

Metrical Displacement and  
Metrically Dissonant Hemiolas

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Like many metrically dissonant idioms, hemiolas can go by almost unnoticed (when they contribute only a touch of spice which the composer adds to the metrical *mélange*), or they can call so much attention to themselves that they bring the composition to a near halt.<sup>1</sup> Example 1, from the Courante of Handel's E major keyboard Suite, illustrates the first, fleeting kind of hemiolic emphasis.<sup>2</sup> In this excerpt, the hemiola is highly compatible with its surroundings. During the cadential progression in bars 6 and 7, neither the design nor the rhythms of the right hand's passagework alter the ternary articulation they

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<sup>1</sup>This article addresses issues I did not bring up in my three earlier studies of the hemiola: "The Two-Length Bar Revisited: Handel and the Hemiola," *Göttinger Händel-Beiträge*, Vol. 4 (1991; henceforth Willner 1991), "More on Handel and the Hemiola: Overlapping Hemiolas," *Music Theory Online*, Vol. 2.3 (March, 1996; Willner 1996e), and "Handel, the Sarabande, and levels of Genre: A Response to David Schulenberg," *MTO* 2.7 (November, 1996; Willner 1996d). See these articles for bibliographical citations of other studies of the hemiola, and for my division of hemiolas in the tonal repertoire into *cadential hemiolas*, *contraction hemiolas*, *expansion hemiolas*, and *overlapping hemiolas*. I shall return to these divisions at the end of the present essay.

<sup>2</sup>Much like Handel's other courantes, this is actually an Italianate corrente, but since Handel retained the French title, I have opted to do the same. This is common practice in the Handelian literature.

had established and maintained throughout bars 1-5. Only the bass carries a hemiolic suggestion: On the third beat of bar 6 and on the first beat of bar 7 it introduces a pair of falling thirds which contradicts the Courante's 3/8 meter (see the square brackets in Example 1). Completing the contradiction, the pair of falling thirds reaches the dominant on the second beat of bar 7. The hemiola that the bass projects is consequently fairly obvious, but at the Courante's rapid tempo, and covered by a relatively thick texture in the upper voices, it goes by almost unnoticed. This is a particularly understated but hardly unusual realization of the standard *cadential hemiola*.<sup>3</sup>

The cadential hemiola in bars 43 and 44 of the Gigue from Bach's E minor English Suite, by contrast, completely disrupts the momentum which the Gigue had built up during its first reprise (Example 2).<sup>4</sup> Here the hemiola is quite incompatible with its surroundings: It replaces the Gigue's perpetual motion of running scalar sixteenths with sustained chordal eighths that span almost the entire range of both hands. The disjunctive miniature silence that the hemiola's eighths introduce is remarkable on many counts; there is nothing quite like it among the many movements of Bach's dance suites. I shall return to that hemiola's disruptive complexities at the conclusion of this article, after we've had the opportunity to

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<sup>3</sup>See Willner 1991 for a detailed account of cadential hemiolas.

<sup>4</sup>This, too, is an Italianate movement, more a giga than a gigue, but again it is best to retain the title by which the piece is best known.

assess the degree of metrical dissonance our hemiolas maintain, and to redefine the durational nature of that dissonance.

Most cadential hemiolas fall somewhere in between the two extremes portrayed by Handel's Courante and Bach's Gigue. Quite apart from the thematic, textural, and registral adjustments by which they are announced, there is an ever-fluctuating complex of durational alterations and emphases in the foreground that accompanies them too.<sup>5</sup> On the face of it, these alterations seem obvious: Most hemiolas of the common-practice period only superimpose a group of three "twos" over a group of two "threes" (see Examples 1b and 2b). But in doing so they inevitably contradict the larger metrics and rhythms of the piece, not just those of their immediate surroundings.<sup>6</sup>

The hemiola's prominence, and the extent to which it is worked out as a compositional issue, depends on the generic, stylistic, and inventive circumstances set up by the piece. Its contradiction of the notated meter is not always as simple or as obvious as it appears to be. Many eighteenth-century instrumental compositions in triple meter, sometimes even minuets and sarabandes, feature long-range metrical displacement that is occasioned by apparent upbeat or by

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<sup>5</sup> In this study I include only cadential hemiolas. For detailed accounts of other types of hemiola (such as expansion, contraction, and overlapping hemiolas), see Willner 1991, 1996d, and 1996e, with further references.

<sup>6</sup> In a recent article, Richard Cohn defines the hemiola as follows: "When a span of time is trisected in place of an anticipated bisection, a *hemiola* is said to occur." See Cohn 2001, p. 295.

genuine afterbeats. When such displacement takes place across long spans of time, the hemiola's relation to the composition's metrical structure quickly grows in complexity. This growth is reflected in the effect of *metrical dissonance* conjured up by the hemiola—the disagreement between the music's announced meter and the temporary but concurrently running meter or metrical idiom suggested by the hemiola. When displacement occurs, the hemiola grows in complexity as well.<sup>7</sup>

In this paper I shall deal with the extent to which hemiolas, which often follow the notated meter regardless of surrounding displacements, retain their built-in, grid-locked metrical dissonance in the face of the long-range displacements surrounding them. Having described the local circumstances under which these hemiolas operate, I shall examine the long-range durational roles they play within the larger metrical scheme of the piece. The displacements in question are the typically Baroque displacements that move the composition's effective, *thematic* meter by one or two beats to the right or to the left. We shall find, surprisingly perhaps, that what is clearly a metrically dissonant hemiola at the

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<sup>7</sup>The notion of metrical dissonance was introduced (as rhythmic dissonance) by Hector Berlioz and legitimized in North American music theory by Charles Seeger; for a more comprehensive account, see Harald Krebs, *Fantasy Pieces* (Krebs 1999), pp. 13-18.

My approach to the metrical dissonance of hemiolic idioms does not contradict the approach of Cohn, Krebs, or any other author, but it focuses on aspects of metrical dissonance that are different from those pursued in earlier studies.

Among other important explorations of metrically dissonant hemiolas that have recently appeared are Lewin 1981, Rohr 1997, Kurth 1999, and McLelland 2004.

surface can in the long run, at least conceptually, be regarded as something of a durational consonance. To keep the discussion within manageable bounds, the issue of metrical displacement will be covered only to the extent that it impinges on the relative consonance or dissonance of the hemiola. The focus of the paper will be the significance of the hemiola's larger metrical status.<sup>8</sup>

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In what way is the hemiola metrically dissonant? Reviewing Example 1, we can see how one measure of 3/4 is "underposed" below two measures of the Courante's 3/8. Reviewing Example 2, we can see how one dissonant measure of 3/4 replaces two of the Gigue's 3/8 measures altogether. Despite the switch to 3/4 time, the Gigue's 3/8 remains operating in our minds, at least subliminally.<sup>9</sup> In both examples, the disagreement between 3/4 and 3/8 constitutes the metrical dissonance of the hemiola. The long-range displacement I just mentioned, which we shall encounter later on, often sets this dissonance in sharp relief.

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<sup>8</sup>Particularly good general accounts of metrical displacement in early eighteenth century music can be found throughout Ido Abravaya's highly detailed dissertation, "Studies in Rhythm and Tempo" (Abravaya 1999 and 2006), in Agmon 1991, and in Grave 1985 as well as Burkhart 1994. I deal with the relation between meter, pacing, and displacement systematically in my dissertation, chapters 2 and 3.

<sup>9</sup>As a matter of history and genre, both the minuet and the sarabande contained built-in hemiolic contradictions. Minuets were notated in 3/4 but danced in 3/2; sarabandes, generically, had their second beat stressed. See especially Russell 1972 and McKee 1999.

Now even in the absence of displacement, the built-in dissonance of any hemiola would appear to be considerable. The hemiola resets the durational clocks of the two measures it spans, altering each measure in a different way, one measure right after the other.<sup>10</sup> The altered metrics in bars 10-11 of Example 3a, from the Sarabande of Handel's E minor keyboard Suite, illustrate. The first hemiolic measure, that is bar 10, has its first and third beats emphasized at the expense of the Sarabande's topical second-beat *counterstress*.<sup>11</sup> The second hemiolic measure, bar 11, has its second beat overemphasized at the expense of the downbeat, which is glided over. At the level of the two-bar segment in 3/4 time, bar 10—whose first and third beats are emphasized—consequently emerges as a strong measure and bar 11—whose second beat alone is emphasized—emerges as a weak measure. Example 3b displays this reinterpretation.

The strong-weak metrics of the hemiola consequently appear to contradict the 1 2, 1 2 and the 1 2 3 4 strong-weak, strong-weak metrics of bars 9-12, the four-bar group in which it occurs; see again Example 3a. Yet the hemiola does not

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<sup>10</sup>In 6/8, 12/8, and 6/4 time the hemiola of course occurs within the measure and resets the durational clock of that measure.

<sup>11</sup>Counterstress may be defined as any type of accent—durational, agogic, textural, registral, or even contrapuntal or harmonic—that falls on a relatively weak beat. It was introduced by William Rothstein in "Beethoven with and without *Kunstgepräg*" (Rothstein 1995a), p. 167; for an article-length study, see Willner 1998.

throw the Sarabande's quadratic metrics out of whack: The layered nature of the metrical system maintains the entire situation in aural perspective. Without in any way changing the grid's standard accentuation patterns, the hierarchy allows the hemiola to add its own conflicting layer of strong-weak onto the Sarabande's layer of weak-strong, which is built into the metrics of the phrase where the hemiola occurs.<sup>12</sup>

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Things become more complicated whenever afterbeat patterns prevail. Many pieces in triple meter begin in earnest only on the second beat of the measure, and their motives, segments, phrases, and periods consequently all end on the first beat of their measure. This potentially confusing setting takes advantage of the downbeat's accentual and cadential prominence in order to signal closure rather than to signal beginning. As a matter of idiom, the afterbeat patterns often displace the entire piece by one beat to the right, yet they leave the notated metrical structure alone, preserving it intact. Instead of working against the notated meter, they work in concert with it, superimposing the displaced design—the displaced *thematic meter*—over the notated meter, and over the pre-

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<sup>12</sup>The adjectives strong and weak are commonly associated with the downbeat of the measure they describe, but the downbeat's relative strength or weakness infiltrates the entire measure. I thank Justin London (private communication) for this formulation.

established metrical grid.<sup>13</sup> Example 4, a schematic preview of Example 5, illustrates.

Example 5, from the opening Largo of Handel's E minor Concerto Grosso, Op. 6, No. 3, presents an afterbeat displacement that is closely worked right at the outset. The entrance of the displacement is quite emphatic, and so is the entrance of the later, corresponding displacements that permeate the entire piece. A low-pitched, declamatory E, played by the 'cello and the bassi, announces the notated meter in theatrical fashion. This E is the *pedal call*, a metrical ploy frequently summoned up in both the duple and the triple meters to displace the thematic meter at the opening of the piece by a beat (say, a quarter note), two beats (a half note), three beats (a dotted half note), a fraction of a beat (an eighth or a sixteenth), or even a fraction of two beats (three eighths). In this instance, the half-note pedal call shifts the thematic meter by a half note to the right (given the 3/2 time signature). That is where the entire ensemble begins its discourse in earnest, introducing the Largo's first antecedent-like phrase. Three bars long, the phrase closes at the downbeat of bar 4.<sup>14</sup>

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<sup>13</sup>The most detailed studies of afterbeat patterns in early eighteenth century music are Abravaya 1999, 2004, and 2006 and my dissertation. Earlier studies include Rothstein 1989 (especially pp. 29-30 and 50-51) and Agmon 1991 (pp. 65-66). Important studies of end-accenting are Temperley 1996 and 2003, as well as Rothstein 2005 and de Ghizé 2006.

<sup>14</sup>Like several slow movements throughout Handel's Op. 6, this Largo is replete with three-bar groups. In other largos from Op. 6, three-bar groups alternate with two-bar groups as a matter of course (see, for instance, the Largo of



The concertino's two solo violins open the consequent-like second phrase, also three bars long, on the second beat of bar 4. The consequent is displaced in just the same way as the antecedent, and it closes at the downbeat of bar 7. Less than a measure after their second entrance, at the downbeat of bar 5, the two solo violins begin to describe a typical cadential hemiola. Unlike the thematic meter, the meter of the long hemiola is not displaced: The hemiola enters at the downbeat, and it extends from the beginning of bar 5 through to the last beat of bar 6. Thus superimposed on the notated meter, the hemiola is particularly expressive because the two violins' high solo lines rise well above those of the ripieno, and as they do they introduce a brilliant new texture, namely parallel thirds. The new texture's effectiveness is enhanced many times over by the hemiola's amplified metrical dissonance—by its concurrent disagreements with both the notated meter and the displaced thematic meter.

As it happens, there is more to the hemiola and its metrical dissonance here than meets the eye—or the ear—during a casual reading. Example 5b depicts the complexities of bars 5 and 6 schematically; Example 5c clarifies them with a relatively straightforward durational reduction by a factor of 2. The reduction is

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Op. 6, No. 5).

For excellent accounts (using different terminology) of the pedal call see Abravaya 1999, 2004, and 2006, as well as Rothstein 2005 and especially Hogwood 2005 (pp. 105-6).

helpful inasmuch as it simplifies the metrical texture of the entire passage, rendering its temporality transparent.<sup>15</sup> It shows how, for the duration of two beats, the entrance of the hemiola in bar 5 allows the downbeat of the notated 3/2 meter to assert itself as a beginning downbeat, rather than as a closing downbeat. (This assertion of the downbeat differs markedly from the assertion of the downbeat at the end of segments and phrases which, as I emphasized earlier, is the *raison d'être* of afterbeat displacement in general.) Under the circumstances, the hemiolic emphasis on the third beat of bar 5, which follows, works not only against the notated downbeat of 3/2, but against the displaced downbeat of the (displaced) thematic meter. That downbeat, which had been established in bars 1-4, was to have fallen on the second beat of bar 5, but it is now overridden by the hemiolic emphasis on the third beat. In bar 6, by contrast, the accented hemiolic alteration does fall on the second beat and does agree with the thematic meter. The alteration consequently overturns only the notated meter, and by agreeing with the thematic meter it sets the stage for the return of the (displaced) thematic meter in bar 7. That is to say, the two violins' hemiolic accent on the second beat of bar 6 serves, fortuitously, as preparation for the re-entrance of the tutti and their thematic meter one measure hence.

On the whole, the hemiola in this instance, notwithstanding the metrical

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<sup>15</sup>For an introduction to durational reduction see Schachter 1980/1999b. I discuss the application of durational reduction to early eighteenth-century instrumental music in Willner 1998.

independence it asserts, aligns its metrics more closely with the notated meter than with the displaced thematic meter. Indeed, its metrics ultimately reinforce the durational boundaries of the notated meter, and they do so in no uncertain terms. Aurally and visually, the hemiola reminds us of those boundaries' existence, even as it contradicts both the established and the thematic accentuation patterns of the two measures it spans.<sup>16</sup> By reminding us of those boundaries it underlines the tacit but fairly tight control that the notated meter—despite the competing, movement-long displacement of the thematic meter—exerts on the entire Largo.<sup>17</sup> If the displaced thematic meter quickly becomes the principal meter of the Largo, then the notated meter—riding on the strength of the pedal call and the echoes of the pedal call throughout the piece—acts as a kind of shadow meter.<sup>18</sup> It is the tension between the two meters that holds the metrics of the Largo together. The hemiola plays the role of mediator between the two meters, agreeing first with the

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<sup>16</sup> Not to mention the relative strength and weakness of the two measures.

<sup>17</sup> Carl Schachter (private communication) relates that even with the pedal call announcing the displacement so vigorously, one still hears the notated meter underlying the thematic meter throughout. The pedal call, after all, provides a very strong notated downbeat, and the downbeats that follow are heard as its satellites (some, to be sure, more conspicuously so than others).

<sup>18</sup> *Shadow meter* is a term coined by Frank Samarotto (1999a and 1999b) to describe an unnotated meter that competes with the notated meter without usurping its hegemony.

NB: It would be perfectly legitimate to hear the notated meter as the principal meter (with the pedal call as its reinforcing agent), and to hear the displaced thematic meter as the shadow meter.

notated meter (bar 5), then with the displaced meter (bar 6).

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And so it is that with the help of a strategically placed hemiola the proverbial conflict between solo and tutti comes into its own very early in Handel's Largo—unexpectedly so, perhaps, because no event of substance has yet had a chance to take place and to evolve into a musical narrative. But still greater conflicts can arise right at the outset when an upbeat incipit, backed up by corresponding figures in succeeding measures, enters the picture. In 3/4 time an upbeat is likely to occupy a quarter note (or, in some pieces, a dotted quarter note)<sup>19</sup>, and to attach to many of the motives and themes throughout the movement.<sup>20</sup> To be sure, the upbeat may well be overridden later on (at least temporarily) by motivic formations that contain no upbeat. But if it is persistent enough, and if it is fully supported by the harmonic design, the upbeat can suggest and eventually carry out a wholesale displacement of the design by a quarter note (or a dotted quarter note) to the left, in just the same way that the afterbeats in Handel's Largo displaced the design by one beat—a half note—to the right. And the displacement which the upbeat may bring about can easily amount to afterbeat

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<sup>19</sup> More accurately, a quarter note plus an eighth.

<sup>20</sup>For a brilliant account of the upbeat's tendency to hang on to the piece and the consequences of its persistency see Heinrich Schenker, *Free Composition* (Schenker 1935/1979/2001, paragraph 295.

displacement that has shifted the piece by two beats to the right.<sup>21</sup> Either displacement again superimposes a displaced thematic structure, with a displaced thematic meter, on the notated meter, without usurping it, just as the displacement in Handel's Largo did. Once afterbeat displacement has been established, the original upbeat becomes what I call an *apparent* or *internal*, or even *simulated* upbeat; McLelland (2004) calls it a *gestural* upbeat.

The celebrated Passacaille from the Eighth Ordre of the François Couperin's Pièces de clavecin allows Couperin to explore many of the metrical conflicts and contradictions inherent in this idiomatic upbeat setting (Example 6).<sup>22</sup> Such contradictions, I hasten to add, never become ambiguities because the layers of the metrical grid remain clearly articulated: The notated meter ultimately operates at a level of structure deeper than that of the displaced meter.

The four-bar refrain of Couperin's Passacaille begins on a quarter-note upbeat that is completely supported by the tonic. Right at the outset, this third-beat tonic posits the likelihood of displacement. The string of heavy-set rolled chords that follows wavers, undecided, between notation and displacement. On

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<sup>21</sup>Harald Krebs points to the seemingly nebulous distinction between the two displacements (preferring, as I do, the displacement by one quarter note to the left) several times in *Fantasy Pieces* (Krebs 1999). The lower left of Example 6 shows how the displacement to the left originates with afterbeat displacement to the right vis-à-vis Arthur Komar's "bar 0"; see my "Bar 0 and the Suppressed Hyperdownbeat," at this Site.

<sup>22</sup>I say "celebrated" because its influence on the last movement of Brahms's Fourth Symphony is well known. See Pascal 1989, p. 237.

the one hand, the thematic parallelism between the rising thirds  $f\#^1-g\#^1-a^1$  and  $g\#^1-a\#^1-b^1$ , outlined by the rolled chords in bars 1 and 2, emphasizes the notated meter. On the other, the built-in introductory figures  $a^1-g\#^1$  and  $b^1-a\#^1$  (which bridge the junctures of bars 1-2 and bars 2-3 and link the rising thirds), enlist the support of chromatic passing tones in the bass and place the third beat of each rising third in *sforzato*-like relief. If nothing else, the third beat gains a good deal of counterstress thereby. Heinrich Schenker referred to such introductory upper-voice figures, which show a remarkable capacity for motivic enlargement and thematic networking, as *reaching-over* figures (see the curly brackets in Example 6).<sup>23</sup> In Couperin's Passacaille, the second reaching-over figure is enlarged across the entirety of bar 3.

Despite the brevity of the four-bar refrain, Couperin finds a variety of ways with which to help the third-beat counterstress in bars 1 and 2 reduplicate the emphasis that accrued to the opening upbeat, if at cost. The second counterstress, on  $b^1$  at the end of bar 2, quickly loses its independence: It turns out to be part of a hemiola that the rolling right-hand chords outline (see the middle brackets atop Example 6). The hemiola, which begins at the downbeat of bar 2, first agrees with the notated meter. At the third beat of bar 2, however, it shifts its agreement: It now reinforces the counterstress of the Passacaille's

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<sup>23</sup>Schenker1935/1979/2001, paragraphs 129-134 and 231-232.

characteristic upbeat figure and of the emerging, displaced thematic meter.

Through this shift in allegiance the hemiola now underlines and reaffirms the prominence of the displacement suggested by the opening upbeat.

Only in bar 3 does the hemiola encounter accentual resistance. The closing hemiolic stress falls on the mid-register  $c\#^1$  at the second beat, while the principal registral emphasis is reserved for the elongated reaching-over figure's  $b^1$ , which falls on the third beat. The prominence of  $b^1$  reminds us of the Passacaille's potential upbeat displacement and prevents the hemiola from erasing the effect of displacement. It also sets the stage for the reintroduction of the displacement and the repetition of the Passacaille's refrain at the end of bar 4. The "structural downbeat" of bar 4, by emphasizing the refrain's closing two-beat tonic, now completes the preparations for the refrain's repetition and for the return of the harmonically supported upbeat on the third beat of the measure.

Each of the refrain's four measures, then, projects metrical dissonance in its own highly characterized way. The first measure contradicts the displacement suggested by the opening tonic upbeat through the emphasis it places on the notated meter; the second measure, thanks to its hemiolic design, supports and then contradicts the notated meter, emphasizing (up to a point) the displaced, thematic meter; and the third measure, whose principal hemiolic emphasis accrues to the falling leap expressed by each hand on the second beat, contradicts both the notated *and* the displaced thematic meter at one and the same time, while keeping

the thematic meter hanging by a thread through the delayed emphasis on b<sup>1</sup>.

Although in the long run the hemiola does much to balance and clarify the multi-directional metrics of the refrain—as we go along it will become increasingly clear why that is so—locally it carries the refrain's metrical dissonance to the point of saturation. Such saturation could probably not be sustained for the length of a complete piece, not Couperin's *Passacaille* nor any other balanced piece of music, for that matter.<sup>24</sup> And indeed, of the eight couplets that follow only two—the first and the seventh—continue to suggest quarter-note displacement to the left (Example 7). The remaining couplets offset and gradually release the durational tension that accumulates with the repetition of the metrically dense refrain by asserting a much more common and more familiar type of displacement—afterbeat displacement by one beat to the right (Example 8). This is essentially the same idiomatic displacement we encountered in Handel's *Largo* (Example 5).

Because the hemiola begins as a rule at the notated downbeat rather than at the thematic downbeat—there are exceptions, but they require a separate study<sup>25</sup>—it can serve here as the common denominator that links the metrics of the refrain to the changing metrics of the *Passacaille*'s couplets. It connects the

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<sup>24</sup>On accentual saturation and its limitations see chapter 3 of my dissertation, Example 3.8 and the attendant discussion (pp. 220-21), as well as chapter 5 of Frank Samarotto's dissertation (Samarotto 1999b). Leonard Meyer (1956) has written perceptively on saturation in music in more general terms.

<sup>25</sup>For instance, in the Menuet from Haydn's *Symphony No. 104 in D*, after the double bar, at the upper strings' (and, later, violas') repeated notes (bar 20,



refrain both to the couplets that displace by one quarter note to the left and to the couplets that displace by one quarter note to the right. The annotations in Example 9 show how the second hemiolic counterstress at the end of the third couplet (a couplet that displaces on to the second beat, to the right), prepares for the re-entrance of the refrain (which displaces on to the third beat, to the left), two measures hence: The hemiolic accent cancels out the third couplet's displacement and – since it occurs on the third beat of the measure – it prepares for the reentrance of the refrain. The couplet and the refrain have the hemiola in common, and to a certain extent it is the hemiola that mediates between their diversely displaced metrics. Here the hemiola serves not so much as a common denominator but rather as a kind of pivot figure, what one might call a metrical stilt. (The mere occurrence of a strong hemiola that follows the notated meter also prepares for the return of the refrain since it brings to mind one of the refrain's principal metrical gestures.)

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By turning to the more familiar afterbeat displacement of one quarter note to the right during long stretches of the Passacaille, Couperin takes advantage of the notated meter, and in more ways than one. I mentioned earlier, in connection with Handel's Largo, how amicably the notated meter and the idiomatic one-beat displacement to the right co-exist; they operate, quite literally, side-by-side. All

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beat 3, to bar 24, beat 2).

couplets that have been displaced by a quarter note to the right conclude, as a rule, on the notated downbeat, which takes up one beat. Those displaced by one quarter-note to the left also close at the notated downbeat, but they require that the closing chord be extended for two beats. The shorter, one-quarter-note closing chord of quarter-note displacement to the right—unlike its two-quarter-notes counterpart—can be abbreviated in many ways: Its length can be shortened to an eighth, a sixteenth, or—equally common—to a dotted eighth. That in turn opens the door to alterations in the character of the downbeat, making it possible for a metrically contrasting passage, one that does follow the notated meter to enter at the downbeat and overlap with the closing chord. Example 10 shows schematically how this familiar accentual and thematic overlap comes about in the course of the sixth couplet, which is reproduced later in Example 12. Note how many different types of hemiola Handel calls upon to create the transformation (Example 10a). These include *incidental* and *contrapuntal* hemiolas that derive from various degrees of accentual emphasis offered by the voice leading and the design.

Seizing the opportunity to reinterpret the emphasis that accrues to the closing downbeat as the emphasis that accrues to a true opening downbeat, Couperin turns the Passacaille's metrics on their head several times by treating the notated downbeat, briefly, as the thematic downbeat for brief stretches (for instance, in bar 9 of the sixth couplet; see the lower system of Example 12).

During these short stretches Couperin activates the notated meter (just as does when he allows the refrain's hemiola to uphold the notated meter in its defiantly independent and metrically dissonant way). Couperin's occasional assertions of the notated meter, different from each other though they are, become closely related when it emerges that the hemiola's simultaneous activation and contradiction of the notated meter—as if it were purposely bringing it into the metrical arena just in order to pick a fight with it—is no isolated phenomenon. It ties in closely with other metrical fluctuations that occur throughout the Passacaille. I shall return to this issue and its ramifications in the closing pages of this essay.

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Five measures into the fourth couplet, Couperin entrusts each hand with a different but complementary metrical role (see the arrows and brackets in Example 11). At first, both hands reaffirm the couplet's quarter-note afterbeat displacement to the right. Soon, however, the right hand begins to emphasize the downbeat at two-bar intervals. So demonstrative is that emphasis that the right hand *almost* adopts the notated meter. The left hand, by contrast, although it comments imitatively on the right hand's initiative at the distance of one measure, nonetheless maintains the displaced meter (Example 11). This is but the first step in the Passacaille's metrical problematization.

At the aforementioned assertion of the notated meter, nine measures into

the sixth couplet (following a similarly imitative alternation between the hands as well as a good deal of hemiolic dissonance), Couperin brings all activity to a halt, as if he were throwing the Passacaille into a *séance* (Example 12); note how the bass falls from the sustained tonic's B in bars 7-8 to a low G in bar 9. For the next eight measures, Couperin allows a series of slowly moving and sustained bass tones to draw a magical picture of an orderly metrical world whose regularity appears to be but a mirage, viewed from within the metrically tortuous surroundings of the Passacaille.<sup>26</sup> The hemiola, with the notated meter in its wake, enters quietly at the end of the interlude, its dissonant affirmation of the notated meter prefiguring the familiar displacements of the refrain. The hemiola here serves as a bridge between the couplet and the refrain: Its familiar flow across two measures enables the Passacaille to break out of the *séance* and to assume its former metrical disposition once again. In sum, for all its metrical dissonance the hemiola has a fundamentally constructive—and in a deep sense, consonant—role to play. (This issue, too, will re-emerge in the closing pages of this essay, when we return to the Gigue from Bach's E minor English Suite.)

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<sup>26</sup>Curiously, Handel does precisely the opposite in one of his most overtly periodic pieces, the third-movement Allegro from the E minor Concerto Grosso, Op. 6, No. 3 (the movement preceding the Largo at which we looked earlier). Much of the Allegro is relatively foursquare—until it reaches its last phrase, bars 57-64, at which point all hell breaks loose. One wonders what sort of vision Handel had on *his* mind! (For a speculative interpretation see my dissertation, chapter 5, pp. 336-61).

One composer who took to the magic of Couperin's visionary interlude was Johannes Brahms. (Brahms gave Friedrich Chrysander some assistance in editing Couperin's *Pièces de clavecin*.)<sup>27</sup> In the B minor Capriccio, Op. 76, No. 2, Brahms opens the middle section by falling precipitously, just as Couperin does, from the home key of B minor into the other-worldly realm of an extended G major seventh chord (Example 13a). The seventh chord, in the larger scheme of things, plays double duty as an augmented sixth chord that paves the way for the eventual arrival of the home key's dominant, F#. But as it enters, without any advance preparation, the G major chord conjures up the same kind of magic as did Couperin's brief affirmation of the notated meter in the sixth couplet. A close comparison between the two composers' junctures (Example 13b) reveals that Brahms's change of harmony and mood is borrowed, virtually note for note, from Couperin's. The Capriccio's register, texture, and keyboard voicing at the moment of transformation are all identical to those of Couperin's couplet. Since the Capriccio unfolds in 2/4 time, shows little displacement, and contains no hemiolas, it builds no hemiolic bridges comparable to Couperin's. The significance of Brahms's unusually literal appropriation for our apprehension of Couperin's *Passacaille* resides in the similarity of its purpose: The Capriccio's reverie—like

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<sup>27</sup>François Couperin, *Pièces de Clavecin*, edited by Johannes Brahms and Friedrich Chrysander (London: Augener Ltd., 1888c; reprinted, Mineola, NY: Dover Publications, 1988). Brahms's role in preparing the edition, we now know, was not as significant as had previously been postulated; see Kelly 2004.

the Passacaille's séance—is a special event that is designed to break away completely from the dramatic setting of the composition by introducing a sense of peaceful stillness as ethereal as it is artful. The move is drastic enough to require a commensurate, complementary gesture to bring us back to the music's here-and-now. In the Capriccio, it elicits the iridescent harmonic reinterpretation of a prominent high B<sup>b</sup> as an A<sup>#</sup> leading to B (Example 13c); in the Passacaille, it summons up hemiolic intervention. On a moment to moment basis, the hemiola's metrical effect is dissonant enough, to say the least; but on a couplet to couplet basis, with the help of hindsight, it registers as an emblem of orderly temporal design. The heightened intensity of Couperin's reverie cannot be maintained for long; its drastic liquidation through the hemiola's intervention throws in turn a good deal of light on the nature of the hemiola's long-range architectonic purpose. Indeed, it helps us understand how a metrically dissonant idiom can be called upon to perform a duty that is conceptually and effectively consonant in the larger scheme of things. For it is the hemiola, more than anything else, that puts the Passacaille back on its wayward tracks after its characteristically idiosyncratic metrics have been derailed by the disagreements between the temporalities of the right hand and the left hand.

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By way of coming full circle I should like to return to the Gigue from Bach's E minor English Suite (recall Example 2) and to place the Gigue's

disjunctive hemiola in the broader context of long-range afterbeat displacement (Examples 14 and 15). It will soon emerge that this hemiola, too—for all the violence of its intervention—is conceptually consonant, and quite tangibly so, in the larger scheme of things. Moreover, we shall find out that Bach's agenda is not only rhetorical: It is, first and foremost, practical. The fundamental, conceptual consonance of the Gigue's disruptive hemiola will then tell us something about the nature of many eighteenth-century hemiolas.

Like so many Baroque pieces in  $3/8$  time, Bach's Gigue projects the longer duple organization of a piece in  $6/8$  (as do Bach's alternate versions, in  $6/8$  time, of pieces whose final version he notated in  $3/8$ : the Courante from the E minor Partita for Clavier, for instance, or the Presto from the G minor Sonata for Solo Violin). Within the framework of  $6/8$  time, the cascade of sixteenths that introduces the Gigue's fugal subject is not an upbeat to the restless eighth-note leaps or the agonized chromatic half-steps that follow in bars 2 and 3. Despite its precipitous rush, the cascade is an afterbeat motive that has been displaced to the middle of the measure; see the annotations in Example 14. The annotations in Example 15, in which the first reprise of the Gigue is rebarred in  $6/8$  time, provide the length of each of the first reprise's measure groups in both  $6/8$  and  $3/8$  time (the last-named in parentheses). The rebarring discloses that, as ultimately notated in  $3/8$  time, the fugal subject is a five-bar modulating phrase that begins on a weak first measure and closes into a sixth, strong measure (compare Example 2 with

Handel's Largo, Example 5). What the subject leaves out is the pedal call (recall the discussion of Handel's Largo, Example 5), which in this instance occupies—implicitly—a half measure of 6/8 time or a full measure of 3/8 time (see again Example 14). The dramatic effect is that of stumbling perchance upon an impassioned discourse *in media res*.

The idiom Bach uses to achieve this effect—and especially the manner in which he uses it—is a common one: A good number of Baroque compositions imply the pedal call but leave it out, and quite a few begin with a strong “bar 0” that stands for the pedal call.<sup>28</sup> In this instance the fugal subject (as notated in 3/8) leaves out its opening, silent measure and extends for 5 + 1 measures. (When parsing the subject one must bear in mind that the last two measures of the subject overlap with the next fugal entrance.) In 6/8 time, by contrast—with a silent half-measure at the beginning—the subject is three bars long and closes into the fourth measure, that is 3 + 1; see Example 15.

The first set of square brackets in Example 15 show how the subject is displaced by half a measure in 6/8 time, that is by a full measure in 3/8 time, to the right. This is essentially the same procedure through which Handel displaced the

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<sup>28</sup> See my dissertation, chapter 2, for an extended explanation of implicit pedal calls and for an extended account of a similarly positioned “bar 0” in the Bourrée from Handel's Royal Fireworks Music, which is set in *alla breve* time. I discuss the Bourrée in greater detail, along with the phenomenon of bar 0 (including its formulation by Arthur Komar), in “Bar 0 and the Suppressed Hyperdownbeat,” at this Site.



thematic material and thematic meter of his Largo in Examples 4 and 5 by one beat, namely by a half note, to the right. Within the framework of the Gigue's displacement—counting, that is, the missing bar 0 as an integral part of the subject in 3/8 time—one would parse the subject not as a 5 + 1 phrase but as a six-bar phrase closing into the downbeat of a seventh measure (that is, bar 6; see again Example 15). I shall return to this not uncommon feature later.

Example 16b shows how the countersubject, durationally not quite congruent with the subject, follows a strong-weak scheme (in the notated 3/8 meter) and how it begins late, in the second, strong measure of the subject (see also bar 6 of the score, Example 2). The countersubject confines itself to four bars, but its fourth and last measure is elided through an overlap with the subsequent episodic sequence. (One might argue that the countersubject and the episodic sequence combine to form a six-bar group that closes into a seventh measure; see the bracket atop Example 16.) Owing to the way in which the countersubject and its continuation later combine with the subject, they help rather than forestall the apparent emergence of periodicity in the Gigue. The annotated double brackets in Example 15 demonstrate that far from preventing a foursquare periodicity from building up, the constant elision of measures at the end of the subject and the countersubject, and at the end of each episodic sequence, combined with the countersubject's delayed entrance, all promote what one might call an *approximate*

or *simulated periodicity*.<sup>29</sup> I shall return to this feature, too, later on.

On account of the persistence of the aforementioned metrical overlaps, the entire fugal and episodic apparatus is often temporarily “undisplaced” to its proper metrical setting. The commentary that overlays and underlays Example 15 recounts the continual alternation of the apparatus’s one-bar displacement and its reversal (a procedure referred to as “redisplacement” by Arthur Komar)<sup>30</sup> throughout both the fugal stretches of the Gigue and its sequential episodes. Unlike the subject, which is inherently a six-bar phrase, many of the episodes are (or at least appear to be) foursquare; see again the annotations in Example 15. Within the framework of the Gigue’s foundational meter of 6/8 such undisplacement and redisplacement, which sculpts the episodes’ periodic look, is all in a day’s work; the notation in 3/8 time only masks the underlying 6/8 meter’s opening rest, and it allows the Gigue’s many overlaps (between the entrances of the fugal subject, between some of the episodes, and between some of the fugal entrances and the episodes) to enter at the downbeat rather than at the middle of the measure. The visual effect of a downbeat in 3/8 time lends the overlaps an emphasis they could not obtain in 6/8: Compare Example 15 with Example 2. Especially for the performer, 3/8 time offers a much sharper and more focused

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<sup>29</sup>Justin London prefers the term *malleability* (London 1991) in describing a similarly durational setting in the first movement of Bach’s Third Brandenburg Concerto.

<sup>30</sup>Komar 1971.

aural picture of the overlaps than does 6/8 time.

Now because the episodes predominate and frequently overwhelm the subject (as they usually do in fugal giges), the subject here is repeatedly abbreviated to a four-bar phrase through the elision or outright omission of its closing measures. Coupled with the Gigue's ubiquitous phrase overlaps, the abbreviation of the subject yields the impression of on-again, off-again quadratic periodicity (see the annotations to Examples 15) to which I called attention earlier. This kind of periodicity is not exactly the periodicity of the galant style: It does not originate with the same foundational grid. Generally speaking, its building blocks vary in length, consisting as they do of (1) three-bar and four-bar groups; (2) four-bar and six-bar groups; and (3) six-bar and eight-bar groups, all of which operate side by side and also come and go as a matter of course. At most, these hypermetrically independent groups establish the periodic grid rather loosely and informally, *con alcune licenze*. That is just the kind of opportune, noncommittal periodicity one associates with the gigue as a genre. In this instance, of the various periodic stretches in the E minor Gigue it is the later sequential episode of the first reprise, across bars 31-38 (compare Examples 2 and 15), that does the most to substantiate the impression of a periodic grid. By the time our disruptive hemiola enters at bar 42, the appearance of four-bar grouping has all but taken hold.<sup>31</sup>

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<sup>31</sup>Bach, to be sure, realizes several other types of periodicity throughout his music; see Willner 1996b and 1998, with further references.

Beginning as it does on the fifth measure of the subject and on the fourth measure of the countersubject—and bringing both to a halt—the hemiola goes on to furnish the subject's perpetually elided and omitted thematic and cadential conclusion. By extending the subject to six measures of  $3/8$  time, the hemiola allows the subject to occupy the entirety of its underlying time span (that is, bars 38-43), and to close into a seventh measure (bar 44). As I observed earlier, that is in fact the subject's foundational length— $6 + 1$ —a length whose complete expression at the surface had been denied since the subject's entrance in bar 1 (recall the discussion of the subject's opening silent measure, above).<sup>32</sup> Most important, the hemiola sweeps both the Gigue's one-bar displacement and its acquired four-bar periodicity aside in one sweeping gesture. Precisely because it is so violent, it can reset the Gigue's durational clocks, and bring some order to the Gigue's temporal instability. In so doing, the hemiola prevents the Gigue's escalating periodicity from dominating its temporality. However paradoxically, it restores the unpredictable behavior of the Gigue's metrics, and in so doing it rescues the Gigue's improvisatory character.

(As a necessary step towards restoring the hypermetric restlessness of the opening measures, the four-bar codetta-like phrase that follows (bars 44-47) offers a one-bar extension—bar 48, a strong measure. It is this addition that allows the

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<sup>32</sup>If the hemiola does not offer a way of articulating the implicit bar 0, it at least helps fill in the missing time-span.

repeat of the first reprise to begin on a weak measure and to reestablish the Gigue's instability.)

Disjunctive and even anarchic in effect, the hemiola in the larger scheme of things conveys the very opposite message—the suggestion that a metrical order of sorts, topsy-turvy but at the same time closely controlled—prevails throughout the Gigue after all. Like the other metrically dissonant hemiolas we encountered in this study, the Gigue's hemiola, when heard within a larger perspective, embodies not only the developmental turbulence of the surface but also the measured calm that prevails below, the equilibrium that rules at the deeper layers of durational structure.<sup>33</sup> Its intervention, however dissonant metrically, may be read as a call to order, and its metrical dissonance as a means to that end. In sum, what appears at first to be a wildly expressive *cul-de-sac* turns out to be the stabilizer of the Gigue's precarious metrics.

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The two faces of Bach's hemiola offer a properly suggestive perspective and context for reviewing the hemiolic dissonances we encountered earlier in this study, and for reevaluating the role which their dissonance plays in holding together the durational structure of each piece.

In Handel's E major Courante (Example 1), the cadential hemiola tightens up the entire ritornello-like theme of bars 1-8 by welding bar 6 to bar 7. The

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<sup>33</sup> On Schenker's notion of equilibrium at the deeper levels see Snarrenberg

fusion of the two measures makes it much easier to apprehend the two preceding, overlapping segments—as well as bars 6 and 7—as a three-part ritornello theme: a four-bar *Vordersatz* (bars 1-4), an overlapping three-bar *Fortspinnung* (bars 4-6), and an overlapping two-bar *Epilog* (bars 6-7, closing into a deceptive cadence at bar 8). Besides shedding light on the compressed ritornello's outline, the hemiola also clarifies its shrinking 4 + 3 + 2 design.

In the Sarabande from the E minor Suite (Example 3), the hemiola of bars 10-11 seizes on the motivic outline of bar 2, and especially on its bass descent (bar 10; see the brackets in Example 3). By refashioning this motivic set-up as a chordally accelerated cadence, the hemiola allows the winding 12-bar theme to find its home, as it were.

In Handel's E-minor Largo (Example 5) the hemiola's effect is experientially similar to that of the hemiola in the E minor Sarabande (bars 5-6; see the annotations in Examples 5c and 5d). Here the cadential and textural intensity of the hemiolic measures—their cumulative urgency—prompts us to reinterpret the second, consequent-like phrase (bars 4<sup>b</sup>-7<sup>a</sup>) as a parenthetical event whose purpose it is to complete the I-III-II<sub>5</sub><sup>6</sup>-V<sup>#</sup>-I cadence begun by the antecedent (bars 1-4<sup>a</sup>; see again the voice-leading sketch in Example 5d).

And in Couperin's Passacaille the hemiola undertakes to hold the refrain and the couplets together by playing the role of mediator, not only between the

conflicting internal metrics of the refrain but also between the refrain and the ensuing couplets. Throughout, the hemiola serves as a bridge between the diverse accentual schemes of the surrounding phrases.

In each instance, it is the hemiola's metrical dissonance that marks, defines, and carries out the larger task which the hemiola has set out to accomplish. Since that task represents an eminently constructive rhetorical ploy within the composition's durational scheme, the hemiola must be regarded as a conjunctive, not as a disjunctive phenomenon. However dissonant or disruptive at the surface, the hemiola remains conceptually consonant at deeper or higher levels. In this higher sense, all the hemiolas we've looked at are cut of the same cloth. The more dissonant and interventional the hemiola at the surface, the more constructive its role within the larger temporal and rhetorical scheme of the piece.

And that makes "geographical" sense, for the cadential hemiola appears as a rule at the end of the phrase, the period, the reprise, or the section in which it occurs. Unlike the early quirk or irritant that Arnold Schoenberg, Siegmund Levarie, Ernst Levy, and Carl Schachter have identified—the catalyst that throws the composition purposely off balance right at the outset—the cadential hemiola undertakes the task of putting things in order, of restoring the durational balance.<sup>34</sup>

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<sup>34</sup>Schachter 1994, pp. 54-55, with further references, and Levarie and Levy 1983, pp. 81-82. Once the quirk or irritant has accomplished its task by introducing state of imbalance or unrest, the restoration of balance becomes the *raison d'être* of the composition's remaining measures. (See also Sobaskie 2006.) Schachter 1994 quotes Schoenberg's "state of unrest, of imbalance" (Schoenberg

One of course does find many hemiolas, even cadential hemiolas, that appear early on in the composition and therefore fit the notion of a quirk or irritant to a T: Haydn's and Mozart's minuets are saturated with them (not to mention such dance suite movements as the courante, the gigue, or the hornpipe).<sup>35</sup> And these hemiolas do indeed become the expository and the developmental subject matter of the composition, rather than its organizing agent.<sup>36</sup> Their investigation, though (along with that of the contrapuntal and incidental hemiolas that I mentioned in connection with Example 10a), will have to await another occasion.

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1984, p. 123); Levarie and Levy refer to “initial disturbances.” It was in teaching that Schachter has referred to “quirk” and that Levarie has referred to “irritant.”

<sup>35</sup> The minuets of Mozart's G minor Symphony, for instance, or of Haydn's Symphony No. 99 in Eb.

<sup>36</sup>I have not come up yet with a suitable appellation for these developmental hemiolas. "Incipiently irritating" or "quirky hemiolas" is accurate enough, but it doesn't sound very good.



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