To the memory of Roxanna Glass

Sequential Expansion and Baroque

Phrase Rhythm

Channan Willner

Among the many rewards of our interest in historically earnest performance practice is the renewal of flexibility in matters of rhythm, meter, and tempo.1 Such flexibility must have been known to the eighteenth-century musician: Already in 1752, Joseph Riepel demonstrated how changes in meter from common time to alla breve may be implicit in the music but not in the score, as Justin London and William Rothstein have pointed out.2 In the first system of Example 1, at a), Riepel’s arabic numerals show—quite remarkably—how he groups two bars of common time into what we nowadays would call hypermeasures; the reduction I have added on top brings out the slow underlying ascent, one bar at a time, from C to D and E with which the excerpt begins. The bass I’ve

1 This is a revised and slightly expanded version of a paper presented at the 1995 annual meeting of the American Musicological Society in New York. I thank Floyd K. Grave for his valuable comments on an earlier version, and Cambridge University Press for permission to reproduce Example 5 and parts of pp. 205-9 of my “Sequential Expansion and Handelian Phrase Rhythm” (Willner 1999). Except for that Example and the attendant discussion, the present paper is a different essay altogether.

Rather than transform the paper into a full-blown essay, I have retained its work-in-progress scale.

added below shows both rapid surface activity and slower motion in whole notes to support the upper-voice ascent.

The reduction atop the second system, at b)—where Riepel adopts the unnotated alla breve time—demonstrates that the descent from E to D and C is twice as slow as the ascent. Riepel indicates the change through his wider spacing of numerals but, characteristically, he provides no harmonic support. As London notes, a shift at the surface from two harmonies per bar to one—more accurately, from two movements of the bass to one—has taken place. My addition of a bass and an inner voice to the Example discloses that although motion in whole notes does emerge, a broader, more inclusive sequential idiom appears also: a contrapuntal 6-5, 6-5 form of the familiar descent through the circle of fifths in which the archetypal rising fourths in the bass are bypassed in favor of rising seconds. At the two-bar level, essential stepwise movement in parallel tenths between the outer voices prevails.

The movement in parallel tenths here indicates that sequential expansion has taken place: The essential one-bar pace of the ascent in Example 1a has been replaced by a two-bar pace in the descent of Example 1b through the addition of ancillary chords that double the time span of the preceding principal chords. (The ancillary chords’ main tonal function is to break up the parallel fifths between the principal chords. See the large parentheses which I’ve added to Example 1b in order to differentiate between the ancillary chords and their surroundings.) Although such sequential expansions, which are both tonal and durational in nature, have been briefly observed by Heinrich Schenker, Oswald Jonas, Christopher Wintle, William Rothstein, the the present writer, a

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3 Ibid.
systematic investigation of the circumstances under which they appear has not yet been offered. And while their importance is manifest throughout the common-practice period, they present the principal means of tonal and durational expansion during the high Baroque.

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The stepwise movement in whole notes by the outer voices, which is implicit at the very beginning of Riepel’s example, might be regarded as the example’s basic pace. Most Baroque pieces show a rather faster basic pace in half notes or, if compound meter is signaled, in quarter notes; pieces in triple meter generally display a basic pace of one to the bar (though three to the bar and uneven versions of 1-2 or 2-1 occur also). Let us turn now to Example 2, the first reprise from Rameau’s L’égyptienne, to see how the sequential expansion of the basic pace may affect the composition’s phrase rhythm.

As the annotations in Example 2 point out, the first reprise divides into three similarly built but unequal phrases, each comprising (somewhat like a miniature concerto ritornello) three unequal segments marked a, b, and c. Rameau’s basic pace, like Riepel’s, is one to the bar; the incipient sequential progression in the second segment of the first phrase (bars 3-5) undergoes transposition and expansion at the corresponding location in

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5 The most recent contribution to the study of Baroque expansions is the highly insightful Braunschweig 2004/2005, which introduces the notion of rhetorical expansion; see also Braunschweig 2003.
the second phrase (bars 11-16; see the large parentheses in Example 2). The durational reduction by two in Example 3a illustrates, again by means of the same large parentheses employed in Example 2, how the expansion extends the length of each step of the incipient progression through the addition of a subservient chord that, just like Riepel’s ancillary chords, falls within the circle of fifths.

The changing time signatures in the reductions throughout Example 3, in conjunction with the long slurs that follow (Example 3a), bring out the long-span rhythmic design of the entire first reprise. They display the changes in grouping that emerge after reduction has consolidated each pair of measures at the surface into one hypermeasure, along the lines of Riepel’s arabic numerals, and after all expansions and nonessential repetitions have been removed. The changes in time signature suggest that grouping, even on a relatively large scale, is a dynamic pace as well. Unlike the basic pace, whose fabric is equally tonal and durational, a composition’s grouping pace is largely durational in nature, even though it is tonally articulated. (As we shall see, the relation between the two types of pace is quite complex.) Classical and Romantic grouping paces, say at the two-, four-, and eight-bar levels, tend to alternate quite freely; that is possible because we are active participants in supplying the metrical grid and in cooperating with it aurally. Baroque grouping paces, which don’t enlist our participation to the same extent, tend to grow gradually, one from within the other, through expansion, regrouping, or simply increases in length. One might refer to their growth as incremental
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periodicity, since its cumulative intent and effect is the establishment of a periodic grid one step at a time, from the ground up as it were.⁶

Rameau’s grouping paces expand twofold in the course of the first and second phrase, and threefold in the course of the third phrase; this is visually evident in Examples 3a and 3b, in which the reduced phrases (3a) and their durational diagrams (3b) are aligned one atop the other. Such characteristically Baroque changes in phrase length can be difficult to observe on account of frequent backtracking to shorter grouping and the equally frequent appearance of brief cadential progressions that occupy many small phrases in the later stages of numerous movements. Changes in phrase length are masked still further by the intervention of various durational expansions, and by the simultaneous growth of both the basic, unexpanded length of each phrase and the added, ultimately parenthetical expansions.

This process of continual and closely integrated growth repeatedly procures the addition of material at various levels of structure. Sequential expansion is but one outcome of such procurement: Repetition, extension, figural spinning, and many other developmental devices (often resembling the expansion techniques later codified by Riepel and Koch) establish a milieu of enlargement and thereby also foster large-scale motivic expansion.

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⁶ See Willner 1996b as well as “On Irregularity in Baroque Phrase Rhythm,” at this Site, for more extended accounts of incremental periodicity. On the role played by the entrained listener in establishing metrical relations see London 2004 and the trenchant review in Miruta 2004.
Our next example, the closing Allegro from Corelli’s C minor Concerto Grosso, Op. 6, No. 3, is reproduced in Example 4. It illustrates some of the procedural intricacies of sequential expansion and their elucidation through reduction.

As a whole, Corelli’s Allegro, whose outlines are summarized diagrammatically in Example 5, displays the same type of phrase growth as does Rameau’s *L’égypitienne*. By increasing the basic length of each phrase, and by increasing the extent of the sequential expansion added on to the basic length of the phrase, Corelli delays the characteristic response of the *tutti* to the declamatory themes and developmental spinning of the *concertino* for as long as possible within the modest scale of the piece. The summary in Example 5 (in which the Allegro’s five phrases and codetta are lined atop each other in pairs) shows schematically how the length of each phrase grows.

Expansions that are not counted in parsing because they are deemed *nonessential* at higher levels are represented by parentheses; the growth in time signature and in the size of several segments reflects their growing length, which emerges once the nonessential expansions have been reduced out.\(^7\) (Elsewhere the growth in time signatures simply denotes changes in grouping; context clarifies whether expansion or change in grouping is involved.)

The reductions of Corelli’s opening phrase, shown in Example 6a, leave out the triplet figures in the lower system and reduce the resulting chordal progressions further by two in the upper system, disclosing a basic pace of two to the bar. They also reveal that an afterbeat displacement of one dotted quarter note to the right—from which an

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\(^7\) *Essential* expansions, by contrast, are those whose inclusion is necessary for the phrase in question to reach its basic length, usually a quadratic four or eight measures. See Willner 1999, pp. 205-9, for a more detailed explanation.
eighth-note upbeat is subtracted to the left—runs through almost the entire Allegro, up to the beginning of phrase 5 at bar 30. At that point the notated meter takes over in preparation for closure, 13 bars hence. A comparison between the middleground and foreground reductions in Example 6a will disclose how the afterbeat displacement affects the foreground of the Allegro, and how the notated meter peers through, quite assertively if without making itself entirely known, from the very first.

The reductions of the Allegro’s three major sequences in Example 6b and 6c display similar pruning but add a deeper level of reduction (without additional diminution in note values) in the uppermost system. The ancillary chords of the initial, unexpanded sequence in Example 6b (bars 9-11) belong to the following chords but reside within the time span of the preceding chords (note the play of small parentheses and short horizontal lines at the beginning of the middle system in Example 6b, bars 9-11). The time spans of the ancillary chords cannot be left out here because each combined movement of principal and subservient chord add up to one step of the basic pace. In other words, no sequential expansion has taken place: The ancillary chords only find a habitat in a set of hosting parallel-sixth chords (note the cross-beams, which indicate the subservience of the ancillary chords to the parallel-sixth chords).

In the enlarged sequence of Example 6b, by contrast (bars 19-23), the subservient chords overexpand, as it were. Embellished by anticipations of the principal chords they serve to introduce, the subservient chords intrude on the time span of both the preceding and following chords; note the play of large parentheses and long horizontal lines in the upper systems of Example 6b. The reduction in the very uppermost system removes those embellished anticipations of the principal chords, and in so doing it restores and
realigns—or normalizes—the basic time span of each chord. It discloses, above all, that the stepwise movement of the basic pace has been doubly augmented. (This type of enlargement has already been observed by Christopher Wintle.) All the same, the progression clearly echoes the movement of the previous, unexpanded sequence, only on a much larger scale.

The reduction in Example 6c shows Corelli’s last sequence (bars 23-29). The sequence encompasses three, rather than two, components, in the manner of a large-scale triplet; though displaced by half a bar to the right—see the bracket on top of the Example and the dotted bar lines throughout the Example—each pair of principal and subservient chords continues the expanded pace of the previous sequence (bars 19-23) in much the same way. But now the complexities of mid-bar displacement are both added on to the complexities of embellishment and anticipation and intensified further. (Each component of the first expanded sequence in the top system of Example 6b (bars 19-23) begins in the middle of the measure and displays a characteristic drive to the downbeat that follows a measure and a half later; each component of the second, longer sequence in Example 6c begins similarly but attenuates the arrival at the downbeat by fusing thematically to the subservient chord of the next component. The displacement is confirmed by the addition of a compensating “extra” half measure in the second part of bar 29.)

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10 The addition of the half measure leads directly to the assumption of the notated meter in bars 30ff.
Closely related in both material and outline, Corelli’s three sequences form an internal, self-contained network of development and enlargement. On a much larger scale, the long chains and bulky clusters of sequential expansions which one finds in the extended works of Bach and Handel—the Brandenburg Concertos and the Concerti Grossi, Op. 6, come to mind—form similar networks. They should always be studied together within each movement to see how the general environment of enlargement fashions each network.

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An idea of the direction that the study of sequential expansions might take can be culled from our next example, the Corrente from Bach’s G major Partita for Clavier, reproduced in Example 7. The durational circumstances here differ greatly from those in our earlier examples: Instead of phrase enlargement, we find a steady cumulation of eight-bar subphrases, modified by several one-bar elisions and additions, and articulated as a pair of 16-bar phrases in the second reprise. Since each reprise is 32 bars long, the Corrente’s stylized symmetry coincides with its localized periodicity. In the absence of phrase enlargement, sequential expansion and the expansion and contraction of the basic pace occur for their own sake, within a flexibly periodic framework. That is strong indication that the Corrente is a genuinely periodic piece at many (if not all) levels of durational structure. The basic pace moves at the spacious rate of two bars a step; it expands sequentially to four-bar movement in the penultimate subphrase of the second

11 Very often, symmetry across the two reprises of binary form in music of the high Baroque does not necessarily imply a concomitant periodicity within each reprise. In this instance, however, symmetry and periodicity coincide.
reprise (bars 49-56) and contracts sequentially to one-bar movement in the last subphrase of each reprise (bars 24-32 and 57-64).

The two tonal reductions in Examples 8a and 8b present the Corrente’s opening and closing pairs of subphrases, highlighting the two sequences that each pair contains (bars 1-4 and 8-12 in the first pair; bars 49-53 and 55-63 in the last pair). In Example 8a, the bracketed part of the second sequence outlines a descent in parallel tenths from F# to D in the upper voice and from D to B in the bass (see the annotation 10-10-10-10 in Example 8a as well as in Example 9a, a durational reduction). The brackets in Example 8b bring out the later recomposition of the same tenths on a much larger scale, with D natural replacing D# (bars 48-63). These later tenths stretch from the expanded sequence near the beginning of Example 8b (bar 48) to the end of the contracted sequence at the penultimate bar of the Corrente. They span both the two sequences and the larger progression that links the structural submediant, which appears at bar 48, with the structural dominant, which appears at bar 63 via a parenthetical subdominant (bar 55) and an equally parenthetical tonic sixth chord (bar 63; see the Roman numerals and parentheses under Example 8b).

Examples 9a and 9b offer durational reductions of the same passages. The smaller parentheses show the potential of the two-bar basic pace for sequential embellishment. The larger parentheses and the overlying bracket in Example 9b show how a sequential expansion (bars 49-63) quite similar to Corelli’s begins to expand the earlier descent in tenths that took place in bars 8-12 (see the overlying bracket in Example 9a). As things stand at the end of the penultimate subphrase (bar 55), the augmentation is still
incomplete; it remains for the last subphrase (bars 57-63) to bring it to a close in purely tonal fashion.

From a long-range perspective, the enlargement of the parallel tenths serves to reharmonize and expand the Corrente’s opening figure, D-E-F#-G (circled in Examples 7-9), in responsorial inversion, as it were. This becomes evident if we hook the enlargement back to the immediately preceding submediant and its upper voice G in bar 47 (see the annotation in Example 9b), and if we consider that the high F# of the original sequence (bar 8) came from the high G in bar 1.

The importance of the sequential expansion here resides in its role as a conduit between the tonal and durational enlargement of motives close to the surface, on the one hand, and their far greater, purely tonal expansion at the higher levels of the middleground, on the other. To paraphrase Schenker, the expanded sequence helps realize the “motivic Tonwille” of the surface. The succession of durational and tonal augmentation in which the sequence takes part is a particularly important developmental procedure, one that has received little attention in the literature. It plays a highly significant role in Handel’s instrumental works as well.¹²

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Mention of Handel’s name brings us to the last and most theoretical of our examples, the opening Ritornello of the second movement, in D minor, from Handel’s

¹² For an extended discussion of this phenomenon see my dissertation, chapter 4 (solo instrumental music) and chapter 5 (orchestral music).
Concerto Grosso in F, Op. 6, No. 2, reproduced in full with a variety of durational and contrapuntal reductions in Example 10.\textsuperscript{13}

In this ritornello, the opening melodic ascent from D to E and F in bars 1-2 and its echo in bars 2-3 introduce a basic pace of half-notes (eighth notes in the reduction by four in Example 10b). Statement and echo constitute the \textit{Vordersatz} of the three-part ritornello. During the \textit{Fortspinnung} that ensues, in bars 3-6, a more deliberate descent, essentially in whole notes (quarter notes comprising tied eighths in the reductions), follows. Each tone of the descent is displaced from the downbeat to the middle of the bar by its lower neighbor note and supporting applied dominant; these in the manner of an appoggiatura, occupy the early half of the principal tone’s and principal chord’s time span. See the asterisks atop Example 10a and the noteheads under the Example, as well as the square brackets over the reduction in Example 10b. From the high Bb in the middle of bar 3 to the F in the middle of bar 6, the upper voice descends in parallel tenths with the bass at an expanded pace that is particularly characteristic of the developmental middle sections of tripartite ritornellos and ritornello-like structures.

In decidedly Handelian fashion, this expansion leads to still further enlargement, through extension, in the \textit{Epilog} (bars 7-8) even though the basic pace appears to accelerate its movement to quarter notes. Such contradictions between sets of tonal and durational expansion, on the one hand, and tonal/durational contraction, on the other, occur frequently in the Baroque repertoire. The expansion in bars 3-6, for instance, is balanced by a contraction in surface grouping, from a two-bar pace in bars 1 and 2 to a

\textsuperscript{13} Example 10 and parts of the attendant discussion are reproduced from Willner 1999, pp 205-9 and Example 5, with the permission of Cambridge University Press.
one-bar pace in bars 3-6. In the sudden absence of two-bar grouping, the tension between expansion and contraction becomes a major compositional issue.\(^{14}\)

Despite the expansion of the basic pace in bars 3 to 6, the surface design of bars 1 and 2—particularly the figurations in eighths and sixteenths in the outer voices—continues as if expansion hasn’t really taken place. This seeming contradiction informs most Baroque expansions. To explain how it is to be resolved, we must consider the dependence of Baroque expansions on the supporting role, durational as well as tonal, that combined species counterpoint plays just under their surface.

Many theorists have noted the simultaneous operation of various durational strata in tonal music. The durations and rhythms of these strata animate their tonal counterparts: Like the tonal strata, they are realized either explicitly or implicitly. The eighths and sixteenths in bars 1 and 2, for instance, are apparent at the surface; the half notes of the underlying ascent from D to E and F are apparent just below; but the whole notes that articulate the implicit, repeated high A shown hovering over bars 1 and 2 in the contrapuntal reduction of Example 10c are decidedly latent. (They are represented at the lower octave by repeated figural sixteenths.) What I believe has not been previously expressed is that each of the underlying, partially implicit durational strata also describes a partially implicit, largely stepwise tonal motion (modified of course by at least some arpeggiation, repetition, and suspension and other changes), and that all the strata—tonal and durational, from the diminutions at the foreground to the slow, sustained tones of the middleground—work smoothly together because they realize a series of stepwise

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\(^{14}\) I discuss the ramifications of these contradictions, especially when they occur early in the piece, throughout my dissertation.
progressions essentially identical to the movement of voices in combined species counterpoint. The all-important proliferation of implicit tones and durations, foreign to the species exercise, is made possible by the harmonic framework of the music, which pedagogical species exercises don’t possess either. The contrapuntal structure’s durational properties reside in the opportunities it presents for seamless shifts in emphasis from one group of constellations of explicit and previously implicit tonal and durational strands to another, this without necessarily altering the fabric of the contrapuntal design at the surface in any appreciable way.

The notion of moving from one group of durational constellations to another is a necessary first step (and, given the daunting difficulties of the task, perhaps one of the last) in formulating a theory of phrase rhythm for Baroque music. It in some ways reflects Schenker’s notion of fluent melody (“fliessender Gesang”), William Rothstein’s imaginary continuo, and above all Frank Samarotto’s idea of modulating from one temporal plane to another.\textsuperscript{15}

Looking at the changes the basic pace undergoes within the span of a single phrase, such as our Concerto Grosso ritornello, we see that in expanding and then contracting at the turn of the \textit{Fortspinnung} and the \textit{Epilog} the basic pace helps the ritornello in acquiring a distinct profile, that of a closed durational design. Over the course of a complete movement, such a profile will characteristically repeat several times, often in the manner of hidden rhythmic repetitions, promoting a rhythmic ebb and flow that belies—and, I believe, supersedes—the motoric thrust of the surface. This ebb

\textsuperscript{15} Schenker 1987/2001, pp. 94-95; Rothstein 1990b, pp. 101-109; and Samarotto 1999b. See also Cadwallader and Gagné 2006.
and flow is made possible by the uniquely spatial quality of the basic pace, a quality the basic pace assumes through its union of duration and pitch. More than anything else, the union of pitch and duration accounts for the coherence of large-scale phrase rhythm in the Baroque repertoire, which may be viewed not as an additive chain of durationally independent phrases but as the balanced sum total of the long-span fluctuations in the basic pace. Indeed, one might define large-scale Baroque phrase rhythm as a play of equal and unequal durations and paces at several levels of structure that it mediated by the basic pace and governed by enlargement and contraction.16

Ultimately, a theory of Baroque phrase rhythm, as such, is bound to remain something of a chimera. What might be the crux of such a theory—the formal identification and procedural categorization of the fluctuations in phrase length and grouping pace—does not lend itself to the kind of codification usually found in a treatise. However elusive, the study of Baroque phrase rhythm will nonetheless always play a major role in our attempt to understand this deceptively accessible area of the tonal repertoire. By focusing on sequential expansion here, I hope to have provided at least one useful tool with which to carry out this quest.

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16 Throughout the detailed analyses in chapters 4 and 5 of my dissertation I demonstrate how the relations between expansion, contraction, and the basic pace are in turn governed by narrative archetypes. The incremental periodicity we’ve observed in the Rameau and Corelli examples here, for instance, is but one example of the expansion archetype.
WORKS CITED


