CHAPTER TWO

PACING, GROUPING, AND DISPLACEMENT IN DUPLE METER

I have already begun to apply the notion of expansion to a broad spectrum of compositional resources—to paces, motives, linear progressions, and sequences—in chapter 1. In later chapters I shall apply it at deeper and more abstract levels to the narrative strategies that pull these resources together. To set the stage for the later treatment of expansion, though, it will be necessary to give a detailed account of the elements to which expansion is applied, and of the basic durational framework within which these elements operate at the surface. The bulk of this chapter will therefore be devoted to a survey of the different types of duple meter that appear in Handel's instrumental works, and to a survey of the various unexpanded paces and grouping patterns typical of each meter. An overview of the metrical displacements which often shift the metrical and the hypermetrical grid of the piece by one or two beats to the right will occupy a major part of these surveys. In chapter 3 I shall cover the same territory in triple meter but over wider spans of music, in preparation for the detailed analyses of complete movements that will follow in chapters 4 and 5.

Cumulatively, chapters 2 and 3 offer a new approach to the study of meter and metrical displacement during the early decades of the eighteenth century. This approach centers on the articulation of meter and periodicity by tonal and by durational paces, and on the fusion of meter and voice leading through the mediation of the basic pace. As we proceed, it will soon become apparent why it is essential to apprehend Baroque metrics not in the abstract but within this wider tonal and rhythmic framework, and why it is

necessary to do so before going on to the analysis of complete works in chapters 4 and 5.

I. Phrase and period structure.

Among the benefits of describing the articulation of Baroque music in terms of contiguous and nested ritornello cycles (chapter 1) is the high degree of thematic and tonal characterization embodied by the notions of *Vordersatz, Fortspinnung*, and *Epilog.* Each of these terms denotes a distinct type of expository material, developmental spinning, and cadential closure that crosses the boundaries between solo and orchestral media, between the high, the middle, and the low styles, and between the various types of duple and triple meter. Applying the more traditional division of phrase structure into segment, subphrase, phrase, and period to the same repertoire is, by contrast, less helpful. In the absence of an extended periodic and hypermetric hierarchy the relation between the formal parts of each movement is much more improvisatory and ad-hoc than it is in later music. Emblematically, the length of each part remains in a constant state of flux. But since a larger sense of incipiently periodic grouping and incipiently duple order nonetheless does prevail, the use of these traditional descriptors retains the advantage of telling the reader something, however general, about the thematic and tonal disposition of the passage in question. I therefore employ them quite liberally but with the tacit understanding that the context of the discussion will ultimately clarify their intended significance.[1]

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[1]To recapitulate briefly, the high style embraces relatively strict counterpoint, taut thematic work, and fundamentally even pacing throughout a single movement, and these are relieved by a series of closely related expansions and contractions. The middle style promotes a more liberal environment of harmonic prolongation, uneven pacing, and thematic variety. The low style fosters protracted chordal extensions, folklike themes, sparse and raw textures, and seemingly interminable repetitions.

The segment and the basic segment. I use *segment*, as does Kirnberger, to denote the smallest one-, two-, and three-bar groups at the surface. According to Kirnberger, "longer [phrases], particularly when they are longer than four measures, are usually divided into two or even more smaller segments that are articulated by very small rest points, which are comparable to the caesura in verses and are thus also called *caesuras*" (p. 408);[2] see Examples 2.1a and 2.1b, which quote from the F-minor Allemande and the E-minor Concerto Grosso Allegro I discussed in chapter 1. In the initial stages of a piece, such short segments often coincide with the one-bar units or, depending on the meter, the two-bar units articulated by the principal grouping pace and often also by the primary periodic span. I refer to such segments as *basic segments.* Their length may be modified locally by the addition of a short upbeat or a short cadential suffix.

Looking at Example 2.2a and Example 2.3 we can observe readily how despite the prevalence of one-bar basic segments throughout the F-minor Allemande, the temporary adoption of two-bar grouping in bars 5-6 and 7-9 occasions a corresponding change in the length of its basic segments from one bar to two bars. This two-bar length takes in also the upbeat to bar 5 and then the cadential suffix to bar 8. The unexpanded half-note movement of the basic pace (recall the discussion in chapter 1) and the adoption of a temporary simple 4/4 welds bars 5 and 6 together; the unchanging design and the resumption of quarter-note pacing similarly welds together bars 7 and 8, and (to a lesser extent) bar 9[a]. Shorter one-bar units of course do shine through bars 5-8 as well, but they are not very conspicuous.

One can, I think, evidently make a strong case for allowing temporary fluctuations in the length of basic segments without contradicting the essential definition and purpose

[2] All references to Kirnberger 1776-79/1982 appear henceforth in the text.

of the basic segment as a stylistic and a theoretical notion. It should be stressed that in Baroque style any durational norm set up in the course of a piece is likely to be abandoned with some frequency, only to be picked up, altered or unaltered at a later point. Improvisatory time-keeping of this sort marks the temporality of Handel's keyboard and chamber pieces in particular; it is less prevalent in his more hierarchically conceived orchestral works.

While some of the durational norms set up at the beginning of the piece undergo only temporary changes in the course of developmental spinning, others find themselves transformed permanently. Despite occasional fluctuations in length, the basic segment usually maintains a foundational consistency throughout the entire piece. As the piece progresses, the grouping pace, on the other hand, is likely to expand permanently by a factor of two, and the primary periodic span, at least in orchestral works, will probably expand by a factor of four.[3] Only under special circumstances, like those that mark the opening period of the E-minor Allegro (chapter 1), will a one-bar or a two-bar basic segment expand permanently; see Example 2.2b, which shows the one-bar segments of the E-minor Allegro's opening theme (Example 2.1b) expand permanently into two-bar segments.[4]

Like the basic pace, but at a higher level of durational structure (and therefore less consistently tied to the barline), the basic segment helps define the meter of the piece. But whereas the basic pace is most closely tied to the movement of the voice leading at the levels of the beat and the "supra beat," the basic segment is most closely tied to the

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[3]Expansion of the primary periodic span by a factor of eight is rare, but not unheard of; see the analysis of the Allegro from the E-minor Concerto Grosso, Op. 6, No. 3, in chapter 5.

[4]Brainard 1987 remains the principal study of two-bar grouping in Handel's music, but it addresses the vocal repertoire exclusively. See also Dreyfus 1996, p. 66.

movement of the upper voice at the level of the measure and the two-measure group. In the compound 4/4 the basic segment typically occupies a single measure; in the simple 4/4 and in the large, fugal 4/4 it occupies two. For all its fluctuations, the basic segment is the backbone of the Handelian composition's thematic and durational framework*:* It sets up the standard length against which the work's larger durational fluctuations are measured at the levels of the phrase and the subphrase, and it substantiates the (relatively modest) hypermeter of the piece. Like some other elemental units of duration, the basic segment is more of a common, supporting structural given than a piece-specific creation; it consequently—and paradoxically—does not figure very prominently in one's analytical observations, at least not in its original, unexpanded form.

The period. The *period* (to jump to the other shore before plunging into the murky waters in between) spans a substantial and complete tonal motion from the beginning of the piece to its first authentic cadence, and from one authentic cadence to the next.[5] Even though this definition coincides quite squarely with the most persuasive definition of the *phrase*—rather than with the definition of the period—and a definition of the phrase that many musicians have adopted to describe later styles, I follow Kirnberger here in using the term *period* to describe a corresponding span in Baroque style*:*

> The musical statement that is complete and ends with a formal cadence we will call a *section* or *period*; but the incomplete one that ends only with a melodic break or a satisfying harmony we will call a *phrase* or a *rhythmic unit* (p. 405).[6]

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[5]Excluding very short and self-contained themes like the opening theme of the E-minor Concerto Grosso Allegro in Example 2.1b.

[6]Rothstein 1989 presents a comprehensive approach to the phrase as a complete tonal motion. Because tonal movements take place at various levels of structure and extend over different spans of time, Rothstein applies the notion of the phrase hierarchically, nesting

A little later, Kirnberger elaborates on the degree of closure:

> A musical period, then, is a succession of connected notes that concludes with a complete or formal cadence. The effect of this cadence is so satisfying to the ear that it permits it to comprehend the entire succession of notes combined in this period as a unit, without being disturbed in this sensation by the expectation of what might follow (p. 405).

A complete composition might therefore consist of "a series of such periods, none of which but the last closes in the main key . . ." (pp. 405-6).[7] Regarding the length and scale of the period, Kirnberger observes:

> The shortest periods are from six to eight measures; the longest extend not much over thirty-two measures. I am referring here only to what is most common and sounds best, because it sometimes happens that shorter periods occur for special reasons, particularly if required by a text; and sometimes they can also be extended beyond the mentioned limits without becoming boring (p. 407).

Two practical considerations justify an open-ended view of the period and a restricted one of the phrase in this repertoire. The first is the need to reserve the term phrase for short but relatively self-contained stretches at the eight- to twelve-bar range that may be cadentially incomplete. The second is the corresponding need to reserve the term period for extended thematic structures that do not necessarily divide into symmetrical components (on the order, say, of antecedent and consequent) yet require a properly associative label. Describing the division of periods into phrases Kirnberger

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phrases at one level within phrases that belong to deeper levels.

[7]Talbot 1971 and Dreyfus 1996 offer the most authoritative accounts of the period and its tonal articulation in early eighteenth-century music.

writes:

> Each period generally consists of a larger or smaller number of phrases that are not completely cut off or separated from one another yet are somewhat detached by smaller rest points than those produced by cadences. These smaller rest points are created in melody either by melodic closes or by rests, but in harmony by restful chords, particularly dominant chords; a new consonant harmony must at least be heard where the small rest point is supposed to be. Cadential chords can also be used for this, but they must be weakened by inversions or dissonances so that the feeling of rest is not too strong and the ear is kept in close anticipation of what follows.
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> A phrase is articulated most forcefully by the half cadence; its inversions produce weaker breaks. Inversions of full cadences can also be used for this, and even the cadence itself if it falls on a weak beat, as happens most commonly in gavottes (p. 408).

The phrase. A phrase, then, is a relatively independent thematic progression, some eight to twelve bars long (with a good deal of flexibility on either side), which is supported by a sustained but usually incomplete harmonic motion, such as I-V or V-I, either in the home or in a foreign key. Although Kirnberger is indeed quite flexible in matters of length, it would seem best to regard very short periods (including short periods in the slowly paced compound 4/4) as phrases for the sake of maintaining consistency of scale, even though such phrases may be tonally complete. One must simply keep in mind that even under the most favorable circumstances it is difficult to avoid some inconsistency in using these terms as well as a certain awkwardness in coordinating the spans of time they embrace. According to the formulations just presented, for instance, the opening eight and a half bars of Handel's F-minor Allemande represent a tonally complete period and comprise

two phrases (bars 1-4 and 5-9[a]) which are tonally incomplete at one end. And yet the four and a half bars that follow constitute not a period but a tonally complete phrase (Example 2.3). Such terminological fluctuation can be minimized, if not completely avoided, if one invokes the notion of levels: At the deeper level of formal and tonal structure, one might well regard each complete reprise of the Allemande (bars 1-3 and bars 14-29) as a single large-scale period, and bars 1-9[a] as a smaller period nested within the larger one.[8]

The subphrase. A very useful term Kirnberger does not employ is the *subphrase.* As its rubric implies, the subphrase is part of a larger phrase: Most phrases divide into two or three subphrases, each of them about two or three times as long as the basic segment and each outlining a more self-contained and more clearly defined tonal progression than does the segment. Subphrases thus range from three to six bars in length in the simple 4/4 (fewer bars in the compound 4/4), and they close with some kind of semi-cadential articulation, however weak. In the F-minor Allemande, for instance, the opening phrase, bars 1-4, divides quite readily into two subphrases, bars 1-2 and 3-4 (see again Example 2.3).

Problems in parsing arise as soon as expansion begins. The F-minor Allemande's second phrase, bars 5-9[a], divides similarly into two dovetailing subphrases, bars 5-6 and 7-9[a], but the juncture of the two subphrases is much less sharply demarcated. In fact, I have already described these subphrases earlier as enlarged basic segments. Evidently, the distinction between enlarged segments and short subphrases in this instance is a fine and not entirely a significant one. When enlarged, at least some segments become subphrases. (And, similarly, enlarged subphrases might become phrases.)

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[8]I follow Rothstein in pursuing a hierarchic approach to periodic structure.

Generally speaking, short stretches, especially those that also show *Vordersatz*, *Fortspinnung*, or *Epilog* function in the small, remain relatively self-contained thematically or cadentially and fall under the category of the subphrase. Other stretches, less closely defined, run more freely into and out of the surrounding material and fall under the category of the segment. Just as circumstances dictate whether a borderline case should be called a period or a phrase, and whether it really matters, so do they dictate whether a shorter stretch should be known as a segment or as a subphrase, and whether one needs to be concerned about it. Most often, subphrases do in fact divide into short segments and the problem of categorization does not really come up.

It is by now apparent that complete congruence will not necessarily obtain between the composition's collection of three-part ritornello cycles and the composition's phrase structure. The ritornello's division into *Vordersatz, Fortspinnung*, and *Epilog* on the one hand and the period's division into segment, subphrase, and phrase on the other refer to different features of the foreground and to different formal functions. Each term can prove equally useful when called upon to characterize the smaller parts of the piece in the course of one's analysis.

II. Metrical displacement

Meter and displacement. Recent research on meter seems to have favored the technical mysteries of the durational hierarchies over the durational study of complete compositions. This imbalance stems, paradoxically, from the general resurgence of interest in temporality, which has resulted in an urgent need for very basic explanations and definitions of such phenomena as the beat and the accent. Inevitably, a certain abstraction has come to characterize the resulting work since there are many lively and artful details of context that one must typically exclude from the study of concepts and models that

have been isolated from their sources. During the past decade several theorists have pointed to the need for recombining metrical investigation with the study of the larger durational and stylistic frameworks in which meter operates, arguing quite persuasively that meter as a compositional resource connotes much more than the mere division of time into equal segments at various levels.[9] This view, in fact, resembles substantially the view of the eighteenth-century music theorists: Kirnberger, in particular, felt that the meter chosen to articulate a piece and the tempo chosen to realize that meter were crucial to the proper expression of the work's character*:* "The character of a melody depends on tempo and meter" (p. 382), since "according to the type of meter, the motion is more hurried or emphatic, lighter or heavier, even while the speed remains the same" (p. 378). The tonal effect of the piece and its durational effect are, in other words, interdependent—sometimes to the point of becoming (almost) one and the same thing.[10]

Devoting the bulk of two chapters to meter, metrical displacement, and basic grouping structures at the level of the phrase, the subphrase, and the segment in a dissertation that centers on issues of large-scale pace and expansion is necessary on account of the close correlation between meter and pace that marks the music of the high Baroque. Metrical displacement, in particular, is a normative rather than an exceptional feature of Baroque style—It is, one might say, a way of life in this repertoire. But given the misconceived image of irregularity that metrical displacement has often conjured up among scholars, it requires further description and clarification before one can proceed to larger issues. Understanding where within the measure and under what metrical circumstances segments and phrases as well as ritornello cycles begin, and where they

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[9]Kramer 1988, Schachter 1987/1999b, Botelho 1993, and Hasty 1997 are among the most productive of the complainants who offer remedies to this occupational hazard.

[10]Marshall 1996 is the foundational study of the relation between tempo, meter, and the character of meter.

end, is essential to a correct interpretation of their durational disposition on any level of structure.

Especially at the surface, Baroque metrics raise many fundamental questions: Does one, for instance, hear the downbeat displaced to another beat along with the entire metrical structure, as one often does in displacements throughout the Classic and Romantic eras, or does one only hear a thematic and rhythmic emphasis on a weaker beat that competes with the formal metrical emphasis on the notated downbeat? What looks like displacement in Baroque style may sometimes indeed occur as a result of a deliberate metrical reshuffling, but it is more likely to stem from an informal and essentially thematic "play of beats" between the downbeat and another beat. And it may also fall within a grey area in between. Evidently, the phenomenon requires a closer look.[11]

Since some *effect* of displacement usually does obtain whenever the suggestion of a shifted downbeat is made, however discreetly, it is best to retain the term displacement as a practical rhetorical convenience, even if the perception of displacement is due only to accentual competition by a thematically prominent mid-bar beat. One can always qualify the displacement with the proper adjective, as "afterbeat displacement," "mid-bar displacement," and so on, when the context so requires.

Metrical irregularity. The more embracing question of what constitutes metrical irregularity in Baroque style is a vexing one: Absent a genuinely large-scale periodic hierarchy and an extended hypermetrical setting, how does one determine what is regular and what is not?[12] During the discussion that follows I hope to show not only that

[11]Recall my observations in chapter 1 on the relative weight of the second and fourth beats in the deliberately paced compound 4/4.

[12]Wolf 1981 views Baroque metrics, even within a periodic framework, as irregular. Grave 1985, Samarotto 1985, and Burkhart 1995 are among the many who suggest that Baroque metrical displacement presents, at least potentially, a departure from the norm.

displacement is something of a norm in Baroque style but also that deliberate metrical irregularity as such is quite rare. Many of Handel's instrumental works, and those of other Baroque composers, do in fact establish, gradually, a sense of thematic patterning and durational order on several levels as they proceed. The metrical difficulties they pose arise in the first instance primarily because their durational order may not immediately be apparent (recall the alternation of expansion and contraction in the F-minor Allemande, which I discussed in chapter 1). The fundamental durational challenge these pieces present resides in finding and describing that hidden order.

So little of Handel's instrumental style fits the definition of metrical irregularity as such—the willful avoidance or the deliberate prevention of metric and rhythmic patterning—that genuine metrical peculiarities, when they do occur, can be dispatched rather quickly. Examples of real irregularity can occasionally be found in Handel's early keyboard works, such as the Allemande from the D-minor Suite published in 1733 but composed in Hamburg between 1703 and 1706 (Example 2.4). A few of the suites from this period, like the G-major Suite whose Allemande and Courante we encountered earlier, are almost squarely periodic; others are unabashedly unpatterned.

The present Allemande, as it happens, resembles the Allemande from the F-minor Suite both in its larger thematic outlines and in its durational earmarks: It shows a quarter-note basic pace and a one-bar grouping pace, and it presents a sequential contraction in bar 3 that is remarkably similar to the sequential contraction in bar 3 of the F-minor Allemande. The D-minor Allemande's complexities are due to the unusual location of its tonal points of articulation. In bar 3 the quarter-note basic pace undergoes contraction to movement in eighths in much the same way it does in the F-minor Allemande's third

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Rohr 1997, Krebs 1999, and Samarotto 1999b approach displacement and its corollary, plasticity, as something that is bound to emerge in an artwork.

measure. There is nothing in the orderly contraction of the basic pace or in the discreet resumption of the underlying quarter-note movement on the fourth beat of bar 3 to prepare us for the radical change in design from figural sixteenths to figural eighth—or for the beginning of a new segment—on the second, weak beat of bar 4. On the basis of the undisplaced metrics established in bars 1-3, one would expect these important changes to fall on the first or third beat of the measure, where they might be more effectively introduced.

But that is not all. The appearance of an implicit $^{6}_{4}$ sonority over the bass C on the second beat of bar 4 is simply confusing. The upper voice's g^1, on the second eighth of the second beat, resolves the $^{6}_{4}$ sonority's a^1 weakly because it is part of a new thematic and durational entity that begins right on the second beat, the aforementioned new segment. Besides resolving a^1 inconclusively, the g^1 also leaves the misleading and probably unintentional impression that it acts as a lower neighbor to it. And by suggesting a lower neighbor, g^1 conjures up the equally misleading effect of a quarter-note I $^{6}_{4}$ - I $^{5}_{3}$ progression in the key of F (at a deeper level than the more probable eighth-note F: V^{6}_{4} - $^{5}_{3}$ - I progression) from the second to the third beat of the measure. The suggestion, however unintentional, of a quarter note $^{6}_{4}$ - $^{5}_{3}$ progression within a stationary tonic halts the Allemande's harmonic rhythm precipitously. And the apparently intentional near-overlap between the beginning of the segment on the second beat of bar 3 and the sequential expansion that begins on the third beat backfires badly. Instead of enhancing the Allemande's dramatic urgency, the tonally saturated overlap suspends and compromises its momentum.

Along the same lines (perhaps as a well-meaning but misplaced durational parallelism), the quarter-note movement of the basic pace in bar 6 and on the first beat of bar 7 runs uncomfortably into a three-beat extension of the dominant's dominant that begins on the second beat of bar 7. The disruption echoes the disruption in bar 4 but its

effect is equally misplaced. Disjunctive durational peculiarities of this sort must be the result of Handel's youthful experimentation with adventuresome harmonies, melodies, and rhythms; they recur very rarely in his later instrumental works.[13]

Handel's metrical displacement resembles Bach's inasmuch as it relies heavily on the systematic dislocation of many groups of measures—sometimes whole movements—through the introduction of afterbeat idioms. It also takes advantage of many borderline displacements that are due to the presence of upbeats and afterbeats at the levels of the eighth and the sixteenth. Those borderline displacements, though, are part and parcel of Handel's isorhythmic practice, and their study must await another occasion.

III. The large, the simple, and the compound 4/4

Taking a detailed look at how meter and other aspects of the design behave during the opening measures of a piece is essential to a proper understanding of the expansions that occur later. At least in the high style of Handel and Bach it is the opening thematic group—usually the *Vordersatz* of the movement's first three-part ritornello cycle—that sets up the patterns of meter, pacing, grouping, and motivic play on which the subsequent enlargements will be based. The articulation of these patterns differs from meter to meter: In addition to fundamentally diverse norms of pacing in duple and in triple meter, several different modes of pacing in at least three different kinds of 4/4 time

[13]Recall Mattheson's famous criticism of the young Handel's excessively ambitious thematic spinning (Knapp 1983 and Mann 1983). There is a great difference between unintentional rhythmic awkwardness (the repeated notes' suggestion of triple meter just after the beginning of the opening Allegro from Vivaldi's A-minor Violin Concerto, Op. 3, No. 6, which is in 4/4 time), and deliberate awkwardness—a mark of plasticity—that needs to be worked out by the design. The last-named occurs sometimes in Brahms (Rosen 2000a).

and in several types of compound triple meter must be contended with. Each time signature shows its own characteristic patterns of pacing, grouping, displacement, and expansion. I shall now take up the various duple meters in turn, following the order in which Kirnberger presents them.

III. 1. The large 4/4

Handel's fugal meter. Kirnberger describes the large 4/4 as follows:

> Large 4/4 time is of extremely weighty tempo and execution and, because of its emphatic nature, is suited primarily to church piece[s], choruses, and fugues. Eighth [notes] and a few sixteenth notes in succession are its fastest note values. To distinguish it from small 4/4 time, it should be designated by 4/4 instead of C. The two meters have nothing in common except for their signatures (p. 391).

While there are few, if any, pieces among Handel's instrumental works that match Kirnberger's description precisely—the slow tempo and the large note values Kirnberger cites are not very Handelian—the treatment of 4/4 time in Handel's fugal and densely contrapuntal pieces nonetheless does bear a good deal of conceptual similarity to Kirnberger's view of the large 4/4, especially in what concerns its emphatic nature (see Examples 2.5-2.8, from the opening fugue from Handel's E-minor keyboard Suite (1720), which I discuss in greater detail later on). On the face of it, Handel's fugal 4/4 seems to show the same kind of deliberate, weighty, and evenly distributed quarter-note pacing characteristic of the compound 4/4, but when one looks at it carefully one realizes that more often than not its dense contrapuntal activity at the surface masks a much lighter and more generously spread out articulation of counterpoint and grouping, namely that characteristic of the simple 4/4. The basic pace reductions in Examples 2.5b and 2.6b bear

this observation out.

We can retrace Handel's decidedly less formal, less emphatic, and less strictly linear setting just under the surface, through a plain reduction to the basic pace, the figural pace, and (when extensive sequential expansions occur) to the much slower obbligato pace. The polyphonic and contrapuntal activity of each voice, which results from the extensive use of compound melody, typically engages the figural paces of eighth notes and quarter notes (see the figural pace reductions in Example 2.5c and 2.6c). The underlying stepwise voice leading on the other hand most often sets up a slower basic pace of half notes. Not infrequently, the emphasis on serious, even severe polyphonic play at the quarter-note level does overwhelm the underlying half-note basic pace to such an extent that it in effect takes over and assumes the role of the basic pace itself, occasioning a temporary modulation to the compound 4/4 (cf. the preponderance of quarter notes in Examples 2.5b and 2.6b). Though fairly common, such modulation does not usually recur systematically enough to let the compound 4/4 take over.

In terms of the long-range context of its half-note basic pace, Handel's fugal 4/4 is a more sparing, more prolongational meter than his compound 4/4. At the same time, at the polyphonic quarter-note level, it is a more active meter than Handel's simple 4/4. I therefore feel justified in adopting Kirnberger's large 4/4 to describe it. In what concerns the contrast between fugal appearances at the surface and fugal realities below the surface, it is important to keep in mind that, like many of Bach's fugues, Handel's ultimately reduce to three very active linear strands or polyphonic parts, each of which typically moves among—indeed generates—two, sometimes three voices at the surface (compare the first and the third beats of bar 18 in Example 2.6b).[14] Each fugue's collection of

[14]Renwick 1995a often narrows the number of parts in Bach's fugues down to three; see especially pp. 96-100; so does Marker 1996/97. That is not to say that most of Handel's or Bach's fugues are three-voice fugues. Wen 1999 presents a meticulous distinction between voice and part.

restlessly busy voices—if we heed the implications of polyphonic melody, these may turn out to be as many as five or six even if only four seem to be active—operates at the level of the fugue's generically ornamental surface complexities, not at the deeper levels of the fugue's contrapuntal and structural setting (Example 2.6, bar 18^{b}). That is why Handel's fugal voices can enter and leave at will, their cumulative number appearing to rise and fall without much forewarning.

The suggestion that Handel's large 4/4 is in some ways a lighter meter than one might expect would seem to be surprising, especially perhaps in view of the ponderous and pretentiously learned performance to which Handel's fugues have been subject in the past. But since Handel's fugal manner as a rule superimposes an ornamental layer of improvisatory diminutions and figurations ranging from quarter notes to sixteenths over a tonal structure that most often progresses in half notes, the reduction of these diminutions and figurations and especially the normalization of the emerging kernel will point to the presence of some surprisingly plain and straightforward harmonic progressions. In fact, relatively simple progressions usually emerge in the course of reduction no matter how severe Handel's linear discourse or how ornate his figural embroidery may be, probably because Handel's fugal practice is based, empirically, on his improvisatory practice.[15]

Looking more closely at the conduct of the quarter-note figural pace vis-à-vis the underlying progression's basic movement in half notes, we find that the deeper reason for this seemingly unlikely state of affairs has to do with the relation of meter to pace and especially to counterpoint in Handel's fugal 4/4. Unlike the second and the fourth beat of the compound 4/4, which are often occupied by the relatively independent steps of the

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[15] In a brilliant exposé, Robert Hill makes a surprising but highly persuasive case for regarding Handel's keyboard fugues as galant fugues (Hill 2002). Hill's conclusions support my formulation of Handel's fugal 4/4 as a "lighter meter than one might expect."

basic pace, the second and the fourth beat of the large 4/4 are occupied by chords that are more subservient to the harmonies on the first and the third beats of the measure (compare again levels b and c in Example 2.5 and 2.6). Even when a fugue's *moto perpetuo* appears to depend on all four beats equally, there are substantial differences in harmonic and contrapuntal weight between the chords and linear constellations on the even-numbered and those on the odd-numbered beats. To a certain extent such differences of course prevail in all types of 4/4 time, including the compound 4/4, but they are much more pronounced in the large 4/4 and, as we shall see, in the simple 4/4.

III. 2. Handel's E-minor Fugue

Pacing. Examples 2.5-2-8, reproductions and pace reductions of bars 1-11^{a}, 17^{b}-20, 29-37^{a}, and 62-66 from the E-minor Fugue, illustrate these observations in ample fashion. Let us look at these passages now in greater detail.[16] The basic-pace reduction of bars 1-10 (Example 2.5b) shows how, despite a good deal of quarter-note pacing in at least one outer voice, all the important steps of the essential voice leading, and especially the entrances of the cadentially defining harmonies, take place at the beginning or in the middle of the measure. The design of the fugal subject's figurations—they are the thematic source for the Fugue's layers of pacing—changes regularly on the first and on the third beat of the subject's second and third measures, lending the tones that enter at each of these beats a particularly expressive instrumental color.[17] In later measures, the repeated

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[16]The subject's $\hat{5}$ - $\hat{6}$ - $\hat{5}$ - $\hat{4}$ - $\hat{3}$ follows William Renwick's paradigm 1b (Renwick 1995).

[17]The seventh c^{1}-b^{1} at bar 2^{b}, in particular, calls for some sort of shading in performance, perhaps a slight rubato, if it can be managed without compromising the momentum of the Fugue.

notes, unfolded intervals, and linearly articulated sonorities that enter on the second and the fourth beat—see the figural-pace reduction in Example 2.5c—either extend the chord represented by the previous note, interval, or sonority, or they play a supporting role in a stepwise motion or in an arpeggiation that leads to the next harmonic or contrapuntal signpost, on the following beat. Compare, for instance, the entrance of tonic, chromaticized subdominant, and dominant harmonies on the first and the third beat of bars 4 and 5 with their extension on the second and the fourth beat as it is portrayed in the reductions of Example 2.5. The subject and its elaborations are treated in similarly prolongational fashion throughout the Fugue.

Most significantly, the half note basic pace described by this prolongational setting provides the foundation for the numerous sequential expansions that take place later on in the course of the Fugue and help chart its durational profile. It is no coincidence that the motivic and contrapuntal kernel which underlies almost all of these expansions appears at the half-note basic pace in bars 7-8^{a}. It enters inconspicuously, in the guise of a short and seemingly standard transitional passage through the linear progression d^{2}-c^{2}-b^{1} in the upper voice and through the accompanying linear progression b^{1}-a^{1}-g^{1} in the inner voice, which serves as the temporary bass line of bar 7. I shall describe the Fugue's many sequential and thematic enlargements of this fundamental progression in chapter 4.

That Handel was deliberately using his own special brand of the fugal 4/4 here becomes apparent when one glances at Handel's early sketch for the E-minor Fugue (Example 2.8b, which owing to layout follows the analytical excerpts in Example 2.8a, below).[18] The sketch, which Handel quickly abandoned, shows augmented, *alla breve*

[18]I thank the British Library for permission to reproduce this sketch and several other Handelian fugal sketches in this chapter.

note values, and a one-bar basic pace. A later trio-sonata version of the Fugue—the fourth movement, *a tempo giusto*, from the Trio Sonata in G minor, Op. 5, No. 5—employs the same meter as the keyboard Fugue.

Composite pacing. For all its reliance on fundamental half-note pacing, Handel's E-minor Fugue quite obviously also shows a substantial layer of stepwise contrapuntal activity and pacing at the quarter-note level. Though essentially figural, the preponderance of quarter notes at a level just beyond the surface points to the profoundly composite nature of Handel's fugal 4/4 (and Bach's too, for that matter).[19] In the long run—and especially in the stylistically mixed orchestral fugues and in some of the darkly archaic keyboard fugues—Handel's fugal 4/4 shows more by way of composite pacing than any other Handelian duple meter, and it engages in composite pacing more consistently than do even the lightest and most stylistically mixed movements in the Water Music or the Concerti Grossi, Op. 3. Very often a fugue's half-note basic pace will give way temporarily to movement in quarter notes, and sometimes even in eighths, only to reappear and reassert itself after a measure or two. Not surprisingly, there are several fugues (like the second movement of the A-minor Concerto Grosso, Op. 6, No. 4) in which the play of a half-note basic pace and a quarter note basic pace assumes a decidedly thematic and rhetorical role. For a short but vivid illustration observe the mixture of half notes and quarter notes in the subject of the Fugue from Handel's F-minor Suite, reproduced in Example 2.35a.

Lest it appear that Handel's fugues are a free-for-all, I hasten to add that fugal composite pacing in general is much more controlled than the improvisatory composite pacing one finds in the middle style of Vivaldi and Telemann. The durational rigor of

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[19]I discuss the principle and the mechanics of the mixture of several paces at different levels to procure thematic flexibility in chapter 1.

Handel's fugues is built as a generic premise into Handel's fugal design, and it contains many safeguards against the kind of wonderfully unbridled but fugally inappropriate durational freedom that marks a good number of the middle style's enduring masterworks.[20]

Fugal displacement. One of the most common but most remarkable features of fugues in 4/4 time is the frequent displacement of the subject to the middle of the measure. There are theorists who have questioned whether we really perceive such fugal displacement as displacement at all; Schenker's skepticism regarding the larger durational organization of fugues (at the hypermetrical levels) stemmed, among other things, from what he felt was the constant need for metrical reinterpretation that the displacement of the subject required.[21] A close look at Handel's fugal practice, though, indicates that the displacement of the subject is not always as casual or as automatic as it might seem to be, nor is it often the result of imitative stretto effects (Examples 2.6 and 2.7).

When the subject is displaced it enters unobtrusively in the middle of the measure, and it acquires a new metrical profile. It also assumes an altogether new metrical role. The subject now serves to emphasize not its own thematic downbeat but its third beat, and later analogous beats. More often than not, the displacement does not affect the fugue's larger metrical scheme. Despite the displacement, both the subject's displaced beginning and the downbeat that follows continue to subscribe to the fugue's larger metrical design; they don't usually shift their significance to conform to new metrics that might be

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[20]Again, the opening measures of Vivaldi's Op. 3, No. 6, with their inconclusively articulated compound 4/4, come to mind: such freedom is highly persuasive in a concerted work whose demeanor bespeaks the middle style, but not in a composition with fugal aspirations..

[21]Schenker 1935/1979/2001, p. 126.

suggested briefly by the displacement. In other words, the displacement occurs not so much because the metrical quality and the accentual weight of the first beat is easily interchangeable with that of the third (as it might indeed sometimes be, especially in the compound 4/4), but rather because the downbeat and the third beat display sufficient metrical weight and character to support and shade fugal entrances in their own distinct way. The downbeat introduces and reintroduces the subject in the subject's primordial state; the third beat tones the displaced subject down somewhat, either in the interest of maintaining perpetual motion or in order to allow for a stronger or a renewed emphasis on the following downbeat.[22]

And so it is that despite the displacement of the subject in bars 17^{b}-20^{b} of the E-minor Fugue (see again Example 2.6), the harmonic and contrapuntal support at the downbeats of bars 18, 19, and 20 is stronger than the harmonic emphasis that accrues to the middle of each measure, to which the principal beats of the subject are displaced. Thus the underlying neighbor-note motion B-A-B in the bass—which also describes an extended $\frac{6}{4}$ - $\frac{5}{3}$ progression over V spanning the dominant, the intervening subdominant, and again the dominant at the downbeats of bars 18, 19, and 20—ultimately takes precedence over the outlines of the displaced subject in the two-line octave (see the annotations under Example 2.6b). These displaced outlines show a harmonically unstable falling third, b^{2}-a^{1}-g<, which is split between several registers and has its last tone chromatically altered and taken over by the bass (bars 17^{b}, 19^{b}, and 20^{b}; see the annotations atop Example 2.6b). Despite the displacement, then, the "one-two" count of the half-note basic pace, along with the one-two count of the Fugue's larger rhythms, remains very much in place and continues to coincide with the notated meter.

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[22]For the larger significance of fugal displacement, see Agmon 1991; for its important effect on performance, especially vis-à-vis de-emphasizing the first beat, see Rothstein 1995a.

When questions and doubts arise about the extent to which displacement does or does not take place, the ultimate arbiter is usually the location of the underlying harmonies. In bars 18, 19, and 20 of the E-minor Fugue, the presence of significant harmonies at the notated barline indicates that the displacement is more apparent than real (see once again the annotations in Example 2.6b). We shall later find out that similarly thematic displacement in the simple 4/4, by contrast, usually involves the wholesale displacement of the entire movement's thematic and durational structure to the middle of the bar. It indicates genuine displacement even though it does not succeed in overriding—nor does it intend to usurp—the notated meter. On the contrary, it coexists peacefully with the assigned meter.[23]

To elaborate briefly on this very important issue I should like to anticipate briefly one of my later and more detailed observations on the relation between displacement and voice leading in 4/4 time. The location of the voice leading's principal harmonies is a major signal in distinguishing between quarter-note displacement in the fugal and the simple 4/4, which are the two duple meters that maintain a half-note basic pace (Examples 2.29 and 1.4), and quarter-note displacement in the compound 4/4, which is the duple meter that maintains a quarter-note basic pace (Example 2.25). On account of contrapuntal and chromatic play (abundant, as it happens, in Examples 2.2a and 1.4), both the fugal and the simple 4/4 often add a layer of chordally supported quarter notes that lends the metrics at the surface the quality of quarter-note movement in the compound 4/4. If quarter-note afterbeat displacement then takes place (see again those two examples), the fugal and the simple 4/4 will retain the location of their principal harmonies and the steps of their half-note basic pace at the notated downbeat and at the middle of the measure. The compound

[23]Lester 1986 and Krebs 1999 are particularly valuable in that they stress the durational significance of the location at which the underlying harmonies appear. I present the issue in detail in Willner 1998 and 1999.

4/4, on the other hand (see again Example 2.25), will shift all its voice-leading and its basic pace by a quarter note to the right (or, rarely, to the left).

Shadow meter. It goes without saying that the prominence of the E-minor Fugue subject's displacement, which takes place at the Fugue's highest register after a long ascent from the one-line octave, does compete for durational authority with the notated meter. When Handel accords displaced entrances such registral prominence but allows the fugue's metrical structure to maintain its domain, one does sense the emergence of a displaced meter that competes with the notated meter and attempts to replace it, if not immediately then gradually, in the later course of events—and by no means successfully. Such a competing meter embodies what Frank Samarotto recently called *shadow meter*, and there are several dramatic instances of it in the E-minor Fugue.[24] We shall see in chapter 4 that all these instances serve to intensify the Fugue's developmental discourse and to collapse the rhythms of its episodes onto the rhythms of its learned imitative matter. Like Handel's large hypermeter, Handel's fugal shadow meter is an occasional feature*:* It will persist for a stretch, go away for a while, then come back. But unlike Handel's hypermeter, which might eventually settle down and stay for good, Handel's shadow meter will often yield to the notated meter as the piece draws to a close, and it will allow the fugue's metrical scheme to reassert itself during the climactic pages of the piece.[25]

Example 2.7 shows the second instance of shadow meter in the E-minor Fugue. The bass's three-bar presentation of the subject in the key of the mediant, G (bars 29-31),

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[24]Samarotto 1999a and 1999b.

[25]The Fugue from the French Overture that opens the Concerto Grosso in F, Op. 3, No. 4 (to cite but one example) shows a very organized movement away from the notated meter to a mid-bar shadow meter in its central pages. Emblematically, the Fugue reclaims the notated meter during its closing pages.

follows the notated meter. In the course of the Fugue's next two-bar group (bars 32-33), which is defined as a durational entity by the bass motion from B to A on each downbeat, the upper voice prepares for a displaced entrance of the subject by repeating the subject's fragmented incipits in the middle of each measure in theatrically gestural fashion, a step higher each time. These fragments begin in the middle of bar 31, where they overlap the tail end of the subject's statement in the bass, and they lead to a displaced upper-voice entrance of the subject in the key of the dominant, B minor, in bars 33^{b}-36. Although both the displacement and its supporting counterpoints represent a free transposition of the displacement in bars 17^{b}-20, the circumstances under which they occur are slightly different*:* While the bass continues to maintain the notated meter through the neighbor-note motion F#-E-F# on the downbeats of bars 34-36 (in just the same way it outlined the neighbor-note motion B-A-B in bars 18-20), the displaced subject in the upper voice gains still greater independence than it possessed earlier. That is so because its entrance, and especially its displacement, has been so theatrically prepared during the preceding measures. Evidently, the Fugue's shadow meter is a durational force one must contend with.

Fugal grouping. Handel's fugal practice allows measures to group in local clusters of one, two, three, and even four or more bars quite easily. These gather at the most opportune level of phrase structure, namely the level of the segment or the subphrase. The length of the group hinges on the extent to which the subject is abbreviated*:* The displaced one-bar incipits in Example 2.7 (bar 31^{b}-33^{a}), for instance, make for a chain of three displaced one-bar segments. Because in the course of development the subject is frequently displaced and abbreviated or displaced and fragmented at one and the same time, segments and subphrases incorporating half measures—one-and-a-half, two-and-a-half, or even three-and-a-half-bar groups—are fairly common too. Like many Handelian fugue subjects,

the subject of the E-minor Fugue extends for three bars and closes at the downbeat of the fourth bar, but it retains its three-bar identity during a good many entrances since it does not continue to unfold within the fourth measure. Under this flexible arrangement, those displaced and undisplaced entrances that are neither extended nor abbreviated retain their distinctive three-bar length and three-bar profile.[26]

The subject's three bars divide, quite typically, into one plus two; note the barlines with different lengths in Examples 2.5b and 2.5c. The opening strong measure is followed by a strong-weak pair whose first, stronger measure is rather weaker than the opening measure.[27] An alternative division showing a two-plus-one scheme, in which the strong-weak pair is followed by a relatively strong measure, is certainly idiomatic in Baroque instrumental style, and it appears quite often in Handel's music, but it does not occur in the E-minor Fugue. Example 2.11, from the D-minor Allemande, illustrates. An even division into three similarly or equally weighted measures is less common, and within the rapidly changing durational framework of the E-minor Fugue it has little chance of coming up. It figures prominently only in situations where a slow moving or sequentially expanded linear progression underlies the surface. In such cases, the assignment of relative strength to the second or third measure is futile (see the first three measures in Example 3.13 in chapter 3).[28]

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[26]In chapter 4 it will become apparent that the length of each group may also depend on the extent of its enlargements, especially its sequential expansions.

[27]The threefold relation of s-s-w is reinforced by the Fugue's aphoristic countersubject, whose entrance in bar 14 coincides with the second bar of the subject. See Example 4.3 and the attendant discussion in chapter 4.

[28]The 1 + 2 and 2 + 1 division of three bars is very similar to the s-w-w and s-s-w division of the beats within the measure in triple meter; see chapter 3. I discuss the issue further in Willner 1996b. London 1995 is the principal study of uneven grouping at the level of the measure.

Owing to the subject's characteristic three-bar length, the E-minor Fugue is indeed replete with three-bar segments, many supported by sequentially expanded linear progressions that move at an enlarged basic pace of one-to-the-bar. Despite the presence of other groups of different sizes, and despite the pervasive displacement of the subject, the three-bar span ultimately comes to represent the Fugue's basic segment. A durational reduction of the entire fugue (which is beyond our purview here) even reveals a surprisingly consistent three-bar hypermeter, even though the extent to which one can hear or maintain a 1-2-3 count throughout each hypermeasure is certainly debatable.[29]

The Fugue's principal grouping pace varies widely with the abbreviation, fragmentation, and elaboration of the subject. When the subject is allowed to outline its full three-bar length—especially when it is followed by a complete answer—a three-bar grouping pace does seem to emerge, if somewhat abstractly. And when the subject is cut down to a one-bar incipit and then extended for half a measure in a stretto setting, a one-and-a-half-bar grouping pace emerges through the temporary adoption of unnotated 3/2 time (Example 2.8a).

Orchestral fugues. Handel's orchestral fugues and his lightly fugal orchestral movements, for all their additional resources of texture and sonority and their more homophonic, more prolongational fabric, do not differ metrically or durationally from his keyboard fugues. To an even greater degree, chords on the second and fourth beats of these pieces represent explicitly articulated satellites of the chords on the first and third beats. Such fugues therefore show a similar, if more easily expandable, two-to-the-bar basic pace, as well as a

[29]Three-bar grouping is an occasional feature of extended virtuoso pieces with fugal textures, like the préludes to Bach's English Suites. See my analysis of the Prélude to the D-minor English Suite in Willner 1996b, where I emphasize the typical replacement of the triple hypermeter by a duple hypermeter as the Prélude evolves.

moderately explicit and occasional periodicity. Along the same lines, they allow for three-bar grouping and three-bar hypermeter, and for different types of metrical displacement, including local displacement of the subject that doesn't alter the larger rhythmic fabric of the piece, and even displacement of the more global and casual type that I describe later in this chapter in conjunction with displacement in the simple and the compound 4/4. Example 2.37, from the D-minor Concerto Grosso, Op. 6, No. 10, illustrates how the downbeat, firmly anchored in the notated meter (bars 1-4^{a}, at a) is gradually shifted by competitive points of imitation (bars 11-14^{a}, at b). After an informally expanded reprise (bars 17ff., at a) the downbeat suddenly finds itself in the middle of the measure (bars 19 and 20, at a).

In keeping with their contrapuntally lighter and more widely open textures, Handel's orchestral fugues show a more formal and more pointed use of sequential expansion, especially in their episodic stretches, than do his keyboard fugues. Fugal circumstances notwithstanding, the episodic adoption of homophonic textures therefore allows some sequential expansions to realize a temporary duple or triple hypermeter, to switch from one hypermeter to another, and even to simulate an alla breve style (compare a and b with c and d at Example 2.33, where I discuss the issue further).

IV. The simple 4/4

Handel's basic meter. According to Kirnberger, the simple 4/4 (which he also calls the "small 4/4," "simple common 4/4," and "common even meter")

> has a more lively tempo and a far lighter execution [than the large 4/4]. It tolerates all note values up to sixteenth notes and is used very often in all styles (p. 391).

The simple 4/4 is the foundational meter of Handel's instrumental style, the meter that

supports the longest and most substantial allegro and tempo giusto movements in Handel's solo, chamber, and orchestral works. Like the large 4/4, it is expressed by a basic pace of two-to-the-bar: The steps of the basic pace on the first and the third beats are set in relief by either the absence of substantially new voice leading on the second and fourth beats, or by the presence of voice leading on these beats that is clearly ancillary to the movement of the basic pace on the odd-numbered beats. Example 2.9, which reproduces the opening measures of the Allemande from the D-minor keyboard Suite of 1720, illustrates.[30]

When the simple 4/4 does appear to activate the even-numbered beats of the measure, its faster movement might indicate that a contraction in the basic pace has occurred (bar 4 of the D-minor Allemande, Example 2.10), that composite pacing has briefly taken over (bars 6-8 of the Allemande, Example 2.11), or that polyphonic or chromatic voice leading has been introduced (Example 2.12). Note how in Example 2.12 the underlying movement in half notes is broken up by 9-10 suspensions in the manner of a compound melody to suggest a more animated movement in quarter notes that is closer to the surface. To these quarter notes the local motives and the surface diminutions add a layer of eighths; they thereby contribute the polyphonic play which one ultimately hears in the foreground. (For an instance of chromaticism that appears to transform the simple 4/4 into the compound 4/4, see Example 1.4 in chapter 1 and the later discussion in this chapter).

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[30]The essential 8-10-8-10 progression in half notes that underlies the Allemande's two-bar theme takes, I feel, precedence over the cadentially accelerated II^6_5-V progression in quarter notes, B=-C, on the first two beats of bar 2. This reading is swayed, to say the least, by the plagal inflections of the two Couperin themes on which Handel's theme is based (Examples 4.24 and 4.26), and by Brahms's plagal interpretation of the second Couperin theme at the beginning of the Romanze in F, Op. 118, No. 5. But hearing an accelerated quarter-note basic pace in bar 2 is a far from unlikely interpretation.

Simulated pacing: suspensions. The simple 4/4 differs from the large, fugal 4/4 in that the chords it does allow to stand on the second and on the fourth beats make no comparable attempt to simulate the kind of contrapuntal but fundamentally ornamental complexity that marks these beats in a Handelian fugue. There are times, of course, when the even-numbered beats in the simple 4/4 do carry sufficient weight and offer a sufficiently large and varied set of diminutions for the composition to appear to have shifted, at least temporarily, to the compound 4/4; see Example 2.13, which reproduces a developmental passage, bars 15-17, from the D-minor Allemande of 1720. In bar 15, Handel presents a kind of inside-out, downside-up transformation of bar 4 (compare Example 2.10)*:* Just as it did in bar 4, the basic pace accelerates its half-note pace to movement in quarter notes, which is articulated again by parallel tenths between the outer voices (Example 2.13b). Since the transformed progression rises rather than falls, the earlier progression's 7-6 suspensions are replaced, not too obviously, by hidden rising 5-6 suspensions (Example 2.13c). Now instead of restoring the movement in half notes at some point in bar 16 (and mimicking the resumption of half notes at the corresponding measure, bar 5), Handel continues to employ quarter-note movement throughout the measure, as if he had exchanged the simple 4/4 for the compound 4/4. Only with the entrance of an enlargement of the opening theme's descending steps, d^2-c^2 and bb^1-a^1, at the turn of bar 17 (see the bracket in Example 2.13b and compare with Example 2.9), does Handel reinstate the half-note basic pace.[31]

We may conclude, then, that the addition of a fast-moving suspension series in the

[31]I thank Robert Cuckson for pointing out the relation between bars 4 and 15 to me. See Willner 1990 for a more extensive discussion of the opening theme's descent. The compact metrics and dense voice leading of bar 16 are particularly complex; they are laid out in greater detail in chapter 4.

simple 4/4, when it is extended over some time and supported by a properly weighty texture and by an equally elaborate design, may be enough to simulate the temporary adoption of the compound 4/4. Hidden though it is, the rising 5-6 suspension series in bar 15 and its continuation in bar 16 of the D-minor Allemande offers a good example. The falling 9-10 suspension series in bars 3-4 of Example 2.12 offers another.

Conversely—and this is a very closely related phenomenon—there are times when the typically ornate thematic and contrapuntal activity on the even-numbered beats in the compound 4/4 has diminished sufficiently for the meter to borrow from the simple 4/4. There are also instances in the compound 4/4 in which its typically busy activity on these beats has not yet begun in earnest, having been delayed by the presentation of introductory flourishes. Example 2.14, from the Allegro of the E-minor Concerto Grosso, Op. 6, No. 3, illustrates the first of these two possibilities. A four-bar double sequential expansion spanning bars 29-32 (and shown in more complete reduction in Example 5.3) expands the quarter-note basic pace to one-bar movement. Instead of resuming the basic pace immediately, Handel—with a view towards enlarging the Allegro's grouping structure—keeps the basic pace at a relatively slow interim pace of two-to-the-bar for an additional four measures (bars 33-36). This more deliberate pace, with the *allargando* effect it conjures up, also helps establish the key of the dominant, B minor, more persuasively. Only at the return of the Allegro's multiple voice exchanges in bar 37 does the four-to-the-bar basic pace resume.

A careful and consistent durational analysis of a complete movement will usually disclose which type of 4/4 governs it as a whole. In the interest of tracing the pace structure and the tonal structure of the piece accurately, it is essential for us to keep the distinction between the various types of 4/4 time clear throughout, this despite the temptation (to which I have succumbed elsewhere) to propose at least a temporary

merger of the two.[32]

Basic groupings. Our earlier encounters with basic groupings touched mainly on groupings in the compound 4/4, where the single measure often serves as the characteristic "hypermeasure" and as the basic segment of the meter, and where it also acts as the meter's principal grouping pace (Example 2.1, and chapter 1). The simple 4/4 presents a similar set-up but one that typically extends over two measures. A glance at the examples in the simple 4/4 presented so far (Examples 2.9-2.13) and at several examples of displacement in the simple 4/4 presented below (Examples 2.15 and 2.20) will disclose that the two-bar segment is the basic segment of the simple 4/4. It will also reveal that frequent motivic or rhythmic parallelisms between two-bar groups or simply caesuras that occur frequently at two-bar intervals account for the meter's prevalent two-bar grouping pace. (Three-bar grouping in the simple 4/4, though fairly common, is a less idiomatic and more piece-specific phenomenon, so I defer its further consideration to the detailed analysis of the D-minor Allemande in chapter 4.)

In Handel's organ concerto allegros and in his large orchestral allegros, adjacent two-bar segments typically promote both a two-bar grouping pace and an initial two-bar primary periodic span (recall Example 8, from the Organ Concerto in B=, Op. 4, No. 6, in the Introduction). By setting up a two-bar periodicity the two-bar segments also establish a two-bar hypermeter, even though the beginning and the end of each segment may not necessarily be congruent with the notated meter and with the implicit hypermeter (Example 2.15). It will later become apparent that although the introduction of afterbeat patterns frequently allows the grouping structure to be displaced away from the notated

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[32]I propose such a merger in my analysis of the second movement, Allegro, from Op. 6, No. 2, in Willner 1999.

grid, sometimes even for the duration of an entire piece, it nonetheless keeps the notated grid—with its periodicity and its hypermeter—firmly in place.[33]

The preliminary establishment of a two-bar periodic norm in extended works like the long allegros of the Concerti Grossi, Op. 6, provides the basis for the later establishment of four-bar, six-bar, and eight-bar periodicity, and sometimes even for the establishment of four-bar pacing and a four-bar hypermeter (chapter 5). But it must be emphasized that the gradual construction from the ground up of a large periodic framework in these pieces is always subject to temporary interruption by one-bar movement, by triple grouping, or by altogether unpatterned grouping, and that such interruption can take place at any time in the course of the piece. And we can already observe further that the frequent adjacency of two-, four-, and six-bar groups accounts for the common appearance of larger ten-, fourteen-, eighteen-, and twenty-bar groups at the levels of the phrase and the period. These larger groups work quite effectively against the establishment of a full-blown periodicity, though they do tend to build up what one might call an "approximate periodicity" or "subliminal periodicity."[34] It must be emphasized, too, that in Handel's keyboard music and in his chamber works the treatment of the basic segment is generally less periodic and hence more flexible and more thematic than it is in the orchestral works.[35]

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[33]L & J 1983 and Rothstein 1989 frequently address the concurrence of close relation and lack of congruence between grouping and hypermeter. I discuss it in detail in Willner 1998.

[34]Krebs 1999 often points to the subliminal hypermetrical dissonance of adjacent periodic groups whose lengths are not equal. The smaller the groups, the more evident their approximate periodicity; the larger the groups, the more elusive their subliminal periodicity.

[35]Bach's periodicity differs markedly from Handel's in this respect. In Bach's periodic keyboard works, and especially in his *Galanterien*, the second measure of each two-bar segment contrasts substantially with the first: It leads its own, motivically distinct life. Thematic parallelisms at the surface therefore obtain externally, between the

Mid-bar displacement in the simple 4/4. The orchestral ritornello from the opening Allegro of Handel's Organ Concerto in F, Op. 4, No. 4 (Example 2.15), illustrates the most common form of displacement in the simple 4/4, one that has a complete phrase, period, section, or even a whole movement shifted by a half note to the right. Mid-bar displacement in the simple 4/4 differs fundamentally from mid-bar displacement in the compound 4/4, which has been discussed quite thoroughly in the literature*:* Its purpose is not only to shift the downbeat from the first beat to the third beat of the measure but, more important, to enable the closing chord of the stretch in question—and the intervening cadential and semi-cadential goals—to fall on the notated downbeat of the measure. The displacement, in other words, relocates the thematic and the tonal points of arrival of the entire stretch from the third beat to the first. Without mentioning the displacement, Kirnberger points to the rationale for it*:* "The concluding note must always fall on the downbeat of the measure" (p. 390). He then allows for a displaced beginning, though he only describes it as a phrase that "begins on the upbeat" (p. 392; see Example 2.16, which quotes the example Kirnberger provides on p. 393).[36]

The pedal call. Kirnberger's further statement regarding closure on the notated downbeat,

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corresponding measures of adjacent two-bar segments, rather than internally, between the two measures that make up each segment. The disposition of these parallelisms strongly supports each *Galanterie'*s characteristic periodicity. I discuss the extensive hypermetrical ramifications of this essential distinction in Willner 1998.

[36]It is evident that I regard mid-bar displacement in the simple 4/4 as a plastic (if metrically dissonant) norm, not as a deviation from metrical or hypermetrical regularity. This view supplements those offered in Grave 1985 and Burkhart 1995, which address mainly mid-bar displacement in the compound 4/4, an altogether different issue.

"If this does not happen, it indicates that somewhere in the melody there is an extra or missing half measure," requires additional comment. It so happens that an extra half measure (if not precisely the half measure Kirnberger had in mind) is in fact very often provided at the very beginning of the piece, when the displacement's basic apparatus is set up. As the piece begins, the displacement is typically preceded by a half-note downbeat, usually in the bass, which establishes the notated meter and puts in place the durational framework for both the chain of notated metrical downbeats and the chain of displaced thematic downbeats that follow. I have coined the term *pedal call* to designate this opening sustained tone. In a very powerful way the pedal call kicks off the entire panoply of displacements that runs through most of the movement in question.[37] And on an immediate, short-term basis it provides a particularly effective foil for the entrance of the principal theme on the third beat (see the annotation in Example 2.15). The pedal call is implicitly represented in the later course of the movement by the cadential goals at the notated downbeats, which do double duty: They close one displaced period or phrase, and they usher in the upcoming, displaced period or phrase. To put it another way, the displacement introduced by the pedal call is reintroduced again and again in later measures by the pedal call's many tonal and durational satellites.

In Handel's F-major Organ Concerto Allegro and in the simple 4/4 generally, the pedal call occupies a full half note. In other meters and under different metrical circumstances it is often much shorter in duration, taking up just a quarter note or even an eighth. The pedal call can also be suppressed, in which case the composition begins with either a rest or an incomplete measure (see Example 2.34, below, for a telling illustration of a nearly silent measure in alla breve style).

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[37]Abravaya 1999 describes the same phenomenon in different terms. I took note of the pedal call in the unpublished Willner 1984.

When referring to the metrics of displacement in the simple 4/4, both in the presence and in the absence of the pedal call, I shall henceforth distinguish between the *notated downbeat*—the explicit or implicit pedal call, along with its subsequent representation by later cadential downbeats and intermediate points of arrival—and the *thematic downbeat*, the displaced beginning of the opening theme proper and its metrical representation by similarly displaced beginnings in later measures.[38]

Afterbeats and afterbeat displacement. Appearances to the contrary, the type of displacement introduced by the pedal call in the simple 4/4 (unlike the displacements the pedal call introduces in the compound 4/4, and unlike other kinds of displacement more commonly found in later repertoires) does not really contradict the notated meter but rather acts in concert with it. Tensions between the *notated meter* and the *thematic meter* do of course arise sometimes, and they may indeed serve as the point of departure for later compositional elaboration; J. S. Bach's instrumental works contain some particularly remarkable examples.[39] But in Handel's instrumental works, and above all in those that follow the simple 4/4, the thematic and the notated meters operate simply side by side, with few hints of antagonism.

Such metrical coexistence is easy to explain. Mid-bar displacement in the simple

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[38]If my suspicions that the beginning of Handel's F-major Organ Concerto influenced the beginning of Beethoven's "Eroica" Symphony could be confirmed, one might hear Beethoven's opening two chords as an enlargement of Handel's pedal call. Analogously, one might also hear the scalar runs that open the "Eroica"'s last movement as an enlarged pedal call: The ostinato theme to which they lead is, after all, very strongly reminiscent of Couperin's rondeau themes, virtually all of which begin with a long pedal call. Flotzinger 1970 points to the Baroque provenance of Beethoven's variation themes; Willner 1996c explores the Handelian origins of Beethoven's Piano Sonata in F, Op. 54, which seem to spill over into Op. 55 and Op. 57.

[39]Burkhart 1995 offers many wonderful illustrations.

4/4 differs little, in principle, from the kind of modest and small-scale *afterbeat displacement* with which many themes and indeed many thematic areas in a wide range of tonal styles begin and end. A typical "afterbeat theme" opens with a suppressed notated downbeat and closes on the corresponding notated downbeat beyond the theme's last barline. The initial afterbeat rest, which replaces the opening downbeat, may suppress a sixteenth, an eighth, a quarter note, or even a dotted quarter (see Example 2.17, from the Andante of the same F-major Organ Concerto, Op. 4, No. 4). This kind of modest afterbeat displacement has already been described in ample measure in the literature.[40] Mid-bar displacement in the simple 4/4 is little more than afterbeat displacement, writ large.

Among the common surface complexities of Baroque phrase rhythm is the combination of several different afterbeat patterns, each with its own delay or displacement, into one thematic configuration. The subsequent reformulation of these delays and displacements during the thematic configuration's expansion and contraction, in the course of developmental play, multiplies these complexities many times over. I shall offer an extended example of such combinations and reformulations and their consequences during the discussion of the compound 4/4, later on. The difficulties of retracing networks of superimposed afterbeat displacements far outweigh the difficulties of retracing the tensions between the notated and the thematic meters; paradoxically, sorting them out is less rewarding analytically.

Borrowed displacement. Since a piece in the simple 4/4 that begins with mid-bar afterbeat displacement typically shows both a thematic and a notated downbeat, it realizes a dual

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[40]Rothstein 1989, Agmon 1991, and Agmon 1997 present some vivid examples; Krebs 1999 offers a methodical account.

thematic and notated metrical framework. And, from a larger perspective (assuming that the piece maintains a basic, if part-time two-bar periodicity), it also realizes a dual thematic and notated hypermetrical framework. I suggested earlier that the retention of the notated meter and hypermeter, because it underlies and supports the displacement of the thematic meter and hypermeter, presents us with a metrical setting fundamentally different from the corresponding setting in the compound 4/4. It is the setting last-named that permits the kind of brief and casual mid-bar displacement that occurs so often in the compound 4/4 and identifies the meter for us, visually and aurally*:* The displacement shifts the entire durational structure—lock, stock, and barrel—temporarily to the middle of the measure.

Similar temporary displacement does occur from time to time in the simple 4/4, but not nearly as often as it occurs in the compound 4/4. Example 2.18 illustrates how cadential enlargement brings about one remarkable thematic instance of such "borrowed displacement." Conversely, thematic mid-bar displacement characteristic of the simple 4/4 occurs occasionally in the compound 4/4 as well, but it is very hard to spot by means other than ear, instinct, and experience because the more intermittent and casual mid-bar displacement so typical of the compound 4/4 is likely to prevail elsewhere in the movement under question. Learning to distinguish by instinct between the borrowed displacements is important, though, for it helps the performer shape the web of contrapuntal voice leading on instruments like the harpsichord, which lack dynamic differentiation.

The repercussions of displacement. If the tensions of mid-bar displacement in the simple 4/4 are not a major source of short-term rhythmic play in Handel's instrumental works, they can sometimes become a consequential issue in the larger scheme of things. At the level of the complete movement, especially, they may in fact change the metrical

disposition of developmental spinning in the foreground. This can be quickly surmised if one looks at the F-major Organ Concerto movement as a whole. Cast in ABA' form, the entire Allegro is metrically displaced—except for its relatively short but highly developmental B section (Example 2.19a). Just as a composer might use temporary displacement as a means of intensification and elaboration, Handel uses the temporary adoption of the *notated* meter here as one of several developmental ploys. Most significantly, the climactic passage at the beginning of the varied reprise—a set of stretto-like, fully harmonized and richly scored orchestral repetitions of the Allegro's unison incipit—takes place not in the redisplaced meter, as one might expect, but in the notated meter (Example 2.19b). The displacement proper resumes only eight measures later, without fanfare, when the organ re-enters with a group of descending parallel tenths adapted from the opening A section (see again Example 2.19b).

A closely worked play between the different types of mid-bar displacement and between the notated downbeats and thematic mid-bar afterbeats is only an occasional feature of Handel's simple 4/4. It represents a much more typical and much more expressly thematic element of Bach's instrumental music, whose perpetually imitative textures allow the large fugal 4/4 to simulate the compound 4/4 as a matter of course. In his fugal gigues, for instance, Bach employs various meters that resemble the simple 4/4 in their larger outlines. But these meters rely for their displacements on both the thematic mid-bar displacements typical of the simple 4/4 and on the fugal displacements typical of the large 4/4. For good measure, and in close alternation, Bach then adds quarter-note afterbeat displacement typical of the compound 4/4. See, for instance, the Gigues from the E-minor Partita for Clavier and the D-minor English Suite, which present a bevy of displacements and durational artifice so blunt that it conjures up the art historian's

definition of the "Baroque."[41]

The displaced hypermeter. I described earlier how the thematic meter acts in concert with the notated meter, taking advantage of the metrical emphases that the notated meter makes available to the thematic meter's points of arrival and closure through its large hierarchy of notated downbeats. The thematic hypermeter, similarly, acts in concert with the notated hypermeter, but at a higher and much more abstract, conceptual level. Its working relationship with the notated hypermeter is subject to interruptions when either the characteristic mid-bar displacement or the composition's small periodic hierarchy drop out temporarily. In theory, the two hypermeters may come into conflict by stepping in each other's way, and their encounter may generate a complex developmental discourse. In practice, and especially in Handel's shorter works, they usually coexist peacefully and uneventfully. The dialectics of hypermeter, as such, do not often appear as major items on Handel's durational agenda.[42]

V. Gavottes

Displacement. The type of metrical displacement and metrical coexistence that marks the simple 4/4 also prevails in the typical gavotte, where the notated meter (followed by the dancers) and the displaced thematic meter (projected by the performer) operate side by

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[41]The dialectical exchanges between solo and tutti in the Andante from the F-major Organ Concerto, which begin where Example 2.17 leaves off, are the exception that proves the rule; I discuss these exchanges at length in the unpublished Willner 1984. Wölfflin 1966 (1988) is the standard (though dated) interpretation of the Baroque in the visual arts.

[42]The principal exception appears to be the sustained Handelian Adagio or Largo in 3/2 time; see chapter 3.

side. The music begins on the displaced thematic downbeat but the dance proper begins at the notated downbeat.[43] One might speculate that Handel's propensity for avoiding extended hypermetrical conflicts between the thematic and the notated hypermeter in the simple 4/4 translated readily into a propensity for keeping his gavottes as simple as possible, and in fact for avoiding the gavotte, generically, as much as possible. I present Example 2.20, from the Organ Concerto in G minor, Op. 4, No. 3, by way of illustration, and I add a very short quotation from one of Couperin's gavotte-like masterworks in Example 2.21 to demonstrate the kind of surface complexity Handel (for all his evident admiration for Couperin) was keeping at arm's length.[44]

Much like the familiar quarter-note afterbeat displacement that abounds in 3/4 time, the G-minor Gavotte's mid-bar thematic downbeat (in bar "0") simulates a relatively weak but tangible upbeat to the notated downbeat of the first full measure, an *internal upbeat* or *simulated upbeat* as one might call it; see the brackets in Example 2.20. Each notated measure then follows the same essential internal setting, maintaining the duality (not the ambiguity) suggested at the outset. If gavottes present a special metrical and hypermetrical case that is because their thematic, displaced meter often appears to take precedence over the notated meter for the duration of the piece. In other simple 4/4 displacements, the notated meter makes its presence known more vividly in various ways (especially through the pedal call and through the emphasis that accrues continuously to the pedal call's subsequent reinforcement by the closing, cadential downbeats), and it controls the larger metrics of the piece in no uncertain terms.

The two meters and the two hypermeters of the gavotte, then, operate side by

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[43]Schulenberg 1992 contains good descriptive accounts of this suggestive relationship; so does Little/Jenne 2001.

[44]Emblematic of the durational differences between Handel and Bach is Bach's predilection for the gavotte.

side as displaced thematic meter and notated shadow meter, and, at a deeper level, as displaced thematic hypermeter and notated shadow hypermeter. Even though the dance steps begin on the notated shadow downbeat rather than on the displaced thematic downbeat, it is probably best to maintain the reversal of the metrical norm I have just proposed, and to regard the displaced thematic meter and hypermeter as the effective time keepers of the piece. I would not be surprised, though, if in a thoroughgoing study of the matter another scholar should reach a different conclusion.[45]

The durational clarity of Handel's metrics in the face of constant displacement—plainly evident in Example 2.20—is remarkable in one respect. When thematic displacements of the type found in gavottes introduce a string of consistently simulated internal upbeats (or even one particularly intense internal upbeat) they can throw the gavotte's thematic metrical structure temporarily away from the middle of the measure on to the arriving downbeat, and in so doing they tend to contradict the gavotte's basic assumption of thematic displacement by overemphasizing, however briefly, the gavotte's notated appearance. The playful result is the paradoxical formation of a notated double shadow meter (or perhaps a meter with its shadow once removed) that appears, deceptively, to follow the notated metrical grid of the piece.

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[45] And indeed, Edward Aldwell (private communication) has suggested a most persuasive alternative interpretation, which is shown under Example 2.20*:* A hypermetrical 2-3-4-1 group of four half-note hyperbeats leads in the manner of an extended upbeat to the downbeat of the second notated measure, and then finds itself replicated over and over gain in subsequent measures. This reading, which corresponds to my reading of the "Harmonious Blacksmith" theme (Example 2.25a), spans two measures of the simple 4/4, whereas my "Harmonious Blacksmith" reading spans one measure of the compound 4/4. For the correspondence between the readings to be complete, one would have to supply an imaginary half-note pedal call at the head of the Gavotte's "bar 0," which is neither a difficult nor an unidiomatic task to accomplish. The way Handel's quarter notes rise up to the half-note bb^2 at the turn of bar 2 certainly lends Aldwell's attractive formulation a good deal of credence.

Handel—a composer whose metrical games sport a different, more straightforward and rather more subtle kind of complexity—seems to have paced his gavottes in a very conservative, low-key way, and to have stayed clear of such artful complications; so did Bach, notwithstanding a strong inclination to displace when possible. The dense situation I describe is a sophisticated and closely worked hallmark of Couperin's gavotte and gavotte-like displacements. The displaced thematic downbeats of Couperin's gavottes are often contradicted by the competing entrance of seemingly nondisplaced thematic and tonal patterns at the notated downbeats that follow. The contradiction is highlighted by the different brackets in Example 2.21a, which presents the evidently programmatic refrain from the Rondeau, "L'Adolescente," the troisième partie of "Les Petits Ages" from the seventh Ordre of the Pièces de Clavecin.

Couperin's thematically displaced tonic leads to a sonorous, richly textured subdominant on the downbeat of bar 1 in the manner of an internal upbeat. Before the four-bar antecedent concludes in the middle of bar 4, a pair of nested prefix progressions B♭-C-D (annotated atop Example 2.21b) define a competing, notated double shadow meter (or doubly shadowed meter) at the downbeats of bars 1, 2, and 3 through the bass line:

Bars	1	2	3	4
Bass tones	C	(B♭-C-D)	B♭ - C - D	
Progression	IV	(III^{5}	C	^{6}) II^{6} $V^{\#}$

Although the displaced thematic meter is maintained by the F-major chord and C-minor sixth chord on the third beats of bars 1 and 3, these turn out to operate only at the service of the nested prefix formations outlined in Example 2.21b. The conservative Handelian Gavotte in Example 2.20 demonstrates that Handel by contrast is very careful indeed

about preserving, even guarding, the idiomatically molded metrical identity of each measure.

VI. Other metrical features of the simple 4/4: Parsing and hidden triple meter

Extra half measures. Because in the simple 4/4 whole sections are often displaced in their entirety, they require a one-time addition or elision of half a measure at the beginning or at the conclusion of the displacement—and sometimes at both ends, depending on circumstances—in order to get the displacement started or to close it off.[46] At least in Handel's music, such addition or elision is not usually much of a compositional issue.[47] The initial addition is most often accomplished right at the outset by the pedal call and in later measures by unobtrusive, thematically parallel formations. The elision, when it is called upon to help out, occurs through an overlap at the notated downbeat with similar ease. An instance of such elision appears in bar 42 of Example 2.19a, from the F-major Organ Concerto, where the organ begins the developmental, undisplaced middle section of the Allegro with a local quarter-note afterbeat. The mere absence of the half-note afterbeat displacement that prevailed earlier in the movement calls so much attention to itself that it signals the cancellation of the displaced thematic meter and the activation of the notated meter.

Unnotated triple meter. The ease with which mid-bar afterbeat displacement occurs in the simple 4/4 seems to encourage the generic half-note movement of the basic pace to establish temporary tonal groupings of three half notes and to put together brief stretches

[46]Burkhart 1995 refers to these, aptly, as metrical "bumps" that nudge the performer.

[47]In Bach's, on the other hand, it certainly is; see Burkhart 1995.

of unnotated 3/2 time. Movements such as allemandes whose tempo is relatively slow and whose tonal design is by and large complex are particularly hospitable to such fundamentally tonal groupings, which embody what Carl Schachter called *tonal rhythm* with particular clarity.[48]

We already encountered one instance, at a furiously fast tempo, in Handel's E-minor Fugue (Example 2.8a, above); we shall find a more typical exemplar, one that also paces itself at a more reasonable moderate speed, in the first reprise of the Allemande from the E-major Suite (1720), whose opening five and a half bars comprise three segments of 3/2 time. Example 2.22a shows how each segment divides unevenly into a bar of 2/4 time and a bar of 4/4 time (or the reverse), in much the same way that the E-minor Fugue's three-bar subject divided into a single measure and a group of two measures (recall Examples 2.5 and 2.6). Because like many borrowings from unnotated meters the Allemande's ad-hoc 3/2 possesses a deeper meaning, which will emerge as I return to the Allemande later on, it will be advantageous to dwell on the procedural intricacies of this little-studied phenomenon in some detail here.

Among the difficulties of parsing the opening measures of the Allemande is the manner in which the second and the third segment in 3/2 time (bars 2^{b}-3 and 4-5^{a}) close into the segments that follow*:* Each one-and-a-half bar segment takes on the deceptive appearance of an overlapping two-bar group whose last half measure has been elided. To interpret the passage properly one must therefore pay particularly close attention to its changes in texture and in motivic design. And indeed, these changes take place at the three-beat intervals set forth by the underlying tonal motion, and they do much to verify that single measures in 3/2 time have indeed taken over from the notated meter.[49]

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[48]Schachter 1976/1999b.

[49]Dahlhaus 1977 remains the most comprehensive study of unnotated 3/2 as a metrical phenomenon; Agmon 1991 and Grave 1995 offer invaluable observations.

When it assembles unnotated formations of triple meter in the simple 4/4, the basic pace typically outlines three-step neighbor-note motions, linear third progressions, and other, more specifically thematic three-part tonal configurations. In bars 1-2^{a} of the E-major Allemande we find that the opening theme describes a self-contained threefold tonal motion by first reaching up to the two tones, e^{2} and a^{2}, from the opening upbeat, and then falling down to the third tone, g#^{1} (compare Example 2.22a with the contrapuntal reduction in Example 2.22b). The contrapuntal thread linking these three tones is the inner-voice neighbor-note motion g#^{1}-a^{1}-g#^{1}, and it is this motion that together with its arpeggiated accompaniments holds together the single measure of three beats (see the "alto" voice in Example 2.22b).

The contrapuntal progressions in bars 2^{b}-3 and 4-5^{a}, by contrast, owe their durational outlines to the third progressions outlined by the bass descents D-C#-B and B-A-G# (the last within the larger span of the fourth B-A-G#-F#, which extends to the new sequence that begins at the middle of bar 5). These three-step descents account for the length of each three-beat measure in much the same way the underlying neighbor-note motion in bars 1-2^{a} does. Owing to its long span—three dovetailing segments of three-beat measures—and to its strategic position as the principal theme at the beginning of the Allemande (and a slow-moving allemande at that), the unnotated 3/2 stretch becomes a substantial metrical force in charting the durational outlines of the piece*:* Through the metrically dissonant changes in the thematic fabric that it introduces—subliminally at the beginning, and with greater friction against the notated meter later on—the unnotated 3/2 defines a temporary measure-and-a-half grouping pace that contradicts the Allemande's two-bar grouping pace at major junctures of its thematic outlines.[50]

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[50]Krebs 1999 contains many beautiful observations about this type of metrical dissonance.

Metrical parsing at the downbeat. The density of the metrical design at the beginning of the E-major Allemande is due to one's emerging sense of metrical dissonance but, even more, to the aforementioned closure of the two groups of 3/2 at the downbeat of the groups that follow*:* Bars 2^{b}-3 close at the downbeat of bar 4, and bars 4-5^{a} close in the middle of bar 5. I noted several times that precise parsing in Baroque style is complicated by the tendency of numerous groups, ranging from short segments to long periods, to close at the downbeat of the following group without continuing beyond that downbeat. Such quick closure is predicated on several assumptions: First, that the group of measures about to close will contain only a very short, even minimal afterbeat displacement (a sixteenth, an eighth, or at the very most—in examples discussed later on—a quarter note), and that it will therefore take up only a minimal part of the new group's time span; second, that the new group of measures will take off at a brisk pace; and third, that the sojourn of the closing group's last chord, even if reinforced by some sort of cadence, will not be extended beyond the duration of the prevailing afterbeat pattern (recall the discussion of the A= chord at bar 9^{b} of the F-minor Allemande in chapter 1). These assumptions mean that the two groups in question, each minimally displaced by very local afterbeats, meet each other at the downbeat without really overlapping. Other things being equal, the accomplishment of quick closure and quick departure will entail only the completion and the subsequent beginning of familiar sixteenth-, eighth-, and quarter-note afterbeat idioms.

To complicate matters further, suspensions and rests are part and parcel of afterbeat patterns: A pattern that began with a rest may often have its rest represented by a suspension at the downbeat where two groups of patterns meet. Example 2.22c distills the encounters between the one-and-a-half bar groups at the beginning of the E-major Allemande. It shows how afterbeat patterns of three sixteenths plus a sixteenth rest or a

suspension at the downbeat weld bars 1-2[a] to bars 2[b]-3 and then in turn weld bars 2[b]-3 to bars 4-5[a]. Afterbeat patterns of seven sixteenths plus a sixteenth suspension similarly weld bars 4-5[a] to bars 5[b]-7[a]. Owing to the fusion of these segments one accepts speedy closure at the thematic downbeat (often in the middle of the measure in this Allemande) quite readily, without including the downbeat's entire measure or entire half measure in one's parsing of the group that is about to close. It is under these circumstances that one makes no attempt to interpret Handel's unnotated 3/2 as a series of overlapping two-bar segments.[51]

One should bear in mind that the movement of the basic pace at the deeper level does not reflect the presence of small-scale afterbeat displacements at the sixteenth-note and eighth-note levels. In other words, for the purpose of analysis, reduction, and especially normalization, we remove (or undisplace) the various sixteenth-note and eighth-note displacements, and we follow the underlying half-note movement of the piece. The reduction in Example 2.22b illustrates this principle better than words can.

Larger triple groupings. Almost all groups of three, ranging from three tones at the surface to three measures and three hypermeasures at the higher levels, display one durational disadvantage: They lack the kind of clear-cut, unambiguous strong/weak metrical hierarchy that organizes duple progressions. That is perhaps why triple groups of various denominations often seem to seek out a duple organization at a higher metrical or hypermetrical level. The quest for a higher duple organization helps explain why groups of three fit so easily into duple contexts, and why duple and triple groups can stand so readily side-by-side without occasioning much conflict in Baroque style. Further

[51]Agmon 1991 discusses such overlaps, which do occur from time to time in Handel's instrumental music; the opening movement from the A-minor Concerto Grosso, Op. 6, No. 4, for instance, contains several remarkable examples.

explanation can be found in the common tonal origin of duple and triple grouping*:* Both are supported by the same even movement of the basic pace and by its expansions.[52]

Because triple meter generally gives way to duple meter at the higher levels of duration, groups of three often yield to groups of four by the time the composition has reached its closing stretch. This shift in grouping ties in with the tendency of many Baroque pieces to establish a small-scale periodic hierarchy, however incipiently, as they go along.[53] Emblematically, the E-major Allemande's three groups of one-and-a-half measures in bars 1-5^{a} yield to four groups of two bars before the first reprise has reached the halfway mark (bars 5^{b}-13, Example 2.23). Of the four duple groups, the first two (bars 5^{b}-7^{a} and 7^{b}-9^{a}) are displaced to the middle of the measure in the casual manner of the compound 4/4 by the preceding three triple groups, the third (bars 9^{b}-11) is extended by half a measure to conclude the displacement, and the fourth (bars 12-13) is given over to a dominant pedal-point prolongation that serves to round out the preceding three duple groups in periodic fashion and to conclude the entire play of three vs. four.

The same principle of three becoming four operates also at the higher level of the complete composition. Example 2.24 presents the familiar Allemande from the early G-major Suite (1703c) yet again. It shows how the three two-bar subphrases of the Allemande's first reprise are replaced by four such subphrases in the second reprise. Each reprise extends for one additional measure in order to lend substance to its closing chord, which arrives—contrary to Kirnberger's instructions for the simple 4/4—in the middle of the measure preceding the extension.

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[52]Spitzer 1998 offers a particularly good account of the relation between duple and triple groups.

[53]Schachter 1987/1999b explains why a triple hierarchy on a very large scale is impracticable.

VII. The Compound 4/4

Internal diversity. I have already discussed the principal attributes of the compound 4/4 in some detail in chapter 1 and, through comparison with the large and the simple 4/4, in the present chapter. I shall therefore only summarize my observations briefly here, and then focus on those aspects of the compound 4/4 that require further elaboration.

Kirnberger's comments on the compound 4/4 are rather less helpful than are his observations on the other types of 4/4 time. He notes chiefly that each measure of the compound 4/4 comprises two bars of 2/4 time, and that in the compound 4/4 "the cadences fall naturally on the second part of the measure and last only half a measure, which would not be possible in 4/4 meter" (p. 398). Be that as it may (compare my observation during the last section about the metrical position of the closing chord in the G-major Allemande), there are many measures in the compound 4/4 that don't readily yield the impression of easy divisibility into two, and there are many cadences in the compound 4/4 that occur away from the third beat.[54]

Quite a few theorists have in fact noted the existence of two types of compound 4/4. The first type does contain two bars of 2/4 time and consequently shows a third beat almost identical in metrical emphasis to the first. The second type contains a more differentiated metrical hierarchy and consequently shows a third beat more clearly subservient to the first.[55] Although the first type is more common in the earlier decades of the eighteenth century and the second type comes into its own during the later decades,

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[54]I thank David Schulenberg (private communication) for bringing this point to my attention.

[55]Grave 1985 and Burkhart 1995 offer invaluable accounts of this issue. See also Mauerer Zenck 2001, and the various authors I cited in connection with Kirnberger during the Introduction.

most examples of the compound 4/4—at least in the complex pieces under consideration here—fall somewhere in between the two types, as Reinhard Strohm recently observed.[56] It is this in-between type of compound 4/4 that I shall be concerned with principally in the present study.

As for pacing and grouping, the principal attributes of the compound 4/4 are its four-to-the-bar basic pace in the tonal-durational sphere, and its one-bar grouping pace, one-bar "hypermeter" (which comprises two half-measures), and one-bar primary periodic span in the durational-thematic sphere. The examples I presented in chapter 1 make it clear that these fundamental attributes are all subject to different kinds of enlargement in the course of the piece, particularly in the orchestral repertoire. The different types of enlargement are in turn coordinated by the kinds of narrative discourses and strategic schemes I shall lay out in chapters 4 and 5.

Quarter-note afterbeat displacement. Quarter-note afterbeat displacement in the compound 4/4 is similar to half-note afterbeat displacement in the simple 4/4 inasmuch as it serves to emphasize the closing notated downbeat of a phrase, a period, or a complete piece and the intermediate cadential and melodic goals in precisely the same way. A familiar example is the "Harmonious Blacksmith" Air from Handel's E-major Suite, which begins with a quarter-note pedal call (just as the F-major Organ Concerto began with a half-note pedal call) and introduces its thematic downbeat on the second beat of the measure (Example 2.25a).[57] Observe how several metrically weak melody tones,

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[56]Strohm 1987. I thank Reinhard Strohm for elaborating on the matter in a private communication.

[57]Abravaya 1999, pp. 113-14, Examples VI-24 and VI-25, presents a similar and altogether admirable analysis of the "Harmonious Blacksmith" theme, arriving at his conclusions via a historical route that begins in the Renaissance.

especially the eighth-note $f\#^1$ in bars 1 and 2 and the passing $d\#^1$ in the middle of bar 2, find themselves, incongruously, at the notated downbeat rather than at the weaker beat to which they properly belong. Owing to their odd-looking metrical position they are accented rather more emphatically here than they are in Mauro Giuliani's undisplaced, augmented transcription, which employs 2/4 time (Example 2.25b; that Giuliani omits the pedal call is not an issue—Handel did not include it, either, in an early manuscript version of the Air).[58] The principal tones of the melody, by contrast—the e^1 and $g\#^1$ of bar 1, and the $g\#^1$ of bar 2—find themselves on the weaker beats of each measure. Moreover, the tune's tonal underpinning—the harmonic weight of its tonic chord—has been moved to those weak beats as well.

Afterbeat displacement with a surprising accentual look is by no means as uncommon as it seems. It occurs with great frequency not just in Handel's music but in the keyboard works of Francois Couperin and in the vocal music of J. S. Bach—everywhere in the Baroque repertoire, in fact—but it certainly appears odd to the eye unaccustomed to the peculiarities of Baroque notation. On account of the quarter-note displacement, the less weighty material usually associated with the second and fourth beats enters on the notated downbeat and on the third beat, and the prominent tones usually assigned to the thematic downbeat and to the third beat enter on the second and on the fourth beats. If one only thinks of 2/4 time, where (minus the pedal call) such displacements are very common even in later repertoires (Example 2.25c), the practice looks rather more persuasive*:* Without its *Ersatz* augmentation, Giuliani's remake of the Harmonious Blacksmith tune in 2/4 would certainly make the tune more plausible to the modern eye (Example 2.25d).[59]

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[58]Reproduced in Hicks 1983, among others.

[59]The difference between the idiomatic use of 2/4 displacement (and of related displacements) during the Baroque era and during later periods resides in its changing

Whether the odd-looking location of the downbeat becomes an issue for rhythmic play and thematic development depends on the relative emphasis the composer chooses to place on the notated downbeat and, subsequently, on the thematic downbeat; it also depends on the extent to which the composer wants to question the identity of either beat. Although Handel does take advantage of the notated meter—the $\frac{5}{2}\ \frac{6}{3}$ suspension on the downbeat of bar 2 in the Harmonious Blacksmith is very expressive—he often forgoes the opportunity to develop durational confrontations between the two types of downbeat in an extended, thematic way. The exceptions one finds occasionally are short: A fleeting but effective example shows that Handel might resort to such play when it is not too obtrusive. The exceptional displacement in question occurs near the double bar of the Gigue from the G-minor Suite, which is set in compund 12/8 time; it is signalled by the square brackets in Example 2.28b (I discuss Example 2.28a, which provides the theoretical basis for Example 2.28b, later). Taking advantage of a nonconfrontational situation in which all he needs to do is to buy time until the mediant is tonicized at the double bar, Handel shifts the upper-voice figurations very briefly by one beat to the left. He keeps the bass in place though, letting it complete the tonicization on schedule (see the chord labels at the sketch under Example 2.28b). In comparable situations Bach explores the possibilities for rhythmic play to a rather greater extent; a good example is the aforementioned Gigue from the D-minor English Suite (also set in compound 12/8 time).

The reason quarter-note afterbeat displacement, despite its odd appearance, works so well in the compound 4/4 has to do with its similarity as a notational and as an

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status as an issue that calls for compositional elaboration and resolution. Baroque displacements of this type don't *necessarily* require such elaboration; later displacements often do. Samarotto 1985 points to some telling examples in Bach's instrumental music; Grave 1985 and Samarotto 1999 address the phenomenon's working-out during the Classical era and beyond.

accentual idiom to the metrical disposition of suspension series and points of imitation. One thinks of the suspension as occurring on a strong beat, and one thinks of its preparation and its resolution as occurring on a weaker beat. But in practice the preparation and the resolution of the suspension can lend substantial rhythmic emphasis to the metrically weak beat on which it falls, especially when several suspensions are grouped together in a series; Example 2.26a, from the Allemande of Handel's A-major Suite (1720), illustrates. The expressive approach to e^2 on the fourth beat of bar 7, from the descending third $d\#^2$-$c\#^2$-b^1 on the third beat, highlights the preparation of e^2's suspension into bar 8. The decorated resolution of the suspended e^2, emphasized by a passing B# in the bass, highlights the entrance of the resolving $d\#^2$, on the second beat of bar 8, in a similarly expressive way.

Imitative practice, likewise, lends substantial rhythmic emphasis to the metrically weaker beats of the measure as a matter of stylistic norm (Example 2.26b, from the beginning of the same Allemande). Though not related to afterbeat displacement directly either, points of imitation are powerful tools that Baroque composers often use in defining and enhancing the accentual personae of the weaker beats.[60] As they enrich the fabric of imitative counterpoint the composers also establish a durational and accentual milieu within which long-term quarter-note afterbeat displacement can take place as a matter of course.

That for Handel such displacement was all in a day's work can be observed in his free transcription of the Passacaille theme from the G-minor keyboard Suite of 1720. The theme, along with some further variations, reappears at the beginning of the developmental interlude in the middle of the opening Andante from Handel's Organ Concerto in B-flat, Op. 7, No. 1 (Example 2.27; the Andante consists of a series of

[60]I discuss the wider durational ramifications of this practice in Willner 1998.

variations on a similar theme). Originally in the simple 4/4 and congruent with the notated meter, the Passacaille theme is now reset in the Andante's compound 4/4, its notes halved in length and displaced by a quarter note to the right in order to fit into the metrical setting of the Andante's outer sections.

A reciprocal displacement to the left, one that puts the thematic downbeat on the fourth beat of the measure—"forebeat displacement" as it were—occurs occasionally: quite infrequently in Handel's music and only slightly more often in the music of other Baroque composers. We encountered a fleeting occurrence—the furthest Handel would go—when I pointed to the incidental displacement of the upper voice shown in Example 2.28b. Example 2.28a, from the Allemande of Bach's A-minor Partita for Clavier, presents a rather more substantial deviation, if an unusual one.[61] Whereas in Handel's instrumental works such displacement takes place internally, as a short part of a larger passage—not at the beginning of a piece or over long durational spans—here the displacement announces itself at the outset. Just like Handel, Bach allows his bass to follow the notated meter (see the sketch and the roman numerals under Example 2.28a), but unlike Handel Bach pursues the conflict between the two voices all the way to the conclusion of the piece.[62]

Quarter-note displacement in the large and the simple 4/4. A look at several excerpts from Handel's C-minor Fugue reproduced in Example 2.29—excerpts whose metrical

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[61]I thank David Schulenberg (private communication) for confirming the rarity of this particular instance of displacement.

[62]Perhaps the most extended Handelian example one can find occurs in the second movement, a Fugue, from the E-minor Concerto Grosso, Op. 6, No. 3, but it is appropriated—lock, stock, and barrel—from Scarlatti's "Cat's Fugue," K. 30 (duly noted in Derr 1989). The further subtleties and complexities of such elusive displacements, which most probably derive from the French keyboard repertoire, must await a study of Baroque isorhythmic practice.

underpinnings will require several pages of analytical prose to unravel—discloses that quarter-note displacement in the large, fugal 4/4 and in the simple 4/4 differs from afterbeat displacement in the compound 4/4. The thematic downbeat on the second beat does not represent an independent step of the basic pace*:* Rather, it falls within the harmonic domain of the half note projected by the pedal call, or within the domain of the harmony implicit on the opening downbeat when the pedal call is short or when it is suppressed altogether. Such displacement is actually more common in the large, fugal 4/4, which shares its half-note basic pace with the simple 4/4, than it is in the simple 4/4, because fugal circumstances require a preponderance of contrapuntal and imitative play in quarter notes (recall my earlier remarks about the metrics of suspensions). Fugal discourse also requires a pervasive engagement of chromaticism and of compound melody, based again on movement in quarter notes. These ancillary contrapuntal and imitative quarter notes—whether they occasion displacement or not—are added on, at the surface, to the undisplaced half-note movement of the basic pace.

The suppressed quarter-note downbeat so characteristic of fugal subjects and fugal textures—observe how it seems to sharpen its profile as Example 2.29 evolves, at c—is probably the most frequent and most common instigator of quarter-note displacement under these hierarchically tiered conditions. The displacement has all the deceptive looks and the deceptive effect of a borrowing from the compound 4/4 in the style of the Harmonious Blacksmith. But reduction and normalization quickly reveal that the displacement is more apparent than real: It follows the undisplaced movement of the half-note basic pace, and (for better or for worse) it assumes the looks of Lerdahl and Jackendoff's more drastic analyses when its quarter notes are left out (on the right-hand side of Example 2.29a). A comparable reduction of a piece with genuine quarter-note displacement in the compound 4/4, by contrast, reveals a quarter-note basic pace that has been displaced by a quarter note to the right, as a quick review of Example 2.25a will

confirm. A performer aware of these metrical differences will surely weigh and shade the chordal textures of Handel's fugues more lightly and shade them more fluently than is customary nowadays.

The suppressed fugal downbeat. The reason, then, for including the C-minor Fugue's opening quarter note in Example 2.29 within the structural domain of the opening measure's first half note is that the material in the first half of the measure, regardless of its looks, supplies a single half-note step of the basic pace. It supplies that half note even if some of the material is suppressed and replaced by a rest. Like the sixteenth-note afterbeat patterns in Example 2.22c but at a higher level, quarter-note displacement in the fugal 4/4 and in the simple 4/4 is a purely local phenomenon, one that only very rarely displaces the basic pace from either the first or the third beat of the measure. (Exceptionally, in Example 2.19a, bars 42-44, it does override the basic pace's half-note displacement, by borrowing from the compound 4/4.)

The C-minor Fugue presents a highly characteristic occurrence of a fugal subject's seeming quarter-note displacement in the large 4/4. Appearances to the contrary, the subject's opening quarter note, g^1, along with the supporting C-minor harmony suppressed at the downbeat, introduces the half-note basic pace of the large 4/4 (see the reduction in Example 2.29a). By the same token, the subject's closing quarter note stands for a full half note. Handel, sure enough, later on sets the subject as a theme moving in a chordal rhythm of half notes (Example 2.29b). In all fairness I must point out that Handel later on also sets the subject as a theme that moves in a chordal rhythm of quarter notes. But when he does so he makes it clear that the Fugue's half-note basic pace has to all intents and purposes contracted briefly and temporarily to accommodate a borrowing from the compound 4/4 (Example 2.29c).

Mid-bar displacement. Mid-bar displacement of the type discussed by Charles Burkhart in his article, "Mid-bar Downbeat in Bach's Keyboard Music," appears with some frequency in Handel's compound 4/4.[63] I already suggested earlier (chapter 1, Example 1.2a, bars 9-11[a]) how in this type of displacement the third beat of the compound measure assumes the role of the downbeat *temporarily*, shifting the entire durational apparatus by a half note to the right or to the left. The idiomatic and strictly limited dislocation embodied by this sort of mid-bar displacement differs fundamentally from mid-bar displacement in the simple 4/4 (Examples 2.15 and 2.19)*:* Whereas in the simple 4/4 the displacement occupies much of the piece and operates *with the support of the undisplaced, notated meter*, in the compound 4/4 it is a purely local phenomenon whose displaced metrics *override the notated meter completely*—but only for a brief period of time.

To that short example of mid-bar displacement from the F-minor Allemande I presented in chapter 1 (bars 9[b]-11, Example 1.2a) I should like to add a more dramatic orchestral example, from the opening ritornello of the Allegro from the Concerto Grosso in D major/minor, Op. 3, No. 6 (Example 2.30).[64] Here the elision of half a measure at the middle of bar 4 allows the two-bar *Fortspinnung* to begin right in the middle of the measure (bar 4[b]), and it also allows the *Vordersatz* to reappear, truncated and parenthetically displaced, at the middle of bar 6. Through a further elision only a measure and a half away, at the downbeat of bar 8, a second *Fortspinnung* enters, unexpectedly in the parallel minor. In a rather theatrical and peremptory manner, this second *Fortspinnung* restores the notated downbeat.

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[63]Burkhart 1995.

[64]Its silent drama may have something to do with its origin as the Overture to Handel's Ottone.

Even though the parenthetical displacement of a truncated *Vordersatz* is a common, some might say casual procedure, a potential conflict between the notated and the displaced meters nonetheless does color the passage. The notated meter has been put aside. Sensing that something in the periodic hierarchy is amiss, one expects it to be restored. The displacement is far from incidental in its effect, and its consequences are soon reflected in the measures that follow. In other words, the mere suggestion of a potential for conflict between the notated and the displaced meters indicates that a dialectic relationship between the meters prevails—that their relationship is fundamentally very different from the cooperative give and take between the meters in the simple 4/4. In the compound 4/4 it is an underlying tension that one senses, even if it is not always expressed directly at the foreground, and even if it does not become an issue for the composition to contend with.

These observations notwithstanding, one does find pieces, and not all of them in the compound 4/4, in which mid-bar displacement occurs *so* casually that it brings about no conflict of any kind. This is borne out by several instances of Handel's occasional confusion, probably the result of haste in preparing his autograph manuscripts, between the first and the third beats. Even in the large, fugal 4/4 Handel sometimes loses his way while navigating the metrics of the piece. Glancing through Example 2.31 we can see how Handel, in preparing the manuscript of the C-minor Fugue, crossed from the ninth to the tenth system and again from the eleventh to the twelfth system and began barring each measure in the middle of the measure rather than at the downbeat. After four such measures in the tenth system, and again later after five such measures in the twelfth, Handel realized his error and went back to strike out the misplaced bar lines, replacing them with accurately located lines.[65]

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[65]Burkhart 1995 presents a similar example from a Bach manuscript. I thank Zdenek Scoumal for bringing Handel's metrical confusion to my attention in an early, unpublished

Composite displacements and metrical malleability. Dealing with each type of displacement and every afterbeat pattern one at a time is not a particularly difficult undertaking, nor is it an inordinately tedious or cumbersome task. The real challenge of parsing Handel's instrumental works on a measure-to-measure basis—and one that may in practice prove to be insurmountable—resides in sorting out the displacements and the afterbeats when several different afterbeat displacements have been superimposed over each other and have then been subjected to expansion or contraction. As a result of the fluctuation in pace and the subsequent resumption of the original metrics, different types of 4/4 time, different afterbeat patterns, and different types of displacement seem (however deceptively) to follow each other in rapid succession, throwing into question one's interpretation of each displacement and each afterbeat pattern, yet leaving one little time in which to disentangle and mull these over. A brief example, the ritornello-like opening theme of the second movement, Allegro, from Handel's E-minor Flute Sonata, Op. 1, No. 1[b] (Example 2.32a) illustrates why unraveling these complexities is something of a thankless, even fruitless task. In the course of parsing one finds out that competing afterbeat patterns, at different levels of duration (especially at the eighth-note and at the quarter note level) all nest within each other, but one learns little about the piece itself. If the exercise nonetheless does possess some value, that is because it points to the extraordinary degree of *malleability* (to borrow Justin London's term, with some license) that each displacement and each afterbeat pattern contributes to the construction of a theme that is at once angular, supple, and beautiful.[66]

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paper from 1983, "The Keyboard Fugues of Bach and Handel."

[66]London 1991. Responding to a hypermetrical account of duration and displacement in Bach's Third Brandenburg Concerto given in Botelho 1990, London offers a less global and less reductive approach that centers instead on the generative power of the malleable detail.

The ritornello theme divides into three uneven parts: a *Vordersatz* lasting a measure and a half (bars 1-2[a]); a two-bar *Fortspinnung* that seems to begin in the middle of bar 2 and to close on the second beat of bar 4, with an elision of its last quarter note; and an *Epilog* that extends from the second beat of bar 4 to the third beat of bar 6. The *Vordersatz* sets up the Allegro's compound 4/4 by establishing a basic pace of quarter notes. At the same time it also introduces a quarter-note afterbeat displacement, of the Harmonious Blacksmith variety, whose first eighth note is suppressed. On top of that it adds a chain of nested eighth-note afterbeat patterns. To prepare for the entrance of these eighth-note afterbeats, the opening quarter-note pedal call does double duty: Split into two, it emerges as a pair of eighths that introduces both the quarter-note and the eighth-note afterbeats across the leap of an octave. The pedal call is followed by three groups of three eighths, each in the bass and each beginning with the aforementioned eighth-note afterbeat; these are imitated twice by the flute.

At the deeper level of movement in half notes, the *Fortspinnung* of bars 2[b]-4 seems to offer full-fledged mid-bar displacement. The displacement begins at the middle of bar 2, as I shall soon explain. But at the surface the *Fortspinnung* in fact begins already on the second beat of the measure, just as the *Vordersatz* had begun—with the ritornello's characteristic quarter-note afterbeat displacement and the afterbeat's equally characteristic eighth-note suppression. And along the same lines—owing to the quarter-note afterbeat patterns—the *Fortspinnung* appears to end at the downbeat of bar 4. Now at a deeper level the *Fortspinnung* does expand the basic pace, from quarter-note movement to half-note movement, in the same way most *Fortspinnung* passages do (see the reduction in Example 2.32b). The expansion begins on the third beat of bar 2 and ends on the second beat of bar 4, and it makes use of the idioms of sequential expansion without enlisting the

help of a sequential progression directly.[67] Hence the sense of midbar displacement I mentioned earlier, which prevails in bars 2 and 3. In retrospect, one realizes that this brief expansion of the basic pace was prepared by a half-bar obbligato pace which (subliminally) underlies the various harmonies in bars 1 and 2^{a}.

On the second beat of bar 4 the expansion of the basic pace and the idioms of sequential expansion all end prematurely. Their closure is elided by the overlapping entrance of the *Epilog*, and by the resumption of the quarter-note basic pace.

If the *Epilog* displays a curiously familiar quality that is because it emphasizes the quarter-note afterbeats that were somewhat masked by the added layer of eighth-note afterbeats during the *Vordersatz* and the *Fortspinnung*. The *Epilog* offers a contraction, at the restored quarter-note basic pace, of the preceding expansion's melodic kernel, c^{3}-b^{2}-a^{2}-g^{2} (see the brackets atop Example 2.32b). It closes in a modestly climactic way, with a cadential acceleration to movement in eighths that takes place during the first part of bar 6. The third beat of bar 6 hosts the pedal call that opens the next phrase, and in so doing it introduces the casual type of mid-bar displacement typical of the compound 4/4.

I offer these decidedly tortuous observations not with the intent of grounding one's contemplation of Handel's airy tune in a thicket of complexities, but rather with the purpose of showing just how deeply entrenched and how closely intertwined the procedures of metrical displacement and afterbeat displacement are at various levels in this repertoire. What is really extraordinary here is how liberally and how malleably different types of displacement combine and overlap when expansion and subsequent contraction take place. Once one has become accustomed to the ubiquitous presence and to the pervasive interaction of the consequent durational fluctuations, one's capacity for

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[67]One might again refer to a quasi-sequential expansion, as I did in describing the rising 5-6 series in bars 5-6 of the F-minor Allemande (chapter 1).

sensing their fusion at the surface—without necessarily following each durational adhesion slavishly—becomes second nature. Before long, one also realizes that there is nothing that is metrically irregular about these fused fluctuations. They represent everyday life in the masterworks of the high style.

Duple meters in the concertos. Handel's concertos, like those of other Baroque composers, sometimes introduce orchestral ritornellos and solo passages that show different types of 4/4 time, and it is up to the discourse between the solo and the orchestral complements to realize and then to dissipate the tensions between the various meters. Example 2.33, from the lightly fugal third movement of the Concerto in Alexander's Feast, illustrates. The Example at the same time provides a succinct introduction to the temporality of Handel's orchestral and concerted fugal works.[68]

The fugal subject and the fugal ritornello as a whole show the compound 4/4, with its characteristically even quarter-note basic pace (see the reduction in Example 2.33b). Many of the solo interludes that follow, despite substantial intensification in thematic activity, offer a much lighter half-note basic pace and a slow moving, whole-note obbligato pace (see Example 2.33c and the reductions in Example 2.33d). In marked contrast to the fast-paced ritornello, they portray a characteristically broad *alla breve* style.[69] The great difference between the two durational settings is then worked out in the course of the movement through a series of large-scale sequential expansions. The wide scope of these expansions in turn accommodates the entire gamut of paces within a slowly moving, mildly contrapuntal framework.

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[68]Handel conjures up the same effect, but without settling into another meter, in bars 13-16 of the Allegro from the E-minor Concerto Grosso (chapter 1).

[69]Riepel 1752-1768, pp. 53-54. See Willner 1999, p. 198, fn. 7, for a more extended discussion of Riepel's well-known observation and for further references to other theorists' citation of Riepel's remarks.

VIII. Other duple meters

Fugal alla breve. The *alla breve* type of 4/4 time serves in at least two different capacities (and in a few additional variant roles as well) in early eighteenth-century style. It provides the stately pulse of the learned choral and fugal high style, with heavy accentual emphasis on the first and the third beats, and it also supports what seems to be the very opposite—a fast-moving version of the simple 4/4 that emphasizes the first and the third beats too, but does so under the relatively homophonic and texturally light conditions of the middle and the low styles.[70] The inevitable confusion surrounding the meaning of *alla breve* is reflected even in Kirnberger's description of the first type: After mentioning that the l*arge alla breve* (= 2/1 time) is no longer in use, he observes that "It is to be noted about this meter [the first type] that it is very serious and emphatic, yet is performed twice as fast as its note values indicate, unless a slower tempo is specified by the adjectives *grave*, *adagio*, etc." (p. 386). Elsewhere, Kirnberger seems to indicate that there really isn't much difference between the first *alla breve* and his notion of large 4/4 time:

> For solemn and pathetic pieces, *alla breve* is especially appropriate and is therefore used in motets and other solemn church pieces. Large 4/4 meter has a very emphatic and serious motion and is suited to stately choruses, to fugues in church pieces, and generally to pieces where pomp and gravity is required (p. 400).

The severe and archaically evocative passagework of Handel's slower keyboard fugues,

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[70]Botelho 1993 presents a lucid account of the different uses to which *alla breve* has been put. Allanbrook 1983, which I follow here, offers the most widely encompassing and, stylistically, the most convincing interpretation.

often weighed down in performance by a needlessly solemn playing style, approximates the character of the first type of *alla breve* meter, even though none of the fugues is explicitly marked *alla breve* and none contains the long note values associated with it; see again Examples 2.29 and 2.31, from the C-minor Fugue. Chordal appearances to the contrary, the somewhat brisk pace and grouping attributes I enumerated earlier in conjunction with the large 4/4 prevail in the C-minor Fugue as well, as does the frequent use of composite pacing (note the alternation of quarter notes and half notes in Examples 2.29b and 2.29c). The welcome tendency of historically informed players to perform Handel's choral and instrumental music lightly and briskly is consonant with these observations.

Light alla breve. Examples of the second, lighter type of *alla breve*, explicitly designated as such through the time signature of C with a slash, are much easier to find among Handel's instrumental pieces, especially in such relatively light orchestral works as the Concerti Grossi, Op. 3, the Water Music, and the Music for the Royal Fireworks, all of which contain several movements in the middle style. The Bourrée from the Royal Fireworks Music presents a good illustration (Example 2.34). On account of the liberties associated with the middle style, the Bourrée's metrics are actually more convoluted than those of other pieces I present in this chapter, with the possible exception of the E-minor Flute Sonata. An analysis of the opening theme shows why.

The Bourrée begins with a sequential cycle of descending fifths that serves to harmonize the principal theme. The fifths descend at the quarter-note figural pace rather than at the half-note basic pace (compare the two levels of reduction in Example 2.34). Their sequence therefore does not alter the duration of the theme's essential tones through either sequential expansion or sequential contraction. The parentheses in Example 2.34c indicate that the ancillary upper fifths on the second and fourth beats of bar 1 and on the

second beat of bar 2 reside within the time span of the preceding, more structural chords, which appear on the first and third beats. This seemingly skewed relationship holds even though motivically the chords on the even beats are more directly subservient to the structural chords that follow. Although it remains conceptually confusing, that is a very common sequential disposition, and one that we have already encountered several times earlier.

Within this tonal and metrical framework, which spans both sides of the barline, the opening-tonic upbeat ushers in the subdominant on the downbeat of bar 1. At a deeper level, though, the tonic upbeat resides within the longer time span of an implicit half-note tonic that occupies the second half of "bar 0" (see Example 2.34b). One can, in fact, easily imagine an idiomatic quarter-note pedal call preceding the quarter-note upbeat of the piece (Example 2.34c), as well as a larger, half-note pedal call at the head of "bar 0" itself (Example 2.34b). The implicit participation of the two nesting pedal calls in the temporality of the Bourée discloses a hidden mid-bar displacement of the type usually found in the simple 4/4. We might go one step further now and hear the entire Bourrée as displaced in this familiar way by a half note, in which case "bar 0" would become the underlying bar 1. The reason the opening of the Bourrée is so very effective despite the harmony-textbook quality of its progression is that it actually begins *in medias res*. The two pedal calls have been left out, but the listener familiar with Handelian idioms can sense their absence and experience a richer and more tensile durational hierarchy than what the seemingly unpretentious surface would seem to suggest.[71]

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[71]Had a quarter-note basic pace prevailed throughout, one could have made a case for sequential expansion to movement in half notes in bars 1 and 2 on the basis of one's familiarity with the cycle of descending fifths as a tonal and durational idiom. My notion of “bar 0” differs from that of Arthur Komar, who regards it as a necessary adjunct to an upbeat measure (Komar 1971, pp. 151-61, especially p. 155). For a trenchant critique of Komar’s idea, see Schachter 1976/1999b (pp. 34-35 in 1999b).

2/4 Time. Examples of pieces in 2/4 time are rare in Handel's instrumental works, as Peter Williams pointed out in an important study of Bach's and Handel's sparing use of this time signature.[72] Even Handel's most substantial exemplar, the Fugue from the F-minor Suite (Example 2.35a), was originally if half-heartedly conceived as a piece in 4/4 time (Example 2.35b). The reason which Williams advances for the two composers' infrequent use of 2/4 time is quite convincing*:* In the absence of a substantial intra-measure hierarchy involving long runs of sixteenths, the rapid play of quarter notes and eighth notes that marks 2/4 time—and, above all, the meter's binary opposition of quarter notes—allows Bach and Handel to emphasize each beat more or less equally and to establish an accentual rivalry between the two. While 2/4 time consequently displays serious hierarchical limitations, it possesses at the very least this highly significant thematic and narrative attribute.[73]

As it happens, the strong presence of a hypermetrical structure in 2/4 time, which can hardly be denied in light of the brevity of each measure, does give an accentual edge to the downbeat of each measure (at the expense of the competing second beat) and, on a larger scale, to the downbeat of every other measure. (And, under still more periodic circumstances, to the downbeat of every fifth measure as well.) So the conflict between the agonist and antagonist beats within the measure still needs to be substantiated by the design of the piece.

Handel's F-minor Fugue realizes this potential attribute of 2/4 time in a dramatic

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[72]Williams 1993/1994.

[73]The intra-measure confrontation that 2/4 time highlights is evident also in the opening theme of Mozart's K. 545 Rondo (Example 2.25c). Much of Komar's work was heavily indebted to the visionary thinking of Godfrey Winham, so it is possible that "bar 0" originated with Winham.

and rhetorically gestural way, visually as much as audibly. Register, texture, accent, and cross-accent face off repeatedly within adjacent measures, at the quarter-note level, and they do so in extravagantly stacked chordal fashion (Example 2.35c). The binary opposition between the two beats takes center stge. Equally important, the change from 4/4 to 2/4 allows the first three tones of the subject to occupy one measure each, and it lends them a pressing accentual urgency they would not otherwise possess.[74]

Kirnberger's brief observation that the "2/4 is also lively but certainly combined with more lightness [than 4/4 time] and, for that reason, can be used well to express playfulness" (p. 400), casts no light on the meter's dramatic properties or on the F-minor Fugue's great accentual play. It is unfortunate that Handel made no use of 4/8 time in his instrumental music since 4/8 time offers both the dialectical advantages of 2/4 time and a more versatile, if small, metrical hierarchy that incorporates many sixteenths within the measure.[75]

IX. Repercussions of grouping and expansion

Grouping as hidden repetition. A major but not immediately apparent benefit of the emphasis that Handel places on the initial basic segments of one, two, or three measures

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[74]Rosen 2000b contains a particularly vivid description of Handel's unacademic rhetoric in this Fugue.

[75]The difference between 2/4 and 4/8 time can be surmised by looking ahead to Example 5.13 and the Allemande, "L'Ausoniène," from Couperin's eighth Ordre of Pièces. A major source of Handelian borrowings, this unusually brisk, Italianate Allemande also contains much of the source material for the Capriccio from Bach's C-minor Partita for Clavier (though the relationship, which emerges only gradually as the Allemande reaches its double bar, is by no means obvious). Couperin's Allemande presents its richly terraced narrative in 4/8 time; Bach's Capriccio offers its fiery drama in the tautly confrontational 2/4. Both are virtuoso pieces that make substantial demands on the performer; Handel's Fugue is digitally challenging for that matter too.

is the preliminary definition and establishment of a tonally stable block of time. This is the thematic and durational unit that serves as the backbone of later grouping enlargements and also as the armature of underlying associations between similar and equally short groups of measures. It acquires and maintains great immediacy and endurance through its privileged position at the head of the piece. Its on-again, off-again prevalence throughout the piece in its original form, enlargements notwithstanding, is of course fairly obvious; one expects it to be the focus of developmental spinning. What one cannot immediately foresee is the extent of the influence that the preliminary tonal stability of the basic segment might wield over later durational developments in the piece.

The opening basic segment of the movement usually unfolds over a tonic that is extended just under the surface—by a complete cadential progression, by a bass progression up to a back-relating dominant, sometimes even by a local bass pedal tone. Common to all these supporting progressions, beyond their strategic location at the beginning of the piece, is the periodic potential of the time-span they occupy and the thematic nature of the prolongation they offer. They are the tonal building blocks whose help will be enlisted in constructing the composition's durational structure and durational hierarchy from the ground up. The basic segment they support consequently registers on the ear as a uniquely marked tonal and durational entity. Such a distinct and forcefully imprinted span of time is likely to engender the appearance of similarly well defined and prolonged spans later on—spans whose thematic similarity to the basic segment may not call attention to itself, but whose tonal and durational underpinnings will remain all but identical.

The later recurrence of stretches in unnotated 3/2 time corresponding to the three groups of unnotated 3/2 at the opening of the Allemande from the E-major Suite (Example 2.22, above) presents a vivid illustration of this phenomenon (Example 2.36). The unnotated movement in 3/2 time originates with the underlying three-step motion e^2-

a^{2}-$g\#^{1}$ in bars 1-2^{a}, and it continues to depend for its tonal rhythm on similar thematic progressions later on. But its potential for hidden repetition is due in at least equal measure to its subliminally dissonant extension of the tonic during its first occurrence (see again the reduction in Example 2.22b). Throughout the second reprise of the Allemande, the unnotated 3/2 meter reappears as a hidden repetition of the unnotated 3/2 time in the first reprise both at the obvious spot—over the sustained dominant and then over the sustained local tonic at the beginning of the reprise, bars 14-16 (Example 2.36a)— and, by way of further development, at the tonicization of the mediant, G# minor, in bars 20-23 (not shown; bar 23 is a suffix to bars 21^{b}-22). Unlikely though it may seem, the one-and-a-half bar dominant and tonic extensions in bars 14-16 actually have little in common with the one-and-a-half bar tonic extension in bars 1-2^{a} besides their identical time frame, sustained bass tones and emerging metrical dissonance. They seem to derive from a different thematic source. Like bars 12-13 just before the double bar, bars 14-16 are borrowed from the corresponding passage in the Allemande, "La Logivière," from the fifth Ordre of Francois Couperin's Pièces de Clavecin, whereas bars 1-2^{a} appear not to be; see Example 2.36b. It is only the slightly veiled recollection of the tonal stability of bars 1-2^{a} in bars 14-15^{a} and bars 15^{b}-16 that provides the expected reminiscence of the Allemande's opening gesture.[76]

An important advantage of these hidden tonal *qua* durational repetitions resides in the opportunities they present for simulating the effect of tonal and durational enlargements in the later stages of the piece without requiring explicit durational expansion. While not all of the repetitions involve chordal extension as such (those in bars

[76]For all their unabashed lyricism, rare even for Handel, bars 1-2^{a} might have something to do with the stridently clangorous beginning of the untitled Allemande for two harpsichords from Couperin's ninth Ordre. This is a piece with which the opening stretches of Handel's Allemande shares some magnificently dissonant sonorities, as they do with the *seconde partie* of Les Agréments from the fifth Ordre.

2^{b}-3 and 4-5^{a} of the E-major Allemande, for instance, do not), those repetitions that do certainly call substantial attention to themselves because the slow but prominent obbligato pace they establish—especially the one-and-a-half bar pace in bars 14-15^{a} and 15^{b}-16 of the Allemande—contradicts the two-bar grouping pace established during the later stretches of the first reprise; see the reduction in Example 2.36a.

Expansion as recomposition. A closely related type of tonal enlargement, but one that is too loosely defined in its outlines to qualify as a precise durational expansion, is the freely augmented recomposition of an incipit or an opening theme at the point of a brief, apparent recapitulation. Such recomposition is usually too varied in its newly minted details and in its newly enlarged scale to be aligned with its model exactly, one on one (or, enlarged, two on one, three on one, and so on). Example 2.37a, from the third-movement Allegro of the D-minor Concerto Grosso, Op. 6, No. 10, shows how the Allegro's opening two bars are fragmented and recomposed in improvisatory, ad-hoc fashion as three bars at the opening of the apparent recapitulation.[77] It is actually the earlier preparation for the entrance of the augmented opening that summons up the use of durational expansion proper, in the form of a long series of sequentially enlarged rising fifths. This slowly ascending progression inverts the opening theme and occupies almost the entire stretch between the central double bar and the freely enlarged recapitulation incipit. By the time the enlarged fragments of the opening theme enter, the general sense of their impending transformation is firmly in place. Their free, improvisatory enlargement now comes across as a natural consequence of the more formal and more strictly measured enlargement that had led up to it.[78]

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[77]I explain why the recapitulation is apparent in Willner 1988.

[78]This is a particularly good example of the kind of general enlargement Schenker called *Vergrösserung*; the enlargement of each half of bar 1 into a full measure at bars 17 and 18

also embodies what Samarotto and others, from Kirnberger to Rothstein and Petty, call *elongation* (I defined these terms in the Introduction).