CHAPTER ONE.

TONAL AND DURATIONAL PACING

The rhythms of the high Baroque are best known and best loved for their momentum and drive, their sustained *moto perpetuo*. To understand the complexities of those rhythms, though, one cannot restrict one's attention to this attractive feature alone, however great the temptation. One must look in several other directions as well for analytical and theoretical clues that might unravel the music's durational mysteries. No single component of the design, no matter how prominent, can define or sustain the temporality of so intricate a style on its own.

The most promising venue to which we might turn first is that of the deeper durational levels. We have already had occasion to observe how these support the breathless energy of the foreground with a panoply of simpler and more slowly moving progressions. By their very nature, the deeper levels are much more likely than the foreground to disclose hierarchically tiered norms of durational organization, and they are also more likely to reveal connections between tonal and durational planning that are not obvious at the surface.

Among the most significant connections that we shall find at the deeper levels are the close tonal ties between the underlying paces at which the various components of the design progress, namely the web of contrapuntal relations that mediate between these paces. In the paragraphs and chapters that follow it will gradually become apparent that the celebrated thrust of early eighteenth-century style is indeed a matter of underlying pace, but not of one single motoric pace. Such thrust is, rather, a cumulative phenomenon, a compendium of tonal and durational paces as well as a compendium of

grouping paces that move in and out of phase with each other. Because each pace can expand and contract independently of the other paces and their fluctuations, considerable tension between the many paces inevitably emerges. The need to establish, reconcile, and then dissipate these tensions—the quest for the high style's coherence, which I described during the Introduction—requires the intervention of narrative discourses, strategic schemes, and plot archetypes. These relatively abstract archetypes ultimately affect the foreground directly and consequently hold the key to understanding the intricacies of Baroque temporality.

In this chapter I embark on the search for a connection between Handel's pace structures and his elusive rhetorical apparatus. I begin with a survey of the tonal paces and the grouping paces that underlie Handel's keyboard suites, and then continue with a survey of the paces that underlie the Concerti Grossi, Op. 6.

Part 1. Solo works

I. Solo vs. orchestral style

Medium and pace. Handelian pacing, and more generally Baroque pacing at large, operates not just at the service of the stylistic level to which each composition subscribes, but equally at the service of the performing medium that the composition engages. The two major paces I already described—the largely tonal basic pace and the largely durational grouping pace—define the durational and the stylistic environment in which they operate. This environment is split into two by the needs of the medium: Music for solo instruments, marked by the fluctuation of tonal paces, and music for orchestra, marked by the growth of grouping paces. The division is quite sharp but not exclusive, since each mode of expression makes use of all the paces available to it. It is a division of emphasis, of a strong preference for certain kinds of paces in favor of others.

In recent decades we have become increasingly aware of both the deliberately drawn similarities and the built-in differences between chamber style and symphonic style, in the Classic repertoire at least, if not in earlier music. We know for instance that the differences between the breadth of symphonic idioms and the concentrated expression of music for only a few instruments is likely to be enriched by cross-stylistic and cross-generic borrowings from the opposite medium. The consequent mixture of topics and affects has added to the complexity of our analytical task and our theoretical formulations, but it has been covered quite widely in the literature. Such generous coverage has rarely extended to the study of Baroque music.[1]

Early eighteenth-century music maintains a much sharper differentiation between its constituent idioms than does later music. It confines idiomatic recombinations largely to the deliberate mixture of solo and orchestral styles in several highly topical genres (the préludes to Bach's English Suites, and *Sonaten auf concertart*), to keyboard simulations of violin passagework (the right-hand arpeggios in Handel's organ concertos), and to keyboard adaptations of the French lutenists' *style brisé* (the Allemande, say, from Bach's D-minor French Suite).[2] Generally, though, Baroque music favors a more or less exclusive emphasis on the idiomatic peculiarities of each instrument and each medium. The breadth of Baroque orchestral style, with its broader grouping structures and its more extensive chordal prolongations, projects its large scale in sharp contrast to the intimacy of instrumental expression, which is marked by shorter groups and more dense counterpoint.

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[1]Broyles 1983 remains the basic introduction to the differences between chamber and symphonic style, which were observed as early as the 1780's (Koch 1783-92/1983). Gagné 1999 addresses them from a Schenkerian perspective.

[2]Dreyfus 1996 is the most imaginative of several studies to call attention to these very specific and highly stylized mixtures.

Medium and enlargement. These fundamental distinctions affect matters of durations directly and deeply: They account for major differences in pacing, grouping, thematic design, and contrapuntal expression that have never been properly identified. Especially in what concerns durational enlargement, they embody two discrete compositional approaches, the first contrapuntal, and the second prolongational. I shall now trace the enlargements we find in the contrapuntal environment of solo composition by pursuing a detailed analysis of the first reprise from Handel's F-minor Allemande. The purpose of the analysis, and of the subsequent traversal through the first period from the central Allegro of the E-minor Concerto Grosso, Op. 6, No. 3, is to establish the diverse ways in which the paces that identify the temporality of each medium articulate enlargement. I shall consequently focus on a pace-by-pace theoretical overview rather than a measure-by-measure analytical account of each piece, even though I shall be proceeding chronologically, examining each pace as it presents itself while the composition unfolds in time. The most urgent task that the analysis of the F-minor Allemande seeks to accomplish is to introduce a working vocabulary of paces, and then to introduce a corresponding vocabulary of pace enlargements and pace contractions. In the course of building up this dual vocabulary, there will be necessary detours for matters of form, borrowings, and rhetoric.

By way of a preliminary observation I should mention that the Allemande and the Concerto Grosso Allegro do share one vital feature, namely the three-part ritornello cycle. The tripartite scheme underlies both pieces at several levels, and it assumes substantial durational properties during the opening measures of each. It will soon become apparent though that the differences between the ritornello scheme's durational articulation in the solo and in the concerted repertoires far outweigh the similarities. Indeed, these differences present us with an effective means of gauging the points of contact and the points of divergence between the Allemande and the orchestral Allegro, and between the two modes of expression they employ.

A preliminary note, too, about metrical matters: Much of the music discussed in the present chapter is set in compound 4/4 time, the meter of some of Handel's weightiest works in *tempo giusto*, though by no means the meter he most frequently used when writing in 4/4. Other types of 4/4 time will be taken up in chapter 2. At the close of this chapter I shall add two short examples from courantes in 3/4 and 3/8 time in order to introduce the fundamental differences between pacing structures in the duple and the triple meters; a more complete account of pacing in triple meter will then follow in chapter 3.

II. Handel, Suite in F minor (1720), Allemande, first reprise: The pacing structure

II. 1. Outer and inner voices

The basic pace and the upper voice. The Allemande from Handel's F-minor Suite contains a particularly rich amalgam of paces slow and fast. That is by no means unusual: Demonstrative durational intricacies are quite characteristic both of allemandes and, more generally, of pacing in the compound 4/4. Once the Allemande's surface has been simplified through the removal of ancillary voice-leading and through the normalization of time spans occupied by diminutions, rests, and the like, the essential progression that remains defines a largely stepwise motion in quarter notes, principally between the outer voices (see bars 1 and 2 in Examples 1.1 and 1.2, which are modified versions of the Introduction's Examples 1 and 2). This underlying motion, to which I called attention earlier, is the Allemande's *basic pace*. In bars 1 and 2 it is projected by the highest and the lowest layers of quarter notes that shine through the right hand's and the left hand's cascading sixteenths: The upper voice by ab^1-g^1-ab^1 in the soprano register, by ab-g-f in the tenor register, and by ab^1-$f^{1/2}$-e natural^2 in the soprano register again; the bass by f_1-e natural ^{1}-f^1 in the alto register, by f-e natural -f in the tenor register,

and by f-db-c in the proper bass register. On account of the imitative texture, the components of the basic pace move about the texture here perhaps more than they usually would. But the polyphonic nature of Baroque style—and the invertible counterpoint that frequently graces the high style—dictate that registral flexibility and textural elasticity be the rule, not the exception, even at the deeper levels of structure. Familiarity with the idioms involved, as well as common sense, often make it clear which parts of the *notated* texture play the roles of the structural outer voices, and which notated parts take on the roles of the structural inner voices.

Besides supporting the Allemande's contrapuntal movement with duration—its most important task—the basic pace mediates between the Allemande's thematic and durational hierarchies. In so doing, it exemplifies in a very specific way a rather sweeping observation of Kirnberger's about the relation of melody to meter:

> All principal notes must fall on the downbeat, because the first beat of the measure has the greatest weight and is accented. What I mean by the principal notes here are those at which even a crude peasant nods his head or stamps his foot when expressing the feeling of the meter (p. 388).[3]

The idea of a basic pace extends Kirnberger's notion of principal notes that are thematically and metrically accented to a level closer to the surface, a level that in the compound 4/4 engages all four beats of the measure.

Even though it remains predominantly stepwise as a matter of principle, the basic pace allows for a moderate deployment of arpeggiation, repetition, and motivic extension of its constituent tones, especially in the upper voice, so that its movement always maintains an essential thematic flexibility. As long as sequential patterning (and hence sequential expansion) or durational expansion does not change the setting of the pace in

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[3]Kirnberger 1776-79/1982 p. 388. The quotations from Kirnberger's treatise derive from the translation by David Beach and Jürgen Thym, with the permission of Yale University Press. All further references to Kirnberger are in the text.

both outer voices entirely, the tones that make up the basic pace can be repeated or sustained locally within a one-bar or a two-bar framework without decelerating the pace. A good example (to which I shall return) appears in the F-minor Allemande's opening two-bar theme: During the second half of bar 2 the theme allows a half-note caesura to modify the quarter-note basic pace temporarily, but it does not change the progress of the pace entirely. (Brief accelerations, by contrast—especially at cadences—affect the basic pace more dramatically.)

While in practice it is not often necessary to do so, one can certainly refer to each step of the basic pace as a *basic step* in the course of one's analytical discussion. From time to time the term proves very useful indeed.

The notated bass. Outside of imitative texture, the bass line in early eighteenth-century music usually moves more slowly than the upper voice. Again, Kirnberger offers a vivid description:

> Because of the long period of vibration of low notes, all short note values must be avoided in the low register; but in the high register they are more effective than long sustained notes. The progression of the bass generally relates to that of the highest part like the walk of a mature man to that of a young girl. Where she takes two or three steps, he takes only one, yet both cover the same distance. Not that a young girl could not go slowly and a mature man quickly, but it is not as natural (p. 381).

And so it is that the slower progress of the notated bass sometimes points directly to the basic pace, in either its original or its altered state. Comparison of the score in Example 1.1 with the pace reductions in Example 1.2 reveals that in bar 3 of the Allemande the descent of the bass in eighths against the upper-voice's descent in sixteenths, calls attention to the basic pace's contraction from movement in quarter notes to movement in eighths; and in bars 5-6, the comparison indicates that despite the bass's articulation in

eighths, its octave leaps call attention to the basic pace's expanded movement in half notes. There are other slow and moderate paces to which the bass points as well; I shall take them up (along with the pace fluctuations I just mentioned) later on.

The notated inner voices. The moderately animated movement of the inner voices, logically enough, occupies a position halfway between the slow progress of the bass and the brisk run of the upper voice. According to Kirnberger, "the voices in the middle registers can be considered as gaits of boys and young adults by analogy to the shorter or longer note values of their rhythmic steps" (p. 381). The analogy to the gaits of boys and young adults is, unintentionally perhaps, full of insight. The notated inner voices, especially Handel's, do tend to move spasmodically, as if they were imitating the impulsive fits and starts of the eternal teen. Although the variety in the number and the significance of Handel's inner voices—and in their significance at the deeper levels—precludes any easy categorization of their durational role, their altogether slower and simpler progress supports quite readily and even enhances the more fundamental movement of the nearest outer voice. The textural and rhythmic polarity between high and low, to which they contribute, consequently underlines the more stable movement and more measured fluctuations of the basic pace.

A good example is the notated alto g^1 in bar 2: A quarter note on the third beat, it supports the basic pace's e natural ^{2} and lends weight to the melody's aforementioned caesura. The tenor's eighth note g, just before, is part of a hidden pair of eighths (ab-g, see Example 1.2a) that by way of an implicit suspension intensify the bass's quarter-note drive to the dominant, db-c, below.

Inner-voice tones that are part of a longer, unnotated line—or that must be inferred completely from the polyphony—are more complicated. The alto's quarter-note db^1 on the second beat of bar 4, is part of the line eb^1-c^1-db^1-eb^1 (Example 1.2a) that begins on the fourth beat of bar 3 and extends to the middle of bar 4. But the role of both

the db^1 and the longer, unnotated line of which it is a part is the same as the role of Handel's more explicit inner-voices lines: It supports the deceleration of the basic pace in the upper voice from accelerated eighths (bar 3, the first three beats) to a quarter note (bar 3, beat 4), to half notes (bar 4).

The cascading sixteenths in bars 1 and 2 also contain inferred lines that are faster than the hidden quarter-note basic pace but slower than the notated sixteenths at the surface—namely, the eighth-note pairs ab^1-f^1 and g^1-e natural ^{1} on the first and second beats, and ab-f and g-e natural on the second and the third beats. At least in this instance these are neither inner-voice nor outer-voice tones but rather *figural paces* that mediate between different strands of the tonal and durational hierarchies and link them with each other. I shall take them up later.

II. 2. Pace and texture

Polyphonic pacing. Very often an explicit outer voice and an implicit inner voice will combine temporarily to form a polyphonic, compound melody that moves about twice as fast as either voice would on its own. In bar 3 of the Allemande the contracted basic pace progresses in eighths and describes a series of parallel tenths between the outer voices. What appears at first glance to be a rapid melodic run of sixteenth notes consisting of unfolded parallel fifths in the upper voice comprises in fact two staggered melodic lines: the upper voice proper, which moves in eighths, and a set of hidden eighth-note 7-6 suspensions added by an immanent inner voice to these more deeply embedded and more expressly stated eighths (see Example 1.2b). The suspension series, although it is implicit, enables the compound melody's sixteenths to crystallize over the eighth-note parallel tenths between the outer voices, and it enables the putative parallel fifths to survive intact. The compound melody eventually fizzles out in bar 4 during the

(semi)cadential expansion of the basic pace to movement in half notes, just when the notated inner voice db[1] reenters.

Sixteenths are of course prominent in bars 1 and 2 also, but the role they play in those measures is different: There the sixteenths outline the diminutions of the surface and possess no independent contrapuntal significance of their own. In bar 3, by contrast, the sixteenths join forces with the accelerated movement of the basic pace, and gain polyphonic accreditation as it were through the addition of the suspensions' tonal and durational layer.

Suspensions. The engagement of a staggered inner voice in the procurement of suspensions points to an important general principle of pacing: On account of its metrically displaced location, the fundamentally decorative introduction of a suspension series may simulate the addition of a faster layer of pacing on top of the prevailing durational setting, especially if the suspensions are of short duration. We just observed how the introduction of the suspensions in bar 3 requires in the addition of a layer of sixteenths to the fundamental, contracted movement in eighths. Elsewhere, quarter-note suspensions typically allow a piece that has been set in the simple 4/4 or the fugal 4/4, with a basic pace of two-to-the-bar, to simulate the behavior of a piece set in the compound 4/4, whose basic pace moves at the more tightly packed rate of four-to-the-bar (chapter 2). Fugal textures usually benefit most explicitly from the consequent variations in pacing. Generally speaking, though, the longer the note value of the suspensions, the lesser the immediate or palpable influence they wield over the various types of pace and over the pace hierarchy as a whole. The reason is obvious: The addition of long suspensions is less likely than the addition of short suspensions to cause rhythmic disturbance.

Composite pacing. When a melody or a cadence needs to be sharply etched—the *Vordersatz* theme in bars 1-2 of the Allemande, or the cadential progression in bar 9—it is common for diminutions with different note values to follow each other closely and to participate more or less equally in the construction of the theme. The conjunction of these diminutions often takes place at several levels of pacing at once, cutting across all of them. That is one reason why the rhythms of themes and cadences are so difficult to describe in theoretical terms. In order to attack the diminutions or to collapse them onto each other, their conjunction demands brief fluctuations and adjustments in the local, figural paces and also in the slower, underlying paces. Above all, their conjunction calls for a short-term fusion of these paces into a single durational gesture. I call the resulting, highly mixed configuration of paces *composite pacing*. In Handel's instrumental music, as in Bach's, composite pacing is a very local feature of the thematic design, a motivic feature; it rarely obscures the more neutral progress of the basic pace, the principal grouping pace, or any of the other paces I shall describe later, even though it might then alter them briefly.[4]

The basic pace, especially, is subject to deceleration or to acceleration during composite pacing. Deceleration helps accommodate caesuras, and it opens up durational space; perhaps that is why it remains more open to interpretation than acceleration. In bar 2 of the Allemande one can certainly hear the basic pace moving in quarter notes throughout the entire measure (as I already suggested, at least if one counts the change of position within the dominant on the fourth beat as a basic step). But there is also a distinct—perhaps an even stronger—sense that the basic pace has replaced its two quarter notes in the second half of the measure with a half-note occupied by the dominant in

[4]Most themes throughout the tonal literature comprise several isorhythmic repetitions of compositely paced figural constellations. The isorhythm which the repetitions generate consequently welds together several layers of pacing. It would take us too far afield to elaborate on Handel's isorhythm or on its close relation to Handel's borrowings and improvisations at this point.

order to support the principal theme's caesura on e natural[2]. The dominant's half note in fact represents another pace, an *obbligato pace*, to which I shall return. It is the fusion of the quarter-note basic pace in the first half of bar 2 with the half-note obbligato pace in the second half of the measure into a single, unbroken thematic and durational gesture that constitutes the opening theme's composite pacing. If one so wanted, one could describe this fusion, with greater technical precision, as a very brief borrowing from or modulation to a slower pace that answers the express needs of the thematic design.

The brief deceleration made possible here by composite pacing allows an intermediate caesura, like our "standing on the dominant" in bar 2, to contribute a momentary sense of repose before further developments ensue. At cadences, which confirm the arrival at a new key or reconfirm the maintenance of the present key, composite pacing accomplishes the opposite task: It urges the basic pace to move on to the cadence faster in order to generate greater tonal tension. Example 1.2 shows how on the first beat of bar 9 the basic pace accelerates very briefly to coincide with the eighth-note figural pace. The fleeting fusion of the two paces and the fleeting abandonment of quarter-note pacing secures the desired effect of tonal intensification.

By its very nature a phenomenon that resists patterning, composite pacing is a flexible notion, and not one that is easy to formulate conceptually. One cannot emphasize forcefully enough that its recombination of pacing levels applies not only to the mixture of rapid diminutions and figurations with different note values at the very surface, as in fifth-species counterpoint, but equally—and often simultaneously—to the mixture of the slower, underlying paces that supports these same diminutions and figurations at the deeper levels. To clarify the notion further, one might extend the analogy with species counterpoint and think of the mixed slower paces as a kind of structural fifth-species counterpoint.

Extended composite pacing. Composite pacing on a still larger scale—what I called "fifth species writ large" during the Introduction—occurs rarely in Handel's music, and then only under circumstances dictated by the highly stylized and highly controlled requirements of a specific genre. Long-range composite pacing is not typical of the high style altogether; rather, it embodies the essence of phrase rhythm in the middle style. In this repertoire, sharp contrasts in pacing that are thematic in origin but much more drastic in scope may extend over the length of the entire composition: They are the middle style's durational norm. Let us recall the short Gavotte from the eighth Ordre of François Couperin's Pièces de claveçin, which I cited briefly in the Introduction. The Gavotte is reproduced again in Example 1.3a. The pace reduction in Example 1.3b illustrates how a basic pace of quarter notes yields to movement in half notes several times during the first reprise. Now and again the quarter-note pace attempts to reassert itself during the second reprise, notably just before the Gavotte closes, but it never really regains its early momentum and drive.

It is just this kind of composite pacing that Handel usually avoids. Besides the lighter movements of the Water Music, the Music for the Royal Fireworks, the Concerti Grossi, Op. 3, and some of the chamber sonatas, which subscribe to the ideals of Quantz's mixed style, only Handel's fugues, gigues, choruses and arias present substantial stretches of composite pacing. Throughout those pieces, Handel's composite pacing remains strictly generic: Rather than signal a relaxation of the high style's contrapuntal *noblesse oblige*, it simply responds to a few genres' pre-established durational needs, and to their uniquely patterned rhythmic idioms identity. The durational freedom it simulates is held firmly in check by the constraints of the fugal design, by the stylized conventions of the gigue and the giga, and by the affective consistency of the textual setting.[5]

[5]I describe the middle style's composite pacing in detail in Willner 2004. The kind of multi-layered pacing introduced by a slow-moving cantus firmus or by a slow-moving vocal line against a faster instrumental background—Bach's cantatas (and especially the aria "Sheep May Safely Graze") come to mind—is an idiom of Baroque vocal style, and

II. 3. Faster paces

Figural paces and diminutions. The unique advantage of the basic pace as a supporting element of the foreground resides in its capacity to carry several different structural resources simultaneously: counterpoint, harmony, duration, and thematic design. From this structural perspective, the other paces that operate either more slowly, beyond the level of the basic pace, or more rapidly, between the levels of the basic pace and those of the fastest-moving diminutions, are perhaps less significant. With few exceptions, they do not connect at one and the same time to both the tonal and the durational structures of the piece except on those occasions when the basic pace expands or contracts and consequently overlaps with them for a few measures' duration. The long-range structural importance of these slower and faster paces resides, rather, in the preparation and the support they provide for the later expansion and contraction of the basic pace, and in the potential (not always realized) for conflict that their juxtaposition with the basic pace presents. On a more immediately apparent plane, the faster paces articulate and define the thematic structures at or just under the surface; in so doing they introduce important sources for later thematic and durational elaboration and expansion. They also serve as go-betweens that link the diminutions in the foreground with the more structural paces beyond. That is about as far as they penetrate the underlying pace structure of the composition.

Among these faster paces is the pace I already referred to as the *figural pace*, the rate at which the short linear progressions and the triadic arpeggiations immediately below the surface move (recall the eighth-note pairs ab^1-f^1 and g^1-e natural ^{1} in bar 1, to which I referred earlier). The progressions and arpeggiations in question are those that

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does not occur often in Handel's music, not even in his vocal works.

underlie directly the spontaneous-sounding gestures, figures, motives, and diminutions of the foreground. In the compound 4/4, the figural pace is represented by a continuum of stepwise or disjunct eighth notes that supports the movement of stepwise and arpeggiated sixteenths at the very surface. In other types of 4/4 time, where the basic pace progresses in half notes, the figural pace is represented by movement in quarter notes, and also by a faster movement in eighths if sixteenth notes are particularly active at the surface.

Examples in the F-minor Allemande abound. In bar 1, we have our pairs of eighths (see again Example 1.2b); in bar 2, there are replaced by steps (beats 1, 3, and 4) and by larger skips (beat 2). In bar 3, the figural pace and the basic pace coincide on account of the basic pace's contraction to movement in eighths (Example 1.2a). In bar 4, during the expansion of the basic pace from quarter notes to half notes (to which I pointed in the Introduction), the figural pace continues its motion in eighths (compare Example 1.2a with 1.2b). Observe how the expansion in bar 4 allows a concurrent, arpeggiated figural pace of quarter notes to emerge and to mediate between the expanded half-note basic pace and the eighth-note figural pace. The quarter-note pace answers the need to fill in the durational stratum left vacant when the basic pace expands. Its temporary intervention helps regulate and maintain the tactus of the piece while the basic pace fluctuates.[6]

[6]Ornate pieces in the simple 4/4 sometimes appear to incorporate features of different types of 4/4 time on account of pervasive pace fluctuations (resulting from expansion, contraction, displacement, polyphonic unfolding, or chromaticism). Such pieces typically establish their own small hierarchy of figural paces. The hierarchy consists largely of quarter-note and eighth-note paces, but its articulation is rarely complex or problematic because its decorative function is always clear. It incorporates the basic pace directly only when the basic pace contracts from the simple 4/4's perennial movement in half notes to quarter notes (or, in the compound 4/4, from movement in quarter notes to eighths).

Contradictions of pacing. It is one of the ironies of pacing that the fastest and most conspicuous layers of pacing—in this instance, the Allemande's stream of running sixteenths—show little structural significance beyond their introduction of motives that might be enlarged later on. Unlike other paces, the ubiquitous sixteenths at the surface don't govern a still-faster pace (though they might have, had thirty-second notes appeared); they consequently don't present a sustained stepwise or arpeggiated line which they can call their own. As a rule, structurally significant lines move more slowly than they do. Going back briefly to bar 3 and Example 1.2a, we find that the inner-voice eighth-note line and the outer voices' contracted eighth-note basic pace—not the constantly leaping sixteenths—is what really counts. The sixteenths, we have learned, are the product of the skew between the suspended inner-voice line and the contracted basic pace. They have no independent lives of their own. It is probably for this reason that melodies and themes ultimately remain beyond analysis. It also explains why their invention cannot be taught and why they so often become the subject of borrowings that are passed on from composer to composer in the manner of a chain letter.

Another irony of pacing, which I described in some detail elsewhere, is the occasional simultaneity of pace expansion and pace contraction: When one pace expands, its wider durational spans may require the addition of faster activity, close to the surface, to prevent the expansion from distending the durational design altogether.[7] Conversely, when a new layer of faster, busier, and more concentrated activity at the surface introduces itself, it may call for the addition of more broadly spaced tonal and durational signposts. These more widely distributed signposts make it possible for the ear to organize the greater amount and greater density of detail it must now take in. For an illustration, see chapter 3, Example 3.1a, and compare bars 1-3^{b} with bars 6^{b}-9^{a}.[8]

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[7]Willner 1999, p. 207, especially fn. 20.

[8]I discuss this aspect of Example 3.1a in detail in Willner 1999.

Chromatic paces. I should like to mention at least in passing that chromaticism, like polyphonic unfoldings and suspension series, can add a faster layer of figural paces over the layer of the basic pace. When chromatic passing tones, which are fundamentally decorative in nature, persist for any length of time, they can make it appear that the basic pace is moving faster than it really does. (They can also take the basic pace over, but that doesn't happen often.) Since Handel's instrumental music, so unlike Bach's, rarely remains chromatic for long, the issue is largely moot here, but one needs to be aware of it all the same. The opening phrase of Couperin's "Les Regrets," from the third Ordre of the Pièces de clavecin (Example 1.4) illustrates: The doleful layer of chromatic quarter-note passing tones allows the composition's simple 4/4 and its half-note basic pace to assume the looks and sounds of the compound 4/4, replete with a quarter-note basic pace and a characteristic chain of quarter-note afterbeat figures. The conflict between the meters and their basic paces eventually becomes the narrative discourse of the piece, and the conflict's resolution—which calls for many sequential expansions—emerges as the subject of Couperin's strategic scheme.[9]

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Naming the paces that run through the F-minor Allemande's opening four measures has provided us with a fundamental vocabulary of pacing, one that will help us tackle the Allemande's remaining complexities. But before embarking on an analysis of bars 5-13 and expanding that vocabulary it will be necessary for us to consider the relation of pacing to ritornello form. To the end, I shall digress briefly and outline the formal plan under which the three-part ritornello scheme governs the first reprise of the Allemande. In these remarks I shall build on the preliminary discussion of the ritornello's tripartite division that I offered during the Introduction.

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[9]For a sensitive rhythmic analysis from a more historical perspective see Abravaya 1999, p. 99, Example VI-14.

III. Ritornello form in solo and chamber works

Applied Ritornello Schemes. I noted during the Introduction that the ubiquitous three-part ritornello plan is prevalent well beyond the domain of orchestral works: Its characteristic cycle of *Vordersatz, Fortspinnung*, and *Epilog* appears with great frequency in solo instrumental and chamber works as well. In nonorchestral settings, where the instrumental parts are not often called upon to present contrasting episodes, the ritornello scheme is usually reduced in scale and repeated several times in a row, in cyclic fashion. As these ritornello cycles unfold, each cycle as a whole may assume the quality of a large-scale *Vordersatz, Fortspinnung*, or *Epilog*. A group of several ritornellos is therefore likely to add up to a larger ritornello that will occupy a complete reprise in binary form or the entirety of a through-composed piece. Whatever their level, the repetitions of ritornello cycles in a solo or a chamber setting usually support different material; they are cyclic repetitions not of musical material but of formal patterning (also known as function). Much like a piece that follows a conceptual ostinato bass or a conceptual isorhythmic pattern, the composition varies, refashions, and transforms its surface either partly or completely as it goes through each ritornello cycle's three parts.

Ritornello permutations. For better or for worse, the situation in practice is still more complex, because the number of the ritornello parts and the order in which they appear is subject to constant variation. Very often, when the formal outlines of a complex piece by either Handel or Bach seem at first glance to be haphazardly drawn, they reveal, upon closer inspection, a series of five or six ritornello cycles in which some of the internal components have been duplicated, omitted, or relocated—and then recomposed. Interpreting such recombinations is really a matter of hearing: Once our ear has become accustomed to identifying the behavior of the ritornello's three parts, as the ear of the

eighteenth-century listener doubtless was, the difficulties of retracing them ease considerably.[10]

Internal regrouping. After the composition has advanced past the first ritornello group, developmental circumstances during the remaining ritornello cycles might require sequential or cadential activity well before the *Fortspinnung* or *Epilog* have been reached, that is during the *Vordersatz.* Conversely, the kind of formal theme that marks the *Vordersatz* may not be wanted when it's time for the *Vordersatz* to appear. As a result, the *Vordersatz* might contain material usually reserved for the *Fortspinnung*, and the *Fortspinnung* might contain material reserved for the *Vordersatz* or the *Epilog*. The *Vordersatz* is sometimes either omitted altogether or replaced by an early, additional *Fortspinnung*. (The ritornello then consists of two sequential *Fortspinnungen* and a cadential *Epilog,* or of a single, longer *Fortspinnung* and an extended *Epilog*.) If developmental activity is not required, the *Fortspinnung* may be left out altogether, or it may be replaced by a second *Vordersatz*.[11] The *Epilog* is not usually passed over—a marker is needed to close off the ritornello cycle—but it can be reduced to a cadential gesture so short that it becomes absorbed in the *Fortspinnung*.[12]

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[10]The familiar and largely Schoenbergian notion of formal function, which I summoned up once or twice earlier, has often been used to describe the essence of the three parts of Schoenberg's sentence structure and, by extension, the essence of the three parts of Fischer's ritornello scheme, for instance, in Petty 1995a and Caplin 1998. I generally prefer to avoid the word function altogether, and to use instead words like outline, duty, profile, patterning, and the like. Function strikes me as a needlessly blunt and pseudo-scientific term. "Ladies and gentlemen, music is not a science," Ernst Oster would often exclaim in class before dismissing terminology that feigned precision where precision was neither necessary nor desirable.

[11]Dreyfus 1996 offers the most detailed account of this phenomenon.

[12]In the opening imitative theme of the Courante from Handel's F-minor Suite there is no *Epilog*: The *Fortspinnung* (bars 7-10) overlaps at bar 10 with the beginning of a new *Vordersatz,* which recomposes the *Vordersatz* of bars 1-6 over the dominant.

During long orchestral pieces, a second or third *Vordersatz*, *Fortspinnung*, and

Ritornello and pace. Moment to moment, the pace structure of the F-minor Allemande hinges on the local fluctuation of the basic pace. Phrase to phrase, it hinges in equal measure on the distinctly etched durational profile that its ritornello cycles' three parts assume. The opening ritornello's basic pace is established in the course of the first *Vordersatz*, and it remains associated with the thematic setting of the *Vordersatz* throughout the rest of the piece. The basic pace is then expanded (mainly in the orchestral works) or contracted (mainly in the solo and chamber works) at the beginning of the *Fortspinnung* or shortly thereafter. Finally the basic pace is restored or, more rarely, modified further through a new round of either expansion or contraction at the beginning of the *Epilog*.

The most complex and most variable of the three parts, in what concerns pacing, is in fact the *Epilog*. Besides the unpredictable readjustment or modification of the basic pace, its cadential activities entail an unpredictable rearrangement of other faster and slower paces, either figural paces or obbligato paces. Luckily, the *Epilog* is the shortest and the most neutral of the ritornello's three parts: Its closural contents do not wield the kind of strategic influence over the rest of the movement that the more thematic contents of the *Vordersatz* or *Fortspinnung* do. The *Epilog*'s durational peculiarities are therefore a matter of local, not of global concern.[13]

Epilog may be added to each cycle without disturbing the three-part outline. The order in which these parts are added, too, is quite likely to be switched around, as if the orchestra were improvising. Such extravagant modification is particularly common in Bach's vocal and instrumental works and above all in Vivaldi's concertos, where the quintessentially tripartite ritornello often contains far more than three parts. It is typical also of Domenico Scarlatti's keyboard sonatas (Willner 2000).

[13]Exceptionally, the *Epilog* of the ritornello from the last movement of Handel's A-minor Concerto Grosso, Op. 6, No. 4 turns out in the long run to be the most significant of that ritornello's three parts (chapter 3).

IV. Handel, F-minor Allemande, first reprise: Ritornello form and duration

IV. 1. Pacing of the three ritornellos

The first reprise of the F-minor Allemande divides into three approximately equal ritornello cycles: bars 1-4, 5-9^a, and 9^b-13. These nest, in turn, within a larger ritornello, whose *Vordersatz*, *Fortspinnung*, and *Epilog* they articulate in turn. The annotations in Example 1.1 show the division into three cycles; the superscripts "a" and "b" in the remarks that follow refer to the first and second half of the measure; when no superscripts appear the bar number denotes the entire measure. The reader might wish to consult the tonal sketch in Example 4 of the Introduction in conjunction with the pace reductions in Example 1.2.

The first ritornello cycle (bars 1-4). The opening theme in bars 1-2 leads to the local dominant at bar 2^b and presents the expository *Vordersatz*; the sequentially contracted descent in parallel tenths in bar 3 departs from the tonic again but more forcefully, and it provides the developmental spinning of the archetypal *Fortspinnung*; and the preparations for the expansive half-cadence on E= in bar 4 signal that the *Epilog* has been reached. Since the fluctuations of the basic pace underline the thematic and durational duties of the three-part division in bars 1-4, one might say that the phrase rhythm of the passage weds the generic temporality of the Allemande's compound 4/4 to the generic temporality of its first three-part ritornello. To see how this wedding of two pre-established temporalities issues a more distinctly profiled progeny as it becomes the subject of the Allemande's later expansions and the core of its rhetoric, we need to take a still closer look at the armature of the four opening measures' paces.

An essential characteristic of the compound 4/4 and the four-to-the-bar basic pace, well exemplified in the *Vordersatz* of bars 1 and 2, is the appearance of substantial

harmonies and contrapuntal sonorities on the second and fourth beats of each measure (Example 1.5). Such off-the-main-beat chords carry much greater tonal weight than do their lighter counterparts in the other types of 4/4 time. Even though they usually turn out to be subservient to the harmonies on the first and third beats at some deeper level, their relative weight at the foreground prompts the weak beats they occupy to assert substantial tonal, durational, and thematic independence. Moreover, their tonal weight slows down the tempo, lending credence to Kirnberger's remark that "weightier meters require a longer stroke and more bow pressure" (p. 388).

Having accelerated to movement in eighths during the *Fortspinnung* of bar 3, the basic pace begins to reverse itself already on the fourth beat of the measure, in preparation for the *Epilog* of bar 4 (see again Example 1.2a). As the pace expands to the half-note rate of bar 4, the quarter-note voice leading, we've observed, does not drop out; rather, it assumes the role of a figural pace that supports the weakened, ancillary voice leading on the even beats of bar 4 (see the additional illustration in Example 1.6). The harmonies on the second and fourth beats of bar 4 are decidedly subservient to the harmonies that follow: They bring in the upper fifths, in root position and in first inversion, of the chords on Eb at the third beat of bar 4 and on Db at the downbeat of bar 5 (cf. the arrows in Example 1.6). The expansion in bar 4 consequently simulates the tonal and the metrical conditions that prevail in the simple 4/4: It lifts the tonal and the accentual weight that would accrue to the second and fourth beats of the measure. The accentual transformation works seamlessly because the quarter-note tactus of the Allemande continues undisturbed.[14]

Thanks to the distinct pattern of contraction and expansion in voice leading and pace that bars 1-4 introduce, the first ritornello cycle assumes a distinctly etched and self-

[14]In Willner 1999 I go to great lengths to describe the contrapuntal mechanism that makes these shifts in pacing possible; see pp. 209-11.

contained durational profile (Example 1.7a). The *Vordersatz* introduces the basic pace, the *Fortspinnung* contracts it, and the *Epilog* expands it. This profile can now be repeated, varied, and enlarged in whole or in part in the course of the ensuing ritornello cycles. The element Handel chooses for repetition and enlargement is the effect of foreshortening that comes about at the turn of bar 3, where the *Fortspinnung* announces that the quarter-note movement of the basic pace has been replaced by movement in eighths (Example 1.8a). This is the personified progeny of the generic temporalities' wedding, of which I spoke earlier.

The second ritornello cycle: Bars 5-9^a. Two apparently sequential progressions, the first rising and the second falling, occupy most of the second ritornello cycle. The first is a series of 5-6-5 exchanges whose suspensions are largely implicit; it ascends at an expanded stepwise pace of half-notes (bars 5-6; see again Example 1.2). The second is a loosely modified cycle of falling fifths that descends at the restored pace of quarter-notes (bars 7-8). Each progression embodies a developmental *Fortspinnung*: There is no *Vordersatz*. The two series prepare for the arrival of the mediant, whose temporary tonicization is announced by a brief half-measure *Epilog* (bar 9^a). The *Epilog* closes into the beginning of the third ritornello cycle in the middle of bar 9.

(When two ritornello cycles overlap in mid-bar or at the downbeat, I parse their point of contact only once and I assign its duration only to the new ritornello. It is preferable not to read an elision of half a measure at that point, and not to add the closing downbeat to the length of the first ritornello. Parsed in this manner, bars 5-9^a make up a four-and-a-half-bar group, not a five-bar group. The rationale for this seeming anomaly is complex and will emerge only gradually, as we encounter overlaps that are fused to afterbeat displacements in chapter 2.)[15]

[15]Jonathan D. Kramer refers to overlaps such as that in bar 9, as *rhythmic overlaps*; overlaps that cause genuine metrical elision are, by contrast, *metrical overlaps* (Kramer

The suspension series in bars 5-6 is technically not a full sequence since it contains no ancillary chords beyond the $^{6}_{3}$ constellations suggested by its implicit 5-6 alternations. But because the 5-6 suspensions expand the basic pace and because the idioms are those of a genuine 5-6 sequence one can refer to the expansion as a *quasi-sequential expansion*. (This may seem to be a distinction without a difference now, and an ungainly term, but it will soon come in handy.) Like the semicadential pace expansion in bar 4, the pace expansion here simulates the accentual norms of the simple 4/4.[16]

The falling progression in bars 7-8 presents an embryonic sequence that brings back the quarter-note movement of the basic pace. The second half of the progression, from the last beat of bar 7 on, is clearly sequential; the first half projects some initial uncertainties as Handel lingers around the bass tones C and F. The reductions in Example 1.2b show to what extent the first half is realized in a deliberately haphazard way. The apparent meanderings of its bass are intended to assign a parenthetical quality to the Ab chord at the downbeat of bar 7 (I read C as the essential bass tone at this point, as the tonal sketch in the Introduction shows). They withhold the arrival at the low register temporarily in order to highlight the forthcoming descent from Ab to F, which takes place later on in bar 8 and expands the Allemande's opening upbeat figure.

The second ritornello cycle bears substantial durational similarity to the first ritornello cycle inasmuch as it re-creates at the beginning of its central *Fortspinnung* in bar 7 the effect of foreshortening that was first conjured up at the beginning of the *Fortspinnung* in bar 3 (Example 1.8). Most significantly, it does so on a larger durational scale. In bars 5-6 the outer voices move in tenths at the expanded half-note pace; in bars

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online b).

[16]Rising 5-6 exchanges, like all suspension series, introduce a skewed layer of pacing on top of the basic pace. Depending on the pace of the new layer, the addition may or may not force the basic pace to expand. Unlike other suspension series (the 7-6 suspensions implicit in bar 3, for instance), the rising 5-6 series rarely contracts the basic pace.

7-8 they move in sixths, and they accelerate, restoring the Allemande's quarter-note basic pace. On a large scale, the acceleration at the turn of bar 7 mimics the acceleration from movement in quarter notes to movement in eighth notes that took place across the barline in bars 2 and 3. Emblematically, the descent from ab^2 at the point of acceleration in bar 7 enlarges the descent from ab^2 at the point of acceleration in bar 3 (compare Example 1.8a with Example 1.8b). These enlargements, we shall later learn, are the crux of the Allemande's rhetoric.

The third ritornello cycle: Bars 9^b-13 and sequential expansion. The third ritornello cycle opens with a metrically displaced sequence (bars 9^b-11) which is based on a series of rising fifths in the bass (consult again Example 1.2). The sequence ascends from the mediant at the middle of bar 9 to the dominant at the middle of bar 11 at the doubly expanded basic pace of one-to-the-bar, twice as slowly as the semicadential progression in bar 4 and twice as slowly as the rising suspension series in bars 5-6. Just like the suspension series the sequence finds itself at the beginning of a ritornello cycle. It, too, substitutes a characteristic *Fortspinnung* progression for the expected *Vordersatz.* This time, however, no second *Fortspinnung* appears: The slow pace and the large scale of the ascending fifths prevent the realization of a second *Fortspinnung*, but they leave enough room for an extended *Epilog,* which tonicizes the dominant (bars 12-13).

The sequence in bars 9^b-11 embodies the principle of *sequential expansion*, in which a step of ancillary voice leading is added on to the unexpanded step of the basic pace. Now a plain sequential expansion adds duration, externally as it were, to the basic pace, but it does not alter the basic pace itself, at least not at the deeper levels: Upon normalization both the basic step and the *ancillary step* turn out to occupy the same time span. The expansion we find here is a *double sequential expansion*: The basic step and the ancillary step both have their time-span augmented by a factor of two. In this instance, the durational relation between the steps is clear, since they evidently occupy

the same spans of time—half a measure. Elsewhere, variation in the time span each step occupies at the surface requires that we reduce and normalize the sequence for the relation to emerge.[17]

The pace reductions in Example 1.2 demonstrate how each tone of the rising linear progression Ab-Bb-C in the bass, followed in tenths at a distance of more than two octaves by the upper voice, is allowed to occupy a half note instead of a quarter note: This is the expanded basic pace. The time spans of the first two tones of the progression, Ab and Bb, are then extended further, for the duration of another half note, by their ancillary upper-fifth chords. On account of the linear progression's mid-bar displacement, the ancillary chords enter on the downbeats of bars 10 and 11; the second ancillary chord, on F, is abbreviated by a stepwise descent to C, and the absence of C's upper fifth in bar 12 allows the sequence to close at C during the second half of bar 11. The notated meter and the quarter-note basic pace can therefore resume right at the downbeat of bar 12. (It is common for the last fifth in a sequential series of ascending fifths to be dropped, shortening the sequence thereby.)[18]

All told, the double sequential expansion slows the basic pace down by a factor of four. Imagining that the tones Ab and Bb are sustained under their upper fifths, Eb and F, one can hear the basic pace moving in displaced whole notes without difficulty. Christopher Wintle described this type of expansion in all but name in his ground-breaking article, "`Skin and Bones': The C minor Prélude from J.S. Bach's Well-Tempered Clavier, Book 2," and I have described it in some detail, too, in "Sequential

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[17]Rothstein 1981, 1989, and 1990b contain detailed accounts of normalization. For a summary, see my Introduction.

[18]I discuss mid-bar displacement in chapter 2. The topic of exiting sequences presents a great challenge, for unlike the sequence itself, which is a highly stylized idiom, the return to nonsequential voice leading is limited only by the composer's imagination. It would take us too far afield to tackle it here; Richard Bass offers an indispensable introduction to the intricacies involved in Bass 1996.

Expansion and Handelian Phrase Rhythm."[19] This, then, is a good moment to respond to a question that has come up in the interim: In what way does sequential expansion reflect Schenker's *Dehnung?*

Schenker's very specific notion of *Dehnung* posits the explicit or implicit presence of a tonal and metrical model for the expansion.[20] Our linear progression Ab-Bb-C in the bass, along with its accompaniment in tenths by the upper voice, *is* that model. Its first two tones Ab and Bb, extend in much the same way that the tones underlying Schenker's *Dehnung* extend, and its third tone, despite closural curtailment, extends similarly. The sequential enlargement differs from Schenker's *Dehnung* (and from many later Classic and Romantic expansions) in that it splits systematically and for the most part evenly between the model's tones. Those tones and the distance between them of necessity expand in fairly strict copycat fashion, in keeping with their idiomatically sequential setting. The tones of Schenker's *Dehnung,* by contrast, expand much more liberally—in an improvisatory manner over an imaginary fermata—each tone projecting its own miniature cadenza.[21]

When the basic pace in the compound 4/4 expands by a factor larger than two, the accentual scheme does not usually change dramatically. The deceleration in pace occasions a subtle replacement of the compound 4/4 by the simple 4/4, and the replacement takes away some of the tonal weight that would otherwise accrue to the second and to the fourth beat. It so happens that the wide expansion of the ascending

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[19]Wintle 1986 and Willner 1999.

[20]Schenker 1935/1979/2001, and especially Oster's commentary. Rothstein 1981 and 1989 as well as Schachter 1987/1999b offer very detailed and elegant elaborations. See also my Introduction.

[21]Rothstein 1989 relates expansion to composing-out over imaginary fermatas in a particularly sensitive way (pp. 80-83). As I mentioned in the Introduction, Schenker's *Vergrösserung* differs from *Dehnung* in that it expands a tonal but not a metrical model.

fifths Ab-Eb and Bb-F in the F-minor Allemande goes farther than most sequential expansions do, and it lightens the accentual emphasis at the downbeats of bars 10 and 11 to the point of compromising their metrical status. The resulting contradiction is as lyrical as it is metrically and visually dissonant, but its uncommonly rhapsodic quality—an unexpected link with Schenker's *Dehnung*—is difficult to project in performance without undercutting the gestural power of the Allemande.[22]

I've observed how besides restoring the Allemande's quarter-note basic pace and reasserting its compound 4/4 time, the *Epilog* in bars 12-13 also resets the Allemande's accentual clocks. The *Epilog*'s most important durational task, though, is the provision for a momentary acceleration to movement in eighth notes, through cadential intensification and composite pacing, at the turn of bar 13: This acceleration offers in turn a particularly vivid example of composite pacing and it illustrates how several paces can be activated all at once when asked to do so by a structural cadence. The fleeting, thematically pointed change in pace to an eighth-note figural and cadential pace on the last beat of bar 12 and on the first beat of bar 13 stands in sharp contrast to the metrics of the sequence in bars 9^{b}-11^{a}. The mercurial shift from expansive scalar passagework to urgent cadential skips shows Handel taking advantage of the density with which diverse rhythms can be packed into a measure or two of the compound 4/4. The quarter-note basic pace reasserts itself on the second and third beats of bar 12 in much the same mercurial way, but it now depends for its progress on the rock-solid support of a half-note obbligato pace (see Example 1.2a).

Most significantly, the conjunction of enlargement in bars 9^{b}-11 and contraction in bars 12 and 13 recomposes the effect of foreshortening that obtained at the beginning

[22]A more radical change from the compound 4/4 to genuine *alla breve* style would call for considerably lighter textures than the present expansion offers: It would also entail the introduction of new material of a different character. That is precisely what often happens at the entrance of the solo instrument(s) in concerto settings; see chapter 2, Example 2.23; chapter 5, Examples 5.10-5.19.

of bar 3 in the first ritornello cycle and, augmented, at the beginning of bar 7 in the second cycle—only it does so on a still larger scale. Note how theatrically the point of contraction, at the downbeat of bar 12, echoes the earlier points of contraction: The onset of composite pacing and the entrance of eighth-note chords prompt Handel to quote and to reharmonize many different figures from the two earlier contractions in quick succession (see the brackets in Example 1.9 and compare Example 1.8c with Examples 1.8a and 1.8b). Much of bar 2, including the approach to the dominant and the half-note caesura on the dominant itself, reappears in bar 11; the lead-in to bar 3 and the opening motivic ploy of bar 3—the descent from ab^2—reappear as well, at the turn of bar 12. So does the chain of unfolded sixths that began the descent from ab^2 in bar 7, colorfully reharmonized in F minor. The brackets in Example 1.9 highlight these observations.[23]

IV. 2. Expansion

Expansion, ritornello, and tessitura. We can now put the entire reprise together and see how its three ritornello cycles relate to each other durationally. Each cycle repeats and expands the pace fluctuations of the preceding cycle. Not only does the growth of this pattern of alternating enlargement and contraction emerge as the guiding idea—the strategic scheme—that governs the design of the reprise: The urgency with which it culminates in the pace constellations at the beginning of bar 12 suggests that it might try to mold the thematic and the rhythmic substance of the Allemande's second reprise as well. Whether it will succeed—in this repertoire there are no guarantees that it will—we shall learn in chapter 4.

[23]The F-minor chord reminds us of the tonic, powerfully, but it does not function as one; recall Example 4 in the Introduction.

The succession of pace enlargements underlines in a particularly interesting and unusual way the growth in the tessitura of the Allemande's intervallic content (Example 1.10). The first cycle's figural intervals include mainly small-scale unfolded thirds (bars 1 and 2) and apparent fifths (bar 3). The second cycle's more developmental figures include fifths and fourths that move more slowly and add up to broken octaves (bars 5 and 6); these are followed by unfolded sixths (bars 7 and 8). Finally, the third cycle's double sequential expansion brings in stepwise motion that unrolls a florid tapestry of sixths and apparent sevenths (bars 9^{b} and 10).

Unexpected perhaps, certainly whimsical in its gestural manner, is Handel's merger of his durational and intervallic growth during the arpeggios at the beginning of the second reprise. This is the spot usually reserved for a formal and often literal quotation of the opening theme over the fading residues of the dominant or the mediant at the other side of the double bar. Handel's quotation is anything but literal: The modest arpeggios of bar 1 burst into expansive sequential cascades that take almost a measure and a half to fall from the two-line octave in the upper voice all the way to the great octave in the bass.[24]

Secondary enlargements. I pointed out during the Introduction that the pace expansion in bar 4 and the two sequences in bars 5-8 leave in their wake a series of increasingly prominent and insistent enlargements of the Allemande's opening upbeat figure, c^{2}-ab^{1}. More of the same follows in the third ritornello cycle: A rich conflation of expansions, contractions, and transformations of the figure saturates the sequential and cadential progressions of the third cycle at or near the surface. The enlargements, along with some

[24]In the closing Rondo of Mozart's D-minor Piano Concerto, K. 466, the opening arpeggios seem to grow both upwards and downwards as the movement evolves. Their scale is larger and their drama is more explicit, but in principle their growth resembles that of Handel's intervals.

contractions and inversions, are highlighted by the square brackets in Example 1.2b. The progressive expansion of c^2-ab^1 continues right through the entire Allemande, but even during its massive and rather obvious enlargement by the sequential bass in bars 14-19 (Introduction, Example 3) it never really evolves into a rhetorical issue of substance. Rather, it remains perpetually subservient to the enlargement and to the contraction of the basic pace, and to the progressive enlargement of the descent from ab^2, which comes into its own in the second reprise. There is a clear sense in which the growing individuation of the upbeat figure, however marked for our attention, remains incidental to the thematic design: The manner in which the figure is always squeezed into the nooks and crannies of the Allemande's suspension series and sequential progressions suggests that in a deep sense its enlargement is occasional and opportune—that the design makes it possible for the enlargement to take place, but that its progressive growth is not absolutely essential to the Allemande's progress. It is a welcome improvisatory by-product of more important and more essential events, but as such it differs fundamentally from the long-range enlargement of the basic pace's foreshortening, which charts the narrative trajectory of the Allemande.

The hierarchy of enlargements. At the risk of digressing, I should like to trace very briefly the course that enlargement of c^2-ab^1 follows; the detour will help us retrace the Allemande's narrative path later on, since the upbeat's enlargement connects hierarchically—rhetorically—to the other enlargements by which it is surrounded, and since it is more obvious—but less consequential—than its companion enlargements. The narrative design of the Allemande articulates the tensions between the enlargements (a matter I shall discuss in chapter 4); we need to map them all, even if they play only a minor role in the strategic scheme of the piece. (I leave the enlargement of the descent from ab^2 out of the present discussion since it comes into its own only in the second reprise.)

In bar 4 of the Allemande, then, the expanded half-note movement of the basic pace makes it possible for the motive c^2-ab^1 to reappear three times, in slow motion, between the upbeat to bar 4 and the downbeat of bar 5: c^2-ab^1, bb^1-g^1, and ab^1-f^1 (see, again, the square brackets in Example 1.2b). At a deeper level, the second tone of each statement of the motive extends for a full half-note, and the entire kernel of the Allemande's opening theme, ab^1-g^1-ab^1/f^1, echoes through to bar 5, bridging the gap between the two measures and between the Allemande's first two ritornello cycles (the curly brackets in Example 1.2b). As a by-product of the expanded 5-6 series in bars 5 and 6, the enlargement of c^2-ab^1 then continues sequentially on to the downbeat of bar 7 (note the additional square brackets atop Example 1.2b). The resumption of the quarter-note basic pace in bar 7 permits both c^2-ab^1 and the thematic kernel ab^1-g^1-ab^1/f^1 to reappear in the bass, as the hidden and sequentially embellished repetition in the great octave to which I pointed earlier. The repetition begins on the second eighth of bar 7 and extends through much of bar 8 (the square bracket below Example 1.2b) Finally, the double sequential expansion in bars 9^b-11^a opens up the tonal space of c^2-ab^1, inverting its descent and filling it in as its upper voice makes its slow stepwise ascent from ab^1 to c^2. So many additional surface enlargements, inversions, and diminutions of the motive take place throughout the doubly expanded sequence and the ensuing *Epilog* that it becomes superfluous to cite them all. Even so, the "story" of c^2-ab^1 is not what the Allemande is really about.

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On the face of it, this analytical description reads like a scenario for an organicist fantasy: Enlargements, contractions, diminutions, and hidden repetitions ensure the Allemande's integrity by setting up a coherent and tightly knit web of interconnected details. That many of the most conspicuous enlargements are more opportune than structural, though, points to a fundamental instability amongst the Allemande's narrative layers. To find out more about this instability, which does not dissipate until the end of

the second reprise, we must look at the remaining paces that run through the Allemande. It is at this point that the Allemande's grouping paces enter the fray.

IV. 3. Grouping paces

Grouping paces and grouping modulation. I observed briefly during the Introduction that in the first ritornello cycle (bars 1-4) each measure represents a distinct and discrete grouping entity. Bar 1 and bar 2 are both sealed off by caesuras; the texture and the design change dramatically at the beginning of bar 3; and the basic pace retransforms itself at the approach to bar 4. The single measure, then, is the Allemande's *principal grouping pace*, the pace at which its most conspicuous grouping units move ahead. Because the surface in most tonal styles constantly groups and regroups in many different ways at once, more than one grouping pace will usually operate at any given time; hence the slightly unwieldy but essential notion of a *principal* grouping pace. And while that is not absolutely necessary, it is advantageous for the principal grouping pace to be defined by at least one faster and one slower grouping pace. Throughout much of the Allemande's first eight measures, for instance (more so in some measures than in others), a faster two-chord, half-note grouping pace is quite prominent, but unlike the one-bar pace it plays no structural role—it does not often assist in defining the most significant thematic, tonal, or durational units with any consistency. Similarly, the slower two-bar grouping pace in bars 1-4 does not correlate with surface events as closely as the one-bar grouping pace does.

During the second ritornello cycle (bars 5-9[a]) the principal grouping pace expands. It activates the slower two-bar grouping pace and takes it over, investing the pace with the immediacy it lacked earlier. The temporary switch to two-bar pacing takes place through the fusion of bar 5 to bar 6 and bar 7 to bar 8: There is no break in the progression at the turn of either bar 6 or bar 8. It is most important to observe how

gradually the transformation is accomplished. In bars 1 and 2 the independence of each measure is ensured by internal cadential progressions, by tonal caesuras, and by rests; in bars 3 and 4 it is secured by changes in pace and in design. But already in bar 3 the grouping begins to show signs of mutation: The parallel tenths that occupy the measure lead to the parallel tenths in bar 4 so seamlessly that they nearly weld the two measures together (recall that the basic pace begins its deceleration already on the fourth beat of bar 3). By the time bar 5 enters, two-bar grouping has all but established itself. I refer to such a gradual transformation of a grouping pace as a *grouping modulation*; it is a major resource of early eighteenth-century phrase rhythm.[25]

Within the confines of bar 9, one can observe how grouping modulation works in the reverse direction. The weakened sense of any large grouping during the first half of bar 9 permits the unobtrusive restoration of one-bar grouping—displaced to the middle of the measure—without the concurrent deployment of any disruptive segmentation. Its cadential acceleration aside, the complexity of bar 9 serves mainly to bring about this pacing restoration. Beyond that, the metrics of bar 9 hold little significance for the Allemande's phrase rhythm as a whole since they do not establish a pattern for later elaboration.[26]

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[25]I discuss Bach's grouping modulations in detail in Willner 1996b and 1998. Robert Morgan describes a similar phenomenon in Morgan 1998. Feil 1982 and Grave 1995 refer to the phenomenon of grouping pace with the help of different terminologies.

[26]The occupation of bar 9^a by the second ritornello's *Epilog* and the *Epilog*'s closure at bar 9^b may seem to suggest a one-time, three-bar group (bars 7-8 plus bar 9), but it really sets up only a two-and-a-half-bar group because (as we have already observed) the overlapping third ritornello cycle begins in earnest right at bar 9^b. At a reasonably brisk tempo, and in the absence of a very sustained mediant one hears a cumulative two-and-a-half-bar group: 2 1/2 = 2 + 1/2. And the sense that bar 9^a is cadentially tacked on to the two-bar group in bars 7 and 8 helps preserve the semblance of a two-bar grouping pace—notwithstanding the half-bar addition of bar 9^a. The long-range importance of this convoluted near-regularity in grouping emerges during the second reprise, when bars 5-9^a resurface as the tonal and durational model for the extravagant sequential enlargements in bars 20-26.

The one-bar components of the sequence in bars 9^{b}-11^{a} re-create the one-bar grouping pace of bars 1-4 in their own powerfully expansive way, displacing it to the middle of the measure. By sheer coincidence, the sequence is two-and-a-half bars long (bars 9^{b}-11): However great the temptation, it is doubtful that one can really hear a two-and-a-half-bar grouping pace established by bars 7-9^{a} and bars 9^{b}-11. In any case, the sequence concludes in the second half of bar 11—recall that there is no upper fifth to extend the C chord of bar 11^{b} into bar 12^{a}—and the elision of the upper fifth allows the *Epilog* of the third ritornello to enter undisplaced on the downbeat of bar 12. As it enters, the *Epilog* redisplaces the one-bar grouping pace to its proper metrical location.

Grouping pace and large ritornello form. If we put these fluctuations in grouping together, we'll see readily that they follow the large three-part design of the first reprise. A one-bar grouping pace holds together the first and the third cycles, and a two-bar grouping pace holds together the second cycle (Example 1.11). The articulation of the reprise as a three-part *durational* structure consequently emerges not only through the local, cyclic expansion and contraction of the basic pace but, equally, through the more sweeping expansion and contraction of the principal grouping pace. It is underscored also by the nearly equal length of the three ritornellos: 4, 4 1/2, and 4 1/2 bars.[27]

In sum, the pace fluctuations within each of the three small ritornello cycles support the emergence of the larger, modulating three-part ritornello that encompasses the entire reprise of which I spoke at the outset. The first cycle, the *Vordersatz* (bars 1-4), introduces the principal thematic and durational issues as it moves away from the tonic; the second cycle, the *Fortspinnung* (bars 5-9^{a}), expands on these issues, literally

[27]This brings us into the realm of *hidden periodicities* that are not immediately obvious (Schachter 1987) and also *approximate* or *subliminal periodicities*, whose symmetry of grouping is neither exact nor immediately striking but remains palpable all the same. For extended discussions of both periodicities see chapter 5 and Willner 1996.

and figuratively, as it moves towards the mediant; and the third cycle, the Epilog (bars 9^{b}-13), prompts the ensuing tensions to come to a head as it defines the tonal axis of the dominant.[28]

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With an overview of the Allemande's grouping apparatus in place, we can turn our attention to those supporting paces whose significance becomes apparent only in retrospect during the later stretches of the Allemande. Adding these paces to our growing vocabulary of pacing now is a necessary step in reconstructing the narrative trajectory of the Allemande. Moreover, it is an essential step in preparing for the analysis of the more elaborate Allegro from the E-minor Concerto Grosso, which follows.

V. Other paces

The cadential pace: From bass to melody. Where imitative textures prevail—for instance, in bars 1 and 2 of the Allemande—the bass is likely to contain the entire panoply of paces outlined by the upper voice. Elsewhere, we saw, its movement is much more sparing: Only when cadential intensification is needed is there a reasonable certainty that the bass will again incorporate most of the paces available to it, collapsing them onto each other through composite pacing.[29] Thanks to its composite pacing, in fact, the cadential bass acquires a markedly irregular profile. Throughout bars 12 and 13, for instance, the on-again, off-again coincidence between the rapidly changing basic pace and the more streamlined figural pace lends the bass a distinctly angular durational intensity.

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[28]Petty 1995a observes a similar growth in tripartite division, from sentence to sonata exposition, in which the identity of each part is defined and maintained by its "global formal function" (p. 175).

[29]Lester 1986 offers a particularly good account of cumulative rhythms in the bass.

When the basic pace either accelerates or yields the spotlight to faster paces at cadences it is sometimes helpful to refer to the faster pace as the *cadential pace.* In practical terms the cadential pace offers nothing new, at least not here: It has been present in the guise of the figural pace all along, and it has also appeared as the contracted eighth-note basic pace in bar 3. But the forward impulse that the eighth-note pace acquires briefly during the approach to the cadence is so strong that it justifies appellation by a special descriptor.

It so happens that full-fledged cadences, replete with a prominent basic pace and an animated cadential pace, find themselves at the beginning of some of Handel's most celebrated themes. Such thematically engendered cadences may not necessarily involve acceleration or intensification, but they do bring out the tension between the two paces. A brief but telling example, with important repercussions for the upcoming analysis of the E-minor Allegro, is the half-bar incipit of "Ev'ry Valley" from *Messiah* (Example 1.12).[30]

The basic pace of "Ev'ry Valley" outlines an ascent in quarter notes from e^2 to $f\#^2$ and $g\#^2$, harmonized essentially by I, V, and I. On top of these basic harmonies Handel superimposes a complete cadential progression, I-I^6- II^6_5 -V -I, which moves at a cadential pace of eighth notes. The faster cadential progression intimates, however faintly or facetiously, that the rising third e^2-$f\#^2$-$g\#^2$ might also be harmonized in mock-plagal fashion by the pungently dissonant progression I - II^6_5 - I.[31] That such a straightforward harmonization can be so dialectically or virtually suggestive is emblematic of Handel's skill in the deployment of the tonal system's most basic

[30]The multiplicity of self-sustaining paces that we find here is a hallmark of the middle style. In the high style, the friction it generates is usually worked out in the course of the composition.

[31]Such a progression would not be out of place in a chorale setting.

properties. It would also appear to serve as a nice foil to Handel's well-documented dependence on other composers' materials for the compositional matter itself.[32]

The obbligato pace. When the basic pace contracts, it makes use of the faster figural pace that has been active near the surface all along; its temporary transformation therefore takes place quite smoothly. But when the basic pace expands for the first time, or when it expands by a factor greater than two, it often appears to bring in new paces that have not been previously introduced. All the same, paces slower than the basic pace are suggested intermittently or established early on by underlying chordal extensions and by short thematic prolongations at levels deeper than that of the basic pace. On account of their sporadic and loosely timed appearance, it can take a while for such ambient extensions and fleeting prolongations to register either as recurring tonal patterns or as paces. But after a few phrases have gone by we become increasingly aware of their presence and of their significance in holding the design together. And as the piece progresses we come to recognize them as structural entities, for they support an ever greater number of one-bar and two-bar, sometimes even three-bar and four-bar subphrases.

These *obbligato paces*, as I call them, are most often signaled by sustained notes or by pedal tones either in an inner voice or in the bass, above all during long orchestral movements. They can be realized also by short cadential or semi-cadential progressions, and by other progressions that leave a distinctly patterned prolongational residue in their

[32]Alas, neither the progression nor its kaleidoscopic pacing is original with Handel: Scarlatti's Sonata in G minor, K. 8 (Example 1.18), and his Sonata in B minor, K. 27, begin in much the same way. Handel's invention here resides in the deceptive simplicity of the incipit's harmonization: The listener senses that there may be more to the cadence than meets the eye—or, more accurately, the ear—and anticipates the later explanation of the theme subliminally. Listeners to the Scarlatti Essercizi would know immediately that formidable complexities lie ahead.

wake. The sequential expansion of the basic pace often coincides with an obbligato pace introduced earlier.[33]

If only a few attenuated obbligato paces appear during the first reprise of the F-minor Allemande, that is Handel's way of underlining each change in the basic pace, of composing it out as a major event in the durational drama of the piece. Handel, it seems, deliberately refrains from preparing or anticipating any of the expanded slower paces of the Allemande too conspicuously. Even so, in bars 1 and 2 an underlying obbligato movement in half notes remains clearly perceptible—observe how the tonic triad is initially reiterated at half note intervals, and how the mobile voice leading in bar 2 reduces out to two chords if one undertakes a time-span reduction in the style of Lerdahl and Jackendoff (compare the upper two levels, a and b, in Example 1.13).[34] Slower one-bar and two-bar obbligato paces also suggest themselves, however abstractly and without further confirmation, through the prolongation of the tonic at increasingly deep levels in bar 1 and, collectively, in bars 1 and 2 (see the lower two levels, c and d, in Example 1.13).

All three time spans emerge as genuine obbligato paces later on: the half-note pace during the expanded ascent of the basic pace in bars 5-6, the one-bar pace during the sequential expansion in bars 9^{b}-11, and the two-bar pace during the massive quasi-sequential progressions in bars 14-19 (chapter 4). We've just encountered a particularly vivid example of a half-note obbligato pace at the underlying extension of the F-minor chord in the first half of bar 12: The extension supports the dramatic confluence of paces

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[33]The notion of an obbligato pace differs from William Rothstein's very useful description of a voice-leading structure's *obbligato voices*, which are sustained by the inner parts (Rothstein 1990b). A conceptual connection between our common use of obbligato is certainly detectable, though.

[34]Although I rarely go to the length of reducing time-spans to the abstract extensions that mark their work (L & J 1983), I remain deeply indebted to their pioneering study. (See also my Introduction, Examples 11 and 12.)

throughout the cadential setting, and it finds a suitable response in the complementary extension of the G-major chord during the second half of the measure (Example 1.2a).

The preparation for the expansion of the basic pace and for the expansion of the principal grouping pace well ahead of time is one of the principal tasks of obbligato paces. Such preparation prevents the later enlargement of these more fundamental and more prominent paces from creating too great a disturbance in the perpetual flow of the piece. It stands to reason, therefore, that Handel's obbligato paces should intervene only temporarily: Within the framework of a fluctuating periodicity and an ambient hypermeter, their appearance must remain an occasional feature. In the end this turns out to be all to the good, because the presence of obbligato paces below the surface combines with their on-again, off-again realization in the foreground to lend them the quality of hidden tonal and rhythmic repetitions.[35]

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As we look over the durational profile of the Allemande before leaving it for the time being—I shall complete its analysis in chapter 4—we need to summarize the accomplishments of its paces and also to define the issues it leaves unresolved at the double bar. The main narrative thread running through the first reprise has been the ever growing and relatively systematic alternation in the expansion, contraction, and foreshortening of the basic pace; it has unfolded, one step at a time, across the three ritornello cycles of the reprise. Related elements of the design, most of them tonal—the

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[35] In orchestral pieces, which emphasize chordal extensions in an idiomatic way, obbligato paces may span as many as four bars. Most often, though, they operate at the one-bar and two-bar level in the simple 4/4, and at the half-bar and one-bar level in the compound 4/4. They frequently coincide with the ambient hypermeter, and they lend weight to the slower grouping paces; they also suggest the emergence of a larger metrical grid. But obbligato paces and grouping paces are not interchangeable: Obbligato paces remain predominantly tonal, and grouping paces remain predominantly durational.

Some of the paces Joseph P. Swain describes in Swain 1998 and 2002 resemble my obbligato paces but lack a firm connection to the long-range tonal structure of the piece.

upbeat figure c^{2}-**a**b^{1}, and the three descents from ab^{2} (bars 3, 7, and 12)—have grown in narrative fashion as well. What remains to be seen now is whether their growth has any tonal and durational room left to continue during the second reprise, and whether one of the Allemande's other threads can intervene and replace the expansion in the event that space does run out.

Part 2. Orchestral works

While grouping modulations and changes in the principal grouping pace are an important feature of Handel's F-minor Allemande, they don't affect its measure-to-measure progress in the same intricate ways that the fluctuations of the Allemande's basic pace do. This imbalance in the prominence of pacing structures, typical of Handel's solo and chamber pieces, is usually reversed in Handel's intermittently periodic orchestral works, where grouping paces are frequently called upon to build each movement's tentative periodicity from the ground up. The central Allegro from Handel's E-minor Concerto Grosso, Op. 6, No. 3, offers an especially colorful and elaborate example. The expansion of the basic pace is a major component of the Allegro's temporality to be sure, but its contribution to the composition's long-span durational design is conditioned by its contribution to the Allegro's grouping enlargements.

Handel, Concerto Grosso in E minor, Op. 6, No. 3, III: Allegro, Bars 1-22

The Allegro from Handel's E-minor Concerto Grosso opens with what appears to be a bona fide four-bar ritornello, and a genuine ritornello theme it certainly is, borrowed as such from the beginning of a Scarlatti sonata. In the longer scheme of things, though, the opening four measures turn out to be a kind of signature motto, a mock-refrain that (even though it returns from time to time) serves mainly to jump-start the piece and put

its tonal and durational settings in place.[36] The real ritornello, the basis for the Allegro's developmental spinning, is much longer. Spanning the entirety of bars 5-22, the Allegro's first period, it contains altogether different material—argumentative passagework borrowed from another Scarlatti Sonata. The opening four-bar theme returns only twice: modified and expanded, at the head of the second period (bars 23-29), and unaltered, at the tail end of the entire piece (bars 65-68, chapter 5). The theme is reproduced in Example 1.14, along with the Allegro's first period (bars 5-22); tonal and durational reductions follow in Examples 1.15 and 1.16.

The upper-voice structure of the Allegro's first period presents us with a good example of a descent from $\hat{5}$ that alternates polyphonically with a subsidiary descent from $\hat{3}$, a third below.[37] As the upper descent reaches $\hat{3}$ over the mediant at bar 22, the lower descent adjusts its fall and re-hooks onto $\hat{3}$. Uncharacteristically, the lower descent from3 plays no further role in the Allegro's tonal structure. Even the upper descent from $\hat{5}$ ultimately takes a back seat to a middleground enlargement of the prominent but illusory descending octave that in very obvious ways holds together the opening four-bar ritornello theme (see the bracket under Example 1.22). In bars 1-4, the illusory octave is superimposed over an underlying descent from $\hat{5}$; across the entire Allegro, the falling octave unfolds over the fundamental descent from $\hat{5}$ (chapter 5). By the end of the first period, at the tonicization of the mediant in bar 22, the octave descent has reached only as far down as $\hat{7}$. Example 1.23 shows how the octave begins in the bass and breaks off as early as bar 12; it resumes only much later, in the upper voice, at bar 41.[38]

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[36]I discuss this borrowing later on. For now, I note that several of the Scarlatti Essercizi begin in just this way, a good indication of Scarlatti's influence on Op. 6: K. 4, bars 1-4; K. 8, bars 1-4; K. 12, bars 1-3; K. 25, bars 1-3; and K. 27, bars 1-3.

[37]I follow Neumeyer 1987 here and call upon the three-part *Ursatz* to explain the background structure of the piece.

[38]I remain convinced that most long-span octave descents in the Baroque repertoire are thematic middleground events, and that they are not supported by a specific bass

I. Tonal and durational analysis

I. 1. The opening theme

Bars 1-4. The entire collection of paces I introduced during the discussion of the F-minor Allemande is encapsulated by the pair of measure-long cadential progressions which begin the Allegro's opening four-bar theme. As it happens, these progressions are not stated openly—they remain implicit in the movement of the stark unisons and octaves that make up the texture of the theme; they become explicit only during the tonicization of G in bars 20 and 21 (see Examples 1.15-1.17, of which Example 1.17 offers the most detailed illustration). At the outset, the two progressions are embedded in the unfolded sixths in of bars 1 and 2, and they crystallize through harmonies projected by the polyphonic engagement of each sixth's inner strand. The two progressions establish a basic pace of quarter notes and a figural as well as a cadential pace of eighth notes, and they do so in much the same way as did the corresponding cadential progression in the incipit of "Ev'ry Valley" (Example 1.17b; cf. Example 1.12). In fact, save for the ascent from $\hat{1}$ to $\hat{3}$, which is absent here, each of the two progressions in bars 1 and 2 of the E-minor Allegro is remarkably similar to the opening progression of "Ev'ry Valley": A I-V#-I cadence advancing at the basic pace of quarter notes is embellished by a I-I^6-II^6_5-V#-I progression advancing at the figural pace of eighth notes.[39] In this instance, the

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progression. I consequently follow the background octaves outlined in Neumeyer 1987c and Smyth 1999 only rarely (see my analyses of the Prelude from Bach's D-minor English Suite in Willner 1996b, and of the opening ritornello from Vivaldi's Concerto in G minor for Viola d'amore and Lute, RV. 540, in Willner 2004).

[39]If we keep in mind that much in bars 1-2 of the E-minor Allegro comes from Scarlatti's K. 8 (of which more later), we begin to realize just how much Scarlatti "Ev'ry Valley" also holds. On the other hand, the opening stretch of Example 1.25, which dates from about 1703, contains a similar progression.

progression is followed on the fourth beat by an implicit applied VII^6 chord which, suitably embellished by arpeggiation, introduces the opening chord of the next progression (see again Example 1.17b). The resemblance to "Ev'ry Valley" notwithstanding, I derive the harmonization of the two cadential progressions from Handel's harmonization of the corresponding cadential progressions in bars 21 and 22.

As it hovers over the local 5-line of the opening theme, the octave descent from e^2 to e^1 introduces several of the Allegro's obbligato paces and also some of its preliminary grouping paces. The tone E, which represents the governing sonority in bar 1, and the tone D, which represents the corresponding sonority in bar 2, work together to establish a principal grouping pace as well as a tentative obbligato pace of one bar. In between, each of the cadential progressions in bars 1 and 2—and the quick descent that follows in bar 3—also describes a two-chord, half-note grouping pace. When the Allegro's grouping structure grows in scale later on, the one-bar grouping pace is transformed into a two-bar grouping pace, and the two-bar pace then becomes the Allegro's principal grouping pace (notwithstanding many other enlargements in the Allegro's grouping structure). Over time, the half-note obbligato pace and the half-note grouping pace become less and less conspicuous.

Although the four-bar theme does in fact encompass a miniature three-part ritornello, with a traditional *Vordersatz* (bars 1-2), a *Fortspinnung* (bar 3), and an *Epilog* (bar 4), that is not its most important feature. From a larger perspective, the theme sets the stage for a durational confrontation between bars 1-4 and bars 5-22, the Allegro's first large period. Bars 5-22 not only introduce different material: They contradict the basic durational premise of bars 1-4, so much so that the drastic change at the turn of bar 5 calls for some sort of response or accommodation on the part of the opening theme. The

remaining two periods of the piece occupy themselves with realizing this response, which turns out to be the Allegro's strategic scheme.[40]

I. 2. The first period

Bars 5-12. I suggested already that the complete period in bars 5-22 might be thought of as a large-scale ritornello. And indeed its outlines show a large three-part ritornello similar in its division to that of the F-minor Allemande's first reprise. The ritornello here consists of two outer orchestral phrases, bars 5-12 and bars 17-22, and a highly contrasting embedded solo phrase, bars 13-16. The first orchestral phrase leads to the subtonic in preparation for the upcoming establishment of the mediant; the solo phrase moves entirely within this subtonic (Example 1.15). The closing orchestral phrase confirms the mediant's tonicization with a chain of luminous voice exchanges and sonorous cadences.

Within the framework of a large three-part ritornello, then, the orchestral passage in bars 5-12 represents the *Vordersatz* and introduces new material in expository fashion; the novelty of its subject matter matches the harmonically colorful transition to the subtonic. The solo passage in bars 13-16 serves as the developmentally transitional *Fortspinnung* and links the root position of the subtonic (bar 12) with its first inversion (bar 16) via a complex and not very apparent voice exchange, which turns inwards (see Example 1.15). And the orchestral passage in bars 17-22 provides the cadential *Epilog* by confirming the mediant with a complementary, equally hidden voice exchange, which turns outwards, in the opposite direction: It leads from the first inversion of the mediant

[40]Although neither the *Fortspinnung* nor the *Epilog* of the four-bar theme offers any modification in the basic pace (despite the change in melodic design at the turn of bar 3), the withdrawal of the one-bar obbligato pace at the beginning of bar 3 simulates the effect of durational acceleration.

to its root position (bars 17^{b}-21^{a}, see again Example 1.15). This complementary voice exchange spawns many smaller, nested voice exchanges, and it prepares the way for the luxuriantly orchestrated cadential gestures that follow (bars 21-22).

Bars 1-4 vs. 1-12. The contrast between bars 1-4 and bars 5-12 is set in high relief by the design of the *Vordersatz* in bars 5-12: The relatively self-contained eight-bar *Vordersatz* is twice as long as the entire opening theme of bars 1-4, and it shows a two-bar rather than a one-bar grouping pace, as well as a matching two-bar obbligato pace. Both the basic four-bar time frame of the opening theme—the characteristic length and temporal scale by which it is marked—and the theme's basic periodic premise are in effect cancelled out through the augmentation carried out by the eight-bar *Vordersatz*. But the aural memory of bars 1-4, which propose to introduce the subject matter of the Allegro's thematic discourse, cannot be erased so easily. Bridging the temporal and the thematic gap between bars 1-4 and bars 5-12 consequently becomes the principal issue that the Allegro must work out.

Appearances notwithstanding, the basic pace in bars 5-12 remains unchanged: Despite a preponderance of insistent thematic repetitions that simulate a general framework of expansion, the quarter-note basic pace continues to hold forth (see the pace reductions in Example 1.16). The tonic is quite obviously extended twice as a two-bar obbligato pace across bars 5-6 and bars 7-8, and the subtonic is similarly extended from bar 9 to bar 10, yet the many literal repetitions overhead serve not so much to expand these chords specifically as to introduce additional basic material for the Allegro to work out. The novelty of this material redefines our instinctual interpretation of the repetitions: We soon realize that far from extending a durational element already introduced, they in fact outline an altogether new durational premise. This is a scenario that is common to many seemingly redundant repetitions in Handel's Op. 6; it will become more persuasive when I discuss the different sources in Scarlatti's keyboard sonatas from which bars 1-4

and bars 5-22 are borrowed. Of course it can't be denied that from an abstractly durational perspective the repetitions do serve to "buy time," as repetitions often do—to fill in the space between bars 5 and 12. Yet hand-in-hand with the realization of a time delay the repetitions accomplish two still more important tasks, the one durational, the other tonal: They carry out the augmentation of the Allegro's principal grouping pace from a one-bar pace to a two-bar pace, and they bring about the tonal enlargement of the opening theme's falling step E-D (Example 1.22). In so doing they begin the long octave enlargement that spans the entire piece, and they substantiate the paradoxical observation that the novelty of Handel's repetitions generally supersedes their redundancy.[41]

The changes which take place at the entrance of bar 5 include a remarkable and remarkably early transformation of texture and register. The stark unisons and octaves in the middle and low registers of bars 1-4 give way to brilliant unisons and to a resonant play of intervals at the upper reaches of the two-line octave in bars 5-12. Because the transformation underlines the tensions between the different temporalities of bars 1-4 and bars 5-12, it intensifies the need to resolve this tension in some way, if necessary at the cost of giving up the opening theme's temporality. Thus begins a cycle of grouping enlargements that substantiates and magnifies repeatedly the early temporal augmentation of bars 1-4 in bars 5-12. The cycle continues right through to the end of the piece.

Even as an expression of style, bars 1-4 differ from bars 5-12. Bars 1-4 look back to the severity of Baroque counterpoint, and bars 5-12 look ahead to the spacious periodicity of galant harmonies.[42] An aural question therefore arises: Will the Baroque

[41]One can refer to such repetitions as *apparent expansions* if one so wants; I shall discuss the advantages of doing so when I address the norms of periodicity and grouping pace in chapter 5.

[42]Some writers, though, have interpreted Vivaldi's cultivation of sonorities similar to those in bars 5-12 as Venetian simulations, on string instruments, of the brass ensenble sound that marked the music of the Bolognese composers; see, for instance, Kerman 1999, p. 68. A dated but still valuable account of the Bolognese brass sound is Berger 1951.

setting of the opening theme ultimately become a thing of the past, or is there some way for it to be maintained in the face of the Allegro's increasingly periodic durational framework? In the course of later enlargements almost all the components of bars 1-4 gradually fuse to those of bars 5-12, until the two groups appear to interlock and become one. In the nick of time, Handel finds a tonal pocket within which the character of the opening theme and its temporality can survive, during the apotheotic but unpatterned last phrases of the Allegro's climactic third period. How Handel does that will become evident in chapter 5.

Bars 1-4 vs. 1-12: Hybrid and composite borrowings. The existence of a genuine dialectic between bars 1-4 and bars 5-12—the notion that in a sense they belong to different pieces—becomes abundantly clear when one compares the different thematic, textural, and stylistic sources of the two groups. Bars 1-4 are borrowed mainly from the opening measures of Domenico Scarlatti's Sonata in G minor, K. 8 (Example 1.18), and bars 5-12 are borrowed mainly from various passages in Scarlatti's Sonata in G minor, K. 12 (Example 1.19). Bars 13-22, and in fact most of the remaining measures of the Allegro, lean much more heavily on K. 12 than they lean on K. 8, though the starkly funereal strains of K. 8 echo through these later stretches as well.[43]

While emphasizing the fundamental differences between the two sonatas, Handel of necessity also underscores the similarities between them. After all, without several thematic common denominators the two Scarlatti pieces could not weld together as they do. And so it is that Handel's all-important unfolded sixths in bars 1-4 derive not just from the inner voices of K. 8 but, equally, from the similar left-hand figurations of K. 12 (Example 1.20a); conversely, Handel's wholesale descent from E to D in bars 5-8 and

[43]Derr 1989 is the standard survey of Handel's borrowings from Scarlatti's Essercizi, but Silbiger 1984 also offers valuable, complementary observations. Derr notes the most substantial parallelisms between Handel's Allegro and Scarlatti's K. 12.

bars 9-10 derives not from K. 12 but rather from the descent from G to F in bars 1-2 and bars 3-4 of K. 8 (see Example 1.18). Despite these cross-borrowings, the different origins of bars 1-4 and bars 5-22 do retain their distinctly separate identities, at least for the time being.

Returning now to the internal design of bars 5-12, we can observe more readily that the thematic material in bars 7-8 is not a variant designed to extend the tonic and the repeated notes of bars 5-6. The motivically repeated notes of Handel's bars 5-6 are borrowed from bars 14-18 of Scarlatti's K. 12; see the bracket and the annotation atop these measures in Example 1.19. The characteristically alternating descending thirds (g^2-$f\#^2$-e^2 and a^2-g^2-$f\#^2$) in Handel's bars 7-8 are on the other hand borrowed from a different passage of K. 12, bars 4-5; see Example 1.20. Handel's bars 7-8 therefore present what one might call "new thematic information." That a seemingly prolongational passage like bars 7-8 can contribute so much more than a mere extension or expansion is something one must keep in mind when tackling similarly "repetitive" passages throughout Handel's Concerti Grossi, Op. 6.[44]

Bars 1-4 vs. 5-12: Stylistic differences. The contrasts between the two Scarlatti sources also illuminate the stylistic tensions in Handel's opening twelve measures. Although the contrapuntally dense and texturally harsh sonorities of Scarlatti's K. 8 evoke the crustier elements of the Iberian peninsula's folk-dance style, they show a still closer affiliation with the learned and affective discourse of the high style. And while the insistent repetitions and substantial chordal extensions of K. 12 reflect a lighter dance idiom and a more homophonic chordal texture, they bring to mind the rhythmic freedom of the middle

[44]The tonal and durational meaning of figural repetition is a difficult topic which I explore at length in chapter 5. The literature on repetition is very scant: Raymond Monelle (1992, especially p. 244) and Jairo Moreno (2000) are among the few who have made valuable contributions to its elucidation. Peter 1992, despite its title *Rests and Repetition in Music*, is not very helpful.

style, above and beyond the more mechanical discourse of the galant style. The stylistic tensions between Handel's bars 1-4 and bars 5-12 therefore embody not just the "horizontal" tensions of differences between styles (which I mentioned earlier) but the "vertical" tensions of fundamental conflicts between different *levels* within the same style. The process of stylistic elevation and fusion that takes place later on, during the remaining periods of the Allegro, sets out ambitiously to overcome all these differences at one and the same time. As I complete the analysis of the E-minor Allegro in chapter 5 it will become apparent that the resolution of the stylistic conflict between bars 1-4 and 5-12 governs the durational articulation of the entire movement: Among other things, the accommodation between the groups requires that the fragmentary, incipiently periodic material of bars 1-22, with all its fits and starts, be synthesized into a much larger and more homogeneous continuum of periodic groups.[45]

It was Laurence Dreyfus who, during a question and answer period at the annual meeting of the American Musicological Society in 1992, suggested that Bach's treatment of periodicity in the *Galanterien* of his dance suites and partitas derives not from "progressive" preferences as such but from the superimposition of the high, learned style over the low, popular style.[46] While Dreyfus's observation does not necessarily explain

[45]Handel's stylistic intervention also alters, irrevocably, the character and the larger drift of Scarlatti's sources, smoothing out their deliberately rough edges, in surprisingly Bloomian fashion. As I mentioned during the Introduction, *hybrid* or *composite* borrowings, which recombine materials from different pieces and from different locations in the same piece in dialectically narrative opposition to each other, are common in Handel's instrumental music. Compare, for instance, the orchestral ritornello in the celebrated "Entrance of the Queen of Sheba" from Solomon, borrowed from Telemann's Concerto in F for Three Violins from Musique de table, with the episodic material assigned to the two solo oboes, which derives from Giovanni Porta's opera, Numitore. I discuss the tonal and structural ramifications of such composite borrowings in Willner 1989.

[46]Dreyfus offered his comments in response to my paper, "Nascent Periodicity and Bach's `Progressive' *Galanterien*" (Willner 1992, reproduced here in the Appendix). I treat the relation of periodicity to the mixture of styles superimposition in detail in Willner 2004.

all instances of periodicity in late Baroque style, it does offer an intriguing solution to quite a few of them. It throws a good deal of light on the present set of hybrid borrowings in Handel's Allegro, and on many other, similarly composite borrowings in Op. 6.[47]

Bars 13-16: Quadruple sequential expansion. Acting as the *Fortspinnung* of the large-scale ritornello begun in bar 5, the solo passage in bars 13-16 represents the first period's most likely venue for a wholesale, even drastic expansion of the basic pace. In general, where concerto textures prevail, solo passages like the stretch in bars 13-16 establish a substantially wider durational framework than does the surrounding orchestral material. On many occasions they introduce a slower basic pace, a larger grouping pace, and a wider hypermeter. It is during such passages that the temporary adoption of a more lightly accented *alla breve* style, along lines suggested by Riepel in a well-known observation, is most likely to occur.[48] Because the passage under consideration here is so short and so isolated from similar solo passages, the wholesale durational reversal one might expect doesn't quite have a chance to come about. Instead, an extensive but quite common *quadruple sequential expansion* takes place. That this is indeed the proper durational interpretation is confirmed later on, in bars 49-52 (chapter 5, Example 5.7), where a very similar progression, a hidden rhythmic repetition in fact, is played not by the soloist but by the entire ensemble, in rousing climactic fashion.

The principle behind quadruple sequential expansion is the same as the principle behind double sequential expansion, which I explained earlier in conjunction with the sequence in bars 9^{b}-11 of the F-minor Allemande. The expansion in bars 13-16 here

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[47]Petty 1995a also addresses the durational ramifications of stylistic confrontation; see pp. 271-72.

[48]Riepel 1752-68, pp. 53-54. I discuss Riepel's observation, with further references to its citation by other scholars, in Willner 1999, p. 198, fn. 7.

centers on a rising third progression in the bass, D-E-F#, which links the subtonic's D at bar 12^{b} with its upper third, F#, at bar 16^{b}. The step-by-step diagram in Example 1.21 illustrates how the two central tones of this ascent, E and F#, are expanded. The later sketches in Example 1.24 provide the larger context in which their expansion takes place: Example 1.24a relates the progression as a whole to the opening measures of the Allegro; Example 1.24b illustrates how the progression fits into the tonal framework of bars 12-22.

Deferring to the bass, the upper voice does not play much of a role in setting up or in realizing the model for the expansion. Rather, it accommodates the outline of its figurations to the bass progression within the tonal space made available to it by the larger progression in bars 12-16. One might therefore say that the bass alone provides the model for the expansion. In any case, the upper voice squeezes in a rising fourth, a^{1}-d^{2}, that spans the entirety of bars 12-16. The fourth helps realize the aforementioned hidden voice exchange, which extends the underlying subtonic. (The voice-exchange signs in Example 1.24b and those in Example 1.18 suggest that both this voice exchange and the voice exchange within the mediant, which follows in bars 17^{b}-21^{a}, derive from bars 1-4 of Scarlatti's K. 8.)

Paradoxically—but quite typically—the all-important sequential bass tones E and F# occupy only half a measure rather than a measure each (bars 14^{b} and 16^{b}), and they support chords in first inversion, not in root position (Example 1.21). A measure and a half of each two-bar group is taken up by the ancillary upper-fifth chord that precedes the principal sixth chord (bars 13-14^{a} and 15-16^{a}). I refer to the enlargement as a quadruple sequential expansion because in the course of normalization each enlarged step of the expanded basic pace is reckoned back to include its preceding ancillary chord. Once it has been normalized, this step comes to occupy two bars instead of a quarter note; the normalization confirms that the quarter-note basic pace has been quadruply enlarged.

(Putting it another way, one might say that the essential quarter-note movement implicit in bars 1-4 has been replaced by a pair of two-bar steps.)

To understand the magnitude of the change through which the Allegro's temporality goes in these four measures, it would be helpful to review and to compare briefly the three types of sequential expansion that I have identified so far. Simple sequential expansion of the basic pace, along the lines of the pace expansion in bars 5-6 of the F-minor Allemande, adds only an ancillary chord equal in length to the step of the basic pace; double sequential expansion (like the expansion in bars 9^{b}-11 of the F-minor Allemande) extends the length of the basic step itself by a factor of 2 and then adds an ancillary chord equal in length to the expanded basic step; quadruple sequential expansion expands the basic step by a factor of 4 and then adds an ancillary chord equal in length to the doubly expanded step. Most often, the combined two-bar time span of the quadruple expansion is then modified further still, and drastically: The ancillary chord will precede, rather than follow, the principal chord, and the duration of the ancillary chord will extend for a measure and a half, at the expense of the principal chord. Example 1.21a demonstrates how each ancillary chord in our quadruple sequential expansion is added on to the basic progression; Example 1.21b shows how the time-span of both the principal chord and the ancillary chord is enlarged; finally, Example 1.21c shows how the ancillary chord is expanded further at the expense of the principal chord. It is essential to keep in mind that similar and even greater modifications in the durational relations between the principal chord and the ancillary chord at the surface are very common in all types of sequential expansion, and that it is always possible for the ancillary chord to follow rather than to precede the principal chord, if at the price of forfeiting the appoggiatura-like rhythmic dissonance of the idiom.

Bars 17-22: The primary periodic span. The quarter-note basic pace is restored at the beginning of the *Epilog* in bar 17, with the entrance of the large voice exchange within

the mediant and its nested multiple voice exchanges (Examples 1.16b and 1.16c; the smaller exchanges in bars 17-20 derive from the falling parallel $^{6}_{3}$ chords in bars 6-7 of Scarlatti's K. 8, as the annotations in Example 1.18 suggest).[49] The grouping structure is particularly complex here: On the one hand, the short voice exchanges restore temporarily the one-bar grouping pace of bars 1-4; on the other hand, the prominent underlay of stepwise descents in the celli and the bassi straddles the barline at the turn of bars 18 and 20 and adds a deeper layer of two-bar grouping. Without usurping the temporary one-bar grouping pace, the intervention of the bass instruments helps preserve the two-bar grouping pace that was gained in bars 5-12 and maintained throughout bars 13-16. At the same time, it streamlines bars 17-20 to the point that a distinct impression of still larger four-bar grouping emerges with rather greater force than it did in bars 13-16.[50]

Of the three spans of grouping, the four-bar grouping span ultimately turns out to be the most significant, at least in terms of the Allegro's periodic growth. Going back to bars 13-16 we find that although the extension of each ancillary chord over the barline in bars 13-16 assures the maintenance of two-bar grouping, the parallelism between bars 13-14 and bars 15-16—the larger periodicity at which it hints—sets the stage for the

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[49]The falling $^{6}_{3}$ chords are embellished by 7-6 suspensions.

[50]The reader may well detect a certain ambivalence in my tonal sketches of the nested cadences in bars 21-22. My ambivalence is due to Handel's elegant abbreviation of Scarlatti's archetypal cadential idiom, IV-[V^{4}_{2}]-I^{6}-IV/II^{6}_{5}-V-I, which in this instance is applied to the mediant. That progression is the cadence that William Rothstein has named the "Schrock cadence," after Karl Schrock, who first observed the frequency with which it occurs in Bach's organ works (Rothstein 1991, 1992, and 1999; several examples of this cadence appear in Bach 1949, p. 256). Scarlatti often repeats it many times in a row in nested fashion, but he does so very clearly (Willner 2000). Handel, in the interest of rhythmic continuity, blurs the beginning and the end of each nested cadence to the point that the entire hierarchy is very hard to reconstruct. The end result is a distinctly Bloomian mutation of Scarlatti's gestural vigor, yet at least in this instance it has little to do with the anxiety of influence.

adoption of four-bar grouping (if not quite a four-bar grouping pace) within the next few measures, namely in bars 17-20. It is in bars 17-20, in the absence of a sharp articulation between the second and the third measures, that the four-bar time span acquires its periodic identity and its hierarchic stability. The fluctuating span that defines the composition's growing periodicity in this way is the *primary periodic span*. This is the span that regulates and maintains the periodic grid as the grid goes through several stages of augmentation. Unlike the principal grouping pace, whose growth is subject to limits and reversals, the primary periodic span grows as the composition proceeds and only rarely reassumes its original state. The procedure Handel calls upon to widen the Allegro's periodic span, though, is the very same grouping modulation he used in the F-minor Allemande to transform the one-bar grouping pace of bars 1-4 into the two-bar grouping pace of bars 5-8.

With the entrance of the multiple voice exchanges that occupy bars 17-20 the modulation to a four-bar periodic span is complete, despite the temporary restoration of the opening theme's one-bar grouping pace at the surface. The fusion of bars 17-18 and bars 19-20 confirms the presence of a local grid that comprises both two-bar and four-bar groups; the subsequent addition of two measures (bars 21 and 22) to the group then sets the stage for the modulation to a six-bar span in the next period and (however indirectly) for the modulation to an eight-bar span in the Allegro's third period.

Looking back at bars 1-12 we can now observe how the friction between the one-bar groups in bars 1-4 and the two-bar groups in bars 5-12 triggers the growth of the primary periodic span. The onset of grouping modulation, as such, and the establishment of long-range periodic grouping both respond to the forced confrontation between Scarlatti's K. 8 and his K. 12. The modulation from two-bar to four-bar grouping begins as early as bar 5, where a periodic grid is suggested by the obvious parallelisms between bars 5-6 and bars 7-8. On a larger scale, the four-bar span is prefigured also by the (rather more tenuous) parallelisms between bars 5-8 and 9-12, which begin to confirm the

emergence of a small periodic hierarchy. In bars 5-12 four-bar grouping is still offset by a continual emphasis on caesuras at the end of each two-bar group. In bars 13-16, by contrast, the caesuras all but disappear and we sense that the modulation from a two-bar to a four-bar span is underway.

II. Underlying durational features

Essential and nonessential expansion. Having already explored the intricate distinction between essential and nonessential expansion in several of my publications, I shall rehearse it only briefly now, without treating it exhaustively.[51] I shall take it up again later, from a somewhat different perspective, in chapter 5, after we've had a chance to meet a larger number and a greater variety of sequential expansions in the course of the intervening chapters. The complexities involved require also that we defer treatment of a closely related issue, the establishment of minimal durational criteria for reading expansion, to chapter 5.

Even a cursory look at the length of the groups surrounding bars 13-16 of Handel's E-minor Allegro discloses that the quadruple sequential expansion in these measures occurs within an informally foursquare periodic framework, however unstable the boundaries of its grid: bars 1-4 = 4 bars; bars 5-12 = 8 bars; and bars 17-22 = 4 + 2 bars. The expansion is necessary if the short, embryonic progression on which it is based is to occupy the entire four bars—if, in other words, it is to satisfy the requirements of the prevailing phrase structure. Borrowing a familiar distinction originally coined by Kirnberger in connection with chordal dissonances, I regard the expansion here as *essential* at levels close to the foreground and as *nonessential* at the deeper levels of the durational middleground. Most sequential expansions remain essential at the foreground

[51]Willner 1996b, 1998, and 1999; see especially Willner 1999, pp. 205-9.

and at the nearby levels of the middleground since they make it possible for a short progression to span a stretch as extensive as the local circumstances may require; almost all become nonessential as one reaches farther and farther into the skeletal middleground and uncovers their original short duration.[52]

At the risk of oversimplifying I should add that sequential expansions remain nonessential at all levels if they enlarge a periodic group—say, a stable and pointedly symmetrical eight-bar phrase—into a less stable, markedly nonperiodic group, such as a ten-bar phrase. Conversely, sequential expansions remain essential at all levels if the piece in question is fundamentally and symmetrically periodic, and if the expansions are evidently necessary for achieving and maintaining its strict periodicity and its symmetry. But outside of several complex movements from among Bach's dance suites and partitas—the Corrente from the G-major Partita for clavier is the perennial exemplar—the occurrence of such expansions before the Classic era is rare, and it is very rare in Handel's instrumental music.

The basic length. One advantage of considering sequential expansions in their starkly reduced, elementally short state resides in the light their reduction throws on the *basic length* of the phrase, the period, or the movement in which they occur—the length that remains when the stretch in question has had its principal voice leading normalized and its ancillary voice leading and expansions reduced out. The basic length is a hidden feature of the composition but one whose importance was recognized as early as the 1780's and 1790's, with the publication of Koch's *Einleitung zur Composition*.[53] It has been described extensively in the literature and has become a fundamental tenet of

[52]Within a larger and less strictly defined hypermetrical grid, Botelho 1993 observes a similar distinction between essential and nonessential expansions.

[53]Koch 1782-93/1983.

current analytical thought.[54] Among the benefits of its investigation, beyond the discovery of a structurally significant durational framework, is the revelation of symmetries and periodicities that reside well below the surface.[55]

The basic length shows some relevance to the study of Baroque phrase rhythm because its distribution at the surface occasionally illuminates the long-range behavior of the basic pace. In the extended allegros of Handel's orchestral music the uneven distribution of a short basic length over the span of extended prolongations can shed light on the relation of the underlying tonal configuration to the long-range durational design. The significance of the basic length, though, varies widely from piece to piece. Just like Handel's hypermeter, the basic length may turn out to be a fundamental link in the chain of durational enlargements that supports the design, or else it may remain an interesting but not crucially important feature of the middleground. If I make little use of it here that is because Handel's basic length, on the whole, only infrequently becomes a major issue in the composition's underground activities.[56]

Thematic enlargements. As soon as one is aware that an enlargement of the opening theme's octave descent is under way in bars 5-12, it becomes apparent that thematic enlargements in the E-minor Allegro will weave a narrative thread that runs through the entire piece. As it happens, they also play a major role in setting up the Allegro's periodic grid right from the outset.

When bars 9 and 10 repeat bars 7 and 8 a step below, on D, they initiate a self-evident enlargement of the Allegro's opening four-bar theme (Example 1.23a): One

[54]Rothstein 1989 and Braunschweig 1997 contain the clearest introductions to the basic length and its significance.

[55]Rothstein 1989 offers the most resourceful and the most useful of these revelations.

[56]I do call upon the basic length to uncover hidden symmetries and periodicities in Bach's keyboard suites in Willner 1996b.

immediately recalls that the opening theme's second measure repeated the first measure a step below, on D, in a similarly demonstrative way. This tonal enlargement, it seems, serves primarily to support the durational enlargement of the principal grouping pace, the primary periodic span, and the underlying obbligato pace from a one-bar to a two-bar entity, but it is distinctive enough to etch an independent thematic profile of its own. The tonal enlargement is then confirmed in bar 11, where the bass descends a step further, to C, in imitation of the opening theme's third measure.

In the second half of bar 12, however, the bass line changes its direction. The bass tone D reappears, and the long-range subtonic it supports takes over and cuts the enlargement off. The enlargement having been confirmed in bar 11, one would have expected it now to continue and to descend further, in close imitation of the opening theme. That these prospects dim so suddenly, without warning, should not however surprise us unduly. The abandonment of a thematic or tonal enlargement in its preliminary stages is by no means rare in Handel's music, nor is it uncommon in the music of other Baroque composers, especially in the solo works of Bach and Couperin. Although the ellipsis it brings about occasionally does indicate that the enlargement has served its purpose, run its course, and need not be completed—that it can now give way to other enlargements—more often than not it announces that the enlargement's continuation has only been postponed. It sends its message out through the registral, textural, and thematic prominence of the ellipsis. In this instance the postponement allows the composition's all-important series of durational expansions and grouping modulations to be carried out systematically until the Allegro's durational framework—its temporal scale—has been expanded sufficiently to support a suitably elaborate tonal enlargement.[57]

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[57]Bach's instrumental music, especially the suites and partitas for solo violin and violoncello, displays many similar ellipses, as does C.P.E. Bach's keyboard music; see Petty 1995a, p. 264. A particularly dramatic example, rather suspiciously similar to our Handel ellipsis, governs the entirety of the Gigue from the eighth Ordre of Couperin's

In bar 41 of the Allegro, at the beginning of the third and last period, Handel picks up where he left off (Example 1.23b). This is the spot at which the Allegro's periodicity has matured enough to sustain tonal enlargement on a truly global scale. With eight-bar periodic spans at hand, Handel now resumes the enlargement of his octave descent with a series of repeated D's and C's in the highly conspicuous three-line octave: It is apparent that Handel expects the progression to refresh our memories of the D's and the C's in bars 5-10.

Tentative enlargements. Our awareness of the potential for incompletely worked enlargements will inevitably point to other progressions in the E-minor Allegro whose tentative initial realization holds some promise for later elaboration. The solo violin's ascent from a^1 to d^2 in bars 12-16, for instance, seems to be a preliminary and inconclusive enlargement of the Allegro's rising upbeat (compare the square brackets in Examples 1.24a and 1.24b). Handel, as he sometimes does, takes advantage here of favorable contrapuntal and thematic circumstances to improvise an informal motivic enlargement which at the time of its occurrence remains subservient to other, more pressing issues. Although it is more suggestive than emphatic—for the time being it remains nonbinding structurally—the enlargement nonetheless succeeds in setting off a chain of motivic expansions that comes into its own later. By way of immediate reaction, the violin's extended rising fourth is balanced by the tutti's many descending apparent fourths in bars 17-20. These fourths are incidental too, the happy by-products of the local voice leading (namely the nested multiple voice exchanges; see the curly brackets in Example 1.24).[58] And they too set off a chain of motivic expansions that comes into its

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Pièces de clavecin.

[58]In *Free Composition*, Schenker makes it abundantly clear that descending fourths which come about as a result of multiple voice exchanges amount only to paired collections of steps, not to genuine linear progressions. See Schenker 1935/1979/2001, Figure 43.

own later. As they enlarge, the tutti's falling fourths continue to follow the solo violin's ascending fourth; and the two figures' paired enlargement goes on to span the entire Allegro.

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Looking back at the first reprise from the F-minor Allemande and at the opening period of the E-minor Allegro, we finally find ourselves in a position to compare their durational expansions. We can now see quite clearly how these differ. The two analyses confirm our preliminary observation: The most significant enlargements in the Allemande, a solo work, indeed derive mainly from the growing fluctuations of the basic pace, while the most significant enlargements in the orchestral Allegro derive mainly from the expansion of the principal grouping pace and the enlargement of the primary periodic span. The analyses also suggest that the purpose behind the enlargements is the same: They play a comparable role in procuring and in organizing the durational space and the tonal space in which each composition unfolds, and they participate equally in setting the stage for later events whose narrative trajectory remains to be defined. It is interesting to observe that right along with their improvisatory flavor the enlargements also assert a generic, procedural quality: They often bring in new linear progressions and new chordal elaborations in a rather systematic way. They do so out of necessity, out of an express need to lengthen the composition by providing additional material for its developmental spinning. Handel's artistry, his originality, resides precisely in his transformation of necessity into invention as he integrates the enlargements into the tonal core of the composition.

Part 3. Introduction to triple meter

The fundamental differences between the various types of duple and triple meter, especially in what concerns expansion, grouping and pace, will emerge during the

discussion of duple meter and triple meter in chapters 2 and 3. I should nonetheless like to present brief examples from the opening measures of two courantes at this point in order to draw a more comprehensive general picture of Handelian and Baroque pacing before delving into the specifics of pacing that mark each duple and triple meter. This early introduction will make it easier for the reader to adapt the observations I offer in this chapter and in the next to the observations on triple meters I offer in chapter 3.

The two courantes approach the sequential idioms of *Fortspinnung* in very different ways—the first through expansion, the second through compression—and they disclose empirically why the duple and triple meters pace themselves so differently. One should keep in mind that almost all of Handel's courantes are in fact Italian correntes, but since Handel himself, in the 1720 collection of suites published under his supervision, referred to them as courantes, and since Handel scholars have traditionally followed his lead, I shall do so here too.

I. Handel, Suite in G major (1703c./1733), Courante: The opening theme

The opening twelve-bar theme of the Courante from Handel's G-major Suite—that youthful suite composed around 1703, despite its mature 1733 publication date—shows the familiar outlines of the three-part ritornello scheme in its solo instrumental applications. The *Vordersatz* occupies bars 1-4, the *Fortspinnung* bars 5-8, and the *Epilog* bars 9-12. Example 1.25a quotes the theme, and Example 1.25b presents a tonal sketch. Example 1.26 offers two pace reductions.[59]

[59]My tonal sketch differs considerably from the sketches in Salzer 1952/1962, Guck 1978, and Keiler 1978, and there are few points of contact between my observations and theirs.

Bars 1-4. The melodic contour of bars 1-4 and its supporting bass progression draw a tonal pattern very similar to that of the "Ev'ry Valley" incipit I discussed earlier. (Example 1.12). Evidently, this characteristic progression appears just as frequently in Handel's triple meters as it does in his duple meters. After an initial flourish centering on $\hat{5}$ in bar 1, the upper voice falls to $\hat{1}$ in bar 2; reversing itself, it then rises to $\hat{2}$ and to $\hat{3}$ in bars 3 and 4, all at the rate of one tone a measure. The bass descends from I in bar 1 to VI in bar 2, then on to V in bar 3 and to I in bar 4. Quite characteristically, V is displaced to the third beat by the intermediate II^6_5 at the downbeat of bar 3. The question often arises in these rapidly moving thematic and cadential circumstances whether the structural harmony in the penultimate measure is II^6_5 at the downbeat or V later in the measure. Because Handel's theme requires cadential closure, and because a strongly dissonant harmonization of so prominent a passing tone as the2 in bar 3 is uncharacteristic of Handel's instrumental style in general—it is more at home in the contrapuntal environment of a plagally inflected Bach chorale—I opt for reading the displaced V as the structural harmony, and I consequently normalize V back to the downbeat in the later, more abstract stages of pace reduction.

With V normalized back to the downbeat of bar 3, the basic pace of these measures would appear to follow a one-to-the-bar norm at a deeper level; see the pace reduction in Example 1.26a. But how is one to account durationally for the consistent and effortless addition of substantial harmonic or contrapuntal activity to each measure—for the passing F# in the bass on the third beat of bar 1, for the tonic chord in first inversion on the third beat of bar 2, and for the aforementioned II^6_5 at the turn of bar 3? These additions embody, inescapably, a norm of uneven pacing that is unique to triple meter. The frequent, even systematic, addition of a second chord or harmony to the essential voice leading in most measures activates the beat on which the chord falls in a fundamental, metrically idiomatic way. The activation of the beat becomes a major durational feature of the pacing structure even though the added chord remains

subservient to the principal chord: Whether the added chord displaces the principal chord on to a weaker beat or not, it increases the accentual density of the entire measure. The tonal weight of the addition protects the beat on which it falls from the analyst's scissors: It renders the addition less prone to displacement or effacement during reduction. The result is an uneven two-to-the-bar basic pace which alternates with the slower, even, and ultimately more fundamental one-to-the-bar basic pace. One might call the on-again, off-again two-to-the-bar pace a *composite basic pace* if one so wants, and this term can sometimes prove very useful. In practice, though, it is not usually necessary to invoke any special terminology to describe the phenomenon since the metrics at the surface alternate freely between an even one-to-the-bar pace and an uneven two-to-the-bar pace in a very obvious way. Simple reference to an alternation of even and uneven pacing is generally sufficient to clarify what is meant.

When the basic pace moves unevenly at a two-to-the-bar pace, the added chordally supported basic step often falls on the third beat. It may also fall on the second beat, however, especially in sarabandes and in similarly stylized genres. Minor complications arise when the entire metrical structure is shifted by one beat to the right as a result of afterbeat displacement; I shall deal with these highly idiomatic configurations in chapter 3, where I shall also discuss the rare occurrence of a three-to-the-bar basic pace in Handel's instrumental works.

Bars 5-8. The sequence of falling fifths occupies the *Fortspinnung* of the solo ritornello cycle almost as frequently as it occupies the *Fortspinnung* of orchestral ritornellos. It appears here in complete triadic form, with root-position chords. The sequence presents two alternating and competing stepwise progressions in parallel tenths: the first links bar 5 with bar 7, and the second links bar 6 with bar 8 (see again Example 1.26a). Rather unusually, the tenths continue far into the more dissonant *Epilog,* up to bar 11. Because they operate at different levels—one set of tenths is ancillary to the Courante's voice

leading—we hear the basic pace expanding to a two-bar pace. This, in fact, is a particularly good example of broad sequential expansion in triple meter.

An attempt to decide which of the two sets of tenths is primary and which is secondary can be difficult in such cases but the choice here is fairly clear-cut. Undeniably, a good deal of local emphasis accrues to the chords in bars 6 and 8 on account of the ascending leaps of a fourth by which they are introduced in the bass. But the tenths in bars 5 and 7 ultimately win out because they engage the help of the design: They acquire their long-range emphasis with the assistance of the overarching melodic link between the tones e^2 and d^2 in bars 5 and 7 (see the unfolding signs in Example 1.25a). This melodic link is highly exposed thanks to the textural weight of the link's supporting bass octaves, over C and B, and thanks to the stepwise continuation of the link by the tenths during the *Epilog*, to c^2 over A and to b^1 over G in bars 9 and 11. The emphasis that the left-hand octaves throw on bars 6 and 8 does however suggest a brief contradiction of the Courante's paired, strong and weak odd-numbered measures by several paired, strong and weak even-numbered measures—the kind of contradiction Frank Samarotto has described as *shadow meter.*[60]

Each chord in the even-numbered measures throughout bars 5-11 represents the upper fifth of the chord that *follows* in the next odd-numbered measure, but it expands the time-span of the chord that *precedes* it in the previous odd-numbered measure. This is a seemingly complicated but, in practice, a very straightforward and also a very common way of realizing sequential expansion. The expansion goes through the motions of traversing the familiar chain of descending fifths (or, as the case may be, one of its many contrapuntal variants). As it unfolds, the expansion distributes the metrical and the textural emphasis which falls on each pair of chords across the two sides of the barline,

[60]Samarotto 1999a, p. 235. For more on Handel's shadow meter, see my comments on the E-minor Fugue in chapter 2.

shoving the ancillary chord in a potentially confusing direction. The composer's tacit assumption is that the ear is familiar enough with the idiom to filter and to comprehend a good deal of inventive chordal shuffling without becoming disoriented.

It is under these seemingly convoluted circumstances that we hear the sequential expansion continue as far as bar 11. It extends that far despite the dense and dissonant contrapuntal overlay that signals the beginning of the *Epilog* in bar 9, and despite the suggestion of a cadential hemiola in bars 10 and 11. Although the basic pace often resumes its original speed or accelerates at the beginning of an *Epilog*, it doesn't always do so: The present *Epilog* offers a remarkable but not entirely exceptional example. The underlying parallel tenths sustain both the hectic improvisatory flourish of the outer voices in bar 9 and the spiral fall of the bass in bar 10. The basic pace resumes, along with a brief cadential acceleration, only at the approach to the cadence in bar 11 (Example 1.26b). At that point, the bass line's underlying quarter note G and its half note, D, on the first and second beats, enlist the help of the eighth-note C and the aforementioned hemiola, and together they vent the tension generated by the tightly packed events of the angular twelve-bar theme.

Grouping paces. The articulation of grouping paces in the twelve-bar theme resembles the threefold articulation of grouping in the first reprise of the F-minor Allemande. Despite the ritornello's evidently periodic design, a one-bar grouping pace prevails: A two-bar grouping pace emerges only with the entrance of the alternating sets of parallel tenths, namely during the *Fortspinnung* in bars 5-8. Four-bar grouping acquires a good deal of prominence later on, when it assumes the role of the Courante's primary periodic span, but it is not yet established as a grouping pace at this early stage of the music's durational growth.

The absence of two-bar grouping from much of the ritornello theme is an interesting quirk, in light of the theme's periodicity. Because the potentially

hypermetrical ascent from g^1 to a^1 and b^1 in bars 1-4 begins, in the style of shadow meter, in bar 2, two-bar grouping hardly suggests itself at the turn of bar 3. And because the continuous motion in eighths by the outer voices in bars 9-11 is articulated by the growing implication of a hemiola in bars 10-11, two-bar grouping does not suggest itself at the turn of bar 11 either (notwithstanding the two-bar division suggested by the underlying parallel tenths). Quirky, too—although this is not immediately obvious—is the theme's emphasis on sequential expansion in bars 5-8 and on a residual pace expansion in bars 9-11: Pieces in triple meter are usually more reticent about incorporating such wide expansion at the outset than Handel's youthful and ambitious theme.[61]

II. Handel, Suite in E (1720), Courante, Opening Theme

The opening theme of the Courante from Handel's E-major Keyboard Suite, from the 1720 collection, also shows the outlines of a three-part ritornello scheme, if on a smaller and more compact scale. The theme is reproduced in Example 1.27a; basic-pace and figural-pace reductions follow in Examples 1.27b and 1.27c. Only eight bars long, the theme comprises a four-bar *Vordersatz*, an overlapping three-bar *Fortspinnung*, and a two-bar *Epilog* that closes with a deceptive cadence on the submediant. The deceptive conclusion overlaps with the beginning of the Courante's second phrase in bar 8. On account of the elisions that the two overlaps bring about both the *Vordersatz* and the *Epilog* lose one measure each: The *Vordersatz* becomes, in effect, a three-bar subphrase, and the *Epilog*, similarly, becomes a one-bar segment.[62] The deceptive cadence on the

[61]Morgan 1998 quite accurately points out that some basic duple groups are now and then left out of even the most obviously periodic structures, especially early on.

[62]I explain my use of traditional phraseology in chapter 2.

downbeat of bar 8 derives from an analogous deceptive cadence in the Allemande (bar 7), of which the Courante is a humorous recomposition.[63]

Uneven pacing and uneven expansion. The pace reductions in Examples 1.27b and 1.27c show how the basic pace of the Courante moves forward on the first and on the third beat of every measure throughout the first two measures of the *Vordersatz*, in the style of *notes inégales* writ large. After accelerating to movement in eighths in bar 3, the basic pace expands for the three-bar *Fortspinnung* in bars 4-6, where it moves at a slower, even rate of one to the bar. Its essential motion in bars 4-6 is defined by octaves between the outer voices, these are broken up by the upper voice's 9-8 suspensions.[64]

It is the idiomatically sequential manner in which Handel rhythmicizes the aversion of his octaves at the surface that concerns us here. The octaves are obscured by the 9-8 suspensions, which resolve on the second beat of bars 4, 5, and 6. They are masked still further by a chain of falling fifths whose ancillary components are represented by first-inversion chords on the third beats of the same measures. Now under similar circumstances in duple meter the first-inversion chords typically expand the basic pace by occupying a time span equal at least to one step of the basic pace. But under the

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[63]The very distinctive incipit of Handel's Courante (bar 1-2[a]) is identical to the incipit of "L'Artiste" from the nineteenth Ordre of Couperin's Pièces de clavecin, published in 1722. Given the proximity in publication dates (Handel's is 1720) and the probable earlier availability of both pieces in manuscript copy form, it is too hazardous to guess who borrowed from whom. Couperin's later date, the wink that peers through his title, and the strain of humor that graces the redundant repetition of his incipit all conspire to suggest a parody of Handel's ill-disguised borrowings from Couperin. But since the Allemande of Handel's Suite draws heavily on Couperin's fifth Ordre (recall my observations on his borrowing in the Introduction), the lines of thematic priority and succession remain in this instance all but impossible to retrace. In the words of Terence Best (private communication), "We shall never know!"

[64]Though appropriately hidden, the octaves are especially significant because they allude to analogously broken octaves in the Allemande, bars 4-5.

compositely paced circumstances unique to triple meter these ancillary chords hide within the measure, as it were: Their movement is contained by the underlying one-to-the-bar movement of the basic pace.

The nonexpanding treatment of sequences is a mainstay of triple meter: It is much more common than the kind of sequential expansion we found in bars 5-11 of the G-major Courante. Adding its voice to unevenly composite pacing, it pushes the norms of triple meter even further away from those of duple meter.

The one-bar *Epilog* in bar 7 allows the basic pace to resume its uneven two-to-the-bar movement, but it places the harmonic activity on the first and second beats, rather than on the first and third beats of the measure. Coupled with the movement of the bass on the third beat of bar 6, the intensified activity at the turn of bar 7 conjures up an effect of pace acceleration. Across bars 6 and 7 the acceleration brings about a cadential hemiola that (like many cadential hemiolas) takes place only in the bass, not in any of the upper voices (see again Example 1.27b).

Incremental grouping. The principal grouping pace throughout the ritornello theme is clearly a one-bar pace. It is established by the Courante's thematic incipit, which only slightly exceeds the length of the first measure; the incipit contains the Courante's upbeat, and it closes at the beginning of bar 2. The one-bar grouping pace is then confirmed by the incipit's imitative repetition at the distance of one measure in the bass, and it is subsequently maintained by the one-measure segments of the *Fortspinnung* and by the one-measure length of the *Epilog*.

Even though a larger and more varied grouping articulation does not have sufficient time to crystallize, the sense of a one-bar group (bar 1) that is followed, in incremental fashion, by a two-bar group (bars 2-3) and then by a three-bar group (bars 4-6) nonetheless emerges quite forcefully. Such *incremental grouping*, at various levels—and, conversely, grouping in which the length of each segment decreases in the

same way—is by no means uncommon in Handel's instrumental works, and in the works of other Baroque composers.[65] Though small in scale, the Courante's blunt incremental growth represents in principle the same kind of gradual growth in grouping that in more hidden ways marks much longer stretches and much larger pieces, such as the first period of the Allegro from the E-minor Concerto Grosso as well as the Allegro in its entirety.[66]

[65]See Example 3.16, in chapter 3, for a dramatic illustration from Rameau's "L'égyptienne."

[66]In longer pieces the length of the groups, as such, may not change appreciably, but the internal proportions between their phrases and subphrases may grow with such regularity that an effect of incremental growth will obtain all the same (chapter 5).