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SCHOENBERG ON ORNAMENTATION AND STRUCTURAL LEVELS

Jack Boss

In his 1932 radio lecture on his *Vier Lieder*, op. 22, Arnold Schoenberg makes a claim about a particular pitch in "Seraphita," the first song.¹ See example 1.² Schoenberg calls the A4 in his example 23 an "ornament" to the B♭4 and B4 on either side of it. (The German original uses the adjective *umschreibend*.) This seemingly insignificant assertion elicits two questions whose answers are significant. First, does Schoenberg promote the idea of structural levels in atonal music here, despite passages in his other writings that seem to reject the notion of structural levels altogether? And if he does, what criteria does he suggest for determining which notes are structural and which ornamental? This article will attempt to answer both questions, interpreting Schoenberg's example 23 and other examples from the radio talk in the light of more recent literature that suggests criteria for distinguishing between structure and ornament in atonal music.

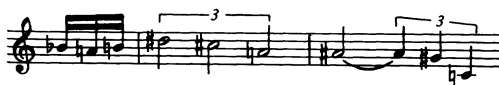
In his article "The Problem of Prolongation in Post-Tonal Music," Joseph Straus points out that two criteria used in tonal music to distinguish structural from ornamental pitches generally do not apply in atonal music: first, the support of structural pitches by consonant triads or intervals; second, the higher position of that support in a hierarchy of consonant harmonies.³ To explain why Schoenberg calls

In the second section the voice repeatedly employs the three-note motif in a variety of ways. For example, at the words “laute Angst,”



No. 19 (Piano)

or at “in deines Ruheortes”



No. 20 (Piano)

where, to be sure, changes have become evident, so that



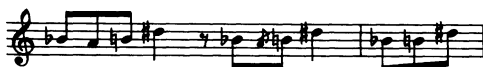
No. 21 (Piano)

attests to the original shape



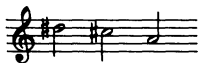
No. 22 (Piano)

—if one disregards the ornamental half-step—



No. 23 (Piano)

and where the minor third has become a major third. To this will be added a further transformation; the minor second likewise becomes major.



No. 24 (Piano)

Example 1. Nos. 19–24 in “Analysis of the Four Orchestral Songs op. 22.” Copyright 1967 by Belmont Music Publishers. Used by permission of Belmont Music Publishers, Pacific Palisades, CA 90272.

this A4 ornamental, we should first determine whether Straus might be wrong about the first criterion; maybe the vertical supporting it can be considered more dissonant than the verticals surrounding it, which would make A4 correspond to a dissonant ornament in tonal music. Example 2 lists the set-class names and interval vectors for all verticals in mm. 33–37 of “Seraphita.” The purpose of this list is to show whether the verticals supporting B♭4 and B4 are more consonant in the traditional sense than that supporting A4; that is, whether they emphasize intervals such as thirds, fifths, or sixths to a greater extent. The list in ex. 2 also is intended to show whether Schoenberg defines the verticals supporting B♭4 and B4 as more consonant in a contextual sense—whether he defines their set classes somehow as focal points.

The support for A4 in example 2 is vertical 12, which belongs to set class 6-Z11 (012457). It is no more dissonant in the traditional sense than verticals 11 and 13, which belong to set classes 6-Z23 (023568) and 6-Z49 (013479). It is true that 6-Z11 has one fewer interval class 3 (minor third or major sixth) than its surrounding sets, but it also has one fewer interval class 6 (tritone). At the same time, Schoenberg defines neither 6-Z23 nor 6-Z49 contextually as a focal point through frequent repetition or placement at the beginnings and endings of phrases. In fact, he rarely repeats any set class in mm. 33–37: 6-Z10 (013457), 6-Z49, and 6-Z50 (014679) occur twice, and 6-15 (012458) occurs three times among 27 verticals.

Thus, our example of an atonal ornament seems to prove Straus right: the vertical supporting it cannot be construed as relatively dissonant either in the traditional sense or in a contextual sense. The support for A4 does not contribute to its ornamentality. We still need to figure out what it is about the note that inspired Schoenberg’s “ornament” label.

Many authors in the past fifty years have devised strategies for distinguishing between structural and ornamental elements in musical contexts where patterns of consonance and dissonance provide no clues or provide clues contradicting those strongly suggested by other features. We will divide these strategies into three categories: 1) the use of contextual criteria to distinguish structural from ornamental pitches, 2) limiting the acceptable structures, 3) limiting the acceptable ornament types.

One good example of using context to distinguish structure from ornament at different structural levels is Joel Lester’s analysis of the “Menuett” from Schoenberg’s op. 24 *Serenade*. In his treatment of mm. 1–2 of the clarinet part (see ex. 3), a middleground “division tone,” E♭4, ornaments the F♯4 and C4 at beginning and end of the phrase, and is itself ornamented in turn. This division is followed by a register transfer to E♭5.⁴ (According to Lester, a division tone is the

molto rit. - - -

bleib von mir fern in deine

2. Sol Gg (arco) m Dpf f am Steg - - -

3. Sol Gg pizz trem m Dpf 5.6. K1

1. Sol-Vel

pp dolce 3

1 2 3 4 5 6 7 8 9 10 11 12 13

Example 2. Verticals in mm. 33–37 of “Seraphita,” with tables of set classes and interval vectors. Copyright 1917 by Universal Edition. Copyright renewed 1944 by Arnold Schoenberg. All rights reserved. Used by permission of Belmont Music Publishers, Pacific Palisades, CA 90272.

atonal equivalent of a tonal passing tone, in which no limit is placed on the dividing intervals’ size—they need not be seconds. However, they must divide the outside interval equally or almost equally.) The structural status of F#4 and C4, the notes representing the interval being divided, is enhanced by their placement at the beginning and end of the phrase. Schoenberg reinforces the middleground dividing quality of E♭ by giving it the middle two beats of the phrase—a relatively long duration—and by placing it in a relatively high register, though the register transfer causes it to divide F# and C in a less obvious way.

This practice of calling pitches structural because of factors—sometimes rhythmic, dynamic, and timbral—that cause them to stand out from other pitches in their immediate contexts is common to every writer on structural levels in non-tonal music. Milton Babbitt’s 1949 article “The String Quartets of Bartók” includes longer duration, greater dynamic emphasis, metrical accent and repetition as contributors to structural distinction.⁵ Felix Salzer’s analyses in vol. 2 of *Structural Hearing* illustrate a wide variety of contextual criteria, which he never makes explicit, but which can be inferred.⁶ He associates certain criteria with certain composers: while Stravinsky high-

Set	Interval vector	Set	Interval vector	Set	Interval vector
1. 6-Z50	<224232>	10. 6-Z13	<324222>	19. 6-15	<323421>
2. 6-16	<322431>	11. 6-Z23	<234222>	20. 6-Z10	<333321>
3. 6-Z42	<324222>	12. 6-Z11	<333231>	21. 5-16	<213211>
4. 6-Z47	<233241>	13. 6-Z49	<224322>	22. 6-Z49	<224322>
5. 6-21	<242412>	14. 6-Z17	<322332>	23. 6-Z10	<333321>
6. 5-26	<122311>	15. 6-7	<420243>	24. 6-15	<323421>
7. 6-31	<223431>	16. 6-Z12	<332232>	25. 6-Z50	<224232>
8. 6-15	<323421>	17. 6-27	<225222>	26. 6-Z46	<233331>
9. 6-34	<142422>	18. 6-Z19	<313431>	27. 6-22	<241422>

Example 2. (continued)

lights structural chords by repeating them and continually returning to them, structural pitches in Hindemith are often beginnings or endings of sequenced motives. (See his analyses of Stravinsky's *Symphony in Three Movements* [2:234–37]; and of Hindemith's *Third Piano Sonata* [2:6–7].) Allen Forte provides a long list of contextual criteria for identifying structural pitches in his early work *Contemporary Tone-Structures*.⁷ Roy Travis emphasizes the pitch's location in the phrase. In the course of an analysis of the opening measures of the *Rite of Spring*, he writes:

... those chords which mark the beginning or end of a given procedure of motion tend to serve in a structurally more important capacity than the chords in the midst of that motion.⁸



Example 3. Adapted from No. III-5 in Joel Lester, "A Theory of Atonal Prolongations." Copyright 1970 by Joel Lester. All rights reserved. Used by permission.

Robert Morgan relies to a large extent on Travis's criterion to determine "middlegrounds" and "backgrounds" that depart from and return to diminished seventh chords and augmented triads in the music of Liszt and Wagner.⁹ In a more recent study, Fred Lerdahl distinguishes between "prolonged" and "prolonging" notes in atonal music according to such features as strong metrical position, loudness, timbral prominence, registral position, density, duration, parallelism with another structural event, and departure and return.¹⁰

Clearly, much of the work on structural levels in atonal music has focused on establishing contextual criteria for structurality; not surprisingly, many and various criteria have been suggested or implied. By way of summary, we will list nine of the most commonly-mentioned ones. See table 1 (which deviates little from the list provided by Lerdahl).

Another commonly-used technique in distinguishing between structure and ornament in atonal music is to limit the kinds of configurations that are accepted as structural. These configurations usually do not resemble the major or minor triad, the ultimate structure in Schenkerian analyses of tonal music. Sometimes, authors propose symmetrical interval patterns as analogies to the triad. For example, Morgan's analysis of "Énigme," no. 2 of Scriabin's *Morceaux* op. 52, suggests that the background is a contrapuntal "prolongation" of {A \flat , C, E $\flat\flat$, G \flat , B \flat }, a whole-tone subset.¹¹ And Lester's middle-ground encompassing the first six measures of the "Menuett" in Schoenberg's *Serenade* op. 24 incorporates a number of symmetries, as ex. 4 shows. The symmetries are indicated by arrows in the example.¹²

A similar approach limits structure to those configurations which in some way resemble a referential motive. Allen Forte has asserted that in both tonal and atonal contexts, pitch-class successions belonging to the same set class as a motive can carry greater structural weight than the surrounding pitch classes in a line. His illustrations include a demonstration of how the melodic line in the first sixteen measures of the *Tristan* Prelude ornaments the pitch-class succession <G \sharp , B, D, F \sharp >,

Table 1. Contextual criteria for structurality suggested by the literature on structural levels in atonal music

A pitch or sonority is more likely to be structural if it:

- 1) begins or ends a phrase, motive, or other significant unit
- 2) has a relatively long duration
- 3) is repeated or returned to
- 4) is relatively loud
- 5) is metrically accented
- 6) is relatively high or low
- 7) is relatively prominent timbrally
- 8) is relatively dense
- 9) occurs in a location parallel to some other structural event

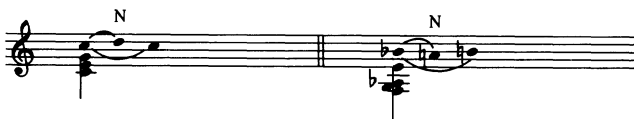
a transposition and reordering of $\langle F, B, D\#, G\# \rangle$, the “Tristan chord.”¹³

Just as limiting possible structures helps identify ornament in atonal music, so restricting the number of acceptable ornament types helps identify structure. Many of the above-mentioned authors simply borrow the neighboring tone, passing tone, and consonant skip from tonal music, as Schoenberg also may have been doing when he labeled A4 an “ornamental half-step”—possibly he thought of it as a neighbor. But there is a problem with this, as Straus points out in “The Problem of Prolongation in Post-Tonal Music.” That is, abandoning the distinction between consonant and dissonant intervals and sonorities, as we do in atonal music, prevents us from associating certain intervals with arpeggiation and certain other intervals with motion outside a harmony. How do we know in an atonal context what is a passing or neighboring tone and what is a chordal interval? Straus rightly considers the ability to consistently associate vertical and horizontal seconds with passing and neighboring motions and triadic intervals with structure an important condition for prolongation in the Schenkerian sense. (We will discuss Schenker’s sense of prolongation in more detail later, showing how a consistent distinction between consonant and dissonant intervals derives naturally from it.)

But what about a notion of ornamentation that does *not* claim to be prolongational in the Schenkerian sense, but defines as an atonal ornament some pitch that mimics a function of a tonal prolongation, regardless of the intervals surrounding that pitch? Joel Lester seems to resolve Straus’s problem in this way in his dissertation on Schoenberg’s op. 24 (even though Lester does include the word “prolongation” in the work’s title). According to Lester, if a pitch in an atonal context has a function analogous to a type of tonal ornament, it can be



Example 5a. Illustrations of tonal passing tone and atonal division tones



Example 5b. Illustrations of tonal and atonal neighbor tones

“New Approaches” consists mainly of unordered pitch-class sets and set classes, the motivic structure Schoenberg describes in the radio talk has to do with ordered pitch interval successions. This author demonstrated in a recent article that most or all of the intervals in “Seraphita” can be derived by applying three variation kinds to the song’s motive, which is a class of eight ordered pitch interval successions.¹⁶ The successions, called Category A, are listed on table 2. Applying octave complementation to either or both of the intervals in a Category A form results in 24 Category B forms, reordering the pitches representing a Category A form generates 16 Category C forms, and expanding either or both of the intervals in an A form by semitone creates 24 Category D forms. See table 3 for illustrations. In the above-mentioned article, this author evaluates the motive-forms in Categories B–D for their closeness to or remoteness from the original Category A forms, and he characterizes the successions of motive-forms in “Seraphita” as increasing or decreasing in remoteness. These increases and decreases delineate segments of the musical form and enable such segments to fulfill their unique function, as well as expressing the song’s text.

The structural pitches B \flat 4, B4, and D \sharp 5 in Schoenberg’s example 23 do in fact represent a varied form of the motive of “Seraphita.” Schoenberg himself points out that they form an interval expansion, $\langle +1, +4 \rangle$; as he puts it, “the minor third has become a major third.” But limiting structure to varied and unvaried forms of the motive of “Seraphita” does not by itself exclude A4 from structural status. The pitch succession $\langle C\sharp 4, B\flat 4, A4 \rangle$ represents $\langle +9, -1 \rangle$, an octave complementation,¹⁷ and $\langle A4, B4, D\sharp 5 \rangle$ represents the interval expansion $\langle +2, +4 \rangle$. Therefore, to explain the “ornamental” status of A4, some of the other ways of distinguishing structural



Table 2. Motivic Category A in “Seraphita” (unvaried motive)

$\langle -1, +3 \rangle$ $\langle -1, -3 \rangle$ $\langle -3, +1 \rangle$ $\langle -3, -1 \rangle$
 $\langle +1, -3 \rangle$ $\langle +1, +3 \rangle$ $\langle +3, -1 \rangle$ $\langle +3, +1 \rangle$

Table 3. Variation kinds in “Seraphita”—examples

octave complementation (Category B): $\langle +1, +3 \rangle \longrightarrow \langle -11, +3 \rangle$
 $\longrightarrow \langle +1, -9 \rangle$
 $\longrightarrow \langle -11, -9 \rangle$

pitch reordering (Category C):

$\langle +1, +3 \rangle \longrightarrow$  \longrightarrow  $\longrightarrow \langle +3, -4 \rangle$

interval expansion (Category D): $\langle +1, +3 \rangle \longrightarrow \langle +1, +4 \rangle$
 $\longrightarrow \langle +2, +3 \rangle$
 $\longrightarrow \langle +2, +4 \rangle$

pitches described above must be considered. First, contextual criteria: the rhythmic figure containing three short values followed by a long value is motivic in “Seraphita,” and it isolates the succession $\langle B\flat 4, A4, B4, D\sharp 5 \rangle$ as a unit (register and text also contribute to marking $B\flat 4$ as a starting point). Within this unit, $B\flat 4$ gains prominence as its beginning and $D\sharp 5$ as its ending, according to Travis’s principle quoted above. The longer duration of $D\sharp 5$ also provides emphasis. Between these starting and ending points indicated by contextual criteria, the succession $\langle B\flat 4, B4, D\sharp 5 \rangle$ represents a motive-form, but $\langle B\flat 4, A4, D\sharp 5 \rangle$ does not. Also, assuming $B\flat 4$ and $D\sharp 5$ to be structural leaves $A4$ as the only member of the four-note unit that satisfies Lester’s criteria for ornament status. $A4$ is approached by a semitone and left by a whole tone, and thus could be called a neighbor to $B\flat 4$ and $B4$; but $B4$ does not divide $A4$ and $D\sharp 5$ symmetrically, which would deny it division tone status. Both contextual criteria and Lester’s limitations on ornament types help us to choose $\langle B\flat 4, B4, D\sharp 5 \rangle$ as structural, rather than the motive-forms that include $A4$. Schoenberg’s “ornament” label in his example 23 is consistent with criteria developed by more recent theorists for distinguishing structural from ornamental notes.

We should not be satisfied with proving that these criteria explain Schoenberg’s label in just one example, however. We need to look at another example from the radio talk, Schoenberg’s example 27, which

presents the first and second violin parts in m. 41 of “Seraphita.”¹⁸ See example 6a.

Schoenberg talks about an “additional connection” between the violins’ intervals in his ex. 27 and the “Seraphita” motive, and shows that this connection is the succession $\langle C\sharp 5, C5, E\flat 5 \rangle$. (In his words, “Sie hängen aber noch durch etwas mit dieser ersten Figur zusammen.”) This succession is the only one in the example representing a form in one of the 4 motivic categories A, B, C, or D. If we limit structure to pitch successions representing forms in those categories, then we can explain why Schoenberg’s stemmed and beamed notes ought to be considered structural. Contextual criteria also support this distinction: $C\sharp 5$, $C5$, and $E\flat 5$ each gain emphasis through high register and relatively accented metrical position, and $E\flat 5$ is the only pitch in the example to be accompanied (see ex. 6b, which provides the larger context for Schoenberg’s ex. 27).

The group of ornament definitions proposed by Lester also assists in making a structural-ornamental distinction in Schoenberg’s ex. 27. The ornaments here satisfy Lester’s definitions if we invoke register transfer as an operation that can follow an atonal ornament type (as Lester does). Then the first $D4$ in example 27 would be a complete neighbor to $C\sharp 5$ and $C5$, the $B3$ would be an incomplete neighbor to $C5$, and the second $D4$ an incomplete neighbor to $E\flat 5$. All three pitches form ordered pitch intervals of 1 or 2 semitones (octave-complemented or compounded) with structural pitches. As for the $G3$ that begins the example, it is a division tone between the $C\sharp 3$ in the tuba immediately preceding it and the $C\sharp 5$ immediately following it. This division tone is also transformed by a register transfer.

We need to evaluate and justify the practice of allowing register transfer to follow an atonal ornament, particularly in the case of the division tone $G3$, which no longer divides the interval between structural notes symmetrically after register transfer. The aural similarity of pitch intervals belonging to the same interval class is an important reason for hearing $G3$ as a division tone. The ordered pitch interval $+6$ between $C\sharp 3$ and $G3$ sounds like the octave-compounded interval $+18$ from $G3$ to $C\sharp 5$, so that in a sense, the ornament departs from and returns to $C\sharp$ by the same interval, notwithstanding the register transfer. In the same way, the neighboring quality of $D4$, $B3$, and $D4$ seems to be most easily explained by aural similarity of pitch intervals within the same interval class: for example, the octave-complemented ordered pitch interval -11 between $C\sharp 5$ and $D4$ sounds like the $+1$ that would be formed between $C\sharp 5$ and a more easily recognizable neighbor $D5$.

A third group of examples of ornaments from the radio talk will further test our criteria for distinguishing between structural and

We have also played the measures that introduce the more agitated middle section, during which you heard the violin figures:

No. 26: Orch.

(Violins),

p. 7, mm. 41–43

whose large intervals are in the rhythm of the first figure. But there is an additional connection: by stressing the top notes in the first phrase,



No. 27 (Piano)

you will obtain the first figure.



No. 28 (Piano)

Example 6a. Nos. 27–28 in “Analysis of the Four Orchestral Songs op. 22.” Copyright 1967 by Belmont Music Publishers. Used by permission of Belmont Music Publishers, Pacific Palisades, CA 90272.

m. 41

Example 6b. Context of example 6a in the score of “Seraphita” (m. 41). Copyright 1917 by Universal Edition. Copyright renewed 1944 by Arnold Schoenberg. All rights reserved. Used by permission of Belmont Music Publishers, Pacific Palisades, CA 90272.

ornamental notes. This group comes from Schoenberg's discussion of the third song in op. 22, "Mach mich zum Wächter deiner Weiten" (see ex. 7a).¹⁹ Schoenberg, in his ex. 59, points out that the incipits of the three segments that make up the second part of the vocal solo are similar in structure, despite being "ornamented" in different ways. (In the original typescript, the adjective used is, again, *umschreibend*.) We will focus on his examples 59a and 59c, which interpolate ornaments between the marked structural pitches (*Hauptnoten*).

In Schoenberg's exs. 59a and c, contextual criteria of the kinds we have discussed support his labeling of notes as structural in more subtle ways than in previous examples. (See ex. 7b for the passages in the score corresponding to Schoenberg's exs. 59a and c.) In his ex. 59a, the first two of his marked pitches, F4 and E4, are highlighted metrically by occurring *after* the beat. They are the only two syncopated pitches in the group that begins the first segment of Part II. In addition, the accompaniment reinforces F4 and E4 texturally: the English horn leaps down 13 semitones to the D4 that appears together with F4, and the oboe's entry on A5 begins together with E4.

As for his ex. 59c, the lower register of the marked pitches seems to set them off from surrounding pitches, particularly since downward-moving lines figure so prominently in the accompaniment in m. 24. The four cello parts also reinforce E4, as they descend by relatively large intervals into the chord that accompanies it on the latter half of the first beat of m. 24.

Schoenberg's assertion that the marked notes in his ex. 59 constitute "a sort of ornamented figure" suggests the presence of a basic motive in "Mach mich zum Wächter deiner Weiten," which roughly resembles the "Seraphita" motive. This class of eight ordered pitch interval successions, which we will call the "Wächter" motive, includes all the two-interval successions combining ordered pitch intervals -1 , $+1$, -2 , and $+2$, where both intervals descend or ascend. See table 4. The structural notes in ex. 59a overlap $\langle -1, -2 \rangle$ with $\langle -2, -1 \rangle$ to form $\langle -1, -2, -1 \rangle$, while the structural notes in ex. 59c represent $\langle -1, -2 \rangle$.

The only class of criteria that cannot assist with making a structural-ornamental distinction in Schoenberg's ex. 59 is the group of ornament definitions proposed by Lester. Some of the ornaments here do satisfy Lester's definitions: the E4 beginning ex. 59a is an incomplete neighbor, and the F4 in ex. 59c is a complete neighbor. But the G#4 in ex. 59a and the A4 and B4 in ex. 59c cannot be explained as neighbor or division tones, even if we were to consider possible structural notes in the accompaniment. These three pitches present us with a dilemma. Schoenberg calls them ornamental in his commentary on ex. 59, and the pitches that they ornament seem more structural for

Now, in the endeavor to gain a sung melody from the natural intonation of the words in spoken melody, it is obvious that one will have to evade the principal notes in singing, as much as one will avoid the fixed pitches in speaking. If, in the former, one slips away from them, so in the latter case one will surround principal notes with embellishments. Indeed, perhaps it is this which imbued the recitatives in older operas with their liveliness—this embellishment named *appoggiatura*. If this interpretation is acceptable, light will be shed on many aspects of my works from this period, which might otherwise be difficult to understand. You will then be able to admit that, in fact, both the places that I designated as being practically the same, actually are so:



No. 58 (Piano)

Furthermore, you will then perhaps be able to hear that the three segments which make up the second part all begin with this sort of ornamented figure.

The first



No. 59a (Piano and Voice)

the second:



No. 59b

the third:



No. 59c

Example 7a. Nos. 58–59 in “Analysis of the Four Orchestral Songs op. 22.” Copyright 1967 by Belmont Music Publishers. Used by permission of Belmont Music Publishers, Pacific Palisades, CA 90272.

m. 15 laß mich der Flüs - se Gang be - glei - ten aus dem Ge -

1. Ob *pp* *schr. zart*

1. E H *pp* *schr. zart*

1. Sol Vcl *pp* *arco*

1. Bs-Kl *pp* *arco*

m. 20 Schick mich in dei - ne lee - ren Län - der.

3. Ob *pp* *schr. zart*

1. E H *pp* *schr. zart*

1. Bs-Kl *pp* *arco*

4. Sol Vcl *pp* *arco*

m. 23 de gehn, wo groß - e Klö - ster wie Ge - wän - der um un - ge

1. Bs-Kl *pp* *schr. zart*

4. Sol Vcl *pp* *schr. zart*

4. arco *pp* *schr. zart*

4. am Steg *pp* *schr. zart*

4. am Steg *pp* *schr. zart*

Example 7b. Contexts of Schoenberg's examples 59a-c in the score of "Mach mich zum Wächter deiner Weiten." Copyright 1917 by Universal Edition. Copyright renewed 1944 by Arnold Schoenberg. All rights reserved. Used by permission of Belmont Music Publishers, Pacific Palisades, CA 90272.

Table 4. The unvaried motive in “Mach mich zum Wächter deiner Weiten”

$<-1, -1>$	$<-1, -2>$	$<-2, -1>$	$<-2, -2>$
$<+1, +1>$	$<+1, +2>$	$<+2, +1>$	$<+2, +2>$

contextual and motivic reasons, but we cannot define them as atonal ornaments using the criteria developed by Lester and described earlier in this article.

The inability to define these three pitches as ornaments might lead us to abandon the distinction between structural and ornamental notes in Schoenberg's atonal music. Abandoning that distinction for all atonal music seems to be what Joseph Straus has done in “The Problem of Prolongation.” He suggests an alternative approach to structural levels in this music. According to Straus, members of a motive separated by other pitches can be “associated” contextually (every member has the same register, metrical or rhythmic position, timbre, or other quality), but intervening pitches should not be explained as ornaments of the motivic pitches. Straus's approach is well illustrated by his analysis of Webern's *Concerto for Nine Instruments* op. 24 (reproduced here in ex. 8).²⁰ He points out associations based on articulation and timbre (these are beamed in the example), then he states in the commentary accompanying the example: “I have made no claim regarding the pitches that intervene between the associated pitches.” Still, he does refer to the associated pitches as a “middleground” and a “structural level.”

Abandoning structural-ornamental distinctions in Schoenberg's atonal music would cause a number of problems, however. We would have to assume that Schoenberg was misguided in labeling certain notes as principal and others as ornamental and suggest that he was using those terms without any clear concept of what an ornament constitutes. But a more serious problem would be to limit ourselves to analyses of atonal music that assign events to structural levels but do not connect these levels except to show how they are similar. When lower levels do not grow out of higher levels, either through tonal prolongation or some other kind of ornamentation, it is difficult to understand how they can be called structural levels at all. It would be better simply to observe that some motive-forms involve adjacent notes and others non-adjacent notes.²¹

Another way out of our dilemma would be to retain the notion of atonal ornament but account for G#4, A4, and B4 as free tones. That is, we could assert that motivic and contextual considerations clearly mark them as ornamental, but that they do not fit any of the defined

Sehr langsam $\text{♩} = \text{ca. } 40$ 10 *calando a tempo*

Fl. 5 10 *calando a tempo*

Ob. *mp*

Kl. *mp*

Trp. *immer mit Dmp.* *pp* Pos. *immer mit Dmpf.*

Gge. *p*

Br. *mit. Dmpf.* *pp* *mp*

Klav. *pp* *p* *pp* *mp* *p* *pp* *p* *mp*

Example 8. No. 7 from Strauss, "The Problem of Prolongation"

ornament types. In effect, this would remove all restrictions governing the relations between ornamental and structural notes. The problem with this approach is that we would be labeling certain notes as ornamental without defining clearly how they relate to the structure. Motivic and contextual considerations alone cannot satisfy the definition of ornament. The note has to perform some kind of ornamenting role, preferably one analogous to a tonal prolongation (the kind of ornament most familiar to musicians). Were we to suggest that notes can be non-structural without serving some ornamental function, we would be open to the same criticism leveled against Strauss in the preceding paragraph. We would be asserting that structural levels exist in atonal music without showing how those levels grow out of one another.

The only recourse in the dilemma brought about by Schoenberg's ex. 59 seems to be adding an ornament type to those suggested by Lester. Like his division and neighboring tones, this ornament would mimic the function of a tonal prolongation, but would not satisfy the definition of prolongation in the tonal, Schenkerian sense. Let us consider an atonal ornament that functions in a similar way to the tonal consonant skip: it replicates the ordered pitch interval succession of a motive defined as structural in a piece, just as the consonant skip uses horizontal intervals that the tonal system defines as structural. We will call this kind of ornament a "motivic replication."

The three unexplainable ornaments in Schoenberg's ex. 59 are all part of motivic replications. The G#4 in ex. 59a is part of a replication of the "Seraphita" motive; with the structural pitches F4 and E4, it forms $\langle -1, +4 \rangle$, a Category-D (interval-expanded) form. (There are numerous examples of the "Seraphita" motive, both structural and ornamental, in "Mach mich zum Wächter deiner Weiten," suggesting that Schoenberg thought of it as more than just a motto for op. 22, #1.) As for A4 and B4 in Schoenberg's ex. 59c, they form the ordered pitch interval succession $\langle +2, -10 \rangle$ with the structural C#4 following, and hence could be explained as a replication of a transformed "Wächter" motive. We may derive $\langle +2, -10 \rangle$ from $\langle +2, +2 \rangle$ by octave complementation, one of the same variation kinds that Schoenberg applies to the "Seraphita" motive in op. 22, #1.²²

The pitches Schoenberg identifies as ornamental and principal in his ex. 59, as well as in his exs. 27 and 23, all meet three conditions, which will be proposed as general conditions for distinguishing structural from ornamental pitches in Schoenberg's atonal music:

- 1) Contextual criteria in the realms of duration, register, meter, timbre, accent, or other realms must support the distinction between structural and ornamental pitches. Structural pitches should all be emphasized through some characteristic in one or more of these realms, or at least share some characteristic in one or more of these realms.²³

- 2) Structural pitches must represent an unvaried or varied form of some motive in the piece (in "Seraphita," for example, a succession from one of the four categories A, B, C, D).

- 3) Ornamental pitches must satisfy either Lester's definitions of division tone or neighboring tone, or the definition of motivic replication proposed here. Though they may not be prolongations in the tonal sense, they should still serve a function analogous to that of a tonal ornament.

Before addressing some historical issues brought up by the notion of ornamentation and structural levels in Schoenberg's music, let us consider briefly the usefulness of the three ornament conditions in the analysis of a longer passage from "Seraphita." Example 9 offers mm.

33

bleib von mir fern in deiner Ruhe- oder Heiligkeit!

non-motivic D D non-motivic D2 D

< -1, -9, +9, +1, +4, -2, -4, +1, -2, -8, -1, +4, -1 >

Category B B D D D2 D

Example 9. Motivic analysis of the voice in mm. 32–37 of “Seraphita.” Copyright 1917 by Universal Edition. Copyright renewed 1944 by Arnold Schoenberg. All rights reserved. Used by permission of Belmont Music Publishers, Pacific Palisades, CA 90272.

32–37 of the voice part, the larger context of the ornamental A4 we considered initially. This passage contains another neighbor tone as well, an A4 in m. 33 on “von” that gets relatively little emphasis contextually and decorates the Category B form $\langle -1, -9 \rangle$. When we remove the two neighbors, we get the ordered pitch interval succession below the score in ex. 9, which consists almost completely of Category B, D and D2 forms (D forms with one or both intervals octave-complemented). The D and D2 forms and the progression from B to D to D2 indicate a progressive removal from the original motive, Category A, and also suggest relaxation in that they arise through interval expansion. (Expansion and relaxation are normally associated in the physical world.) Schoenberg is expressing motivically the text’s image of a beloved resting in safety, far from the struggles of the poet, and he reinforces this expression rhythmically and orchestrally as well (by long note values and by giving the double basses the *Hauptstimme* during these measures). Considering the first two A4s to be neighbors makes the motivic pattern easier to recognize by reducing the non-motivic interval successions to two, rather than the four that would have occurred.

* * *

While this article was establishing general criteria for distinguishing structure from ornament in Schoenberg’s atonal music, some readers might have been protesting that, despite his labels in the op. 22 radio talk, any concept of structural levels, Schenkerian or other, was foreign to Schoenberg’s thought. The reader might have appealed to the

its pitches. The middle level shows the inclusion of a passing tone, while the bottom level incorporates neighbors and another passing tone.

We could consider similar examples from *Fundamentals of Musical Composition*, or discuss passages in that book where Schoenberg demonstrates how ornamentation can generate musical form (passages such as his treatment of theme and variations, p. 169). But it will better fulfill our purpose if we return to the quotation from *Theory of Harmony* and show that the seeming conflict between its viewpoint on structural-ornamental distinctions and the viewpoint expressed in the op. 22 radio lecture and in *Fundamentals* really does not exist. The larger context of the quotation, all of chapter 17, strongly indicates that Schoenberg is attacking a structural-ornamental distinction that claims to be valid for *all* music, not distinctions appropriate to individual pieces, styles, or composers. According to him, no interval or combination of intervals is inherently non-structural: one musical style may treat the consonant triads and dissonant seventh chords as structural and other dissonant sonorities as ornamental, but that does not preclude the advent of another style or individual piece that would treat some dissonant non-tertian sonorities as structural and other sonorities as ornamental. In Schoenberg's own (translated) words, from p. 311 of *Theory of Harmony*:

Conversely, it has not been proved that these accidental harmonies are really without influence. Another point should be emphasized here: it is *not their nature* alone; it is no more their nature to lack influence than it is to *have* influence. Their influence depends only on how they are used. We can write them on one occasion in such a way that they appear entirely unrelated to anything else, but on another occasion in such a way that everything seems to emanate from them.²⁷

Schoenberg is arguing from a progressive outlook on the history of music. He views that history as a continuing struggle to establish intervals between higher partials of the harmonic series as members of structural sonorities. His view is most clearly expressed when he considers the role composers such as J. S. Bach played in the historical progression:

It is then certain that harsh harmonies, since they appear in Bach and thus surely cannot be aesthetic flaws, are actually requirements of beauty, if beauty is itself a requirement. And granted that he could allow them only as passing tones because his ear would not yet tolerate them if written freely—he did write them nevertheless, and did more thereby than just nibble at the tree of knowledge. He fulfilled his urge to accommodate more complicated harmonies, whenever he thought

he could do it without danger to the intelligibility of the whole. But the essential thing, the urge to write harsh harmonies, which I find identical with the urge to include more remote overtones—this urge was there. He wrote them as passing phenomena so that we can use them freely, he used a life-belt so that we learn to swim freely. Just as he swam freely where his predecessors had found the life-belt necessary.²⁸

We can conclude, then, that Schoenberg *asserts* the importance of distinguishing between structural and ornamental pitches, intervals and sonorities in all music; yet, for him, what is classified as structural or ornamental changes as music progresses.²⁹

While distinctions between structural and ornamental pitches and intervals are a crucial part of Schoenberg's thought, we have already suggested in our discussions of atonal ornament types how different these are from Schenker's distinctions between prolonged notes and diminutions. Schenker commented on his differences with Schoenberg in a passage called "The Dissonance is Always a Passing Occurrence, It is Never a Chord," found in the essay "Resumption of Urlinie Considerations" in *Das Meisterwerk in der Musik*, vol. 2. Here, Schenker offers a biting review of the seventeenth chapter of Schoenberg's *Theory of Harmony* and comments (unfavorably) on an excerpt from Stravinsky's Piano Concerto.

The difference with Schoenberg that Schenker highlights can be summarized this way: while Schoenberg makes distinctions for an individual piece involving all the vertical intervals and composites of intervals in that piece, labelling some as structural and some as ornamental according to the three criteria we have established, Schenker asserts for all music that only the consonances are intervals. In Schenker's thinking, the true nature of what some might call a "dissonant interval" is revealed in second species counterpoint; for example, in a passage like ex. 11.

Inasmuch as the passing dissonance forms a melodic bridge between two consonances and creates the tension of a third-span during whose duration (beyond the dissonance) the initiating tone is retained mentally, the significance of the passing dissonance becomes totally exhausted, hence no intervallic relationship between it and the sustained cantus firmus tone enters into consideration . . . The vertical element remains totally excluded, leaving the horizontal tension the only consideration involved. It is as if a vacuum existed between the dissonant passing tone and the sustained cantus firmus tone.³⁰

If Schoenberg were given example 11, it seems he would call all three verticals intervals, and determine on the basis of context which are structural and which ornamental. Schenker, on the other hand,



Example 11. A dissonant passing tone in second species counterpoint



Example 12. Illustrating transformation of a dissonant passing tone into a true interval

hears only two consonant intervals, the first lasting one whole note and retained (*festhalten*) in the listener's mind through the passing tone D5. This mental retention of consonant tone and interval through the space occupied by a dissonance is Schenker's concept of prolongation in its least complex form.

Of course, in contexts more complex than species counterpoint, Schenker permits pitches introduced as passing tones and other kinds of dissonances at one level to be prolonged themselves at a lower level. He accounts for such prolongations in "Resumption of Urlinie Considerations" and also in *Der freie Satz* by positing an added lower voice that makes a consonant interval with the passing tone or other dissonance. See example 12. The new consonant interval, created at a lower level, may then be prolonged itself. In no sense is the original dissonant relationship prolonged.³¹

Besides their difference on the nature of the vertical relationship between dissonant pitch and lower voice, and their disagreement about making a permanent classification of intervals into consonant/structural and dissonant/ornamental categories, Schoenberg's and Schenker's concepts of structural levels differ in other ways. The most obvious difference is in the number of structural levels in their analyses and illustrations. Schoenberg's levels are relatively shallow: he never seems to go higher than two levels from the musical surface, and he usually only goes up one level in analyses of his own atonal music, as we have seen in examples 1, 6 and 7. Schenker, on the other hand, assumes whatever number of levels necessary to get back to the

Ursatz, and ultimately to the tonic triad. This difference stems from different, equally compelling conceptions of the ultimate structure of a piece. Schenker derives everything from the triad, while for Schoenberg, the idea of a piece is the source of both long- and short-range coherence. This idea or *Gedanke* encompasses the working out of implications of motive-forms, within a framework involving the posing and solving of a problem. This framework is the entire piece. For Schoenberg, there is no need to go above the level where unornamented motive-forms occur, because beyond that point relationships created by motive variations, components of the coming to fulfillment of the idea, become the structure.

Given the differences between Schenker's and Schoenberg's approaches, the use of Schenkerian terms like "prolongation," "structural levels," "foreground," "middleground," and "background" in the first part of this article and in other literature on this topic must be reconsidered. We have already encountered several good reasons for abandoning the term "prolongation." Schoenberg's atonal ornaments are different from Schenker's tonal prolongations in two ways—Schoenberg does not prescribe in any systematic way which intervals should be considered ornamental and which structural, and he considers the intervals formed by ornaments to be intervals in their own right. These two differences are closely interrelated indeed, for it is necessary for Schoenberg to put dissonances on an equal footing with consonances as intervals before he asserts that they can play a structural role in some kinds of music, and it is likewise essential to Schenker's all-encompassing distinction between consonance and dissonance that he be able to characterize the dissonances as non-intervallic. Since the term "prolongation" refers precisely to the non-intervallic quality Schenker imputed to the dissonance, the sense in which one is expected to *hear through* the dissonance, it is by no means a proper label for Schoenberg's concept of ornamental interval.

The term "structural levels" still seems appropriate for the result of Schoenberg's concept, however, because he does rank pitches and intervals as structural and ornamental at each level, and in some cases shows how the ornamental pitches derive from the structural pitches through ornamentation types. We can say that structural levels are generated in Schoenberg's music through ornamentation *instead of* prolongation. But it is important to remember that Schoenberg's structural levels, unlike Schenker's, only go up as far as necessary to reach an unornamented motive—in Schoenberg's thinking, long-range coherence is *not* hierarchical in the Schenkerian sense. It is not attained through multiple structural levels, but by making motive variations pose and solve a problem. Therefore we have no need for the term "background" when analyzing Schoenberg's atonal music in

his own terms. Even “middleground” may be unnecessary; none of Schoenberg’s own analyses considers ornamentation on levels higher than what Schenker would call foreground.

Even though Schoenberg’s writings on structural levels and ornamentation do not suggest the notion of levels going all the way up to a background, consistent application of the criteria presented in this article can uncover ornamented forms of the motive that play significant roles in the process of developing variation. It is that process and the way it contributes to the presentation of the piece’s idea that gives Schoenberg’s atonal music its ultimate coherence.

NOTES

1. The archive of the Arnold Schoenberg Institute in Los Angeles holds the original German typescript of the lecture. An English translation by Claudio Spies was published as "Analysis of the Four Orchestral Songs Op. 22," *Perspectives of New Music* 3/2 (Spring-Summer 1965): 1–21; reprinted in *Perspectives on Schoenberg and Stravinsky*, 2nd ed., ed. Benjamin Boretz and Edward T. Cone (New York: Norton, 1972), pp. 25–45. Quotations from the lecture will be taken from Spies's translation; however, since much of the argument here will depend on Schoenberg's wording (and that of his translator), corresponding segments of the German original will also be provided in footnotes. The same procedure will be followed for quotations from other writings of Schoenberg and Schenker later in the article.
2. In the original typescript, Schoenberg's commentary on his examples 19–24 reads as follows (p. 8):

Im zweiten Teil bedient sich die Singstimme wieder vielfach und in mannigfaltigen Formen des Motivs aus drei Tönen. ZB bei den Worten "laute Angst" [ex. 19] oder bei "in deines Ruheortes" [ex. 20] wo sich allerdings bereits Aenderungen zeigen, indem [ex. 21] erst klar die Urform [ex. 22] dokumentiert, wenn man von dem einen umschreibenden Halbton absieht: [ex. 23] und wobei hier aus der kleinen eine grosse Terz worden ist, während in der Fortsetzung nicht nur das geschieht, sondern auch aus der kleinen Sekunde eine grosse wird. [ex. 24]
3. Joseph Straus, "The Problem of Prolongation in Post-Tonal Music," *Journal of Music Theory* 31 (Spring 1987): 1–21.
4. Joel Lester, *A Theory of Atonal Prolongations as Used in an Analysis of the Serenade, op. 24 by Arnold Schoenberg* (Ph.D. dissertation, Princeton University, 1970), pp. 51–52, and analytic supplement p. xii.
5. Milton Babbitt, "The String Quartets of Bartók," *Musical Quarterly* 35 (1949): 378–80.
6. Felix Salzer, *Structural Hearing: Tonal Coherence in Music*, 3rd ed., 2 vol. bound as 1 (New York: Dover, 1982).
7. Allen Forte, *Contemporary Tone-Structures* (New York: Bureau of Publications, Teacher's College, Columbia University, 1955), p. 17.
8. Roy Travis, "Toward a New Concept of Tonality?," *Journal of Music Theory* 3 (Fall 1959): 266.
9. Robert P. Morgan, "Dissonant Prolongation: Theoretical and Compositional Precedents," *Journal of Music Theory* 20 (Spring 1976): 49–91.
10. Fred Lerdahl, "Atonal Prolongational Structure," *Contemporary Music Review* 4 (1989): 65–87.
11. Morgan, "Dissonant Prolongation," pp. 80 and 84. James M. Baker, in "Schenkerian Analysis and Post-Tonal Music," *Aspects of Schenkerian Theory*, ed. David Beach (New Haven and London: Yale University Press, 1983), pp. 153–86, provides an alternative reading of "Énigme," maintaining that the underlying structure is more *Ursatz*-like than Morgan's. Baker's background presents a dominant seventh chord with flatted fifth in Db major, which resolves to the tonic in the middle section of the piece. The altered dominant returns in the third section, and the final resolution to the tonic is implicit.

12. Lester, *Theory of Atonal Prolongations*, pp. 46–48 and analytic supplement p. xi.
13. Allen Forte, “New Approaches to the Linear Analysis of Music,” *Journal of the American Musicological Society* 41/2 (1988): 315–48. It should be noted that other scholars pointed out the relationship between the Prelude’s opening melodic line and its initial chord prior to Forte’s article; among them are Milton Babbitt in *Words About Music*, ed. Stephen Dembski and Joseph N. Straus (Madison, Wis.: University of Wisconsin Press, 1987), pp. 146–51, and John Rahn in *Basic Atonal Theory* (New York: Longman, 1980), pp. 78–79.
14. It should be pointed out that Lester is carrying an even more basic component of the complete tonal neighbor over into atonal music together with proximity: departure and return. Paul Wilson, in “Concepts of Prolongation and Bartók’s op. 20,” *Music Theory Spectrum* 6 (1984): 79–89, maintains that, in the harmonic realm, departure and return alone can form the basis for a concept of atonal ornament. See particularly his pp. 88–89. Other authors use departure and return as the basis for decisions about structure, but tend to view it as a contextual criterion identifying the note departed from and returned to as structural.
15. Forte, “New Approaches,” p. 346.
16. Jack Boss, “Schoenberg’s op. 22 Radio Talk and Developing Variation in Atonal Music,” *Music Theory Spectrum* 14 (Fall 1992): 125–50.
17. The C#4 referred to is the soprano note immediately preceding the passage discussed in Schoenberg’s example 23.
18. “Analysis of the Four Orchestral Songs op. 22,” p. 33. Schoenberg’s original commentary on his examples 26–28:

Wir haben noch die Einleitungstakte zu dem bewegteren Mittelteil gespielt und Sie haben dabei auch die Geigenfiguren gehört: [ex. 26] diese grossen Intervalle im Rhythmus der ersten Figur. Sie hängen aber noch durch etwas mit dieser ersten Figur zusammen. Wenn man nämlich in der ersten Phrase die oberen Noten hervorhebt: [ex. 27] so erhält man [ex. 28] die erste Figur. [original typescript, pp. 8–9]

19. “Analysis of the Four Orchestral Songs op. 22,” pp. 42–43. Schoenberg’s original commentary on his examples 58 and 59 reads as follows (original typescript, pp. 17–18):

In dem Bestreben nun, aus dem natürlichen Tonfall der Worte, aus der Sprechmelodie, die Gesangmelodie zu gewinnen, in diesem Bestreben liegt es nahe, dass man beim Singen den Hauptnoten auf solche Art ausweicht, wie beim Sprechen den starren Tonhöhen. Wie man hier von ihnen weggleitet, so umschreibt man dort die Hauptnoten durch Nebennoten. Vielleicht ist es das auch, wodurch die Recitative in den älteren Opern so lebendig wirkten, diese Vorhalte, die sogenannte Appoggiatura.

Wenn man diese Deutung annehmbar findet, so erklären sich viele der sonst schwerverständlichen Erscheinungen in meinen Werken aus diesem Zeitraum. Sie werden dann auch zugeben können, dass in der Tat die beiden Stellen, die ich Ihnen als nahezu gleich bezeichnet, es in der Tat sind: [ex. 58]. Und so werden Sie vielleicht auch, wenn wir Ihnen den zweiten Teil der in drei Abschnitte zerfällt, hören können, wie jeder Abschnitt mit einer solchen umschreibenden Figur beginnt. Der erste: [ex. 59a]. Der zweite: [ex. 59b]. Der dritte: [ex. 59c].

20. Straus, "The Problem of Prolongation," pp. 13–15 (example 7).
21. Straus, in his more recent work, seems more willing to accept the notion of atonal ornament. In *Remaking the Past: Musical Modernism and the Tonal Tradition* (Cambridge, Mass.: Harvard University Press, 1990), he refers several times to neighbors, passing tones and appoggiaturas in atonal pieces. (The analysis of the opening of Bartók's Piano Concerto No. 3, second movement, on p. 137, provides a good example.)
22. An example of motivic replication in a Schoenberg piece other than op. 22 may already be familiar to the reader: mm. 9–15 of "Nacht," the passacaglia from *Pierrot Lunaire*, op. 21, also make ample use of this ornament type in the left hand of the piano part.
23. Christopher Hasty, in "Segmentation and Process in Post-Tonal Music," *Music Theory Spectrum* 3 (1981): 54–73, explores ways that shared characteristics in different realms help us to distinguish a group of pitches as a segment in an atonal piece. He then demonstrates that such segments take part in "opening" and "closing" processes that provide longer-range coherence. Though Hasty concerns himself mainly with contiguous segments, he uses a wide variety of contextual criteria that could also be used for distinguishing non-contiguous structures.
24. Arnold Schoenberg, *Theory of Harmony*, 3rd ed., trans. Roy E. Carter (Berkeley and Los Angeles: University of California Press, 1978), p. 318. Schoenberg's original reads as follows:

Harmoniefremde Töne gibt es nicht, denn Harmonie ist Zusammenklang. Harmoniefremde Töne sind bloß solche, die die Theoretiker nicht in ihr System der Harmonie unterbringen konnten. [Schoenberg, *Harmonielehre*, 3. vermehrte und verbesserte Auflage (Wien: Universal-Edition, 1922), p. 384.]
25. "Schoenberg and Schenker," *Proceedings of the Royal Musical Association* 100 (1973–74): 209–15. According to Dahlhaus:

Schoenberg was possessed by the idea that no musical occurrence is, or can be, without significance for the context, for the musical logic. Taken strictly, his assertion that non-chordal notes, notes without harmonic influence, do not exist, is an aesthetic postulate, rooted in the opposition to all things ornamental and without function, rather than a description of musical reality. [pp. 210–11]
26. Arnold Schoenberg, *Fundamentals of Musical Composition*, 2nd ed., edited by Gerald Strang with the collaboration of Leonard Stein (London: Faber and Faber, 1970), pp. 6–7.
27. Schoenberg's original reads as follows:

. . . und umgekehrt ist es nicht erwiesen, daß diese zufälligen Harmonien wirklich einflußlos sind. Und es soll dies hier gleich hervorgehoben werden: das liegt *nicht in ihrer Natur* allein; das liegt ebensowenig allein in ihrer Natur, wie *daß* sie Einfluß haben. Das liegt nur an der Art, wie sie verwendet werden. Man kann sie einmal so setzen, daß sie scheinbar ganz unverbindlich dort stehen, das andere Mal umgekehrt so, daß alles von ihnen auszugehen scheint. [Schoenberg, *Harmonielehre*, 1922, p. 375.]

28. *Theory of Harmony*, p. 328. Schoenberg's original:

Es ist also sicher, daß harte Zusammenklänge, da sie bei Bach vorkommen und also wohl kein Schönheitsfehler sind, geradezu Erfordernisse der Schönheit sind, wenn diese selbst ein Erfordernis ist. Und zugegeben, er hätte sie sich nur deshalb im Durchgang gestattet, weil sein Gehör es noch nicht vertrug, sie frei einzusetzen—er hat sie doch wenigstens hingesetzt und damit mehr als genascht vom Baum der Erkenntnis. Hat dem Trieb, komplizierte Zusammenklänge unterzubringen, dort nachgegeben, wo er vermeinte, daß es ohne Gefahr für die verständliche Gesamtwirkung geschehen könne. Aber das Wesentliche, der Trieb, harte Zusammenklänge zu schreiben, den ich für identisch finde mit dem Trieb, fernerliegende Obertöne heranzuziehen, war vorhanden. Er setzte sie im Durchgang, damit wir sie frei verwenden können, er nahm einen Schwimmgürtel, damit wir frei schwimmen lernen. So wie er dort frei schwamm, wo seine Vorgänger den Schwimmgürtel notwendig hatten. [Schoenberg, *Harmonielehre*, 1922, p. 397.]

29. Even Schoenberg's analysis of the Bach chorale "Was mein Gott will, das g'scheh" at the end of chapter 17 (*Theory of Harmony*, pp. 342–44; *Harmonielehre*, 1922, pp. 413–16) should not be interpreted as a rejection of the notion of "ornament." Rather, Schoenberg is trying to show that many of the passing tones in that chorale (and the sonorities they form) are not unnecessary, but grow out of the preceding music and have consequences for the following music. He asserts that ornamenting notes are important to the whole, while admitting that their function is different nevertheless from that of the ornamented notes.
30. Sylvan Kalib, *Thirteen Essays from the Three Yearbooks "Das Meisterwerk in der Musik" by Heinrich Schenker: An Annotated Translation*, 3 vol. (Ph.D. dissertation, Northwestern University, 1973), 2:188–89. Schenker's original language reads as follows:

Darin nun, daß die Dissonanz eine Melodie-Brücke von Konsonanz zu Konsonanz schlägt und die Spannung des Terzzuges schafft, für dessen Dauer (über die Dissonanz hinweg) der Kopftön festgehalten wird, erschöpft sich die Bedeutung der durchgehenden Dissonanz ganz und gar, ein Intervall-Verhältnis von ihr zum ruhenden c.f.-Ton kommt nicht in Frage . . . das Vertikale bleibt überhaupt ausgeschaltet, alles kommt nur auf die horizontale Spannung an: es ist, wie wenn zwischen dem dissonanten Durchgang und dem ruhenden c.f.-Ton ein luftleerer Raum wäre. [Heinrich Schenker, *Das Meisterwerk in der Musik*, 3 Teile (München, Berlin: Drei Masken Verlag, 1925–30), 2:24–25.]

Prior to *Das Meisterwerk*, Schenker had elaborated on the idea of mentally retaining the consonant interval preceding the passing tone, in *Kontrapunkt* vol. 2. See Heinrich Schenker, *Counterpoint*, 2 vol., trans. by John Rothgeb and Jürgen Thym, ed. by John Rothgeb (New York: Schirmer Books, 1987), 2:56–59.

31. Kalib, "Thirteen Essays from *Das Meisterwerk*," 2:189–90; Schenker, *Free Composition*, 2 vol., trans. and ed. by Ernst Oster (New York: Longman,

1979), 1:61–62. There are analyses by Schenker that contradict his view of all dissonances as unintervallic and unprolongable. The section of part III, chapter 1 in *Free Composition* dealing with “The Seventh” (1:63–65) categorically states “since it is a dissonant passing tone, the seventh cannot be composed out” (1:64). Yet several of his examples from that section illustrate the composing-out of dominant seventh chords. In figure 62, examples 3 and 4, particularly, the seventh above the bass is *not* transformed into a consonance through a counterpointing lower voice prior to prolongation. Instead, consonant triads harmonize passing and neighboring tones to the members of the seventh chord, aiding in the prolongation of that dissonant chord.

Robert Morgan comments on Schenker’s figure 62,4 (as well as 62,5) in “Dissonant Prolongation,” suggesting that these examples “provide the basis for an analytic approach” to music prolonging a dissonant sonority (pp. 53–56).

