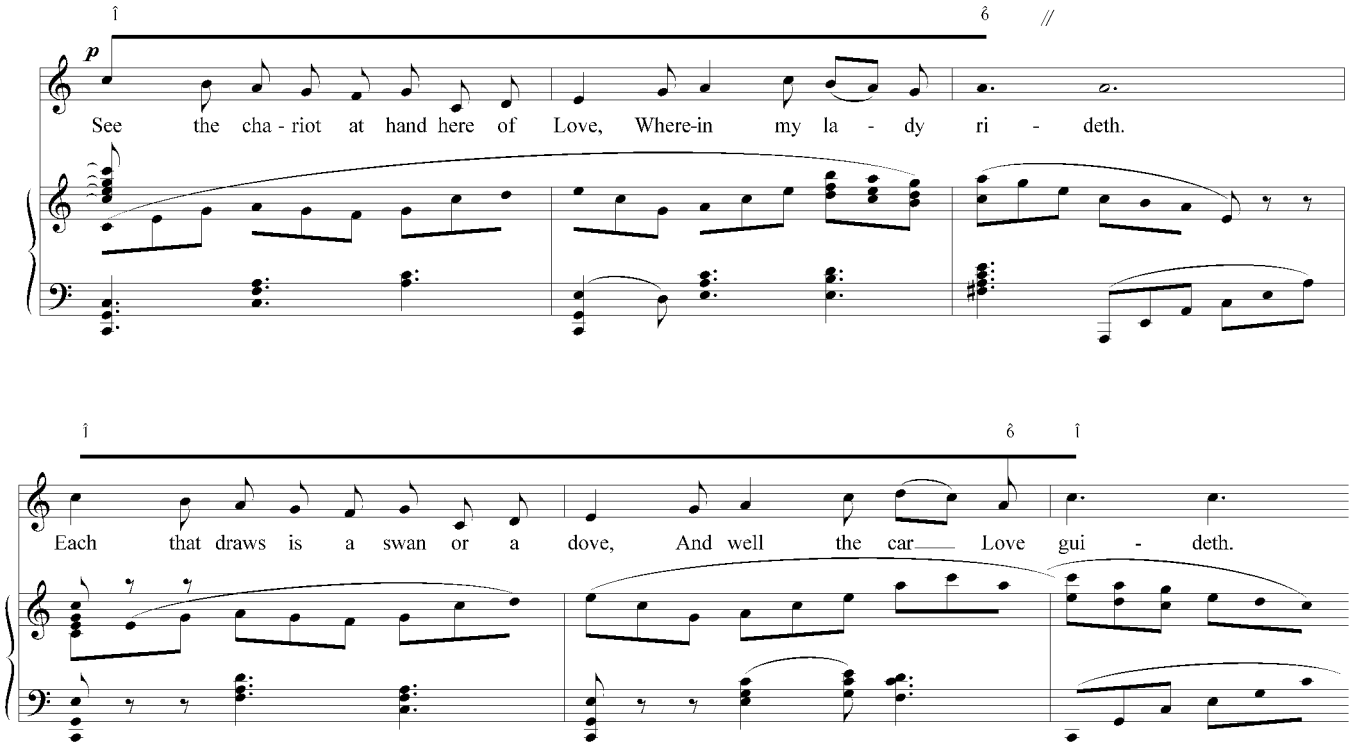
[50]The Picardy sixth in the Berlioz occurs in the fifth measure of Example 31; in the Liszt, it occurs in m. 492, nine measures before the beginning of Example 44.

[51]The notion of a structural plagal cadence is, of course, patently heterodox. Schoenberg (1954, 14), for instance, writes, "plagal cadences . . . are only a means of stylistic expression and are structurally of no importance." This widespread view, although justified in the vast majority of cases, surely needs further qualification with respect to the late nineteenth-century repertoire.

[52]Meyer 1973, 117.

[53]According to Agawu (1994), such "ambiguity" exists only in the mind of the lazy analyst. In my view, this position arises from a needlessly "strong" definition of analysis.

Example 47. Ralph Vaughan Williams, "See the Chariot at Hand," mm. 4–9

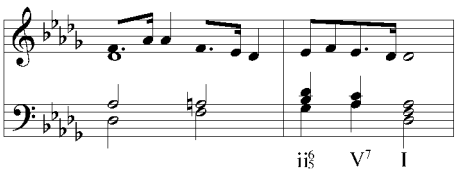


ambivalent status of the minor third as a leap—thirds, for instance, are the only leaps in Fuxian counterpoint that do not call for melodic reversal. And while $\hat{6}$–$\hat{8}$ forms the larger of the two types of pentatonic "steps" (i.e., three semitones versus the two spanning $\hat{6}$–$\hat{5}$), and hence violates the "law of the shortest way" even in pentatonic space, the size-ratio between the two steps is relatively moderate in the pentatonic system (3:2 in semitone units) compared to the diatonic (2:1), implying a commensurate reduction in the force of this law.

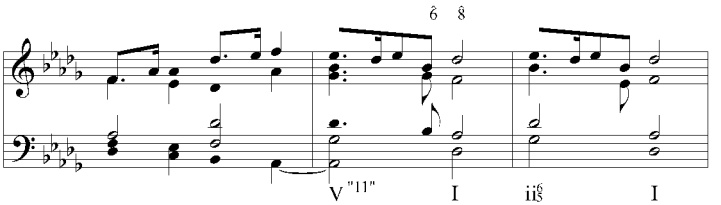
On a more fundamental level, the acceptance enjoyed by $\hat{6}$ as a subtonic alternative to $\hat{7}$ in nineteenth-century Western art music raises the provocative question of "naturalness" in music. Although in our present intellectual climate we regard "naturalness," "universals," and "absolutes" as constructions, we do so too hastily—too "absolute-ly"—for there is often reason to judge some phenomena less constructed than others, and scale degrees offer an interesting case. The semitone, after all, boasts less of a claim to acoustical pertinence than does the third. Moreover,

Example 48. Dvorak, Symphony no. 9: *Largo*

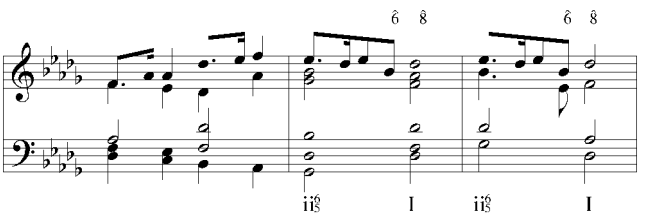
(a) Cadence of first period (mm. 9–10)



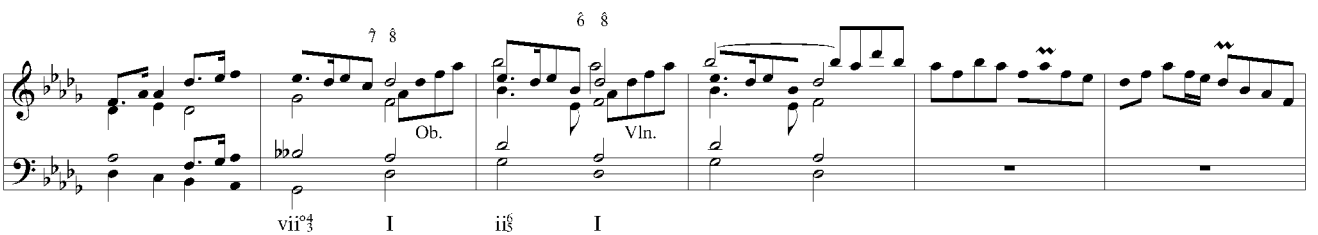
(b) Cadence of first paragraph (mm. 17–19)

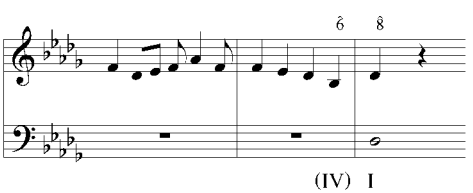


(c) Cadence of A section (mm. 34–40)



(d) Final cadences (mm. 113–21)





ethnomusicologists, in discerning a musical "common denominator" of our species, cite "music that uses only three or four pitches, usually combining major seconds and minor thirds."[54] Indeed, the apparent suitability with which the bare minor third executes quasi-speech interjections—its "logogenic" status as "the basic singsong interval,"[55] whether among children, sports fans, street vendors, or marching soldiers (see Example 49)[56]—raises the possibility of a connection between the $\hat{6}$–$\hat{8}$ cadence and Leonard Meyer's principle of musical "acontextualism" in the nineteenth century.[57] That is, beyond the obvious ideological attractiveness of "primitive" musical structures to the Romantic sensibility, it is conceivable that these structures satisfy deeper psychological or anthropological principles that themselves explain composers' affinity to non-classical $\hat{6}$.

In any case, the story of $\hat{6}$ in the nineteenth century may ultimately amount to little more than a footnote in a larger story, namely that of plagal harmony. But while $\hat{6}$–$\hat{8}$ may be primarily a symptom of a shift in harmonic sensibility, an inevitable experiment by plagal-loving composers in search of new possibilities, the melodic dimension still offers a unique perspective in the historiography of tonal music. For while the nineteenth-century tonal palette became crowded with all fashion of chromatic "color"—rampant applied leading tones, modal scales, symmetrical divisions, and enharmonic trap-doors—the bald omission of a note from the common major scale represented a quiet counter-revolution, waged only intermittently, perhaps even unconsciously, by many of the same composers who ultimately brought common-practice tonality to its moment of greatest crisis.

[54]Nettl 2000, 468.

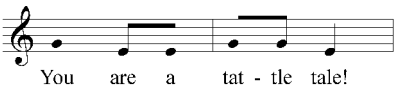
[55]Ringer 2001, 363.

[56]Alper (1992, 247) refers to the descending minor third as the "universal chant of childhood," though with no further discussion or citation. For the use of the minor third among sports crowds, see Heaton 1992.

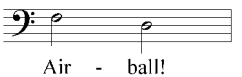
[57]Meyer (1989, 167) describes nineteenth-century music as characterized by "acontextualism," in which "inheritance was to be replaced by inherence."

Example 49. "Speech thirds"

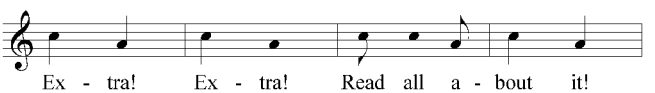
(a) from Campbell (1998, 18)



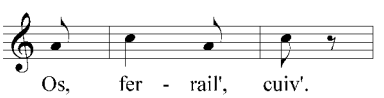
(b) from Heaton (1992, 81)



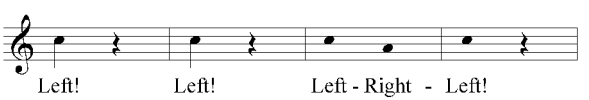
(c) author's transcription



(d) from Massin (1978, #277)



(e) the author's transcription



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ABSTRACT

This paper examines the history of the major-scale submediant ($\hat{6}$) in both theory and practice. The melodic style of the nineteenth century exhibited an increasingly freer interpretation of scale-degree tendency, which included a subtle but highly significant development in the treatment of $\hat{6}$, suggesting a quasi-adjacency to the upper tonic. The implications of this "non-classical $\hat{6}$," which extend to the realms of harmony, rhetoric, meaning, and even formal structure, constitute an essential aspect of the history of common-practice music.