The Polyphonic *Ursatz*

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Apocryphal stories are not only the best; they are the most revealing, too. No one knows whether Schoenberg ever did exclaim, "Where are my favorite thirty-second notes?" when he read through Schenker's analysis of Beethoven's "Eroica Symphony."[1] But the story does express the sentiments of many who feel that there is something missing from Schenker's drastically concise background reductions. That elusive something may turn out to be a different component of the analyses for each of us, of course. For me, it is the pair of inner voices that supports the outer voices of the fundamental structure. The absence of inner voices from Schenker's depictions of the fundamental structure is something of a lacuna in a system that otherwise works quite beautifully. See Example 1, which shows several ways of reading the Allemande from Handel's D minor keyboard Suite (Book I, 1720). At a, the structural upper voice is the soprano, and it descends from a high F, the structural $\hat{3}$. At b, the structural voice is the alto, and it descends from the lower A, the structural $\hat{5}$. Common to both graphs is the omission of *obbligato voices* from the *Ursatz.* (In place of "inner voices" I use the more appropriate term "obbligato voices," after an essay on reduction by William Rothstein.[2])

I am not the first to quibble about the fate of obbligato voices at Schenker's hand, nor the first to attempt redressing the issue by restoring these voices. David Neumeyer

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[1] For a slightly different version, see Babbitt 1991, pp. 130-31.
[2] Rothstein 1990b, pp. 101ff.

has already blazed an "obbligato trail" with his *three-part Ursatz*, which allows for the structural descent of both soprano and alto.[3] Example 2a, of which more later, revisits the Handel Allemande and incorporates the two upper voices, following Neumeyer's models. Felix Salzer often added inner voices to his background graphs, if without making an issue of the matter.[4] Wayne Petty has pointed to the possibility that an obbligato tenor might on some occasions assume the function of the bass during a sonata-form development;[5] Charles Burkhart has called attention to a quasi-structural obbligato movement by the tenor at the distance of an octave above the tonic of the bass;[6] Brent Yorgason has demonstrated that inner voices may display "*Urlinie* envy" and may in fact assume the role of the *Urlinie* itself in the course of the piece;[7] Carl Schachter has noted that the *Urlinie* might be submerged well below several obbligato voices arpeggiated high above;[8] and Eric Wen has demonstrated that the *Urlinie* frequently migrates to the bass.[9] Here I should like to collate these theorists' observations and to take the further step of transforming the *three-part Ursatz* into a *polyphonic Ursatz*—if not one in which all four voices are equal, nor one in which the tenor part embodies a genuine structural voice.[10] I emphasize that this is more of an empirical than a theoretical proposition, since the background structure does indeed remain two-voiced at the very deepest level. The obbligato voices realized by the alto and by the tenor unfold a little closer to the surface

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[3] Neumeyer 1987b.
[4] Salzer 1952/1962. See, for instance, the background sketches in Vol. 2, examples i-viii and many others throughout.
[5] Petty 1999a.
[6] Burkhart 1973.
[7] Yorgason 2003. I thank Brent Yorgason for making a copy of his paper available to me.
[8] Schachter 1994.
[9] Wen 1999.
[10] In responding to Neumeyer 1987b, Steve Larson skeptically posits a similar possibility; see Larson 1987, p. 26.

than the fundamental two voices do. But in practice, as an aural and as an analytical experience, this is a distinction without much of a difference, at least in what concerns the alto.[11]

Emblematically, it is often difficult to decide which of the two upper voices is more structural: the soprano or the alto? Despite the soprano's prominence, it's actually the alto's descent that usually provides the scaffolding over which the thematicism of the piece rests, at least in the Baroque repertoire, if not in later music. When the alto is structural, the soprano represents an obbligato voice superimposed above it. Example 2b illustrates this structural norm: It shows how the soprano's $\hat{3}$–$\hat{2}$–$\hat{1}$ descent in Handel's Allemande bows to the alto's $\hat{5}$–$\hat{4}$–$\hat{3}$–$\hat{2}$–$\hat{1}$ descent. The Allemande is reproduced in Example 3; the two passages that are boxed in the Example are the ones we shall be looking at. The brackets in Example 3 call attention to the Allemande's most important thematic feature, namely the progressive enlargement of its opening turn figure, bb^1-a^1-g^1-a^1.[12]

To analyze the two boxed passages we need to preview the relationship between the bass and the tenor. In theory, the structural status of the bass would appear to be unequivocal. But in practice—throughout the tonal repertoire and especially in the contrapuntal textures of the Baroque—the bass does let the tenor take over its line for long periods of time, either while it remains standing tacitly below, or while it moves forward silently in slow and stealthy steps that are implied by the larger voice leading of the piece. Example 4 illustrates one of the reasons why the bass might go into hiding and

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[11] Unlike the distinction between a long-range *voice* and a local *part*, which Eric Wen has already addressed in his admirable study. See Wen 1999, pp. 277-79.

[12] Kamien 1983b describes progressive motivic enlargement.

become a *hidden bass*: the prevention of long-range, underlying parallel fifths between the bass and the tenor.[13] When the voices ascend, Handel usually averts these fifths by unfolding them from the bass up—or, more rarely, from the bass down—and letting the tenor move first (Example 4a). This creates a long-range intervallic 5-6-5 progression between the two voices (also known as a 5-6 exchange or a 5-6 progression for short). The procedure is shown in Example 4a in its more common, ascending form; the lowest staff of the Example shows how the tenor may temporarily dip below the bass through intervallic inversion. I'll discuss this progression later, when we attend to the contents of the second box.

When the tenor and the bass descend (Example 4b), Handel lets the bass move first (top staff, Example 4b) but often varies the progression in such a way that a 5-4-5 rather than a 5-6-5 succession between the bass and the tenor obtains at levels closer to the surface (middle staff, Example 4b). In this instance—this is the subject matter of our first box—two linear progressions come into play, linking both the bass and the tenor with the adjacent obbligato voices (the first part of the bottom staff, Example 4b). They also introduce a last-minute transfer of the tenor to a register below the bass (the second part of the bottom staff, Example 4b), covering up the underlying progression almost completely. Indeed, owing to the tenor's descent to the lower register, the progression's point of origin is obscured.[14]

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[13] For a detailed account of this feature see my "Bach, Handel, and the Hidden Bass" (forthcoming).

[14] Beginnings and endings of progressions are often covered up in this way in the high Baroque repertoire, rendering one's analysis all the more complicated. And, to compound one's difficulties, there is the frequent overlap of progressions (which, however, merits a separate study; see Wagner 1995).

(Another common reason for hiding the bass and exposing the tenor, which I mention here for the sake of comprehensiveness, is the need to insert a parenthetical cadential prefix—a rising third—between the subdominant and the dominant in order to add time and lend substance to a cadential progression (Example 5a). The prefix, which can be enlarged over the span of many measures, originates with the tenor or, less often, with the alto, and appears at the bass register.[15] Still another reason has to do with the realization of a long-span polyphonic dialogue between the bass and the tenor when they move in parallel thirds or sixths, often against similarly parallel motion in the opposite direction between the two upper voices (Examples 5b and 5c). When, during such dialogues, the tenor voice has its say, the bass must of necessity rest.[16])

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The two passages boxed in Example 3, with whose contents we shall now be occupied, span the opening eight measures of the Allemande and a group of nine measures near the end of the piece (bars 17-25). In the course of the opening measures, all voices descend a step from the key of D to the temporary key of C; in the course of the later passage, the two upper voices, both displaced registrally, carry out much of their structural descent. Within the second box the bass rises from the mediant to the dominant, but only with a good deal of help from the tenor.

Looking at the first box we can see how a^1, the alto's structural $\hat{5}$, is established as the primary structural tone in bars 1 and 2; and we can see how the high f^2, the soprano line's primary tone $\hat{3}$, is established in bar 3 (both $\hat{5}$ and $\hat{3}$ are prominent in the foreground and middleground sketches in Examples 6 and 7). By the last complete

[15] Rothstein 1991, p. 327, fn. 50, and Rothstein 2007; see also Bach 1949, p. 256.
[16] In Willner 2000 I discuss such situations in detail.

measure of the boxed passage, bar 7, the alto has moved down to g^1 and to $g\#^1$, and the soprano, suspended as it were all the way from bar 3, has regained its high f^2—only to fall, appoggiatura-like, to e^2 just before the box closes (bar 8^a). In between, the Allemande's melodic line traverses a zig-zag dialogic journey from the soprano's high ambitus down to the alto's middle register, lingering around the alto's g^1 and improvising an enlargement of the Allemande's opening turn figure, bb-a^1-g^1-a^1, over the sustained bass tone C (bars 5^b-8^a; see the upper brackets in Example 6a). These events, which culminate with the arrival of G# and our first glimpse of the dominant, A minor, in bar 8, are presented schematically in Example 6a. The Example discloses that although the alto and the tenor both move from A to G, an octave apart, each part maintains its own contrapuntal profile. Their near-identity in pitch—and their difference in behavior—runs through much of the Allemande. This is typical of alto-tenor relationships in four-voice textures across the high Baroque.

The bass and the tenor, as they move down from D and A to C and G, engage in the dual task of averting their impending parallel fifths and accompanying the upper voices. It is here that the tenor intervenes and takes over from the bass for the first time: Its fall from A to G becomes the main event of the progression, and it is placed *under* the longer bass movement from D to C (see the curved arrows that run from a to A and from G to g in Examples 6a and 6b). The bass ascends from the opening D to an inner-voice F across bars 1-2 (see again the tonal reductions in Example 6, which are more detailed than the schematic sketch in Example 4b or the middleground graph in Example 7). To describe the progression more closely from the beginning of the Allemande: At this point (bar 2^b) a long descent begins. It connects the inner-voice F, through an intervening D

(bar 3^{b}), with the tones A and G at the end of bar 4. That is where the tenor's G, sounded an octave below its proper register, enters. An ascending fourth, G-C, then links G with the bass's C across bar 5. Example 6b shows how between the aforementioned tones D and A the progression also offers a 7-6 suspension series in support of the dialogue between the descending upper voices (bar 4). It then goes on to show how the alto, the tenor, and the other incidental obbligato voices add local enlargements of the Allemande's opening turn figure, Bb-A-G-A, once the bass C has been reached (bars 5^{b}-8^{a}; see the lower brackets in Example 6b).

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Because the bass line is by its nature disjunct at any level, its tendency to call upon the tenor for help (by way of exchanging roles and registers) inevitably leads to substantial disjunction in the tenor line as well. At levels close to the foreground, and at the foreground, the tenor—impersonating the bass—is likely to simulate the bass's signature movements, often for the entire duration of its masked appearance. Across the span of a complete movement, with the tenor stepping into the shoes of the bass at irregular but frequent intervals, the line the tenor draws will consequently *not* describe a goal-oriented or even a stepwise structural thread. By its very nature it is a migrating obbligato part—now linear, now disjunct—a "utility part," called upon to accomplish specific contrapuntal tasks.

Before we move on to the second box of Example 3, let us look at the tonal reduction in Example 7. The reduction explains the way the first box fits into the larger scheme of things during the first reprise, and it charts the path which the second reprise takes to reach the mediant, F, at bar 17—where the second box begins. By the time the

key of F has been reached, the alto and the soprano have regained their principal tones, a^1 and f^2, and they have returned to the two distinct registers with which we associate with them. However eventful in the foreground, the connecting passages (those between the boxes) move slowly and cautiously; their middleground reduction (Example 7) discloses only modest neighbor-note figures and unfoldings. During the time taken up by the connecting passages, the background structure rests as it were, patiently waiting for the middleground to complete its falling arpeggiation from the opening tonic to the mediant via the dominant at the double bar. Once the mediant, F, has been reached, the background springs into action.

Our focus will now be on how the bass in the second box rises from F to G and to A in bar 23—from the mediant to the subdominant *qua* supertonic in first inversion, and to the dominant—and on how the tenor helps the bass to articulate this ascent. I shall also address the upper voices' concurrent structural descents, if more briefly in order to draw a more comprehensive picture of the tenor's role in the larger scheme of things.

As they did earlier, the bass and the tenor engage in a horizontalized dialogue whose purpose it is to forestall the evils of impending parallel fifths. The step-by-step series of sketches in Example 8 discloses that the bass F in bar 17 tries to continue on to the G that ultimately arrives at the downbeat of bar 23 (see Example 8a). The arrival of G is delayed by an arpeggiated detour, this time upwards, to the tenor's intervallic 5-6 motion (Example 8b; recall Example 4a). The tenor extends its 5-6 motion, C-D (bars 17-21), by dwelling on a chromatic passing tone, C#, and on an introductory upper neighbor, D (Example 8c). To elaborate the progression and to give it length, both D and C# are first realized higher up by an obbligato voice in the one-line octave (bars 18, 19, and 20;

see the 8^{va} sign in Example 8c).[17] Notice that the tenor no longer moves at the distance of an octave from the alto, as it did in bars 1-8. The tenor has migrated down a sixth from its previous "station" at A (which it occupied during the entire first reprise) to a new station at C (compare the tenor line in Example 7b with the tenor line in Example 9b). This is what I meant when I indicated that the tenor migrates from one tonal area to another, in utilitarian fashion, in order to accomplish a specific contrapuntal task.

Let us now take a closer look at the components of the "grand detour" of bars 17-23. First, the connective arpeggio F-A-D in the middle of bars 17, 19, and 20 reaches up to the tenor's final D (Example 8d). The arpeggio fills much of its ascent by step as it climbs, and along the way it simulates the subdominant, at bars 18^{a}-19^{a}, the dominant at bars ^{19b}-20^{a}, and the tonic, at bar 20^{b} (Example 8e). The connective voice leading then reverses its direction: The complementary arpeggio D-Bb-G brings us down from D to the long-awaited G, filling in its descent by step at the downbeats of bars 21, 22, and 23 (Bb, A, and G, Example 8f). The descent outlines a genuine subdominant, but the need for tonal variety promotes a colorful substitution of the subdominant by a supertonic 6/3 at the turn of bar 23. The completion of the progression at the dominant's A, in the middle of bar 23, enables Handel to expand the Allemande's opening turn figure at several levels, as if the figure were the subject for learned improvisation (see the bracket in Example 8f).

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[17] The D, which occupies bars 18 and 19, appears before the C# of bar 20. It serves to mitigate the harshness of the tenor's underlying C-C#-D chromatic progression. Schenker explains this principle in *Free Composition* (Schenker 1935/1956/2001), §249 (pp. 91-92), Figure 114. The way C-C# is intensified by the neighboring D here parallels the intensification of G-G# by the neighboring A in bars 5^{b}-8.

On top, the Allemande's main concern is with the soprano's climactic fall from bb^2 to g^2 in bars 18 and 19, an opportune enlargement of the Allemande's characteristic turn figure minus its closing tone (see the bracket in Example 9a; a glance ahead at Example 10a discloses that both Bb and G are ornamental tones placed above and next to the soprano's structural F). Once g^2, a local neighbor note that feigns to be a structural neighbor note, has been sounded, the soprano's high register is all but abandoned (see the ellipsis sign in Example 9a). The soprano's later continuation to F and to E takes place in the one-line octave, right above the aforementioned Bb-A-G (bars 21-22-23). Only the brief excursion to e^2 and d^2 at the turn of bar 25 hints at the presence of the soprano's earlier tessitura, and the brevity of the excursion confirms our preliminary impression that at the deepest level the soprano is but a superimposed obbligato voice.

What the alto and the bass do vis-à-vis the connective thread Bb-A-G in the large octave is still more remarkable. The falling third Bb-A-G in the low register and its continuation to the dominant on A at the middle of bar 23 not only expands the Allemande's opening turn figure but also takes over the alto's structural line. A comparison between bars 17 and 23—and a look at the heavy beam between the staves in Examples 9 and 10—reveals that the alto's fall from A to G ($\hat{5}$ to $\hat{4}$) has been entrusted to this space-filling, thematically cathartic enlargement. The melody above the enlargement, however beautiful, is simply a sequential accompaniment of the type frequently found at corresponding locations in binary dance-suite movements; fortuitously, it also accommodates the soprano's structural descent.[18] At bar 23, both the alto and the bass

[18] The rhythms of the melody's passagework—and the pointed sharpness of its off-the-downbeat rising leaps—are a gloss on the rhythms and leaps at the turn of bar 3 and the middle of bar 3.

converge upon G. While the bass then proceeds to A, in the middle of the measure, the alto reclaims its proper register, in the one line octave.

Once the bass A has been established, only a few issues remain for the Allemande to work out. These include the completion of the alto's descent—in both its proper register and again in the register of the bass—and the bass's gradual reclamation of the tonic. Like many pieces in binary form that have reached their climax with an expanded sequence late during the second reprise, the Allemande has neither the time nor the space to deal with much more than the tonic's reassertion (see Example 9 and 10).

As for the tenor, after reaching the D of its 5-#5-6 motion at the middle of bar 20 and continuing up to E (bar 23), it does not stop its ascent: It climbs further, up to G (bar 24^{b}, Example 9b). At this point something special happens: The tenor tries to reclaim its former station at or around A by hanging on to the G, a long-range passing tone connecting the A of bar 17^{b} with the closing tonic's upper third, F (bar 27, Example 10). The tenor now begins to move restlessly between A and G on the one hand and D and E on the other; see the straight lines that connect these maneuvers in Example 9b. Only at the very end of the Allemande does the tenor comes to rest, on F.

Taking in the entire Allemande, as depicted by the comprehensive sketches of Examples 10 and 11, we can see how the tenor prolongs A but migrates down to C, D, and E for a substantial stretch (bars 17^{b}-23^{a}) without any contrapuntal procedure to link the tenor's two distinctly different areas of operation (see Example 10c). On the whole, the tenor projects a $\hat{5}$-$\hat{6}$-$\hat{5}$-$\hat{4}$-$\hat{3}$ line which, despite its focus on $\hat{5}$, is interrupted halfway by the excursion to C-D-E. If we put the tenor together with its three companion voices we'll see readily why a structural graph, one that is very close to the background of the

Allemande, would be largely meaningless without a representation, however sketchy, of the migrating obbligato tenor;[19] see Example 10a. Because the tenor is more of a disjunct "service part" than a truly homogeneous contrapuntal voice, and because as such it wanders through the texture, its inclusion problematizes the sketch and the theory underlying the sketch. Intended to reduce and to clarify, the sketch in fact runs the dual risk of becoming too cluttered and veering too far off from what Schenker meant by "background." The addition of the tenor brings with it polyphonic details that are usually omitted even from the deep middleground (let alone the background) graph, but in so doing it pushes the graph back in the direction of the foreground.

And yet tonal music—and Baroque music above all—*is* polyphonic to the core: not two-voiced, nor three-voiced, but four-voiced. Leaving out those parts of the scaffoldiing that support one's favorite thirty-second notes *does* alter the meaning and the sense of one's analysis. It also changes one's aural picture of the music. It consequently hampers the realization of the structural reduction's mandate: To provide a visual and experiential emblem of the music's scaffolding at the very background. Nonetheless, this task *can* be accomplished—by summing up, however cryptically, not only the movement of the alto and the soprano but also that of the tenor. See the proposed background graph in Examples 11a and its more drastically reduced companion graph in Example 11b. Such a blunt summary, of necessity, reduces the tenor line down to a $\hat{5}$ - $\hat{4}$ - $\hat{3}$ descent (as in Example 11b), or (hypothetically) to a $\hat{5}$ - $\hat{6}$ - $\hat{5}$ neighbor-note motion (Example 11c),

[19] Not to mention the obbligato soprano line.

or (again, hypothetically) to a $\hat{5}$ - $\hat{6}$ - $\hat{7}$ - $\hat{8}$ ascent (Example 11d).[20] Despite the omission of some of the tenor's middleground forays (especially in Examples 11c and 11d), the visual summary succeeds in making the tenor's presence known loud and clear, without compromising the clarity of the graph.

Ultimately, the significance of the two principal obbligato voices and the reason for retaining them in the background rests with the purpose they serve: They provide the tonal means by which the two lines of the background structure open up, arpeggiate, and unfold at the later levels. Searching for a metaphoric image one might say that they are the wings that allow the bird to take off and fly.

Letting the *Ursatz* remain in a state of polyphony points to the dependence of all voice leading—from the foreground to the background—on invertible counterpoint.[21] I already emphasized that the migration of the alto's structural descent to the lowest register (as in bars 21, 22, and 23), for all the structural drama it enacts, is a very common phenomenon. So is the alto's second migration, to F in the lowest register, in bar 25 (see

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[20] Owing to difficulties in resisting the tendency of $\hat{6}$ in minor to fall back to $\hat{5}$, and to related difficulties of raising $\hat{6}$ chromatically over long spans of time, this progression does not lend itself to composing out on a large scale in the minor mode. Examples nonetheless can be found throughout Bach's suites, sonatas, and partitas for various instruments. Most movements of the D minor Suite for Violoncello Solo, for instance, close with a motivically charged ascending *Urlinie*. Rothstein 1991, pp. 306-7, and Schachter 1996, pp. 333-41 (especially 338-39) take up the question of levels raised by David Neumeyer's notion of the ascending *Urlinie*; see Neumeyer 1987a.

[21] Specifically, invertible counterpoint at the octave. Franck 2006 demonstrates brilliantly how invertible counterpoint at the 12th may affect the disposition of the structural voices of the *Ursatz* under fugal circumstances, and how it may take part in composing out the *Ursatz*. I thank Peter Franck for making a copy of his paper available to me.

the alto's beam in Examples 9 and 10).[22] The polyphonic *Ursatz* sets the proper stage for presenting and interpreting this invertible counterpoint in its larger context, and for gauging the invertible counterpoint's all-encompassing significance vis-à-vis the obligatory registers of the two structural voices.

As it stands, Schenker's austere and somewhat aloof two-voiced background structure resembles a formal portrait of a senior Royal Family—the monarch and his queen—without their siblings. The polyphonic *Ursatz*, by including both the prince and the princess, adds a much-needed human and familiar touch to the tonal hierarchy.

[22] By the same token—and this applies to all tonal structures—the bass may migrate temporarily up to the soprano's register. In the Classical and Romantic symphonic repertoire (and above all in those that borrow from the Baroque repertoire), a lone tone played by the double basses may take over the soprano's wandering *Kopfton*, and a lone tone played by the flutes may represent a structural bass tone. Retaining the obbligato voices alerts us to these essential but frequently overlooked inversional situations.

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