Almost all Schenkerian studies of jazz improvisation have focused on modern jazz idioms. Yet, as Scott DeVeaux (1991) has noted, there are considerable musical continuities between modern jazz and its stylistic precursor, swing. In order to demonstrate that swing-era jazz improvisations are equally receptive to a Schenkerian perspective, this article surveys some basic methodological issues via graphic analyses of solos by Johnny Hodges, Lionel Hampton, Roy Eldridge, Django Reinhardt, and Lester Young.

Why have there been so few Schenkerian studies of swing improvisation?1 Schenker's theory has been fruitfully applied to many repertoires beyond the Austro-German art-music tradition for which it was originally devised, and postwar jazz idioms, especially bebop, have received considerable attention from Schenkerians such as Henry Martin and Steve Larson.2 But swing, the subidiom of jazz that coalesced during the 1930s and whose chief practitioners—such as Coleman Hawkins, Benny Carter, Teddy Wilson, and Benny Goodman—were born during the first fifteen years of the twentieth century, has seldom been viewed from this standpoint.

One of the reasons for swing's relative neglect is that jazz theorists, like many music analysts, are often concerned with evaluating their objects of inquiry, and have often found it rhetorically effective to draw comparisons between jazz and the classical tradition.3 Martin, for example, declares that “the candidate for the central focus of tonal jazz theory is bebop, comparable in stature in jazz to the Classical era in common-

1 To my knowledge, the only publications addressing pre-bebop jazz from a Schenkerian standpoint are Forte 2011 (originally written in 1958), which offers a rudimentary prolongational perspective (without employing Schenkerian graphic notation) on improvisations by trumpeter Louis Armstrong and tenor saxophonist Lester Young; Peter Winkler's comments on Lester Young and Count Basie (1978, 14-18); Thomas Owens's discussion of Armstrong's 1928 “West End Blues” recording (2002, 296–97); Steve Larson's analysis of a solo by pianist Dave McKenna (1993), who although born in 1930 was strongly attuned to swing-era stylistic conventions; and Henry Martin's brief analysis of a Bix Beiderbecke solo (1986). Martin also draws attention to swing clarinetist Benny Goodman's use of a "large-scale voice leading succession" in a 1937 improvisation on the theme "Avalon" (ibid., 239). Martin's analyses are reproduced in Martin and Waters 2002, 74–75 and 144–45.

2 See, for example, Martin 1996a and Larson 2009. For a comprehensive listing of Schenkerian studies of jazz as of 2004, see Berry 2004, 301–7. Berry lists thirty-seven dissertations and published articles applying Schenkerian concepts to jazz, of which no more than two or three deal substantively with pre-bebop styles.

3 Martin writes that “Parker's finest improvisations are gem-like miniatures, expressively rooted in oral culture, yet exemplifying, on a small scale, the subtlest fine-art desiderata (1996a, 130).” Larson argues that “Schenkerian analysis may be applied to any jazz performance—and it may show the shortcomings of that performance” (2009, 32).
practice European Music” (1996b, 14). Such assertions reflect a widespread conception of jazz history that, as Scott DeVeaux has shown, places bebop at the cusp of the music’s artistic maturation while treating swing and other earlier African-American musics as precursors that had yet to shed the putative stigma of their vernacular or commercial settings (1991). DeVeaux argues, however, that the distinction between bebop and its immediate forerunner, swing, may actually be more political than strictly musical. That is, the key novel aspect of bebop and so-called “modern jazz” was not stylistic innovation but a heightened civil-rights consciousness among the music’s creators and listeners.

Guthrie P. Ramsey, Jr., in a similar vein, characterizes bebop as an “Afromodernist” phenomenon whose synthesis of Euro-American modernist and African-American expressive principles embodies a “productive competence” that counters the legacies of black peoples’ arrested historical relationship with American capitalism and its cultural hierarchy.” Crucially, Ramsey emphasizes that postwar Afromodernism “has always been...defined primarily within the sociopolitical arena” (2003, 106).

In the musical arena, by contrast, bebop and swing were always closely intertwined. Some of bebop’s principal exponents, including saxophonist Charlie Parker and trumpeter Dizzy Gillespie, began their professional careers with swing-era big bands such as those of Jay McShann, Cab Calloway, and Earl Hines, and many instrumentalists nominally associated with either swing or bebop continued to play together through the 1940s, as Patrick Burke has documented in his recent chronicle of New York City’s 52nd Street scene (2008). By the 1950s the two subidioms were considered similar enough that the critic Stanley Dance coined the single label mainstream jazz to describe them both.

A case in point is alto saxophonist Johnny Hodges’s 1952 solo on the Cole Porter song “What Is This Thing Called Love?,” which was recorded at a session featuring bebop improvisers such as Parker and guitarist Barney Kessel alongside somewhat older swing-era saxophonists whose playing had changed little since the 1930s, like Benny Carter, Ben Webster, and Hodges himself. (Born in 1907, Hodges first made his name as a member of the Duke Ellington Orchestra during the decade before World War II.) Example 1 displays a transcription of the beginning of Hodges’s solo on the next-to-highest staff. Immediately beneath Hodges’s solo appears Ray Brown’s concurrently

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4 See also Tucker 2005.

5 DeVeaux writes: “Bebop may well have been, in a narrow musical sense, a logical and seamless continuation of swing (1997, 8).”

6 For two other recent views of Afromodernism in postwar jazz, see Solis 2008, 31; and Magee 2007.

EXAMPLE 1

Johnny Hodges, Alto Saxophone Improvisation on "What Is This Thing Called Love?" (July, 1952)

WHAT IS THIS THING CALLED LOVE? (from "Wake Up and Dream"). Words and Music by COLE PORTER.
Spanish Version by JOHNNIE CAMACHO. © 1929 (renewed) WB MUSIC CORP. All Rights Reserved.
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improvised bass line; Porter’s original melody is on the bottom staff. By articulating many of the composed melody’s pitches at or near their original points within the music’s thirty-two-bar AABA chorus, the saxophonist nicely illustrates what the French composer and critic André Hodeir (1956, 44; repr. Hodeir 2006, 1993), in an influential formulation, calls “paraphrase improvisation”—an especially common approach among swing-era players.8 The uppermost staff uses an adapted form of Schenkerian graphic notation to show how Hodges embellishes the C-major theme with diminutions such as passing tones, neighbor tones, and chordal skips. The song’s primary pitches, which are stemmed and beamed in both the top staff and, as an analytic overlay, the bottom staff, consist of a stepwise melodic descent from a headnote, B♭ (♭7), through A♭ (♭6) and G (♯5), culminating in a skip downward to E (♯5) in m. 7. (The term headnote, defined by Allen Forte as the melody’s first note (1995, 25), is distinct from the Schenkerian concept of Kopfton, which refers to a work’s primary melodic tone.)9 A subsequent reiteration of the same linear descent concludes by skipping from G (m. 13) to E♭ (m. 14) and then to the tonic, C (in m. 15). Underlying each descent is a V7/IV – IV – V7 – I harmonic progression with two bars per chord. Hodges begins by displacing the headnote a bar later than in the original, prefixing it with an ascending melodic line. In m. 3 he prolongs A♭ by a local descent through G to the harmony’s root, F, on the third beat, and then plays a scalar ascent (mirroring the opening bar’s) to the apex pitch, C♯5, on the next downbeat, whose echo-like suffix at the lower octave, C4, he has already foreshadowed in the first half of the preceding bar.

This passage’s overarching melodic structure is not a Schenkerian archetype, and neither do certain of Hodges’s diminutions conform to Schenkerian norms, such as the saxophonist’s second quarter-note triplet in m. 9, D♯5 (a ninth of the underlying dominant-seventh harmony), which has been slurred as a “consonant” skip from the preceding stemmed B. This pitch could alternatively be said to participate in a new middleground design during the solo’s second eight-bar A-section: it resolves indirectly to the recurrence of C♯5 in m. 12. Then again, Hodges may be articulating a different underlying harmony in m. 9: a G-minor pre-dominant (with the D as its fifth) preparing the tonicization of F minor two bars later.10 Yet, these queries aside, Schenkerian notation is in this brief passage quite adequately suited to Hodges’s swing musical idiom. Though

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8 For an overview of paraphrase improvisation in jazz, see Kernfeld 2002, 315–17.

9 Forte 2001 discusses aspects of melodic structure and text setting in “What Is This Thing Called Love?” (54–59).

10 Forte notes that the lead sheet for “What Is This Thing Called Love?” that appears in the popular sheet-music anthology, The Real Book, gives the first chord as G-half-diminished instead of C7; this variant is based on a postwar recording by the Bill Evans Trio (2001, 189).
in itself merely anecdotal, this excerpt supports the historical and ideological reasons for doubting that bebop can be distinguished from swing by the pitch-based features to which certain Schenkerians—rightly or wrongly—ascribe its aesthetic quality. The styles’ main structural differences, such as they are, may lie elsewhere.

To assess swing improvisation’s receptiveness to a Schenkerian perspective, it is worth surveying a few basic methodological issues in conjunction with several preliminary graphic analyses. Some of these issues have previously been addressed in Schenkerian studies of bebop, but reviewing them in a swing context helps to illustrate the two subidioms’ similarities. A productive point of departure is Joseph N. Straus’s work on prolongation, even though its idiomatic purview is remote from the present one—it critiques the application of prolongational voice leading analysis to post-tonal music, demonstrating that atonality is not easily reconcilable with rigorous, consistent criteria for identifying prolongational pitch relationships (1987). Straus’s reductive conditions for prolongation are highly stringent—overly so, by his own subsequent account (1997). Yet this stringency serves to clarify certain of tonal jazz’s key differences from common-practice classical music. The four conditions are:

1. The consonance-dissonance condition: a strict, pitch-defined basis for determining relative structural weight.
2. The scale-degree condition: a consistent hierarchy of consonant harmonies.
3. The embellishment condition: a finite set of relationships between tones of lesser and greater structural weight.
4. The harmony/voice leading condition: a clear distinction between the vertical and horizontal dimensions (1987, 2–5).

After addressing each of these conditions in turn, I will take account of the valid issues raised by Larson’s critique (1997) of Straus. These mainly involve situations where Straus’s reductive pitch-based criteria for prolongation may be overridden by contextual rhythmic and metrical factors, or by a generative (i.e. top-down) analytic perspective in which deeper structural considerations trump surface-level ones.

Straus’s first necessary condition for prolongation is “a clear distinction between consonance and dissonance, a distinction grounded in the ultimate consonance of the triad and its intervals (thirds, fifths, sixths, and, in certain circumstances, fourths)” (1987, 2). This distinction exists in tonal jazz, but as more of a continuum than an either/or binarism. Furthermore, in improvised jazz the consonance/dissonance distinction is best conceived as a function of chord membership rather than of musical interval, as
there is ordinarily no literally sounding fixed pitch structure. Unlike classical music’s harmonies, which are generally defined by the total accumulation of pitches at any given point within a composition, the primary harmonies in jazz improvisations are determined a priori; in performance they become conceptually active at their preordained moments within the temporal form whether or not the musicians actually play any of their pitches. Even when, to take an especially unambiguous example, a drummer plays an unaccompanied solo over a standard form, the chord changes are still conceptually present despite the complete absence of any distinct pitches. Therefore, when analyzing monophonic improvised jazz solos, we ordinarily need first to infer each prevailing harmony; individual notes can then be classified as either consonances or dissonances with respect to their concurrent inferred chords.

But still, the consonance/dissonance distinction remains far from clear-cut in tonal jazz because the idiom routinely features “extended-chord tones” that, in Martin’s words, “may function either as chord tones or nonchord tones. In either case they are relatively dissonant to the pitches of the underlying triad (1996a, 14–15).” These non-triadic pitches—the most common of which are added-sixths, sevenths, ninths, elevenths, thirteenths, and blue notes—act like common-practice consonances in that they often do not resolve stepwise to triadic consonances. And they are not simply dissonances that fail to resolve as they would in common-practice music, for they often function as tones of resolution from less stable notes.12

Roy Eldridge’s 1941 trumpet solo on Hoagy Carmichael’s “Rockin’ Chair,” shown on the second staff from the top in Example 2, contains several such added-sixths, graphed in the upper staff as chordal skips—that is, as consonant extended-chord tones. The first is on the final beat of m. 5, where the sixteenth-note C, embellished by its own lower-neighbor prefix, functions as a chordal skip to the following apex pitch G5. In this instance, however, the sixteenth notes at the end of m. 5 could be considered an anticipation of the C7 harmony that arrives on the downbeat of m. 6. There is no such straightforward alternative explanation for the second half of m. 8, where Eldridge plays a G#, the underlying Bb7 chord’s added sixth; this note is interpreted in the upper staff as a chordal skip from the stemmed Bb that follows it. Likewise, on the second beat of m. 14 Eldridge skips from A#, the third of the underlying F7 harmony, to D, the added sixth, and back again.

11 This has also of course been a basis for the consonance/dissonance distinction in common-practice music since the late-eighteenth century, Strauss’s claims notwithstanding. See McGowan 2008, 74–75.

12 These issues are addressed thoroughly in Strunk 1985. For a related discussion dealing with rock music, see Temperley 2007.
EXAMPLE 2
Roy Eldridge, Trumpet Improvisation on “Rockin’ Chair” (July 2, 1941)

EXAMPLE 2
(cont’d.)
EXAMPLE 3

Lionel Hampton, Vibraphone Improvisation on “Hot Mallets” (September 11, 1939)

HOT MALLETS. By Lionel Hampton. © 1940 (Renewed) WB MUSIC CORP. All Rights Reserved.
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The harmonic status of blue notes—scale-degrees §, §5, and §9—is a thornier issue. In swing improvisation, melodic blue notes, like added sixths, often occur over triadic harmonies with neither unambiguous consonant support nor stepwise resolution to a chord tone. This usage differs from that of either the traditional delta blues, in which blue notes are degrees of a scale that often pervades both the melodic and harmonic pitch environment (Titon 1994, 152–66), or Tin Pan Alley songs, where these scale degrees typically receive consonant harmonic support (Forte 1995, 8–11). Questions of consonance and dissonance become especially hard to unravel in swing when melodic blue notes function as semitonally inflected chord tones. Consider the opening of Lionel Hampton’s 1939 vibraphone solo on “Hot Mallets,” transcribed in Example 3. Aside from the bridge, this thirty-two-bar AABA form’s harmonies consist of a repeating two-bar progression, I I IV – V7 I in B major. Hampton first plays a blue note, G♭ (§3), in m. 1, which contains double eighth-note iterations of F, G♭, F, and E♭ over a tonic harmony.
EXAMPLE 4
Alternate interpretations of Hampton, "Hot Mallets," m. 1

The upper two staves of Example 4 show two plausible ways of interpreting this melodic figure, depending on how we understand the blue note's harmonic status. In the top staff (labeled A) the G₆ is designated a dissonance—a surface-level chromatic upper neighbor to the intermediate consonance, F, which is itself an incomplete upper-neighbor prefix to the fully consonant Eb. In the middle staff (labeled B) the same G₆ is instead considered a consonance—a chromatic inflection of the underlying tonic chord’s third—with the initial F functioning as a lower-neighbor prefix to G₆ and the G₆ as a consonant prolongation of the final tonic note; the second F thus represents a passing tone between the G₆ and Eb.¹³

Straus's second necessary condition for prolongation is a “scale-degree condition: a consistent hierarchy of consonant harmonies (1987, 4).” Tonal jazz fulfills this condition fairly unproblematically because, like common-practice classical music, it is harmonically grounded in an array of chords of varying stability. All else being equal, at any given structural level the tonic is more stable than the dominant, and so forth. (Naturally, contextual factors can override this abstract hierarchy; a dominant harmony might outweigh a nearby tonic that has a weaker metrical position or a shorter duration.)

The third precondition for prolongation according to Straus’s scheme is a set of defined embellishment operations involving tones of varying structural weights, such as arpeggiation, the passing tone, and the neighbor tone. These operations are by and large applicable to swing-era jazz: in m. 1 of Example 2, Eldridge uses Ab as a passing tone between the consonances G and B₆; in the second half of m. 4, Eb is a complete lower neighbor to F; and in m. 12, D is a consonant skip from G (in a G-minor harmonic context). The trumpeter also creates more elaborate prolongational structures by

¹³ The interpretation of 3 and 5 as alternate chromatic inflections of the same scale degree resonates with Gerhard Kubik's concept of a “toneme” in Sub-Saharan African music, in which “the pitch values [transcribed] as C and G, for example, are not necessarily conceptualized as different pitch units but rather as two alternative intonations of the same toneme (2005, 179–80)."
combining and successively reiterating these same embellishments: for instance, the pitch $E_5$ heard on the downbeat of m. 11 (the minor ninth of D7) is prolonged for two beats at the surface level by a descending arpeggiation with interpolated consonant skips. The $E_6$ subsequently resolves to the next upward stemmed note, D, which is itself embellished by an ascending arpeggiation with passing tones.

Prolongational issues become less straightforward when Eldridge appears to apply these same sorts of embellishments to extended-chord tones. His use of the added sixth as a chordal skip, noted above, is but one of many variances from common-practice norms. Another occurs in the second half of m. 13 in Example 2, where he prolongs G, the ninth of the underlying F7, by its complete upper neighbor, A♭, itself the minor tenth (colloquially called a “raised ninth”) in relation to the chord’s root. In terms of its relationship to the harmonies, this melodic gesture is analogous to the first bar of Hampton’s “Hot Mallets” solo, except that, since the chord is V/V rather than I, its minor tenth (minor third) is not a blue note in the tonic key. With neither the G nor the A♭ belonging to the underlying triad, intervallic or chordal criteria for prolongation are here trumped by other contextual factors—the sort of scenario that Larson cites in his riposte to Straus (to be discussed below). In this instance, such factors are not only temporal—the G’s total duration is over twice the A♭’s—but also involve the relationship between Eldridge’s improvised line and the original melody: the G’s in m. 13 are a diatonicized paraphrase of the published G♭, a minor ninth from the underlying root that resolves to F on the next downbeat (the trumpeter references the G♭ as a chromatic passing tone on the final sixteenth note of m. 13).

Because its primary referential harmonies are triads that can be reduced to stacked diatonic thirds, common-practice tonal music exhibits a strict distinction between its vertical dimension, in which chords contain intervals of either a third, fourth, fifth, or sixth (plus their compound equivalents), and its horizontal dimension, in which “the step (major or minor second) is the unique voice leading interval (1987, 5).” Straus notes that this distinction—his fourth condition for prolongation—precludes any confusion between, on the one hand, neighbor-note (stepwise) embellishments within a single voice and, on the other, arpeggiations traversing separate voices of a given harmony. In swing-era jazz the intervallic harmony/voice leading distinction is, however, far from inviolable because, even though triads are pre-eminent, extended-chord tones give rise to other harmonic intervals.

Nevertheless, jazz’s melodic (horizontal) dimension still privileges stepwise motion in the general gestalt sense that notes can be associated by registral proximity—the Schenkerian principle of “melodic fluency” (Schenker 1987, 1: 94–95). The analyst

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therefore retains a necessary, if no longer sufficient, condition for positing melodic voice leading relationships between non-consecutive notes. Various interesting stepwise linear structures appear in Eldridge’s “Rockin’ Chair” solo (Example 2). Beginning with a paraphrase of the original melody from m. 1 through the first half of m. 2, Eldridge ascends stepwise from G, the third of the underlying tonic chord, through B, stemmed in the upper staff. Bar 2 begins with the pitch F, the ninth of the underlying V\(^7\)/IV, but on that measure’s final beat the trumpeter interpolates a sixteenth-note figure that reactivates the apex pitch, B before descending through G–F–E to E on the downbeat of m. 3. Overall, this creates a compound melodic structure in which the trumpeter mirrors the opening measure’s prolongation of B—by the stepwise ascending-third prefix, G–A–B—with a second, lower voice that articulates a longer-range descent of a third from the same headnote, G, in m. 1, through F (m. 2) to E (m. 3). In mm. 4–5 of Example 2, the downward stemmed noteheads indicate that, while sustaining B as the active upper-voice tone, Eldridge concurrently retraces the lower voice’s preceding stepwise descent, ascending through F (m. 4) back to G in m. 5. This same note G also marks the end of a medium-range upper-voice third-progression, articulated by the stemmed notes B (m. 2), A (mm. 3 and 4), and G (m. 5), which are of course the pitches heard previously in m. 1. The stepwise third-progressions are bracketed and labeled “α” on the upper staff of Example 2.

Perhaps tonal jazz’s greatest point of tension with orthodox Schenkerian voice leading principles involves the role of bass lines. Whereas in Schenkerian theory bass lines are structurally crucial, the sounding bass voice in a typical jazz ensemble—ordinarily played by the double bass and as freely improvised as the other instrumental parts—depicts the a priori harmonies, one way or another, but does not affect them. (Accordingly, most Schenkerian studies of jazz have de-emphasized the bass’s role, some ignoring it altogether.) Jazz also disregards many common-practice norms of concurrent voice motion. A clear example appears in mm. 20–21 of Example 3, where Hampton arpeggiates three root-position triads in succession—\(\text{Ab, G, and G}^\#\text{ major (with}

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15 The interpolated sixteenth-note figure at the end of m. 2 is what Larson calls a “confirmation”—a hidden repetition in which a “shorter pattern ... ends simultaneously with the longer pattern that contains it,” here with the additional chromatic passing tone, F\(_7\) (2009, 24).

16 Larson’s work is an exception in this regard.

17 Writing of modern jazz specifically, Larson notes that “some features of modern jazz performances may remain difficult to explain. Such anomalies include: parallel motion in perfect fifths and octaves; parallel motion in dissonant intervals; dissonances added to final tonic sonorities; dissonances that do not resolve until or after a change of harmony; dissonances that are resolved by dissonances; dissonances and their resolutions sounding in the same register; uses of dissonances and even ‘polychords’ in ways that seem to function more to add color than to expand voice-leading content; and pieces that begin and end in different keys (1998, 217)."
passing tones between each chord’s root and third)—creating parallel fifths between the boundary pitches of each two-beat motivic figure. The outlined triads are superimposed over the pre-existing harmonies, which consist of simply an AΔ-major chord in m. 20 and F7 in m. 21; the falling chromatic motion creates a linear connection between the underlying chords (indeed, the upper voice’s semitonal descent continues through m. 24). In Schenkerian terms, this passage raises basic questions about the role of structural levels—Hampton’s solo involves a surface-level elaboration of the predefined harmonies—and the related interpretative issue of how one balances generative (“top down”) versus reductive (“bottom up”) modes of analysis.

Larson has convincingly argued that Straus’s reductive criteria for prolongation can sometimes be over-ridden by other considerations, of which there are two main types. First, a top-down perspective can lead us to assign structural weight to musical events that conform to our prior expectations of the music’s deeper structure, even when these same events would not be notably salient from a reductive standpoint. Second, non-pitch-based factors such as meter, rhythm, and duration can sometimes make surface level dissonances more contextually stable than nearby consonances (Larson 1997, 106–7, 128–29). 18

In orthodox Schenkerian theory, the ultimate top-down point of reference is the Ursatz—a fundamental structure, inherent in all “masterworks,” consisting of an upper-voice linear descent (Urlinie) and a bass arpeggiation (Bassbrechung). Martin has identified some common Urlinie-like descents in Parker’s solos, and Larson finds them in the music of Parker, Evans, and others (1996a, 22). 19 Yet Martin asserts that “there is no required descent of a diatonic fundamental line from 3, 5, or 8” (1996a, 14) and Larson acknowledges being mainly concerned with exceptional cases (2009, 32). Given the limited scope of current research, I do not believe any particular fundamental structure—whether a Schenkerian Ursatz or some other formal design—can yet be taken for granted as a widespread stylistic norm in swing-era improvisations. As the fruit of Schenker’s intensive, lifelong study of the common-practice repertoire, the Ursatz concept—insofar as one finds it compelling—can justifiably be regarded as normative within that repertoire even though not all pieces articulate it explicitly. To date, however, no comparably thorough research has been undertaken on jazz. 20 Swing-era jazz solos should therefore only be considered tonal in the colloquial sense of employing a diatonic,

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20 For what it is worth, Schenker himself would very likely have considered jazz an “exotic music” lacking the Urlinie’s immanent “diatony” (overarching tonal coherence) (1979, 11).
hierarchically organized scale and functional triadic harmonies (DeVoto 2003); there is currently no reason to assume they typically are tonal in the deeper Schenkerian sense of expressing a background-level contrapuntal unfolding of the tonic chord from a primary tone (Kopfton) (Schenker 1979, 10–11). In any case, there are additional methodological reasons for dispensing with the Ursatz as a governing principle: it is, as Richard Cohn has shown, a highly limiting analytical constraint if adhered to rigorously (Cohn 1992a; 1992b; Cohn and Dempster 1992).

In lieu of an Ursatz, we have other case-by-case referents for making top-down analytic decisions in tonal jazz. One option is the solo’s pre-existing harmonic progression. As Steven Strunk (1979) and Henry Martin (1996a, 9–13) have shown, most improvisations’ chord changes can be reduced to progressively deeper structural levels that prolong a single tonic triad at the background. This is not merely a theoretical observation; improvisers often articulate harmonic levels beneath the music’s surface. The concluding passage of Hampton’s solo on “Hot Mallets,” for instance, exclusively expresses a tonic (E-major) harmony while the rhythm section plays the theme’s repeating I–IV–V chord changes (mm. 57–64 of Example 3). As a result, some notes that are surface-level dissonances from a bottom-up standpoint—like the pitch B over an A-major chord, or E played over B major—are deeper-level consonances from a top-down perspective because they conform to the E-major background harmony. Conversely, certain foreground consonances, such as the A on the downbeat of m. 58, are background dissonances.

Just as the jazz analyst’s principal top-down harmonic referent is the theme’s chordal structure, the only melodic referent—a surrogate Urlinie, so to speak—is the pre-existing melody. Indeed, Hodeir’s notion of paraphrase improvisation has a certain affinity with Schenkerian thinking insofar as it implies a hierarchy between structural tones, drawn from the published melody, and subordinate embellishing notes. Consider the first bar of Hodges’s second chorus on “What Is This Thing Called Love?,” in which the saxophonist plays B–C–B in eighth-note triplets on the downbeat (Example 5). The relatively strong metric location and greater total duration of B, the underlying C7 chord’s seventh, would themselves make this note more contextually stable than its

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21 The Ursatz is also, one might add, the element of Schenker’s theory most strongly enmeshed in his reactionary politics. See, for example, Neumeyer and Littlefield 1988, Eybl 1995, Cook 2007, and Clark 2007.


23 Measures 57–58 consist of an ascending E-major arpeggiation with each triadic pitch embellished by upper- and lower-neighbor tones; the pitches in mm. 61–64 are all members of an E-major triad, except for an added sixth (C), blue note (G), and passing tone (F) in m. 63.
upper-neighbor C (the chord’s root), despite the B♭’s more dissonant intervallic status. But B♭ additionally appears more stable because Hodges is still paraphrasing the melody, which contains the same pitch at this point. This additional rationale is admittedly circular—the B♭ has structural weight because Hodges is referencing the original tune, and we know he is doing so because he plays thematic pitches such as the B♭—but such reasoning, as Carl Schachter has noted, is common and inevitable whenever one seeks to comprehend an interdependent whole and part (1981, 132). On the downbeat of m. 3 in the same example, A♭, the third of the underlying F-minor harmony, likewise outweighs the chord’s root, F♭ (beat 3), not only due to its stronger metric location but because it alone paraphrases Porter’s melody.

When all is said and done, Straus’s highly systematic conceptual framework clarifies some of the structural differences between jazz improvisations and common-practice tonal music. I believe these differences somewhat limit Schenkerian theory’s explanatory power for jazz, such that the theory ought to be applied flexibly, in the spirit of Schenker’s own unrigorous midcareer writings (e.g. Der Töneille) rather than the nominally more formalized later theory codified in Der Freie Satz. Martin’s non-orthodox work on Parker (1996a), not to mention numerous adaptations of Schenkerian principles for the analysis of post-tonal music, is instructive in this regard. While my method here is primarily reductive, I sometimes allow contextual rhythmic, paraphrase, and background harmonic factors to over-ride bottom-up analytical decisions. My most decisive alteration to standard Schenkerian notation, besides treating extended-chord tones, including blue notes, as potential consonances, is in using beams simply to link any two consecutive stemmed notes that are pitched a diatonic step apart, and dotted beams to link consecutive stemmed notes of identical pitch. In other words, beamed notes here have no greater structural weight than unbeamed stemmed notes, which is

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24 Larson discusses essentially the same situation—the seventh of chord prolonged by the root, as an upper neighbor—in Larson 1997, 107.


26 Nicholas Cook advocates such an interpretive flexibility (2007, 281–306). See also Lubben 1993. It is important to acknowledge Cohn’s critique of nonsystematic analytical practices. Cohn argues that conceptual principles ought to be at least “partly capable of rational articulation” because an “appeal to ‘inaccessible intuition’ risks becoming “a screen for a set of arbitrary, nonprincipled judgments 1992b, 168.” His point is well taken, and consistent explicit principles are surely an ideal goal, but to formulate such principles prematurely, with insufficient labor and reflection upon the problem at hand, would seem ill-advised. Rather, rational analytical principles are most likely to emerge from an interpretive process that, in its initial stages, will be at least partially intuitive and ad hoc.

EXAMPLE 5
Johnny Hodges, Alto Saxophone Improvisation on “What Is This Thing Called Love?” (July, 1952)

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not so in conventional Schenker graphs. This use of stems and beams, advantageous for indicating patterning beyond the surface level within a single-staff graph, is fairly similar to Forte’s modified usage for analyzing Tin Pan Alley songs, except that I use beams more restrictively. Like Forte, I decide by reduction which pitches to stem, without reference to an Ur line or any other background model outside of the theme in question.28 But

28 In some cases the theme itself may of course be reducible to an orthodox Ursatz, but I do not believe this ought
my beams show only stepwise linear connections, whereas Forte’s “connect components of a large-scale melodic configuration, most often”—but by no means necessarily—“a stepwise line” (Forte 1995, 43).

In closing, I offer full graphic analyses of two very different swing-era improvisations. The first, guitarist Django Reinhardt’s 1937 solo on the theme “Paramount Stomp,” unambiguously articulates most of the chord changes and contains clear medium-range linear progressions. The second, tenor saxophonist Lester Young’s famous 1936 improvisation on George Gershwin’s “Oh, Lady Be Good!,” is oriented more toward the harmonic middleground and contains numerous motivic connections to the composed melody. Neither analysis reveals a standard *Urlinie*.

“Paramount Stomp’s” thirty-two-bar chorus consists of four eight-measure IV–I–V–I harmonic progressions (two bars per chord) with some straightforward elaborations (such as the common-tone vii°/V preceding each initial instance of the tonic). The theme, as played by violinist Stéphane Grappelli on the recording, appears on the lowest staff in Example 6; its most prominent pitches, F and D, do not always conform to the underlying harmonies, occurring, for example, over a dominant chord, C7, in bars 5 and 6. Likewise, Reinhardt’s solo sometimes departs from the chord changes, such as in the first half of m. 8, where the guitarist arpeggiates a G-diminished triad (B♭–D♭–G–B♭) over an F7 chord. This particular harmonic superimposition arises from an improvised linear chromatic succession: the arpeggiated notes B♭, D♭, and G in m. 8 are respectively preceded by the consonant pitches A, C, and F (m. 7) and followed by the consonances B♭ (m. 10), D♭ (m. 10), and G (m. 9) (G is an added sixth of B♭ major). Elsewhere Reinhardt plays more conventional harmonic substitutions, such as the falling arpeggiation, F–D–B♭, in m. 29, which briefly implies a predominant, II° (Gm7), displacing the dominant (C7).

But the guitar solo adheres closely to the predetermined harmonies for the most part. On Example 6’s top staff, stemmed noteheads mark the pitches of greatest structural weight, which are generally consonant, comparatively high in register, metrically emphasized, and, in limited instances, related by paraphrase to the head melody. Although lacking an orthodox *Urlinie*, the analytic graph contains medium-range melodic descents—indicated by beams linking the stems—that encompass all but...
EXAMPLE 6

Django Reinhardt, Guitar Improvisation on “Paramount Stomp” (December 7, 1937)

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EXAMPLE 6
(cont'd)
one of the upward stemmed notes. The single exception is the stemmed F₅ near the
solo’s outset, which lies within a brief opening gesture that, as the lone unequivocal
melodic paraphrase, is differentiated rhetorically from what follows. Reinhardt derives
the linear descents from the predefined harmonic voice leading—they are not found in
the composed melody—and they reinforce the theme’s two-part form.³²

The initial sixteen measures contain two descents, the first from ê to 3 and the next
from ê to 1, comprising a quasi-interruption structure. Conjoining them is a lower-voice
stepwise ascent from m. 5 to m. 11. Mm. 17–32 are spanned by a single stepwise progression
whose opening stemmed note, D₅ in m. 17, is a chromatically inflected reassertion of
the pitch D₅ that initiated descents in m. 2 and m. 9. As the stepwise resolution of the D₅—
the seventh of F₇ (V/VIV)—that Reinhardt plays in mm. 15–16, this note functions like
a consonance despite not belonging to the concurrent B₅-major harmony. The ensuing
beamed progression passes through 5 and 4, just as in the corresponding passage that
began the chorus, but, instead of arriving on 3 again, Reinhardt reactivates 5 (C₅) on the
downbeat of m. 23 (C₅ is elaborated by upper-and-lower-neighbor prefixes, similar to the
A₄ (3) in m. 7). Then, rather than beginning another eight-bar descent from ê as he did
sixteen bars earlier, Reinhardt descends from 5 through 4 to 1 at the solo’s end.

Other than the D₅ in m. 17, the only stemmed note that is not a foreground
consonance is the A₄ in m. 14. This note appears toward the end of the second linear
progression, whose stemmed tones occur in relatively close succession since, unlike
the first and third, it descends all the way from ê to the tonic within only eight bars.
M. 14 contains a dominant harmony (C7), and in Example 6 a consonant G₃ in the
second half of that bar is also stemmed—the conventional 2/V preceding Î/I. Although
there are plenty of theoretical precedents for assigning structural weight to both 3 and
2 over a dominant harmony—in the manner of a cadential six-four—it would also be
analytically plausible to stem only the consonant 2 in this measure, sundering the beamed
linear progression.³³ Alternatively, were the A not followed by G₃, this passage could be
interpreted as a dominant-thirteenth chord resolving melodically from 3 to Î.³⁴ Despite
the consonant G₃’s presence, the A₄ is assigned equivalent structural weight because the

³² More orthodox explanations of this solo’s upper-voice descents have been suggested to me informally by two
individuals. One reasonable possibility is that the descents are “5-lines” from a C Kopfton, whose preceding D₆
(m. 2) and D₅ (m. 17) function as upper-neighbor prefixes. Another, proposed by one of this article’s anonymous
reviewers, is that the descents are “3-lines” from A₄. Such alternatives seem, unlike this article, to assume a
Schenkerian Urlinie as an interpretative point of departure.

³³ On the topic of a structural 3 and 2 both occurring over a dominant harmony, see Beach 1990. See also Lester

³⁴ In his early theory, Schenker interprets this type of melodic formation as an anticipation of the tonic harmony,
displaced over a preceding dominant chord (1954, 302–4).
pre-existing melody (as shown in the lowest staff below m. 14) contains a dominant-thirteenth resolution—in other words, Reinhardt paraphrases \( \overline{3} \) from the composed theme. (The preceding stemmed pitch—the B\( \flat \) in m. 13, supported by the same C7 harmony as the G and A—also paraphrases the original tune.)

Reinhardt’s solo, viewed through a Schenkerian lens, clearly exhibits a coherent, unified large-scale prolongational pitch structure. Yet even swing-era improvisations that do not comport quite so well with Schenkerian aesthetic principles can be worth considering from the same theoretical perspective, if only to better illuminate how swing differs from common-practice art music.\(^{35}\) Young’s saxophone solo on “Oh, Lady Be Good!” is a case in point, for its features that sit less easily with orthodox Schenkerian analysis lie at the heart of the saxophonist’s personal musical language. This legendary performance has been analyzed in detail by both Porter, who mainly addresses aspects of motivic development and formulaic usage (2005, 90–93), and Schuller, who additionally highlights Young’s techniques of “compressing the melodic contours into a much narrower range”; “the linearization of melodic content” (i.e. an emphasis on conjunct motion); and “the superimposition of a single harmonic zone ... on several chords or an entire chord progression (1989, 230; original emphasis).” The latter procedure recalls the final bars of Hampton’s “Hot Mallets” solo, where the improvised melody is dissonant with some of the surface level chords because it articulates a deeper harmonic level consisting of only the tonic chord. Although hardly unique to Young, this technique has long been considered one of his stylistic hallmarks.\(^{36}\)

A transcription of Young’s solo appears on the next-to-highest staff in Example 7.\(^{37}\) In m. 2, the saxophonist plays one of his habitual formulas (Porter 2005, 90). While the chord changes are a subdominant seventh (C7) followed by vii\(^{o}V\) (C\#dim7), Young’s formula expresses a tonic (G-major) chord: the pitches E and F\( \flat \) are its added sixth and minor seventh, and A\# is a chromatic lower neighbor to B. Young’s notes in the first half of the bar—A\( \flat \) (a lower neighbor), B, and D—prolong not the underlying C7 chord but the deeper-level tonic, just like the concluding measures of Hampton’s solo. The question of which harmony Young prolongs is more ambiguous during beats three and four, where he plays E, G, and F\( \flat \). G belongs to both the foreground C\#dim7 chord and the deeper

\(^{35}\) Larson makes this same point with respect to modern jazz (2009, 5–6).

\(^{36}\) In his well-known “‘river trip’ explanation of jazz improvisational styles,” George Russell likens Young’s style to taking “an express steamer that makes stops only at the larger points along the river (the tonic stations). ... The name of the steamer is ‘The Melody (parent scale) Inferred by a Tonic Station’” (1959, xviii; discussed in Porter 2005, 70). See also Winkler 1978, 16–18.

\(^{37}\) The lead-sheet-style chord symbols in Example 7 describe the harmonies implied by bassist Walter Page, which differ slightly from those of Gershwin’s original sheet music.
EXAMPLE 7
Lester Young, Tenor Saxophone Improvisation on "Oh, Lady Be Good!" (November 9, 1936)

OH, LADY BE GOOD! Music and Lyrics by GEORGE GERSHWIN and IRA GERSHWIN. © 1924 (Renewed) WB MUSIC CORP.
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EXAMPLE 7  
(cont’d.)

G major, and so does E if the G-major harmony is assumed to assimilate its idiomatic 
added sixth (of which more below). The blue note F(♭7), heard twice within beat four, 
is dissonant with Cdim7 but can be explained as the minor seventh of the deeper-level 
G-major harmony that the surrounding melodic lines express unequivocally.38 Eight bars

38 Note that if the F–G–F figure on the last beat of m. 2 is interpreted in a G7 harmonic context then its rhythmic
presentation suggests that the chord’s root embellishes its seventh, akin to the beginning of Example 5; in relation to the surface-level Cdim7, however, F is a dissonant lower-neighbor to G.
later (m. 10), during the second A-section of this standard thirty-two-bar AABA song
form, Young plays another melodic line expressing a background G-major harmony over
the same C7 and C#dim7 chord changes; he again sounds the pitches G and E during the
second half of the bar.

Young unequivocally articulates non-tonic harmonies in just eleven of the solo's
total sixty-four measures. He does so most unequivocally in the second half of each
bridge (mm. 21–22 and 53–54), where he highlights C#, the third of the secondary
dominant-seventh chord, A7 (V7/V). And at the very end of the second bridge (m. 56),
he arpeggiates a dominant augmented triad, a device he often used to herald a chorus's
final A-section (Porter 2005, 67). The remaining melodic references to non-tonic
harmonies are in m. 13 (an A-minor chord), m. 17 (C major with added sixth), m. 23
(D dominant-ninth), m. 37 (also D dominant-ninth), m. 45 (D7), m. 49 (C major), m. 50
(C minor), and m. 55 (D7).

The graph on the uppermost staff in Example 7 interprets Young's solo as
elaborating three principal pitch classes throughout: G, D, and E (♯, 5, and 6). Unlike
the analysis of Reinhardt's improvisation, no overarching structural design is proposed;
the primary notes are simply assigned stems or flags based on the familiar criteria of
harmonic consonance, repetition and/or comparatively long duration, and location at
the initial or final notes of phrases (i.e. directly preceding or following rests). Structurally
prominent Gs are indicated with upward stems, Ds with downward stems, and Es with
flags. From an external standpoint, one of the solo's most notable melodic features is
a recurrent motive in which the flagged Es (the tonic harmony's added sixth) function
as upper neighbors (linked by slurs) to stemmed Ds (the tonic chord's comparatively
consonant fifth). Fourteen instances of this motive are bracketed and labeled “α” on
the analytic graph; six others, labeled “αʹ,” are variants in which a chromatic passing
tone, E♯, appears between the E and the D. The α and αʹ motives are thematic according
to Martin's definition of the term in that they have an objective structural relationship
to Gershwin's composed melody (1996a, 35–37). Graphed in Example 8, the original
theme is, as Steven Gilbert writes, “unremarkable melodically. Repeated notes abound

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39 By contrast, non-tonic harmonies account for thirty-four bars (just over half) of the chord changes.
41 The term “upper neighbor” may be somewhat misleading in this context because, even though the pitch E♯
may be relatively less consonant than the triadic pitch D, as the chord's added sixth it is, in a jazz context, not
an unequivocal dissonance.
42 Gunther Schuller originally defined the term “thematic” differently from Martin, using it to describe the
improviser's intentional replication of foreground motives from the head (1986, 94).
in both verse and refrain [chorus]; in the latter the primary tone and its upper neighbor (D♯ and E♭) [D♯ and E♭] are emphasized to the point of obviousness” (1995, 73). The song’s eight-bar A-section loosely conforms to one of Martin’s melodic archetypes—a descent from 5 to 3 and then directly to 1, although 4 (♯3) appears only within a surface-level arpeggiation from 5 and has therefore not been stemmed in Example 8. Two instances of the melodic motive α are bracketed: one is at the beginning of the bridge, where B♭ first enters, as an upper-neighbor prefix (with subdominant support) to D (5); the other is a foreground embellishment midway through the final A-section, a feature absent from the corresponding points during the first sixteen bars.

The α motives are woven into the improvised melody every few measures or so, sometimes as short surface-level patterns and sometimes as slightly larger-scale projections traversing three or four bars. The solo begins with a foreground statement of α (mm. 1–2), closely followed by a more expansive rendering of α’ (E♭ in m. 4–5, E♭♭ in m. 6, and D♯ in m. 7). The rest of the first chorus contains alternating short (mm. 8–9 and 18–19) and longer (mm. 11–14 and 20–24) projections of α. In the second chorus Young plays the motive increasingly frequently—it occurs eight times within the last sixteen bars alone: a large-scale articulation of α’ in mm. 48–51 followed by three foreground instances of α (mm. 52, 55–56, and 56–57) and three of α’ (mm. 58, 59, and 60). After the final α motive (m. 61), his solo ends with an unresolved E♭ (flagged on the uppermost staff in m. 64). Entering slightly before the saxophonist finishes playing, trumpeter Carl Smith begins the next solo with a D♭ (not transcribed), creating another α motive in conjunction with Young’s final note.

Young almost certainly did not consciously intend to create these objectively discernible relationships. As Porter observes, the “use of the sixth to add coloration to a chord is characteristic of the saxophonist’s playing throughout his career” (2005, 66), so the above described motivic connections between the solo and Gershwin’s melody
are probably serendipitous. My analysis is, in other words, exclusively listener-oriented, proposing a way of hearing the solo rather than a poetics of Young's creative process. And though I have in this instance jettisoned Schenkerian theory's traditional objective of disclosing a unified overarching design, the theory nevertheless demonstrates in detail how the solo's pitch organization parts ways with common-practice principles. It also reveals that Young's performance concurrently engages two structural poles of Gershwin's "Oh, Lady Be Good!": the deep harmonic background and one of the song's most salient surface-level melodic motives.

Schenkerian analysis can substantially enrich our understanding of swing improvisations. It can individuate features comparable to those of tonal classical music, pinpoint the two idioms' structural differences, and clarify exactly how the musical idiolects of players such as Reinhardt and Young contrast. While it deserves its place within contemporary jazz studies' methodological toolkit on these grounds alone, it also serves a salutary historiographic function by problematizing the lingering evolutionary view of jazz's early history as progressing from vernacular, or commercial, simplicity toward cultivated sophistication. Although a definitive conclusion awaits more extensive research, this article suggests that Schenkerian theory's elite European aesthetic principles may be just as applicable to swing as to bebop. In terms of their pitch organization, the two styles have a great deal in common. Their chief distinctions are instead to be found either in musical domains beyond the theory's primary purview, such as rhythm-section practices and surface-level rhythmic and melodic features, or outside the musical sphere altogether, in the realm of culture, politics, and history.

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43 This perspective accords with Martin's (1996a, 35–37).

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Recorded in New York, 11 September, 1939
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“Oh, Lady Be Good!” (George Gershwin—Ira Gershwin)
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Recorded in Chicago, 9 November, 1936
Carl Smith (tpt); Lester Young (tenor sax); Count Basie (pno); Walter Page (bs); Jo Jones (dms)

“Paramount Stomp” (Django Reinhardt—Stéphane Grappelli)
Swing 40 (mx. OLA 1995-1)
Recorded in Paris, 7 December, 1937
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Charlie Shavers (tpt); Benny Carter (alto sax); Johnny Hodges (alto sax); Charlie Parker (alto sax); Flip Phillips (tenor sax); Ben Webster (tenor sax); Oscar Peterson (pno); Barney Kessel (gtr); Ray Brown (bs); J. C. Heard (dms)