

Kirnberger's 4/4 Meters and Handel's Basic Paces:  
The Growth of Temporal Narrativity Across Four Decades of Composition

Channan Willner

I. Introduction

*In Die Kunst des reinen Satzes—The Art of Strict Musical Composition*

Johann Philipp Kirnberger differentiates between three types of 4/4 time: the large, the small, and the compound. The large 4/4 is a broad fugal meter that supports learned pieces in the *stile antico* (Example 1a); the small or simple 4/4 is a faster and more generic general-purpose meter that supports the most common types of *tempo giusto* movements (Example 1b); and the compound 4/4 is a densely packed contrapuntal meter that figures prominently in such learned genres as allemandes, and in dramatically charged orchestral allegros (Example 1c).<sup>1</sup> Although Kirnberger allows for only very few deviations from the norms of metrical notation—an occasional beginning in the middle of the measure, and an occasional conclusion in the middle of the measure—each of his three meters lends itself quite readily to several very specific types of pacing and equally specific types of metrical displacement. Each also allows, with similar ease, for the exchange of meters—a temporary modulation from one type of 4/4 to

---

<sup>1</sup> Kirnberger 1776-79/82, pp. 390-403. See also Maurer-Zenck 2001 and Schwindt-Gross 1989.

another—which takes place within the confines of a single movement and within the confines of highly stylized durational situations, under well established circumstances of pacing.<sup>2</sup> The annotations under each excerpt in Example 1 indicate the *basic pace* characteristic of the 4/4 meter in question and also the *metrical texture* of the excerpt reproduced in the Example. The basic pace, of which more later, is the evenly moving counterpoint between the outer voices that emerges after a simple rhythmic reduction has been performed;<sup>3</sup> the metrical texture is the aggregate of all underlying paces, including the slower and faster ancillary paces, that comes to light during such a reduction.<sup>4</sup> All these paces, and the metrical textures they form, are likely to change when a modulation from one type of 4/4 to another takes place.

We must bear in mind that this rather strict-sounding description applies largely to the high style of Bach, Handel, and Scarlatti; the middle style of most mainstream Baroque composers permits much greater flexibility in both metrical

---

<sup>2</sup> The compound 4/4 splits during the later decades of the eighteenth century into one meter that contains a single measure of 4/4 time and another that in effect comprises two measures of 2/4 time (Grave 1985 and Burkhart 1994). Analytically, it is best however to regard Handel's compound 4/4 as an amalgam of both these meters (Strohm 1987). I thank Reinhard Strohm for clarifying this issue in a private communication.

Extended discussions of the changes the compound 4/4 underwent during the eighteenth century are found in Abravaya 1999 and 2006, and in Rothstein 2005, with further references. I thank William Rothstein for making an early copy of his paper available to me.

<sup>3</sup> For a detailed account of the basic pace see Willner 1998 and 1999, and my dissertation.

<sup>4</sup> Ido Abravaya (1999 and 2004) describes a similar phenomenon.

modulation and pacing.<sup>5</sup> And the middle style also does not always require adherence to those norms of thematic coherence that come under the rubric of organicism in the analysis of the music of the high style. For its part, the high style promotes a good deal of temporal and metrical dissonance, which is occasioned by idiomatic metrical displacements and by the co-habitation of different duple meters under the roof of one movement. Contrary, perhaps, to our expectations, the high style does not *necessarily* require that the tensions of such dissonance be completely resolved. After all, Baroque instrumental pieces composed during the earliest decades of the eighteenth century tend to realize affects—states of mind—in somewhat the same way vocal music does. And such states of mind cannot always be conceived or depicted in the holistic way that marks the canonic masterworks of the repertoire.

Only very gradually, as the century wears on—and as instrumental music gradually comes into its own—does the narrative continuity of the high style's thematicism and temporality begin to assume a distinct, coherent, and independent shape. As the composition's large-scale, "architectonic" rhetoric directs its thematic trajectories, the need arises to cultivate a corresponding temporal narrative, and to resolve the temporal tension and durational dissonance of extended metrical displacement and metrical co-habitation.

\* \* \*

---

<sup>5</sup> See Willner 2006 for a more complete account of the metrical differences between the high, middle, and low styles.

*The role of displacement.* Displacements in the different types of 4/4 time span all five decades of Handel's compositional career, and—compared side by side—they project the ever-growing dramatic force of Handel's temporal narratives with great clarity. They also point to the limits of the durational strictness to which Handel was willing to adhere—and to the limits of the temporal flexibility he would accommodate—within the rigorous parameters of the high style. More generally, they illustrate the close links between late Baroque meter and counterpoint on the one hand and late Baroque stylistic norms, constraints, and license on the other. The constraints play a major role in organizing the temporality of the high Baroque. Awareness of their presence—especially of the high style's implicit preference for even contrapuntal pacing—is essential for a proper understanding of Baroque phrase rhythm in general, and for the rhetoric of Handelian phrase rhythm in particular.<sup>6</sup> Balanced by license, they help us understand, among other things, the subtle shifts in Handel's own durational flexibility that took place during Handel's long creative career.

Two especially common departures from metrical norms concern us here: metrical displacement as such, and the mixture of different duple meters within the larger framework of an underlying and generally even hierarchy of paces. Although the study of metrical displacement vis-à-vis Kirnberger's observations on the norms of metrical behavior has been put to good use by many theorists

---

<sup>6</sup> In one way or another these requirements all revolve around the need for even pacing. What they are will quickly become evident as we go along. For a detailed account, see Willner 1998 and 1999.

during the past few years,<sup>7</sup> it is necessary that we re-examine it from the new vantage point of even contrapuntal pacing. Such re-examination will suggest that the significance of departures from the notated meter resides not in any irregularity as such but rather in the way these departures are built into the norms of Kirnberger's three meters. The displacements mark, characterize, and identify each of the three 4/4 meters: They point to the meter as surely as do the meter's unmarked norms.<sup>8</sup> Since the metrical departures I shall be addressing are particularly common in concertos and in fugues, I shall confine my remarks to these two genres; I am leaving for another occasion the irregular pacing of giges, the unnotated mixture of duple meter and triple meter which one encounters now and then, and the metrical peculiarities of the middle style and the low style. All of these very complicated phenomena require separate studies.<sup>9</sup>

*Displacement in the large (fugal) 4/4, and metrical modulation in the compound 4/4.* By way of a direct introduction to the issues involved, I begin with the Fugue (the second movement, marked Allegro), from Handel's G minor Concerto Grosso, Op. 6, No. 6, the Fugue whose opening measures were reproduced in Example 1a. Example 2a, from a central set of fugal entrances, shows the kind of

---

<sup>7</sup> Henneberg 1974, Grave 1985, Schwindt-Gross 1989, Burkhart 1994, and Willner 1999, among others.

<sup>8</sup> On the application of marked and unmarked stylistic traces as well as the application of markedness theory to the analysis of Handel's music see Willner 1996d. The foundational study of markedness in music remains Hatten 1994.

<sup>9</sup> I discuss the pacing of giges and the unnotated mixture of meters in my dissertation, and the durational analysis of the middle and low styles in Willner 2006. For pacing in the triple meters see Willner 1998, 1999, and my dissertation.

displacement typical of the large or, as I call it, the fugal 4/4. The subject of the Fugue, quoted in Example 1a, moves to the middle of the measure, and the accentual emphasis that originally fell on its opening tone now accrues instead to its closing group of tones (even though, as often happens in fugues, there is no one single tone that designates the subject's "official" conclusion).

Example 2b shows what happens when the solo violin of the concerto movement quoted in Example 1c enters: The quarter-note basic pace, which identifies the compound 4/4, slows to a broad, half-note movement characteristic of the small 4/4, and the metrical texture adjusts accordingly (see the reduction given in the Example).

With these two modest observations at hand, we can now delve into the greater complexities of displacement and modulation.

## II. Tentative displacement and conflict in the simple and compound 4/4

A good example with which to embark on a more detailed investigation of these issues is the second movement, the Allegro, from Handel's youthful Concerto in G minor for Flute or Oboe, which dates from the early 1700's and only recently has had its authenticity verified; see Example 3.<sup>10</sup> The solo's

---

<sup>10</sup> I refer to the Concerto as "a good example" with good reason. There have been several attempts to attribute the Concerto to a composer other than Handel (for instance Marx 1987 and 1990) on account of its supposedly awkward voice leading. But Poppe 1993 presents solid archival evidence in support of authentic Handelian authorship. (It can be rather dangerous to assume that unusual voice leading is sufficient to remove an early work—or indeed any work—from the Handelian canon.) Best 2002 offers the most succinct account of the Concerto's odd musicological history. Best's edition (2002) refers to the piece as a "Concerto in G minor for Flute (Oboe) and Orchestra," as do many American library catalogues.

opening theme, a proverbially plaintive oboe melody if one there ever was, begins on the downbeat and proceeds at an essential contrapuntal pace of half notes; it is enlivened at the surface by the addition of quarter-note 7-6 suspensions (see the rhythmic reduction in Example 3b). The underlying, half-note movement of the outer voices (that is, of the solo flute or oboe and the bassi) is a typical example of the basic pace. A half-note basic pace is the fundamental marker of the simple 4/4.

The response of the tutti is dramatically different. The ensemble enters on the fourth beat of bar 4 with a quarter-note basic pace that identifies the compound 4/4; see again the rhythmic reduction in Example 3b. The ensemble's displacement by a quarter note to the left may seem a bit unusual, but that is so only because similar quarter-note displacement to the right is more common: Either displacement would identify the compound 4/4 right away. The purpose of the displacement here is to shift the metrical emphasis from the opening tone of the orchestra's response to its closing tone, which enters in the middle of bar 8.<sup>11</sup>

---

<sup>11</sup> The archetypal Handelian example of quarter-note displacement to the right in the compound 4/4 is the Harmonious Blacksmith theme from Handel's E major keyboard Suite; the archetypal example of the less common displacement by a quarter note to the left is the Allemande from Bach's Partita in A minor for Clavier. In Bach's Allemande only the upper voice is displaced: The bass conforms to the notated meter, and the two voices remain out of phase metrically for long stretches of the piece, joining forces only at cadences. Such out-of-phase behavior is by no means unusual in allemandes, but it often occurs after the beginning of the piece and lasts only for the duration of a segment or a subphrase, or at most a phrase.

For detailed analyses of the Harmonious Blacksmith theme see Abravaya 1999, pp. 113-114, Examples VI-4 and VI-25, Abravaya 2004, pp. 26-27, Example 1.2, Abravaya 2006, pp. 89-90, Examples 39-40, and my dissertation, chapter 2, Example 2.25.

Let us take a look at what Kirnberger has to say about the simple 4/4 and the compound 4/4. According to Kirnberger, the simple 4/4 (which he also calls the “small 4/4,” the “simple common 4/4,” and the “common even meter”)

has a more lively tempo and a far lighter execution [than the large 4/4, discussed above]. It tolerates all note values up to sixteenth notes and is used very often in all styles.<sup>12</sup>

Kirnberger's comments on the compound 4/4, if less revealing, nonetheless remain instructive. He notes chiefly that each measure of the compound 4/4 comprises two bars of 2/4 time, and that in the compound 4/4 “the cadences fall naturally on the second part of the measure and last only half a measure, which would not be possible in 4/4 meter.”<sup>13</sup> There are, to be sure, many measures in the compound 4/4 that don't readily divide into two,<sup>14</sup> and many cadences in the compound 4/4 that close away from the third beat, but this does not diminish the validity of Kirnberger's observations.

Returning to Handel's G minor Concerto, we can observe readily how the simple and the compound 4/4 interact as the Allegro evolves. In most concerto allegro movements set in the high style, the orchestra enters in either the simple or the compound 4/4, and the soloist—playing the quintessential role of “the other”—asserts the alternative mode of 4/4 time, the one the orchestra chooses to forego. What is unusual here, at least from our later, holistic perspective, is the

---

<sup>12</sup> Kirnberger 1776-79/1982, p. 391.

<sup>13</sup> *Ibid.*, p. 398. See also Maurer-Zenck 2001 and Rothstein 2005.

<sup>14</sup> I thank David Schulenberg (private communication) for this caveat.



ongoing mixture of the two meters as solo and tutti take turns in working out the Allegro's passagework. Equally unusual is the concomitant absence of any development or growth in the relationship between the two forces. Solo and tutti continually exchange their identifying paces, adopting now the solo's simple 4/4 and the notated meter, now the tutti's compound 4/4 and its identifying displacement. See Example 4, which presents a temporal cross-section of this stationary relationship as it prevails throughout the entire movement.

During a later ritornello (bars 17<sup>b</sup>-21<sup>a</sup>), reproduced in Example 4a, the solo flute (oboe) introduces the kind of wholesale half-note displacement that is so common in the simple 4/4. Just like the quarter-note displacement that marks the compound 4/4, this displacement shifts the accentual weight of the solo's theme to the closing tone of the theme. The tutti, for their part, follow the solo closely and adapt to the solo's half-note basic pace by expanding their quarter-note basic pace sequentially (see the reduction in Example 4a), but they insist on maintaining the notated meter. Note the first violins' ornamental sixteenths, based on figural eighths, which enter on the downbeat of bar 18, and the second violins' synchronized accompaniments. Contradicting these features is the first violins' eighth-note figural pace, which builds up a thick metrical texture suggestive of the compound 4/4. (The rhythmic setting of this later ritornello is prepared by the episodic mock ritornellos in bars 12<sup>b</sup>-15<sup>a</sup> (upper strings) and, overlapping, in bars 14-15<sup>a</sup> (flute or oboe).)

During the solo episode that follows—bars 24-32, Example 4b—the flute (oboe) picks up the first violins' passagework from Example 4a (bars 18-19) but

displaces it, in the manner I just described, by a half note to the left (bars 26<sup>b</sup>-29<sup>a</sup>). The tutti accompany deferentially, fitting their sequence of falling fifths into the texture of the simple 4/4 but emphasizing their quarter notes and evoking yet again the compound 4/4.

And in the course of a still later solo—bars 37b-40a, Example 4c—solo and tutti, instead of (say) exchanging roles, simply keep the status quo, portraying the two meters simultaneously, if under a different sequential arrangement. Finally, at the very end of the movement—bars 44a-47, Example 4d—the tutti go back to the quarter-note displacement and to the unambiguously compound 4/4 which they introduced at the outset. And that is how the movement ends. Because there has been no appreciable change in the relations between solo and tutti, the closing citation of the tutti's original displacement does not realize the effect of coming full circle it might otherwise have suggested. Instead, it brings the movement to a close on an unusually confrontational tone. The only genuine sign of closure is the sudden appearance of a new, one-bar *obbligato pace*, set up by the implicitly sustained bass D, which is stated emphatically at the middle of bars 44, 45, and 46 (see the reduction in Example 4d).<sup>15</sup>

\*   \*   \*

Handel's Allegro, in keeping with its early date of composition, presents a fairly rare example of a metrical conflict which not only remains unresolved but also does not try to go anywhere. At least durationally, it is a narrative that lacks the quintessentially developmental turns of the beginning—middle—end

---

<sup>15</sup> I discuss figural and obbligato paces in detail in my dissertation, chapter 1.

paradigm.<sup>16</sup> One might even say that it is a temporal narrative without a plot. But its conclusion, however uncertain, embodies a basic feature of early Baroque instrumental temporality: a restless dialectic that mimics the unstable and perpetually shifting affects and states of mind portrayed in operatic arias. Later Baroque instrumental music, from the 1720s and 1730s, displays a more distinctly developmental *qua* instrumental imprint and (again from our latter-day, integrative point of view) shows a more pronounced emphasis on the logic and continuity of its durational rhetoric. Its articulate plots include narrative phases of intensification, climax, and dénouement.

### III. Narrative displacement and conflict in the simple and compound 4/4

The Andante from Handel's F-major Organ Concerto, Op. 4, No. 4, offers a particularly good example of a metrically induced instrumental narrative that is allowed to run its full course. The Concerto dates from the mid-1730s—Handel's most mature and eclectic period—and its Andante contains one of the longest and most sustained dialogic exchanges between solo and tutti in the Handelian repertoire. Indeed, it is one of the most elaborate slow movements to be found among Handel's instrumental works altogether.<sup>17</sup> The opening ritornello, which

---

<sup>16</sup> This paradigm forms the basis of Agawu 1991. For its application to other types of narrative see Armes 1994, with further references.

<sup>17</sup> Equally important, its publication was authorized and supervised by Handel (unlike the tacky publication of, say, the *Concerti Grossi*, Op. 3, and the surreptitious publication of Handel's early keyboard music as the second set of suites during the years just preceding the publication of the Op. 4 organ concertos). In such a carefully monitored publication one can reasonably expect the composer to assert the highest levels of artifice, style, and coherence.

sets the temporal tone for the entire movement, is stated first by the organ (bars 1-5<sup>a</sup>), then by the orchestra (bars 5-9<sup>a</sup>); see the first bracket under Example 5a. The ritornello theme establishes a basic pace of half notes and suggests the simple 4/4 in no uncertain terms.<sup>18</sup> The organ, which begins its developmental discourse on the second beat of bar 9, promptly establishes a contrasting basic pace of quarter notes and suggests the compound 4/4 thereby; see the second bracket under Example 5a.

From this point on, solo and tutti go their separate ways, each adhering to its assigned meter, pace, metrical texture, and accentual scheme. The strings, playing *pianissimo* and without the assistance of oboes, bassoons, or harpsichord continuo, maintain the simple 4/4 and sustain both the notated meter and the half-note basic pace. The organ, on the other hand, maintains the compound 4/4 and sustains the displacement of one quarter note to the right so typical of the compound 4/4; compare Example 5a with the rhythmic reductions in Example 5b, which display the changes in the behavior of all the paces of the metrical texture (including the slow *obbligato pace* and the fast *figural pace*, to which I shall return in the closing pages of this essay). The dialogue between organ and strings

---

<sup>18</sup> Because the theme is based on a sequence of ascending fifths, one might think that it embodies the sequential expansion of a model moving in quarter notes, and that the entire movement is set in the compound 4/4. But in the absence of an earlier metrical setting to define the model precisely, it is best to wait and see (or, rather, wait and hear) how the movement evolves as a whole. And its evolution in this instance certainly confirms the simple 4/4 as the “official” meter of the Andante.

The same principle applies to the metrical interpretation of all Baroque compositions that begin with a sequence (for instance, the Bourrée from Handel's Fireworks music): The durational design of the piece defines the pace of the theme—not the other way around.

soon becomes confrontational: The organ occupies center stage, but when it must join forces with the tutti to tonicize an intermediate harmony, it is almost forced to capitulate. Example 6 shows how the tonicization of the mediant takes place through the orchestra's other-worldly textures but on the organ's metrical terms—that is, in the compound 4/4 (bars 18-22<sup>a</sup>). The two parties' tense exchanges and uneasy alliance during each tonicization (see the annotations in Examples 6b and 6c) conjures up nothing less than a protracted shotgun wedding.

Tensions inevitably mount, and matters come to a head when the organ finally attempts to take the discourse over (see the annotations in Example 7a). The soloist makes a last-ditch effort to superimpose its quarter-note basic pace and its metrical texture over the tutti's half-note pace (see the pace reductions in Example 7b). Then, in the course of a brief but intense cadenza (Example 8a), the solo organ part presents its case in a floridly developmental way, replete with rising octave leaps and rushing scalewise responses, without the overhanging threat of orchestral intervention. But the cadenza's temporality, it turns out, does not side with either solo or tutti. The cadenza simply provides the solo organ with the time and the space it needs to expend its pent-up energy and run out of steam. By default, the cadenza ultimately paves the way for an orderly and permanent re-establishment of the tutti's steady half-note pace and the tutti's notated meter. Their conflict thus resolved, solo and tutti now join forces to conclude the movement by restating the opening ritornello *forte*, instead of *pianissimo* (Example 8b). It is this new partnership that allows the oboes and the bassoons to

enter and participate in the metrical narrative— or what remains of it—for the very first time.

Even without pressing the issue very intensely in the direction of rhetorical hermeneutics, we can easily observe how Handel is using the resources of meter, pace, and displacement within the larger framework of concertato style to tell a story couched in terms of tones, rhythms, and instrumental colors. Handel's dialogic manner and his explicit *rhetorical tone* have less to do with the strictures of organic tonal structure than with an attempt to override the built-in limitations of the high style.<sup>19</sup> The high style, which prevails in most of Handel's, Bach's, and Scarlatti's works, calls for even pacing that is varied by either expansion or contraction for expressly formal or generic reasons.<sup>20</sup> In a long, quasi-programmatic movement such as our Organ Concerto Andante, something beyond expansion and contraction is needed to shape the larger rhythms of the piece across the wide span of some five minutes—a very long time within the framework of Handel's concise dialectics, or within the framework of Baroque instrumental temporality for that matter.<sup>21</sup> The organ's assertive departures from the downbeat and its delayed acceptance of the downbeat as the measure's center

---

<sup>19</sup> I borrow the notion of rhetorical tone from Sisman 1997, p. 45n.

<sup>20</sup> Willner 1998, 1999, and 2006. Some genres, such as gigue and fugue (and fugal texture at large), allow for greater flexibility in pacing than others. The middle style and the low style allow for *much* greater flexibility across the board.

<sup>21</sup> Handel's slow instrumental movements tend to be quite sparing and very short, but they are highly intense; most are decidedly slower than the present Andante. Handel's slow arias, by contrast, can be both long *and* slow (for instance, the eight-minute aria for soprano and 'cello, "What passion cannot Music raise and quell," from *The Song for St. Cecilia's Day* (more commonly known as *The Ode for St. Cecilia's Day*).

of gravity—and as the locus of its rhetorical expression—provide the story line that allows the Andante to escape the shackles of the high style. The Andante's elaborate account of metrical conflict, displacement, and adjustment countermands the regularity, not to say the inflexibility, of the basic pace.<sup>22</sup>

Let us see now how Handel fashions a similar escape from restrictive pacing under lightly fugal circumstances.

#### IV. Narrative displacement and conflict in the fugal and compound 4/4

It so happens that the most varied and, surprisingly, the most flexible of Handel's 4/4 times is the fugal 4/4, which I introduced earlier in conjunction with Examples 1a and 2a. This is a Handelian version of the meter that Kirnberger calls the large 4/4. The change in appellation is warranted because Kirnberger's vision of anciently ponderous contrapuntal metrics, a vision that brings to mind the hallowed *stile antico*, does not describe Handel's lively fugal manner quite accurately:

Large 4/4 time is of extremely weighty tempo and execution and, because of its emphatic nature, is suited primarily to church piece[s], choruses, and fugues.

Eighth [notes] and a few sixteenth notes in succession are

---

<sup>22</sup> One could certainly analyze this Andante—and much of Handel's instrumental output—along lines similar to those laid out in great detail by Roland Barthes in his *Structural Analysis of Narrative* (Barthes 1977/1994). But even though it is doable, that task is bound to become so complex that one would not hear the results in any meaningful way. For more on these matters, and on the need for simplicity in the application of narrative strategies to the analysis of Baroque instrumental music, see chapters 4 and 5 of my dissertation.

its fastest note values. To distinguish from small 4/4 time it should be designated by 4/4 instead of C. The two meters have nothing in common except for their signatures.<sup>23</sup>

If Kirnberger's tradition-oriented account, and the aural image of heavy chordal and contrapuntal textures it conjures up, does nonetheless have a familiar ring to it, that is because Handel's vocal and instrumental fugues have often been played far too slowly and far too heavy-handedly, as if to demonstrate the performer's profound understanding of Handel's learned counterpoint.

Just like the large 4/4 but in much more animate fashion, the fugal 4/4 presents a basic pace of half notes which is enlivened by the addition of figural, contrapuntal and chromatic play at the overlying, figural level of quarter notes (recall Example 1a). Most of the added quarter notes are ancillary suspensions, neighbor notes, and passing tones, and many of these spawn the improvisatory addition of figural passagework and embellishments at the level of the eighth note and the sixteenth note. We consequently find two figural paces at work here: a quarter-note pace, and an eighth-note pace (compare the opening of Example 9 with the reductions in Example 10a). Owing to the preponderance of elaborate, written-out figurations and embellishments, the mixture of paces that proceed at various levels in close vertical proximity mimics the kind of varied or *composite*

---

<sup>23</sup> Kirnberger 1776-79/1982, p. 391.



pacing that one finds in abundance in the middle style of Vivaldi and Telemann.<sup>24</sup> We can easily apprehend the aural picture of composite pacing as fifth-species counterpoint writ large, and indeed we must do so when contemplating the music of the middle style. But we need to keep in mind that the composers of the high style use such pacing not to demonstrate rhythmic freedom for its own sake, but rather to negotiate contrapuntal complexity, to articulate the different rhythms of different imitative idioms (simultaneous, adjacent, or set apart), to generate a developmental or exciting *accelerando* effect, or (quite the opposite) to realize an imposing *allargando*. Procuring such effects summons up both the faster and the slower paces and figures of the pacing hierarchy, often at one and the same time. Near the end of a piece, with the composition's durational narrative largely complete but its fugal play at its most intense, one of these effects, along with its characteristic metrical setting and metrical displacement, will attempt to predominate. It is at this point that the fugal texture is most likely to abandon its basic pace for good: A thoroughgoing contrapuntal reduction will usually reveal that the half-note basic pace has by now given way to a quarter-note basic pace.

The need for narrative intervention in shaping fugal phrase rhythm stems from the need to organize such broadly projected durational variety in some way. It parallels the need for a rhetorically organized rhythmic variety that we encountered in the F major Organ Concerto Andante, but it expresses itself differently. The lightly fugal third movement, marked Allegro, from the D minor

---

<sup>24</sup> I discuss composite pacing in the music of Vivaldi in Willner 2006, and composite pacing in general in my dissertation.

Concerto Grosso, Op. 6, No. 10, illustrates this fugal rhythmic diversification in a relatively transparent way.

*Overview.* The D minor Allegro is reproduced in Example 9. Note how the upper strings' short, open-ended subject (bars 1-2<sup>a</sup>) and its imitation by the lower strings at the distance of half a measure (bars 1<sup>b</sup>-2) polarizes the outer voices, metrically, in dialectical concertato fashion. The one-bar subject, whose ending is never precisely defined, enters just after the downbeat, during the first half of the measure, and it is imitated, confrontationally, by an accompanying stretto entrance at the lower fifth just after the third beat of the measure—that is, well before the subject has had a chance to close.<sup>25</sup> Despite the immediately rising textural and metrical density, a half-note basic pace emerges quite clearly thanks to the sharply etched arpeggiation that underlies the subject (see Example 10a at 1). Since it is not stepwise, at least not at the outset,<sup>26</sup> the characteristically fugal half-note basic pace lends itself to linear filling in, and thereby to transformation into a stepwise, compound 4/4, with a quarter-note basic pace (see Example 10a at b).

The annotations in Example 9 show how the “geographic” contradiction in metrical emphasis between the first and the third beats comes into its own, as a

---

<sup>25</sup> It is by no means uncommon for a subject to be so dovetailed. Another good Handelian example is the brief fugal Allegro, the third movement, from the F major Concerto Grosso, Op. 3, No. 4; yet another is the similarly brief fugal Allegro, the fourth movement, from the D minor Concerto Grosso, Op. 3, No. 5 (not to be confused with the second-movement Fugue).

<sup>26</sup> It is ironic that a partly arpeggiated basic pace is common in some fugal settings.

large-scale developmental issue encompassing several broad metrical displacements, no fewer than three times later on in the piece: At the center of the first reprise (bars 4<sup>b</sup>-6), at the center of the second reprise (bars 19<sup>b</sup>-23), and at the very end of the Allegro (bars 24<sup>b</sup>-28). Since it is the second reprise that is charged with reconciling the Allegro's confrontational tensions, I shall devote most of the paragraphs that follow to the details of its tonal and metrical structure. For now we need observe only that instead of resolving the Allegro's tensions by emphasizing the *allargando* potential of its half-note basic pace, the second reprise leads the Allegro's tensions gradually to a metrically dissonant climax. It does so by modulating to the compound 4/4 and displacing the Allegro's metrics by one quarter note to the left just before the Allegro closes (bars 24<sup>b</sup>-28; see again the annotation in Example 9). This "final modulation" works well because it realizes the dramatic potential of the Allegro's largely stepwise quarter-note figural pace, and it brings into the open the durational disagreements that have been building up across the entire movement. The annotations in Example 9 show how both this modulation and the consequent displacement are prefigured in stages not only by the stretto in bar 1 but also by similarly imitative statements across bar 2 (falling in the direction of the bass), in the second half of bar 3 and (rising in the direction of the upper voice) across bar 4. Further imitative premonition appears during the rising-fifths sequence in bars 11 and 12.<sup>27</sup> These

---

<sup>27</sup> Handel pursues precisely the opposite strategy – that of an imposing, underlying *allargando* -- in the fugal third movement, marked *Allegro*, of the Concerto a due cori in Bb, which is a transcription of the chorus, "See from his post the Euphrates flies," from *Belshazzar*. One's impression can, again, be confirmed by a thorough pace reduction.

premonitions unsettle the last two beats of each measure in which they occur; others, to which we shall soon turn, unsettle the first two beats.

The pace reductions in Examples 10 and 11 offer preliminary orientation in these complexities. Example 12 presents two brief but comprehensive sketches, each depicting the structure of the entire Allegro's bass line, and Example 13 adds a durational sketch of the Allegro's length and its basic length. Example 14 brings out the tonal and durational parallelisms between the first and the second reprise.

And now, for one of the complexities that unsettle the first two beats.<sup>28</sup> It is the suppression of the fugal subject's opening eighth-note downbeat. The suppression, which is very common in Baroque fugal subjects, results in the afterbeat displacement of the Allegro's subject by one eighth note to the right.<sup>29</sup> In a very special way, Handel turns this suppression, which is intensified by the dovetailing entrance of the subject on the third beat, into a major compositional issue during the second reprise. Here—at the very center of the reprise, where the opening of the Allegro returns as the “A<sup>1</sup> section” (bars 17ff.)—Handel allows the afterbeat's elaboration through repetition to reintroduce and intensify the confrontation between the first and the third beats of each measure. The confrontation culminates in a displacement by a half-note to the right (bars 19<sup>b</sup>-23; see again the annotations in Example 9), and it is this displacement that leads

---

<sup>28</sup> Later on, we shall learn that this complexity is inextricably linked to those already cited, which occur on the third and fourth beats.

<sup>29</sup> See Rothstein 1989, pp. 29-30 and 50-51, Agmon 1997, pp. 65-66, and Willner 1998, p. 289. For detailed discussions of afterbeat displacement see also my dissertation, chapter 2, with further references, as well as Abravaya 1999, 2004, and 2006.

in turn to the aforementioned displacement by one quarter-note to the left (bars 24<sup>b</sup>-28).<sup>30</sup> With these admittedly daunting preliminaries in mind, let us turn now to a more detailed reading of the piece.

*The first reprise (bars 1-10).* The first reprise is built like a large three-part ritornello (see the annotations in Example 9). A four-bar expository *Vordersatz* molds a complete lyrical theme out of three components—the subject, the subject's continuation by dotted eighths, and the subject's repetition (bars 1-4a). A two-bar developmental *Fortspinnung* extends from the middle of bar 4 to bar 6 and responds to the *Vordersatz*, antagonistically, by displacing the subject in the upper strings to the middle of the measure. Finally, a four-bar cadential *Epilog* brings the fugal subject and its metrics back to their proper location, restoring the ritornello's durational equilibrium while tonicizing the mediant (bars 7-10). Observe how during the *Fortspinnung* the subject's confrontational imitation by the lower strings enters not in the newly emphasized middle of the measure but at the downbeat, namely at the beginning of bars 5 and 6. The displacement of the subject by the upper strings—like so many displacements in Handel's and in Bach's fugues—appears at first to be merely a paradigmatic instance of the mid-

---

<sup>30</sup> Because the subject begins with a suppressed eighth—and because the suppression is emphasized by the lower strings' opening D, at the downbeat—the subject seems to close at the downbeat of bar 2. But that is a nominal designation of its ending, at best. A brilliant discussion as well as many examples of the problems one encounters in trying to define the conclusion of fugal subjects appears in Renwick 1995a. I discuss preliminary bass tones which support a suppressed upper-voice downbeat in my dissertation, having coined the term *pedal call* to describe the phenomenon. See also Abravaya 1999, 2004, and 2006, Hogwood 2005, and Rothstein 2005.

bar displacement so common in both the fugal 4/4 and the simple 4/4. But it in fact serves to alter and to attenuate the vigorous character of the subject by throwing the weight of its metrics ahead, to the area of its closing tones, rather than maintaining it in the vicinity of the subject's opening tone.<sup>31</sup> It is evident that such displacement serves not only to secure metric and rhythmic variety on a measure-to-measure and on a phrase-to-phrase basis, but also to procure a broader kind of durational variety, one that takes in the temporal dynamics of the entire Fugue.<sup>32</sup>

*The second reprise (bars 11-28).* The second reprise begins with a broadly developmental two-bar sequence of rising fifths—a sequential expansion—whose enlarged one-bar pace accommodates many mock-inversions of the subject (bars 11-17<sup>a</sup>).<sup>33</sup> The tonal sketches in Example 12 disclose that the sequence is shorter

---

<sup>31</sup> Even though the identification of these closing tones, at the end of the fugal subject, may be tentative or uncertain. For valuable discussions of end-accented grouping see Temperley 1996 and 2003, Abravaya *ibid.*, Rothstein *ibid.* and 2003, and de Ghizé 2006. See also my “Bar 0 and the Suppressed Hyperdownbeat,” at this Site. On metrically induced changes in the character of fugal entries see Rothstein 1995a and my dissertation, chapter 2.

<sup>32</sup> Especially in the simple 4/4, the displacement is likely to extend for many measures, even across the whole movement. It therefore differs drastically from the brief but casual mid-bar displacements that occur often in the compound 4/4.

I describe all these phenomena in detail in chapter 2 of my dissertation. Grave 1985 and Burkhart 1994 address mid-bar displacement in the compound 4/4 in detail. Rothstein 1995a lays out the rationale for the frequent attenuation of the subject (specifically the subject's reentrance in the later stages of Bach's fugues) and he calls attention to the need for reflecting this highly expressive feature, necessary for maintaining dramatic continuity, in performance. Agmon 1991 discusses metrical displacement in Bach's fugues from a similar perspective.

<sup>33</sup> I survey Handel's sequential expansions in Willner 1999.

than it appears to be: Although it seems to continue into bar 13, it is taken over at the downbeat of bar 13 by an overlapping tonicization of the dominant, A minor. The auxiliary cadence C-D-E-A, which tonicizes the dominant, restores the half note basic pace but, having reached D at the end of bar 13, it is interrupted—disjunctively—in bar 14 by the parenthetical prefix C-D-E, which introduces the tonicization's cadential E.

Notwithstanding the mock-inversion of the subject and its confrontational imitation during the second half of bars 11 and 12, and despite the decelerated pace of the two measures, the expanded sequence does reassert the basic metrical premise of the Fugue, namely the location of the subject at the head of the measure.<sup>34</sup> Equally important, the sequence lengthens the time frame of the phrase that begins at bar 11 from five bars to six bars. The pace reductions in Example 10a and the basic length reductions in Example 13 show how the expansion takes place. The purpose of the expansion is not so much metrical as it is rhetorical: It sets the stage for the improvisatory, temporally enlarged—but ultimately incomplete—recomposition of the first reprise during the remaining twelve measures of the piece, in bars 17-28.<sup>35</sup>

---

<sup>34</sup> I borrow the notion of basic premise from Epstein 1979. For detailed accounts of the Baroque composers' gradual enlargement of the basic phrase's length see Willner 1996b and 1998, as well as the analysis of Handel's Op. 6, No. 3/III in my dissertation, chapters 1 and 5.

<sup>35</sup> I discuss the elusive voice leading that supports the recomposition of the first reprise in bars 17-28 in Willner 1989.

Under fugal circumstances, the likelihood that the “recapitulation” or recomposition of the first reprise might extend all the way to the end of the Allegro is idiomatically slim, but that is nonetheless the impression we form as the recap enters in bar 17. The enlarged variation of several major segments from the opening measures, shown in Example 14a, certainly confirms that impression. And the impression is substantiated further, up to the closing four measures, by a close stylistic and analytic reading of the piece. Indeed, many recapitulatory recompositions in the binary and rounded binary forms of the early eighteenth-century allow the A<sup>1</sup> section to retain its “A-ness,” if only partially and only in hidden ways, up to the closing measures of the composition.

Bars 17-20<sup>a</sup>, then, retrace the outlines of the *Vordersatz* of bars 1-4 in slow motion, intensifying the earlier conflicts between the first and the third beat by adding an inversion of the subject's incipit at the middle of bars 17 and 18 (Example 14a).<sup>36</sup> The second half of bar 20 and the climactic sequence in bars 21-24 combine to enlarge the *Fortspinnung* that originally extended from the middle of bar 4 to the middle of bar 6, composing it out more slowly and more elaborately than did the first reprise (Examples 11a and 14b). Just like their model in bars 4<sup>b</sup>-6, they reverse the metrical location of the subject and its accompaniments. Finally, the overlapping cadential *Epilog* that begins at the downbeat of bar 24 retraces, however loosely, the *Epilog* of bars 7-10, without restoring the subject and its accompaniments to their assigned metrical locations

---

<sup>36</sup> “Retracing the outlines” is probably the most accurate way of describing this instance of recomposition. It is not quite a precise *Dehnung* or an elaborate *Vergrößerung* in Schenker's sense of the two terms.



(Example 14c). The outward resemblance between the two *Epilogs* is faint: Beyond their cadences, they don't share much more than a strong emphasis on the neighbor-note motion Bb-A and on the falling third bb<sup>2</sup>-a<sup>2</sup>-g<sup>2</sup>, which is dramatically enlarged across the middle of bars 21, 22, and 23.

*Rhetoric and narrative.* Let us look now at the implications of these drastic reinterpretations of the opening ritornello's three parts. The gradual attenuation in the resemblance between the first reprise and its recomposition in the second reprise turns out to be part of Handel's larger rhetorical scheme. As I pointed out earlier, such attenuation—at least on the surface—is more often than not the norm for binary form in this style: Although the second reprise valorizes a return to the composition's basic thematic premise, it shows an even greater preference for the cultivation of an ongoing, developmental departure from that premise.<sup>37</sup> In the absence of a binding requirement for a formal recapitulation (or for adherence to any pre-established form, for that matter), the recapitulation can fizzle out gradually in the interest of spinning dramatic passagework that will bring the *Allegro* to a thematically intense close. All the more remarkable, then, that Handel makes a point of maintaining the metrical location of his fugal subject at the head of the measure almost all the way through to the end of the piece.

*The metrics of bars 17-28.* The tonal, thematic, and rhythmic effects generated by the replay in slow motion of bars 1-4 across bars 17-20<sup>a</sup> radiate centrifugally in

---

<sup>37</sup> Everett 1996 makes much the same point throughout.

several directions. The primary and most striking effect is the simultaneous but incomplete tonal and durational enlargement of the Allegro's opening sixteenth-notes motive,  $a^2-bb^2-a^2-g^2-e^2-f^2$ ; it extends well into the *Fortspinnung*, as far as the  $g^2$  in the middle of bar 23 (see the brackets in Example 11a and the annotations in Example 14b; Example 10c displays the sequential context in which the motive is expanded). Even though the enlargement peters out after bar 23, its realization as a soaring sequential expansion (bars 21-23) is the culminating thematic event of the Allegro, indeed its climax (compare the bracket and annotation in Example 9 with the reductions in Examples 10c and 11a). The uncommonly thorough and elaborate manner in which the sequential expansion is prepared ensures that we hear the expansion as such. For instance, the slowly rising fifths in bars 11 and 12—the core of the Allemande's first sequential expansion (cf. the right system in Example 10a)—pave the way for the augmented one-bar pace of  $bb^2-a^2-g^2$  at the middle of bars 21, 22, and 23—our climactic sequential expansion (Example 10c).

The hesitant, arrested progress of the recapitulation throughout bars 17, 18, and 19 (Examples 10b and 11a) is achieved through the artful intervention of many rests—emphatic silences of an eighth note or a dotted quarter note. These, aurally as much as conceptually, expand the temporal space originally opened up by the fugal subject's suppressed eighth note (see again Example 11a).<sup>38</sup> The decelerated replay of the opening measures in bars 17, 18, and 19 then widens that temporal space through a chain of delays, delays that in turn set up the mid-bar

---

<sup>38</sup> For an imaginative treatment of silence and rests in Handel's vocal music, see Harris 2005.

displacement in bars 19<sup>b</sup>-23 (see the bracket and annotation in Example 9). The immediate occasion for the displacement, though, is a change in design that occurs in the middle of bar 19—an alteration in the figural activity of the violins and the bass. The change is drastic enough for the new texture it spawns to remain in effect through the beginning of the sequence in bar 21. Thanks to the displacement, the climactic tones of the sequence—bb<sup>2</sup>, a<sup>2</sup>, and g<sup>2</sup>, along with their supporting chords—arrive at the middle rather than at the beginning of bars 21, 22, and 23 (see again Examples 10c and 11a). The ancillary upper fifths by which these supporting chords are introduced and expanded appear at the downbeat of each of these measures, but the registral and textural emphasis that accrues to bb<sup>2</sup>-a<sup>2</sup>-g<sup>2</sup> and to its supporting chords nonetheless ensures that we hear the progression, on the whole, as displaced.<sup>39</sup> One might say that the displacement allows the temporality of the subject's stretto entrance—recall its counterstress on the third beat of bar 1—to come into its own.

The close, inner link between the subject's eighth-note displacement and the climactic measures' half-note displacement is forged by the idiomatic metrical connection between the two displacements. Both—the half-note displacement as much as the eighth-note displacement—belong to the same family of afterbeat displacements of which I spoke earlier. Throughout the repertoire of compositions in the simple and the fugal 4/4, afterbeat displacement by a half note to the right

---

<sup>39</sup> Precisely the same situation obtains at the climactic descent, transferred to the bass, of the Allemande from the D minor Suite of 1720. The tones in question there are Bb, A, and G, and the measures are again bars 21, 22, and 23. See my "Polyphonic *Urzatz*," at this Site, Examples 3 and 8.

may extend across the span of a complete movement, signaling the composer's wish to emphasize the closing tone of every phrase, subphrase, period, and reprise. In this instance, the half-note delay places the climactic tones in the middle of each measure, lending the each of the three measures the shape of an arch that leads to a high point and then recedes from it.<sup>40</sup> Because the half-note delay follows directly the pauses and the hesitations of the enlarged ritornello opening in bars 17-19, one can hear tangibly how the initial eighth-note delay is transformed into the later half-note delay. It is the entrance of the ancillary chords in place of the principal chords in the sequence at the downbeats of bars 21, 22, and 23 that realizes and substantiates the connection; see the parentheses in Examples 10c and 11a. (The step-by-step progression from a metrically stable sequential expansion (bars 11-12) to a hesitant, metrically unstable "recapitulation" (bars 17-19) and to a climactic but metrically displaced progression explains my earlier observation that the preliminary suppression of an eighth note, intensified by the competing fugal entries on the first and third beats, leads to a half-note delay in a gradual, narrative manner.) But as I mentioned earlier Handel's temporal account of intensification and displacement does not end here: Its sweeping power brings about one more metrical twist.

The heightened tension and skewed metrics of the Allegro's climactic displacement find their denouement in an additional sequential expansion—the Allegro's third and last—which begins on the fourth beat of bar 24; see the

---

<sup>40</sup> For an excellent account of the compositional role such arches can play see McKee 2004. Even though the article addresses the waltzes of Chopin, its observations possess wide applicability.

annotation in Example 9. Example 11b shows how this expansion comes about, and how Handel throws it across the bar line. The expansion originates, just as the previous sequential expansion did, with a half-note afterbeat displacement whose (normalized) principal chords occupy the third and fourth beats of each measure (bars 25 and 26; the chords at the beginning of Example 11b are parsed in their normalized state).<sup>41</sup> The normalized ancillary chords occupy the first and the second beats of each measure (these, too, are parsed in their normalized state at the beginning of Example 11b). Taking a cue from the quarter-note displacement typical of the compound 4/4—and preparing for the modulation to the compound 4/4 that crystallizes at the conclusion of the sequence, on the last beat of bar 26—Handel anticipates the ancillary chords of bars 25 and 26 on the last beats of bars 24 and 25; see the second part of Example 11b. To compensate for these quarter-note anticipations, Handel simply subtracts a quarter note from the principal chords, which now occupy only the third beats of bars 25 and 26. The combined procedures of anticipation and subtraction displace the entire sequence by one quarter note to the left—the very displacement, it so happens, that marks of the compound 4/4.<sup>42</sup> The displacement projects a sense of metrical permanence because it is supported by an ever thickening texture that introduces

---

<sup>41</sup>Rothstein 1981 and 1990 are the fundamental studies of normalization. Normalization restores the metrical position and the length of the principal tones and harmonies at the deeper levels to their original state, which has been altered by the exigencies of the foreground.

<sup>42</sup> Although, again, displacement by a quarter note to the right is more common in the compound 4/4, displacement by quarter note to the left occurs frequently also. The quintessential example from the high Baroque, as I mentioned earlier, is the opening of the Allemande from Bach's A minor Partita for Clavier; see my dissertation, chapter 2, Example 2.28.

the Fugue's most intense sonorities. By the time the sequence is complete and the fourth beat of bar 26 has been reached, we are ready to accept the compound 4/4 as the new—and displaced—meter of the piece. Example 13 shows without further comment how these events affect the larger rhythms of the entire composition.

*Outer voice polarity.* We now have a clearer picture of the way in which the subject's initial suppression of an eighth note and the initial dialectical confrontation between the subject on the first beat and its imitation on the third beat acquires the status of an ever growing durational invention as the Allegro evolves.<sup>43</sup> But this by no means the only narrative thread that winds its way through the piece. There is a still more complex and perhaps more abstract harmonic and rhetorical story line which complements the Allegro's durational thread. Most Baroque instrumental compositions of the high style are marked by a fundamental polarity between the outer voices that comes into its own during the closing pages of each movement. As the movement proceeds, local emphasis on expository thematic work in the upper voice is replaced gradually by more global, more structural emphasis on tonal development, which centers on the conduct of the bass. This tonal development brings about a traversal through several tonal areas and calls for the realization of several closely spaced tonicizations.

Inevitably, the resulting emphasis on tonal development throws the spotlight on

---

<sup>43</sup> Such metrical density or saturation is by no means rare in Handel's music. Compare, for instance, the opening of the bass aria, "O ruddier than the cherry" from *Acis and Galatea*.

the local articulation of the bass line: Within a short span of time, the bass must establish the movement's structural dominant, tonicize its intermediate harmonies, and introduce its closing tonic by means of a large-scale auxiliary cadence (not to mention a host of shorter, nested auxiliary cadences). Example 12, a sketch in two levels of the Allegro's bass line, shows how this *outer voice polarity* comes about through a dramatic increase in the Allegro's tonal activity and in the complexity of its bass line during the second reprise.<sup>44</sup>

As attention shifts to the bass, many instrumental movements of the high style, both long and short, allow for a marked relaxation in the consistency of their thematic work and in the rigor of the durational organization of their upper voice, especially during their closing phrases. Concomitantly, they also permit a marked increase in the length and thematicism of their sequential spinning. One's aural impression is that the bass now leads and the upper voice follows. Viewed in this light, the D minor Allegro's ever growing emphasis on metrical displacement, its modulation from the simple 4/4 to the compound 4/4, and the continuity with which it carries out its step-by-step displacements and transformations—put together, all of these emerge as dramatic features made possible by Handel's ever greater focus on strict harmonic organization in the second half of the Allegro. In other words, the growing prominence and independence of the bass line enables the upper voice—and the composition's temporality—to unfold extempore. Such naturally engineered but carefully composed transfer of structural control from the upper voice to the bass—and the

---

<sup>44</sup> According to Burnham 1995, the composer Conrad Pope refers to this polarity as “soprano composition” and “bass composition.”

concurrent “liberation” of the upper voice and its temporality—contributes an improvisatory impulse that plays a crucial role in holding the Allegro's temporality together. It has little in common with Handel's casual articulation of his solo-tutti exchanges in the G minor Flute (Oboe) Concerto, with which I began this essay.



List of Works Cited

Abravaya 1999. Abravaya, Ido. "Studies of Rhythm and Tempo in the Music of J. S. Bach." Ph.D. dissertation, Tel Aviv University, 1999.

\_\_\_\_\_. 2004. Abravaya, Ido. "The Baroque Upbeat: Outline of Its Typology and Evolution," in *Bach Studies From Dublin*: 17-28.

\_\_\_\_\_. 2006. Abravaya, Ido. *On Bach's Rhythm and Tempo*. Kassel: Bärenreiter, 2006.

Agawu 1991. Agawu, V. Kofi. *Playing with Signs: A Semiotic Interpretation of Classic Music*. Princeton, NJ: Princeton University Press, 1991.

*The Age of Chopin: Interdisciplinary Inquiries*, edited by Halina Goldberg. Bloomington: Indiana University Press, 2004.

Agmon 1991. Agmon, Eytan. "Rhythmic Displacement in the Fugue of Brahms's Handel Variations: The Refashioning of a Traditional Device," *Music Theory Canada 1990: Selected Essays*; published as *Studies in Music from the University of Western Ontario* 13 (1991): 1-20.

\_\_\_\_\_. 1997. Agmon, Eytan. "Musical Durations as Mathematical Intervals: Some Implications for the Theory and Analysis of Rhythm," *Music Analysis* 16/1 (March 1997): 45-75.

Armes 1994. Armes, Roy. *Action and Image: Dramatic Structure in Cinema*. Manchester and New York: Manchester University Press; distributed exclusively in the USA and Canada by St. Martin's Press, 1994.

*Bach Studies from Dublin: Selected Papers Presented at the Ninth Biennial Conference on Baroque Music, Held at Trinity College Dublin from 12th to 16th July 2000*, edited by Anne Leahy and Yo Tomita (= *Irish Musical Studies*, Vol. 8). Dublin: Four Courts Press, 2004.

Barthes 1988/1994. Barthes, Roland. "The Old Rhetoric: An aide-mémoire"; "Introduction to the Structural Analysis of Narratives"; and "The Sequences of Actions," in Barthes, *The Semiotic Challenge [L'Aventure sémiologique]*, translated by Richard Howard (Berkeley: University of California Press, 1994; orig. publ. New York: Hill & Wang, 1988): 11-94, 95-135 and 136-148.

*Beiträge zur Geschichte des Konzerts: Festschrift Siegfried Kross zum 60. Geburtstag*. Edited by Reinmar Emans and Matthias Wendt. Bonn: Gudrun Schröder Verlag, 1990.

Best 2002. Best, Terence. Preface to *George Frideric Handel, Concerto in G minor for flute (oboe) and orchestra, HWV 287*, edited by Terence Best and Andreas Köhs. Kassel and New York: Bärenreiter, 2002: v-vi.

Burkhart 1994. Burkhart, Charles. "Mid-bar Downbeat in Bach's Keyboard Music," *Journal of Music Theory Pedagogy* 8 (1994): 3-26.

Burnham 1995. Burnham, Scott. *Beethoven Hero*. Princeton, NJ: Princeton University Press, 1995.

De Ghizé 2006. "The Positives and Negatives of Hauptmann's Theory of Meter: A Look at Mozart's Piano Sonata in F major, K. 332," *Dutch Journal of Music Theory* 11/3 (November, 2006): 203-216.

Epstein 1979. Epstein, David. *Beyond Orpheus: Studies in Musical Structure*. Cambridge, MA: The MIT Press, 1979.

Everett 1996. Everett, Paul Joseph. *Vivaldi: The Four Seasons and Other Concertos, Op. 8*. Cambridge and New York: Cambridge University Press, 1996.

Grave 1985. Grave, Floyd K. "Metrical Displacement and the Compound Measure in Eighteenth-Century Theory and Practice," *Theoria* 1 (1985): 25-60.

Harris 2005. Harris, Ellen T. "Silence as Sound: Handel's Sublime Pauses," *Journal of Musicology* 22/4 (Fall, 2005): 521-558.

Henneberg 1974. Henneberg, Gudrun. "Theorien zur Rhythmik und Metrik in der Musik der Wiener Klassik." Ph.D. dissertation, University of Mainz, 1972. Published, Tutzing: Schneider, 1974.

\_\_\_\_\_ 1976. Henneberg, Gudrun. "Was ist der musikalische Rhythmus?—ein Entgegnung," *Die Musikforschung* 29/4 (1976): 465-467.

Hogwood 2005. Hogwood, Christopher. *Handel: Water Music and Music for the Royal Fireworks*. Cambridge and New York: Cambridge University Press, 2005.

Kirnberger 1776-79/1982. Kirnberger, Johann Philipp. *The Art of Strict Musical Composition*, translated by David Beach and J. New Haven: Yale University Press, 1982. This is an edited translation of Kirnberger's *Die Kunst des reinen Satzes in der Musik* (1776-79; reprinted, Hildesheim: Olms, 1968). Permission to reprint several short excerpts was kindly granted by Yale University Press ([www.yalebooks.com](http://www.yalebooks.com)).

Marx 1987. Marx, Hans Joachim. "Echtheitsprobleme im Frühwerk Händels," in *Bach-Händel-Schütz-Ehrung*: 105-111.

\_\_\_\_\_. 1990. Marx, Hans Joachim. "Zur Echtheit des Oboenkonzertes HWV 287 von Georg Friederich Händel," in *Beiträge zur Geschichte des Konzerts*: 33-40.

*The Maynooth International Musicological Conference 1995: Selected Proceedings*, edited by Patrick F. Devine and Harry White, Vol. 1 (= *Irish Musical Studies*, Vol. 4 ). Dublin: Four Corners Press, 1996.

*Mozart Studies 2*, edited by Cliff Eisen. Oxford: Clarendon Press, 1997.

McKee 2004. McKee, Eric. "Dance and the Music of Chopin: The Waltz," in *The Age of Chopin*: 106-161.

Poppe 1993. Poppe, Gerhard. "Eine bisher unbekannte Quelle zum Oboenkonzert g-moll HWV 287," *Händel-Jahrbuch 39* (1993): 225-235.

*The Practice of Performance: Studies in Musical Interpretation*, edited by John Rink. Cambridge and New York: Cambridge University Press, 1995.

Renwick 1995a. Renwick, William. *Analyzing Fugue: A Schenkerian Approach*. Stuyvesant, NY: Pendragon Press, 1995.

\_\_\_\_\_. 1995b. Renwick, William. "Hidden Fugal Paths: A Schenkerian View of Handel's F Major Fugue (Suite II)," *Music Analysis* 14/1 (March 1995): 49-67.

Rothstein, 1981. Rothstein, William. "Rhythm and the Theory of Structural Levels." Ph.D. dissertation, Yale University, 1981.

\_\_\_\_\_. 1990. Rothstein, William. "Rhythmic Displacement and Rhythmic Normalization," in *Trends in Schenkerian Research*: 87-113.

\_\_\_\_\_. 1995a. Rothstein, William. "Analysis and the Act of Performance," in John Rink, ed., *The Practice of Performance: Studies in Musical Interpretation* (Cambridge, U.K., and New York: Cambridge University Press, 1995: 217-240.

\_\_\_\_\_. 1995b. Rothstein, William. "Beethoven with and without *Kunstgepräg*": Metrical Ambiguity Reconsidered," *Beethoven Forum* 4 (1995): 165-193.

\_\_\_\_\_. 2005. Rothstein, William. "Italian and German Metrical Types in Music of the 18th and 19th Centuries," paper presented at the workshop, Communicative Strategies in Music of the Late 18th Century, Bad Sulzburg, Germany, July 2005.

*Schenker Studies 2*, edited by Carl Schachter and Hedi Siegel. Cambridge and New York: Cambridge University Press, 1999.

Schwindt-Gross 1989. Schwindt-Gross, Nicole. "Einfache, zusammengesetzte und doppelt notierte Takte: Ein Aspect der Takttheorie im 18. Jahrhundert," *Musiktheorie* 4/3 (1989): 203-222.

Sisman 1993. Sisman, Elaine. *Mozart, the 'Jupiter' Symphony*. New York: Cambridge University Press, 1993.

\_\_\_\_\_. 1997. Sisman, Elaine. "Genre, Gesture, and Meaning in Mozart's 'Prague' Symphony," in *Mozart Studies* 2: 27-84.

*Structure and Meaning in Tonal Music: Essays for Carl Schachter*, edited by L. Poundie Burstein and David Gagné. Hillsdale, NY: Pendragon Press, 2006.

Temperley 1996. Temperley, David. "Hypermetrical Ambiguity in Sonata Form Closing Themes." Expanded version of paper presented at Society of Music Theory annual meeting at Tallahassee, Fall 1996. Online at <http://theory.esm.rochester.edu/temperley/hyp-amb-clo.pdf>

\_\_\_\_\_. 2003. Temperley, David. "End-Accented Phrases: An Analytical Exploration," *Journal of Music Theory* 47/1 (Spring, 2003): 125-154.

*Trends in Schenkerian Research*, edited by Allen Cadwallader. New York: Schirmer Books, 1990.

Willner 1989. Willner, Channan. "Analysis and Interpretation in the Performance of Handel's Concerti Grossi, Op. 6," *Musical Times* 130 (March 1989): 138-141.

\_\_\_\_\_. 1996a. Willner, Channan. "Austrian Collections in the New York Public Library: Heinrich Schenker's Papers in the Oster Collection," paper presented at the Millenium Conference, Ottawa, 1996. Publication plans by the Editor of the conference proceedings, Walter Kreyszig, have been abandoned.

\_\_\_\_\_. 1996b. Willner, Channan. "Bach's Periodicities Re-Examined," in *The Maynooth International Musicological Conference 1995: Selected Proceedings*, Vol. 1: 86-102.

\_\_\_\_\_. 1998. Willner, Channan. "Stress and Counterstress: Accentual Conflict and Reconciliation in J.S. Bach's Instrumental Works," *Music Theory Spectrum* 20/2 (Fall 1998): 280-304.

\_\_\_\_\_. 1999. Willner, Channan. "Sequential Expansion and Handelian Phrase Rhythm," in *Schenker Studies* 2: 192-221.

\_\_\_\_\_. 2006. Willner, Channan. "Baroque Styles and the Analysis of Baroque Music," in *Structure and Meaning in Tonal Music: Essays for Carl Schachter*.

\_\_\_\_\_. 2007. Willner, Channan. "Bar 0 and the Suppressed Hyperdownbeat," at this Site.