

Strict Use of Analytic Notation

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This paper introduces a usefully restricted notation for rendering Schenkerian analyses, called "strict use" of analytic notation.¹ Strict use brings several pedagogical advantages to the teaching of Schenkerian analysis.²

¹Earlier versions of portions of this paper were presented to the 1989 annual meeting of the Texas Society for Music Theory and to the 1991 annual meeting of Music Theory Midwest.

For more on analytic notation, see V. Kofi Agawu, "Schenkerian Notation in Theory and Practice," *Music Analysis*, 8/3 (October 1989):275-301; Allen Forte, "Introduction to the English Edition," in Heinrich Schenker, *Free Composition: Volume III of New Musical Theories and Fantasies*, trans. and ed. by Ernst Oster (New York and London: Longman, 1979), xvii-xx; Sylvan Kalib, "Thirteen Essays from the Three Yearbooks *Das Meisterwerk in der Musik* by Heinrich Schenker: An Annotated Translation" (Ph.D. dissertation, Northwestern University, 1973), 186-211; William J. Mitchell and Felix Salzer, "A Glossary of the Elements of Graphic Analysis," *The Music Forum*, 1 (1967): 260-268; Gregory Proctor and Herbert Lee Riggins, "Levels and the Reordering of Chapters in Schenker's *Free Composition*," *Music Theory Spectrum*, 10 (1988):102-126; Herbert Lee Riggins, "Heinrich Schenker's Graphic Notation and Contemporary Variants," (Ph.D. dissertation, The University of Texas at Austin, 1981); Felix Salzer, *Structural Hearing: Tonal Coherence in Music* (New York: Charles Boni, 1952; reprinted, New York: Dover, 1962), Vol. 2, xii-xiv; and Felix Salzer, "Introduction to the Dover Edition," in Heinrich Schenker, *Five Graphic Music Analyses* (New York: Dover, 1968).

²Four textbooks have been written specifically to introduce the student to Schenker's analytic method: Allen Forte and Steven Gilbert, *Introduction to Schenkerian Analysis*, text and Instructor's Manual (New York: W. W. Norton, 1982); David Neumeyer and Susan Tepping, *A Guide to Schenkerian Analysis* (Englewood Cliffs, NJ: Prentice Hall, 1992); Salzer, *Structural Hearing*; and Gerald Warfield, *Layer Analysis: A Primer of*

An Analogy With Strict Counterpoint

Strict use may be best introduced by making an analogy: strict use relates to Schenkerian analysis as strict counterpoint relates to free composition. This analogy is based on three important principles that emerge when Schenker discusses the nature of musical hearing, the relation between simplicity and complexity, and the distinction between counterpoint exercises and "real music." (1) For Schenker, strict counterpoint should train the ear to the characteristic effects of tones by studying their movement quality in artifi-

Elementary Tonal Structures (New York: David McKay Co., Inc., 1976). While these textbooks do not employ the strict use proposed in this paper, some of the ideas presented in this paper were inspired by these textbooks. In particular, Forte and Gilbert begin with a limited set of symbols and gradually expand that set; it was this idea more than any other that led to this paper. Other inspirations for this paper came from Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge, MA and London: MIT Press, 1983) and Peter Westergaard, *An Introduction To Tonal Theory* (New York: W. W. Norton, 1975).

For discussions of Schenker's ideas about theory pedagogy and for pedagogical ideas based on Schenker's theories, see Jack Adrian, "Pedagogically Speaking: On Studying Species Counterpoint Before Studying Harmony," *In Theory Only*, 8/2 (1984):15-19; David Beach, "Schenker's Theories: A Pedagogical View," in *Aspects of Schenkerian Theory*, ed. David Beach (New Haven and London: Yale University Press, 1983), 1-38; David Beach, "The Analytic Process: A Practical Demonstration—The Opening Theme from Beethoven's Opus 26," *Journal of Music Theory Pedagogy*, 3/1 (Spring 1989):25-46; Richmond Browne, "Initial Readings in Schenker," *In Theory Only*, 1 (1975):4-5; David Allen Damschroder, "Pedagogically Speaking: Structural Levels and the College Freshman," *In Theory Only*, 8/6 (1975):17-26; Allen Forte, "Introduction to the English Edition," in Schenker, *Free Composition*; Ernst Oster, "Preface to the English Edition," in Schenker, *Free Composition*; Karl Otto Plum, "Towards a Methodology for Schenkerian Analysis," trans. by William Drabkin, *Music Analysis*, 7/2 (1988):143-164; Herbert Lee Riggins and Gregory Proctor, "A Schenker Pedagogy," *Journal of Music Theory Pedagogy*, 3/1 (Spring 1989):1-24; John Rothgeb, "Strict Counterpoint and Tonal Theory," *Journal of Music Theory*, 19/2 (1975):260-281; John Rothgeb, "Schenkerian Theory: Its Implications for the Undergraduate Curriculum," *Music Theory Spectrum*, 3 (1981):142-149; William Rothstein, "The Americanization of Heinrich Schenker," *In Theory Only*, 9/1 (1986):5-17, reprinted in Hedi Siegel, *Schenker Studies* (Cambridge: Cambridge University Press, 1990):193-203; and William Rothstein, "The Americanization of Schenker Pedagogy?," *Journal of Music Theory Pedagogy*, 4/2 (1991):295-299.

cially restricted contexts. "The purpose of counterpoint, rather than to teach a specific style of composition, is to lead the ear of the serious student of music for the first time into the infinite world of fundamental musical problems."³ (2) He advocates progress in small steps from a set of narrowly defined simple rules toward a deeper understanding; more complex phenomena are explained as extensions of more basic phenomena. This progress is reflected both in the ordering of the species and in their explanatory relation to free composition. And (3) he repeatedly emphasizes the critical distinction between the artificial world of strict species exercises and the real world of free composition. "Counterpoint must somehow be thoroughly separated from composition if the ideal and practical verities of both are to be fully developed."⁴

The strict use of analytic notation proposed in this paper reflects all three of these principles. (1) The purpose of strict use, rather than to teach a specific style of analytic representation, is to lead the ear of the serious student of music into the infinite world of fundamental analytic questions. (2) Strict use progresses in small steps from a set of narrowly defined rules toward a deeper understanding; more complex analytic representations are explained as extensions of strict use. This progress is reflected both within the description of strict use and in its explanatory relation to Schenker's analyses. And (3) just as species counterpoint must be separated from free composition, strict use must be separated from Schenkerian analysis if the ideal and practical verities of both are to be fully developed.

A Description of Strict Use

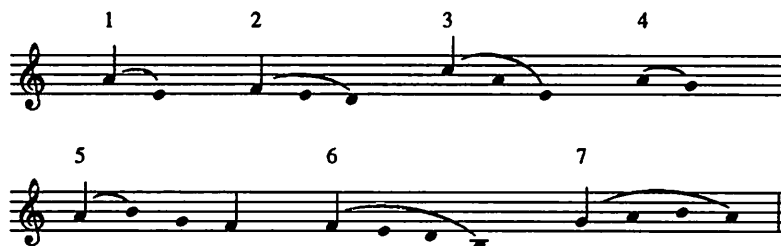
Strict use begins with two sets of rules for the use of analytic notation. The first set of rules governs the use of analytic notation on each individual graphic level of an analysis. The only symbols (in addition to clefs, staves, and accidentals) that may be used are

3 Heinrich Schenker, *Counterpoint: A Translation of 'Kontrapunkt' by Heinrich Schenker (Volume II of New Musical Theories and Fantasies)*, trans. John Rothgeb and Jürgen Thym, ed. John Rothgeb (New York: Schirmer, 1987), 10.

4 Ibid.

noteheads, stems, and slurs. Furthermore, these symbols are limited to specific configurations showing four types of embellishment figures (primary embellishment figures, secondary embellishment figures, double-stem figures, and combined figures). On each graphic level, each unstemmed notehead (an embellishing note) must either be attached by one slur to one stemmed notehead (the note that is embellished), or be contained within such a slur. Notes within the slur must consist entirely of steps or entirely of leaps. If the slur joins more than three notes, there may not be a change of direction. Thus, each graphic level unambiguously clarifies the embellishment function of every unstemmed notehead on that level. Example 1 illustrates these rules.

Example 1. Illustrations of rules governing the use of analytic notation on individual graphic levels of an analysis



The first three figures are allowed in strict use.

The remainder are prohibited:

4. Unstemmed notes must be attached by (or contained within) a slur to a *stemmed* notehead.
5. The G is not attached by (or contained within) a slur to a *stemmed* notehead.
6. This figure mixes steps and leaps under a single slur.
7. Figures longer than three notes may not change direction.

The second set of rules governs the relationships between graphic levels of an analysis. One of these rules says that all noteheads with stems—and only those noteheads with stems—that appear on any given analytic level must also appear on the next, more remote (that is, more abstract, closer to the background) level, as stemmed or unstemmed noteheads. Thus, if a note is represented as a stemmed notehead on a given level, then its embellishment function is clarified at some level closer to the background. Other rules in this second set concern such things as the alignment of levels, the status of inner voices, and the direction of stems.

After offering a taxonomy of embellishment figures and illustrating strict use with analytic examples, I conclude with examples that illuminate the level-dependent nature of harmonic rhythm, that suggest relations between dynamics and structure, and that clarify issues concerning internal consistency of analyses.

Before proceeding, however, a clarifying disclaimer is in order. Strict use is a set of rules governing analytic notation. It is not a theory of musical structure (although it may help to clarify or modify Schenker's theories). It is not a technique of analysis (it may ease and improve the creation of analyses, but its rules govern the representation, not the determination, of analytic relations). It is not an attempt to formalize or computerize Schenker's theories (although it may provide a useful point of departure for others whose interests lie in that direction). And its name (intended to reflect "strict counterpoint") is not intended to imply that other techniques lack strictness. It is, simply, a much needed theoretical clarification and a useful pedagogical tool.

A Classification of Embellishment Figures

Strict use begins by observing that musical motions can be classified by interval direction, interval size, and note order. Direction separates melodic intervals into those that:

- stay the same (repeat a note),
- move up, or
- move down.

Size separates melodic intervals into those that:

- move by common tone (repeat a note),
- move by step, or
- move by leap.⁵

Combining these criteria gives us the following table:

	stay	move up	move down
common tone	repeat	-	-
move by step	-	ascending step	descending step
move by leap	-	ascending leap	descending leap

Thinking of a simple melodic interval in which one note (the embellishing note) embellishes the other (the embellished note) suggests an additional criterion related to musical motion—order; an embellishing note may come before (a prefix embellishment) or after (a suffix embellishment) the note it embellishes. Strict use calls such simple pairs of notes “primary embellishment figures.”

Primary Embellishment Figures

All possible types of primary embellishment figures are listed and illustrated in Example 2. In strict use, these figures are unambiguously represented with two noteheads and one slur: the note that is embellished is given a stem, and the (unstemmed) embellishing note is attached to the (stemmed) embellished note with a slur. The size of the interval between stemmed and unstemmed notes (common tone, step, or leap) unambiguously indicates the type of em-

⁵For further references on the theoretical and psychological importance of this distinction between steps and leaps, see Steve Larson, “Scale-Degree Function: A Theory of Expressive Meaning and Its Application to Aural-Skills Pedagogy”, *Journal of Music Theory Pedagogy*, 7 (1993):69-84. For a musical example of the practical impact of this distinction, see Steve Larson, “Another Look at Schenker’s *Counterpoint*”, *Indiana Theory Review*, 15/1 (Spring 1994):35-52.

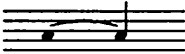
bellishment. For example, if you see a single unstemmed notehead attached to a following single stemmed notehead, and

- ... the interval connecting them is a unison, then it's an anticipation.
- ... the interval connecting them is a step, then it's a prefix incomplete neighbor.
- ... the interval connecting them is a leap, then it's a prefix embellishing leap.

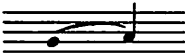
Example 2. Schematic representations of primary embellishment figures

Prefix embellishments:

by common tone
anticipation
(a prefix common tone)



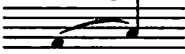
ascending by step
prefix incomplete
lower neighbor



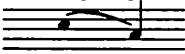
descending by step
prefix incomplete
upper neighbor



ascending by leap
prefix ascending
embellishing leap

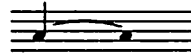


descending by leap
prefix descending
embellishing leap



Suffix embellishments:

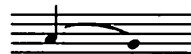
by common tone
repetition
(a suffix common tone)



ascending by step
suffix incomplete
upper neighbor



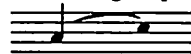
descending by step
suffix incomplete
lower neighbor



descending by leap
suffix descending
embellishing leap



ascending by leap
suffix ascending
embellishing leap



If a single voice is shown on a staff, then stemmed noteheads in the upper staff are stemmed up and stemmed noteheads in the lower staff are stemmed down, and slurs go the same direction as stems. If more than one voice is shown on a staff, then stem and slur direction is used to show membership in different voices (for example, one staff may show a structural soprano with stems up and a structural alto with stems down). Strict use does not provide a way of distinguishing between the incomplete neighbor and the incomplete passing tone—more on this below.

Example 3 illustrates the analytic notation of some of these primary embellishment figures in a familiar musical excerpt. (If one hears $\hat{3}$ as primary, then the first embellishment figure shown, in which C# is a prefix ascending embellishing leap, would have the stem on the other note, making the E a suffix ascending embellishing leap).

Secondary Embellishment Figures

Secondary embellishment figures are created by adding a notehead (or noteheads) between the stemmed and unstemmed noteheads of a primary embellishment figure. The added notes must consist entirely of steps or entirely of leaps. If more than one note is added, the added notes must not introduce a change of direction. If steps are added to an embellishing leap, then the embellishing leap must be completely filled by step (i.e., the steps must form an uninterrupted string of passing tones). Example 4 lists and illustrates every type of secondary embellishment figure that can be shown in strict use. In strict use, these secondary embellishment figures are unambiguously represented in analytic notation with three (or more) noteheads and one slur: the note that is embellished is given a stem, the (unstemmed) primary embellishing note is attached to the (stemmed) embellished note with a slur, and the (unstemmed) secondary embellishing note is contained within the slur attached to the (stemmed) embellished note.

Example 5 illustrates the analytic notation of some of these secondary embellishment figures in a familiar excerpt. The embellishment figure shown in Example 5a occurs on the surface of the mu-

Example 3. Primary embellishment figures in Mozart, Sonata for Piano in A major, K. 331, first movement, mm. 1-4

a)  prefix ascending embellishment leap

b)  suffix common tone

c)  prefix incomplete upper neighbor

d) 

sic, while those in Examples 5b and 5c occur on more remote levels of structure.

This classification suggests that secondary embellishment figures may be generated by a two-step process. For example, the passing tone that fills an embellishing leap may be generated by: (1) taking a single pitch and embellishing it with an embellishing leap, and then (2) filling in that embellishing leap with a passing tone. It is important to recognize that the symbols that identify such a passing tone actually represent—on one *graphic* level—several *analytic* levels of musical structure.⁶ One way to make this clear

⁶Carl Schachter, "A Commentary on Schenker's *Free Composition*," *Journal of Music Theory*, 25/1 (1981):115-142, discusses this point (see esp. 118-121). Schachter distinguishes between "layer" and "level," but Proctor and Riggins, "Levels and the Reordering of Chapters in Schenker's *Free Composition*," make a different distinction between the same two terms. A year later, Riggins and Proctor, "A Schenker Pedagogy," distinguish between "theoretical levels" and "notational levels" (p. 8).

Example 4. Schematic representations of secondary embellishment figures

a) fills an embellishing leap

by step			by leap
passing tones:		arpeggiations:	
prefix ascending	suffix descending	prefix ascending	suffix descending

prefix descending suffix ascending prefix descending suffix ascending

NB: The passing tones shown fill a small embellishing leap (a third). Passing tones may also fill a larger leap.

b) fills an anticipation or repetition

by step above			by step below
complete upper neighbor notes		complete lower neighbor notes	
prefix	suffix	prefix	suffix

by leap above			by leap below
embellishing leaps (all)			
prefix upper	suffix upper	prefix lower	suffix lower

c) fills incomplete lower neighbor fills incomplete upper neighbor

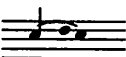
chromatic passing tones (all)*

prefix ascending	suffix descending	prefix ascending	suffix ascending
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by leap—not allowed in strict use

* These schematic representations are notated without clefs. Adjustment of accidentals may be necessary in specific clefs.

Example 5. Secondary embellishment figures in Mozart, Sonata for Piano in A major, K. 331, first movement, mm. 1-4

a)  suffix upper neighbor

b)  suffix descending passing tone

c)  prefix ascending passing tone

d) 

Example 6. "Dot notation" (Lerdahl and Jackendoff, p. 19)

Beats:

1	2	3	4	1	2	3	4	1
•	•	•	•	•	•	•	•	•
•		•		•		•		•
•				•				•

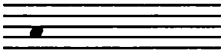
is to compare strict use with a different kind of notation, one that displays only one level of analytic structure on each graphic level. One such different kind of notation, shown in Example 6, is the "dot notation" described by Lerdahl and Jackendoff.⁷ In dot notation, beats (regularly recurring time-points) are represented by dots. The authors write that "for beats to be strong or weak there must exist a metrical hierarchy—two or more levels of beats. The relationship

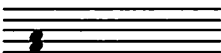
⁷Lerdahl and Jackendoff, *A Generative Theory of Tonal Music*—see the discussion of "The Metrical Hierarchy" that begins on page 18.

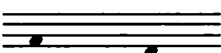
of 'strong beat' to 'metrical level' is simply that, if a beat is felt to be strong at a particular level, it is also a beat at the next larger level."⁸ Thus, dot notation displays one "metrical level" on each graphic level.

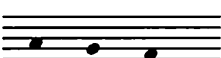
Analytic notation could display pitch relationships in a similar way, with only one analytic level shown on each graphic level. Example 7 does this with a structural analysis of a suffix descending passing tone. Example 7a shows a single pitch. Example 7b adds an inner voice. Example 7c horizontalizes the interval created in 7b; 7d fills in the horizontalized interval with a passing tone. If all graphic levels are shown, then no stems or slurs are required to make this analysis clear.

Example 7. Ultra-strict use showing only one structural level on each graphic level

a) 

b) 

c) 

d) 

⁸Ibid., 19. See also Maury Yeston, *The Stratification of Musical Rhythm* (New Haven and London: Yale University Press, 1976).

Example 8. The redundancy of strict use when showing only one structural level on each graphic level



Example 8 shows that, in the ultra-strict use of Example 7, stems and slurs would be redundant. The stem in Example 8b indicates the structural superiority of the original upper voice. But that information is redundant when we can compare Examples 8a and 8b; the appearance of the original note on both levels makes its structural superiority apparent. The slur in Example 8c shows that the lower note is an embellishing leap. But that information is redundant when we can compare Examples 8a, 8b, and 8c; if the original note is structurally superior and the added note is a leap-related inner voice, then the added note is an embellishing leap by definition. The stepwise motion of the note added in Example 8d shows that the added note is a passing tone. But, again, that information is redundant when we can compare Examples 8c and 8d; if the slurred interval is structurally superior and the added note fills it in by step, then the added note is a passing tone by definition. Because the other information is redundantly reproduced by the stems and slurs, Example 8d contains all the information displayed in

Examples 8a through 8d; it shows all those analytic levels on one graphic level.⁹

An ultra-strict display of pitch relationships such as Example 7—with only one analytic level of musical structure displayed on each graphic level—might at first glance seem advantageous. However, ultra-strict use is neither practical enough nor sufficiently clear for effectively displaying Schenkerian analyses. It is impractical because the number of graphic levels required for a long passage of music would make it difficult to display the levels together, and one of the main purposes of Schenkerian analysis is to show concisely relationships between levels. And it is not sufficiently clear: in some cases, some notation (such as stems and slurs) is required in order to identify clearly the function (e.g., passing tone versus embellishing leap) of notes that are removed (or added, depending on whether one thinks foreground-to-background or vice versa). Strict use more clearly specifies the voice-leading function of what simply appears as residue in ultra-strict use (e.g., in a many-voiced texture, ultra-strict use would make it possible to add or remove notes without being able to see to which voice they were added or from which voice they were removed).

Double-Stem Figures

Primary and secondary embellishment figures are displayed with only one stemmed note. But some embellishment figures involve two structural tones, and thus must be represented with a figure that has two stemmed notes. Embellishment figures that are best represented this way may be called double-stem figures. One such figure is the suspension. Another is the passing tone that fills an interval between two different notes, each of which is harmonized by a different chord.

Classifying a note as a suspension requires criteria not yet mentioned. One of these is metric placement. Usually, metric place-

⁹The ultra-strict use shown in Example 7 differs from the "prolongational reductions" of Lerdahl and Jackendoff. It more closely resembles examples in Westergaard, *An Introduction To Tonal Theory*.

ment is implicit in the classification of common-tone embellishments as either prefix common tones (called “anticipations”) or suffix common tones (simply called “repetitions”).¹⁰ But not all suffix repetitions are suspensions. In fact, the definition of a suspension requires that we think of it not as embellishing a single pitch (which would prevent us from classifying it as a primary or secondary embellishment figure), but as a specific rhythmic treatment of a pair of notes.

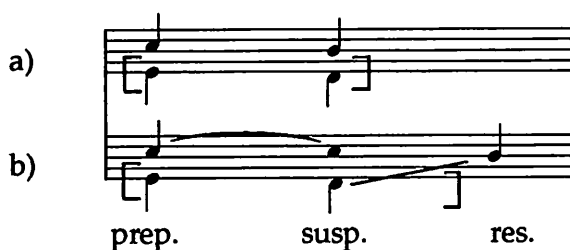
Example 9 shows how strict use represents a suspension figure. This example shows an analysis on two graphic levels. Example 9b shows the suspension figure (upper voice) as three elements: a structural preparation (stemmed), a less structural suspension (unstemmed and attached to the preparation, showing that the suspension is a suffix common-tone embellishment), and a structural resolution (stemmed). No slur attaches the suspension to its resolution. Remember that “less structural” does not necessarily mean “dissonant”; there are consonant suspension figures. Example 9a is a reduction of Example 9b. Only the stemmed notes of Example 9b appear in 9a. The suspension figure has been normalized; Example 9a suggests that the resolution belongs where the suspension occurred.¹¹

Passing tones that fill an embellishing leap are represented as secondary embellishment figures, but passing tones may also appear between two notes that do not form an embellishing leap. (The latter arises in the traditional second species, but the former does not appear until third species.) Example 10 shows a passing tone that fills an interval between two different notes, each of which is harmonized by a different chord. For reasons having to do with harmonic rhythm (discussed in more detail below), it may be best to avoid slurs altogether for the passing tone that does not fill a primary embellishment figure; such notes could simply be labeled “P.”

¹⁰This is because metric placement can determine that we hear a single pitch in terms of its repetition—see Westergaard, *An Introduction To Tonal Theory*, Chapter Seven.

¹¹William Rothstein, “Rhythmic Displacement and Rhythmic Normalization,” in *Trends in Schenkerian Research*, ed. Allen Cadwallader (New York: Schirmer Books, 1990), 87-113.

Example 9. Schematic representation of a suspension



Example 10. Schematic representation of the passing tone filling an interval between two different notes, each of which is harmonized by a different chord



Combined Figures

Strict use allows the combination of embellishment figures; under certain circumstances, a single stemmed note can share two or more embellishment figures without confusion. Example 11 gives schematic representations of a few such combinations of embellishment figures.

Examples 11a and 11b show combinations of a prefix embellishment and a suffix embellishment. Example 11a shows a prefix incomplete lower neighbor filled with a chromatic passing tone combined with a suffix descending embellishing leap. Example 11b

shows a prefix ascending embellishing leap filled with an arpeggiation combined with a suffix common tone. Because the stemmed note separates the embellishing notes into "before" and "after," the meaning of the figures remains clear.

Example 11c shows a combination of upper and lower embellishments. The upper slur in Example 11c shows a prefix embellishing leap, and the lower slur shows a prefix incomplete lower neighbor note filled with a chromatic passing tone. Because the doubly stemmed note separates the embellishing notes into "above" and "below," the meaning of the figures remains clear.

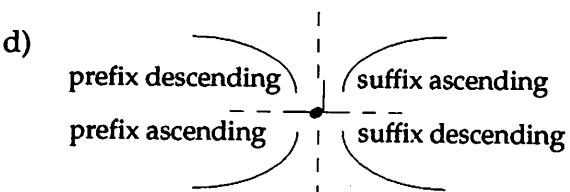
Taken together, these examples suggest that as many as four embellishment figures could be combined and their meaning still remain clear; where inner voices do not complicate the display, slurs could come from any of the notehead's four quadrants shown in Example 11d. Example 12 summarizes the four types of embellishment figures.

Example 11. Schematic representations of combined figures

a) 

b) 

c) 

d) 

Example 12. Summary of embellishment figures

PRIMARY EMBELLISHMENT FIGURES: two noteheads, one of them stemmed, with one slur attaching them.

SECONDARY EMBELLISHMENT FIGURES: at least three noteheads, the first or last of them stemmed, with one slur attaching the first and last (thus, noteheads in the middle — all steps or all leaps — are contained within the slur).

DOUBLE-STEM FIGURES: at least three noteheads, two of them stemmed.

COMBINED FIGURES: at most one slur per stemmed notehead quadrant.

Rules for Combining Graphic Levels

In strict use, the embellishing function of every note must be interpreted.¹² To interpret a note is to show how it depends on other more structural notes. Strict use can show that a note depends on another more structural note in two ways: (1) by representing it as an unstemmed note that is attached by or contained within a slur to a stemmed note, or (2) by representing it as an (unstemmed or stemmed) inner voice of a stemmed note (that is, by aligning it vertically under a stemmed upper-voice note or above a stemmed

¹²Mitchell and Salzer, "A Glossary of the Elements of Graphic Analysis," point out the importance of interpreting all notes, suggesting that a feature of good analytic notation is that no noteheads are left unattended (p. 261). But see Riggins, "Heinrich Schenker's Graphic Notation and Contemporary Variants," p. 226, for a discussion of unattended noteheads in Mitchell and Salzer.

lower-voice note). A given level interprets only its unstemmed notes. In order to interpret the stemmed notes, another level is required. In fact, in strict use, every note that is stemmed on one level must appear on the next more remote level (and no note that is unstemmed on one level appears on the next more remote level).

The Meaning of Slurs in Analytic Notation

Slurs in strict use indicate only one thing: which notes embellish which other notes. Thus slurs in strict use differ from slurs in traditional durational notation and differ from slurs in Schenker's analytic notation. In durational notation, slurs may mean a variety of things. Schenker argued that poor editorial practices have obscured the meaning of slurs in durational notation—sometimes indicating legato, sometimes indicating phrase boundaries.¹³ Sometimes slurs in durational notation indicate which notes "go to" other notes. When we say one note "goes to" another, we may be speaking of a musical gesture, an articulation, or a voice-leading connection. Schenkerian analytic notation often uses slurs to show these types of "goes to" relationships. A slur used to indicate that two notes belong to the same "voice" may show a voice-leading connection between two notes that do not belong to a single embellishment figure.

But strict use does not use slurs to show musical gesture, articulation, or even voice-leading connections. In strict use, voice-leading connections are shown in other ways (e.g., by stem direction or by step relations on more remote levels). The slurs indicate only which notes embellish which notes by showing notes that "go with" (or better still, "belong with") other notes.

By underscoring the importance of distinguishing between "goes to" and "goes with," Forte and Gilbert take an important step in

¹³Heinrich Schenker, "Weg mit dem Phrasierbogen," *Das Meisterwerk in der Musik*, Jahrbuch I (Munich: Drei Masken Verlag, 1925), 41-60, reprinted in facsimile (Hildesheim: Georg Olms Verlag), and translated as "Let's Do Away with the Phrasing Slur" in Sylvan Kalib, "Thirteen Essays from the Three Yearbooks *Das Meisterwerk in der Musik* by Heinrich Schenker," Vol. 2, 52-83.

clarifying the use of slurs in analytic notation (see the portion of their Instructor's Manual that is reproduced in Ex. 13).¹⁴

Example 13. Forte and Gilbert, comments on slurs in analytic notation

Cautionary note #2: Be prepared for small problems that may arise in connection with melodic skips. A typical instance is shown in Example A. Two analyses of the passage at (1) are given at (2) and (3). Which is correct? The first shows a neighbor-note pattern, the second a series of consonant skips. Answer: the second analysis, at (3). The second note of each pair is still governed by the same bass note, and is thus understood as belonging to the first as its diminution. To be sure, there is a stepwise relation between the second and third notes, the fourth and fifth notes, and so on, but that is secondary. The reading at (2), on the other hand, distorts the correct structural associations by wrongly emphasizing the secondary stepwise relation. However, in the setting of a similar configuration at (4), the reading of neighbor-note diminutions is correct. There the bass coincides with the accented upper neighbor note (*appoggiatura*) each time, and the dependency of that note upon the following one is made clear by the bass. In this situation it is the skips which are secondary--and so, this time, reading a series of consonant skips would be incorrect. Informally, it should be pointed out that the main use of slurs in analytic notation, even at this elementary stage, is to show that things go with other things, rather than to them.

Such distinctions, which may seem academic both to instructor and student at this point, are often crucial in later analytical work.

Example A

The musical notation for Example A consists of four staves, each representing a different analytical reading of a melodic passage. The notation is in treble clef with a key signature of one sharp (F#). The passage is 16 measures long. (1) shows a neighbor-note pattern with slurs. (2) shows a series of consonant skips with slurs. (3) shows a series of consonant skips with slurs. (4) shows a series of neighbor-note diminutions with slurs.

Used by permission of W. W. Norton and Company. Forte and Gilbert, *Instructor's Manual for Introduction to Schenkerian Analysis* (New York: W. W. Norton, 1982), pp. 10-11.

¹⁴Forte and Gilbert, *Introduction to Schenkerian Analysis*, Instructor's Manual, 10-11.

Unfortunately, the text does not always follow the advice of the Instructor's Manual. For example, on page 28, the authors discuss relationships shown in their Example 21 (reproduced here in Ex. 14).

Examples 15a and 15b analyze this passage in strict use. The use of two levels clarifies the function of each note and allows the slurs to show more clearly how notes "go with" (or rather, "belong

Example 14. Brahms, Rhapsody in Eb major, Op. 119, No. 4, mm. 1-4:
Discussion from Forte and Gilbert, p. 28

The main purpose of the next example, Example 21, is to illustrate the *consonant passing note* (CP). This is a note that could be simply a passing dissonance above the bass, but is highlighted and given special emphasis by consonant support. Thus, in m. 2 of Example 21, the passing tone G connecting the upper and lower neighbor notes of G is supported by Eb, which makes the interval between upper voice and bass a consonant 10th instead of the dissonant 7th which would have been formed (as G over Ab) had the bass not changed. Similarly, in m. 3 the passing note F in the upper voice is given its own bass note. The F on the downbeat of m. 4 is an indirect passing note that relates back to the main note G on the downbeat of m. 3. Thus, the small motion in the upper voice of m. 3, G-F-Eb, is repeated in expanded form by G (m. 3)-F-Eb (m. 4), the latter indicated by the stemmed notes.

EXAMPLE 21. Brahms, *Rhapsody in Eb major*, Op. 119, No. 4

a. *Allegro risoluto*

b.

Used by permission of W. W. Norton and Company. Forte and Gilbert, *Introduction to Schenkerian Analysis* (New York: W. W. Norton, 1982), p. 28.

with") other notes. Example 15a shows that Ab is a neighbor note to the G of measures 1 and 3. Example 15b shows how the G in measure 2 and the F in measure 3 are, as the text points out, passing tones made consonant by the addition of a less structural harmony (this analysis also shows that the F in measure 1 is a neighbor note made consonant by the addition of a less structural harmony). The text describes the Ab and F of measure 2 as "upper and lower neighbors of G." Examples 15c and 15d present a slightly different reading that shows this double-neighbor pattern.

Example 15. Brahms, Rhapsody in Eb major, Op. 119, No. 4, mm. 1-4:
A strict-use analysis

The image displays four musical staves, labeled a) through d), each representing a different harmonic analysis of the first four measures of Brahms' Rhapsody in Eb major, Op. 119, No. 4. The notation is in Eb major (three flats) and 4/4 time. Staves a) and b) are grand staves (treble and bass clef), while c) and d) are single staves (treble clef). Staff a) shows a wide interval in the treble with a slur over measures 1-4 and a single note in the bass. Staff b) shows a more complex texture with multiple notes and slurs in both hands. Staff c) shows a single melodic line with slurs indicating specific harmonic groupings. Staff d) shows another single melodic line with slurs indicating a different harmonic interpretation. The analyses focus on the relationships between notes across measures, particularly the G in measure 2 and the F in measure 3, as discussed in the text.

The Roles of Top-Down and Bottom-Up Thinking in Analysis

Because strict use indicates *only* embellishment function—that is, it shows (completely and hierarchically) which notes embellish which notes—it can clarify theoretical issues in analysis such as the roles of harmony and counterpoint, the roles of bottom-up and top-down thinking, and the roles of transformation and reduction.

At first glance, strict use may seem overly reductionist. It may appear that with strict use one follows a simple recipe, working from the foreground to the background—that is, from the bottom up, rather than from the top down.¹⁵ But it seems clear that both approaches (as well as some complicated combinations thereof) characterize the discovery methods of good analysts. Schachter, after discussing examples of consonant embellishment, explains why this is so:

What this means is that one can never hope to arrive at a correct view of the background by simply making a “reduction” of the foreground, for example, by eliminating dissonances, chromatics, or non-tonic notes. Without some sense of the background, one can’t begin to understand the foreground; it might be precisely those dissonant or chromatic elements a reduction would eliminate that form the “background” of a passage. But if one needs to understand the background to make sense of the foreground, one also needs to understand the foreground to make sense of the background—a seemingly hopeless impasse. Actually it’s a heuristic problem that confronts people all the time and in areas far removed from musical analysis: one can grasp neither the part without the whole nor the whole without the part.¹⁶

Analysis (and presumably the learning of analysis) involves a constant interaction of top-down and bottom-up approaches.¹⁷

¹⁵Riggins and Proctor, “A Schenker Pedagogy” suggest an essentially top-down approach for the pedagogy of Schenkerian analysis. For a response, see Rothstein, “The Americanization of Schenker Pedagogy?”. Neumeyer and Tepping, *A Guide to Schenkerian Analysis*, also advocate an essentially top-down approach.

¹⁶Schachter, “A Commentary on Schenker’s *Free Composition*,” 132.

¹⁷William Benjamin, “Schenker’s Theory and the Future of Music,” *Journal of Music Theory*, 25 (1981):155-173, writes that Schenker’s “theory provides a rich array of techniques which allow for the rational

To the extent that it encourages a purely bottom-up approach, strict use is thus problematic. But it must be remembered that strict use is a method of depicting musical relationships rather than a method of discovering them. Strict use may be used to display the results of analyses that combine any mixture of bottom-up and top-down approaches.

The following analyses (of Mozart's Sonata for Piano, K. 331, first movement, mm. 1-8; Schubert's Impromptu in Bb major, Op. 142, No. 3, theme, mm. 1-8; and Schumann's "Aus meinen Tränen spriessen," *Dichterliebe* No. 2) show some of the advantages of strict use. They illuminate the level-dependent nature of harmonic rhythm, relations between structure and performance, and internal consistency.

Harmonic Rhythm as a Level-Dependent Phenomenon

The first eight measures of Mozart's Sonata for Piano, K. 331, first movement, are given in Example 16. The strict-use analysis in Example 17 illustrates the level-dependent nature of harmonic rhythm.¹⁸

reconstruction of the piece being 'analyzed', a reconstruction which proceeds from the middleground, or product of creative synthesis (composition)[.] to the repertory piece by virtue of these techniques" (p. 159). This process combines top-down and bottom-up approaches because it is constrained both by the forms of the *Ursatz* and by the surface of the music. See also William Benjamin, "Models of Underlying Tonal Structure: How Can They Be Abstract and How Should They Be Abstract?," *Music Theory Spectrum*, 4 (1982):28-50.

¹⁸In Example 17, the original tenor voice (which basically prolongs E) has been omitted. Downward stems on the upper staves show an alto voice (the structural alto of Ex. 17b, mm. 1-3, consists of notes that were part of the soprano voice in Ex. 17c; yet the structural alto of Ex. 17b, m. 4, consists of notes that were part of the alto voice in Ex. 17c). Any reasonably consistent analysis can be shown in strict use. The analysis in Example 17 differs only slightly from Schenker's. Schenker's analysis appears in "Fortsetzung der Urlinie-Betrachtung," *Das Meisterwerk in der Musik*, Jahrbuch I, 185-205, reprinted in facsimile (Hildesheim: Georg Olms Verlag), and translated as "Resumption of Urlinie Considerations" in Kalib, "Thirteen Essays from the Three Yearbooks *Das Meisterwerk in der*

Example 16. Mozart, Sonata for Piano in A major, K. 331,
first movement, mm. 1-8

Andante grazioso

5

Musik by Heinrich Schenker," Vol. 2, 130-155. According to Schenker's analysis, the second (instead of the first) bass notes in mm. 1-2 should be stemmed (this stemming would emphasize the parallel tenths between outer voices—duplicating the stems-down alto of Ex. 17b—and de-emphasizes the A-G#-A neighbor-note motion).

The notation "leads/follows" in Example 17b indicates that the upper voice has the leading linear progression and that the lower voice has a subordinate line that follows in tenths. (The upper linear progression prolongs a chord to which both its beginning and ending notes belong; the subordinate lower line ends on a note of this chord, but, because it follows in tenths, begins with a note not in the chord prolonged.) On leading and following progressions, see Schenker, *Free Composition*, 78-80.

Example 17. Mozart, Sonata for Piano in A major, K. 331,
first movement, mm. 1-8: A strict-use analysis

a) b) c)

leads follows

Rothstein, in "Rhythmic Displacement and Rhythmic Normalization", has shown that Schenker's analytic notation often makes interesting, albeit implicit, observations about rhythm through the vertical alignment of graphic levels. Strict use requires the vertical alignment of noteheads and stems at various levels and so makes consistent statements about rhythm that can be clearly perceived and understood. For example, in Example 17b, the soprano D of m. 4 is "realigned" with the bass D; this suggests that rhythmically it belongs with the bass, but is displaced in Example 17c by the prefix incomplete upper neighbor note, E. A similar realignment, at a more remote level of structure, takes place between Examples 17a and 17b: in Example 17b the soprano C# does not appear until m. 4, but the appearance of this C# in Example 17a on the downbeat of m. 3 suggests that the ascending third of mm. 3-4 delays a C# that belongs in m. 3.¹⁹

In strict use, slurs used for "belongs with" can show a level-dependent harmonic rhythm (provided that passing tones that fill an interval between two different stemmed notes, each of which is harmonized by a different chord, are not contained within a slur, but instead identified with a "P"). Consider mm. 1-4 of Example 17c. The slurs show the harmonic rhythm of that level; each new prolonged tenth represents a dotted-quarter-note beat. Perhaps "harmonic rhythm" is a misnomer here; while chords change inversion on the second halves of mm. 1 and 2, the harmonies themselves do not change. However, while something like "event rhythm" or "contrapuntal rhythm" might be a better term, the point is that such terms specify a rhythm of events in some model of tonal structure at a specific level. Whatever they are called, these rhythms help generate the fluctuating tension and release that give expres-

¹⁹Carl Schachter has written a series of articles on rhythm and linear analysis: "Rhythm and Linear Analysis: A Preliminary Study," *The Music Forum*, 4 (1976):281-334; "Rhythm and Linear Analysis: Durational Reduction," *The Music Forum*, 5 (1980):197-232; and "Rhythm and Linear Analysis: Aspects of Meter," *The Music Forum*, 6/1 (1987):1-59. These articles also use vertical alignment to make some interesting statements about rhythm (for a revealing discussion of striking syncopations at various metric levels, see the second of these articles, pp. 215-222—the discussion of Beethoven's Op. 14, No. 1).

sive direction to tonal music. In Example 17b, the slurs identify the one-measure tonic-dominant-tonic rhythm of that level (but note the extension of the one-measure duration of m. 3 into m. 4). In Example 17a, where the contrapuntal function of the second measure is identified, the slurs identify the three-measure duration of the initial tonic prolongation.

Structure and Interpretation

The clarity with which strict use displays embellishment function and the degree to which it graphically separates analytic levels help it to illuminate relationships between analysis and performance. Example 18 is the first eight measures of Schubert's *Impromptu* in Bb major, Op. 142, No. 3. The strict-use analysis of this score in Example 19 can be used to illustrate relationships between analysis and performance.²⁰ One symbol requires special comment, however. In Example 19a, m. 4, the symbol "IP" signifies an "incomplete passing tone." When a linear progression (such as the third progression D-C-Bb of mm. 5-8) is interrupted at $\hat{2}$ (as in mm. 1-4), the result is always an incomplete passing tone.²¹ In strict use, the incomplete passing tone is indistinguishable from a suffix incomplete neighbor note. When beams are used for linear progressions and interruptions shown with parallel lines (/ /), this problem disappears.

²⁰Actually, the analysis departs from strict use, but only in ways that are clear: in Example 19c, stem direction indicates inner voices; implied notes are shown in parentheses; common-tone repetitions are not shown; and register has been altered. Another way to say this is to assert that one or two graphic levels closer to the piece could be created in strict use, and that their content is obvious from a comparison of Example 19c and the score (Ex. 18).

²¹Forte and Gilbert, *Introduction to Schenkerian Analysis* correct a reading of one example by saying that "specifically, Eb would then have to be understood as the first and perhaps unique instance of a new kind of passing note: the incomplete passing note!" (p. 59). In light of the ubiquity of interrupted progressions, this remark seems questionable. See Schenker, *Free Composition*, 37.

Viewing dynamics as a response to the motion quality of the music (rather than as a mechanical “get louder here—get softer there” approach), one may associate dynamics with each of the voices of each level of Example 19. Appropriate dynamics will vivify the ways in which the music of a given level departs from the music of underlying levels. For example, if the neighbor-note figure D-Eb-D in mm. 1-3 of Example 19b is performed with a swell, the reduction of tension that results from returning to the more stable D is felt as an appropriate reduction in dynamic intensity. Of course, other interpretations are possible, but the point here is to explore the result of this appropriate choice in terms of the relations it projects.²²

The melodic shapes of right and left hand move in an interdependent way. At the level of Example 19c, the left-hand measures group in twos, moving in simple melodic arcs. At the same time, the right-hand measures tend to group in fours, moving to and from the Eb of m. 2 and concluding with the motive D-C-F (the notes with stems bracketed in mm. 3-4). (The main reason that the contours of the right and left hand group these four measures differently has to do with the locations of leaps and steps within and across the barlines.) If the performer brings out the interdependent dynamic paths of the two hands, the left hand may tend to emerge where it has the same D-C-F motive—a nice anticipation, or “hidden repetition,” of the right-hand motive that follows in mm. 3-4. In fact, the D-C-F motive appears again as the last three notes of the phrase in the foreground of m. 4, where Schubert adds a distinctive ornament that connects $\hat{2}$ down to the inner voice, D-C-F (see Ex. 19d). This distinctive ornament becomes a source of diminution in Variation 2 (as shown in Ex. 20.) In mm. 7-8, the D-C-F motive is transposed to sound G-F-Bb. (This may explain why the G and F appear an octave higher at the end of the phrase—see Ex. 19e.)²³

²²For another view of the Schubert theme, see Alexandra Pierce, “Climax in Music—Structure and Phrase (Part III),” *In Theory Only*, 7/1 (1983): 3-30.

²³John Rothgeb (letter to author) points out that the three-note shape D-C-F of the bass (mm. 1-2) is also echoed by the Eb-D-G shape of the soprano (mm. 2-3), dovetailing these shapes (and that the association

Example 18. Schubert, Impromptu in Bb major, Op. 142, No. 3,
theme, mm. 1-8

Andante

between C-F in the bass of m. 2 and Bb-Eb in the bass of m. 3 further bridges the seam between the two 2-bar subphrases). But he finds the interplay of four-note shapes (e.g., D-G-C-F in the soprano of mm. 3-4) a more compelling aspect of motive in this theme. (I would add that the diminution that begins Variation 2—see Ex. 20 again—supports the argument that G plays an important role in the D-G-C-F shape of the soprano in mm. 3-4.) Whether the analyst selects the three-note shape, the four-note shape, or both, this selection becomes more relevant to the performer when strict use of analytic notation makes the selection more vivid.

Example 19. Schubert, Impromptu in Bb major, Op. 142, No. 3, theme, mm. 1-8: A strict-use analysis

The image shows a musical score for Schubert's Impromptu in Bb major, Op. 142, No. 3, theme, mm. 1-8. The score is divided into five parts: a) the original notation with a slur over the first six measures; b) the original notation with a slur over the first six measures; c) the original notation with a box around the first six measures and a bracket below it labeled 'D C F'; d) a diagram showing the first six measures with a bracket labeled 'D C F' and a diagonal line through the notes; e) a diagram showing the first six measures with a bracket labeled 'G F Bb' and a diagonal line through the notes.

It is an appealing aspect of strict use that it can highlight the ways in which the relations between dynamics and structure not only produce insight into interpretation, but also have the effect of bringing out an elegant hidden repetition. The question (inevitably) arises as to how much such things should be emphasized in performance. One excellent recording of the Impromptu answers this question by shaping the theme according to these dynamics in an attractive but unexaggerated way—but then brings out this hidden repetition with striking clarity in the first variation.²⁴

²⁴Vladimir Horowitz, *The Studio Recordings*—New York 1985, Deutsche Grammophon 419 217.

Example 20. Schubert, Impromptu in Bb major, Op. 142, No. 3,
Variation 2, mm. 1-8.

VAR. II

The musical score for Variation II of Schubert's Impromptu in Bb major, Op. 142, No. 3, measures 1-8, is presented in four systems. The key signature is Bb major (two flats) and the time signature is 3/4. The score is written for piano (p) and includes dynamic markings such as *p*, *cresc.*, and *p*. The notation features complex rhythmic patterns, including sixteenth and thirty-second notes, and various articulations like accents and slurs. The bass line consists of chords and single notes, while the treble line contains more intricate melodic passages. The score concludes with a double bar line and repeat dots.

Internal Consistency

Although Schenker's analysis of Schumann's song "Aus meinen Tränen spriessen" from *Dichterliebe* has been much discussed, it was not until I attempted to render it in strict use that I noticed that this analysis seems internally inconsistent.²⁵ The score is given in Example 21. Schenker's analysis of this song, his Figure 22b, is reproduced in my Example 22.

Examples 23 and 24, in strict use, render contradictory interpretations of Schumann's song; yet both interpretations are derived from different parts of Schenker's analysis of the same measures. Example 23 asserts that the vocal C# in m. 2 (on the syllable "en") is a "consonant passing tone" between the D in m. 2 (on the syllable

²⁵It forms the centerpiece of Allen Forte, "Schenker's Conception of Musical Structure," *Journal of Music Theory*, 3/1 (1959):1-30; which was reprinted in *Readings in Schenker Analysis and Other Approaches*, ed. Maury Yeston (New Haven: Yale University Press, 1977), 3-37; excerpted in *Dichterliebe: An Authoritative Score, Historical Background, Essays in Analysis, Views and Comments* (Norton Critical Scores), ed. Arthur Komar (New York: W. W. Norton and Company, 1971), 96-106; and highlighted in Browne, "Initial Readings in Schenker." Arthur Komar, "The Music of *Dichterliebe*: The Whole and Its Parts," in *Dichterliebe: An Authoritative Score*, 63-94, reviews Schenker's analysis, considers Forte's alternative reading, and offers an alternative reading of his own. Joseph Kerman, "How We Got Into Analysis, and How to Get Out," *Critical Inquiry*, 7/1 (1980): 311-331, reviews Schenker, Forte, and Komar. David Neumeyer, "Organic Structure and the Song Cycle: Another Look at Schumann's *Dichterliebe*," *Music Theory Spectrum*, 4 (1982):92-105, motivated by his analysis of "feeling references" in this and in the preceding song, suggests a correction of Schenker's reading. Forte and Gilbert, *Introduction to Schenkerian Analysis* offer yet another reading in their Instructor's Manual (pp. 45-46). Agawu, "Schenkerian Notation in Theory and Practice," discusses Schenker's reading in detail. Joseph Dubiel, "'When You Are a Beethoven': Kinds of Rules in Schenker's *Counterpoint*," *Journal of Music Theory*, 34/2 (1990):291-340, discusses an apparent contradiction in the song's second measure (the apparent contradiction that Dubiel discusses is less an internal inconsistency and more a contradiction between what we might expect and what Schenker offers—in any case, it is not the same contradiction that I discuss). And William Drabkin, "Schenker, the Consonant Passing Note, and the First-Movement Theme of Beethoven's Sonata Op. 26," *Music Analysis*, 15/2-3 (1996): 149-189, begins his article by returning to Schenker's reading of this piece.

Example 21. Schumann, "Aus meinen Tränen spriessen,"
Dichterliebe No. 2

Nicht schnell.

Aus mei - nen Trä - nen sprie - ßen viel blü - hen - de Blu - men her -

5
vor, und mei - ne Heuf - ser wer - den ein Mach - ti - gal - len - chor. Und

10
wenn du mich lieb hast, Kind - chen, schenk' ich dir die Blu - men all, und ver

15 *ritard.*
dei - nem Fen - ster soll hin - gen das Lied der Mach - ti - gall.

Example 22. Schumann, "Aus meinen Tränen spriessen,"
Dichterliebe No. 2: Schenker's analysis
 (from *Free Composition*, Figure 22b)

Schumann, "Aus meinen Tränen spriessen" (*Dichterliebe*, no. 2)

b)

The image shows the first system of the musical score for Schumann's "Aus meinen Tränen spriessen" from the song cycle *Dichterliebe*, No. 2. The score is in G major and 3/4 time. It features a piano accompaniment and a vocal line. The analysis includes various musical notations such as notes, rests, and dynamic markings. The vocal line begins with a half note G4, followed by a quarter note A4, and then a half note B4. The piano accompaniment consists of a series of chords and moving lines. The analysis includes various musical notations such as notes, rests, and dynamic markings. The vocal line begins with a half note G4, followed by a quarter note A4, and then a half note B4. The piano accompaniment consists of a series of chords and moving lines. The analysis includes various musical notations such as notes, rests, and dynamic markings.

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Example 23. Schumann, "Aus meinen Tränen spriessen,"
Dichterliebe No. 2: A strict-use analysis of mm. 1-4
 (agrees with *Free Composition*, Figure 22b, lowest level)

a)

I ————— V I

b)

I IV V I V I

Example 24. Schumann, "Aus meinen Tränen spriessen,"
Dichterliebe No. 2: A strict-use analysis of mm. 1-4
 (agrees with *Free Composition*, Figure 22b, middle level)

a)

I ————— V I

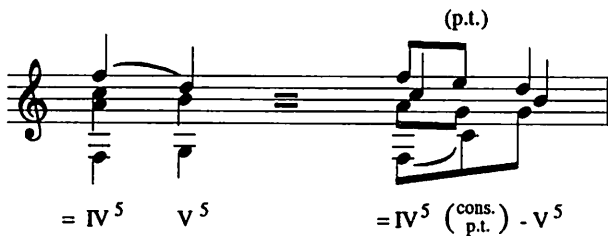
b)

I IV ("I" —) V I

"spriess-") and the B in m. 3 (on the syllable "blü-"). Although Schenker does not offer Figure 134,1 of *Free Composition* (reproduced here as my Ex. 25) as an explanation of his Figure 22b, it explains the voice-leading origin of this vocal C#; it is a "consonant passing tone."

Schenker offers Figure 134 to illustrate "fifth-relationships which lack the significance of harmonic degrees." His comment on Figure 134,1 makes it clear that the E in his example (and the C# in Ex. 23, m. 2) is structurally subservient to the notes that surround it. "When the bass moves stepwise upward and the upper voice starts from the octave position, a skip results in the upper voice; if this is filled in by a passing tone, an ascending fifth can be interpolated, which makes the passing tone consonant."²⁶ Example 23b shows the structural subservience of this C# by its containment within the slur D-B; this reading is consistent with mm. 1-4 of the lowest level of Schenker's Figure 22b. (And in fact, Schenker's depiction on the middle level of Figure 22b of the return of this passage in mm. 12-15 clearly shows the hierarchical relations shown in Ex. 23.) All the notes with stems, and only the notes with stems, in Example 23b appear in Example 23a. Thus, this consonant passing tone C# does not appear in Example 23a. Furthermore, since the bass D of m. 2

Example 25. Schenker, *Free Composition*, Figure 134,1



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²⁶Schenker, *Free Composition*, 115.

(representing IV) in Example 23b functions as a neighbor note to the E of m. 3 (representing V), it cannot appear in Example 23a unless the E also appears, because it is less structural than the E. The slurs in Example 23a, mm. 1-3, show that the initial C# (of m. 1) is prolonged by a motion to an inner voice. This prolongation is indicated by a similar slur on the lowest level of Schenker's Figure 22b. Furthermore, it is consistent with the Roman numerals below that level. As Forte observes, "The long slur from I to I indicates that the IV and V chords lie within the control of that chord, while the abbreviation *Vdg.* (*Vordergrund*) shows that the succession belongs to the foreground."²⁷

Example 24 contradicts Example 23. This analysis asserts that the same vocal C# in m. 2 (on the syllable "-en") is a "consonant passing tone" between the vocal D in m. 2 (on the syllable "spriess-") and a different B—the vocal B in m. 4 (on the syllable "-vor"). Example 24a shows the structural subservience of this C# by its containment within the slur D-B. But strict use requires that all the notes that appear in Example 24a also appear with stems in Example 24b—and that only those notes appearing on both levels have stems in Example 24b. Thus Example 24b must show the vocal B-A of m. 3 ("blühende Blumen") as less structural than the vocal C# of m. 2 ("-en" and "viel"). Furthermore, since the bass D of m. 2 (representing IV) in Example 24a functions as a neighbor note to the E of m. 4 (representing V), it must be more structural than the E and A (of m. 3) that immediately follow it in Example 24b, because these do not appear in Example 24a. This reading is consistent with mm. 1-4 of the middle level of Schenker's Figure 22b.

Therefore, Examples 23 and 24 flatly contradict one another. Example 23b asserts that the vocal C# of m. 2 ("-en") is less structural than the vocal B that follows in m. 3 ("blü-"); Example 24b asserts the opposite—that the same C# is more structural than the same B. And Example 23 asserts that the V-I of m. 3 is more structural than the IV of m. 2; Example 24 asserts the opposite—that the same V-I is less structural than the same IV. Of course, one does not need strict

²⁷Forte, "Schenker's Conception of Musical Structure," 12. I have photocopied Example 22 from the newer translation of *Free Composition*, in which *Vdg.* has been translated to *Fgd.*

use in order to recognize this inconsistency. But strict use works against such inconsistencies; this inconsistency simply cannot be shown in a single strict-use analysis.

One may respond to this apparent inconsistency in several ways. I will consider four different responses and discuss how those responses may inform and be informed by strict use.

The first response might be that Schenker's reading is mistaken. The alternative analyses of this piece that have been published suggest that many hold this view. But this is not the only—or the most interesting—response.

The second response might be that Schenker's analysis offers two readings because he intended that the reader be able to choose. Because Schenker said nothing of the sort about this analysis (nor about any other *single* analysis that I know of—he did discuss alternative readings, but used different graphs to display them), this response seems far-fetched. However, if one were to make this second response, one might also point to another discrepancy in the same analysis, suggesting that this second discrepancy also allows the reader a choice between rival readings: while the last three notes in mm. 3-4 are depicted as more structural than the notes they repeat, the same three notes in mm. 16-17 are depicted as less structural than the notes they repeat.²⁸

The third response might be that Schenker's analysis presents two readings, but that he intended that the reader not choose. The point here would be that the music is ambiguous and that the analysis should therefore also be ambiguous. But if ambiguity is important in music, then the contradictory nature of rival readings should be made as clear as possible, not hidden by ambiguous notation.²⁹

²⁸In fact, this may point us to the most plausible explanation—that Schenker meant something different than is printed, because of a typographical error. That is, in the first two graphic levels, the B and A that occur in m. 4 should have been placed in m. 3. This makes the reading of mm. 1-4 analogous with that of mm. 13-17 and eliminates the contradictions discussed here.

²⁹Steve Larson, "Questions About the *Ursatz*: A Response to Neumeyer," *In Theory Only*, 10/4 (1987): 11-31.

The fourth response might be that strict use has forced us to see conflict where there is none. The point here would be that the first treble five-note succession in Schenker's Figure 22b, third system, is a complete linear progression of a third (supported by the slurred harmonies depicted beneath, I-IV-V-I) and that the next three treble notes merely repeat the last three notes of the previous five-note gesture, yet are more structural. While I do not agree with this interpretation of Schenker's reading (I believe it misreads a motion to an inner voice), I think that it can raise interesting issues concerning the role of abstraction in analysis. But to really understand what such arguments about abstraction mean in the context of specific pieces, one needs a tool that highlights analytic decisions clearly enough to allow focused discussion of abstraction. Strict use is such a tool.

My point here is not to defend a particular reading—or even to defend a particular interpretation of a particular reading—but rather to suggest that internal consistency, musical ambiguity, and analytical (as well as perceptual) abstraction are important issues that deserve the clarification that strict use can bring.

On the other hand, I do not mean to suggest that there are not wrong or bad analyses, nor that there are not mistaken interpretations of analyses. For example, Kerman suggests, of Schenker's Figure 22b, that "from Schenker's foreground sketch one gathers that in bars 4 and 8 he counted the voice's half cadences as primary, whereas in bar 17 he counted the piano's full cadence."³⁰ This is clearly a misreading of Schenker's analysis. The vocal B at the beginning of mm. 4 and 8—just like the vocal B of m. 16—is depicted as a passing tone. The vocal B at the end of m. 8 (part of a $\hat{3}\text{-}\hat{2}$ interruption) is the pick-up to m. 9. While Schenker's analysis gives different weights to these cadences, they are both clearly authentic cadences. Kerman also asserts that "the song's most striking feature—practically its *raison d'être*, one would think—is the series of paired cadences in the voice and then the piano at the conclusion of lines 2, 4, and 8 of the poem."³¹ Kerman's comments may give the

³⁰Kerman, "How We Got Into Analysis, and How to Get Out," 325.

³¹*Ibid.*

impression that Schenker offers “no explanation” for these but rather indulges “the analyst’s instinct to reduce these ambiguities out of existence.”³² This misimpression can be corrected by consulting Schenker’s analysis of the same piece in *Harmony*.³³

Conclusions

Because strict use offers an artificially limited world in which the effects of musical motion can more carefully be examined—like strict counterpoint—it provides an excellent starting point for generating the more complex analyses that illuminate the role of simplicity and complexity in real music.

Strict use offers several advantages. The function of each note is made clear (contradictory readings must be displayed in alternative analytic representations), and the clarity of the notation imposes a consistency within graphic levels that enforces clear thinking (and thus aids clear hearing). The limited number of “embellishment schemata” allows the student to check the “well-formedness” of an analysis by comparison with a table of those embellishment schemata. A clear taxonomy of embellishment types clarifies their musical function and allows fruitful discussion of underlying principles of musical space and time. Specificity and alignment of levels clarify the rhythmic and metric implications of Schenkerian analysis. And finally, the separation and consistency of analytic levels allow the ear to play a greater role in discovering relationships, confirming or denying them, and learning from them.

³²Ibid.

³³Schenker, *Harmony*, 219-221.