To the memory of Arthur Komar, Jonathan Kramer, and Edward Aldwell

Bar 0 and the Suppressed Hyperdownbeat

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On the face of it, the notion that the Adagio cantabile from Beethoven's

"Pathétique" Sonata begins with silence—with an empty "bar 0"—seems a little

idiosyncratic, to say the least. But that is how Arthur Komar reads the opening of the

Adagio in a celebrated analysis that appears in his book, Theory of Suspensions

(Example 1a; as the arrows in the Example show, the result, to use David

Temperley's terminology, is a pair of *end-accented phrases*).¹ Echoing the sentiments

as well as the aural experiences of many listeners, Carl Schachter, in the first of his

three articles on rhythm and linear analysis, notes that

Komar interprets the opening measure as an upbeat; therefore, he assumes as understood a suppressed downbeat measure ("measure 0") preceding the actual beginning. I do not agree that the first measure is an upbeat, but that is not an important issue. Some pieces, after all, do begin with an

¹ Komar 1971, pp. 151-161 (the reference to "measure 0" occurs on p. 155), and Temperley 2003. According to Joel Lester (personal communication), Komar was not entirely happy that "measure 0" received considerably greater attention than other ideas he expressed in his book.

Much of Komar's work was deeply indebted to the teaching of Godfrey Winham, but it is hard to tell whether the notion of bar 0 might have originated with Winham. For some of Winham's observations on the Adagio from Beethoven's "Pathétique" Sonata see Blasius 1997, p. 121. I thank Leslie David Blasius, Joel Lester, and Gregory Proctor (personal communications) for clarifying these issues.

upbeat lasting a whole measure (the last movement of Mozart's String Quartet, K. 499, for instance). What is disturbing is the idea that the silent "measure 0" is supposed to function as a strong beat, not merely in relation to the following measure, but also in relation to larger spans at comparatively remote structural levels. But can we really hear a silent measure as "stronger" than some other measure much further along in the music?² [See Example 1b; as the arrows in the Example show, Schachter's reads the theme as *beginning accented*.]

Notwithstanding these sensible (and very eloquent) objections, Komar's idea—if not his reading of the excerpt in question—is far from untenable, even if it does not appear at first to be very convincing. Why that is so will become clear after we trace the phenomenon of downbeat and hyperdownbeat suppression in the Baroque instrumental repertoire, where it is a very common occurrence indeed. (It was Jonathan Kramer who coined the term *hyperdownbeat*.³) To find out what Komar was trying to express, we may begin with several very short suppressions—of a sixteenth, an eighth, and a quarter note—and proceed to increasingly long suppressions, until we reach those that take up almost an entire measure.⁴ As we go along it will be necessary for us to dwell also on the displacements that these suppressions bring about, and on the mechanisms that facilitate those displacements. We shall then be in a position to gauge how widely off the mark—if at all—Komar was.

² Schachter 1976/1999b, pp. 309-310 (1976) and pp. 34-35 (1999b).

³ Kramer 1988, pp. 128, 130, and *passim*. Kramer also coined the term *hyperbeat* (p. 85 and *passim*).

⁴ For a succinct history of long suppressions that goes back to the Renaissance, see Abravaya, 2004, pp. 17-21.

Displaced themes and displaced movements

Example 2a shows the suppression of a sixteenth at the beginning of a Handel ritornello theme. The suppression causes the entire melody to shift by one sixteenth to the right. That is what some theorists refer to, quite appropriately, as *afterbeat displacement*.⁵ As it happens, the bass in this instance is not displaced: It continues to follow the notated meter.

Example 2b shows a particularly common form of subbeat suppression at the downbeat—under fugal circumstances. Here only the subject's opening tones, in bars 1 and 2 (and their imitation in the bass of bars 3-5), undergo afterbeat displacement; the episodic material that follows in the upper voice(s) of bars 3-7 subscribes to the notated meter.

Example 2c shows the same kind of afterbeat displacement on a much larger, hypermetrical scale. Here, half a measure—a hyperdownbeat—is suppressed. The subtraction of an eighth note from the suppression by an upbeat figure makes little difference. The entire ritornello, in fact the entire movement, undergoes displacement by half a measure to the right.

The purpose of the displacements in the following examples, Example 2 and 3, and in fact throughout the excerpts introduced in this paper, will become apparent

⁵ Rothstein 1989, pp. 29-30 and 50-51, and Agmon 1997, pp. 65-66. For a similar treatment and only slightly different terminology, see Abravaya 2004, pp. 25ff. I offer a detailed treatment of afterbeat displacement in chapters 2 and 3 of my dissertation. Excellent discussions appear throughout Abravaya 1999 and 2006.

if we glance ahead at Example 3c: The displacements all emphasize the closing downbeat or hyperdownbeat of the themes reproduced here (see the slurs and arrows in Example 3c).⁶ Taking this idea a bit further, we can easily see how all the displacements in the pieces I have cited deflect the principal metric, rhythmic, and thematic accent from the opening downbeat, which is suppressed, to the closing downbeat, which is highlighted.⁷ It is essential to bear in mind that the notated meter and the notated hypermeter of each piece both remain in effect right alongside these displacements and alongside the displaced *thematic meter* and the displaced *thematic in the present the state of the state is particularly important in what concerns displacements by half a measure, where two concurrent periodic grids emerge (see the brackets and annotations in Example 2c).*

⁶ Abravaya, *Ibid.*, reaches the same conclusion using a different approach. Wideranging historical and stylistic accounts of metrical positioning within the measure and across the bar line, emphasizing the differences between the evolving Italian, German, and French styles, appear in Abravaya, *ibid.*, and in Rothstein 2005. I thank William Rothstein for making an early version of his paper available to me.

⁷ For important studies of end-accented themes, above all in the sonata-form movements of the Classic and Romantic repertoires, see Temperley 1996 and 2003 as well as de Ghizé 2006.

⁸ As I explain in Willner 1998 and 1999, hypermeter in Baroque music is an on-andoff phenomenon, disappearing frequently only to reappear after an absence of several measures.

The pedal call

The opening suppression of a downbeat or a hyperdownbeat highlights the concurrency of the two meters and hypermeters, the notated and the thematic, particularly in those instances where their simultaneity is underlined by an idiom we shall encounter in Examples 3a, 4a, and 5a, namely the *pedal call*.⁹

The pedal call frequently takes the place of the notated downbeat and fills in the time slot left open by the delay (that is, by the displacement) of the melody's opening metrical gambit. Most often the pedal call is expressed by a stentorian bass tone that announces the notated meter and by doing so—in the absence of an opening melody tone in the upper voice above—points to the displacement that is about to begin. (Occasionally the pedal call appears composed out across the upper voice and in the inner voices as well, but even then it does not become a part of the following, displaced theme.¹⁰)

⁹ I first used the term pedal call in the unpublished Willner 1984. Abravaya 1999, 2004 and 2006 all call attention to the same idiom without giving it a name, as does Carruthers 1998. In an erudite discussion of the same phenomenon, Christopher Hogwood refers to the pedal call as a "gathering note"; see Hogwood 2005, pp. 105-6.

¹⁰ A good example appears at the beginning of the fourth movement, Allegro, from Handel's A minor Concerto Grosso, Op. 6, No. 4. See my dissertation, Example 3.31.

Example 3a presents Handel's celebrated Harmonious Blacksmith air.¹¹ Its pedal call is a quarter note long: That is the extent of the downbeat's suppression, and that is the extent of the ensuing afterbeat displacement. These durational circumstances are characteristic of the compound 4/4, whose basic pace-the underlying, even counterpoint of its outer voices—is that of a quarter note. The entire collection of temporal features here—the pedal call, the suppression of the opening downbeat, the afterbeat displacement, the peculiar look of the theme's metrics, and the quarter-note basic pace—is so idiomatic and so closely woven into the durational fabric of the piece that the pedal call can even be omitted without changing either the theme's durational setting or its larger aural effect. It should come to us as no surprise, then, that an earlier version of the Harmonious Blacksmith air has no pedal call (Example 3b).¹² Nor, for that matter, does the ritornello theme shown in Example 2c. When the listener is familiar with the idiom at hand, it takes the ear no more than a moment or two to realize (however tacitly) that a suppression, a displacement, and two concurrent meters are at play.

The corresponding examples in triple meter, Examples 4a and 4b, are in principle quite similar to Examples 3a and 3b. Example 4a begins with a quarter-note pedal call, Example 4b implies it; Example 4a begins with a quarter-note afterbeat displacement to the right, Example 4b adds an eighth-note suppression that is nested

¹¹ This example derives from Willner 1984 and from my dissertation, chapter 2. Abravaya presents it very effectively in 1999, pp. 113-14, Examples VI-24 and VI-25, in 2004, pp. 26-27, Example 1.12, and in 2006, pp. 89-90, Examples 39 and 40.

¹² Abravaya, *ibid.*, notes that also.

within its two displaced quarter notes. The visual effect (as opposed to the aural result) of Example 4b suggests that only half a measure has been displaced, but that is an illusion.

The simulated (or apparent) upbeat

Common to the two Examples, 4a and 4b, is a phenomenon that is found more often in the triple meters than in the duple meters. The motivic, contrapuntal, and rhythmic drive to the downbeat of the second measure in each Example is so strong that the impression of an upbeat figure or an upbeat motive leading to the downbeat of bar 2 emerges (see the curly brackets in Examples 4a and 4b). But the impression is just that—an impression—and it is misleading: The theme begins, without an upbeat, at the first tone of the melody, and its opening figure or motive presents only a *simulated* or an *apparent upbeat*. In hindsight, one includes the downbeat—which has been suppressed before the apparent upbeat—in one's contemplation of the theme's larger metrics, notated as well as displaced.¹³

A particularly emphatic pedal call sounds very often at the beginning of pieces in the simple 4/4. These compositions constitute the majority of the instrumental Baroque movements in tempo giusto and, along with briskly paced fugal compositions, they display a basic pace of a half note. They consequently displace

¹³ McClelland 2006 refers to the same phenomenon as a *gestural upbeat*. I discuss it extensively in my dissertation; see especially chapters 2 and 3.

very readily to the middle of the measure, staying there for the duration of the entire movement unless the composer has had some very good reason to redisplace the music back, temporarily, to the notated meter. The opening Allegro of Handel's F major Organ Concerto, Op. 4, No. 4, takes maximal advantage of this scenario (Example 5a). The orchestral ritornello begins after the solo organ's half-note pedal call, at the distance of a hyperdownbeat to the right of the notated opening, and it quickly establishes its own thematic meter and hypermeter. But things don't stay that way for long: The Allegro is cast in ABA¹ form (where B stands for the central developmental section and A^1 for the abbreviated reprise), and the organ's developmental spinning in the B section takes it upon itself to establish the notated meter: see Example 5b. The entrance of the tutti's reprise. A^1 , seems to retain the notated meter, but that is a deception: The tutti feign allegiance to the notated meter only by trimming the first four notes of the Allegro's opening eighth-note thematic figure, and in doing so they allow the Allegro's characteristic metrical suppression and displacement to peer through the notated meter (Example 5c). As soon as the organ reenters (Example 5d), the displacement resurfaces. Evidently, displacement is the norm here, just as it is in countless other pieces in the simple 4/4. The assertion of the notated meter is an exception granted for specifically developmental reasons.

The gavotte and bar 0 or,

The true, real meter

The generic nature of Baroque displacements explains perhaps why the gavotte, which offers a more elaborate exemplar of this idiomatic setting, can begin so casually in the middle of the measure (Example 6a). As a rule the gavotte contains no opening rest and no pedal call, so that even a listener with access to the score might be mystified: Where, exactly, is the real opening downbeat? The dancers might claim that it is located at the beginning of the first complete measure, because that is where *they* enter. And the theorist will probably concur, because parsing the gavotte (and numbering its measures) has traditionally begun at the downbeat of the first complete measure. But if that is so, would one really hear the two quarter notes in bar 0— this is our first encounter with a notated, if not a true bar 0—as an upbeat figure, be it real or apparent? (See the curly bracket in Example 6a.)

Edward Aldwell has come up with a brilliant solution to this quagmire. According to Aldwell, we hear the gavotte, as a matter of idiom, not metrically but hypermetrically, and we hear its opening two quarter notes as the first sounded hyperbeat in a 2-3-4-1 formation (Example 6b).¹⁴ This puts the gavotte in a generic metrical setting somewhat different from that of Handel's F major Organ Concerto

¹⁴ I thank Edward Aldwell (private communication) for suggesting this solution and for giving me permission to recount it in this paper, and I thank Carl Schachter for drawing my attention to it. My interpretation of the gavotte's metrics is different from Ido Abravaya's (1999, 2004, and 2006) and Eric Fung's (2005).

(and similar pieces). In the F major Concerto, the displaced thematic meter and the notated meter—and the corresponding hypermeters—all run side by side, on equal terms. Thanks to the pedal call, there is no question as to where the parsing begins: At the downbeat and hyperdownbeat of bar 1. The notated meter forms a solid backdrop against which the displaced thematic meter plays its role out. In the gavotte, by contrast, the notated meter and the notated hypermeter begin *after*—not before—the thematic meter and hypermeter, namely in the first full measure. They consequently form a kind of *shadow meter* and *shadow hypermeter* against the reigning, displaced thematic meter (see Example 6c).¹⁵

But the notated meter and the thematic meter (and their hypermeters) are not alone in managing the gavotte's durational structure. Since the gavotte actually begins at the opening of bar 0—in this it differs most substantially from movements such as the F major Concerto's Allegro—it also has a *true* or *real* meter and a corresponding, real hypermeter. The real meter begins before—and runs concurrently (if not quite on an equal footing) with—the displaced thematic meter and the notated, shadow meter (see the annotation "Gavotte begins" in Example 6c). There are three meters and three hypermeters in all, then—the notated, the displaced and the real. The most prominent is the displaced thematic meter, but the most significant, in terms of durational structure, is the implicit real meter, which begins at the downbeat of bar 0. So, even though the first half of bar 0 is not notated, it does exist, and it is every bit as important as the second half of the measure. This is the suppressed hyperdownbeat to

¹⁵ For a detailed account of shadow metrics see Samarotto 1999a and 1999b.

which the title of my paper refers.¹⁶ In our traditional parsing of the Bach Gavotte presented in Example 6 and of the gavotte in general, then, we have been displacing the entire piece by one full measure to the right (see, again, Example 6c).

Why it is important to think of the gavotte as beginning at the hyperdownbeat of bar 0 becomes clear when we contemplate the placement of the gavotte within the framework of the complete suite from the standpoint of performance. Beginning the gavotte with a half measure's silence—without a heavy metrical accent, and as if *in medias res*—is a highly expressive durational and gestural ploy that is built into the score.¹⁷ As it generically does, the Gavotte of Example 6 – from Bach's G minor English Suite -- follows the Sarabande, and the accentual as well as the durational attenuation of its opening hyperdownbeat provides for a properly modulated bridge between the brooding pathos of the Sarabande and the lightly textured, hypermetric exuberance of the Gavotte.¹⁸

¹⁶ The designations of "downbeats" and "hyperdownbeats" also take in the time spans that stretch down to the next beat or hyperbeat.

¹⁷ Abravaya, too, describes this durational phenomenon, in 2004, p. 25.

¹⁸ This is one of several reasons—the most important perhaps is Edward Aldwell's revelatory reading of the gavotte's metrics—for doing away with the notion of ambiguity as a characteristic of the gavotte's temporality. Ambiguity has been mentioned in connection with the gavotte's temporality by several writers, including Schulenberg 1992 and Little and Jenne 2001.

The best discussion of empirical complexities in reading and performing gavottes that do result in certain ambiguities is Fung 2005, chapter 5.

The bourrée and bar 0

Much the same analytical formulation applies to the beginning of those short and light bourrées that follow either a sarabande or a stately conclusion to a fast ouverture. A bar 0 is again implied, but it is at once more elusive and more than the gavotte's bar 0. It remains once again for the performer to realize a convincing modulation from slow to fast because this gestural ploy is neither implied nor written into the score, and because the sense of an upbeat is much stronger in the bourrée than it is in the gavotte. A good example appears at the beginning of the Bourrée from Handel's Music for the Royal Fireworks; compare Example 7a with the rhythmic reduction in Example 7b.

(I should emphasize that my observations on the present Bourrée's temporality do not apply to all bourrées, since not all bourrées open with a tonic so brief and so problematic (in terms of duration, emphasis, and above all location) as the tonic of our Handelian Bourrée. But there is probably a fair number of bourrées in which the kind of empty measure under discussion here does appear, however subliminally. These are the short alla breve bourrées that one encounters most often in orchestral dance suites, such as Bach's four orchestral suites.)

The reason I suspect that Handel's Bourrée opens with an empty measure is that it begins with what looks like an upbeat tonic. The rhythmic reduction (Example 7b) reveals both the Bourrée's half-note basic pace and its quarter-note *figural pace*—the pace of the faster, ornamental progressions that overlay the basic pace. In so doing the reduction indicates that the tonic at the beginning of the piece is rather more substantial than it seems to be. The familiar procedure of normalization allows the half-note basic pace (which is characteristic of alla breve pieces in general and of alla breve bourrées in particular) to extend the time span of the opening tonic back by one quarter note, turning it into a half note (compare again Examples 7a and 7b).¹⁹ That is to say, despite the brevity of the opening tonic at the surface of the Bourrée a complete *basic step* of the basic pace—namely a half note—occupies the entire second half of bar 0. The tonic is shortened at the surface because the opening sequence of falling fifths, which occupies the notated bar 1 and the beginning of the notated bar 2, contracts the articulation of the basic pace from movement in half notes to movement in quarter notes. It is this contraction that gives the shortened opening tonic the appearance of an upbeat to the notated bar 1. But this tonic is in fact a thematic mid-bar downbeat that, at levels deeper than the surface, retains the full independent metrical status of its parent half note (see again Example 7b).

Close to the surface, then (and assuming one does not hear the opening tonic as a true upbeat), the entire Bourrée seems to be displaced by one quarter note to the left; see the brackets atop Example 7a. At a deeper level, however, the Bourrée is actually displaced by one half note *to the right, from the beginning of bar 0*, just as the Bach Gavotte in Example 6 was; see the brackets atop Example 7b. The real meter and hypermeter of the Bourrée both begin at the downbeat of bar 0; see the annotations atop Example 8. As it did in the Gavotte of Example 6, the notated meter

¹⁹ For detailed accounts of normalization see Rothstein 1981 and 1990b.

assumes the status of a shadow meter, and so does the notated hypermeter; see the upper bracket atop Example 7a. The displaced thematic meter again stands on equal footing with the true meter and hypermeter. Since this is an idiomatic feature, the simultaneous operation of three meters is not a complexity that baffles the ear.²⁰

How, though, can we reconfirm aurally that a largely empty measure is really at play here? The answer resides in the idiom of the pedal call. It is very easy to imagine the Bourrée beginning with a half-note or a dotted-half-note pedal call; see Example 8. Such a long pedal call is not uncommon in Handel's music; it occurs, for instance, in the Chorus, "He led them through the deep," No. 11 from Israel in Egypt (compare the incipit, which is reproduced in Example 8), and—displaced by an eighth—at the bourrée-like beginning of Handel's early oratorio, *La resurrezione* (also reproduced in Example 8, along with its progeny, the better known and seemingly straightforward Bourée from the Water Music). Awareness of this highly generic metrical feature— the long yet potentially implicit pedal call—is important, because it allows both the performer and the analyst to hear the ongoing displacement, and to contemplate the metrical status of the opening tonic as neither a light upbeat nor a forceful downbeat but rather as the starting point of two long-range accentual gestures: one that culminates in the arrival of the subtonic at the beginning of bar 4, and another one that culminates at the arrival of the mediant at the beginning

²⁰ To sum up the displacements: At the surface, the entire Bourrée is actually displaced by three quarter notes to the right (a more accurate formulation than one quarter note to the left, as I posited earlier—see Example 7a); at a deeper level, it is displaced only by a half note to the right (Example 7b). And the notated meter, as such, is displaced by a full measure to the right (Example 8).

of bar 10 (see the slurs and arrows under Example 7b). The result is not only a more fluent reading of the Bourrée's long line, but also a more flowing conception of its relation to the preceding Ouverture.

Bar 0

But what of Komar's bar 0? If we rewrite the Adagio of Beethoven's "Pathétique" Sonata in 4/4 time, we *almost* reach a meter and a hypermeter similar to those of Bach's Gavotte and Handel's Bourrée (Example 9a). I emphasize "almost," because the Adagio's slow tempo and its quarter-note basic pace are far removed indeed from the Gavotte's and the Bourrée's fast tempo and their half-note basic pace, and from their displacements and their shadow metrics. To go beyond the opening "silence" and to find the kind of durational model that Komar might have had in mind, however subconsciously, we must look at the underlying rhythms of a slower, more contemplative genre—namely the allemande. By the time Bach, Handel, Rameau, and Couperin composed their weighty and sprawling allemandes—with which Beethoven was evidently familiar—the allemande was no longer being danced.²¹ Yet its rhythmic markers—groups of two eighths and a guarter note at the surface, and groups of two quarter notes and a half note below the surface-continued to pervade the stylized allemande of the keyboard, chamber, and orchestral suite (Example 10). In the developmental pages of these allemandes, the two quarter notes

²¹ Jenne 1979; see also Arbeau 1967, pp. 109-12.

and the half note were often displaced by half a measure to the right. Example 10a shows the metrically normative formation of this idiom, and Example 10b shows its common developmental displacement. The rhythmic reduction of Beethoven's Adagio in Example 9c—in its original, undisplaced state—reveals that Beethoven was using just such an idiom. But there is no reason for us to hear the idiom, introduced as it is at the very beginning of Beethoven's Adagio, in its displaced form: The displacement places an exaggerated accentual emphasis on each closing half note (the odd-looking reductions in both systems of Example 9b suggest as much). A standard, downbeat realization of the motive, similar to its downbeat realization at the beginning of many allemandes, is much more convincing; see again Example 9c where the opening, quarter-note downbeats are accentually emphasized. There is consequently no reason to hear a suppressed hyperdownbeat—or a bar 0—in front of Beethoven's opening gesture.

But there is good reason to believe—given the close connection between the "Pathétique" Sonata and Bach's C minor Partita for Clavier,²² and given the possibility of a close connection between both compositions and the third Ordre (also in C minor) from François Couperin's Pièces de clavecin²³—that Komar was on to something, after all. Even though it is blatantly misplaced, his bar 0, along with bar 1 (and, by extension, the rhythmic setting in bars 2 and 3) does come very close to replicating the important yet infrequently recognized displaced allemande idiom I just

²² Several scholars have noted the connection.

²³ It is probable that these three Bach, Couperin, and Beethoven pieces are all related by way of multiple, intersecting "familial" borrowings.

described (i.e., Example 10b). Komar's fundamental error—the association of a developmental idiom with the expository idioms found at the beginning of a piece—seems less egregious if we consider the merits of the message it conveys: the importance of not taking the visual appearance of a composition's beginning at face value, and the importance of interpreting the metrics of the opening measures within the much wider framework of the composition's larger metrics, viewed through the lens of temporal and stylistic paradigms. In the end, one might say that Komar's was no mere flight of fancy, and that the pieces we've looked at back up this assertion nicely.

Postscript: Bar 0 in the Classic and Romantic eras

Bar 0—and along with it a composed out, individually sculpted version of the pedal call—both came into their own during the Classic and Romantic eras, and in tonally oriented twentieth-century music. Throughout these eras, they assumed a form that followed closely the Baroque models I've presented in this paper. Only their larger scale, and their more thematic as well as more dramatic character, obscures their close connection to their early eighteenth-century models and precursors.

Examples 11a-11c present, largely without further comment, three illustrations from the late-eighteenth and early-nineteenth century repertoires; Examples 12a and 12b offer two from later nineteenth-century works. (Similar examples appear in tonal twentieth-century music.²⁴ Since the pedal call as a rule expresses the tonic—either a local or a global tonic—it is unlikely to appear in atonal music; much the same holds for bar 0.)

A good deal of ink has been spilled over the metrics of Example 11a, the opening of Mozart's G minor Symphony, K. 550.²⁵ Many of the polemics that tackle the opening of the Symphony are misguided because their authors didn't take the Baroque durational origins of the violas' repeated figurations—in essence, a composed-out pedal call occupying a complete bar 0—into account. The notated meter and hypermeter of the Allegro molto movement begin right then and there—at bar 0, which is universally parsed as bar 1. The thematic meter and hypermeter begin at bar 1, which is universally parsed as bar 2. As the violins enter, the first theme gets underway, without delay; *there is no extended upbeat occupying this measure* (the notated bar 2). Rather, the violins' repeated half-step motive, which opens the theme,

²⁴ Several examples are given in Carruthers 1998.

²⁵ See, among others, Bernstein 1976, pp. 86-115; Carruthers 1998; Dodson 2002; Epstein 1979, pp. 68-71, 80-81, and 139-43; Hasty 1997, pp. 56-58; Kramer 1988, pp. 114-19; L&J 1983, pp. 22-28, 32-52, 85-87, 127-28, 163, 258-60, and *passim*; Nattiez 1998; Schenker 1996, pp. 66-70; and Taggert 1996. Of these, the most similar in approach to my presentation here is Carruthers 1998, which treats the opening measure of K. 550/I (my "bar 0") as a cushion that sets the tone for the drama of the Allegro molto's opening theme. Carruthers offers a variety of similar examples from the eighteenth, nineteenth, and twentieth century repertoires, some in the form of generously reproduced orchestral excerpts, others in the form of tables.

is an apparent or simulated upbeat, just like the apparent or simulated upbeats I described earlier in connection with Examples 4a, 4b, and 6a.²⁶

In Example 11c, the opening of Beethoven's "Eroica" Symphony, the pedal call is split between the two chordal strokes that announce the prospective entrance of the opening theme (as well as the prospective entrance of the thematic meter and hypermeter) in bar 3. Bars 1 and 2, then, constitute a "hyperbar 0."

The pedal call is composed out on a still larger scale, not across two chords but rather across two prefatory passages at the beginning of the Finale, the Saltarello, from Mendelssohn's "Italian" Symphony (Example 12a; the two parts are bars $1-2^a$ and bars 2^b-4^a , the last-named repeated in bars 4^b-6^a). The opening theme proper, along with the thematic meter and hypermeter, enters only in bar 6^b , by which time the much expanded hyperbar 0 has had a chance to unsettle the movement's metrics considerably (in keeping with the Saltarello's spasmodic, volatile character).

A uniquely expressive pedal call, one that spans a generously expanded bar 0, ushers in the exquisitely dissonant opening theme of Schumann's C major Fantasy, Op. 17 (Example 12b). Beyond the opening low G we find not an extension of the stationary Baroque bass tone but rather a wash of shimmering, piquantly astringent figures. These set the stage for the explosive entrance of Schumann's impassioned

²⁶ Reading an upbeat in the notated bar 2 brings to mind the farmer in the famous crop-dusting scene in Alfred Hitchcock's *North by Northwest*. As the suspicious biplane is spraying suspicious powdered dust nearby, the Man (identified earlier in the script as "nondescript" but "could certainly be a farmer") remarks to Thornhill (Cary Grant), "That plane's dusting crops where there ain't no crops" (Lehman 1999, pp. 100-107; see especially pp. 101 and 103).

theme—along with the more neutral thematic meter and hypermeter—in the middle of (the notated) bar 2. Reimagined as a composed-out, improvisatory vamp, the pedal call here acquires a distinct developmental profile, filling in the expanded bar 0 with richly suggestive detail. Although bar 0 still remains outside the thematic meter and its hypermetrical grid, it now plays a leading role in setting the composition's rhetoric, and in charting its temporal discourse.

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