

Bill Evans and The Limits of Schenkerian Analysis

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The application of Schenkerian analysis to jazz, something that Schenker would likely have done only to prove the deficiency of the style, has become more prominent in recent years. The history of similar research stretches back to the 1970s, although these studies were relegated primarily to jazz journals and the occasional thesis or dissertation.¹ By 1995, however, monographs on the American popular ballad and the music of Gershwin, by Forte and Gilbert, respectively, brought greater legitimacy to this line of research. These were, after all, the joint authors of the first widely-used textbook on Schenkerian theory (Forte and Gilbert 1982). Their studies suggested that these styles were not, in the words of Furtwängler (1985, 4), merely a string of intricacies that “exist for the moment in which they sound,” but that long-range hearing could highlight the same sorts of characteristics that unify the works of the tonal masters.

These two books, along with that of Martin on the music of Charlie Parker from 1996, all adapt Schenkerian theory in a variety of ways. Among these three studies, the most radical modifications are made by Forte,² who redefines basic tenets such as the automatic beaming of descending fifth bass movement,³ the use of beams in the upper voice to connect a succession of tones that do not create a linear progression,⁴ and the addition of $\hat{6}$ as a potential *Kopftön*.⁵ Gilbert’s modifications to Schenkerian analysis are less extreme and stem from the treatment of dissonance in jazz. Gilbert tackles this topic at the beginning of his study:

Since Gershwin wrote basically tonal music, it is reasonable that we adopt a modified Schenkerian approach. However, the word “modified” must be stressed. The main point of difference is that in

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1 Stewart (1973/1974–75); Owen (1974); Martin (1975, 37); Simon (1978); Strunk (1979); and Larson (1981 and 1982). Two studies published in the mid-1980s anticipated the importance of the three monographs that followed a decade later: Strunk (1985) and Larson (1987).

2 Earlier studies have proposed more radical modifications to Schenkerian theory in their analysis of jazz. For example, Davis (1990) has proposed concepts in his dissertation that undermine the majority of the fundamental principles of Schenkerian theory, including the addition of the leading tone and supertonic scale degrees as *Kopftöne*, the appearance of mixture in the *Urlinie*, the arrival of the *Ursatz* on harmony other than tonic or on the tonic scale degree (“atonal fundamental structure”), a gapped *Urlinie*, the identification of dissonance based partly on register (“registral stratification”), and the asynchronicity between the *Bassbrechung* and the *Urlinie* (“structural syncopation”). Many of these radical modifications to Schenkerian theory are due to the author’s use of lead sheets as the basis for his analyses, a problem that is discussed below.

3 While Forte extends the meaning of Schenkerian beaming to identify such common harmonic patterns in this repertoire, these patterns will be represented in this study as tonicizations, ones that frequently consist of segments of the chain of fifths (i.e. II–V–I).

4 As Forte explains, “some ballads may have long-range melodic configurations that are not stepwise lines, and indeed that is the case. Usually these are arpeggiations of some kind” (1995, 51).

5 Forte (1995, 49). True to the pronouncement made early in his study, “Nor do I intend to explain at every turn the adaptations of Schenkerian theory or derivations from them,” Forte gives no explanation for the addition of $\hat{6}$ as a *Kopftön* or any of his other modifications noted above (51).

Gershwin's harmonic language the dissonance had at least been partially—to use Schoenberg's word—emancipated. The triad was still necessary for closure, but dissonances such as ninth and so-called thirteenths did not require resolution. (1984, 423)

As a result of these unresolved dissonances, the structural descent frequently lacks $\hat{2}$, a problem that Gilbert (1995, 20–23) finds in his analysis of “I Loves You Porgy.” Martin (1996) agrees with Gilbert and formalizes this problem by introducing three “common bop background forms,” none of which contains $\hat{2}$: $\hat{3}-\hat{3}-\hat{1}$, $\flat\hat{3}-\flat\hat{3}-\hat{1}$, and $\hat{5}-(\hat{4})-\hat{3}-\hat{1}$. With two major tenets of Schenkerian theory compromised—the stepwise resolution of dissonances and the structural descent by stepwise motion to the tonic scale degree—Gilbert's description of his own “modified Schenkerian approach” seems prudent.

Yet in his review of these three books, Larson writes that their “departure from Schenkerian orthodoxy seems more apparent than real.”⁶ Larson is able to make this claim by invoking two concepts intimately related to Schenkerian theory, rhythmic displacement and implied notes,⁷ which allow him to reveal the underlying consonance in passages using 9th, 11th, and 13th chords. As a direct result, Larson has been able to normalize the gapped *Urlinien* used by both Martin and Gilbert, thereby redefining the application of Schenkerian theory to modern jazz in future scholarship.⁸

Larson is an expert in both jazz theory—he is a gifted jazz pianist—and Schenkerian analysis. On the relationship between these two analytic methodologies he writes “the concept of tritone substitution (while useful as a pedagogical tool), when it is not supplemented by a Schenkerian analysis, seems to offer only incomplete explanations of passages” (2009, 49). I agree with Larson on the relative strength of these two methodologies, one of which is a fully-fledged theory for the analysis of tonal music while the other is an ad hoc compilation of harmonic extensions, substitutions, and scale usage for which there is no authoritative treatise.⁹ I disagree with Larson on his point that aspects of jazz theory such as tritone substitution are always secondary in their analytic insight to Schenkerian theory. In fact, this paper will show that specific techniques drawn from jazz theory are the source of modifications to orthodox Schenkerian theory that have heretofore not been recognized.¹⁰ This approach is similar to that taken by

Traut (2000) with the expansive treatment of rhythmic displacement he applies to the first movement of Stravinsky's *Concerto for Piano and Wind Instruments*. As a result, he provides a tonal reading of this movement that contradicts that of Schenker ([1926] 1996) himself, who graphed a passage of this movement in order to reveal its tonal incoherence. Similarly, Day-O'Connell has more controversially focused on the $\hat{6}-\hat{8}$ melodic gap, its relation to the pentatonic scale, and the interrupted *Urlinie* $\hat{5}-\hat{6}||\hat{5}-\hat{6}-\hat{8}$ that governs Debussy's *prélude* “La fille aux cheveux de lin.”¹¹ In looking to jazz theory as the basis for the modifications made below to orthodox Schenkerian theory, the limits of Evans' Schenkerian thought can be established more precisely, a topic that was implied by Larson's translation of Evans' verbal description of “The Touch of Your Lips” into Schenkerian terminology.¹²

This paper will explore the application of Schenkerian theory to the performances of Bill Evans through the study of three recordings from early in his career: “Who Can I Turn To?” by Leslie Bricusse/Anthony Newley, “My Foolish Heart” by Victor Young, and “Goodbye” by Gordon Jenkins.¹³ The first two of these recordings appear on the 1966 album *Bill Evans at Town Hall* while the latter tune is from the 1962 album *Empathy*. Larson's recent analyses of and comparison between complete recordings of “Round Midnight” by Thelonious Monk, Oscar Peterson, and Bill Evans lead him “to a consideration of relationships between improvisation and composition, between technique and art” (2009, x). While this study will also peripherally compare Evans' performance of these three tunes with the standards themselves, its approach is quite different from that of Larson.¹⁴ Indeed, this study will limit itself to the opening statement of the tune by Evans—his “conception of a number,” to use Julian “Cannonball” Adderley's description.¹⁵ This limitation effectively eliminates Evans the improviser and focuses instead on Evans the interpreter, a role that most precisely reflects his compositional and theoretical thought.¹⁶

11 Day-O'Connell (2007). See also the present author's review of this book (McFarland 2009).

12 Larson (1998, 239). Evans' knowledge of Schenkerian theory is further implied on the same page by Larson's comment that the pianist attended the Mannes College of Music. Martin (2011, 125–126) has more recently questioned whether Evans' use of the terms “basic structure” and “fundamental structure” in his description of “The Touch of Your Lips” are references to the *Ursätze*, or rather to “a conscious plan for approaching the improvisation.”

13 The transcription of “Who Can I Turn To?” used in this study is from *Bill Evans Plays* (DeMichael 1969, 33–39). The transcriptions of “My Foolish Heart” and “Goodbye” have been adapted by the author from *Bill Evans Plays Standards* (Tuttobene 1998, 68–73 and 24–45).

14 Transcriptions by the author of the following recordings have been used to make these comparisons: Billy Eckstine's 1950 recording of “My Foolish Heart,” the original Broadway production from 1965 of *The Roar of the Greasepaint—The Smell of the Crowd* containing “Who Can I Turn To?,” and Gordon Jenkins' 1946 recording of “Goodbye” performed by his own orchestra.

15 See the album *Everybody Digs Bill Evans*, the cover of which features several quotes from famous jazz artists, including the following from Adderley: “Bill Evans has rare originality and taste and the even rarer ability to make his conception of a number seem the definitive way to play it.” The focus of this study on Evans' opening statements does not imply that no improvisation takes place in them, but only that it appears to a far lesser extent.

16 Evans' analytic mindset is well-known, as revealed when he discussed the formation of his style: “Now, in retrospect I think it was a good thing I didn't have a great aptitude for mimicry, though it made it very difficult for me at the time because I had to work very hard to take things apart. I had to build my whole musical style. I'd abstract musical principles from people I dug, and I'd take their feeling or technique to apply to things the way that I'd built them. But because I had to build them so meticulously, I think, it worked out better in the end, because it gave me a complete understanding of everything I was doing” (DeMichael 1969, 3).

6 Larson (1999, 115). Larson explores the reasons behind this claim more fully in “Schenkerian Analysis of Modern Jazz: Questions about Method” (1998).

7 Martin's concept of “prolongation by arrival” is also brought into Schenkerian orthodoxy by Larson through the concept of the auxiliary cadence.

8 Larson (1998, 217) has also identified concepts in modern jazz that may never be successfully incorporated into Schenkerian orthodoxy. These features include parallel motion in perfect fifths and octaves, parallel motion in dissonant intervals, dissonances added to final tonic sonorities, dissonances and their resolution sounding in the same register, dissonances that do not resolve until or after a change of harmony, dissonances that are resolved by dissonances, polychords, and pieces that begin and end in different keys. This list is pruned down significantly in the 2009 reprint of this article, where it includes only “polychords’ and dissonances that function more to add ‘color’ than to add voice-leading content” (9).

9 Mark Levine's *The Jazz Piano Book* (1989) and *The Jazz Theory Book* (1995) are arguably among the most popular jazz theory method books.

10 This is not to say that jazz theory is invoked since ultimately its rules are similarly vague to Debussy's aesthetic proclamation that “pleasure is the law.” Rather, specific techniques of jazz theory are discussed below to explain the origins of the consistent employment of exceptional dissonance treatments in Bill Evans' performances.

In spite of these differing approaches to improvisation, this study will use an analytic methodology similar to that used by Larson, one that emphasizes the “significant similarities between dissonance treatment in classical music and jazz” (1998, 217). A quick summary of Larson’s analytic methodology for modern jazz precedes the analysis of the three works under consideration so that the deviations from his approach they contain are made obvious.

ANALYTIC METHODOLOGY

Evans’ harmonic language is much richer than that of the composers of the standards he performs. The difference is one of degree, rather than kind, however; the occasional sevenths and ninths in the works of these earlier composers are joined by elevenths and thirteenths and used much more consistently by Evans. I will refer to these added dissonances using Strunk’s term “tension,” which he defines as “a pitch related to a structurally superior pitch (usually a chord tone) by step, such that the tension represents and substitutes for the structurally superior pitch, called its resolution, in the register in which it occurs” (1985, 98). Strunk adds that tensions usually derive their dissonance from the interval of a seventh between them and a chord tone below. He also notes that most tensions are located a step above their resolution, but there are no requirements for their approach or rhythmic placement.

Larson has formalized the melodic origins of certain dissonances by revealing the underlying consonances represented by each of these tensions. Example 1, adapted from Larson (1998, 216, ex. 4), can be read in one of two ways: when read from top to bottom, it generates 7th chords through an 8–7 rhythmic delay within a 5–8 linear intervallic pattern; when read from bottom to top, it reduces this dissonance back to its consonant origins at a deeper structural level. Larson’s example actually begins where this one leaves off, first chromaticizing each of the seventh chords, and then generating 9th and 13th chords through 9–8 and 6–5 rhythmic delays, respectively. Larson’s corresponding explanation for the 11th chord (Example 2) can be read in both directions as well. The explanation of the function of the 11th, however, is slightly different. As Larson notes:

The ‘eleventh’...is not a ‘dissonance’ at all—rather, the G is the structural note, while the lower voices are ‘dissonant.’ The $\hat{2}$ in the bass is the fifth of the V chord that controls the time span of both chords, and the $\hat{8}$ is a note of embellishment (a suspension, as is typical). (1998, 217)

Two other common tensions are exceptional in that they do not resolve to a chord tone. The first is the added sixth, which is not dissonant with the root of the chord to which it is added, yet is not a chord member. This consonant character allows it to substitute for $\hat{5}$, while most frequently it serves as the resolution of the major seventh tension (Example 3). The second is the augmented ninth chord (typically spelled as a minor tenth), which is dissonant with the major third chord tone below it. This augmented ninth resolves down by step to a minor ninth tension, which substitutes for the consonant octave (Example 4).

Larson’s graphic analyses reflect the methodology of the preceding examples. This is to say that his foreground graphs contain tensions found in the music—9th and 13th, altered scale degrees (generally raised or lowered fifths or augmented ninths) and triads with added sixths—while his middleground

Example 1. Generation of/Reduction to Diatonic Sevenths in 8–5 Pattern

Example 2. Larson’s Generation of/Reduction to Chordal 11th

Example 3. Tensions that do not Resolve to Chord Tones: Added Sixth Chord

Example 3 consists of three staves of musical notation. The first staff shows a treble clef with a chord diagram for an added sixth chord (F major with an added D) and fingerings 5 and 3. The second staff shows a treble clef with a chord diagram for an added sixth chord (C major with an added Bb) and fingerings 6 and 5. The third staff shows a treble clef with a chord diagram for an added sixth chord (G major with an added F) and fingerings 7 and 6.

Example 4. Tensions that do not Resolve to Chord Tones: Augmented Ninth Chord

Example 4 consists of three staves of musical notation. The first staff shows a grand staff with a chord diagram for an augmented ninth chord (F major with an augmented second and a ninth) and fingerings 8, 7, 5, 3. The second staff shows a grand staff with a chord diagram for an augmented ninth chord (C major with an augmented second and a ninth) and fingerings b9, 7, 5, 3. The third staff shows a grand staff with a chord diagram for an augmented ninth chord (G major with an augmented second and a ninth) and fingerings b10, b9, 7, 5, 3.

graphs replace these tensions with the notes for which they substitute. This is the methodology that will be used in this study, as shown in Examples 3 and 4 and in all subsequent examples.

One last point must be made before moving on to the analysis of the three standards chosen for this study. I will be comparing a well-known version of the standard, rather than the lead sheet of this tune, against Evans' own performance. This is not to say that the study of lead sheets is without merit. Rather, this decision is made for two main reasons. First, lead sheets, as noted by Larson (1999, 119–120), are often simplified arrangements made by someone other than the composer and should therefore not be regarded as the *Urtext*. Just as importantly, with the decision made to approach these standards from a Schenkerian perspective, only a diminished version of this theory is possible in the analysis of a lead sheet. This is true since the structural descent must be found within the melody itself,¹⁷ and so the concept of the cover tone is entirely eliminated, while other techniques that are associated with the interplay between contrapuntal voices, most notably unfoldings, as well as motion from and into an inner voice, are less frequently employed. It is therefore not a surprise that the analyses of lead sheets rather than transcriptions can lead to the unnecessary modification of some of the most fundamental Schenkerian concepts. Martin (2011a,1) has written that he has relied on lead sheets for his published analyses, although he also admits to employing Rothstein's (1990) concept of the imaginary continuo to realize the inner voices implied by the chord changes in a lead sheet. His modifications to Schenkerian theory include gapped *Urlinien*, non-triadic *Kopftöne*, and non-traditional *Ursätze*.¹⁸ As substantial as these modifications are, they are relatively minor when compared to those of Davis, whose analysis of Evans' "Peri's Scope," which does not consider the inner voices in any way, undermines Schenkerian theory even more fundamentally.

While Davis' (1990, 74) background graph of this work is a typical five-line, his "first-middleground graph" exhibits unique characteristics, including the structural stratification of the *Bassbrechung* and the *Urlinie*, the former beginning and ending only after the latter is completed. This structural stratification produces circularity—indicated by forward- and backward-pointing arrows in the beaming of the *Ursatz*—when "the final tonic of the fundamental bass is prolonged with activity that fills the gap from the beginning of the thematic process of the tune (a component of surface architecture) up to the beginning of the fundamental bass" (127). One reason for the identification of structural stratification here could be due to the initial appearance of tonic harmony in the lead sheet only at the end of the A section. In fact, the recording of this tune on the 1959 album *Portrait in Jazz* reveals that despite the E found in the bass of the piano's third chord, this E is supported by a C in the string bass, thus forming a

¹⁷ Martin has recently commented on this idea and resulting modifications to the *Urlinie* that he proposes (discussed below): "Typically, Schenkerian analysis privileges the three original prototypes to such an extent that they serve as models for the inference of implied tones, i.e., those missing from the music, but enhancing the coherence of an analytic level. I suggest, instead, that the analyst try to infer any missing notes from the harmonic and voice-leading events of the original melody" (2011a, 17).

¹⁸ It must be noted that the "riff tunes" Martin (2011a, 6) analyzes to show the necessity of non-traditional *Urlinien* all share a melodic simplicity, including "Sentimental Journey," "with only five notes and not extending beyond a perfect fourth," "Moten Swing," with "only four notes (although its range expands to a tritone)," and "Opus One," which uses four notes within the ambitus of a perfect fourth. It is this restrictive melodic palette that leads Martin to propose non-traditional *Ursätze* for these works, something that would be unnecessary for a typical jazz work that is more florid in terms of both melody and harmony.

C 6/9 chord (audible in the quartal voicing e–a–d¹–g¹) rather than the E7 chord that is identified in the lead sheet.

A much more traditional middleground graph of this work—one in which the foreground dissonances have been reduced to middleground consonances, as in the above examples—is presented in Example 5. This reading accounts for the delayed arrival of tonic harmony by a simple diagonal. Furthermore, the *Bassbrechung* and *Umlinie* are synchronous, so that $\hat{5}$ is prolonged in the opening and contrasting sections while the structural descent is heard—covered not only by the melody in this final section, but also by the cover tone G that repeats the motivic A–G neighbor figure that permeates this work—in the modified return of the opening material. While one may argue with the choice of the comparisons made below between a well-known recording of a standard and that of Bill Evans, these comparisons are at least made between like items (transcriptions), rather than between the transcription and lead sheet of the same tune that, for reasons discussed above, could lead to potentially misleading results.

“MY FOOLISH HEART”

There were several popular versions of “My Foolish Heart” recorded before that of Bill Evans’, and the inspiration behind his arrangement of this tune is unknown. Unlike Victor Young’s 1949 original, Evans does not maintain a tonic pedal for much of the opening phrase of the tune, nor does he employ the harmonic substitution in the second measure of the final 8-bar phrase ($\flat VI^7$ rather than II–V). This same substitution, as well as the then-famous “one-finger piano solo” texture makes Gordon Jenkins’ version an unlikely inspiration. The closest well-known recording to that of Evans is the version by Billy Eckstine, which made it to #6 on the national charts in 1950 and, as a million-selling record, would have been known by Bill Evans. It is the close relationship between the relative simplicity of Eckstine’s version and the harmonic substitutions added by Evans that makes the latter recording, in the opinion of this writer, the model for the former.¹⁹ Evans is, as expected, remarkably faithful to Young’s melody; his harmonization, however, is radically different, due to a large extent to an accelerated harmonic rhythm that never falls below that of Eckstine, and is most frequently twice as fast. This accelerated harmonic rhythm is seen clearly by comparing the introduction and opening phrase of both recordings of this work (Example 6a/b).²⁰

In an interview with Marian McPartland, Evans commented “I always have, in anything that I play, an absolutely basic structure in mind. Now, I can work around that differently, or between the strong structural points differently, but I find the most fundamental structure, and then I work from there” (1978). Evans’ quote is a perfect description of the difference between Eckstine’s recording of this work and his own: Evans incorporates only the chords that begin and end the four phrases of the work—the “strong structural points”—and even one of these harmonic pillars is changed. In order to trace Evans’ unique path between Young’s structural points, a detailed study of Evans’ foreground is necessary, one

¹⁹ The Russ Case Orchestra accompanies the singer in this recording, although no arranger is cited. Case, who worked for multiple radio and television stations throughout his career and whose work was frequently uncredited, is likely the arranger of Eckstine’s recording.

²⁰ This is a trait that we will see in all three of the works discussed in this study.

Example 5. Middleground Graph of Evans’ “Peri’s Scope” (1959)

Example 6a. Opening Phrase of “My Foolish Heart” Arranged by Russ Case

My Foolish Heart
Composed by Victor Young
Performed by Billy Eckstine

Moderately Slow

Example 6b. Opening Phrase of “My Foolish Heart” Arranged by Bill Evans (1966)

My Foolish Heart
Arranged by Bill Evans

that focuses primarily on the first phrase that contains the *Anstieg* ascending from e^1 to $c\sharp^2$, the latter note the work's *Kopftön*. This study reveals the logic behind Evans' reharmonization, and as a result demands specific modifications to Schenkerian theory due to his exceptional dissonance treatment.

Perhaps the most striking difference between the opening phrases of these two recordings is the relative harmonic simplicity of Eckstine compared to the complexity of Evans. While Eckstine prolongs each note of his *Anstieg* in the initial phrase— e^1 to $c\sharp^2$ —with either a single chord or a pair of chords, Evans uses up to four. A detailed study of selected melodic prolongations will follow, although rather than being presented in order, they will instead move from the simple to the complex. The prolongation of $\hat{5}$ is by tonic harmony; the only complexity to this opening chord is the movement from chordal seventh to sixth. Example 7 shows the derivation of this dissonance treatment, one that combines the two functions of the added sixth shown in Example 3: like Examples 3–4 above, this graph can be read from top to bottom to generate this 7–6 motion through the elimination of ornamentation in the voice leading—the sixth substituting for the consonant fifth, while the seventh stands for the octave in an abbreviated form of 8–7 motion—while reading from bottom to top reduces these dissonances back to their consonant origins.²¹

²¹ Strunk's observation on $\hat{6}/I$ serving as the resolution for $\hat{7}/I$ was noted above, although in this particular circumstance I disagree with Strunk when he writes “this is its ($\hat{6}/I$) most usual role: an unresolved addition to I, not standing for $\hat{5}/I$ (which is often voiced a step away from it), but also not a chord tone” (1985, 99). In the above example, perhaps because $\hat{6}$ is not voiced a

Example 7. Generation of/Reduction to Evans' Prolongation of $\hat{5}$ in the *Anstieg* of “My Foolish Heart”

TRITONE SUBSTITUTION

The next prolongation to be examined is slightly more complex in that it involves the common jazz technique of tritone substitution.²² Tritone substitution is most often, although not exclusively, applied to dominant seventh chords. The tritone that forms the tendency tones of any dominant seventh chord is shared by the dominant seventh chord whose root is related by tritone, and these two chords function interchangeably. Problems arise when the voice leading between tritone substitutes and their resolution is examined, as in the prolongation of $\hat{2}$ in Evans' *Anstieg*.

Evans prolongs $\hat{2}$ with the common cadential formula of II^7-V^7 , albeit with modifications (Example 8). The top system of this example shows the origins of this progression; the quality of the II chord is changed, following Evans' example, thus turning it into an applied dominant. The voice leading here is that which is recommended in both Schenkerian-influenced textbooks and jazz method books (Aldwell and Schachter with Cadwallader 2011, 213–214; Levine 1989, 17): the chordal seventh of the first chord resolves down to become the chordal third of the dominant, while the chordal third is sustained

step away from $\hat{5}$, I see the consonant origins in the 8–7–6–5 motion; in other words, although the seventh resolves to the sixth, I still hear the sixth as a substitution for the chordal fifth. This reading explains the vertical arrangement of Example 3 above.

²² Because in jazz theory a chord and its tritone substitute function interchangeably, I have used circled Roman numerals to indicate the use of a tritone substitute. For more on this concept, see “Basic Reharmonization” in *The Jazz Theory Book* (Levine 1995, 260–271).

Example 8. Generation of/Reduction to Evans' Prolongation of $\hat{2}$ in the *Anstieg* of "My Foolish Heart"

to become the chordal seventh.²³ The second system of this example shows the additional counterpoint Evans adds in the alto voice, moving from $G\sharp$ through $G\flat$ to $F\flat$. Both the $G\sharp$ and $G\flat$ of the first chord are sixth tensions substituting for the chordal fifth ($F\sharp$) in the upper system. The $G\flat$ to $F\flat$ motion of the dominant chord represents an augmented ninth tension moving to a minor ninth, which substitutes for the doubled chordal root (E) in the upper system. Finally, the bottom system of this example reflects Evans' performance by employing tritone substitution for the II^7 chord. Two separate difficulties are introduced on this bottom staff, the one that represents Evans' foreground, and both are reflected by the use of exclamation marks next to the problematic figures. Each will be discussed in turn, beginning with the most obvious: there are parallel sevenths between these chords in the bass and tenor voices ($F-E\flat$ to

23 Had the II chord not been an applied dominant, the chordal third would have been D and no change of quality of this interval would have been required in order to become the dominant's chordal seventh.

$E-D$), which are emphasized in Evans' performance through the elimination of the original tenor voice ($A-G\sharp$).²⁴

Larson has commented obliquely on this problem of dissonance treatment. He notes:

Planing (parallel motion in several voices that produces a succession of similar chords), which is uncommon in classical music (but common in Debussy's music), may raise questions about the applicability of Schenkerian analysis. In jazz, planing frequently introduces parallel motion in dissonant intervals (especially tritones and sevenths...). It may also introduce parallel motion in perfect fifths. Nevertheless, it seems clear that the best explanations of planing necessarily involve Schenkerian principles of voice leading and structural context (see, for example, Schenker... on leading and following voices). (2009, 24)

The passage in *Der Freie Satz* (Schenker 1979), to which Larson refers discusses simultaneous linear progressions: the leader governs the prolongation of a single chord or the motion from one chord to another, while the follower(s) move(s) in parallel 3rds, 10ths, or 6ths with the leader. Although as common as tritone substitution is in Evans' performance, appearances of it that are not incorporated into simultaneous linear progressions are rarely mentioned in Larson's analyses. The exception to this rule is his discussion of the ending of Thelonious Monk's performance of "Round Midnight." Initially, Larson invokes the concept of tritone substitution to explain the mysterious logic behind Monk's ending. He then refines his interpretation of these measures: "these bass notes—instead of being viewed as the second-hand result of the capricious application of a process of 'tritone substitution'—may be seen as participating in a compound bass melody that resolves into the final authentic cadence" (2009, 49).

Brown (2005) has also explored Schenker's concept of leading and following lines in more detail, and his goal is to accomplish that which Schenker was unable to: a consistent explanation for the appearance of illegal parallel intervals. His analysis of a passage from Chopin's Mazurka, op. 30/4 (Example 9), one that features a string of parallel dominant seventh chords, draws on observations made earlier in his study, observations that absolve this passage of its illegal parallels:

The passage arises from a motion between different polyphonic voices, especially the soprano $D\sharp$ and the alto $F\sharp$ Here, the unfolding of the sixth $D\sharp-F\sharp$ is filled out chromatically and supported by a string of parallel thirds and sixths.... Since these parallel sonorities are created contrapuntally by combinations of non-harmonic tones, they do not violate Schenker's revised laws of tonal voice leading.²⁵

Larson and Brown's attempts to use Schenker's ideas on simultaneous linear progressions to explain illegal parallel intervals are important. Yet it must be pointed out that linear progressions span the

24 The exclamation point next to the figure $\flat 5$ will be discussed in greater detail below.

25 Brown (2005, 175). The specific revised law of tonal voice leading to which he refers here is this: "'If parallel perfect octaves and fifths occur, then they arise from doublings/figuration or from complex combinations of harmonic and non-harmonic tones.' In other words, permissible parallels arise from complexities in the voice leading" (50).

Example 9. Chopin, Mazurka, op. 30/4, Closing Measures

intervals that make up the triad: thirds and sixths, fifths and fourths. In Evans' prolongation of $\hat{2}$ shown in Example 8, there is a pair of chords that contain parallel sevenths, and since they span only a second, the work of Schenker, Larson, and Brown does not apply to them. The same is true for the prolongation of $\hat{6}$ in the key of the supertonic, which, as shown in Example 10, would have reproduced Larson's origins of the chordal 11^{th} (shown in Example 2) had Evans not used tritone substitution for the dominant function. In doing so, a succession of parallel sevenths are found within this chord progression, again between the bass and tenor voices ($C\sharp-B$, $C\sharp-B\flat$, $B\sharp-A\sharp$). The resulting parallel sevenths demand the modification of Schenkerian theory due to their unusual dissonance treatment. It is ironic that this exceptional circumstance in Schenkerian theory is the result of one of the most common harmonic techniques in jazz theory.

It must be noted before moving on that tritone substitution also breaks a rule for the resolution of dissonance in jazz theory: while each member of a tritone serves as either the third or seventh of tritone-related dominant seventh chords, the tritone only resolves according to its function within the original harmonization. This is true despite the fact that a tritone-related bass has been substituted and the changed roles of the two notes—seventh moving to seventh and third moving to third rather than seventh moving to third and vice versa—produce parallel sevenths.²⁶ The implicit rationale behind this

26 Levine (1989, 39). See Figures 6–10 and 6–11 that demonstrate tritone substitution in the opening chords of “All the Things

Example 10. Generation of/Reduction to Evans' Prolongation of $\hat{6}$ in the *Anstieg* of “My Foolish Heart” Using Larson's Derivation of the 11th Chord

oversight, according to Levine, is that “reharmonization such as this transforms old standards into tunes that sound fresher and more modern” (1989, 39).

Harmonic theory of the 19th century, most notably Sechter's (1853) recognition of two enharmonically equivalent dominant seventh chords as having roots related by tritone due to subposition (Example 11),²⁷

You Are.” In Figure 6–10, the tritone $A-E\flat$ resolves to $A\flat-D$ in the progression $F^7-B\flat^7$. In Figure 6–11, the same tritone resolves using the same voice leading, despite the fact that the bass of the first chord has been changed to B to produce $B^7-B\flat^7$. The three-chord progression $C^7-B^7-B\flat^7$ in Figure 6–11 produces the same string of parallel sevenths ($C-B\flat$, $B-A$, $B\flat-A\flat$) as that found in Example 10.

27 For more information on this topic, see “The Tritone as Equivalency: A Contextual Perspective for Approaching

would seem to separate Classical and jazz harmonic theory. This is certainly true for the function of the chords: Sechter's tritone-related chords function according to their spelling as either dominant seventh of the Neapolitan or augmented sixth, while tritone substitutions in jazz harmony are functionally identical. The difference in the treatment of tritone resolution initially also seems to separate the two schools of harmonic thought. For Sechter, the tritone of the dominant seventh (A–E \flat) and that of its tritone-related augmented sixth chord (A–D \sharp) both resolve correctly, while, as noted above, this is not true in jazz theory. Yet it is the resolution of the German augmented sixth chord directly to a dominant seventh chord that introduces two exceptional treatments of dissonance: acceptable parallel fifths between $\flat 6 \rightarrow \hat{3}$ and $\hat{5} \rightarrow \hat{2}$ (as long as this does not appear between the outer voices), and the resolution of the augmented sixth directly to a minor seventh by eliminating the octave of the 8–7 motion over the dominant. Without the distinctive voice leading of an augmented sixth moving out to an octave, the latter progression, employing an augmented sixth moving to a minor seventh, would sound like parallel sevenths. And if a composer were to spell the augmented sixth enharmonically as a minor seventh, then parallel sevenths would be confirmed in the voice leading. Thus, harmonic practice in the 19th century involving the resolution of the augmented sixth chord forges a hidden link between Classical harmonic theory and jazz theory by anticipating the problematic dissonance treatment found in the resolution of tritone substitution chords in jazz.

MELODIC PEDALS

The parallel sevenths in Examples 8 and 10 are indicated in the figured bass by exclamation marks. Exclamations marks in these examples also point out another type of exceptional dissonance treatment, that created by a melodic tension that is not resolved. In Example 8, once tritone substitution is applied to the supertonic chord, the consonant octave in the melody (B–b 1) is transformed into a dissonance (F \sharp –b 1).²⁸ More specifically, the melodic note in this prolongation begins as a lowered fifth tension, one that is transformed into a consonant fifth (E–b 1) only with the arrival of dominant harmony. Without the complicating factor of the parallel sevenths, this passage would not require comment from a Schenkerian perspective; melodic prolongations at the foreground can begin over dissonant harmony and be retrospectively stabilized with consonant harmonic support, as in the prolongation of $\hat{2}$ supported by the progression of a French augmented sixth chord moving to V, or in the prolongation of $\hat{1}$ supported by a common tone augmented sixth chord that resolves to tonic harmony (Example 12a/b). This type of melodic prolongation perhaps explains Larson's unorthodox origins of the 11th chord noted above.

Unlike 9th and 13th tensions that substitute at the foreground for consonances (8 and 5, respectively) at the middleground, Larson explains that the 11th tension itself is consonant while its harmonic support is dissonant (see Example 2 above along with Larson's quote). As Larson explains, the root of the II chord is the fifth of the V chord that controls the time span of both chords. This explanation for the

Example 11. Sechter's Discussion of Enharmonic Modulation Using Tritone-Related Chords (Dominant Seventh Enharmonically Reinterpreted as Augmented Sixth)

B \flat F B E A

Bass Subposed (omitted) with lowered fifth and ninth

Example 12a. Chopin Prélude, op. 28/20, mm. 5–6 with French Augmented Sixth Prolonging $\hat{2}$

5 6 7 - 6 7 $\sharp 6$ $\frac{3}{4}$

I \flat VI II V

Example 12b. Schubert "Am Meer" from *Schwanengesang*, mm. 1–2 with Common Tone Augmented Sixth Chord Prolonging $\hat{1}$

$\hat{1}$ $\hat{1}$

I I

Schoenberg's Music" (Phipps 1985–86).

²⁸ The parallel sevenths noted above are due to a similar transformation, when the consonant D \sharp on the second level becomes a dissonant seventh on the third.

prolongation of a melodic tone that originates over dissonant harmony is similar to the progressions in Example 12 above. Yet when a tritone substitute for the dominant is used, as in Example 10, Larson’s explanation for the consonant origins of this progression is compromised; the root of supertonic harmony is no longer a member of the tritone-substituted dominant and presumably no longer controls the time span of both chords. Further, Larson’s “consonant” melodic pitch becomes a tension in both the II and the tritone-substituted V chords.

A more conventional explanation regarding the origins of the 11th chord is found in a Schenkerian-influenced harmony textbook, which plainly states “There is no reason...to regard ‘11th’...as anything but 4th...that replace, rather than resolve to, 3rd...belonging to seventh chords” (Aldwell and Schachter with Cadwallader 2011, 530). This approach therefore provides an identical explanation for the consonant origins of 9th, 11th, and 13th chords. With this alternative explanation for the chord’s origins, the prolongation of $\hat{6}$ in the *Anstieg* that initially appears as the 11th of supertonic harmony would change to a 10th (Example 13). We are therefore left with two conflicting interpretations of this passage: Larson’s approach would explain the consonant status of the initial melodic F# if the dominant function were not a tritone substitute, while the more traditional approach changes the consonant origins of the chordal eleventh and in doing so paradoxically makes the middleground more complex than the foreground (E–F# rather than a sustained F#).

While conflicting interpretations of the consonant origins of the 11th chord clouded the analysis of Evans’ prolongation of $\hat{6}$, an 11th chord does not appear in Evans’ prolongation of $\hat{1}$ (Example 14). There are four chords used to support this melodic pitch: as the top system shows, three are transformations of the dominant function in the local key of the supertonic, while the last is the tonic function with added seventh. The opening minor dominant supports $\hat{1}$ as a consonance; its transformation into an augmented dominant triad shown on the second system forces a reinterpretation of the melodic pitch as an augmented ninth, the resolution of which is, as discussed above, down by minor third. Yet this resolution does not take place. The third chord is a tritone substitute for the second, as shown on the third system. Unsurprisingly, there are parallel sevenths between the third and fourth chords.²⁹ The melodic pitch of the third chord, on the other hand, becomes a sixth tension, one that also does not resolve. Finally, with the resolution to the supertonic function, the melodic $\hat{1}$ becomes the chordal seventh, its resolution (not shown in the example) transferred into an inner voice so that the *Anstieg* may continue. The important point here is that $\hat{1}$ is heard as a tension in the second and third chords, yet neither resolve. A similar situation is found in Example 10, in which the F# over dominant harmony can perhaps be explained as a melodic prolongation begun over dissonant harmony that is later given consonant harmonic support. This reading is not convincing in context, however, due to the slow tempo and the clear function of F# as tension in the first two chords, neither of which is resolved.

The same type of unresolved dissonances are also found in the inner voices. In Example 10, the first chord at the foreground level contains a D# in the alto and a G# in the tenor, the former a chordal ninth

Example 13. The Generation of/Reduction to Evans’ Prolongation of $\hat{6}$ in the *Anstieg* of “My Foolish Heart” Using a Textbook Derivation of the 11th Chord

The image displays three systems of musical notation for Example 13, illustrating the generation or reduction of Evans' prolongation of $\hat{6}$ in the *Anstieg* of "My Foolish Heart" using a textbook derivation of the 11th chord. Each system consists of a piano accompaniment with treble and bass staves, and chord diagrams below. The first system shows chords II, V, and I with a "of II" label. The second system shows chords II, V, and I with a "Doubles Bass Line" label. The third system shows chords II, V, and I with a "of II" label.

²⁹ The resolution of the third chord’s chordal seventh is only implied in the same register—it is, of course, the melodic pitch that has been prolonged throughout this passage—so the parallel sevenths here are only implied. The parallel ninths between the bass and alto voices of the third and fourth chords, however, are not implied (C^b–D to B^b–C#).

Example 14. The Generation of/Reduction to Evans' Prolongation of \hat{I} in the *Anstieg* of "My Foolish Heart"

The image displays four systems of musical notation for Example 14, illustrating the generation and reduction of Evans' prolongation of \hat{I} in the *Anstieg* of "My Foolish Heart".

- System 1:** Shows a piano score with a treble staff and a bass staff. Below it is a Schenkerian graph with two voice lines and numbers (10, 5, 7, 8, 10) indicating pitch levels. Chord symbols V and I are shown, with the text "of II" below.
- System 2:** Similar to System 1, but with more complex voice leading and numbers (10, 5, 7, 9, 10, 7, 8, 10). Chord symbols V, V, and I are shown, with "of II" below.
- System 3:** Shows a piano score with a treble staff and a bass staff. Below it is a Schenkerian graph with three voice lines and numbers (10, 5, 7, 9, 10, 7, 8, 10, 5). Chord symbols V, V, and \hat{V} are shown, with "of II" below.
- System 4:** Shows a piano score with a treble staff and a bass staff. Below it is a Schenkerian graph with two voice lines and numbers (10, 5, 7, 9, 10, 7, 8, 10, 5). Chord symbols V, V, and \hat{V} are shown, with "of II" below.

The bottom system is labeled "Melodic Consonances Replacing Tensions on Musical Surface".

that substitutes for an implied octave ($C\sharp$) at the top level and the latter a consonant fifth. This $D\sharp$ is ultimately resolved down by step when tonic harmony is reached. Yet before its ultimate resolution, the $D\sharp$ is enharmonically respelled as $E\flat$ over dominant harmony, thus creating an augmented ninth tension, while the $G\sharp$ is respelled as $A\flat$ to become an augmented fifth tension. While the contrapuntal origins of these notes can be seen as suspensions, they, like the melodic $F\sharp$ (a prefix melodic prolongation), are audibly left unresolved. Moreover, these inner voice tensions at the foreground cannot be traced back to consonant origins at the middleground. The same is true of the inner voice motion over supertonic harmony in Example 8. The function of the notes $G\sharp-G\flat$ in the bottom system are, due to the elimination of the tenor voice, more difficult to establish. They most likely represent ninths over the bass, ninths that reduce to $F\flat$, which would be consonant at the foreground but dissonant at the middleground.

A Schenkerian reading of Examples 8, 10 and 14 might explain these unresolved tensions as the result of complex voice leading that forms a dissonance on a deeper level of structure. This approach is the one used by Larson (2009, 72–105) in his analysis of three measures from Evans' live performance of "Round Midnight." He initially describes the upper notes in the series of ascending seventh leaps in terms of their tensions: "the third melodic seventh, $B\flat-A\flat$, begins over $E\flat$ minor, but ends over C^{97} [as thirteenth]– F^7 [as augmented ninth]" (Larson 2009, 87–90; verbal explanation of Example 5.14). Yet Larson treats the $A\flat$ as a dissonant passing note between $B\flat-G\flat$, which explains the lack of resolution of the tensions, as they are subsumed into the larger-scale dissonant passing motion. Explanations of this type are not possible for every musical context, however, as in the prolongations of the individual notes of the *Anstieg* in "My Foolish Heart."

Strict Schenkerian readings of such passages will always be preferable to the concept of unresolved dissonances. Yet when a strict reading is not possible, and the unresolved dissonance is used consistently enough to become part of the interpreter's style, it would be helpful to find the rationale behind this exceptional treatment. Strunk observes that "sometimes a tension sustains through a chord change to become a consonance, thereby losing its 'need' to resolve" (1985, 112). He goes on to cite the progression II^7-V^7 prolonging $\hat{5}$, shown above in Example 2, as the origin of the 11th chord. Yet Strunk makes it clear that this progression is not the sole manifestation of tensions that lose their need to resolve. This concept is therefore offered as an explanation of Evans' dissonance treatment in his prolongations of $\hat{5}$, $\hat{6}$ and \hat{I} in the *Anstieg* of "My Foolish Heart." The unresolved dissonances that eventually become consonant can perhaps be thought of as extended anticipations or as melodic pedals.³⁰ This explanation of a dissonance that loses its need to resolve seems an accurate reflection of Evans' practice, especially in ballads. It is also more faithful to the musical context. Had melodic substitution been employed for the second and third chords in the prolongation of \hat{I} , as shown at the bottom of Example 14, the underlying consonance at a deeper structural level would be revealed. Yet at the same time, the middleground graph would become cluttered with additional notes, thereby obscuring the clarity of this *Anstieg*.³¹

30 For information on the unification of a passage through the emphasis on the common notes shared between chords—note especially Examples 6–81 – 6–84 that place the common tones in the melodic voice—see "Common Tones" in *The Jazz Theory Book* (Levine 1995, 155–161).

31 In a private conversation, Robert Wason mentioned that this opening phrase presents such a clear *Anstieg* that he has used it

“WHO CAN I TURN TO?”

Bricusse/Newley’s “Who Can I Turn To?” uses a similar formal structure to that of “My Foolish Heart”—a double period that features interruption at the end of the second phrase. The first, second and third phrases of both recordings of this tune are shown in Example 15a/b. While the exceptional dissonance treatments discussed above in association with Evans’ performance of “My Foolish Heart” also appear in his recording of “Who Can I Turn To?,”³² there are also new difficulties introduced in the latter tune that further prevent an orthodox Schenkerian reading.

A II–V progression in bar 6 is striking in its simplicity—it appears in a 2-voice texture without any chordal extensions added to the dominant—and foreshadows Evans’ decision to reverse the usage of dominants and tritone substituted dominants found in his likely model, the original Broadway recording. While the Bricusse/Newley original uses tritone substitution only in its final cadence, Evans uses this technique with every cadential dominant with the exception of the final one. This explains the appearance of the A chords at the end of the first and third phrases, these chords substituting for the dominant E \flat in the subdominant tonicization that spans these phrases. As expected, there are parallel sevenths within both these progressions.³³ It is the tritone substitute that ends the second phrase, however, that introduces a completely new problem requiring the modification of another fundamental Schenkerian tenet. The symmetrical phrasing, the impending return of the opening material, and the appearance of $\hat{2}$ in the melody in bar 17 all lead one to expect the arrival of dominant harmony and interruption. Instead, minor third-related seventh chords appear, prolonging the supertonic and leading directly to the expected dominant at the end of bar 18, albeit in second inversion and as a tritone substitute. Two separate issues—exotic scales and interruption—interact in these measures to make them the most complex of this work.

The partial cycle of minor-third related chords in bars 17–18 with roots on F, A \flat , and B, prolongs the supertonic function and invokes the octatonic scale in collection (2,3).³⁴ The B chord that ends this progression is the tritone substitute of the supertonic that began this cycle of thirds. This chord resolves to the tritone substitute of the dominant in the second half of bar 18, and a more typical use of the “diminished” scale is heard in the melody:³⁵ the descending (0 2 3 5) tetrachord (E D C \sharp B) presents,

as an example when teaching courses on Schenkerian analysis.

32 Evans’ interpretation of this work is upbeat when compared to the open display of emotion in Newley’s performance. Evans also uses a much faster tempo. Therefore, despite the fact that Evans continues to use a faster harmonic rhythm, there are fewer opportunities for melodic pedals. The one example appears at the end of the first phrase (m. 10), where $\hat{2}$ is prolonged by a II–V progression despite the fact that this melodic note is consonant with the first chord and is a tension in the second chord.

33 These sevenths occur between the II and V chords: B \flat –A \flat to A–G.

34 Due to the complexity of Evans’ harmonic language the four pitches foreign to this collection are also found within this three-chord progression.

35 This melodic presentation of descending tritone-related (0 2 3 5) tetrachords was used in bar 14 of “My Foolish Heart,” briefly forming octatonic collection (1,2).

Example 15a. “Who Can I Turn To?” mm. 1–25 from the Original Broadway Production (1965)

Moderately, with expression

Who can I turn to when no-bod-y needs me? My heart wants to know and so I must go where

des-ti-ny leads me. With no star to guide me, and no-one be-side me, I'll

go on my way, and af-ter the day, the dark-ness will hide me; And may-be to-mor-row I'll

find what I'm af-ter. I'll throw off my sor-row, beg, steal or bor-row my share of laugh-ter. With

Example 15b. “Who Can I Turn To?,” mm. 1–22, Arranged by Bill Evans (1966)

The musical score for Example 15b consists of five systems of music. The first system (measures 1-4) features a complex texture with triplets in the right hand and a steady bass line. The second system (measures 5-10) includes Roman numeral annotations: II_4 , V , I_{45} , and II of IV . The third system (measures 11-17) contains annotations for $Oct. (0, 1)$, $Oct. (2, 3)$, and a II Partial Cycle of Minor Thirds. The fourth system (measures 18-20) includes $(0, 2, 3, 5)$ and V annotations. The fifth system (measures 21-22) features a WTB annotation. The score is written in a grand staff with treble and bass clefs.

in order, the root, seventh, thirteenth, and fifth of the dominant followed by the tritone-related (0 2 3 5) tetrachord ($B^b A^b G F$) to form collection (0,1).³⁶

Exotic scales continue in the opening of the following phrase (bars 19–22). Over the B^b pedal that prolongs the dominant in these measures, the first chord is a subset of octatonic collection (2,3), the second chord presents a $\sharp 4$ chord as a contrapuntal connection to the following dominant, one embellished with an ascending whole-tone scale in an inner voice. Dominant prolongation ends in bar 22 with a simple dominant seventh that finally resolves to tonic harmony in the following bar. Octatonic and whole-tone harmonies are therefore intimately woven into the contrapuntal fabric of this passage. These exotic scales are not problematic from a Schenkerian standpoint; indeed, Brown (2005, 140–170) has written on Schenker and the “Myth of Scales,” clarifying the idea that exotic scales, like chromaticism, are the result of mixture and tonicization. Instead, the difficulty of these measures stems from the conflict between the structural descent to $\hat{2}$ to signal interruption at the end of the second phrase and the harmonic support of this melodic pitch. This is most readily seen when middleground graphs of the two versions are compared (Example 16).

As described above, the appearance of supertonic harmony supporting $\hat{2}$ at the end of the second phrase leads one to expect dominant harmony supporting the same scale degree to mark the point of interruption as occurs in the Bricusse/Newley original version. In Evans’ performance, however, the tritone substitute for the dominant at the end of the second phrase supports the lower chromatic neighbor of $\hat{2}$; since this note appears within octatonic harmony, it is unclear whether it is intended as a raised $\hat{1}$ or a Phrygian $\hat{2}$. While placed in the metrically correct position, this chord cannot be used as the point of interruption. It is equally incorrect to place the point of interruption over the supertonic of bar 17 rather than dominant harmony in the following measure. What Evans has done instead is to blur the end of the interrupted descent in the first half of the work with the beginning of the complete descent in its second half; the dominant function of bars 19–20 supports both $\hat{2}$ of the interruption and $\hat{3}$ of the resumed descent. This is similar to the recapitulatory overlap described by Peter Smith (1994) in Mozart’s Symphony no. 40, in which the return of the main theme appears over dominant, rather than tonic, harmony. Here, however, the formal overlap is much greater in relative length, and due to harmonic substitution rather than the independence of voice-leading and motivic processes he finds in Brahms.

“GOODBYE”

The structure of Jenkins’ “Goodbye” is different from that of the two works analyzed above. “Goodbye” is written in small ternary form: the opening and closing sections are each three phrases long, while the contrasting section is only two phrases in length. The outer sections of the work contain the structural descent from $\hat{3}$, while the contrasting section prolongs $\hat{3}$ and ends with interruption. Evans’s performance of “Goodbye” serves as a compendium of ideas discussed in the works analyzed above.

³⁶ Evans rhythmically anticipates the resolution of the II^7 , beginning his descending (0 2 3 5) tetrachords a beat before dominant harmony actually arrives.

Example 16. Middleground Graphs of the Opening Three Phrases of “Who Can I Turn To?” by the Original Broadway Production (top) and as Arranged by Bill Evans (bottom).

The top staff (Original Broadway Production) shows a melodic line starting with a triplet of eighth notes, followed by a half note, and ending with a double bar line. The bass line consists of a series of quarter notes. Chord symbols below the staff are I, IV, VI, II, V, I.

The bottom staff (Arranged by Bill Evans) shows a similar melodic line but with a more complex harmonic structure. The bass line is more active, with some chords marked with a circled V and a vertical line through it. Chord symbols below the staff are I, IV, VI, II, \textcircled{V} , V.

The opening phrase in Jenkins’ recording is the model of harmonic simplicity—a supertonic chord resolves to the dominant³⁷—while Evans’ harmonic rhythmic is significantly faster, with Chuck Israels avoiding Jenkins’ initial bass note $\hat{6}$ until the end of the phrase (Example 17a/b). Just as in “My Foolish Heart,” Evans moves between the structural points of this phrase in a manner significantly more complex than that used in the original. It is the same two techniques discussed in “My Foolish Heart”—tritone substitution and melodic pedals—that provide Evans a larger harmonic palette from which to choose when reharmonizing this melody. Indeed, this opening phrase of “Goodbye” represents Evans’ most radical treatment of melodic pedals found in these three works.

Unlike the previous two standards that Evans covered, Jenkins’ melody uses tensions that substitute for consonances at a deeper structural level and therefore disappear in the middleground. For example,

Example 17a. Opening Phrase of “Goodbye” Composed and Arranged by Jenkins (1946)

The score shows a vocal line and a piano accompaniment. The tempo is marked "Very slowly". The key signature has three flats and the time signature is 4/4. The lyrics are: "Women: I'll nev - er for - get you, Though I try and I try. I'll nev - er for - get you, This is our last good - bye. I'll".

Example 17b. Opening Phrase of “Goodbye” Arranged by Bill Evans (1962)

The score shows a piano accompaniment with complex chords and a melodic line. The key signature has three flats and the time signature is 4/4.

37 As Biamonte (2008) has noted, the German augmented sixth chord is an enharmonic respelling of the tritone substitute of the V^7/V chord. One of the main differences between these chords is the voice leading of their resolution, with contrary motion used for augmented sixth chords and parallel motion for the tritone substitute of V^7/V . The latter voice leading is used by both Jenkins and Evans, perhaps revealing their understanding of this chord as a tritone substitute of II^7 . Alternatively, it could reflect the resolution of the augmented sixth chord directly to the dominant seventh chord, as discussed above.

in the opening phrase, Evans borrows Jenkins' treatment of $\hat{3}$ as raised fifth tension over dominant harmony in bar 5 and $\hat{6}$ as minor ninth tension in bar 8; the former is replaced in the middleground graph with a perfect fifth, while the latter is replaced by an octave.³⁸ On the other hand, the listener is frequently shocked since the remaining tensions in Jenkins' melody are reharmonized as consonances, while many of the consonances are reharmonized to become tensions; the complexity of Evans' reharmonization is seen when middleground graphs of both versions are compared in Example 18.

The opening bar in Evans, for example, does not begin with a supertonic chord, but rather a $\sharp VI^7$, with which the melodic $\hat{3}$ forms a lowered fifth tension. This note is not restruck but implied in the following tritone substitution of the supertonic, with which it is consonant (although the chordal root is implied, as noted above).³⁹ This is the first example of Evans' use of melodic pedals, here with a melodic note beginning as a dissonance and later transformed into a consonance. The opposite process of a consonant melodic pedal prolonged as a dissonance begins with $\hat{3}$ of bar three, which was a tension in Jenkins, but is harmonized by Evans with $\sharp VI^7$ harmony with which it is consonant. This melodic pitch is sustained while the harmony changes so that it becomes the raised fifth of the tritone substitute for supertonic harmony (again, the chordal root is implied rather than played).

As noted above, the arrival of dominant harmony in bar 5 supports $\hat{3}$ in the melody; because this is a raised fifth tension, it is replaced by $\hat{2}$ in the middleground graph of this passage. While the resolution of $\hat{3}$ to $\hat{2}$ in Jenkins arrives within dominant harmony, Evans' arrangement is a bit more complex. By the time $\hat{3}$ moves to $\hat{2}$ in bars 5–6, the latter note is supported by the tritone substitute of supertonic harmony, with which it is dissonant. These two scale degrees would be consonant with Evans' harmonization if they were reversed. Melodic pedals provide a more musical solution to this problematic passage. Evans uses $\hat{2}$ as a grace note before introducing the melodic $\hat{3}$ over dominant harmony, as if preparing the listener for the consonant chord member followed by the tension that substitutes for it. It is therefore not a violation of the musical context to replace $\hat{3}$ with $\hat{2}$ over this chord. When $\hat{2}$ is sustained over the tritone substitute of supertonic harmony, it is analyzed as a melodic pedal, one that moves from consonance to dissonance. While $\hat{2}$ in the latter chord represents a lowered fifth, it seems a violation of the musical context to replace this tension with the perfect fifth $\hat{3}$ since this would disrupt the exclusively whole tone chord that Evans has carefully chosen here. In other words, the whole tone chord here, just like the whole tone and octatonic chords involved in dominant prolongation in "Who Can I Turn To?" are excellent examples of *Tonklötzen*, or Schenker's term for the fusion between non-harmonic and chord tones due to complexities in voice leading, in these cases due to the introduction of exotic scales.⁴⁰

The two techniques of exceptional dissonance treatment found in bars 5–6—tritone substitution and melodic pedals—are also heard earlier in this phrase. Evans' fondness for tritone substitution—used here in the progression VI–II–V—and the resulting chromatic trichord formed in the bass may be the

Example 18. Middleground Graphs of the Opening Phrase of "Goodbye" Composed by Gordon Jenkins (top) and Arranged by Bill Evans (bottom)

reason behind his unusual choice of opening chords ($\sharp VI^7$). Or perhaps with well-known melodies, Evans felt free to harmonize sustained tones as tensions that did not require resolution, with a tendency towards sixths, ninths, and lowered fifths. In "My Foolish Heart," melodic pitches were frequently harmonized initially as tensions that lost their need to resolve by becoming members of a consonant chord. In "Goodbye," however, Evans explores further possibilities involving melodic pedals. The recognition of these melodic pedals is shown in Example 19, where these sustained pitches are indicated by ties in the figured bass. This analytic technique is supplemented by Larson's replacement of tensions with their consonant substitute elsewhere in this passage. Below this graph is another reading of the same passage, one that mechanically replaces all tensions with their consonant substitutes. There are substantial differences between these graphs, most notably the placement of the *Kopftön* and the reversal of $\hat{3}$ and $\hat{2}$ in bars 5–6 from their appearance in Evans' performance. It is left up to the reader to decide for themselves whether the revisions to Larson's analytic methodology used in this study represent a refinement to it or not.

Although modern jazz lies well outside the repertoire for which Schenker's theory was originally intended, recent scholarship has brought modern jazz into the accepted canon, at least for the application of a modified version of Schenkerian theory. This is due primarily to Larson's observation, founded on

38 The measure numbers here refer to Evans' version; Jenkins' arrangement uses a meter with note values half the length.

39 With the root of the chord missing, an argument could be made that the tritone substitute is implied. The parallel voice leading between the opening chord, however, leads the listener to assume a similar quality is shared by both chords.

40 For more on *Tonklötzen*, see *Introduction to the Theory of Heinrich Schenker* (Jonas 1982, 120 ff.).

Example 19. Middleground Graphs of Bill Evans' Arrangement of "Goodbye" using both Melodic Pedals and the Substitution of Tensions (top) compared to the Exclusive use of Tension Substitutions (bottom)

The image displays two musical score examples for the piece "Goodbye" by Bill Evans. Both examples feature a melodic line in the treble clef and a bass line in the bass clef. The top example, labeled "Melodic Pedals and the Substitution of Tensions (top)", shows a melodic line with a triplet of eighth notes and a bass line with complex chords and tensions. The bottom example, labeled "Exclusive use of Tension Substitutions (bottom)", shows the same melodic line but with simpler chord substitutions in the bass line. Both examples include Roman numerals and tension symbols below the bass line.

the work of Strunk, that tensions substitute for consonances at a deeper level of structure. This study has pointed out several specific techniques used in three works performed by Bill Evans that require the further modification of Schenkerian theory in order to refine its application to modern jazz. This was demonstrated by explaining the origins of exceptional dissonance treatment through the invocation of techniques from jazz theory. Tritone substitution is too fundamental a technique in jazz to recognize its existence only in passages that exhibit simultaneous linear progressions, despite the fact that its appearance invariably introduces parallel sevenths. Tritone substitution must also be recognized when, as in "Who Can I Turn To?," it is used at the point of interruption and thereby denies the appearance of the required pitches in the *Ursatz*. Melodic pedals can be incorporated into the contrapuntal fabric of a work without exceeding the limits of Schenkerian theory. But this is not always the case, as seen in "My Foolish Heart" and "Goodbye," and so the recognition of these tensions that eventually lose the need to resolve is vital to the understanding of these works.⁴¹

41 It must also be recognized that the complexity of these melodic pedals distinguishes them from Larson's dismissive comment

The identification of these exceptional dissonance treatments also establishes these basic jazz techniques as more fundamental to Evans' conception of a work than the Schenkerian principles they exceed. This interpretation is supported by Chuck Israels' description of Bill Evans' process of arranging a standard:⁴²

Evans' approach to arranging music was...individualistic and exacting. The melody of each standard tune was subjected to intense scrutiny until every harmonic nuance was found. Accompaniments were fashioned from standard progressions which were then carefully adjusted and fine-tuned to the contours of each melody. This was done in so complete a way that when the accompaniment was played without the melody, the notes that were most strongly evoked were always those of the original missing tune. These exacting progressions were repeated during the improvised choruses so that the individual *character* of the piece was implicit in the solo. (Israels 1946, 112)

Israels indicates that, when arranging tunes, Evans focused on finding an ideal harmonization. While Evans learned Schenkerian theory at the Mannes College of Music—and may have even studied with Felix Salzer—this study's discussion of his dissonance treatment has shown precisely the point at which, for Evans, Schenkerian orthodoxies were eclipsed by techniques from jazz theory.

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that "both jazz and classical music also include dissonances that become consonances, 'thereby losing their "need" to resolve,' but these are best described as 'anticipations'" (1998, 217).

42 Chuck Israels was the bassist in the Bill Evans Trio from 1961–66, the years that include all of the recordings discussed in this study.

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