CHAPTER THREE

PACE, GROUPING, AND DISPLACEMENT IN TRIPLE METER

I already suggested that there are fundamental differences in pacing between the duple and the triple meters in early eighteenth-century style. These differences encompass duple and triple meter in general and also the many sharply etched meters that make up each larger metrical class. Because I'll be dealing with a wide variety of constituent meters in this chapter, I'll be using the word meter in its admittedly somewhat awkward plural form.[1]

The most significant differences between the duple and the triple meters reside in the articulation of the basic pace: The characteristically even flow of the basic pace in the duple meters is replaced by a characteristically uneven flow in the triple meters. We've already encountered this difference in the closing examples, from Handel's G-major and E-major Courantes, in chapter 1 (Examples 1.25-1.27), and we shall soon encounter it again. The importance of the distinction becomes self-evident when one considers the need for rhythmic balance between the various movements of a long piece. In the present chapter I shall investigate the degree to which my earlier observations about pacing, grouping, and displacement in the various duple meters are applicable to the triple meters, and I shall identify the metrical and hypermetrical features that are unique to the triple meters as a group. Again, a survey of each triple meter and its pacing, grouping, and displacement patterns at the level of the segment, the phrase, and sometimes the period will follow. In

[1]I hasten to note that the word rhythm has often been used in the plural too, and that Kirnberger (p. 397, for instance) uses "triple meters" from time to time as well.

several instances the scale of the examples' pacing and grouping will be larger than the scale of the examples in chapter 2: The emphasis on a broader scope will serve as a prolegomenum to the analysis of complete long movements in chapters 4 and 5.[2]

Part 1. On triple meter

I. The duple and the triple meters compared

Common features. Unlike the duple meters, which assert their own characteristic array of paces, groupings, and displacements—and then proceed to borrow additional resources from other duple meters—the triple meters share many durational attributes. The triple meters obviously differ from each other in character and in scale, and especially in the sheer amount of material each meter can accommodate within the span of a single measure. But in what concerns long-span durational structure and tonal pacing close to the surface their differences are often outweighed by substantial similarities, especially when it comes to the behavior of the basic pace. That is one reason why the triple meters can support many different kinds of hemiolas as well as elaborate dialogues between such meters as 3/4 and 6/8, 3/2 and 6/4, 3/4 and 3/2, 6/4 and 6/8, and so on. (I shall explain soon the seeming anomaly of including 6/8, 12/8, and 6/4 among the triple meters.)

Harald Krebs has emphasized the distinction between two types of metrical dissonance: One in which congruent layers of the same meter, having been temporarily misaligned, lead to displacement, however mildly, and one in which noncongruent meters, having been temporarily superimposed atop each other, yield hemiolic formations and other, similarly complex effects.[3] A truly mild but very characteristic example of the first

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[2]Spitzer 1998 gives the most thorough account of the differences between the duple and the triple meters.

[3]Krebs 1999. McKee 2000 provides a particularly clear summary of Krebs's

type is readily apparent in Example 3.1a: To observe it, one need only compare the notated meter of 4/4 with the sixteenth-note afterbeats that fashion the incipit of the ritornello theme (see the brackets atop the example). Many examples of the second type will emerge quickly if we glance ahead at the cadential hemiolas in Examples 3.4, 3.7, and 3.10. The first type (actually Krebs's second) occurs most frequently in the duple meters, in the form of half-note and afterbeat displacements, and the second (Krebs's first) occurs most often in the triple meters, in the form of hemiolic idioms, at least throughout early eighteenth-century repertoire. Wholesale displacement of the thematic meter, so typical of the duple meters of course occurs in the triple meters too, but usually as quarter-note afterbeat displacement, and—even more often but less significant structurally—as eighth-note afterbeat displacement. The opening four measures of the rather complicated excerpt in Example 3.1b, to which I shall be returning several times, illustrate in preliminary fashion.

The basic pace and basic segment. Except for the occasional moderately paced movement in 3/4 time and the occasional slow movement in 3/2 time, works in triple meter rarely follow a basic pace of three-to-the-bar. Instead, they usually alternate between an even basic pace of one-to-the-bar and an uneven composite pace of two-to-the-bar. To the steady, "fast-slow" alternation of half notes and quarter notes I observed in the G-major Courante (Example 1.25-1.26), and to the alternation of quarter notes and eighths in the E-major Courante (Example 1.27), we can add a "slow-fast" alternation of eighths and quarter notes; see Example 3.7. Observe also, in the deceptively tranquil Larghetto theme at Example 3.9, the alternation between dotted half notes, half notes, and quarter notes: The inner turbulence of the Larghetto is projected by these hidden currents of rhythmic flow.

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approach.

Basic segments in triple meter typically extend for two bars at the beginning of the piece, and they establish a two-bar grouping pace as well as a two-bar primary periodic span right away (Example 3.2). The grouping pace and the periodic span will in turn expand, the last-named considerably, as the piece progresses (compare the two-bar segments in Example 3.2 with the expanded four-bar segment in Example 3.13). But because triple measures tend to be relatively short, the grouping pace will expand and contract more frequently and more widely than the comparable grouping pace in the duple meters. The built-in tendency of the grouping pace and the periodic span to expand and to expand rapidly is one of several reasons why the triple meters, small and large, support duple hierarchies to a greater extent than the duple meters in high Baroque style do. Even slow-moving subphrases in 3/2 time are quick to form six-bar phrases.

Grouping. With allowances made for many individual fluctuations in the basic pace, these observations about pacing and grouping hold for the entire gamut of triple meters, including the compound triple meters. And that brings us to the question of 6/8, 12/8, and 6/4. While a measure of 6/4 or 12/8 obviously contains twice as much material as a comparable measure of 3/4 or 6/8, the scope of the material supported in the course of one measure by each of these larger meters shows an individually defined and a highly characterized range of pacing and grouping. That is the reason why it is preferable to regard the large meters as autonomous temporal configurations: Their long measures embody distinct durational entities, not just pairs of smaller measures whose intervening bar lines have been removed.

One might of course still argue that 6/8, 6/4, and especially 12/8 should more properly be viewed as purely duple meters rather than as triple meters in their larger outlines. But the frequent participation of the basic pace and its satellite figural paces in most of the local triple divisions of the piece—through the uneven composite pacing characteristic of triple meter, and through contraction and acceleration—marks even the

larger compound meters as fundamentally triple in design. Example 3.28 illustrates: The harmonies and the contrapuntal activation of the eighth notes shown at c) indicates that the eighth-note diminutions have been activated by the accelerating figural and cadential pace. The Example indicates that the large meters are distinguished by a characteristically uneven composite pacing not only at the deeper levels of the basic pace but also, closer to the foreground, at the levels of the figural piece, especially at the quarter-eighth level of 3/8, 6/8, and 12/8.[4]

Note values. A fundamental difference between the duple and the triple meters resides in the smaller range of note values available to each triple meter. Whereas an allegro in 4/4 time (such as the Allegro in D minor from the F-major Concerto Grosso, Op. 6, No. 2, quoted in Example 3.1a) contains notes ranging mostly from quarter notes to thirty-second notes, with the emphasis on movement in eighths and in sixteenths, a comparable allegro in 3/4 time (such as the fourth movement from the D-minor Concerto Grosso, Op. 6, No. 10, quoted in Example 3.1b) contains notes ranging only from quarter notes to sixteenths, with the emphasis on movement in quarter notes and in eighths. Courantes, especially, show a distinctly narrow range (Example 3.2). (This, of course, is a very broad observation that applies in a very general way to the recurrence of note values over the span of a complete movement; it does not exclude the preponderance of longer or shorter durations.)[5]

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[4]There are times, of course, when 12/8 is nothing but 4/4 with its quarter notes divided into eight-note triplets, but in Handel's instrumental music examples are scarce. One comes upon them frequently in Corelli's Op. 6, for instance, and in Bach's vocal music. Marshall 1996 provides an extensive discussion of the phenomenon and includes illustrations in which the upper voices are notated in 12/8 time while the bass instruments are notated in 4/4.

[5]And again, Handel's courantes are really correntes (see chapter 1), but my observation, I think, holds for the French courantes as well.

The smaller range of durations in triple meter has important hierarchic consequences. It leaves the Baroque composer with only a small durational layer—a thin, transparent curtain—with which to separate the eighth-note and the quarter-note figural paces at the surface (in, say, 3/4 time) from the dotted half notes or the alternating half notes and quarter notes of the basic pace below the surface. When sixteenth notes—or else half notes and dotted half notes—are largely absent, as they are in many of Handel's courantes, the constant stream of eighth notes tends to combine or to collapse the movement of the various paces into one durationally homogeneous line; see again Example 3.2. In this instance, the emergent durational recombination enhances and underlines the presence of the rhythmic complexities that inform the genre, but at the same time it also covers them up. The triple meters may present an attractively straightforward duple hierarchy in the large, but they certainly show a daunting labyrinth of elusive metrics in the small.

Internal division. To an even greater extent than a measure in 2/4 time, a measure in 3/8, 3/4, or 3/2 time lacks a ready-made internal metrical hierarchy, one that might determine the relative priority of its second or third beats. Example 3.3 illustrates. Depending on the thematic, textural, or rhythmic emphasis that falls on the beat, either the second or the third beat might be the stronger of the two. Internal grouping or division within the measure—along the lines of grouping and division of three-measure groups that we encountered in chapter 2—is therefore likely to follow either a one-plus-two or a two-plus-one pattern, depending on the design of the foreground. If the measure divides into 1 + 2, the second beat will be stronger than the third; if the measure divides into 2 + 1, the third beat will be stronger than the second. The first division is shown in Example 3.3; note the suppressed pedal call at the beginning of Example 3.3a, and the explicit pedal call at the beginning of Example 3.3b. (Why Example 3.3a should divide into 1 + 2 will become clear when I discuss nested afterbeats.)

To the extent that later tonal music favors themes with pronounced upbeats (the sole examples in chapter 3 are 3.28 and 3.30), the 2 + 1 division of the measure in the triple meters is perhaps more common, more *thematic* in later repertoires that it is in Baroque music: Through aural experience we may have even come to hear it as more natural than the division into 1 + 2. The division into 1 + 2, by contrast, bespeaks the kind of rhythmic artifice, typically Baroque, that makes itself known in the sarabande, the menuet, and other genres which are geared to an accented second beat. A good example of a (temporary) division into 2 + 1 is found in Example 3.13: Here the inner voice initiates a 7-6 suspension series and introduces the "2" of 1 + 2, but the more prominent upper voice responds with a series of registrally prominent comments—the "1" of 2 + 1.

II. Afterbeat displacement in the triple meters

Second-beat afterbeat displacement. When the measure in 3/4 time divides into 1 + 2—Example 3.3b, of which still more presently, continues to illustrate—quarter-note afterbeat patterns are in a position to introduce a thematic downbeat on the second beat and to establish their own thematic and durational hierarchy, in much the same way that half-note afterbeat patterns do in the simple 4/4 (recall my discussion of the F-major Organ Concerto in chapter 2, Examples 2.15- 2.19). To an even greater extent, though, these quarter-note afterbeat hierarchies in 3/4 time coexist with the notated downbeat and with the notated metrical hierarchy without creating any sense of metrical ambiguity or conflict. After all, the downbeats of the notated hierarchy support the thematic hierarchy's durational and cadential points of arrival. The same observations apply to the thematic hierarchies established by eighth-note afterbeat displacements in 3/8 time and by half-note displacements in 3/2. Displacements in 6/4 and 12/8 time are more varied and more complex in nature: They resemble more closely the panoply of half-note displacements one encounters in the different 4/4 meters; I shall discuss them separately

later on.

We already know that Example 3.3b, the opening ritornello from the Larghetto of the Concerto in B= for Harp or Organ, Op. 4, No. 6, illustrates quarter-note afterbeat displacement in 3/4 time. But we may not be aware that the Larghetto's displacement does not occur in isolation. A passage that is very similar yet undisplaced appears during the developmental stretches of the third movement of the Concerto, an Allegro moderato in 3/8 time. That passage is reproduced in Example 3.3c: Inasmuch as its undisplaced metrics evoke the Larghetto's ritornello theme, they reconfirm that displacement has indeed occurred at the beginning of the Larghetto. (Handel supervised the publication of the Op. 4 concertos, so one is probably justified in claiming that the parallelism between the two excerpts is intentional.)

Looking at the Larghetto in Example 3.3b in greater detail now, we find that its notated downbeat, established by the characteristic pedal call, is metrically stronger than the thematic downbeat on the second beat (and stronger, to be sure, than the ancillary third beat) on account of its participation in both the metrical hierarchy and in the larger, hypermetrical hierarchy at the two-bar level. Just as it does at the middle of the measure in the simple 4/4, the thematic downbeat on the second beat carries its own special brand of displaced metrical and hypermetrical accentual strength, but it in no way threatens the domain of the notated downbeat. At the end of each segment, subphrase, and phrase, the emphatic arrival at the downbeat reinforces and takes advantage of the notated meter to such a degree that an effect of two strong beats in a row would ensue were it not for the built-in caesura—a kind of hidden breath—that intervenes between the first and the second beat, between the notated downbeat and the thematic downbeat. This, incidentally, is one reason why Handel's mid-bar displacements in the simple 4/4 are so clearly expressed: A hidden, subliminal caesura intervenes between the first and the second half of most measures, and especially between the opening pedal call and the

ensuing thematic downbeat (recall Example 2.15).[6]

Going back to look at Example 3.1a, one might in the same spirit say that subliminal caesuras separate the repeated statements of e^2 on the third beat of bar 1 as well as the third beat of bar 2. And, looking at Example 3.1b, one could similarly say that silent caesuras separate the pedal-like statements of d^1 across the first and second beats of bars 2, 3, and 4. The repetition of these notes is far from mechanical, and it should not be played in a mechanical way.

Again, the use of the strong rubric "displacement" to characterize quarter-note afterbeat patterns in 3/4 time might seem unduly drastic. The degree of displacement one really hears, so close to the notated downbeat, depends much more than it does in the simple 4/4 on a fluctuating, relative emphasis that accrues to the second beat in the immediate foreground, on a motive-to-motive, bar-to-bar, and phrase-to-phrase basis. The global, wholesale displacement of complete movements in the simple 4/4, by comparison, does not require quite so much by way of continual and intense confirmation. In the long run, though, the word displacement remains an eminently useful descriptor, as long as the thematic emphasis on the second beat is strong enough to sustain it consistently, and with the support of the voice leading structure.

The underlying voice leading remains the ultimate arbiter when questions regarding the existence or even the extent of a displacement arise. If a unit of voice leading—a segment or a subphrase, not to mention a phrase or a period—comes to a close at the downbeat and a new voice-leading unit begins at the afterbeat, displacement has taken place. The Larghetto in Example 3.3b offers ample illustration. But on account of the uneven and unpredictable pacing characteristic of the triple meters, it often happens that the closing unit on the first beat, and the opening unit on the second beat, share the same

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[6]The cadential hemiola shown in Example 3.3b is an idiomatic borderline occurrence: One does not become aware of it until movement has ceased on the second beat of bar 6. A subliminal hemiola, perhaps.

harmony. When that happens, the shared harmony obscures the maintenance of the displacement. Even then, the rule of thumb I just outlined still applies. Handel, at the second beat of bar 2 in Example 3.7c, keeps his displacement despite the absence of a new harmony at the beginning of the new one-bar figure.

Wholesale displacement. Afterbeat patterns in triple meter that suggest displacement for the duration of a complete movement are very common because it is in the nature of the thematic material in triple meter to begin off the notated downbeat. As a matter of habit—at least in early eighteenth-century music—triple meter tends to seek the emphasis of closure—a tonal direction to drive at—in the notated cadential downbeat that lies ahead. Exceptions are few: They occur primarily when the displaced group of measures or the collection of displaced groups of measures closes into a full-blown notated downbeat that signals the simultaneous beginning of an undisplaced group through an overlap (see, for instance, bar 5 in Example 3.1b, and observe the entrance of the violoncello and bassi at the downbeat). The overlap cancels the displacement out, at least temporarily. Exceptions also occur when the displaced stretch closes into an extra measure that allows the displacement to peter out altogether (as it does in Example 3.40, bar 37, near the end of the piece). I stress that these are exceptions, though: Under most circumstances the displaced group will be followed without any break by another group beginning with an afterbeat displacement as a matter of course.

Example 3.4, the opening ritornello from the Largo of the Concerto Grosso in B= major and G minor, Op. 3, No. 1, illustrates how the wholesale displacement of a complete movement comes about in 3/2 time. At the outset the notated downbeat serves also as the thematic downbeat. That, however, turns out to be a one-time introductory ploy designed to get the slow ritornello off the ground. The ritornello's short *Vordersatz* closes at the downbeat of bar 3 with the completion of a I-V#-I progression. At the second beat of bar 3, a four-bar sequence that makes up the *Fortspinnung* enters,

triggering a half-note afterbeat displacement. From this point on the ritornello—and along with it the entire Largo—is displaced. Not even the *Epilog*'s cadential hemiola, which characteristically follows the notated meter in bars 8-9, can restore the ritornello's "proper" metrics.[7]

A more complicated situation prevails in the fourth movement, Allegro, from the D-minor Concerto Grosso, Op. 6, No. 10, a piece to which I have already referred several times (Examples 3.1b and 3.3a). The Allegro is set in 3/4 time. The principal *Vordersatz* theme in bars 1-4 follows a characteristic quarter-note afterbeat pattern whose first eighth note is suppressed; see the upper bracket atop Example 3.1b/ The suppression of eighths adds a layer of eighth-note displacement onto the quarter-note displacement, pushing the displacement to the right by the distance of an eighth (a "shadow" displacement, as it were); see the lower bracket atop Example 3.1b. The suppression of the eighth note obscures both the presence of an underlying quarter note on the second beat and, consequently, of the measure's division into 1 + 2. The result is a typical Handelian subtlety: a 1 + 2 division masquerading as 2 + 1. (One could argue that the entire metrical structure of bars 1, 2, and 3 has been shifted by three eighths to the middle of the measure; the Muffat excerpt in Example 3.19 does precisely that. But the strong sense of an eighth-note upbeat—d^2 in bar 1—to an ornamental quarter note—$c\#^2$—speaks strongly against such a reading.)

The *Fortspinnung* enters, overlapping, in bar 5 (violoncello and bassi). Because it enters on the notated downbeat and continues to emphasize the downbeat for its entire five-measure run (bars 5-9), it cancels out the displacement of the *Vordersatz.* So drastically and so thoroughly does it obliterate the displacement that Handel must take steps, commensurably drastic in their own way, to make it possible for the richly terraced

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[7]This is a full-fledged, all-out hemiola: The outer-voice suspensions at the turn of bar 8 disclose as much. I shall address the apparent contradiction between the displaced thematic meter and the undisplaced hemiolas later.

afterbeats of the *Vordersatz* to re-enter in a convincing and fluid way. Before the return of each *Vordersatz* and the reintroduction of afterbeat displacement, Handel has a new theme—a relatively neutral set of transitional passages first introduced in bars 38ff. (not shown)—enter and clear the air. The new theme dispels the mechanistic metrical effects that the brusque intervention of the *Fortspinnung*'s notated meter has conjured up and facilitates the reentrance of the ritornello in bars 42ff.[8]

Nested afterbeats. The addition of eighth-note afterbeats to the underlying quarter-note afterbeats in Examples 3.1b and 3.3b offers good illustration of *nested afterbeats*, a notion I introduced in chapter 2 (see again the lower bracket atop Example 3.1b). Sixteenth-note afterbeats often nest within underlying eighth afterbeats in the same way that eighth afterbeats nest within quarter-note afterbeats. I shall spare the reader another tortuous analysis along the lines of my close reading of the ritornello theme from the E-minor Flute Sonata, Op. 1, No. 1^b in chapter 2 (recall Example 2.32), but I emphasize that the same kind of complexity involving the expansion, contraction, overlap, and elision of the afterbeats' time spans prevails as persistently in the triple meters as it does in the duple meters, if not more so.

The third beat. There has never been a consensus among theorists about the accentual status of the second and the third beats in triple meter. Burney seems to voice sentiments that are distantly similar to my notion of a thematically accented third beat and an

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[8]Handel's rhythmic scheme fits in neatly with his reliance on borrowings. According to John Roberts (private communication), bars 1-4 derive from or at least relate to the aria, "Ma non s'aspetti, no" from Handel's own opera, Floridante; bars 5ff. derive from the Suonata sesta of Kuhnau's Frische Clavier Früchte; and bars 38ff. are based on the Courante from the second Suite, in G minor, of Gottlieb Muffat's *Componimenti musicali.* It always seemed to me that bars 1-4 came also from the opening measures of Scarlatti's D-minor Sonata, K. 5.

artificially accented second beat:

> Accent, in music. In the mechanism of melody, or measured musical tones, musicians have long agreed to regard the first and third notes of a bar, in common time, whether vocal or instrumental, as accented, and the *second* and *fourth* notes as unaccented. In triple time, divided into three portions, the *first* note and *last* are accented, the *second* unaccented. But these accents are variously modified; often to produce some comic effect, as wantonly limping, to ridicule lameness. If the *third* note in triple time is accented in serious music, it is always less forcibly marked than the first.[9]

A few theorists, influenced perhaps by the third beat's common role as the motivic upbeat to the next measure, have indeed suggested that the third beat is stronger than the second. According to Kirnberger,

> These triple meters have the common element that, in each, three beats are felt per measure, the first of which is always accented, the third unaccented. The second can be accented or unaccented, depending on the nature of the piece. That is, it is usually accented in ponderous meters and in serious pieces, as in chaconnes and many sarabandes; but in light meters this second beat is weak (p. 397).[10]

In practice, when no quarter-note afterbeats are present, the third beat may be occupied by a chordally supported and harmonically tinged upbeat to the following downbeat. More often than not, the chord or at least the bass tone at the following downbeat then extends through to the second beat of the next measure (compare the score in Example

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[9]Burney 1819, v. 1, s.v. *Accent*; quoted in Houle 1987, p. 131.

[10]Evidently, the notion of seriousness meant very different things to the two estimable observers.

3.13a, on which I had commented earlier, with the pace reduction in Example 3.13b). In such settings an internal grouping of 2 + 1 and an accentual norm of strong-weak-relatively strong quickly establishes itself.

Complexities arise when quarter-note afterbeat patterns, which present a 1 + 2 division within the measure, allow voice-leading chords of substance or other prominent elements of the design to occupy the third beat. The third-beat trills in Examples 3.1b and 3.3a illustrate nicely. The 1 + 2 division of the measure of necessity prevails, but a 2 + 1 "shadow division" lurks at the same time, especially if the "chord of substance" (or, in this instance, the "trill of substance") acts as a local upbeat to the notated downbeat.

Further complexities arise when the wholesale quarter-note afterbeat displacement that has shifted both the tonal and the durational structure over to the second beat allows the chords on the second and the third beat to simulate an internal two-beat upbeat to the following notated downbeat. On the face of it, an internal upbeat that emphasizes the following downbeat is (under the present circumstances) an anomaly: It seems to contradict the accentual patterns of the wholesale quarter-note shift away from that downbeat. This puzzling situation rules in one of Handel's few attempts to portray an easygoing, folksy style—the Polonaise in G from the E-minor Concerto Grosso, Op. 6, No. 3; see Examples 3.18-3.23, and the attendant discussion, below.

Third-beat displacement. Very rarely, a beginning on an upbeat supported by the tonic acquires sufficient textural, harmonic, and thematic emphasis to suggest afterbeat displacement to the third beat, somewhat in the manner of fourth-beat afterbeat displacement in the compound 4/4 (recall Example 2.28a, from the Allemande of Bach's A-minor Partita).[11] Despite the favorable circumstances, the implication of such

[11]Samarotto 1999b comments at length on Schenker's feeling that any upbeat will claim at least some accentual authority for itself at the expense of the following downbeat (Schenker 1935/1979/2001). It is up to the metrical hierarchy to try and wrest that challenge away from the upbeat as the composition evolves.

displacement in triple meter is very rarely realized in practice, and certainly not in Handel's instrumental music. An "almost did it" example, whose pertinence will emerge as we proceed, appears in the refrain that opens the Pasacaille from François Couperin's eighth Ordre, in B minor (Example 3.5a).

The tonal and textural emphasis—a metric *qua* rhythmic accent—that accrues to Couperin's opening tonic, and to the powerfully embellished chromatic passing chords on the third beat of bars 1 and 2, does suggest a kind of syncopated displacement. But the proposed displacement is obviously thwarted by the metrical impact—by the 1-2-3 count—of the massive rolled chords on the first beat of bars 1 and 2, and by the rising thirds that mold the upper voice. These rising thirds spawn the appearance of two reaching-over figures (see again Example 3.5a), and in so doing they lend even greater emphasis to the notated meter. A cadential hemiola now enters: It spans bars 2 and 3 in the right-hand part, and it makes use of the notated meter, just as cadential hemiolas usually do. The hemiola transmutes the metrical persona of the third beat in bar 2: This third beat, instead of trying to usurp the metrics of the theme, supports the hemiola's idiomatic but contradictory discourse. Like a metrical pivot chord, the third-beat chord here changes the allegiance it holds while it is played.

As the hemiola enacts its last gesture, on the second beat of bar 3, it dispels the tensions between the participants in the accentual drama: It allows the reaching-over figures to perorate by elongating the concluding step of the second figure, and it dissipates the energy of the upbeats by stressing the second, rather than the third, beat of the measure. The task of the couplets that follow is to resolve the metrical dissonance of the refrain by reverting to the more common afterbeat displacement of one quarter note to the right (Example 3.5b). Emblematically, these couplets emulate the conciliatory lead of the hemiola's last gesture.[12]

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[12]Only a few of Couperin's couplets try to build on the rhythms of the refrain. Among the pieces in the literature that follow a similar metrical scheme consistently are the

The significance of this example to our Handelian discourse resides in the light it sheds on Handel's hemiolic practice, a light more sharply focused than that of any Handelian hemiola. We think of the hemiola as a metrically dissonant idiom whose intention it is to contradict the metrics of the piece, however briefly. But in the larger scheme of things the hemiola—at least the cadential hemiola—acts in precisely the opposite capacity, that of clarifying and regulating the flow of the metrical hierarchy. By following the notated meter rather than the displaced thematic meter the hemiola lends emphasis to the chord that follows on the next notated downbeat. More often than not that is the last chord of a thematically displaced afterbeat pattern, which requires just this kind of added emphasis. By providing the required emphasis the cadential hemiola reminds us where the metrical scaffolding of the piece stands in relation to its thematic design: It undertakes, at the end of the phrase or the period, to mirror the task carried out at the beginning by the pedal call.

III. Other accentual disturbances

Counterstress. Local emphasis on the second beat that represents not displacement but rather the accentual scheme of an established genre pervades Handel's sarabandes, chaconnes, and menuets, and it figures prominently also in his similarly disposed dance-style pieces. As a rule, such generic emphasis, which does not usurp the metrical authority of the downbeat, rarely generates afterbeat displacement. It usually accrues to the second beat through a conspicuous durational accent or through a melodic, textural, or

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second movement of Haydn's Piano Sonata in D, Hoboken 51 (Landon 61), and the Scherzo from Beethoven's Fourth Symphony (whose thematic material is probably borrowed from that of the Haydn D-major Sonata movement. Rhythmically intricate menuets, scherzos, and trios occasionally do so as well; see the discussion of Beethoven's Op. 135 in Samarotto 1999b.

registral intensification of the type I call (following William Rothstein) *counterstress*.[13] Counterstress helps define these dance forms, especially when the piece in question is not specifically titled, or when the rhythms of the piece suggest that the genre in question is enclosed within the confines of another genre. But a counterstress that falls on the second beat and competes with the adjacent downbeat can occur in any composition. Its prevalence in dances is probably the reason why it appears in the triple meters so often. Its ubiquity in imitative textures—during the preparation and the resolution of suspensions, and at points of imitation—accounts for its reciprocal prevalence in the duple meters.[14]

Several examples of second-beat counterstress in 3/4 time follow each other in close proximity in bars 2 and 3 (and, as a trilled echo, in bar 4) of Example 3.6, from the heroically inflected Largo of Handel's F#-minor Suite (1720). The abrupt introduction by leap of thick, dotted chordal sonorities on the second beat of those measures creates a series of distinct *sforzato*-like effects against the steady metrical background maintained by the notated downbeat. It is the notated downbeat, not the competing counterstress, that serves as the thematic downbeat throughout bars 2-5[a]. An uncharacteristically massive and long pedal call occupies all of bar 1 without displacing the Largo's metrics. And following the downbeat of bar 5, the accentual play between the first and second beats begins to suggest the presence of a shadow meter in the upper voice.

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[13]The term seems to be original with Rothstein 1995; I focus on counterstress in Willner 1998.

[14]I explain in Willner 1998 how it is that counterstress can impose itself on almost any beat, and how its domain can reach hypermetrical proportions. I should add that although counterstress indeed rarely generates afterbeat displacement, there are sarabandes and sarabande-like pieces where it conspires with the metrics of the genre to attempt just that: the Sarabandes from Bach's G-major and E-minor Partitas especially (Example 3.33), and the closely related "La Terpsichore" from Couperin's second Ordre. Whether it succeeds is another matter.

Counterstress and hemiolas. Second-beat counterstress plays an essential role in defining the hemiola's third accentual gesture, which the hemiola enacts during the second measure of its signature two-bar formation.[15] The added emphasis on the second beat is needed especially in the many borderline cases where the overarching hemiolic metrics are not strongly characterized. A good example is the aforementioned suspension of activity on the second beat of bar 6 in Example 3.3b. The durational accent that accrues to the second beat through the brief caesura defines the hemiola in the nick of time.

At least in theory, a matching third-beat counterstress may be expected to play a similar role in defining the metrics of the hemiola's second accentual gesture, during the hemiola's first measure, but in practice the frequent use of suspensions to tie the two hemiolic measures together produces an altogether different effect: It defuses both the purely local rhythmic counterstress on the third beat of the first measure and the metrical stress on the downbeat of the second measure, and in their place it contributes a prominent durational accent. To put it differently, instead of promoting tonal counterstress the suspensions offer an extended syncope figure that is unique to the hemiola idiom (bars 26-27 in Example 3.7a). The special thematic quality of the hemiola is due to the temporal bump realized by this long durational accent, and to the tonal qua durational bump occasioned by the second measure's second-beat counterstress, which follows.[16]

In a group of studies on the hemiola I described how hemiolas may require the basic pace to accelerate, from essential one-bar movement to movement in half notes (in

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[15]These remarks apply, tacitly, also to short hemiolas in 6/8 and 12/8 time, which take place within the measure.

[16]The effect of an aural bump is mildly analogous to the bump the performer experiences when encountering metrical displacement in 4/4 time. I derive the idea from Burkhart 1995. Schulenberg 1996 emphasizes the foundational significance of the hemiola's idiomatic suspensions.

3/4 time), or to movement in whole notes (in 3/2 time).[17] I also showed how hemiolas may make use of composite pacing and how they superimpose themselves at the surface without affecting the underlying durational movement much. The basic pace underlay in Example 3.7b illustrates the second observation vividly.[18]

Displacement and hemiolas. The circumstances under which hemiolas—cadential hemiolas especially, but by extension other hemiolas as well—follow the notated meter gradually become clearer now. The key to the relatively fixed position of hemiolas vis-à-vis the notated meter is the fixed position of the chord to which cadential hemiolas lead: Virtually all cadential hemiolas lead to a local tonic, or to a "deputy tonic" (the deceptive VI or IV^6), which as a rule arrives at the following downbeat. If no displacement is involved, the closing chord at the downbeat may well occupy as much as a complete measure (Examples 3.7a and 3.7b, Example 3.15). Paradoxically, the confrontation between the hemiola and the notated meter is greater when no afterbeat displacement is involved since in the absence of a fresh afterbeat pattern the closing chord has more time to counterbalance the hemiola.

On the face of it, then, the hemiolas present a three-way metrical dissonance that makes itself known at two metrical levels. At the level of the measure the metrical dissonance operates against the notated meter and against the prevailing displacement; at the level of two measures it operates against the notated hypermeter. The basic pace reduction in Example 3.7b illustrates. The metrics of Couperin's Passacaille (Example

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[17]Willner 1991, 1996a, 1996d, and 1996e; see especially 1996e.

[18]*Ibid.* In the three articles I provide an extensive typology of Handelian hemiolas, with further references to other hemiolic studies. Rohr 1997 and Krebs 1999 offer nineteenth-century updates. Metrically displaced hemiolas in Handel are rare, but they occur in Couperin, Scarlatti, and Bach (Willner 1996a, Corrigan 1992), in adventurous menuets, scherzos, and trios, and in the nineteenth-century repertoire (Rohr and Krebs).

3.5), however, tell us that in a deep sense this dissonance is more apparent than real: Disruptive though it is, the hemiola nurtures rather than obstructs the notated meter.

Accentual personae. Under the proper thematic and durational circumstances each beat in triple meter can acquire its own distinct rhythmic and accentual persona. Each beat in other words can support a kind of accent completely different in character from the kind of accent that falls on either of the adjacent beats. In the music of the High Baroque, pieces that proceed at a relatively slow tempo sometimes promote brief stretches that turn this genuine but very dense accentual scenario into a rhythmic and thematic reality.[19]

At the beginning of the third movement, the Adagio, from the G-major Concerto Grosso, Op. 6, No. 1 (Example 3.8a), the notated downbeat is announced by the opening pedal call. It is played by all instruments except the first concertino violin, and it contributes a distinct, highly characterized metrical accent that is duplicated by the solo violins' alternating dotted half notes in bars 2, 3, and 4. Instead of closing at once, the pedal call overlaps with the entrance of an equally pointed but differently characterized tone, the thematic downbeat, which is introduced by the first concertino violin, on the second beat. This displaced downbeat brings with it a quarter-note afterbeat figure of three tones (two quarter notes and a dotted half note) that closes into the notated downbeat of the following measure. The three-tone figure then becomes the Adagio's principal motive.

In bar 2, the three-tone figure is entrusted to the second concertino violin. As the group's repetition begins on the second beat, a jagged ostinato counterpoint introduced at the same time by the ripieno's cellos leads on to the third beat of the measure. The cellos' rising third progression, e-f#-g, and the change in note values from eighths to sixteenths at

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[19]Frank Samarotto (1999b) describes a somewhat similar setting in Beethoven's Op. 135.

the arrival on g on the third beat, generates a rhythmic counterstress that is a worthy companion to the other two stresses in the measure.

Altogether, then, three different accents occupy bar 2: the notated downbeat, which represents a motivic point of arrival and stands implicitly for a new pedal call; the thematic downbeat on the second beat; and the rhythmic counterstress on the third beat. The feasibility of realizing such accentual and motivic density diminishes considerably at the quicker tempo of most of the pieces under discussion here, and at the relatively fast pace of most Baroque instrumental music in general. But even in slow movements a crowded accentual overlay is by no means always practicable or even desirable. It can certainly not be maintained for the duration of a long movement without a laborious effort on the part of both composer and performer.

I made little mention of counterstress in chapter 2 because in the absence of massive fugal or imitative textures or of dramatic rhythmic contrasts it appears quite rarely in Handel's duple meters.[20] In Bach's duple meters, which are pervasively imitative and angular, counterstress is by contrast a common idiom. Example 3.8b illustrates Bach's way with counterstress better than words can.[21]

IV. More on pacing in the triple meters

Three-to-the-bar pacing. I described earlier how in triple meter the basic pace constantly fluctuates between a one-to-the-bar and a two-to-the-bar movement within a slower, more fundamental one-to-the-bar framework (recall especially the discussion at the end of chapter 1, and see, by way of a refresher, Example 3.15). Situations occasionally arise,

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[20]Handel's fugal textures and imitative textures, we observed, are anything but conservative.

[21]I give a detailed account of Bach's way with counterstress in Willner 1998.

though, in which the chordal activity on the third beat—especially the characteristic appearance in first inversion of a triad that entered in root position at the downbeat—promotes related chordal activity on the second beat: Most often, it spawns the introduction of a passing chord linking the root position and the first inversion chords (Example 3.9). Similarly, quarter-note afterbeats, which activate the second beat thematically and chordally, can easily encourage the introduction of connective voice-leading chords on the third beat in order to fill out the measure (Example 3.10). If the activation of the second and the third beat continues with some regularity for many measures in a row, the composition will appear to have adopted a three-beat basic pace.

And occasionally, a genuine three-to-the-bar basic pace does indeed establish itself in just this way. During the first reprise of the closing Allegro from the C-minor Concerto Grosso, Op. 6, No. 8 (Example 3.11a), it seems at first that the second beat is occupied almost exclusively by passing chords (bars 1-4), and that the basic pace might emerge as a composite of half notes and quarter notes yet. But as the Allegro proceeds (bars 5ff.), it cultivates the contrapuntal three-to-the-bar pace so studiously that this faster pace quickly takes precedence, structurally, over all the more deeply lying paces (see the reduction in Example 3.11b). Emblematically, the closing V-I cadence of the first reprise, in the key of the mediant, finds itself on the second and third beats of the measure (bar 8).[22]

Obbligato pace, basic segment, and hypermeter. Because the measure in the triple meters is often shorter than the comparable measure in the duple meters, it lends itself more readily to participation in larger and inherently duple durational hierarchies. Obbligato paces, which take in several measures at a time, are for the same reason more clearly and

[22]Bach sarabandes not infrequently follow the same procedure within the framework of a developmental discourse. I present a detailed account in Willner 1996a.

more explicitly articulated in the triple meters, and they are easier to pinpoint analytically. (Recall my description of obbligato pace in chapter 2 as the broad pace established by the sustained or prolonging harmonies at the level of the segment or subphrase, and see the dotted and tied whole notes in Example 3.12.) The opening sixteen measures, bars 48-63, of the Allegro from the Ouverture to the Music for the Royal Fireworks show a one-to-the-bar basic pace and an unusually wide four-bar grouping pace (Example 3.12; the parentheses in the Example indicate that my count excludes the one-time delay occasioned in much of bar 47 and at the beginning of bar 48 by the measure-long extension of the pedal call at the downbeat of bar 47). The four-bar grouping pace is confirmed by the three repetitions of the principal four-bar phrase: These repetitions take place once on the tonic and twice on the dominant.[23]

Along with the four-bar grouping pace, a four-bar obbligato pace is established by the miniature four-bar extensions of the tonic and the dominant. A strong I-IV-V-I progression substantiates each prolonging four-bar phrase (see the lower staves in Example 3.12). In later measures the obbligato pace drops in and out in its typically unpatterned way, but it continues to project great associative significance whenever the Ouverture highlights four-bar groupings.[24]

Inevitably, both the grouping pace and the obbligato pace suggest the presence of

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[23]A four-bar shadow meter beginning with an upbeat—read now as an internal upbeat—at bar 47 is possible too; see the annotations under Example 3.12. In Willner 1999 I offer a more detailed but rather different analysis of pacing in bars 47-89.

[24]The motivic incipit in the first measure of each four-bar phrase in Example 3.12 begins on the second beat, as it would in a standard quarter-note afterbeat formation, yet the otherwise parallel motivic groups in the second, third, and fourth measures don't quite follow suit—they begin on the first, not on the second beat. At a deeper tonal level, the domain of the chord at the downbeat of the first measure does indeed extend through the entire measure, despite the thematic beginning on the second beat. Similarly, if in mirror-image fashion, the material on the second and third beats of each fourth measure prepares for the next four-bar group, imitating as it does the pedal call extension in bar 47; yet at a deeper level the chord at the downbeat again extends through the entire measure.

a four-bar hypermeter, but the hypermeter, such as it is, remains elusive: It comes and it goes throughout the Ouverture just as it does throughout most of Handel's orchestral pieces. These comings and goings, reasonably enough, dovetail those of the two paces by which the hypermeter is articulated, namely the four-bar grouping pace and the four-bar obbligato pace. The hypermetrical instability they bespeak is but one element that marks the Ouverture as a Baroque rather than as a galant piece, for all its dalliance with foursquare periodicity.[25]

V. Sequences

Sequential expansion. Ubiquitous in the duple meters, sequential expansion does not occur as often or on as large a scale in the triple meters. All the same, it remains Handel's fundamental means of tonal and durational enlargement in these meters as well, especially when the effect of a substantial deceleration of pace is needed.

It occurs less frequently for two reasons. First, ancillary chords that might serve as agents of expansion elsewhere tend to appear on the third beat of the measure or on the second and the third beats combined (see Example 3.13, and especially the annotations at b). These chords appear within either the time span of the chord on the first beat or the time span of the chord on the second beat (the last-named when quarter-note afterbeats are at play). The ancillary chords generate no extra time for expansion since they fall within the domain of a single step of the basic pace, which the chord on the first or on the second beat expresses (note the parentheses in Example 3.13b). Under similar circumstances in the duple meters ancillary chords usually occupy a time span equal at least to a full step of the basic pace (Example 3.14). Second, when sequential expansion

[25]The analysis of the G-major Polonaise from the E-minor Concerto Grosso, Op. 6, No. 3, below, suggests the same tension between the advocacy of galant periodicity and the evasion of large-scale hypermetrical equilibrium.

does take place in the triple meters, it requires each principal chord and each ancillary chord to occupy either a full measure (in 3/8, 3/4, or 3/2 time) or a long half measure (in 6/4, 6/8, or 12/8 time). The expansion runs the danger of lending the ancillary chord more weight and the consequent danger of slowing the basic pace down farther than circumstances warrant. Since the enlargement calls a good deal of attention to itself, it is generally reserved for either special thematic emphasis or for such highly stylized idioms as the sequences that occupy the Fortspinnung of the three-part ritornello (Example 3.15; this is the G-major Courante whose rhythms and whose hemiola I explained in chapter 1).

Triple sequential patterns. Idiomatically sequential clusters of three bars in which each measure represents one complete sequential component offer an important durational idiom that appears with some frequency in the triple meters, and occasionally also in the duple meters. Example 3.13, from Handel's F-minor Courante, and Example 3.16, from Rameau's Pièces de clavecin, illustrate (cf. the annotation under bars 3-6 in the Rameau excerpt). The principal chord of each measure enters on the downbeat and occupies either the first beat alone or both the first and the second beats; the ancillary chord takes up either the third beat or the second and third beats combined (the tail end of the second beat in Example 3.16). The cluster is usually accepted as a group of three bars by the ear even though it originates with a higher duple ordering of four bars (see the brackets and the annotations in each example). The three-qua-four bars are indeed supported by a duple tonal model in the form of a fourth-progression led by the bass and followed in parallel tenths by the upper voice. But the last component of the progression overlaps with the beginning of the next progression, and the fusion of the two progressions signals the early, premature conclusion of the sequence. And although each three-bar sequence represents an expanded basic segment, it contracts the composition's typical two-bar grouping pace to a one-bar grouping pace. For these two reasons—the loss of a measure and the one-bar pacing of the remaining three measures—one's sense of a larger duple

order weakens temporarily in favor of a transitional, ad-hoc triple order.

Incremental grouping. This idiomatic progression retains considerable durational importance not only on account of the frequency with which it appears but because it often characterizes the *Fortspinnung* of triple-meter ritornello cycles. Even more significantly, it represents a mechanism that is often called upon idiomatically to mediate between two-bar and four-bar groups throughout the early eighteenth-century instrumental repertoire. The progression, then, offers a more explicit and a more highly characterized example of *incremental grouping*, the principle on which I called in chapter 1 to explain the growth of the E-major Courante's grouping structure (Example 1.27).

Rameau's paradigmatic theme in Example 3.16 embodies all of the progression's many properties at one and the same time.

VI. More on basic segments, upbeats, and afterbeats

Basic Segments. One-bar and two-bar basic segments are common at the beginning of works in the compound triple meters, which are marked by longer measures than the simple triple meters. Examples 3.28 and 3.30, below, present typical one-bar exemplars. The simple triple meters also rely on one-bar and two-bar segments as a basic durational premise (Examples 3.1b and 3.2), but they offer a large number of four-bar basic segments, like those in Example 3.12, thanks to the short measures by which they are known. Hence their greater propensity for galant periodicity: A ready-made grid is built into their system already. It is up to Handel, in fact, to avoid the trappings of foursquare metrics.

Basic segments and larger duple ordering. I suggested several times earlier that many of the triple meters lack a real hierarchy within the measure. Meters without a tiered intra-

measure division of necessity employ the single measure as their smallest and most basic durational building block, and for the same reason they invite duple grouping at higher levels as a matter of course.[26] And so it is that reasonably stable duple hierarchies—built-up periodic grids—are paradoxically more common even among the large triple meters, those with one-bar basic segments, than among even the lightest duple meters. In Handel's music the shorter duration of the measure combines with the fast tempo, the light character, and the airy textures of the triple meters to sustain this seemingly unusual state of affairs.

Perhaps on account of its duple ordering and general lightness, Handel's triple-meter music blurs the distinction between pace enlargement in the solo pieces and grouping enlargement in the orchestral pieces. When the distinction does prevail, it manifests itself only in subtle ways.

Regardless of performing medium, the length of the basic segment, as such, often becomes the subject of grouping confrontation and grouping enlargement in the triple meters. Typically the confrontation takes place between unequal groups of measures, and especially between adjacent, alternating groups of three and four, four and six, or six and eight measures. The confrontation is quick to acquire a thematic character because each measure in the triple meters is so clearly established and so pointedly characterized as a packaged unit. At the opening theme of the Allegro from Handel's G-minor Suite of 1720, for instance, the contrast between the curt introductory two-bar segment and the long-breathed developmental six-bar subphrase that follows raises an issue whose elaboration and resolution later engages the help of several enlarged periods and, indeed, occupies the remaining measures of the piece (Example 3.17).

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[26]Schachter 1980/1999b demonstrates that a large-scale triple hierarchy is impracticable because it would contain impracticably long hypermeasures.

Internal upbeats. Tensions within grouping hierarchies and tensions within pacing hierarchies are less abundant in triple meter than in duple meter on account of the triple measure's greater thematic characterization on the one hand and its lesser hierarchical complexity on the other. The developmental opportunities presented by such tensions are consequently fewer. That explains in part why I have chosen to include a larger number of duple pieces than triple pieces in the present study.

If there is one rhythmic area in which the essentially thematic setting of triple meter comes into its own as a source of durational friction and elaboration that is the field of afterbeat displacement. The dialectics of afterbeat displacement stand at the forefront of developmental play in almost all triple meters—not so much on account of conflicts between the notated and the thematic downbeats (as I already observed), but rather because afterbeat displacements often simulate internal upbeats to the measures that follow, and in so doing they spin a tangled metrical web that affects the entire composition.[27] In chapter 2 I observed how reticent Handel is about exploiting the developmental possibilities built into half-note displacement in the simple 4/4, and how he declines the ready-made invitation to exploit such developments when composing gavottes. But within the confines of 3/4 time Handel by contrast often does accept a similar invitation—the opportunity to build up conflicts around the mysteries of internal upbeats—with enthusiasm. The G-major Polonaise from the E-minor Concerto Grosso offers a particularly good set of illustrations (Examples 3.18-3.23).

Like the Courante from the G-major Suite, which I introduced in chapter 1, the Polonaise is one of several Handelian pieces that seem to show the outlines of a miniature, embryonic sonata form (Example 3.18).[28] The "second theme" of the Polonaise (bars

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[27]The principal Handelian exception is 3/8 time, which usually begins on the beat. Couperin is among the few Baroque composers who engage in afterbeat displacement even in 3/8 time.

[28]I discuss the sonata affiliations of the Polonaise in Willner 1989, with further references to other scholars' observations on Handel's "sonata form." See also Petty

21ff.) in some ways does indeed contrast markedly with the "first theme" (bars 1-5[a], plus several varied and registrally enlarged repetitions; it is hard to pinpoint a transition precisely). The first theme is built around quarter-note afterbeat displacements that simulate internal, rising diatonic upbeats within each measure; see the brackets in Example 3.18a. The second theme is built around eighth-note afterbeat displacements that appear by contrast to project genuine descending chromatic upbeats; see the brackets in Example 3.18b. The diversity of the great sonata tradition seems to be in full view. (In the discussion that follows, the superscript "[a]" refers to the first beat of the measure, and the superscript "[b]" refers to the second and third beats cumulatively.)

As it happens, it is the unity of the great sonata tradition rather than its diversity that is prefigured here. Even though they are supported by a series of ascending, quasi-cadential progressions in the bass, the extended chromatic upbeats in the second theme turn out to be deceptive. At the level of the one-bar incipit they embody an inverted hidden repetition of the first theme's internal upbeats (note the alignment in Example 3.18). If one compares the passage with the keyboard piece from Gottlieb Muffat's *Componimenti Musicali* on which it is modeled, it becomes clear that the second theme's seeming upbeats are in fact fully fledged afterbeat displacements (Example 3.19).[29] Leaning heavily on the kind of displacements and ornamentation found in Couperin's Pièces de clavecin, Muffat begins his segments, subphrases, and phrases right in the middle of the measure, on the fourth eighth note, and concludes them in the third eighth. That is the setting in which Handel finds his theme (Muffat, bars 3-6; see the brackets in Example 3.19). Handel simply moves the displacement by one quarter note to the left, so

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1995a, pp. 226-29.

[29]John Roberts discussed this borrowing in "*The Song for St. Cecilia's Day* and Handel's Borrowing from Other Composers," a keynote lecture delivered at the annual meeting of the American Handel Society in College Park, Maryland, 1992.

that it now begins on the second eighth of the measure and closes on the downbeat.[30]

As the falling chromatic contours of the second theme's internal upbeat motive invert the rising diatonic contours of the first theme's internal upbeat motive (Example 3.20a), the ascending cadential progressions in the bass which support them suggest the enlargement of the first theme's rising third by omitting the first tone of the rising fourths they describe, and then expressing the remaining three tones as quarter-note afterbeat patterns. The result is a hidden repetition of the first theme. (See again Example 3.18b.)[31]

That the Polonaise is really "about" the reification of its internal upbeats becomes evident when one considers how the first theme's internal upbeat motive is extended into a large-scale thematic configuration already during the first repetition of the theme, in bars 5^{b}-9^{a} (Example 3.20b). The repetition does not halt on e^{2} in bars 6 and 8, in correspondence with the arrival at the apex of the tune in bars 2 and 4. Instead, it continues on to a high g^{2} on the downbeat of bar 7, and then on to an even higher b^{2} on the downbeat of bar 9. Following the presentation of the second theme proper, the repetition and the enlargement of the "upbeat" configuration is both answered and dissipated by a remarkable peroration that puts the central issue of internal upbeat vs. afterbeat displacement to rest (admittedly at the price of ignoring the chromatic twists and turns of the second theme). The peroration relocates the rising third that occupies the first theme's internal upbeats, metrically as well as registrally, with a bluntness that is rare even for Handel (see the curved brackets in Example 3.21).

Looking at the second theme and at the ensuing peroration in greater detail now,

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[30]Muffat's displacement is the same one finds in the Sarabande from Bach's G-major Partita and "La Terpsichore" from Couperin's second Ordre.

[31]It is very instructive to note that Muffat has rising fourths, not thirds, under his theme (a good example of invention in Handel). The tension between upbeats and afterbeats, incidentally, is much more of an issue in Bach's instrumental music, for instance in the Prélude to the C-minor Suite for Violoncello Solo.

we find that the entire dominant region—from the beginning of the theme to the codetta at the double bar—divides roughly into three groups, of four, four, and five bars. The first of these groups, reproduced in Example 3.18b, contains the second theme proper (bars 21^{b}-25^{a}), and the last two (bars 25^{b}-29^{a} and 29^{b}-33^{a}), reproduced in Example 3.21, dovetail the second theme in the manner of *Fortspinnung* and *Epilog*. The two-bar "post *Epilog*" codetta (bars 33^{b}-35^{a}) follows.

The second four-bar group, the *Fortspinnung* (bars 25^{b}-29^{a}), provides a second set of hidden variations on the first theme's simulated upbeat figure by replacing the second theme's characteristic eighth-note afterbeat displacements with underlying dotted-quarter-note afterbeat patterns, which are modeled perhaps on Muffat's signature displacement (see the straight brackets and the annotations in Example 3.21a). The overlapping five-bar group, the *Epilog* (bars 29^{b}-33^{a}), by contrast, restores the first theme's quarter-note afterbeat patterns (if under the cover of running sixteenths) but it defuses the first theme's internal upbeat figure by shifting the figure's characteristic rising third from the third beat to the second (see the curved brackets and annotations in Example 3.21b). The Epilog also takes the rising third away from the upper voice and relegates it to the inner voice for three measures in a row, purposely robbing it of its thematic and rhythmic panache (compare the curly brackets throughout Example 3.21).[32] By way of compensation, the rising third's new location, at the second beat, suggests a network of thematic relations all its own: It helps us recall that during the second theme, the second beat was the site of the bass progression's enlargement of the rising third. We now realize that the bass enlargement may have served as preparation for the figure's later peroration.

At the end of the recapitulation the peroration undergoes a drastic change: Its displaced rising thirds are elevated from the inner voice to the top voice (Example 3.22).

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[32]I thank Timothy Jackson (private communication) for drawing my attention to the *Epilog*'s transformation of the rising third.

Entering at the highest register of the Polonaise they rise in the most exposed way up into the three-line octave, at which point they join the cadential descent of the melodic line. The quarter-note afterbeat patterns do of course prevail again in the two-bar codetta, but within its post-cadential framework they can do little but reminisce. The sense of quarter-note displacement as such has all but dissipated.

Because two-bar and four-bar groups proliferate in both the first-theme and the second-theme areas in equal measure, it is tempting to look for an embracing four-bar hypermeter in the Polonaise's durational structure, and for an expansion of its grouping pace from two-bar to four-bar pacing. But a strong emphasis on two-bar grouping prevails: As if to suggest large-scale syncopation, isolated two-bar groups that stand on their own intervene several times right between the few four-bar groups that do emerge in the first theme area, repeatedly throwing the effort to build a larger periodicity off. As they usurp the authority of the periodic grid, they forestall the formation of a consistently large hypermeter or the establishment of a primary periodic span longer than two measures; Example 3.23 illustrates.[33]

Metrical irregularity. Deliberately irregular metrics are as rare in Handel's triple meters as they are in his duple meters. Minor irregularities sometimes do appear at the surface in the lighter dance-like orchestral pieces, though, where the fifth measure of an eight-bar phrase might echo not the opening measure, as one would expect, but rather the preceding fourth measure. The surprise throws one's thematic orientation as well as one's metrical and hypermetrical bearings off. In the last movement of the C-minor Concerto Grosso (Example 3.11, above), a motivic figure comprising two-sixteenth notes plus an eighth predominates in bars 5 and 6. Because the figure echoes similar figures presented on the

[33]Whether the contiguity of two-bar and four-bar groups procures (or is intended to procure) metrical dissonance remains an open question. I discuss the larger hypermetrical patterning of the Polonaise in relation to its form and tonal structure in Willner 1989.

last beat of bars 2, 3, and 4, its entrance is quirky—it welds bars 4 and 5 together just at the point where one would have expected some sort of caesura. Hence the effect of irregularity that the entrance conjures up.[34]

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Part 2. The triple meters surveyed.

I should like to devote the remaining pages of this chapter to a survey of basic pacing and grouping in each of the major triple meters. Since many of the issues involved will by now be familiar to the reader, I shall take this opportunity to begin delving into matters of long-span duration, pacing, and grouping.

3/8 Time. Marked by a combination of rapid tempo, light textures, and a one-bar basic pace, 3/8 time would seem to offer little by way of durational expressiveness or developmental potential. Even Kirnberger's description of it is perfunctory: "3/8 meter has the lively tempo of a passepied; it is performed in a light but not an entirely playful manner and is widely used in chamber and theatrical music" (p. 397). But because pieces in 3/8 time seldom appear in isolation—they typically assume the strategic role of a dénouement at the end of a multi-movement composition, or else they play the role of an interlude between the composition's weightier movements—they can wield substantial rhetorical and dialectical influence in the larger scheme of things. The advantage of 3/8 over 6/8 time resides in the relative strength of its even-numbered measures, compared to that of the second part of the measure in 6/8 time. Though hypermetrically weak, even-

[34]The metrics of the Menuet from the F-major Concerto Grosso, Op. 3, No. 4, follow a similar scenario (see Willner 1999, pp. 201-2). The metrics of Bach's menuets and trios frequently suggest either 3 + 5 or 5 + 3 grouping in at least one voice, for instance in the Trio from the B-minor French Suite (Willner 1998, pp. 283-89).

numbered measures in 3/8 time convey a stronger and clearer accentual impression at their downbeat than do the second halves of measures in 6/8 time. They are consequently in a better position to support *sforzato*-like instances of counterstress at the level of the measure, and they lend themselves particularly well to the clear articulation of metrical overlaps, elisions, and reinterpretations. These, in turn, occur frequently in the type of transitional and occasional material that 3/8 time supports.

Example 1.27 in chapter 1, from the Courante of the E-major Suite, offers a very effective example of metrical overlap and elision in 3/8 time. At the downbeat of bar 8, the Courante's ritornello-like opening theme closes into the second phrase of the piece with a deceptive cadence that echoes a corresponding but less strategically conspicuous cadence in the Allemande (bar 7^{b}). The cadence prevents the Courante's theme from reaching its tonal goal, and it redirects the Courante's tonal structure elsewhere, namely towards the chromaticized supertonic and towards the dominant. The effect of beginning the new phrase with an unexpected cadential twist would have been decidedly weaker had the phrase begun during the second half of the a larger measure of 6/8 time.[35]

A characteristic instance of counterstress in 3/8 time is shown in Example 3.24, from the untitled Menuet of the Concerto Grosso in B=, Op. 3, No. 2.[36] The Menuet's opening four-bar segment—the *Vordersatz* of a three-part, twelve-bar ritornello—presents a perfectly stable metrical alternation of strong and weak measures entrusted to the solo oboes and the 'cello. Taking advantage of the Menuet's typical rounded-binary form, Handel turns the alternation of strong and weak on its head in the later stages of the piece. During the opening four measures of the abbreviated

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[35]In the larger scheme of things it may be that bar 8 remains a weak measure, but the thematic effect of its deceiving submediant would have been compromised, at least visually, by a 6/8 notation. (The relation of meter to performance, after all, often hinges on appearances.)

[36]I draw this title from Baselt 1986.

recapitulation, bars 41-44, the oboes and the 'cello simply repeat bars 1-4, but the tutti enter unexpectedly to occupy both the second and the fourth measure, bars 42 and 44. While the tutti's sudden intervention does not transform these two weak measures into metrically strong bars, it saddles them with a substantial rhythmic emphasis—a counterstress—that spreads over the span of the entire measure.[37] This counterstress now competes for prominence of accentual effect with the built-in metrical and hypermetrical emphasis that attaches to the downbeat of the recapitulation's first and third measures, namely bars 41 and 43.

It is well known that there are a few pieces by J.S. Bach that exist in both 3/8 and 6/8 versions. Of these, the most substantial are the Courante from the E-minor Partita for Clavier, the A-minor three-part Invention, and the Presto from the G-minor Sonata for Solo Violin. One reason why Bach usually settled for a later version in 3/8 time (dispensing even with the wise alternation of small and large barlines he sometimes employed in the earlier 6/8 versions) is the promotion of a metrically clear and well-characterized performance. The constant reinterpretation of weak measures as strong measures—a hallmark of 3/8 time—is much more palpable and effective when the measure's barline is spelled out as such than when the measure's barline appears hidden within the confines of a larger meter.[38]

3/8 and 6/8 Time. The common assumption, implicit between the lines of Kirnberger's discourse, that a measure of 6/8 time encompasses two measures of 3/8 time permits Kirnberger to dispense with an extended commentary on 6/8 time—nothing, in fact, that merits quoting.[39] As it happens, 6/8 time is actually a fairly complicated meter. Its larger

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[37]I thank Justin London (private communication) for suggesting this formulation.

[38]Lockwood 1996 offers much the same reason for similar alterations Beethoven made in his sketches.

[39]Kirnberger's one useful observation has to do with a distinction he draws between a

duple ordering enriches and substantiates the local triple grouping at the surface by providing a steady metrical foil against the continual intervention of hemiolas of various denominations: local hemiolas that occur at the level of the beat, within the measure, and larger hemiolas that engage three supra-beats across the span of two measures (to say nothing of overlapping hemiolas).[40] Equally important, the duple design of every measure allows the time span of chords to extend beyond the borders of the half measure without notational difficulties and it thereby facilitates the introduction of complexities that one does not usually encounter in 3/8 time. The contrast between the two meters is best gauged by means of two examples that show how differently each cultivates a similar durational kernel.

In the opening five-bar theme of the second movement, the Andante, from the F-major Concerto Grosso, Op. 3, No. 4, each of the first three measures carries two steps of the basic pace—a quarter note and an eighth—and a step of the principal grouping pace. The fourth and the fifth measure reverse the order of the basic pace's two steps and present an eighth note that is followed by a quarter note; the quarter note is camouflaged by an eighth, and by an eighth-note rest (Example 3.25a). Rather than offer an expansion of bar 1 through a direct repetition in bar 2 and a varied and through intensified repetition in bar 3, the anapest-like grouping in bars 1-3 in fact presents a very common three-bar idiom, one that hinges on the repetition of the first measure in the second, and on the presentation of a slightly changed design—a clearly recognizable variant of the first measure—in the third (Example 3.25b).[41] The idiom generally occupies a subphrase, and

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simple and a compound 6/8 (p. 401).

[40]Hemiolas in 6/8 time are generally much more common in Scarlatti, Bach, and Couperin, who use the meter often, then they are in Handel, who uses it only occasionally. Corrigan 1992 presents an admirably detailed account of hemiolic 6/8.

[41]It is the change of emphasis in the third measure that conjures up the effect of an anapest.

it is usually repeated in antecedent-consequent fashion to form a larger phrase of six bars. In this instance, though, it remains too incomplete at the turn of bar 4 to allow for direct repetition; of necessity, it leads to an altogether different motivic and textural continuation in bars 4 and 5. Although the idiom, to which no one has yet given a name, appears only from time to time in the music of Handel and Bach, it is ubiquitous in the Venetian instrumental repertoire, especially the concertos of Vivaldi. Emblematically, it plays the role of a rhythmic and thematic thread that runs through the Four Seasons (Example 3.26).[42]

The change in design in bar 3 of Handel's Andante—the threefold fragmentation of the Andante's opening motive—is sufficient to differentiate bar 3 from bars 1 and 2, and to clarify the durational picture of both the three-bar segment and its two-bar continuation. But the inconclusive ending of Handel's five-bar theme appears to imply that a closing, sixth measure has been left out: At least in retrospect, one can imagine the phrase in bars 1-5 leading to the dominant during the absent sixth measure. Furthermore, the anapest idiom in bars 1-3, as such, leads one to expect a commensurate three-bar response in bars 4-6 and a larger six-bar phrase. One's imaginary, retrospective interpretation is confirmed when one hears the phrase repeated later on, as a six-bar group, in bars 10-15 and in bars 16-21 (Example 3.25d). That a six-bar model does indeed serve as the basis for the first five-bar group becomes clearer still when six-bar grouping gradually emerges as the primary periodic span of the Andante. Indeed, the reification of six-bar grouping in the face of uncertainty in subdivision seems to be the essential theme of the piece.[43]

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[42]Hasty 1997 is among the few who have observed this phenomenon in print, drawing on the same paradigmatic Vivaldi example. The phenomenon has however been the subject of some discussion on the SMT-list.

[43]The change in design at bar 3 also suggests an alternative but less persuasive parsing of 2 + 3 that would call for bars 1 and 2 to be followed by a three-bar group, bars 3-5. The beginning of the three-bar group would be signaled by the change in design in bar 3

During the opening measures of the third movement, the Larghetto, from the Organ Concerto No. 13 in F (one of several movements the concerto shares with the Concerto Grosso in F, Op. 6, No. 9), Handel follows an anapest plan somewhat similar to the plan he used in bars 1-3 of the earlier Andante.[44] But in this instance Handel sets the anapest patterns in 6/8 time with no trace of elision (Example 3.27a). The opening theme, six bars long, contains a complete phrase composed of two three-bar subphrases—an antecedent and a consequent—with a two-to-the-bar basic pace and a one-bar grouping pace. The theme is anchored on a central mediant, rather than a central dominant, in bar 3.[45] The first two measures of each subphrase are welded together by the Larghetto's archetypal siciliana rhythms. Although the bass in the first subphrase begins to move away from the tonic during the second half of the second measure, it extends the tonic directly in the first half (see the tonal sketch in Example 3.27c). This extension—from the beginning of the subphrase to the middle of its second measure—supports the notion that at least the first of the two three-bar formations represents, in essence, our idiomatic anapest pattern, even though the pattern has been extensively modified at the foreground (see the time-span reduction in Example 3.27b; the reduction admittedly resorts to the kind of drastic normalization found in many of Lerdahl and Jackendoff's sketches).

The second subphrase, in bars 4-6, presents greater interpretative problems, for its bass line can be read in two different ways. The first (Example 3.27c), shows the

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(see Example 3.25c), and the three-bar group would divide into 1 + 2. Because the change in design in bar 3 is less significant than the change in bar 4, which brings in a new motivic figure, the first reading remains preferable. All the same, the alternative reading is by no means implausible: It is possible that bar 3 embodies an ellipsis—that it collapses the beginning of one three-bar group onto the ending of another.

[44]Gudger 1987 has removed any lingering doubts that the Organ Concerto was the first to be composed.

[45]This mediant is a particularly good example of what Schenker called *Terz-teiler*, or third-divider; it is the midpoint of the arpeggiation I-III-(I)-V.

mediant extending through to the middle of bar 5, with the help of a 5-6-5 exchange on top; the second—less obvious but more idiomatic (Example 3.27e)—shows the subdominant being unfolded throughout bar 4 (a faster realization of the same 5-6-5 exchange). The second reading's subdominant extends through to the dominant in bar 6 with the help of the parenthetical prefix I^6-IV-V. Either way, our anapest pattern prevails.

The anapest design underlying these measures is in effect not very different from the durational idiom underlying the Andante theme from Op. 3, No. 4, but it accommodates much more material, and it displays a much greater degree of complexity. The veiled extension of the tonic throughout bars 1 and 2, for instance, falls into place without difficulty within this framework of 6/8 time; it would be obscured by a rebarring in 3/8 time. Such a rebarring would emphasize the theme's potential for an altogether different grouping in threes—for a visually if not musically persuasive hypermeter of 9/8 (Example 3.27d). Paradoxically, the Larghetto's six-bar theme is rather clearer in its larger outlines than was our earlier F-major Concerto Grosso Andante's five-bar theme: The tonal and the thematic density within each of its measures prevents it from engaging in the kind of playful measure-to-measure uncertainty that marks the earlier work.

9/8 Time. As for 9/8, there are few pieces in 9/8 time in Handel's instrumental oeuvre. I have in any case dealt with the complexities of that meter in my analysis of the Prélude from Bach's D-minor English Suite, in "Bach's Periodicities Re-Examined."[46]

12/8 Time. Like 4/4 time, 12/8 time leads a double life, as a simple meter and as a compound meter. There are many attributes 12/8 time shares with the simple and the compound 4/4: similar two-to-the-bar and four-to-the-bar basic paces, similar types of

[46]Willner 1996b.

mid-bar and quarter-note/dotted-quarter note afterbeat displacements, and similar two-bar and one-bar grouping paces. All the same, 12/8 time remains a decidedly triple meter on account of its frequent contrapuntal and harmonic activation of the third eighth in its groups of three eighth notes.[47] In the simple 12/8, for instance, the dotted-half-note basic pace often engages in composite pacing with the dotted-quarter-note figural pace. The ensuing chordal intensification spills over, as it were, to the eighth-note level, which is generally occupied by diminutions, and it promotes additional contrapuntal and harmonic activity by the eighth-note figural pace. Example 3.28, from the Gigue of the early G-minor Suite published in 1733, illustrates: The contrapuntal and harmonic activation of the eighth-note figural pace is shown at c), under the basic-pace reduction at b) and under the score at a).

Since the Gigue theme is paradigmatic, not to say generic, it indicates that the simple 12/8 retains its characteristically triple quality as a matter of course. A similar but still more intensely tonal effect obtains in the compound 12/8, whose composite pacing is based on a quarter-note basic pace that frequently visits with the eighth-note figural pace. (Kirnberger, again, offers no comments that would be helpful to us. I adopt the terms *simple 12/8* and *compound 12/8* from his simple 4/4 and compound 4/4.)

In what concerns displacement, a brief example from a still earlier version of the same G-minor Gigue (which survives in several sources, some copied by Handel's associates) will suffice to illustrate the close correspondence between the simple 12/8 and the simple 4/4 (Example 3.29). The two-to-the-bar basic pace and the two-bar grouping pace of the Gigue support a thematic afterbeat mid-bar displacement identical to that found in the simple 4/4. Unlike the revised version of the Gigue, which announces its fugal subject bluntly with an eighth-note upbeat to bar 1, the early version begins with a chordal pedal call and a half-measure delay, and it leads to an emphatic half cadence on the

[47]Marshall 1996 reaches much the same conclusion.

dominant at the downbeat two measures later.[48]

In chapter 2 I quoted an interesting example of quarter-note displacement in the upper voice of a later, altogether different G-minor Gigue (Example 2.28b). That displacement resembled the Harmonious Blacksmith type of displacement, but just like its companion example, which presented the uncommon displacement of the upper voice in the Allemande from Bach's A-minor Partita for Clavier (Example 2.28a), it began on the fourth beat rather than on the second beat of the measure and it involved only thye upper voice: The bass followed the notated meter. I reproduce Example 2.28b here again, in Example 3.30. The example illustrates Kirnberger's observation (p. 398) that the compound 4/4—read the compound 12/8—is apt to close in the middle of the measure, and it shows how the one-bar grouping pace characteristic of the compound 12/8 is slightly masked by the discrepancy between the displacement in the upper voice and the notated meter in the bass. See the brackets in Example 3.30.[49]

Tacitly, Example 3.30 also suggests that closure away from the barline, pace Kirnberger, is not a very frequent occurrence in high Baroque style. The relative rarity of this kind of ending, at least in Handel's instrumental music, underscores the pressure Baroque composers were under to close at the barline. By extension, it also helps explain the frequent occurrence of mid-bar displacement in the simple 4/4 and the simple 12/8, and of quarter-note and dotted-quarter-note displacement in the compound 4/4 and the compound 12/8. It all but ensures closure at the barline.

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[48]The pedal call was obviously optional; some early versions of the Harmonious Blacksmith Air survive in manuscript copies without it. That is important for us, for it means that we can indeed sometimes supply it aurally in order to clarify a metrically vexing situation (recall my analysis of the Royal Fireworks Bourrée in chapter 2, Example 2.34).

[49]By way of generically idiomatic departure from an otherwise strict adherence to the basic pace, Handel maintains an expanded, dotted-half-note pace for most of the Gigue's duration. I discuss a similar example, from the F#-minor Suite, in chapter 4 (Examples 4.1 and 4.2).

3/4 Time. I have already presented examples of pieces in 3/4 time that show a common preponderance of eighth notes (the Courante from the G-major Suite, in chapter 1, Examples 1.25 and 1.26) as well as a much less common preponderance of sixteenths (the Polonaise from the E-minor Concerto Grosso, above, Examples 3.18-3.23). Kirnberger's revealing comments on the accentuation of the second and the third beat in the triple meters, which I quoted earlier, are the most interesting observations he offers that apply to 3/4 time.

At this point I should like to add but one example, the opening ritornello from the last movement, an Allegro, of the A-minor Concerto Grosso, Op. 6, No. 4. The ritornello's way with simulated internal upbeats is highly instructive, for it seems to present genuine upbeat figures—rather than afterbeat figures that simulate upbeats—before each measure (Example 3.31). I stress "seems" because as one becomes increasingly familiar with the vehement quality these figures assume at the surface (a quality Handel exploits obsessively throughout the long Allegro), one's ear begins to follow not the figures themselves but rather the contrapuntal voice leading—the underlying tonal rhythm—that supports them. After the movement's episodic solo-and-tutti exchanges get underway one gradually realizes that these apparent upbeat figures hang on to the voice leading of the measures in which they occur, not to the voice leading of the measures they introduce. Ultimately, one comes to accept the figures as afterbeats that are defined by the Allegro's tonal rhythm, even if one does hear them at first as upbeats. Similar idiomatic formations often occur in a relatively slow duple meter in Couperin, where they usually appear as afterbeats within the framework of extended mid-bar displacement; Example 3.32 illustrates.[50]

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[50]I maintain, in other words, that an accurate rhythmic interpretation of the ritornello depends on a comprehensive tonal reading of the entire Allegro, and on a comprehensive appraisal of the Allegro's tonal rhythm (as the term is defined in Schachter 1976/1999b). Examples of genuine upbeats in a somewhat similar motivic setting abound, though, in the

The difficulty of parsing Handel's ritornello and parallel passages throughout the entire movement stems not so much from the entrance of the opening tonic and the opening thematic formation at what seems to be an upbeat measure as it does from the use of the pedal call idiom to introduce the thematic formation's afterbeat displacement. To explain and resolve the difficulty will require a brief digression. There are indeed pieces in which the opening tonic is represented explicitly only by a long, genuine upbeat in the unaccompanied upper voice: The expression of the tonic by the thematic upbeat allows another chord to enter at the downbeat of bar 1. In Handel's instrumental works such unaccompanied yet structural upbeats are quite rare, even when they are accompanied by the bass. The Royal Fireworks Bourrée reproduced in Example 2.34 is the exception that proves the rule. But upbeats that represent the structural tonic appear idiomatically in the music of other Baroque composers. With or without accompaniment, they add a layer of complexity to the task of parsing some well-known sarabandes' topical second-beat accents. Example 3.33, from the Sarabande of Bach's Partita in E minor for Clavier, is often cited as an analytically challenging exemplar. It is most probable that in such examples the tonic is implicitly present as an imaginary pedal call already at the beginning of "bar 0," a full half measure or more before the entrance of the upbeat, and a full measure before the beginning of the composition's basic length.[51] The parsing I present in the remarks that follow is the parsing I would adopt for most of these exemplars.

In Handel's A-minor Concerto Grosso Allegro the implicit tonic at the head of the

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aforementioned Prélude from Bach's C-minor 'Cello Suite.

[51]Samarotto 1985 and Schulenberg 1992 both offer valuable comments on the E-minor Sarabande. My feeling is that even here an afterbeat, not an upbeat, is at play. Harald Krebs (1999) most often reads afterbeats, not upbeats, under similar circumstances as well. The Sarabande from Bach's G-major Partita, and Couperin's "La Terpsichore," are to my mind clearer than the E-minor Sarabande inasmuch as they present longer, less equivocal unaccompanied afterbeats.

usually putative bar 0, along with the usually tacit pedal call, is actually realized. It transforms bar 0 into bar 1. The pedal call is expressed as an urgent downwards leap by the ripieno's second violins and violas, and as a dramatically falling octave by the cellos and the bassi. The purpose of the tonic's early entrance is to establish an expressly gestural metric and rhythmic framework for the entire movement. The theatrical orchestration of the pedal call, similarly, is intended to generate the Allegro's pressing, motoric momentum.[52] For its part, the upper voice begins with a suppressed and then with a nested afterbeat: An eighth note rest delays the entrance of the ritornello theme at the second beat of the measure and replaces the quarter note that is due there with two nesting eighths of which only the second is stated by the violins; the first eighth is suppressed. In all, the delay is a dramatic ploy. One should begin parsing each phrase and period, and each segment and subphrase, right on the second beat whenever the afterbeat figures of bar 1 reappear (they are ubiquitous).[53]

The durational reduction by a factor of 2 in Example 3.34 clarifies these issues by bringing out the periodic and the hypermetrical contexts of the ritornello's tonal rhythm. As the Allegro's periodicity grows, it is this increasingly hierarchic context and our increasing familiarity with it that clarifies Handel's durational picture. We come to understand the Allegro's local metrics better as we assimilate the Allegro's growing hypermeter. We also come to appreciate the value of durational reduction. This is a particularly good example of a durational reduction that can yield metrical observations more clearly than other types of reduction.

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[52]The pedal call's theatricality captures the gestural spirit of the Scarlatti Essercizi, from which long stretches of the Concerto are borrowed (Derr 1989). The Allegro as a whole, though, assumes an idiomatically Venetian garb; compare the thematically similar last movement of Vivaldi's Concerto in G minor for Viola d'amore and Lute, RV. 540.

[53]This is different from the Muffat example (3.19), where there is no analogous rest. Parsing in the Muffat begins on the fourth eighth of the measure.

Having established a larger context for its metrical and hypermetrical parsing, I should like to dwell a little longer on the ritornello's durational features, because some of them are typical of ritornello cycles in 3/4 time. These features, which are highlighted in Example 3.34, include the distinct one-to-the-bar basic pace set up by the *Vordersatz* (bars 1^{b}-5^{a}); the straightforward sequential expansion of that pace during the *Fortspinnung* (bars 5^{b}-9^{a}), which makes it possible for the *Fortspinnung*'s four bars to balance the four bars of the *Vordersatz*; and the simulation of expansion during the first three measures of the *Epilog,* which introduces thematic arpeggiation vital to the later structural and narrative development of the piece (bars 9^{b}-12^{a}; the superscript "^{a}" again refers to the first beat of each measure, the superscript "^{b}" to the second and third beats combined). While the *Epilog* continues through to bar 15^{a} without introducing any expansion as such, it does suggest the establishment of a three-bar obbligato pace, to be confirmed later on, and in so doing it prepares for the deployment of six-bar and eight-bar obbligato paces in the second half of the movement. A one-bar grouping pace prevails through much of the ritornello; only during the *Fortspinnung* does it expand to a two-bar pace.

6/4 Time. Movements in notated 6/4 time are rare among Handel's instrumental works and therefore require little extended discussion here. The primary significance of Handel's 6/4 time resides in its ready alternation with his 3/2 time. This highly idiomatic alternation provides the strategic basis for one of Handel's most celebrated pieces, the longer and better known of the two hornpipes from the Water Music, presented here in its D-major version (Examples 3.35-3.38). The alternation of 6/4 and 3/2 plays no comparable role in Handel's courantes, which, as I mentioned in chapter 1, are really Italianate correntes. (To accommodate both the duple division of 6/4 time and the Hornpipe's idiomatic syncopations in 3/2 time, the superscripts "^{a}" and "^{b}" in the discussion that follows refer

to the first and second half of the measure consistently throughout.)[54]

For all its internal repetitions, the opening theme of the Hornpipe, reproduced in Example 3.35, outlines a relatively standard three-part ritornello cycle—a four-and-a-half-bar *Vordersatz* (bars 1-5^{a}), a displaced four-bar *Fortspinnung* (bars 5^{b}-9^{a}), and an overlapping three-bar *Epilog* (bars 9-11). The opening *Vordersatz* is among the few passages in the Hornpipe that articulate 3/2 meter without some interference from 6/4; the Hornpipe's topical syncopations, though, enter already in bar 2 and begin preparing at once for the onset of full-blown 6/4 time at bar 5^{b} by spawning the composition's characteristic three-quarter-note figure (see the brackets and annotations in Example 3.36).

Perhaps because the Hornpipe as a whole is cast in ABA da capo form, with a dramatically developmental middle section in B minor, Handel reserves the explicit, extended use of the more tightly paced 3/2 for the climactic central passage of the B-minor stretch. To conjure up development at that strategically located span without relinquishing 6/4 altogether, Handel deploys the newly explicit emphasis on 3/2 to suggest a relatively straightforward but subtle intensification within the measure: The temporary adoption of three beats at the surface, nested between the relatively consistent appearance of two beats in the outer stretches, speeds things up without calling too much attention to itself. (The complexities of this section are too formidable to pursue further here.)

Although Handel emphasizes the appearance of 6/4 in much of the outer sections, he does not give up 3/2. We shall soon see that strong residues of 3/2 permeate those sections as well, and that it would not be illegitimate to read them accordingly, in 3/2 time.

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[54]The literature on the alternation of 3/2 and 6/4 is scant; Wodehouse 1977 is the only major study of which I know, but neither the author, whose master's thesis it was, nor the music library at Stanford University have a copy. The most extended current account is given in Little-Jenne 2001, and (according to a private communication from Artis Wodehouse) it incorporates some of the material originally presented in Wodehouse 1977. Steglich 1921 presents a brief survey.

The Hornpipe's discourse, one might say, centers on a play between the two meters that is both horizontally and vertically conceived.

Returning to the Hornpipe's opening theme, we find that the prominent repetition which enlarges the *Vordersatz* by one measure (bar 2^{b}-3^{a} = bar 3^{b}-4^{a}) is by no means mechanical: It establishes a displaced anapest pattern similar to the one I observed earlier in the Andante from the F-major Concerto Grosso (recall Example 3.25). The displaced anapest pattern extends from the middle of bar 2 to the middle of bar 5. The uneven makeup of the idiom, and the seemingly lopsided way in which the trochaic design balances the measure-and-a-half incipit in bars 1-2^{a}, mirror at a higher level of rhythmic invention the internal metrical tension between 2/3 and 6/4 that runs throughout the Hornpipe. At the same time, the extensive use of repetition on which the passage as a whole is based (bar 4^{b}-5^{a} is admittedly not all that different from the two preceding displaced measures, despite the overarching anapest outline) sets the stage for the extended repetitions that one will encounter later on.

For much of the Hornpipe, Handel employs 6/4 time as the venue for sequential expansion, reformulating the uneven two-to-the-bar basic pace of 3/2 he introduced at the outset as an even, expanded one-bar pace. The durational reduction in Example 3.37 brings out this hidden connection between the two meters: Note how the stretch in 6/4 time (3/4 in the reduction) spans the displaced sequential expansion and occupies the entire *Fortspinnung* in bars 5^{b}-9^{a}. As the expansion takes place, the metrical outlines of 6/4 come into greater conformity with those of 3/2 since the expanded, normalized basic 6/4 pace now occupies a full measure (compare the two boxes in Example 3.37). The sequential expansion presents the first instance of this metrical reconciliation, which unfolds over the span of the entire Hornpipe (the *Fortspinnung* begins only in the middle of bar 5, but 6/4 time effectively governs the entire measure; conversely, 3/2 governs the entirety of bar 9.)

The sequential expansion in bars 5^{b}-9^{a} helps convert a tonal kernel—an underlying

descent of a third progression in parallel sixths between the outer voices—into a four-bar progression that depicts a large-scale turn, B-A-G-A, in the bass. The expansion proper proceeds in only one direction, and it comprises only the tones B, A, and G; the outline of the turn is made possible by the addition of the rising step G-A. The last tone of the turn, owing to the change in the direction of the bass, is at least technically not part of the sequential progression proper. This is a fundamental point, one whose complexities and repercussions I shall address in the course of several analyses in chapter 4.

Motivic niceties notwithstanding, the role of the expansion in this instance is more durational than it is thematic. The expansion's four-bar length serves to balance, in approximate fashion, the only slightly greater length of the *Vordersatz* (see, again, the durational reduction in Example 3.37).[55] The three-bar *Epilog* (bars 9-11) restores the 3/2 meter, but the meter is modified by a slowly paced cadential hemiola. The hemiola, in turn, also contradicts the preceding 6/4 and covers it subliminally with a new layer of metrical dissonance.[56]

Among the thematic charms of the Hornpipe is the way Handel employs low-key motivic emphasis to preserve the residues of 3/2 time—or, depending on how one hears it, 3/2 time itself—throughout the Hornpipe's stretches of 6/4. The groups of three quarter notes that occupy the second half of many measures, while on the face of it indicative of 6/4, also suggest 3/2 by highlighting the second tone in each group. They generate this emphasis through the articulation of quarter notes in subgroups of 1 + 2 in the bass. The arrows and the annotations in Example 3.38 show how the syncopated rhythmic weight that so accrues to the second quarter note helps maintain a sense of

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[55]The sequential expansion in the A-minor Concerto Grosso ritornello plays much the same role; recall the durational reduction in Example 3.34.

[56]The coincidence of a lingering impression of 6/4 with a hemiola in 3/2 is a good example of what Harald Krebs (1999) refers to as subliminal metrical dissonance.

movement in half notes. Observe the elegance with which Handel's violas underline the connection by reverting to movement in half-notes in bar 7 (indicated by the bracket in Example 3.38).

Slow movements in 3/2 Time. Kirnberger's observation that "3/2 meter is emphatic and very serious as long as not too many short notes are used" (p. 400) represents something of an understatement where Handel's use of 3/2 time in slow movements is concerned. A glance back at Example 3.4 will disclose why. Handel employs 3/2 most often in large-scale slow movements, especially those in the Concerti Grossi, Op. 6, to cast a spell over time as it were, to portray arrested motion. But despite the substantial length that each measure of 3/2 takes on at Handel's very deliberate tempo, the larger durational outlines of many of these pieces show the same characteristic tendency for periodic grouping at a higher level that marks the faster triple meters. Apparently the long measures, just like their short counterparts, require a higher organizing principle to hold them together as a group and to support the "long lines" drawn by their overarching melodic lines and by their basic pace. Emblematically, even slow movements with a relatively adventurous design, movements that rely on three-bar grouping or on the alternation of three-bar and two-bar grouping at the surface, rarely stray very far from the safe haven of a relatively stable duple hierarchy.

The opening Larghetto from the E-minor Concerto Grosso, Op. 6, No. 3, presents a regular—that is to say, patterned—alternation between the tutti and concertino groups, each of which contributes a three-bar subphrase in turn (Example 3.39). Displaced by a very prominent half-note pedal call, every subphrase begins on the second beat of the measure and closes on the downbeat three measures later. Tension and variety emerge through changes in the internal division of the alternating solo and orchestral subphrases: Whereas the ripieno's framing statements divide into 2 + 1, the concertino's episodic interjections divide into 1 + 2 on account of the cadential hemiolas with which they end

(see the durational reduction in Example 3.39b). I mentioned earlier that such hemiolas generally follow the notated meter, as if oblivious to the prevailing afterbeat patterns: They consequently defy and often override the prevailing norms of grouping at the segment level. In this instance especially (but elsewhere in slow 3/2 as well), the powerful antimetrical effect that hemiolas project is due more to their contradiction of the afterbeats than to their contradiction of the notated meter.

At a deeper level, tension that is due to overlaps in grouping seems to be even higher; see the annotations under Example 3.39b. The pedal call at the very beginning and its metrical satellites, the downbeats of every measure, establish a 1 2 3 4 grouping that is consistently broken up by the overlapping entrance of a new group on the second beat of the fourth measure. At the surface, then, one hears 2 + 1 and 1 + 2; underneath, one also hears 1 2 3 4 / 1.

Following a series of three six-bar phrases realized along these lines, the tutti close the Larghetto with a fourth phrase seven bars long: The last three-bar subphrase has its closing downbeat extended to occupy a complete measure—a vivid but fairly rare example of afterbeats that peter out by closing into a full bar. Though we do tend to hear a one-bar principal grouping pace at the outset, the regularity and the prevalence of three-bar groups from beginning to end gradually allows a three-bar grouping pace to take over. This grouping modulation is greatly facilitated by the stability of the basic pace, which shows a characteristically uneven two-to-the-bar movement varied by an occasional acceleration (see, again, Example 3.39b). On account of the regularity in patterning one could certainly make a strong case here not just for an evolving three-bar periodic span but also for an evolving three-bar hypermeter that is substantiated gradually over the course of the piece. In the abstract it would not be inaccurate to posit an even larger and more slowly evolving six-bar hypermeter, but little would be gained by doing so since the piece is so short: It does not put its durational hierarchy to much developmental use.

The central Largo from the D-major Concerto Grosso, Op. 6, No. 5, reproduced in

Example 3.40, presents a similar but more elaborately realized durational scheme, one whose genuinely interesting outlines crystallize only after some decidedly tedious parsing. The durational reduction in Example 3.41 summarizes. The Largo's opening ten-bar period (bars 1-11^{a}) comprises a pair of five-bar phrases, each divided into segments of three and two bars. This first period is followed by a second ten-bar period (bars 11^{b}-21^{a}) that divides into discrete segments of 3 + 2 and 2 + 3 bars. The second period brings the Largo to its (approximate) midpoint and tonicizes the dominant as it goes along. The two ten-bar periods are now balanced by a seventeen-bar period (bars 21^{b}-37) composed of three phrases, five, six, and six bars long. These phrases divide into segments of 3 + 2, 4 + 2, and 3 + 3 bars. A three-bar semi-cadential tag provides a lead-in to the Allegro that follows. (And again, tension accrues at a deeper level to overlaps between the undisplaced groups suggested and then reiterated by the pedal call and the call's satellites at the downbeat of each measure; see the annotations under Example 3.41.)

Throughout the Largo, a steady basic pace of one-to-the-bar or, more often, two-to-the-bar prevails (recall Example 3.10), and so does a one-bar grouping pace. Persistent fluctuations in phrase length and segment length notwithstanding, the recurring emphasis on three-bar grouping and on its continuation by two-bar grouping allows one to accept the combination of three plus two as something of a typical feature of the piece—certainly a hidden rhythmic repetition, and perhaps also a periodic if uneven grouping pattern with substantial hypermetrical implications. One could say that in this Largo Handel attempts gradually to set up a thematically alternating three-bar and two-bar grouping pace, since both the three-bar and the two-bar groups are very highly characterized.

Each group is characterized in the following way. The developmental three-bar segments, even in the longer phrases, are marked by half-note afterbeat displacement and by falling and rising thirds. The steady alternation of these thirds emphasizes the prevailing afterbeat patterns and blurs any potential subdivision of three-bar grouping

into 1 + 2 or 2 + 1 bars. The more traditionally patterned two-bar groups, by contrast, are marked by familiar cadential progressions and by idiomatic cadential hemiolas that emphasize the notated meter. Even though in the later stages of the piece Handel is ultimately forced to give up the alternation of 3 and 2 in the interest of sustaining a still larger developmental scheme of a tonal nature, one hears the alternation of short triple and duple groups as one of the Largo's major rhetorical issues.

To find out something about Handel's larger developmental schemes and the rhetorical contexts in which they unfold, we now turn to the analysis of complete instrumental and orchestral works.